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for
Stock Car Auto Racing, Inc.**

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CHRIS WRIGHT
Director, NASCAR K & N Pro Series, East

ANDY MITCHELL
Technical Director, NASCAR K & N Pro Series, East

KIP CHILDRESS
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Coordinator, Competition Communications

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NASCAR FOREWORD

Since its inception, NASCAR has endeavored to make stock car racing highly competitive, affordable and entertaining for racing fans and competitors. One of the tools that we use for this purpose is the NASCAR Rule Book, which contains the rules and procedures governing NASCAR-sanctioned racing.

Close, side-by-side competition among various makes of cars is the basis for NASCAR's tremendous fan support and phenomenal growth. NASCAR remains committed to this path.

The NASCAR Rule Book is designed to continually promote better competition while factoring in the costs of participation. Where appropriate, it encourages technical innovation and creativity. Where necessary, it discourages potential imbalances that could impact the quality of the racing or its affordability. In all cases, rules are crafted with the goal of keeping the sport relevant and exciting.

As part of NASCAR's commitment to maintaining a proper balance in competition, it may be necessary from time to time for NASCAR to make rule changes or adjustments. To maintain fairness and uphold the integrity of the sport, it may be necessary from time to time for NASCAR to issue penalties for rules infractions.

NASCAR's Deterrence System is designed to send a clear message that NASCAR members and racing teams should largely police themselves. When a penalty is called for, the matter is less about the member(s) receiving the Penalty Notice. The greater consideration is the rest of the garage area, who are the ones potentially affected when an infraction occurs.

This latest version of the NASCAR Rule Book is the culmination of more than 65 years of experience, learning, and knowledge. For 2015, it has been revised in several respects. We urge you to carefully study and familiarize yourself with the new Rule Book in order to understand these revisions, as well as those rules that have not changed.

We at NASCAR wish all of you a successful and rewarding year of racing.

BRIAN FRANCE
Chairman of the Board &
Chief Executive Officer

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PREFACE

A NASCAR-sanctioned Event is a competitive stock car racing Event which is intended to be conducted and officiated in accordance with this Rule Book. This Rule Book may be amended from time to time. Special rules may be published by NASCAR specifically for the Event and any applicable agreements to which NASCAR is a party may also apply. The NASCAR Rule Book is designed to provide for the orderly conduct of NASCAR-sanctioned Events. Ultimately, the solution for unauthorized or improper officiating lies not in individual challenges seeking to undo what has been done, but rather in pressure brought upon the Officials in charge by drivers, owners, fans, and even NASCAR to improve the caliber of Race supervision. It is the responsibility of each Member to address any complaint he/she might have regarding officiating to the NASCAR Competition Administrator.

It is ultimately the obligation of each participant to ensure that his/her conduct and equipment comply with all applicable NASCAR Rules, as they may be amended from time to time. EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHALL NOT RESULT FROM PUBLICATION OF, OR COMPLIANCE WITH, THESE RULES. They are intended as a guide for the conduct of stock car racing and are in no way a guarantee against injury or death to participants, spectators, or others.

DEFINITION OF TERMS

The following terms, which appear periodically throughout this Rule Book, have the following meanings:

1. "Competitor" - A driver, car owner, crew member or other person (other than a NASCAR Official) who participates in a NASCAR sanctioned racing Event. Whenever the words Competitor, driver, car owner, team member or crew member are used, unless the context indicates otherwise, the term used shall be interpreted to include any driver, car owner, crew member or other person assigned to or a member of the same racing team.

2. "Double File – Touring Style" – The procedure used to line up cars for restarts during the Race.

3. "Event" - A NASCAR sanctioned motorsports Event. It includes the designated Race as well as all periods for registration (including, without limitation, review and approval pursuant to Rule 20C & D-3.11), inspections, qualifying, qualifying Races, practice runs, Post-Race inspections and rain or postponed dates related thereto.

4. "Member" - An individual or entity who has been accepted by NASCAR as a Member pursuant to the NASCAR Rules, and whose membership has not expired, been suspended, canceled or terminated.

5. "NASCAR" - The trade name and registered service mark of National Association for Stock Car Auto Racing, Inc.

6. "NASCAR Event Management, Inc. (NEM)" – An affiliated company and licensee of National Association for Stock Car Auto Racing, Inc. which holds certain NASCAR-owned and NASCAR-controlled rights with respect to the sanctioning and operation of NASCAR Events in accordance with a separate license agreement between NASCAR and NEM.

7. "NASCAR Headquarters" - The principal office of NASCAR

P.O. Box 2875,
Daytona Beach, Florida 32120-2875.

8. "NASCAR Inspection Station" – The designated location for various NASCAR inspections.

9. "NASCAR Officials" - Persons licensed by NASCAR and appointed by NASCAR to officiate as an employee or independent contractor at the Event, which may include employees or representatives of NEM.

10. "NASCAR Rules" - The rules in the NASCAR Rule Book.

11. "NASCAR Supervisory Officials" - The officers, employees or agents of NASCAR as designated herein or in a NASCAR Bulletin. NASCAR may designate in a NASCAR Bulletin additional persons as NASCAR Supervisory Officials. The NASCAR Supervisory Officials for 2015 are as follows:

For all Events:

| | |
|------------------|--|
| Brian France | Chairman of the Board & Chief Executive Officer |
| James C. France | Vice Chairman of the Board, Executive Vice President & Assistant Secretary |
| Mike Helton | President |
| Steve O'Donnell | Executive Vice President & Chief Racing Development Officer |
| Robin Pemberton | Senior Vice President, Competition |
| Gene Stefanyshyn | Senior Vice President, Innovation & Racing Development |
| Jim Cassidy | Senior Vice President, Racing Operations |
| Richard Buck | Managing Director, NASCAR Sprint Cup Series |
| John Darby | Managing Director, Competition, Racing Development & Inspection Processes |
| Jerry Cook | Competition Administrator |

For Touring Series Events:

| | |
|-----------------|---------------------------------------|
| Brad Moran | Managing Director, Touring Series |
| Tony Glover | Technical Director, Touring Series |
| Les Westerfield | Technical Coordinator, Touring Series |
| Chris Wright | NASCAR K & N Pro Series, East |
| Kip Childress | NASCAR K & N Pro Series, West |
| Jimmy Wilson | NASCAR Whelen Modified Tour |
| Juston Ellis | NASCAR Whelen Southern Modified Tour |
| Kenny Hunley | Director, Weekly Racing |

12. "OEM" - Original Equipment Manufacturer.

13. "Promoter" - The individual, partnership, corporation, joint venture or other legal entity that, in connection with the Event, is designated as the "Promoter" in the executed Sanction Agreement for that Event.

14. "Qualifying" – The procedure(s) for determining the starting positions for a Race, or the method used if the scheduled Qualifying is unable to occur or cannot be completed.

15. "Race" – The racing competition during a NASCAR-sanctioned Event.

16. "Race Equipment" – Any car, part, engine, engine component, tires, fuel or any other part or related equipment.

17. "Series Sponsor" – K & N Engineering, Inc. ("K & N")
Whelen Engineering, Inc. ("Whelen")

18. "Stock Car" - Any car that fits the specifications set forth in this Rule Book.

19. "Team Support Vehicles" – Any form of transportation used by a team at an Event.

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National Association for
Stock Car Auto Racing, Inc.**

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NASCAR®, the NASCAR logo, Chase for the Championship®, Chase for the Cup®, Race to the Chase®, The Chase®, Chase Tracker®, The Chase Grid™, Air Titan®, NASCAR Air Titan®, #MYCHASENATION™, 16 NATIONS, 1 WILL PREVAIL, CHALLENGER 16™, CONTENDER 8™, CHAMPIONSHIP 4™ and all related slogans, logos and trade dress are trademarks of the National Association for Stock Car Auto Racing, Inc.

PATENTS

| | |
|--|------------|
| APPARATUSES, SYSTEMS, AND METHODS FOR CLEARING A SURFACE USING PRESSURIZED AIR | 13,757,114 |
| LOCKING MECHANISM WITH ROTATABLE FEATURES | 7,097,240 |
| METHOD OF CONDUCTIONG A RACING SERIES | 7,207,568 |
| RETAINING COUPLER | D656,883 |
| RETAINING SHOE | D666,134 |
| RETAINING SYSTEM | 8/485,482 |
| ROAD SURFACE CLEANING APPARATUS | 29/444,700 |
| STRAIN GAGE LOAD CELL ANCHOR | 14/327,150 |
| TAPERED DRIVE SHAFT HOUSING | D556,648 |
| VEHICLE BODY | D547,249 |
| VEHICLE BODY (NATIONWIDE) | D598,811 |
| VEHICLE BODY PORTIONS WITH WING | D603,295 |
| VEHICLE FRAME RAIL | 555,548 |

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NASCAR hereby grants to each NASCAR Member a revocable, royalty-free license for 2015 to make and use the objects and methods embodied in the above listed patents and patent applications for the sole purpose of competing in NASCAR-sanctioned Events, unless otherwise approved in writing by NASCAR. In addition, NASCAR hereby grants each NASCAR Member a revocable, royalty-free license for 2015 to sell objects and methods embodied in the above patents and patent applications only to other NASCAR Members and for the sole purpose of competing in NASCAR-sanctioned Events, unless otherwise approved in writing by NASCAR.

SECTION 1 - THE NASCAR RULES

1-1 Effective Date

A. The NASCAR Rules, including any amendments thereto, are effective upon the date of issuance by NASCAR, regardless of when a Member receives actual notice.

B. "Date of issuance" of the NASCAR Rules or any amendment thereto is the earliest of mailing or electronic posting from NASCAR or release to the daily or trade press.

1-2 Amendment

A. The NASCAR Rules may only be amended by the issuance of a NASCAR Bulletin issued by NASCAR pursuant to the authority of the President of NASCAR or other duly authorized official of NASCAR.

B. Amendments are effective upon the date of issuance by NASCAR, regardless of when a Member receives actual notice.

1-3 Applicability

NASCAR issues various Rule Books, each of which includes in its title reference to a particular NASCAR-sanctioned Series or type of Event. The NASCAR Rules in each such Rule Book are applicable to the Series or type of Event set forth in the title of that Rule Book.

1-4 Interpretation and Application

A. If there is a disagreement or dispute regarding the meaning or application of the NASCAR Rules, the interpretation and application by the NASCAR Officials at the Event shall prevail.

B. Notwithstanding the foregoing or any other provision in the Rule Book, NASCAR Supervisory Officials may review, adjust, modify and/or supersede an interpretation or application of the NASCAR Rules when the NASCAR Supervisory Officials deem such review to be appropriate.

1-5 Finality of Interpretation and Application

A. The interpretation and application of the NASCAR Rules by the NASCAR Officials at the Event, or by a NASCAR Supervisory Official, pursuant to sub-section 1-4 Interpretation and Application, shall be final and non-appealable, except as provided in the following Rule Book sections:

- Section 12 Violations and Disciplinary Action
- Section 14 Appeals to the National Motorsports Appeals Panel and/or
- Section 15 Final Appeal to the National Motorsports Final Appeals

B. In order to promote stock car racing, to achieve prompt finality in competition results, and in consideration of receiving the numerous benefits available to them, ALL MEMBERS, INCLUDING COMPETITORS AND OFFICIALS, EXPRESSLY AGREE THAT DETERMINATIONS BY NASCAR OFFICIALS (WHETHER LOCAL, REGIONAL OR NATIONAL) (AND NASCAR SUPERVISORY OFFICIALS WHEN MADE) AS TO THE APPLICATION AND INTERPRETATION OF THE NASCAR RULES ARE NON-LITIGABLE, AND THEY COVENANT THAT THEY WILL NOT INITIATE OR MAINTAIN LITIGATION OF ANY KIND AGAINST NASCAR, NEM OR ANYONE ACTING ON BEHALF OF NASCAR OR NEM, WITH RESPECT TO SUCH DETERMINATIONS OR TO RECOVER DAMAGES OR TO SEEK ANY OTHER KIND OF RELIEF AS A RESULT OF SUCH DETERMINATIONS, UNLESS THE NASCAR OFFICIALS OR SUPERVISORY OFFICIALS MADE SUCH DETERMINATIONS FOR NO PURPOSE OTHER THAN A BAD FAITH INTENT TO HARM OR CAUSE ECONOMIC LOSS TO THE MEMBER, COMPETITOR OR OFFICIAL. IF A MEMBER, COMPETITOR OR OFFICIAL INITIATES OR MAINTAINS LITIGATION IN VIOLATION OF THIS COVENANT, THAT MEMBER, COMPETITOR OR OFFICIAL AGREES TO REIMBURSE NASCAR FOR THE COSTS OF SUCH LITIGATION, INCLUDING ATTORNEYS' FEES. EACH MEMBER, COMPETITOR OR OFFICIAL FURTHER COVENANTS THAT IN ANY LITIGATION BROUGHT AGAINST NASCAR OR NEM FOR ANY REASON, IF THE LITIGATION IS NOT DISMISSED PURSUANT TO THIS COVENANT, THE MATTER WILL BE TRIED BEFORE A JUDGE OF COMPETENT JURISDICTION AND HEREBY WAIVES ANY RIGHT TO TRIAL BY JURY IN SUCH ACTION. NASCAR RESERVES THE RIGHT TO TAKE ANY OTHER ACTION HEREUNDER, INCLUDING SUSPENSION OR TERMINATION OF MEMBERSHIP, FOR VIOLATION OF THE COVENANT NOT TO SUE.

1-6 Principal Rule of Interpretation and Application

A. The NASCAR Rules are intended to ensure that NASCAR-sanctioned Events are conducted in a manner that is as fair as possible for all Competitors, consistent with prompt finality in competition results.

B. On occasion, circumstances will be presented that are either unforeseen or are otherwise extraordinary, in which strict application of the NASCAR Rules may not achieve this goal. In such rare circumstances, the NASCAR Officials, as a practical matter, may make a determination regarding the conduct of an Event, the eligibility of a Competitor, or similar matters that are not contemplated by or are inconsistent with the NASCAR Rules, in order to achieve this goal.

C. From time to time in particular rules, Official Entry Blanks, Bulletins and elsewhere, NASCAR may use the term "EIRI" – meaning "Except in Rare Instances" – to indicate the likelihood that such a determination may be made.

D. NASCAR, however, may make such a determination even if "EIRI" has not been included in a particular rule, Official Entry Blank, Bulletin or otherwise. Such determinations are reviewable by NASCAR Supervisory Officials pursuant to sub-section 1-4 Interpretation and Application. All such determinations are subject to sub-section 1-5 Finality of Interpretation and Application.

1-7 Special Rules

Special rules may be made by the Supervisory Officials for an Event. Such special rules shall apply to the conduct of that Event if they are issued or announced prior to or during the Event by means of a Bulletin, newsletter, fax, electronic or internet posting or Pre-Race meeting.

1-8 NASCAR Event Management, Inc.

Any and all rights of NASCAR to prepare, amend, modify and enforce the NASCAR Rules, as set forth throughout this Rule Book, have been duly licensed by NASCAR to NEM for the purpose of sanctioning, operating and controlling the Events. As such, any and all rights and authority conferred upon NASCAR in accordance with the NASCAR Rules shall be extended to NEM and its designated employees and representatives, and NEM shall have full authority and discretion to govern and control Events on behalf of NASCAR. As such, any decisions, determinations or rulings made by NEM shall be final and binding to the same extent such decisions are enforceable by NASCAR in accordance with the NASCAR Rules.

SECTION 2 - MEMBERSHIP

2-1 Eligibility

NASCAR may, but is not required to, accept as a NASCAR Member any individual or business entity interested in stock car racing, so long as the individual or entity has properly and truthfully completed and filed a NASCAR membership application, agreed to abide by the NASCAR Rules, paid the fee(s) prescribed for membership, and meets the required qualifications. NASCAR is dedicated to the highest degree of professionalism, sportsmanship and integrity in stock car racing. For that reason, NASCAR may reject the membership application of an otherwise qualified applicant in the interest of stock car racing or NASCAR, in NASCAR's sole discretion. Among other things, participation or involvement by a person or business entity (including, in the case of a business entity, involvement by any stockholder, director, officer, employee, partner or agent thereof) in conduct detrimental to stock car racing or to NASCAR, whether in the course of competition or not, and whether the person or business entity was a Member or applicant at the time of such conduct, may result in rejection of a membership application by NASCAR. Any person or business entity whose membership application has been rejected by NASCAR may appeal the rejection to the National Motorsports Appeals Panel.

2-2 Application Process

Application forms for a NASCAR membership may be obtained from NASCAR Headquarters. Upon completion, they must be submitted to NASCAR Headquarters, which is the only NASCAR office authorized to approve and issue such memberships. Membership application forms must be fully executed, signed by the applicant, and accompanied by the requisite fee(s). The receipt of a NASCAR membership application form and fee(s) by a NASCAR Official and the depositing of accompanying fee(s) by NASCAR do not constitute the issuance of or approval by NASCAR of such an application for NASCAR membership.

2-3 Membership Status

A NASCAR Member, including a Member who has been issued a NASCAR license pursuant to Section 3, is not an agent, or employee of NASCAR or NEM by virtue of such membership or license. With respect to any NASCAR-related activities in which a Member engages, unless the Member is also an employee of NASCAR or NEM, the Member shall act as and be deemed to be either an independent contractor or an employee of a person or entity other than NASCAR or NEM, and not an agent, or employee of NASCAR or NEM. Each such Member, or the Member's employer, is obligated to furnish any tools, supplies or materials necessary to perform the Member's duties. Each such Member shall be

responsible for compensating, and shall be responsible for all actions, of their employees or agents. Each such Member assumes all responsibility, either by himself/herself or on behalf of his/her employer, for any charges, record keeping, premiums and taxes, if any, payable on any funds the Member may receive as a result of any activities as a NASCAR Member, including but not limited to, social security taxes, unemployment insurance taxes, workers compensation insurance, income taxes and withholding taxes. If a Member is a NASCAR or NEM employee, the NASCAR or NEM Employee Manual supersedes this Rule Book on any violations and/or disciplinary actions.

2-4 Suspension

NASCAR may suspend a NASCAR membership for a definite or indefinite period of time in the interest of stock car racing or NASCAR, in NASCAR's sole discretion. The affected Member may appeal such a suspension to the National Motorsports Appeals Panel. Such Member shall have no right to receive, and NASCAR shall not be obligated to refund, any part or all of the fee(s) previously paid by the Member to NASCAR.

2-5 Voluntary Termination

A Member may terminate his/her NASCAR membership at any time by providing a letter of resignation to NASCAR Headquarters. Such Member shall have no right to receive, and NASCAR shall not be obligated to refund, any part or all of the fee(s) previously paid by the Member to NASCAR.

2-6 Involuntary Termination

NASCAR may terminate a NASCAR membership at any time in the interest of stock car racing or NASCAR, in NASCAR's sole discretion. Such Member shall have no right to receive, and NASCAR shall not be obligated to refund, any part or all of the fee(s) previously paid by the Member to NASCAR. Such Member may appeal such a termination to the National Motorsports Appeals Panel.

2-7 Expiration

A NASCAR membership expires automatically on the last day of the calendar year in which the membership is issued.

2-8 Ejection

A NASCAR Supervisory Official may eject a Member from an Event or from the racing premises in an emergency situation, as determined by such Supervisory Official, to promote the orderly conduct of the Event, and/or future Events. An ejection is final, non-appealable and non-reviewable except as provided in sub-section 1-4.

2-9 Membership Required

Every person or entity who desires to participate in a NASCAR-sanctioned Event as a Competitor, Official, Promoter, Manufacturer, Sponsor or Sales Representative or other approved position, must apply for, receive, and possess a valid, current NASCAR membership.

2-10 Medical

For safety reasons, at any time during the calendar year NASCAR may require a Competitor to undergo a physical or psychological examination by designated medical professionals at the Competitor's expense.

2-11 Notice

Any Member charged with any violation of the law relating to alcoholic beverages or illegal substances, or charged with any felony, shall notify the NASCAR Competition Administrator prior to the next scheduled Event or within 72 hours of being so charged, whichever is earlier.

SECTION 3 - LICENSES

3-1 Eligibility

Any person or entity who is a Member in good standing is eligible to receive a NASCAR license authorizing the Member to participate in a NASCAR-sanctioned Event, if the Member has properly filed a NASCAR license application, agreed to abide by the NASCAR Rules, paid the fee(s) prescribed for the license, and meets the required qualifications for the license set forth in this Section 3 and as may be otherwise required by NASCAR. NASCAR is dedicated to the highest degree of professionalism, sportsmanship and integrity in stock car racing. For that reason, NASCAR may reject any license application of an otherwise qualified applicant in the interest of stock car racing or NASCAR, in NASCAR's sole discretion. Among other things, participation or involvement by a person or business entity (including, in the case of a business entity, involvement by any stockholder, director, officer, employee, partner or agent thereof) in conduct detrimental to stock car racing or to

NASCAR, whether in the course of competition or not, and whether the person or business entity was a Member or applicant at the time of such conduct, may result in rejection of a license application by NASCAR. Any person or business entity whose application has been rejected may appeal to the National Motorsports Appeals Panel.

3-2 Licenses Required

Every NASCAR Member who desires to participate in a NASCAR sanctioned Event as a Competitor, Scorer, Official, Promoter, Manufacturer, Sponsor, Sales Representative or other approved position, must apply for, receive, and possess a valid, current NASCAR license authorizing participation in that capacity. NASCAR may specify, limit or restrict the types of racing Series, race cars, or race tracks in which a license-holder may participate.

3-3 Application Process

Application and/or renewal forms for a NASCAR license may be obtained from NASCAR Headquarters. Upon completion, they must be submitted to NASCAR Headquarters, which is the only NASCAR office authorized to issue such licenses. License application forms must be fully executed, signed by the applicant, and accompanied by the requisite fee. The receipt of a NASCAR license application form and fee by a NASCAR Official does not constitute the issuance of or approval by NASCAR of such an application for a NASCAR license. Applicants will receive a license card from NASCAR Headquarters when their application for a license has been approved.

3-4 Minors

If the applicant is a minor under the laws of his/her state/province of residence, the applicant must also submit, with his/her application, a fully executed and signed Minor's Release. This Minor's Release must be signed by the applicant, as well as the applicant's natural father or mother, or by a court-appointed legal guardian. As with all applications NASCAR may, but is not required to, approve the application of any applicant under 21 years of age.

3-5 Licenses Non-Transferable

A NASCAR license is non-transferable and non-assignable. It may be used only by the Member to whom it is issued. Any attempt to transfer, lend, or permit any other person or entity to use it shall result in a penalty imposed on the licensee by NASCAR. IF FOR ANY REASON, WHETHER INTENTIONAL OR UNINTENTIONAL, A LICENSE IS TRANSFERRED, LOANED, OR USED BY ANY OTHER PERSON OR ENTITY, THE ORIGINAL LICENSEE SHALL INDEMNIFY NASCAR AND ALL RELATED PARTIES FOR ANY DAMAGES ARISING IN CONNECTION WITH SUCH TRANSFER, LOAN, OR USE.

3-6 Minimum Driver License Requirements

To secure and maintain a NASCAR Competitor License as a race driver, a NASCAR Member at a minimum must:

- (1) Be at least 15 years of age.
- (2) If requested by NASCAR Officials, submit to and pass driving ability tests conducted by and at the discretion of NASCAR Officials, whose decision as to the applicant's driving ability is final and binding on the applicant.
- (3) Be physically and physiologically fit as determined in the sole discretion of NASCAR. In this regard, NASCAR requires a Competitor or applicant to submit to and pass one or more physical examinations by a qualified physician(s).
- (4) Execute and deliver to NASCAR such authorizations, releases, applications, consents, waivers, resumes and other documents as may be required by NASCAR from time to time.
- (5) Be in compliance with NASCAR's Substance Abuse Policy (See Section 19).

3-7 Minimum Car Owner License Requirements

A. To secure and maintain a NASCAR Competitor License as a car owner, a NASCAR Member at a minimum must:

- (1) Be at least 18 years of age, unless the applicant is a business entity.
- (2) Own a racing car.

B. NASCAR will issue the license in the name of the car owner as named on the license application. If the car is owned by a partnership, corporation or other business entity, the license will be issued in the name of the partnership, corporation or business entity, and the license will further indicate the name of the individual legally responsible for the ownership and operation of the business entity. That person will be the party responsible for all communications and contact with NASCAR regarding all business (as opposed to racing competition) matters in connection with the car.

C. NASCAR will indicate on the license the car number assigned to the licensee by NASCAR, subject to sub-section 3-7D. The licensee may use the assigned car number on the car or cars owned by the licensee as follows. During an Event, the licensee may use an assigned number to identify a particular car. A number may not be transferred by the licensee to another car during the Event except as provided in sub-section 9-6F. At a subsequent Event, the licensee may use the number to identify a different car owned by the licensee, so long as the number is not transferred again during the Event except as provided in sub-section 9-6F. Points and other prizes for car owners will be awarded to the licensee, depending upon the performance of the car identified by the number assigned to the licensee. If NASCAR changes a car owner's number during the season, NASCAR, at its option, may transfer to the new number championship points accumulated using the previous number.

D. NASCAR reserves the right to revoke, reassign or transfer car numbers to another licensee at any time. Car numbers are non-assignable and non-transferable, except by NASCAR.

E. A car owner Competitor License is non-assignable and non-transferable. The licensee shall inform NASCAR Headquarters in writing promptly if the partnership is altered in any material manner including bankruptcy or the corporation's stock or assets are sold (other than routine daily stock sales) or become the subject of a merger or the business entity's ownership interest materially changes. When NASCAR is informed of such a change by the licensee or otherwise, NASCAR, in its sole discretion, may approve or revoke the license as of the date of the change or otherwise. If NASCAR revokes the license, the new partnership, corporation or business entity must submit a new license application. NASCAR may assign the old car number or numbers to the new licensee, or it may assign a new car number or numbers. NASCAR, in its sole discretion, may assign to the new licensee championship points earned by the former licensee, if doing so is in the interest of competition and stock car racing. NASCAR may make such other determinations regarding scoring, point funds and the distribution of the purse or prize monies as it determines to be in the interest of competition and stock car racing.

3-8 Minimum Crew Member License Requirements

To secure and maintain a NASCAR Competitor License as a crew member, a NASCAR Member at a minimum must:

- (1) Be at least 15 years of age.
- (2) Be physically fit to be a crew member, as determined in the sole discretion of NASCAR. In this regard, NASCAR may require the Competitor or applicant to submit to and pass one or more physical examinations by a qualified physician(s).
- (3) Execute and deliver to NASCAR such authorizations, releases, applications, consents, waivers and other documents as may be required by NASCAR from time to time.
- (4) Be in compliance with NASCAR's Substance Abuse Policy (See Section 19).

3-9 Minimum Premier License Requirements

To secure and maintain a NASCAR Premier License, a NASCAR Member at a minimum must:

- (1) Be at least 18 years of age.
- (2) Be an employee of a company that has a direct sponsorship program with NASCAR (Official Status, Contingency Programs, Special Awards and Series Sponsors).
- (3) Execute and deliver to NASCAR such authorizations, releases, applications, consents, waivers and other documents as may be required by NASCAR from time to time.

3-10 Minimum Support Industry License Requirements

To secure and maintain a NASCAR Support Industry License, a NASCAR Member at a minimum must:

- (1) Be at least 18 years of age.
- (2) Licenses are available to employees of marketing/sales/PR companies or industry firms (companies currently working with a team or teams that require access to service their product, i.e. engine builders, manufacturers of cars/parts or other equipment) which require access, as determined by NASCAR, to garage and pit areas to conduct business.
- (3) Execute and deliver to NASCAR such authorizations, releases, applications, consents, waivers and other documents as may be required by NASCAR from time to time.

3-11 Minimum Class "B" License Requirements

To secure and maintain a NASCAR Class "B" License, a NASCAR Member at a minimum must:

- (1) Be at least 18 years of age.
- (2) Be an employee of a company that does not have a direct program or sponsorship involvement with NASCAR or a team but requires access, as determined by NASCAR, to the garage and pit areas to conduct business (parts vendors, etc.).
- (3) Execute and deliver to NASCAR such authorizations, releases, applications, consents, waivers and other documents as may be required by NASCAR from time to time.

3-12 Minimum Team Sponsor License Requirements

To secure and maintain a NASCAR Team Sponsor License, a NASCAR Member at a minimum must:

- (1) Be at least 18 years of age.
- (2) Be an employee of a company that has a primary or associate sponsorship with a NASCAR Regional race team.
- (3) Execute and deliver to NASCAR such authorizations, releases, applications, consents, waivers and other documents as may be required by NASCAR from time to time.

3-13 Minimum Officials License Requirements

To secure and maintain a license as a NASCAR Official, a NASCAR Member at a minimum must:

- (1) Be at least 18 years of age.
- (2) Possess, in the sole discretion of NASCAR, the necessary qualifications and abilities to carry out the duties of a NASCAR Official.
- (3) Be physically fit to perform the duties of an Official, as determined in the sole discretion of NASCAR. In this regard, NASCAR may require the Official or applicant to submit to and pass one or more physical examinations by a qualified physician(s).
- (4) Execute and deliver to NASCAR such authorizations, releases, applications, consents, waivers and other documents as may be required by NASCAR from time to time.

3-14 Minimum Promoter License Requirements

To secure and maintain a license as a NASCAR Promoter, a NASCAR Member must:

- (1) Be at least 18 years of age. If the applicant is a corporation, partnership, or other business entity, the individual principally responsible for the ownership and operation of the business entity must satisfy the same age requirements.
- (2) Be the Promoter and/or an employee of a Promoter that has entered into a valid Sanction Agreement for one (1) or more NASCAR-sanctioned Events.
- (3) Execute and deliver to NASCAR such authorizations, releases, applications, consents, resumes, waivers and other documents as may be required by NASCAR from time to time.

3-15 Use of NASCAR License

A. Licensees must present their NASCAR license to the NASCAR Officials at any time upon request.

B. The license of a Member suspended or terminated, at any time for any reason, must be promptly forwarded to NASCAR Headquarters. Even if the Member fails to do so, the license shall be inoperative and invalid unless the Member has been suspended, in which case the license shall be inoperative and invalid until the lifting of the suspension. NASCAR Headquarters will return the license to the Member upon the lifting of a suspension.

3-16 Suspension

NASCAR may suspend a license for a definite or indefinite period of time, or for all or specified NASCAR-sanctioned Events or tracks, in the interest of stock car racing or NASCAR. Such Member may appeal such a suspension to the National Motorsports Appeals Panel. Such Member shall have no right to receive, and NASCAR shall not be obligated to refund, any part or all of the license fees previously paid by the Member to NASCAR.

3-17 Voluntary Termination

A licensee may terminate his/her license at any time by surrendering his/her license, accompanied by a letter of resignation, to NASCAR Headquarters. Such Member shall have no right to receive, and NASCAR shall not be obligated to refund, any part or all of the license fees previously paid by the Member to NASCAR.

3-18 Involuntary Termination

NASCAR may terminate a license at any time in the interest of stock car racing or NASCAR. Such Member shall have no right to receive, and NASCAR shall not be obligated to refund, any part or all of the license fees previously paid by the Member to NASCAR. Such Member may appeal such a termination to the National Motorsports Appeals Panel.

3-19 Expiration

A license expires automatically on the last day of the calendar year in which the license is issued.

3-20 Ejection

A NASCAR Supervisory Official may eject a licensee from an Event or from the racing premises in an emergency situation, to promote the orderly conduct of the Event, and/or future Events. An ejection is final, non-appealable and non-reviewable, except as provided in sub-section 1-4.

3-21 Interim Review of Licensee Qualifications

NASCAR, in its sole discretion, may review the qualifications of a licensee at any time after issuance of a license and may require the licensee to submit to such additional physical examinations, to submit a resume or an updated resume to include driver information and record of competition, or to pass such additional driver ability tests, and may take such other action or require the licensee to take such other action as NASCAR may deem appropriate, to determine whether the licensee continues to qualify for a license under these Rules.

SECTION 4 - INJURY REPORTS

4-1

A. Any Member involved in an accident or otherwise injured while on the racing premises at an Event (e.g. racing surface, pit area, garage area, etc.), must report such incident to a NASCAR Official or NASCAR Medical liaison as soon as practicable, but in no event prior to leaving the premises, unless such Member is physically unable to make such a report.

B. Each Competitor agrees and consents that in the event of injury or death in the course of or as a result of an Event, to sign in advance of the Event the necessary waivers to release and provide to NASCAR access to copies of any and all medical records of the Competitor related to such an injury or death.

SECTION 5 - SANCTIONED EVENTS

5-1 A NASCAR-sanctioned Event is an Event that NASCAR has agreed in writing to sanction, in an applicable, fully executed Sanction Agreement that is in effect at the time of the Event.

5-2 A NASCAR Sanction Agreement is issued only by NASCAR Headquarters on the appropriate form, after approval by NASCAR. The issuance of a Sanction Agreement for a specific Event does not obligate the Promoter or NASCAR to enter into a Sanction Agreement, or to issue a sanction, for any other Event(s).

5-3 Only individuals or entities holding current, valid NASCAR memberships and licenses are authorized to participate in NASCAR-sanctioned Events.

5-4 All changes relating to an Event, including qualifying, must be approved in advance by NASCAR Headquarters.

SECTION 6 - SAFETY

6-1 Stock car racing is an inherently dangerous sport. Each Member assumes the risk of bodily injury, death, or property damage when he/she participates in an Event. The risk of serious injury or death cannot be eliminated and, in fact, will always be present at a high level. Members are required to advise their spouses and next of kin, if any, of this fact.

6-2 Although safety generally is everyone's concern, NASCAR cannot be and is not responsible for all or even most aspects of the safety effort. That responsibility instead rests with the various participants in the Event(s) as follows:

A. Promoter: The Promoter is directly and finally responsible to ensure that the racing facilities are adequate for the Event; that adequate safety personnel and equipment are provided for each Event, both for the purpose of preventing injury

where reasonably possible and responding to injury when it occurs; and that the conditions at the racing facility are maintained in a reasonable manner to reduce the risk of injury, all as more fully set forth in the Sanction Agreement applicable to the Event.

B. NASCAR: Employees and representatives of NASCAR, when they are present at an Event, will inform the Promoter of any inadequacies in the facilities, safety personnel and equipment, or other conditions at the track that they (a) observe and (b) consider in their best judgment to be inconsistent with the interests of safety. In addition, NASCAR works with Competitors, Promoters, car manufacturers and outside independent experts to facilitate, where and when appropriate, the exchange of useful information regarding safety designs, products, practices, and procedures. Where appropriate, it will also institute rules or procedures relating to safety. NASCAR, however, is not and does not hold itself out as an expert in safety standards, designs, products, practices or procedures, nor is NASCAR a standards organization or a designer, manufacturer or seller of safety-related products, facility designs or race car designs. NASCAR DOES NOT MAKE ANY REPRESENTATIONS OR WARRANTIES OF SAFETY TO ANY MEMBER OR OTHER PERSON AND CANNOT AND DOES NOT TAKE RESPONSIBILITY TO ENSURE THE ADEQUACY - FOR PURPOSES OF SAFETY - OF THE RACING FACILITY, SAFETY PERSONNEL AND EQUIPMENT, AND/OR CONDITIONS AT THE TRACK. The Promoter (see above) and the Competitors (see below) are solely and ultimately responsible for such matters at NASCAR-sanctioned Events.

C. Competitors: All Competitors are obligated to inspect for any unsafe condition the racing facilities, his/her race car and all related equipment, safety personnel and equipment, and/or conditions at the track on a continuing basis before, during and after the Event. Competitors must report to the Promoter and NASCAR Officials promptly any inadequacy or unsafe condition in the facilities, race car, personnel and equipment, and/or conditions at the track. Competitors also are solely and directly responsible for the safety of their race cars and racing equipment and are obligated to perform their duties (whether as a car owner, driver, or crew member) in a manner designed to minimize to the degree possible the risk of injury to themselves and others. NEITHER NASCAR NOR THE PROMOTER CAN OR WILL BE RESPONSIBLE FOR THE ADEQUACY OF A COMPETITOR'S RACE CAR, RACING EQUIPMENT, OR RACING ACTIVITY TO ACCOMPLISH THIS PURPOSE.

D. NASCAR Officials: NASCAR Officials should report promptly to the Promoter any observed safety inadequacies in the racing facilities, safety personnel and equipment, and/or conditions at the track. In addition, if a NASCAR Official observes any safety inadequacy in a Competitor's race car, racing equipment, or conduct, the Official may take whatever action is deemed reasonable and appropriate in order to correct such inadequacy. Such action may include, but is not limited to, physical examinations, medical determinations and driver ability or experience tests. NASCAR, HOWEVER, IS NOT RESPONSIBLE FOR THE ADEQUACY OF A COMPETITOR'S RACE CAR, RACING EQUIPMENT, OR RACING ACTIVITY TO ACCOMPLISH THIS PURPOSE.

SECTION 7 - ENTRIES

7-1 Entry Requirements

A. In order to compete in a NASCAR sanctioned Event, a Member must submit and have approved an Official Entry Blank for the Event. NASCAR publishes the sole Official Entry Blank for the Event. For purposes of this Section, "Official Entry Blank" refers to the form of entry required by NASCAR for Members to officially enter a NASCAR-sanctioned Event.

B. It is the responsibility of the Member to obtain the appropriate Official Entry Blank, and to ascertain and abide by all applicable deadlines and instructions. The distribution of Official Entry Blanks to Competitors does not relieve them of this responsibility.

C. The Member must complete the Official Entry Blank for the Event in full and submit it to the appropriate office (as specified on the Official Entry Blank) by the deadline listed thereon.

D. In the event an Official Entry Blank is not submitted by the deadline, NASCAR, in its sole discretion, may decide to accept the Competitor's entry in which case he/she may be eligible for prize money, provisional starting position(s), NASCAR Championship points or bonus money, if any. Entries must be submitted by mail or other NASCAR-recognized courier, electronically or via the Official NASCAR Member website (www.NASCARMembers.com). Telephone entries will not be accepted.

E. Acceptance of any entry is at the discretion of NASCAR.

7-2 Member Obligations / Agreements / Release

A. A NASCAR-sanctioned Event is a competitive stock car racing Event, that is intended to be conducted and officiated in accordance with this Rule Book, as it may be amended from time to time, any special rules that may be published by

NASCAR specifically for the Event, and any applicable agreement to which NASCAR is a party. BY SUBMITTING AN OFFICIAL ENTRY BLANK AND/OR TAKING PART IN ANY ACTIVITY RELATING TO THE EVENT, A MEMBER AGREES TO ABIDE BY THE DECISIONS OF NASCAR OFFICIALS (WHETHER LOCAL, REGIONAL OR NATIONAL) AND NASCAR SUPERVISORY OFFICIALS, RELATING TO THE EVENT OR ANY MATTERS ARISING OUT OF THE EVENT, AND AGREES THAT SUCH DECISIONS ARE FINAL, NON-APPEALABLE (EXCEPT AS PROVIDED IN SECTIONS 12, 13 AND 14 OF THIS RULE BOOK) AND NON-LITIGABLE. SUCH A MEMBER FURTHER AGREES TO INSPECT THE RACING FACILITIES, AND HIS/HER RACE CAR AND ALL RELATED EQUIPMENT, SAFETY PERSONNEL AND EQUIPMENT, AND CONDITIONS AT THE TRACK, TO ENSURE THAT IT IS IN A SAFE, RACEABLE AND USABLE CONDITION, AND THAT THE MEMBER VOLUNTARILY ASSUMES THE RISK OF, AND HAS NO CLAIM FOR DAMAGES AGAINST NASCAR, THE PROMOTER OR THEIR OFFICERS, DIRECTORS, SHAREHOLDERS, OFFICIALS, AGENTS OR EMPLOYEES BY REASON OF, DAMAGE TO THE CAR, OR INJURY OR DEATH OF THE DRIVER, THE PIT CREW OR ANY OTHER PERSON. ALL MEMBERS ASSUME FULL RESPONSIBILITY FOR ANY AND ALL INJURIES SUSTAINED, INCLUDING DEATH, AND ALL PROPERTY DAMAGE, ANYTIME THEY ARE IN THE RACING AREAS OR EN-ROUTE THERETO OR THEREFROM. EACH MEMBER ACKNOWLEDGES THAT THE MEMBER'S SPOUSE AND NEXT-OF-KIN HAVE BEEN ADVISED THAT THE MEMBER UNDERSTANDS THE HIGH RISK OF SERIOUS INJURY OR DEATH WHICH MAY RESULT FROM RACING, AND THAT THE MEMBER SOLELY ASSUMES ALL SUCH RISKS.

B. When a Competitor submits an Official Entry Blank, and the entry is accepted, the Competitor becomes obligated to attempt in good faith to compete in the Event to the best of his/her ability. Once an entry is accepted by NASCAR, a Competitor must submit in writing any requested changes to the entry, which NASCAR may accept or reject in its sole discretion.

C. If a Competitor competes in a NASCAR-sanctioned Event without having properly submitted a fully-executed Official Entry Blank, the Competitor, by such entry, nevertheless agrees that he/she is subject to all NASCAR Rules, amendments and special rules, as well as all statements, releases and obligations appearing in the Official Entry Blank, as if he/she had properly submitted a fully-executed Official Entry Blank.

D. Only persons approved by NASCAR may enter the racing areas. Competitors may not enter the racing areas (i.e., garage areas, pits, racing surface and similar areas) unless they personally have signed all required entry forms, waiver and release of liability forms, and pit permits applicable to the particular Event. No person may sign at any time, for any reason, any entry form, waiver and release of liability form or pit permit for anyone other than himself/herself.

7-3 Advertising / Promotion Release

Each Member, by entering a NASCAR-sanctioned Event, grants to NASCAR, its duly authorized agents and assigns, a license to use and sub-license his/her name, likeness and performance, including photographs, images and sounds of such Member and/or any vehicle(s) with respect to which the Member competes in NASCAR-sanctioned Events, in any way, medium or material (including, but not limited to, telecasts by and through television, cable television, radio, pay-per-view, closed circuit television, satellite signal, digital signal, film productions, audiotape productions, transmissions over the Internet, public and private online services authorized by NASCAR, sales and other commercial projects, and the like) for promoting, advertising and publicizing at any time any NASCAR-sanctioned Event or NASCAR related telecast or programming, before, during and after such Event, and each Member hereby relinquishes to NASCAR in perpetuity all rights thereto for such purposes.

7-4 Telecast and Other Rights

Each Member, by entering a NASCAR-sanctioned Event, acknowledges that NASCAR, and its licensees and assigns exclusively and in perpetuity owns any and all rights to broadcast, transmit, film, tape, capture, overhear, photograph, collect or record by any means, process, medium or device (including, but not limited to, television, cable television, radio, pay-per-view, closed circuit television, satellite signal, digital signal, film productions, audiotape productions, transmissions over the Internet, public and private online services authorized by NASCAR, sales and other commercial projects, and the like), whether or not currently in existence, all images, sounds and data (including, but not limited to, in-car audio, in-car video, in-car radio, other electronic transmissions between cars and crews, and timing and scoring information) arising from or during any NASCAR Event or the Member's performance in the Event, and that, except for works created pursuant to the fair use doctrine or the NASCAR Media Access Policy, NASCAR is and shall be the sole owner of any and all copyrights, intellectual property rights, and proprietary rights worldwide in and to these works and in and to any other works, copyrightable or otherwise, created from the images, sounds and data arising from or during any NASCAR Event or the Member's performance in the Event. Each Member agrees

to take all steps reasonably necessary, and all steps requested by NASCAR, to protect, perfect or effectuate NASCAR's ownership or other interest in these rights. Each Member agrees not to take any action, nor cause others to take any action, nor enter into any third party agreement that would contravene, diminish, encroach or infringe upon these NASCAR rights.

7-5 Code of Conduct

A NASCAR Member shall not make (or cause to be made) a public statement and/or communication that criticizes, ridicules, or otherwise disparages another person based upon that person's race, color, creed, national origin, gender, sexual orientation, marital status, religion, age, or handicapping condition.

7-6 Performance Obligation

NASCAR requires its Competitor(s) to race at 100% of their ability with the goal of achieving their best possible finishing position in the Event.

Any Competitor(s) who takes action with the intent to Artificially Alter the finishing positions of the Event or encourages, persuades or induces others to Artificially Alter the finishing positions of the Event shall be subject to a penalty from NASCAR. Such penalties may include but are not limited to, disqualification and/or loss of finishing positions and/or fines and/or loss of points and/or suspension and/or probation to any and all Members of the team(s) including any beneficiaries of the prohibited actions.

"Artificially Alter" shall be defined as actions by any Competitor(s) that show or suggest that the Competitor(s) did not race at 100% of their ability for the purpose of changing finishing positions in the Event, in NASCAR's sole discretion.

SECTION 8 - INSPECTIONS AND ELIGIBILITY

Prior to use in any Event all Race Equipment described in Sections 20C & D must be submitted to the NASCAR Competition Administrator for consideration of approval and approved by NASCAR. The Race Equipment above may thereafter be used in its approved form until NASCAR determines that the equipment is no longer eligible for competition.

8-1 Time / Manner / Location

A. All Race Equipment is subject to inspection by NASCAR, at any time and in any manner and location as determined by NASCAR Officials in its sole discretion

B. All decisions by NASCAR Officials regarding the timing, manner and location of inspection, as well as what Race Equipment will be inspected, are final, non-appealable and non-reviewable except as provided in sub-section 1-5 Finality of Interpretation and Application.

8-2 Inspection Area

Only those persons approved by NASCAR Officials may be admitted to the inspection area.

8-3 Car Eligibility

A. NASCAR Officials will determine whether Race Equipment meets the applicable specifications for an Event as set forth in the Rule Book, as it may be amended from time to time, and any special rules published by NASCAR for an Event.

B. Except as provided below, only Race Equipment determined by NASCAR to meet the applicable specifications is eligible to compete in the Event. Such determinations may be made by NASCAR Officials at any time before, during, or after the Event, and may take into account, to the extent deemed reasonable by NASCAR Officials in the interests of racing competition and fairness, any modifications caused or required as a result of damage caused by in-race accidents.

C. Throughout the Event, a car owner must compete with the original car that is presented for initial inspection, unless the car has been damaged beyond a timely repair. The Series Director will make the determination of whether a car is damaged beyond a timely repair. If the Series Director makes such a determination, a backup car may be unloaded. The backup car may not be unloaded at any time, unless approved by the Series Director. Under no circumstances will a car owner be permitted to use a backup car if, in the judgment of the Series Director, the original car was intentionally damaged.

D. After a car has completed initial inspection, at the discretion of the Series Director, a car that has sustained severe damage as a result of an on-track incident may be removed from the track premises for adequate repairs.

E. The backup car will be subject to an additional inspection fee and must pass NASCAR inspection.

8-4 Competitor Obligations

A Competitor must take whatever steps are requested by a NASCAR Official, including disassembly of the car, to facilitate inspection of the Race equipment. This obligation includes, but is not limited to, installing inspection holes, inspection ports, and/or other means of inspection in the frame, roll cage bars, engine components, and the like. NASCAR is not responsible for payment, reimbursement, damage or loss to the Competitor as a result of such inspections.

8-5 Inspection Prior to Competition

If a NASCAR Official determines prior to the competition that a car including Race Equipment does not meet the applicable specifications, the car will not be allowed to compete unless, in the discretion of the Series Director, the deficiency

- (a) will not adversely affect the orderly conduct of the Race;
- (b) cannot be corrected in time for qualifying or for the Race (if no qualifying or if the deficiency is discovered after qualifying but prior to the Race);
- (c) is so insubstantial as not to warrant a determination that the car is ineligible to compete in the Race.

If the Series Director permits the car to compete under these circumstances, the Series Director will apprise the Competitor in writing of the deficiency and specify the date and time in which the deficiency must be corrected. If the deficiency has not been corrected by the date and time specified by the Series Director, a penalty may be imposed by the Series Director, and the car will be prohibited from competing in any future Event until the deficiency has been corrected.

Unless otherwise authorized by the Series Director, once a car has been presented at the beginning of the inspection procedure for either qualifying or the Race, the car must not be removed from the inspection procedure until after qualifying or the Race has been completed.

8-6 Car Sealing / Impounding

A. NASCAR has the right, for inspection purposes, to seal or impound any Race Equipment entered and competing in an Event. NASCAR also has the right to seal or impound any Race Equipment to conduct an analysis of the performance capabilities of the Race Equipment pursuant to sub-section 8-9. NASCAR is not responsible for payment, reimbursement, damage or loss to the Competitor as a result of such sealing or impounding.

B. In Events where cars are impounded after qualifying, only repairs or adjustments authorized by NASCAR Officials may be performed. All repairs and/or adjustments may result in a penalty.

8-7 Inspection After Competition

A. At an Event where the NASCAR Rule Book, special rules, or NASCAR Officials require inspection after the Event, any Race Equipment that has competed in the Event may not be taken from the racing premises without permission of the Series Director.

B. NASCAR Officials may assess a fine and/or loss of championship points, and/or loss of finishing positions in the Event for any engine that requires additional cooling time in excess of the maximum cooling down time of two (2) hours from the official completion of the Race.

C. If a NASCAR Official determines after the Race that Race Equipment does not meet applicable specifications, but the deficiency is so insubstantial, the Series Director in the exercise of his/her sole discretion may determine that the Race Equipment was eligible for the Event, but will apprise the Competitor in writing of the deficiency and direct the Competitor to correct the deficiency for future Events. The car will be prohibited from competing in any future Event if the deficiency has not been corrected by the date and time specified by the Series Director.

8-8 Cars / Equipment / Parts Failing To Meet Specifications

A. NASCAR has the right to confiscate any Race Equipment without obligation for payment or reimbursement which fails to meet applicable NASCAR specifications during an Event or that is used or altered in violation of the NASCAR Rule Book in NASCAR's sole discretion.

B. If NASCAR determines that any Race Equipment used by a Competitor does not meet NASCAR specifications or is used or altered in violation of the NASCAR Rules, NASCAR may:

- (1) declare the car (and/or Race Equipment) ineligible for the Event
- (2) disallow the Competitor's qualifying times
- (3) withdraw the Competitor's opportunity to qualify for the Event
- (4) take away finishing position
- (5) disqualify the Competitor(s) from the Event and/or
- (6) make such other determinations as may be appropriate in the interest of competition.

The above actions are in addition to all remedies available to NASCAR under Section 12, will not be deemed or construed to be a penalty within the meaning of Section 12 and is not appealable under that Section.

8-9 Competitive Analysis

From time to time, NASCAR may determine, in the interest of competition that it is necessary or appropriate to conduct an analysis of the performance capabilities of Race Equipment. The Competitor shall take whatever steps are requested by NASCAR Officials for this purpose.

NASCAR also has the right to seal or impound Race Equipment for this purpose. NASCAR is not responsible for payment, reimbursement, damage or loss to the Competitor as a result of such analysis, sealing or impounding.

If, in the judgment of NASCAR Officials, any Race Equipment has been altered or modified or any action(s) or procedure(s) were conducted to compromise the results of the competitive analysis, NASCAR may assess penalties pursuant to Section 12. If, in the judgment of NASCAR, any action(s) or procedure(s) were conducted with the intent to alter or compromise the results of the competitive analysis, NASCAR may assess penalties pursuant to Section 12.

8-10 Finality of Inspection / Eligibility Decisions

Inspection and/or eligibility decisions, including any decision regarding a Competitor's compliance with equipment-related procedures set forth in the NASCAR Rule Book, are final, non-appealable and non-reviewable except as provided in sub-section 1-5.

8-11 Penalties

In addition to making the inspection and/or eligibility decisions described in this section, NASCAR may issue a Penalty Notice for any violation of the NASCAR Rules in accordance with the procedures in Section 12.

8-12 Certification

NASCAR, in its sole discretion, may require a Competitor to submit Race Equipment to NASCAR before being permitted for use in an Event, for the purposes of permitting NASCAR to certify that it is in compliance with the NASCAR Rules.

Once Race Equipment has been certified by NASCAR as being in compliance with the NASCAR Rules, it must not be altered, modified, repaired or changed in any manner, without prior written notification to and approval by NASCAR. If NASCAR determines, in its sole discretion, that previously certified Race Equipment may have been altered, modified, repaired or changed in any manner, NASCAR may require the Race Equipment be submitted to NASCAR for re-certification before further use in an Event.

After the Race Equipment has been certified and/or encrypted, NASCAR certification verification(s) may be installed on the Race Equipment. It is the responsibility of the team(s) to maintain the original integrity of the encryption and NASCAR certification verification(s).

SECTION 9 - RACE PROCEDURE

9-1 Race Procedure Defined

Race Procedure is the manner in which an Event is conducted. It includes, but is not limited to, determinations regarding the eligibility of car(s) for competition, a Competitor's compliance with competition-related procedures as set forth in the Rule Book, qualifying procedures, the line up of the cars, the start of the Race, the control of cars throughout the Race by flags, lights or other direct communication between NASCAR Officials and Competitors, the election to stop or delay a Race, control of pit activity, flagging, the positioning of cars at any time, the addition of lap(s), the assessment of lap and time penalties and the completion of the Race. It does not include the assessment of penalties pursuant to Section 12 (disqualification, suspension, point deduction or fine), but it does include lap and/or time penalties and similar actions during a Race or immediately after a Race as provided in this section. The rules in this section provide the framework for NASCAR Officials to implement race procedures. In addition to interpreting and applying these rules, NASCAR Officials are authorized to make such other determinations or take such other action as they determine to be necessary to promote the best interests of NASCAR racing, including but not limited to, fairness and prompt finality of competition results.

9-2 Finality of Race Procedure Decisions

All decisions by NASCAR Officials at the track involving race procedures are final and non-appealable, subject only to review by NASCAR Supervisory Official(s) if one (1) or more such Officials determine that extraordinary circumstances exist that require such review. In making such a determination, the interest of finality in competition results will be a principal consideration. NASCAR Supervisory Officials will not review any race procedure decision unless it has been brought to their attention by an affected Member within 20 minutes after the posting by NASCAR of the results of the Race or the qualifying session at which the race procedure decision was first made. If a NASCAR Supervisory Official determines (a) that the race procedure decision should be reviewed, and (b) that the decision was in error,

the Supervisory Official(s) may take whatever action deemed appropriate to initiate a remedy to further the interests of fairness and finality in competition results. Such action includes, but is not limited to, revising the qualifying results, revising the official Race results, imposing penalties (disqualifications, suspensions or fines), or awarding or subtracting points. The Supervisory Official(s) may alternatively elect not to take remedial action. All such decisions are final and non-appealable (except the imposition of a penalty, as provided in Section 12).

9-3 Official Starter

The Official Starter will be designated by NASCAR Officials.

9-4 Driver / Crew Chief Responsibilities

A. The car owner must designate, on the Official Entry Blank, the crew chief who shall be the sole spokesperson for the driver, car owner, crew members and others assigned to the racing team in any and all matters pertaining to the Event (other than proceedings pursuant to Sections 12, 14 and 15 of the Rule Book). At all Events, the crew chief assumes responsibility for the actions of his/her driver, car owner and team members, and may be subject to disciplinary action as a result. At all Events, the crew chief assumes responsibility for assigning and directing the activities of all crew members and others assigned to the racing team who enter the car servicing area of pit road, and for spotter(s), for ensuring that they report to their designated area at the appropriate times. The Crew Chief will be the only team representative authorized to withdraw a car from the Event. Unpaid fines for the car owner, driver, crew chief, crew members, and others assigned to the racing team may be collected by NASCAR by deducting same from the purse or point fund earnings of the driver or car owner.

B. All drivers must be on time to compete in the qualifying session(s) and Races for which they are scheduled. Any driver or car not ready to compete within five (5) minutes of the time called may be sent to the rear of the line, repositioned within the order of the qualifying session(s) or Race, or left out of the remainder of the day's qualifying session(s) or racing activities, at the discretion of the Series Director.

C. Changes of the driver at any time must not be made without advance notification to and approval by the Series Director. In any condition other than when a Race is halted due to a red flag, a driver change must be made in the car's assigned pit box or garage area only. If a driver change is made while the red flag is displayed, the location and the other circumstances of the change must be approved by the Series Director. If a driver change is made while the red flag is displayed, the car must relinquish its position and move to the rear of the field when the Race is resumed and remain there until a green flag restart.

D. A rookie driver may not compete in an Event, whether in practice, qualifying, at the start of the Race, or as a relief driver, unless authorized by the Series Director. The Series Director shall be the sole judge of whether an individual is a rookie, based on the individual's prior racing experience, including but not limited to, the individual's racing experience at the Event facility and in the Series for which the Event is a part.

E. A car's eligibility to compete in the Event will be at the discretion of the Series Director.

F. Any driver or crew chief that is not present to answer the second roll call at the driver and/or crew chief meeting(s) and any driver that is not present at the Pre-Race driver introductions may be penalized.

G. Subject to the other provisions in the Rule Book, any eligible car may be driven in any Event by an eligible driver.

9-5 Starting Position Determination

A. A driver may not attempt to qualify more than one (1) car in a single qualifying session or qualifying Race. A car may only make one (1) qualifying attempt per session unless otherwise authorized by the Series Director. A driver may only qualify one (1) car for an Event. The time accredited to each car determines its starting position as set forth in this sub-section 9-5. When two (2) or more cars have the same qualifying times, the starting position for the Event shall be determined by the current calendar year NASCAR Championship car owner point standings in the Series for which the Event is a part. For purposes of the foregoing sentence, the previous calendar year's final car owner point standings shall be used until the completion of the third Championship Events. If point standings do not prevail, then the driver setting the duplicate time first would start in front of the other.

B. In postponed Events where re-qualifying is specified, only the qualifying times established in re-qualifying will be certified as NASCAR records.

C. The procedure for the qualifying session(s) will be established by NASCAR Officials and will be announced and/or posted to the drivers and/or crew chiefs before qualification.

9-5.1 Starting Position Eligibility – Adverse Conditions

If the qualifying session(s) are not completed due to weather or other adverse circumstances, all available starting positions will first be assigned to those car

owners who have entered in the Event. All available starting positions will be assigned, including those starting positions previously designated as provisional starting positions on the Official Entry Blank. Championship points for the Event will be assigned to those non-qualifier drivers and car owners, provided they have entered in the Event. The Series Director will determine the driver of record for the car. Starting positions will be assigned to car owners provided their car has passed inspection in a timely manner and the driver is approved for the Event using the following sequence of procedures.

When Combination Events are held and qualifications are not completed due to weather or other adverse circumstances, the following sequence of procedures will be used and divided equally between the Series competing in the Combination Event. The Series for which the Event is sanctioned will be considered the primary Series for the Event.

A. Speeds posted in the final round of qualifying will not be used in determining the starting positions unless the entire final round of qualifying is completed. If the final round of qualifying is determined to be incomplete by NASCAR due to weather or other adverse circumstances, the unfilled number of starting positions (as specified in the Official Entry Blank for the Event) will be determined on the basis of speeds posted in the first qualifying session (except for provisional starting positions based on other criteria listed on the Official Entry Blank for the Event) provided they are of acceptable speed as determined by NASCAR.

B. Should starting positions for the Event not be assigned per sub-section 9-5.1(A), those positions will be assigned to the highest 20 cars in the current calendar year car owner point standings entered in the Event in the Series for which the Event is a part. For purposes of the foregoing sentence, the previous calendar year's final car owner point standings shall be used until the completion of the third Championship Event of the current season for each Series, of the current calendar year. In case of ties, ties will be broken as set forth in sub-section 17-4, B-1.

C. If applicable, the next available position will be assigned to the reigning champion driver in the Series for which the Event is a part, if he/she has not already been assigned a position, provided that driver was entered in that car for the Event.

D. If applicable, the next available position will be assigned to the reigning champion car owner in the Series for which the Event is a part, if he/she has not already been assigned a position, provided that car owner has entered that car for the Event.

E. The next available positions(s), if any, will be assigned to any car owners who have entered in the Event and have won at least one (1) Championship Race, with the car licensed by the car owner, in the Series for which the Event is a part during the current calendar year or previous calendar year, if they have not already been assigned a position. In case of ties, ties will be broken by current calendar year car owner point standings as set forth in sub-section 17-4, B-1.

F. The next available position(s), if any, will be assigned to any drivers who have entered in the Event and have won at least one (1) Championship Race in the Series for which the Event is a part during the current calendar year or previous calendar year, if they have not already been assigned a position. In case of ties, ties will be broken by current calendar year car owner point standings as set forth in sub-section 17-4, B-1.

G. The next available position(s), if any, will be assigned to any car owner(s) who has a past champion driver, who is eligible per the Official Entry Blank, and who participated in the Series for which the Event is a part, as a driver in the previous calendar year, provided that driver was entered in that car for the Event and provided the eligible owner's car added to the starting lineup is the car which was used in the official qualifying attempt, unless as determined by NASCAR Officials, it is not repairable. In the event of more than one (1) champion, positions will be assigned in descending order starting with the most recent Series champion.

H. For the first three (3) Championship Events of the season, the next available position(s), if any will be assigned in order to the highest 30 cars of the current calendar year car owner point standings in the Series for which the Event is a part, provided the car was entered in the Event.

I. The next available position(s), if any, will be assigned to the car owner(s) who have made the most number of qualifying attempts during the current calendar year, with the car licensed by the car owner during the current calendar year, in the Series for which the Event is a part, provided the car was entered in the Event. The current calendar year car owner point standings in the Series for which the Event is a part shall prevail. In case of ties, ties will be broken by current calendar year car owner point standings as set forth in sub-section 17-4, B-1.

J. For the first Event of the season when current calendar year qualifying attempts are not applicable, the next available position(s), if any, will be assigned in order to the highest available car(s) of the previous calendar year's attempts, provided the car was entered in the Event.

K. The next available position(s), if any, will be assigned to the car(s) in the order (1, 2, 3...etc.) in which their number was selected during the random qualifying draw for the Event, provided the car was entered in the Event.

L. The next available position(s), if any, will be assigned to any car owner who did not enter the car in the Event by the following order:

- (1) Remaining position(s), if any, will be assigned to car owners who have made the most number of qualifying attempts, during the current calendar year, with the car licensed by the car owner during the current calendar year, in the Series for which the Event is a part. In case of ties, ties will be broken by current calendar year car owner point standings in the Series for which the Event is a part, as set forth in sub-section 17-4, B-1.
- (2) If any positions remain, they will be assigned to cars in the order (1, 2, 3... etc.) in which their number was selected during the random qualifying draw for the Event.

M. Additional starting positions will not be assigned, except at the discretion of the Series Director.

9-6 Race Start

A. All cars that are in the official starting line-up must be on the starting grid ready to participate five (5) minutes before the pace laps start unless otherwise directed by the Series Director. Any car in the starting line-up and on the starting grid will be permitted to enter the Race at any time after the pace laps start, if possible. If a car is able to enter the Race after the starting flag is displayed, the NASCAR Official on pit road must be advised to insure proper scoring of the car.

B. If a car drops out during the pace laps, or drops out before the completion of the first official lap, and thereafter fails to return to the Race, its finishing position will be determined by its starting position in relation to other cars that do not complete the first official lap. If a car does not leave the starting grid and thereafter fails to return to the Race, the car's finishing position will be behind those cars that depart the starting grid and will be determined by its starting position in relation to the other cars that do not leave the starting grid.

C. Once the field of cars are lined up and the starter signals the drivers to be ready, pace laps may be set at the discretion of the NASCAR Officials. During the pace laps, if a car does not maintain its designated position in the starting field, NASCAR Officials may reposition the car at their discretion. Scoring and the required Race distance begin when the leader crosses the start/finish line after the starting flag is displayed.

D. Unless otherwise directed by NASCAR, the car awarded the pole position will be given the choice of starting on the pole or taking the outside position in the front row. The car awarded the pole position will be used as the control car for the start of the Race.

E. The addition of fuel will not be permitted from the time the engines are started until after the affected car receives the green flag on the race track. If the Series Director begins a Race under green/yellow flag conditions, the addition of fuel will not be permitted until the yellow flag is withdrawn, doing so will result in a minimum of a one (1) lap penalty.

F. NASCAR, at its discretion, may use a predetermined competition caution period(s) that will be made known to all Competitors. The addition of fuel will not be permitted prior to the respective competition caution period(s), doing so will result in a minimum of a one (1) lap penalty.

G. At Events where the cars are impounded by NASCAR Officials after the starting lineup is determined, teams will not be permitted to make any repairs, adjustments, add fuel, changes of car parts and/or components before the affected car receives the green flag on the race track, unless otherwise authorized by the Series Director. If the Series Director begins a Race under green/yellow flag conditions, the above changes will not be permitted until the yellow flag is withdrawn. Failure to comply with this rule may result in a penalty at the discretion of the Series Director.

H. When a driver change is made during a Race in order for the initial driver to receive points, the initial driver must start the Race. Otherwise, the points will be awarded to the relief driver. Driver changes will not be permitted from the start of pace laps until after the car completes its first scored lap.

I. All driver changes must be authorized by the Series Director. If a driver change is made before the start of a Race, the car must relinquish its starting position and start at the rear of the field. Driver points will be awarded only to the starting driver.

J. Back-up Cars:

- (1) Once qualifying has begun (whether completed or not), or the starting field has been determined, if a back-up car is used, the car must start the Race at the rear of the field.
- (2) If qualifying is not completed due to weather or other adverse circumstances, and a back-up was authorized prior to the starting field being determined, the Series Director will make the determination whether a backup car has had adequate practice to remain eligible for its assigned starting position. If the determination is made that the car is not eligible for its assigned starting position, the car will start at the rear of the field.

9-7 Race Halt

A. NASCAR Officials will determine whether the race track is suitable for competition.

B. A Race may be stopped at the discretion of the NASCAR Officials at any time they determine, or in the exercise of their independent judgment, that the track is not suitable for competition.

C. Upon resuming the Race, following a Race halt, all subsequent laps will be scored.

9-8 Race Halt / Restart Before One (1) Lap Completion

When a Championship Race is stopped before the completion of one (1) lap, there shall be a complete double-file restart in the original starting positions, except any car that is not able to return to its position at the time of the restart shall lose its original position and NASCAR Officials shall determine the new starting position for such car(s) at the rear of the field.

9-9 Race Halt / Caution Period / Restart After One (1) Lap Completion

A. When a Race is stopped after the completion of at least one (1) lap, cars will line up in their respective track order in which they were scored. If there is no restart, and the Race is declared official, the cars will be scored as described in sub-section 9-14D.

B. Restart procedures will be made known at the Pre-Race drivers meeting. When the starter gives the "one (1) lap to go" signal, unless otherwise directed by NASCAR Officials, cars will line up in columns of two (2) for all restarts in the following "Double File – Touring Style" format after they cross the start/finish line.

- (1) The Race leader will have column/lane selection for each restart and is the control car for the restart.
- (2) The third place car, in scored order, must line up on the inside column/lane of the second row as designated in the Pre-Race drivers meeting. All other lead lap car(s) must line up in their respective track position.
- (3) All lapped car(s) must line up in their respective track position, behind the last car on the lead lap.
- (4) The car awarded the "Free Pass" at the time of the last completed green flag lap must line up behind the last lapped down car in the running order.
- (5) Car(s) that have been issued a race procedure penalty must line up at the "Tail of the Field" in their respective track position.
- (6) Once the leader receives the "one to go" signal at the start/finish line, all cars exiting pit road will restart at the rear of the field, unless otherwise directed by NASCAR Officials.
- (7) Car(s) electing to lay over to the inside column, must allow all car(s) to pass on the outside, and then double-up at the "Tail of the Field" in their respective track position.

C. All car(s) must maintain their respective track position and stay in their lane and/or line until they have crossed the start/finish line for the restart.

9-10 Race Halt / Adverse Circumstances

When an Event is halted due to rain, curfew or adverse circumstances, the Event may be rescheduled to a date and time to be determined by NASCAR. Unless otherwise determined by NASCAR, the rescheduled Event program shall start with the incomplete portion of the previous Race and all original entries shall start in the position they held when the Race was stopped.

9-11 Lap or Time Penalties

A lap or time penalty is the act during a Race of detaining a car and its driver for a certain time or number of laps, whichever is appropriate as determined by NASCAR Officials. A lap or time penalty is not a "penalty" within the meaning of Section 12, and is not appealable under that Section. A lap or time penalty may be imposed when the Competitor has violated the NASCAR Rules, a directive from a NASCAR Official, or a known pit road or race procedure including but not limited to, intentionally causing or attempting to cause a caution period, aggressive driving, passing the caution vehicle, going above the pre-established blend line when exiting the pits, passing prior to the start/finish line on the initial start, restart violation, passing after turn three on the "one to go" lap and verbal abuse of, or inappropriate gestures to NASCAR Officials. A Competitor shall not receive a lap or time penalty after the completion of the Race unless in the closing laps of the Race, a Competitor violates a NASCAR Rule, a directive from a NASCAR Official, or a known Race or pit road procedure, and there are not enough laps or time remaining in the Race for the NASCAR Officials to impose a lap or time penalty. If a post Race lap or time penalty is imposed, a scoring correction reflecting the penalty will be permitted prior to the posting of official Race results.

9-12 Parking

A NASCAR Supervisory Official may direct a Competitor to cease competition, to leave the racing premises, or to bring the car to the pit road and/or garage area for a specified number of laps and/or a specified time penalty, for the balance of the Race or future NASCAR Race(s), if it is necessary to do so in order to promote the

orderly conduct of the NASCAR Event(s). Such a directive will be given only in extraordinary circumstances, as determined by the NASCAR Supervisory Officials. It will not be deemed or construed to be a disqualification, suspension or other "penalty" within the meaning of Section 12 and is not appealable under that Section.

9-13 Race Start / Finish Line

The start/finish line shall be considered to extend from the grandstand retaining wall to the pit service wall. Any car driven by its driver between these points may legally be scored, receive the green, yellow, black, white or the checkered flags. Unless otherwise authorized, the leading edge of this line shall be considered the scoring point, as determined by NASCAR Officials.

9-14 Official Completion

A. All Races will be run until the leader has completed the required Race distance, which means the advertised distance in the Official Entry Blank, except as described in sub-section 9-14C & D.

B. Once the leader receives the white flag at the start/finish line and then the yellow flag is displayed and/or the caution lights illuminated (yellow), the Race will not be restarted.

C. Required Race Distance Is Greater Than Advertised Distance -

In the closing laps, when the Race is under a caution period, the required Race distance may be extended beyond the advertised distance. If the Race is restarted with two (2) or less laps remaining of the advertised distance, the Race may be concluded with up to three (3) restart attempts that would consist of a green flag lap, a white flag lap and a checkered flag finish. When the leader receives the white flag at the start/finish line under a green flag condition, and then the yellow flag is displayed and/or the caution lights illuminated (yellow), the Race will not be restarted. If, after the final restart attempt, the leader has not received the white flag under a green flag condition, the Race will be concluded under caution. All additional lap(s), if any, will be counted and scored. The Series Director at his sole discretion may limit the number of restart attempts to complete the Event.

D. Required Race Distance Is Less Than The Advertised Distance -

If, when the halfway distance has been reached or surpassed by the leader, NASCAR determines in its sole discretion that unforeseen circumstances prevent the completion of the advertised distance or make it impractical to continue or complete the Race within a reasonable time after it has been stopped, the Race will be considered officially completed as of the last lap completed by the leader prior to the Race halt, and the finishing positions will be determined as they would have held if the Race had been restarted.

9-15 Pit Procedures During Race

Drivers or cars may receive pit stop service only when they are in their assigned pit box, and/or the garage area or at NASCAR's discretion.

If in the judgment of NASCAR Officials an infraction of a pit road procedure is so insubstantial or inconclusive as not to warrant a penalty, the NASCAR Officials will advise the crew chief of the infraction and may elect not to assess a penalty. As set forth in sub-section 9-11, lap or time penalties may be assessed for any violation of the NASCAR Rules, including without limitation the foregoing pit procedure rules and as set forth on the pit road procedure card.

A. When following the caution vehicle during a caution period, drivers must maintain their position in relation to other cars in the field or as otherwise directed by NASCAR Officials, and will not be permitted to pass other Competitors or the caution vehicle when preparing to enter pit road.

B. A designated commitment line may be used at all Events to determine the entrance of pit road. If used, the commitment line must be crossed to enter pit road and once a car has crossed the commitment line, that car must not return to the race track until the exit of pit road.

C. Cars must enter the pit road in a single file line. After a car commits to their assigned pit box, the car behind may pass to the outside. After pitting, car(s) will be permitted to re-establish the posted pit road speed limit. A car will not be permitted to drive through more than three (3) pit boxes entering or exiting their assigned pit box.

D. Drivers must not exceed the pit road speed limit determined by NASCAR for each Event. The pit road speed limit will be made known to all Competitors in the Pre-Race driver's meeting.

E. A crew member's foot must not touch the pit road surface before the car is one (1) full pit box away from its assigned pit box or equivalent distance.

F. It is the responsibility of each driver to position his/her car within the assigned pit box. It is the responsibility of the crew chief to prevent all crew members from servicing the car until the car is within its assigned pit box. Each car must stop within the designated lines of its assigned pit box on pit road to be considered "in the box." Unless otherwise authorized by NASCAR, a car is considered "outside the box" if any of the following occur:

- (1) The outside front tire of the car is on or over the outside line of the pit box.
- (2) If any part of the car is on top of or over the front line of the pit box.
- (3) The inside rear tire is on or outside the outside line of the pit box.

(4) The rear tire(s) is on or rearward of the back line of the pit box.

G. Unless otherwise authorized by NASCAR, the use of extension poles is limited to the following: displaying the signboard(s), cleaning the grille, cleaning the windshield and servicing the driver. Extension poles and signs must remain within the assigned pit box. Extension poles and sign boards must not be illuminated.

H. At all NASCAR K & N Pro Series Events, only four (4) pit crew members will be permitted in the car servicing area unless otherwise authorized by NASCAR Officials. Once a pit crew member steps into the car servicing area, the crew member becomes one (1) of the four (4) designated crew members for the remainder of the pit stop. Once a crew member has stepped into the car servicing area during a routine pit stop (a routine pit stop is a normal pit stop in the assigned pit box for fuel and/or tires and/or minor adjustments), if the crew member returns to the equipment side, the crew member may not be replaced by another crew member, and the crew member may not enter the car servicing area again for the remainder of that pit stop.

At all NASCAR Whelen Modified / Whelen Southern Modified Tour Events, only five (5) pit crew members will be permitted in the car servicing area unless otherwise authorized by NASCAR Officials. Once a pit crew member steps into the car servicing area, the crew member becomes one (1) of the five (5) designated crew members for the remainder of the pit stop. Once a crew member has stepped into the car servicing area during a routine pit stop (a routine pit stop is a normal pit stop in the assigned pit box for fuel and/or tires and/or minor adjustments), if the crew member returns to the equipment side, the crew member may not be replaced by another crew member, and the crew member may not enter the car servicing area again for the remainder of that pit stop.

I. Only one (1) NASCAR-approved jack can be used for a pit stop involving tire(s)/wheel(s) changes. The same jack must be used when tire(s)/wheel(s) are changed on the left and right side during the same pit stop. If a car falls off a jack or the jack fails, a second NASCAR-approved jack can be used on the same side to facilitate use of the first jack.

J. Only two (2) NASCAR-approved 1/2 inch drive air wrenches, with a single socket and with a hex design capable of removing or attaching one (1) lug nut at a time, must be used to change tire(s)/wheel(s) during any pit stops. The socket must not have the capability of retaining or dispensing any lug nuts. If one (1) NASCAR-approved air wrench becomes unusable, the unusable air wrench must be **carried** to the equipment side of the pit wall before being replaced with an additional air wrench to complete the pit stop. Before the car leaves its assigned pit box, the air wrench used to change the front tire(s)/wheel(s) must be carried back to the pit service wall.

K. Crew members must not service or repair a wrecked or damaged car until the car has been removed from the race track. After repairs have been completed by the crew, the car is subject to visual or other inspection by NASCAR Officials prior to and/or during any further competition. If NASCAR Officials determine that further repairs are warranted, the crew must make those repairs on pit road or after removing the car from pit road, depending on the extent and nature of the work required. At the sole discretion of NASCAR Officials, a damaged or wrecked car that has been repaired may compete with damaged or missing body panels, car parts and/or other components. Unless otherwise authorized, all cars will be subject to the minimum speed requirement.

L. Air supply tanks and pressure regulators for all air wrenches must remain on the equipment side of the pit service wall at all times. Air supply tanks must have a protective cage or guard around their regulators and fittings at all times.

M. The fuel handler must be in control of the fuel can at all times when fuel is being added to the car. The fuel handler will not be permitted to perform any adjustments or other pit stop procedures while the fuel can coupler is engaged with the car-mounted adapter.

N. When refueling, one (1) of the four (4) crew members must catch any overflowing fuel into a NASCAR-approved overflow container coated red. The fuel overflow crew member must be in position to catch any overflowing fuel and be in contact with the overflow container at all times when fuel is being added to the car.

O. Fuel filler cans, overflow containers or any other equipment must not be tossed/thrown at anytime.

P. All tires and wheels must be installed in a safe and secure manner at all times during the Event. NASCAR reserves the right, at any time, to require any Competitor to report to pit road for inspection in the event of any noncompliance. Any loss of a wheel(s) beyond the exit of pit road may result in a penalty in the sole discretion of NASCAR. See Section 12 Violations and Disciplinary Action.

Q. All equipment used to service the car must remain in the assigned pit box. Equipment must not be left unattended in the outside half of the pit box. When a car runs completely over or under its air hose or over any other equipment within its assigned pit box, the driver may be instructed to return to the car's assigned pit box for inspection at the direction of NASCAR Officials.

R. Crew members:

- (1) Must remove tire(s)/wheel(s) from the outside half of the pit box in a manner acceptable to NASCAR Officials before the car exits its assigned pit box.

- (2) Must not allow a tire(s)/wheel(s) to cross the center of pit road at any time.
- (3) Must not intentionally cause a tire/wheel to go beyond the outside half of any pit box.

S. Cars may not be pushed past the NASCAR Official at the end of the pit road. Unless otherwise authorized, once the Race is underway, cars may be started by hand pushing in the pit area only, but under no circumstances is any car to be hand pushed more than three (3) pit boxes away from their assigned pit box or into the acceleration zone or onto the race track from the pit area. Cars may not receive any assistance after the white flag has been displayed, except those cars making pit stops.

T. The deceleration zone before the pit road entrance and the acceleration zone after the pit road exit are not part of the pits and work must not be performed on cars in these areas. The proper procedures for usage of the deceleration and acceleration zones will be made known to all Competitors in the Pre-Race driver's meeting.

U. The only personnel that are permitted in the pit service area (over the wall) will be those who are properly licensed, credentialed and equipped/attired during racing conditions.

V. Crew members must not go on the race track for any reason while the cars are racing or while the cars are running under the yellow flag or the red flag, unless directed to do so by a NASCAR Official.

W. All major car repairs, including suspension parts, components and front springs, as determined by NASCAR Officials, must be performed behind the pit service wall or in the garage area.

X. Unless otherwise authorized by the Series Director, the changing of a tire(s)/wheel(s) and the addition of fuel will not be permitted during the same pit stop.

9-16 On-Track Incident Procedure

During an Event, if a race car is involved in an on-track incident and/or is stopped on or near the racing surface and unable to continue to make forward progress, unless extenuating emergency conditions exist with the race car (i.e. fire, smoke in the cockpit, etc.) the driver should take the following steps:

- (1) Shut off electrical power and, if driver is uninjured, lower window net.
- (2) Do not loosen, disconnect or remove any driver personal safety equipment until directed to do so by safety personnel or a NASCAR Official.
- (3) After being directed to exit the race car, the driver should proceed to either the ambulance, other vehicle, or as otherwise directed by safety personnel or a NASCAR Official.
- (4) At no time should a driver or crew member(s) approach any portion of the racing surface or apron.
- (5) At no time should a driver or crew member(s) approach another moving vehicle.

All vehicles not involved in the incident or that are able to continue afterwards should slow down to a cautious speed as outlined in Section 10-4 (Yellow Flag), use extreme care as they approach an incident scene, and follow any directions given by safety personnel or NASCAR Officials. Cars in line behind safety car should not weave or otherwise stray from the line in the vicinity of the incident.

SECTION 10 - RACE PROCEDURE (FLAG/LIGHT RULES)

10-1 General

NASCAR Officials will use flags/lights, as set forth in this Section 10, for the purpose of providing drivers with information. A driver is deemed to have received notice when the flag is raised above the top railing of the flag stand, or when the lights are illuminated, regardless of whether or not the driver has seen the flag/lights. If a driver or crew chief is informed of a decision or circumstance by NASCAR Officials in a manner other than by use of flags/lights, then, use of a flag/light in that situation is not necessary. The procedure for use of flags/lights by NASCAR Officials may vary for individual tracks or Races.

10-2 Green Flag

A. The green flag signifies the start or restart of racing conditions. The NASCAR Officials will signify one (1) lap to go, a lap before the green flag will be displayed.

B. At the initial start of the race, the starter will display the green flag at his/her discretion. Cars must maintain their respective track position/lane as designated by NASCAR Officials until they have crossed the start/finish line. The number two (2) starting position must not beat the number one (1) starting position to the start/finish line.

C. All restarts shall be made at a designated area on the race track and will be made known to the drivers in the Pre-Race driver's meeting. The leader of the race will control the restart within the designated area on the race track. If the leader does not restart when he/she reaches the designated area on the race track, the starter will restart the race. Once the green flag is displayed, cars must maintain their respective track position/lane as designated by NASCAR Officials until they have crossed the start/finish line.

10-3 Blue Flag With Diagonal Yellow Stripe

The blue flag with a diagonal yellow stripe signifies that faster traffic is overtaking the cars being signaled. Cars being given this flag must prepare to yield to overtaking traffic.

10-4 Yellow Flag / Pit Entry Flag / Light

A. The yellow flag/light signifies a caution period. The yellow flag will be displayed and the caution (yellow) lights illuminated immediately following any cause for the caution period. ALL CARS MUST REDUCE THEIR SPEED TO A CAUTIOUS PACE, maintain their respective track position independently and form a single line behind the lead car. The track position of each car will be determined by each car's last completed green flag lap, and NO PASSING WILL BE PERMITTED, unless directed by NASCAR Officials. Cars must maintain, under their own power, a reasonable speed considering the conditions that exist on the track. Determination of a reasonable speed is a judgment call and will be made by NASCAR Officials.

B. The pit road will be considered closed at the same time the caution period begins. A pit entry NASCAR Official stationed at or near the entry onto pit road will signal that pit road is closed. The pit entry/closed flag (red flag with the yellow cross) will be displayed at the same time the yellow flag is displayed and/or the caution lights are illuminated (yellow). Any cars having passed the commitment line (if used) to pit road before the pit entry/closed flag (red flag with the yellow cross) is displayed, while entering pit road, will be considered to be under green flag pit road conditions. When a car is in the de-acceleration zone and approaching the commitment line (if used) and/or the pit road entrance, and the yellow flag is displayed and/or the caution (yellow) lights illuminated while entering pit road; while incurring this circumstance, the car can continue to travel the entire length of pit road without stopping and/or pitting and return to the race track without receiving a penalty for pitting while the pit road is closed. When the caution vehicle has entered the race track and is positioned in front of the lead car and the Race Director opens pit road, the pit entry NASCAR Official will, display the pit entry/open flag (green flag) signifying that all cars except the free pass car may enter pit road. The "free pass" car will be permitted to pit after being instructed to pass the caution vehicle and the "one (1) to go" signal has been given. NASCAR may, because of conditions, limit the entry to pit road. Any car entering the pits after the pit entry/closed flag (red flag with the yellow cross) is displayed, but prior to the pit entry/open flag (green flag) shall start at the "Tail of the Field" after the one (1) lap to go signal has been given by the starter, regardless of his/her position in the Race.

C. Cars returning to the race track from the pits during a caution period must wait for the end of the continuous line of cars behind the caution vehicle, unless otherwise directed by NASCAR Officials.

D. Cars may not pass the caution vehicle unless directed to do so by a NASCAR Official. Any cars illegally passing the caution vehicle or Race leader will be black-flagged or re-positioned at the discretion of the NASCAR Officials.

E. Any driver who, in the judgment of NASCAR Officials, intentionally causes or attempts to cause a caution (yellow flag) condition by stopping or spinning out or any other action, will be penalized at NASCAR's discretion.

10-4.1 Free Pass

A. After the yellow flag is displayed and/or caution lights are illuminated (yellow), the first eligible car, one (1) or more laps down to the leader at the time of a caution period, will be given one (1) lap back. The car must maintain a reasonable speed (what determines a reasonable speed will be at the discretion of NASCAR Officials). The eligible car will be instructed to line up behind the caution vehicle. When the "one (1) to go" signal has been given, the eligible car will be instructed by NASCAR Officials to pass the caution vehicle in order to gain one (1) lap back and will restart the Race at the "Tail of the Field".

B. A car is not eligible to receive the "Free Pass" when, in the judgment of NASCAR Officials, the car was involved in, or the reason for the caution. Under these circumstances, the "Free Pass" will not be awarded to any car. If a car(s) is under penalty by NASCAR, the car(s) is in the garage, the car(s) is behind pit wall, making a pit stop before pit road is open, or making a pit stop before being released on the "one (1) lap to go signal" the car(s) will be deemed ineligible and the "Free Pass" may be awarded to the next eligible car.

10-5 Red Flag

THE RED FLAG SIGNIFIES THAT THE PRACTICE OR RACE MUST BE STOPPED IMMEDIATELY REGARDLESS OF THE POSITION OF THE CARS ON THE TRACK. The red flag shall be used if, in the opinion of NASCAR Officials, the practice or Race should be stopped immediately. Cars should be brought to a stop in an area designated by NASCAR Officials. Repairs or service of any nature or refueling will not be permitted when the Race is halted due to a red flag. All work must stop on any car in the pits and/or garage area when the red flag is displayed during the Race, unless the car has withdrawn from the Event. Work must not be resumed until the red flag is withdrawn.

10-6 Black Flag / Black Flag with White Cross

A. The black flag signifies the driver must go to the pits immediately and report to the NASCAR Official at the car's assigned pit box. It does not mean automatic disqualification. At the discretion of the NASCAR Officials, if the driver does not obey the black flag directive, the driver may then be given the black flag with a white cross at the start/finish line to inform the driver that any additional scoring of his/her car will be discontinued until further notice.

B. In addition to the black flag, NASCAR Officials may use a blackboard or black flag number indicator in full view of the Competitor on which the number of the car being black-flagged will be shown. NASCAR Officials may also communicate to the crew chief the black flag directive.

10-7 White Flag

A. The white flag signifies that the leader has started his/her last lap. When the yellow flag is displayed and/or the caution lights are illuminated (yellow) during the white flag lap, cars will be scored based on their respective track position. **NO PASSING WILL BE PERMITTED** as long as the car(s) maintain a reasonable speed considering the conditions that exist on the track. The determination of respective track position and reasonable speed are judgment calls that will be made by NASCAR Officials.

B. In the judgment of NASCAR Officials, a car(s) may not receive assistance after the leader has received the white flag at the start/finish line, except cars making a pit stop. Violation will result in the car not being scored on that lap.

C. In the judgment of the Series Director, the car or team providing the assistance after the leader has received the white flag at the start/finish line may be subject to a post-race lap(s) or time penalty and scoring correction.

10-8 Checkered Flag

A. The checkered flag signifies that the Race is completed. When the required Race distance has been completed by the lead car, the Race distance will be declared "officially complete" regardless of the flag being displayed. The definition of the required Race distance is provided in sub-section 9-14.

B. When the checkered flag is displayed and the Race leader completes the Race, the balance of the field also completes the Race in the same lap. Finishing positions will be determined according to the most laps traveled in the least total time, whether the car is still running or not.

C. The Race winner or any other designated Race finishers in any Race must bring his/her car to the start/finish line or designated area and remain there until released by the NASCAR Official.

10-9 Special Flags / Signal Lights

A. Special flags and/or signal lights may be used at the discretion of NASCAR Officials, but must be explained to all drivers and crew chiefs at the Pre-Race meeting.

B. At road course Events, a solid blue flag will be used to indicate local track conditions.

SECTION 11 - TIMING AND SCORING

11-1 Official Scoring

The NASCAR Official designated by NASCAR to be the Official Chief Scorer for an Event is responsible for timing and scoring the Event. The decisions of the Official Chief Scorer, with respect to timing and scoring, are final unless the Official Chief Scorer elects to request a re-check by the NASCAR Competition Administrator or a driver and/or crew chief who has competed in the Event requests, in accordance with the procedures set forth below, that the Official Chief Scorer submit a request for such re-check to the NASCAR Competition Administrator.

11-2 Scoring Re-check Procedure

At the discretion of NASCAR, or at the request of a driver and/or crew chief, the Official Chief Scorer may review the scoring results after the completion of the Event and will make any corrections to the scoring results as deemed appropriate including, but not limited to, correcting missed or extra laps and/or lap or time penalties pursuant to sub-section 9-11. A driver and/or crew chief who has competed in the Event may request the Official Chief Scorer to submit to the NASCAR Competition Administrator a request for a re-check, but such a request must be made to the Official Chief Scorer in person and in writing within 20 minutes after the posting of finishing positions by NASCAR Officials. The finishing positions of an Event, including any individual Race, time trial, or qualifying Race, shall not be considered official if a re-check is requested as provided herein, in which case the scoring results of the Event shall be considered official upon the announcement of the re-check decision by the NASCAR Competition Administrator. If the Official Chief Scorer elects to request a re-check of the timing or scoring of an Event, the Official Chief Scorer shall promptly forward to the NASCAR Competition

Administrator the request and any scoring data for the Event. If a driver and/or crew chief who has competed in the Event requests such a re-check, the Official Chief Scorer shall promptly forward to the NASCAR Competition Administrator the written request and any scoring data for the Event, accompanied by a \$200.00 non-refundable service fee collected from the driver and/or crew chief. Decisions of the NASCAR Competition Administrator on a scoring re-check are final, non-appealable and non-litigable.

SECTION 12 - VIOLATIONS AND DISCIPLINARY ACTION

12-1 General Procedure

If a NASCAR Official or Supervisory Official observes or is made aware of an act or omission by a NASCAR Member that constitutes a violation of the NASCAR Rules or that is detrimental to stock car racing or NASCAR, and if the NASCAR Official or Supervisory Official determines that the act or omission is sufficiently serious to warrant the imposition of a Penalty, the Official shall report the violation to the NASCAR Competition Administrator as soon as practicable, recommending the Penalty for the violation. The NASCAR Competition Administrator shall consider the report and shall conduct whatever additional inquiry he or she deems appropriate under the circumstances. After concluding the inquiry, the NASCAR Competition Administrator shall review the matter with NASCAR personnel from relevant areas to determine whether disciplinary action is appropriate, and if so, what disciplinary action should be taken. The Member shall be informed of the determination by the NASCAR Competition Administrator or by the Series Director, and if disciplinary action is imposed, the NASCAR Competition Administrator shall cause a Penalty Notice to be issued to the subject Member specifying the violation, a brief statement of the time and circumstances of the violation, and the Penalty imposed. NASCAR may publish notice of the violation and the Penalty. The subject Member referenced in the Penalty Notice shall have no claim or cause of action of any kind against NASCAR and its Members, Employees and Affiliates, or any individual publishing such Penalty Notice or announcing the violation. If the Member wishes to appeal the Penalty Notice, the Member shall make a written request for a hearing to the National Motorsports Appeals Panel within 10 calendar days of the issuance of the Penalty Notice, as outlined in Section 14.

12-2 Emergency Action

If the act or omission of a Member is determined by a NASCAR Official or Supervisory Official to constitute a threat to the orderly conduct of the Event, that NASCAR Official may take temporary emergency action against the Member. Such emergency action may include ejection from the racing premises, suspension of membership and license, or any other action designed to remove the threat created by the Member. Examples of conduct warranting such emergency action include, but are not limited to, the consumption of alcoholic beverages, stimulants, depressants, tranquilizers or other drugs before or during an Event, the use of illegal drugs at any time, fighting, aggressive driving, Rule violations, race procedure violations, or any other directive of an Official. The NASCAR Official shall report the Member's conduct, and the emergency action taken, to the NASCAR Competition Administrator as soon as practicable, and thereafter the procedure set forth in sub-section 12-1 shall apply. The emergency action shall remain in effect until the decision of the NASCAR Competition Administrator is made, except that parking and/or an ejection is final, non-appealable and non-reviewable in accordance with sub-section 3-20 (ejection) and/or sub-section 9-12 (parking).

12-3 Payment of Fines

Fines shall be paid to NASCAR Headquarters promptly after receipt of a Penalty Notice. Failure to pay promptly may result in suspension. All unpaid fines of a Member may be collected by NASCAR by deducting the amount from the purse or point fund earnings of the Member, or if the Member is not a driver, from the purse or point fund earnings of the driver or car owner with whom the Member was associated at the time of the conduct that gave rise to the Penalty Notice. Any fines left unpaid at the end of the racing season shall be considered grounds for refusal to approve that Member's NASCAR membership application for the next applicable year of the Member against whom the unpaid fine has been assessed.

12-4 General Scope of Penalties (The NASCAR Deterrence System)

NASCAR may issue Penalty Notices as it deems fit to provide for the orderly conduct of the sport.

The NASCAR Deterrence System exists to help maintain the integrity of the sport, maintain a competitive but balanced playing field, send a clear message to the garage and the industry that Rules violations will not be tolerated, address safety for all involved, and provide for the best possible motorsports experience for fans, sponsors, supporters, and participants.

Penalties are designed primarily to deter NASCAR Rules violations. At each level of the NASCAR Deterrence System, the magnitude of the Penalty is structured to be appropriate for the magnitude of the Rules violation. However, Penalties are not designed at any level simply to serve as an offset for whatever alleged benefit the infraction may have resulted in. As with every professional sport, Penalties must serve as both a deterrent and a punishment.

When NASCAR determines that it must issue a Penalty Notice, it will refer to the guidelines described in this Section. When determining a specific Penalty for a specific Rules violation, NASCAR may adjust any standard Penalty in this Section if, in its sole judgment, the circumstances warrant. Additionally, if NASCAR determines that a Rules infraction “trend” (i.e.; the same or similar technical Rules infractions recurring, even if amongst different teams) is developing in a given series or area of the sport, then it may reassign a given type of infraction to a higher-numbered Penalty level than it had been assigned to previously before issuing a subsequent Penalty.

A. To treat all members fairly and equitably, among other things, the NASCAR Deterrence System provides for Penalties:

1. without regard to intent or lack of intent in the case of technical infractions;
2. without attempting to determine if any perceived advantage or disadvantage may have resulted from a technical infraction;
3. without attempting to determine who was actually a party to whatever led to the violation, except in the case of behavioral infractions, and then only to the extent reasonable and practical for a sporting authority;
4. without regard to a driver or team’s current position in the Championship point standings;
5. without regard to a member or team’s financial means or current manpower resources;
6. without regard to the manufacturer, sponsor, supplier, vendor, or any third-party affiliates;

The relative magnitudes of the types of violations are ranked in the NASCAR Deterrence System accordingly.

NASCAR has elected to use common terminology throughout this Section, rather than legalese and/or technical language, to convey the meaning in a form that should be easily understood by all participants in the sport, and also by fans, the media, sponsors, third-party vendors, and all followers of the sport. Furthermore, this Section, in some cases, cites examples to better illustrate the types of infractions that fall into each level of the NASCAR Deterrence System, but does not attempt to cover every possibility.

B. If the meaning or intention of any portion of the NASCAR Deterrence System is unclear to a NASCAR Member, then it is the Member’s responsibility to inquire about it to NASCAR. However, the Member need not inquire in advance about where a hypothetical infraction might fall, since that infraction should not occur in the first place, nor should any Member be contemplating violating the Rules.

C. Some guiding principles relative to Penalties that are issued for technical infractions include:

1. Any infraction that was undetected during any prior inspection(s) is still an infraction regardless. In most cases, however, NASCAR will not retroactively issue a separate Penalty for previous competitions that occurred prior to the competition in which the infraction was detected, except in circumstances such as where components may have been sealed, etc.
2. The responsibility for full compliance with the Rules on or of any and all elements provided by, leased, purchased, etc. by third-party suppliers, and/or from other affiliated race teams or former race teams lies solely with the team that has entered the car in competition.
3. Any element(s) that constitute Rules infractions may be confiscated by NASCAR. NASCAR will address requests for the return of confiscated elements on a case-by-case basis.

D. The issuance of a Penalty Notice by NASCAR is not a reflection on any sponsor affiliated with an affected team, driver, or Member; nor on the racing organization that fielded the race car; nor on any of the individuals employed by that organization; nor on the auto manufacturer; nor on those who were specifically named in the Penalty Notice.

E. A Penalty issued under the scope of this Section may be appealed as outlined in Section 14 of the Rule Book, and further Appealed under Section 15. Both the National Motorsports Appeals Panel, upon the initial hearing, and the National Motorsports Final Appeals Officer, if on further appeal, are empowered to modify a specific Penalty that was issued under this Section if they determine that the specific circumstances of the infraction(s) under their review warrant such modification. However, neither the National Motorsports Appeal Panel nor the National Motorsports Final Appeals Officer are empowered to re-run any competition, or to re-write any Rules in this Rule Book, or to re-write this General Scope of Penalties. Only NASCAR has the authority to re-write the Rules in the Rule Book. Accordingly, if either the National Motorsports Appeal Panel or the National Motorsports Final Appeals Officer determine that the specific circumstances surrounding a specific infraction(s) warrants the modification of that specific Penalty, such modification on

their part will have no bearing on this Section, or on any future Penalties NASCAR may issue under the scope of this Section, even if for the same type of infraction(s).

F. The NASCAR Deterrence System has evolved over many years. Accordingly, Penalties that were issued in the past have factored into the evolution of the current NASCAR Deterrence System. Be advised however that, if NASCAR determines that a Penalty should be issued for an infraction, it will use the current General Scope of Penalties (the NASCAR Deterrence System) as outlined in this Rule Book, or as amended from time to time, as the guide.

G. NASCAR will review the NASCAR Deterrence System from time to time and make adjustments as needed. NASCAR welcomes relevant input from any NASCAR Member in this regard. However, any decision to adjust this System will be made solely by NASCAR. If adjustments are made, NASCAR will notify the NASCAR membership in a timely manner, and will not retroactively adjust any Penalties that had already been issued.

H. Recurrence Multipliers are designed to deter additional Rules infractions by a team and/or Member. A Recurrence Multiplier is assessed on the basis of one (1) or more subsequent infraction(s) occurring with the same registered car number, during a fixed period of time after one or more Penalty Notices had previously been issued, regardless of any owner, driver or crew changes that might have occurred during the interim.

The Recurrence Multiplier would also apply to individual crew members as follows:

If a penalized crew chief or other crew member moves to another team in any one of NASCAR's Touring Series (NASCAR K & N Pro Series, East / West; NASCAR Whelen Modified Tour / Whelen Southern Modified Tour; NASCAR Canadian Tire Series) and is still under probation from an infraction that occurred at the Touring Series level, and is then further named in a new Penalty Notice due to an infraction occurring with the latest team, then the portion(s) of the Penalty normally assigned to that specific crew position (i.e.; fine; fine and suspension; suspension; probation) would have the appropriate recurrence multiplier applied to those portions only.

Example 1: If a NKNPS crew chief who is still under probation from a P3 through P6 Penalty moves to another Touring Series team, and that latest car receives a first-time P4 Penalty, then the fine would increase by an additional 50 %; the suspension for the crew chief would increase from three (3) races to five (5) races; and the period of probation for the crew chief would be increased by another 50%. However, the specified minimum driver and owner Championship points portion of the Penalty would not be multiplied.

Example 2: If a NWMT crew chief who is still under probation from a P3 through P6 Penalty moves to another Touring Series team, and that latest team receives its second-time P3 through P6 Penalty (even if the 1st infraction occurred prior to the crew chief's move), then all applicable elements of the recurrence multiplier (including the crew chief's portion) would be assessed first based on the registered car number, and then the fine and/or suspension portion assigned to that crew chief would be further increased by an additional 50%.

The Recurrence Multiplier is not affected by any subsequent change in driver or car owner, but is assigned on the basis of subsequent infractions with the same registered car number. Approved car number changes or reassignments do not negate or eliminate applicability of the Recurrence Multiplier.

When the amount of a fine, loss of points, period of suspension and/or probation is increased due to a Recurrence Multiplier and the resulting amount includes a fraction, the fraction will be rounded up to the next whole number. Point deductions are assessed regardless of the current points total that the driver or car owner may have accumulated to that point in the season, if any.

I. The following structure generally describes the NASCAR Deterrence System that NASCAR uses as a guideline when determining Penalties, with Level 1 Penalties (P1) applying to the least serious Rules violations and Level 6 Penalties (P6) applying to the most serious Rules violations. The descriptions that follow are not meant to be all-encompassing, or to represent an exhaustive list of every imaginable infraction. Rather, they are meant to clearly explain the general levels of Penalties that will be issued for the general levels of infractions, should NASCAR determine that a Penalty will be issued.

12-4.1 Warnings and P1 Penalty Options

When appropriate, NASCAR will issue a Warning instead of a Penalty for certain types of very minor, first-time infractions. While the Warning is primarily for the information of the Member or team affected, NASCAR will also advise the garage that a warning has been issued to that Member or team. However, NASCAR will generally not specify or detail the infraction publicly unless it pertains to something new or unforeseen that the rest of the garage would benefit by knowing. Warnings are not appealable.

A. Multiple Warnings issued to the same member or team will result in one (1) or more P1 Penalties.

If the same team receives two (2) Warnings during the same Event, or two (2) Warnings during two (2) consecutive Events, whether the Events are Championship or non-Championship, then this may result in one (1) or more of the following P1 Penalties at NASCAR's discretion:

1. Last choice in the pit selection process
2. Track time deductions in practice
3. Track time deduction in qualifying
4. Delay in order of inspection
5. Be selected for post-race inspection
6. Car must remain in the hauler for a specified time at the beginning of the Event or day after others are allowed to be unloaded
7. Temporary suspension of NASCAR License for NASCAR members
8. Reduction or suspension of other Event privileges (examples: loss of team parking pass(es))
9. Community service

B. If any team or member accumulates six (6) or more Warnings during a six-month period from the time of the first warning, then this may result in a P2 Penalty.

C. If any team or member accumulates eight (8) or more Warnings during a twelve-month period from the time of the first warning, then this may result in a P3 Penalty elsewhere in this Section 12.

12-4.2 P2 Penalty Options

While important enough to result in a Penalty, violations leading to P2 Penalties, in general, tend to be of a lesser nature and include, but are not limited to, unapproved minor parts and pieces; go/no-go measurement infractions and so on. These violations tend to pertain to secondary or ancillary componentry, accessories, hardware; to misalignments; to go/no-go measurements of lesser importance.

A. Violation examples could include but are not limited to:

1. Expiration of certain safety certification(s) or improper installation of any safety system of a minor nature;
2. Failure to meet the minimum weight at the end of the race, but not of a nature rising to higher numbered Penalties;
3. Hollows in minor components which must be solid, but not of a nature rising to higher numbered Penalties;
4. Minor fasteners, nuts, bolts, etc. of the wrong material, but not of a nature rising to higher numbered Penalties;
5. Minor bracketry, supports, etc. of the wrong material, but not of a nature rising to Penalties;
6. Failure to meet the ground higher numbered clearance and/or body height specifications in post-race inspection.
7. An engine that is not situated in the race car within the required location parameters.
8. Approved parts that do not meet minimum material thickness (such as drive shafts, A-frames, etc.)

B. Minimum P2 Penalty options (ONE (1) OR MORE of the following may be used):

1. Loss of six (6) Championship driver and six (6) Championship owner points, irrespective of whether it was a Championship race or not; AND/OR:
2. Up to \$1,000 fine, depending on the specific infraction; AND/OR:
3. Suspension for the crew chief, and/or any other team members, as determined by NASCAR, for one (1) or more races; AND/OR:
4. Probation through the end of the calendar year for the crew chief, or for a six (6) month period following the issuance of the Penalty Notice if that period spans across two (2) consecutive seasons.

C. P2 Recurrence Multiplier

Recurrence Multipliers are further explained later in this sub-section 12-4.7.

If a team that already received two (2), P2 Penalties receives a third P2 Penalty within a six (6) month period from the issuance of the first Penalty, whether with or without the same driver and/or race team members, then each minimum Penalty for the third P2 level infraction will be increased by an additional 50%.

If a fourth P2 level violation occurs during the timespans listed above, then each minimum Penalty for the fourth infraction will be increased by an additional 100%.

If a team that already received a P3, P4, P5 or P6 Penalty then receives a P2 Penalty within a six (6) month period from the issuance of the first Penalty, whether with or without the same driver and/or race team members, then each minimum Penalty for that P2 level infraction will be increased by an additional 50%.

If the crew chief is already under probation for one or more P3 thru P6 Penalties at the touring series level at the time of the latest P2 Penalty, then he/she shall also be subject to suspension for one or more races if suspension is not already part of the standard penalty for that type of infraction.

12-4.3 P3 Penalty Options

Violations resulting in P3 Penalties tend to fall between serious and intermediate in nature. While they might include general "categories" of infractions similar to

those in P4 (e.g.; unauthorized parts; failing to meet specs; etc.), they tend to pertain more to secondary componentry or systems; modifications of lesser significance; go/no-go measurement failures of an intermediate nature.

A. Violation examples could include but not limited to:

1. Unapproved parts or system configuration of importance but, not rising to higher numbered levels – examples:
 - a. Unapproved secondary steering linkage
 - b. Unapproved secondary drivetrain components
 - c. Unapproved added weight and/or weight affixed improperly (e.g.; Unapproved added weight (size and material); Unapproved added weight location), but not of a nature rising to a higher numbered penalty.
2. Failure to submit secondary components, such as, brake calipers, oil pan, etc.
3. Engine ancillary components (i.e. valve covers, outer oil pans, pulleys, headers etc.)
4. Approved parts that fail their intended use (e.g.; shock absorbers that fail to rebound regardless of reason)
5. Coil spring violation.
6. Circumventing open radio communications between the driver and spotter and team which the fans should be able to listen in to (other than clear equipment failure)
7. Faulty, missing, or ineffective seams on required interior sheet metal seals (excluding safety barriers such as firewalls).
8. Unapproved body modifications (metal or composite).
9. Heating or chilling any parts, systems or materials that are not allowed to be heated or chilled by the Rules. NOTE: If relative to tires or fuel, then a P5 Penalty.

B. Minimum P3 Penalty options (ONE (1) OR MORE of the following may be used):

1. Loss of 12 Championship driver and 12 Championship owner points, irrespective of whether it was a Championship race or not; AND/OR:
2. Up to \$ 1,500 fine; AND/OR:
3. Suspension for the crew chief, and/or any other team members, as determined by NASCAR, for one (1) or more races; AND/OR:
4. Probation through the end of the calendar year for the crew chief, and/or any other team members, as determined by NASCAR, for a six (6) month period following the issuance of the Penalty Notice if that period spans across two (2) consecutive seasons.

C. P3 Recurrence Multiplier:

If a team that already received a P3 Penalty then receives another P3, P4, or P5 Penalty during the same racing season, or within a six (6) month period following the most recent Penalty that spans across two (2) consecutive seasons, whether with or without the same driver and/or race team members, then the minimum for that latest Penalty will be increased by an additional 50%.

If a third violation in levels P3, P4 or P5 occurs during the timespans listed above, then the minimum for that latest Penalty will be increased by an additional 100%.

If the crew chief is already under probation for one or more P3 thru P6 Penalties at the touring series level at the time of the latest P3 Penalty, then he/she shall also be subject to suspension for one or more races if suspension is not already part of the standard penalty for that type of infraction.

12-4.4 P4 Penalty (the Penalty includes the combination of ALL minimum elements listed below)

Violations leading to P4 Penalties, in general, are very serious. They include, but are not limited to, a broad spectrum of infractions such as parts which do not meet specifications; unauthorized parts that differ from what had been approved; actions or omissions which might circumvent the Rules; mounting configurations which might represent a safety compromise; failure to meet go/no-go measurements, and measurement failures of significance. These often involve primary component or system infractions not otherwise rising to the magnitude of P5 infractions, but could also include secondary component or system infractions, particularly if of a nature suggesting some of the characteristics described in P5 below, and/or involving safety implications.

A. Violation examples could include but are not limited to:

1. Compromises to the integrity or effectiveness of any safety elements not falling elsewhere under this Section 12-4.
2. Unapproved added weight and/or weight affixed improperly (examples: Unapproved added weight (size and material); Unapproved added weight location)
3. Engine components (i.e.; fly wheel, etc.) that differ from what is required by the Rule Book (i.e.; original source if specified; material; configuration; alteration in areas not permitted; etc.)
4. Approved parts that are not properly installed or are made adjustable when not normally intended to be (e.g.; Failure to maintain rear spoiler angle, other than due to crash damage)

5. Body panels failing to meet minimum thickness or any indication of major body modifications.
 6. Components, devices, systems, configurations, installations, etc. which serve to circumvent NASCAR templates, gauges, measuring devices, whether intended or not, that do not rise to the level of something like the approved chassis in P6 or the characteristics described in P5.
 7. Anything which would circumvent mandated regulatory devices such as pre-determined gear rule.
- B. Minimum P4 Penalty (the Penalty includes ALL bullet points):
1. Loss of 12 Championship driver and 12 Championship owner points, irrespective of whether it was a Championship race or not.
 2. Up to \$2,500 fine.
 3. Suspension for the next series Championship race, plus any non-Championship races or special Events which might occur during that time period, for the crew chief, plus probation through the end of the calendar year, or probation for a six (6) month period following the issuance of the Penalty Notice if that period spans across two (2) consecutive seasons.
- C. P4 level infractions detected during post-race inspection:
If the infraction is detected during post-race-inspection, then the following Penalty elements will be added to those listed above:
Loss of an additional six (6) Championship driver and six (6) Championship owner points, irrespective of whether it was a Championship race or not.
- D. P4 Recurrence Multiplier:
If a team that already received a P4 Penalty then receives another P3, P4, or P5 Penalty during the same racing season, or within a six (6) month period following the most recent Penalty that spans across two (2) consecutive seasons, whether with or without the same driver and/or race team members, then the minimum for that latest Penalty will be increased by an additional 50%.
If a third violation in levels P3, P4 or P5 occurs during the timespans listed above, then the minimum for that latest Penalty will be increased by an additional 100%.

12-4.5 P5 Penalty (the Penalty includes the combination of ALL minimum elements listed below)

Violations leading to P5 Penalties, in general, are extremely serious. They represent other key safety areas not mentioned elsewhere in this Section and potentially performance-related areas of the race car that might or might not afford a competition advantage, but with a violation occurring in such a fashion that it would be naive to attribute the violation to an accident, omission, or misunderstanding, even if it was an accident, omission, or misunderstanding. Characteristics of violations of this magnitude might include, but are not limited to, elements like disguise; concealment; areas that are camouflaged and/or "hidden in plain sight"; areas that show evidence of work, mounting or alignment that might or might not lead to normally unintended ramifications, even for what might otherwise consist of standard componentry, systems, etc.; the failure of parts or systems that should not occur in the normal course of competition that might or might not lead to potential consequences elsewhere; things which allow for adjustability on the race car in areas that should not otherwise be achievable when adhering to the Rules; violations conspicuous in their nature regardless of intent, whether operational or not.

A. Violation examples could include but are not limited to:

1. Effecting, modifying and/or altering the standard tires in any way, other than through authorized means such as tire pressure adjustments within the recommended range, permitted tire cooling when mounted on the race car; or heat-cycling on the race car on the race track earlier in the Event.
2. Effecting, modifying and/or altering the standard fuel in any unauthorized manner.
3. Unauthorized fuel storage capability aboard the race car.
4. Combustion enhancing additives in the oil, oil filter, air filter element, etc.
5. Compromises to the integrity or effectiveness of the following safety elements: fuel cell; fuel cell container; and/or pressurized lines running through the driver compartment; unless the compromise clearly resulted from race damage during that Event.
6. Major external engine components (i.e.; not part of the long block engine) such as intake manifold, oil pump, oil pan, that differ from what is required by the Rule Book (i.e.; original source if specified; material; configuration; alteration in areas not permitted; etc.)
7. Unapproved parts or system configuration of great importance (examples: rear suspension parts mounted and assembled in a unapproved manner so as to allow movement that should not otherwise be available; shock absorbers that show evidence of possible modification or alteration or have the wrong internal components)
8. Approved parts that are not properly installed or are made adjustable when not normally intended to be (e.g.; bracing in the trunk which alters the rear deck lid configuration and, in turn, alters how the rear spoiler is measured during inspection)

9. Approved parts that fail or are improperly installed to fail in their intended use of great importance (e.g.; rear wheel well panels that fail and allow air evacuation in the trunk area; oil box cover that fails and allows air evacuation in the driver compartment; shifter boot cover that fails and allows air evacuation through the floor pan)
 10. Parts, systems, devices, omissions or component failures that could have an effect on what should otherwise be the normal airflow over the body of the race car and/or required aerodynamic devices such as the rear spoiler, roof air deflectors, etc. (e.g.; repositioning a windshield; repositioning the rear window; altering the greenhouse; failure to maintain rear spoiler angle, other than due to crash damage)
 11. Parts, systems, devices, omissions or component failures that could have an effect on the race car's down force (e.g.; unauthorized undercarriage panels)
- B. Minimum P5 Penalty (the Penalty includes all points)**
1. Loss of 20 Championship driver and 20 Championship owner points, irrespective of whether it was a Championship race or not.
 2. Up to \$3,500 fine.
 3. Suspension for the next three (3) series Championship races, plus any non-Championship races or special Events which might occur during that time period, for the crew chief and any other team members as determined by NASCAR.
 4. Probation through the end of the calendar year for all suspended members, or for a six (6) month period following the issuance of the Penalty Notice if that period spans across two (2) consecutive seasons.
- C. P5 level infractions detected during post-race inspection**
- If the infraction is detected during post-race-inspection, then the following Penalty elements will be added to those listed above:
- Loss of an additional 10 Championship driver and 10 Championship owner points; irrespective of whether it was a Championship race or not.
- D. P5 Recurrence Multiplier:**
- If a team that already received a P5 Penalty then receives another P3, P4, or P5 Penalty during the same racing season, or within a six (6) month period following the most recent Penalty that spans across two (2) consecutive seasons, whether with or without the same driver and/or race team members, then the minimum for that latest Penalty will be increased by an additional 50%.
- If a third violation in levels P3, P4 or P5 occurs during the timespans listed above, then the minimum for that latest Penalty will be increased by an additional 100%.

12-4.6 P6 Penalty (the Penalty includes the combination of ALL minimum elements listed below)

Violations resulting in P6 Penalties, in general, represent the expressly-forbidden areas of unauthorized activity in the race car, including the internal workings and performance of the engine; Certified Race Equipment, Approved Chassis, including major safety systems designed to protect the driver, other competitors and fans; and other significant items such as technologies or evidence of technologies like nitrous oxide or traction control.

A. Violation examples could include but are not limited to:

1. Engine
 - a. Engine total cubic inch displacement above the maximum allowed or below the minimum required.
 - b. Compression ratio on any cylinder above the maximum allowed.
 - c. Long block engine and internal components that differ from what is required by the Rulebook (i.e.; original source if specified; material; alteration if not permitted; etc.) or fail to meet the minimum or maximum requirements (i.e.; dimensions; weight, etc.) or fail to meet the configuration requirements (i.e.; location, angle, etc.).
 - d. Unauthorized engine performance enhancement(s) such as nitrous oxide, whether operational or not; air entering the engine through means other than through the authorized air intake, or through means other than via the restrictor plate or tapered spacer when applicable; intake manifold failing a leak test; unauthorized pressure systems or componentry relative to the fuel system, whether operational or not.
2. Approved Chassis

Any unapproved modification to the approved chassis without prior notice to and approval by NASCAR, including major chassis safety systems designed to protect the driver, other competitors and fans. Such as failing to meet minimum wall thickness of the frame and/or roll bars.
3. Certified Race Equipment

Modifying, altering, repairing or changing Certified Race Equipment, or failing to maintain the integrity of the encryption or NASCAR certification verification(s) without prior notice to and approval by NASCAR.
4. Technologies
 - a. Traction control or traction control componentry, whether operational or not.

- b. Onboard recording, receiving or transmitting devices, computers, telemetry, and so on, not approved in advance by NASCAR, whether operational or not.
- 5. Violation of the NASCAR Testing Policy.
- B. Minimum P6 Penalty (the Penalty includes all points)
 - 1. Loss of 100 Championship driver and 100 Championship owner points, irrespective of whether it was a Championship race or not.
 - 2. Up to \$5,000 fine.
 - 3. Suspension for the next three (3) series Championship races, plus any non-Championship races or special Events which might occur during that time period, for the crew chief and any other team members as determined by NASCAR.
 - 4. Probation through the end of the calendar year for all suspended members, or for a six (6) month period following the issuance of the Penalty Notice if that period spans across two (2) consecutive seasons.
- C. P6 level infractions detected during post-race inspection:
If the infraction is detected during post-race-inspection, then the following Penalty elements will be added to those listed above:
 - 1. Loss of any of the benefits of the finishing position in that race for driver and car owner including, but not limited to, as a tie-breaker per the Rule Book; for determining eligibility or position within future races (Championship; non- Championship; qualifying races; etc.); for programs such as the Leader Bonus; or for determining eligibility or position within series competitions.
 - 2. Loss of any of the benefits of the starting position (including Pole Position, if applicable) in that race for driver and car owner including, but not limited to, for determining eligibility or position within future races or competitions.
- D. P6 Recurrence Multiplier
If a team that already received a P6 Penalty receives another P3, P4, P5, or P6 Penalty during the same racing season, or within a six (6) month period following the most recent Penalty that spans across two (2) consecutive seasons, whether with or without the same driver and/or race team members, then the minimum for that latest Penalty will be increased by an additional 50%.
If a third violation in in levels P3, P4, P5, or P6 occurs during the timespans listed above, then the minimum Penalty for the third infraction will be increased by an additional 100%.

12-4.7 Penalty Notice

The Penalty Notice will stipulate which NASCAR Member(s) receive which portion of a given Penalty relative to a given car number for technical infractions in Levels P2 through P6, and where applicable in P1. Generally, Championship car owner points will be deducted from the car owner of record; Championship driver points will be deducted from the starting driver; fines will be assessed against the crew chief of record; suspensions and/or probation for technical infractions will be assessed against the crew chief and/or other crew members. Suspensions and/or probation for technical infractions in Levels P1 through P6 will generally not be assessed against car owners or drivers.

In cases where the period of probation and/or suspension spans across two or more consecutive seasons, and the NASCAR Member elects not to renew his/her annual membership during that ensuing time period, then the remaining unserved period of probation and/or suspension will be applied if and when the Member is accepted by NASCAR for membership in the future.

12-4.8 Suspension

A suspension may be total or it may be limited to a suspension of membership and/or license privileges at a particular track or tracks, and/or for a particular series of Events, and/or for one (1) or more NASCAR-sanctioned series, and/or for a specified or indefinite period of time, and/or as otherwise determined by NASCAR. Any special conditions for the suspension will be stated on the Penalty Notice. All suspensions are with immediate effect. In general, a Member who is suspended is not eligible to participate in person in any NASCAR-sanctioned activity, nor to enter restricted areas of an Event (garage, pits, spotter stand, victory lane, etc.) in which the competition or related activities take place. If the Member holds a current NASCAR License, that License shall not be valid during the period of suspension. Other NASCAR privileges will be suspended during the period of suspension. However, during the period of suspension, the Member is still bound by and subject to this Rule Book and all the obligations of a licensed NASCAR Member. If the Penalty Notice states that a Member is "suspended from NASCAR" for a specified or indefinite period of time, then the suspension shall apply to all NASCAR-sanctioned Events at all levels of the sport.

12-4.9 Behavioral Penalties

A. NASCAR membership is a privilege. With that privilege comes certain benefits, responsibilities and obligations. Correct and proper conduct, both on and off the race track, is part of a Member's responsibilities. A Member's actions can

reflect upon the sport as a whole and on other NASCAR members. Ideally, NASCAR members are role models for the many fans who follow this sport, regardless of the type of license a Member may hold, or the specific series in which a Member may participate.

B. Therefore, NASCAR views behavioral rules violations with the same importance as technical rules violations. Behavioral infractions differ from technical infractions in that each is handled on a case-by-case basis, viewed in context, with an understanding of the prominence of the sport, the large fan following that the sport has garnered, the large corporate and sponsor support that the sport attracts, and also with an understanding of the passions that the sport can evoke as well as, the competitive nature of most NASCAR members.

C. Certain behavioral infractions are zero-tolerance (e.g.; substance abuse violations) and are described in greater detail elsewhere in the Rule Book. Most behavioral infractions fall under the broader heading of Actions Detrimental to the Sport.

In part due to their individual nature, and the context in which they may have occurred, behavioral infractions do not lend themselves to a structure similar to that outlined in Levels P1 through P6 above for technical infractions, although very minor infractions might require a Warning.

D. Nonetheless, there are a range of Penalties which NASCAR may employ should it decide that a Penalty is required and those include, but are not limited to:

1. Probation
2. Community Service
3. Suspension of NASCAR License
4. Penalty(s) for the team
5. Fine
6. Exclusion from non-competition activity(s) (e.g.; testing; awards ceremony)
7. Loss of points
8. Suspension
9. Termination of membership

12-4.10 Other NASCAR Penalties

A. NASCAR may also issue other types of Penalties as it deems fit for the orderly conduct of the sport that fall outside the scope of this Section 12-4. Those include areas such as but not limited to:

1. Race Procedure Penalties issued during the running of a race (pit road speed violation; pitting outside the box; working under a red flag; etc.).
2. Other Event-related Penalties listed on the NASCAR Pit Road Procedure Card or elsewhere in this Rule Book (engine change during the Event, etc.).
3. Lap or Time Penalties specified in Section 9-11.
4. Administrative Penalties (insufficient funds; invalid credit card information; etc.).
5. Penalties issued relative to the Appeals Process (member held "in contempt"; failure to appear and or testify; etc.).
6. Emergency Actions specified in Section 12-2.

B. Penalties in these areas are not appealable in any case. Only Penalties issued relative to Section 12-4 via a Penalty Notice may be appealed.

SECTION 13 - PROTESTS

13-1 General Procedure

If a NASCAR Member who is a Competitor believes that another Competitor has or will obtain a significant unfair competitive advantage by some action that the Member believes is in violation of the NASCAR Rules, the Member may protest such action to the Series Director. The protest must be made in writing by the Competitor (or his/her crew chief if the Competitor is a driver and is on the race track) within 20 minutes after the checkered flag is displayed signifying the completion of the Race. Each separate protest shall be accompanied by a \$500.00 protest fee. The Series Director shall decide whether the matter is subject to protest, and if so shall decide the protest as promptly as possible, and shall inform the parties to the protest of the decision. The Series Director may decline to accept a protest, even if the matter were otherwise subject to protest, if he/she determines that the alleged rule violation is so insubstantial as to not provide the Competitor with a significant competitive advantage over other Competitors. A decision that the matter is not subject to protest is final and non appealable. In deciding the protest, the Series Director may take whatever action he/she deems appropriate to further the interests of fairness and finality in competition results. Such action includes, but is not limited to, revising the official Race results, imposing penalties (disqualifications, suspension or fines, and/or loss of finishing position(s) in the Event), awarding or subtracting points, or taking no action.

13-2 Matters Not Subject To Protest

Protests will not be accepted that are directed to a decision of a NASCAR Official or Supervisory Official on any subject not specifically provided for in these rules. Such subjects include, but are not limited to, timing and scoring decisions (except as set forth in Section 11), inspection decisions and Race procedure decisions.

13-3 Protest Review Procedures

A. If either of the parties do not accept the decision of the Series Director, the written protest shall be forwarded by the Series Director, along with the Race report and the protest fee, to the NASCAR Competition Administrator unless the decision of the Series Director was that the matter was not subject to protest, in which case the decision is final and not subject to further review. The NASCAR Competition Administrator shall then conduct whatever inquiry the NASCAR Competition Administrator deems appropriate, which may include contacting the parties to the protest before making a decision. If either party desires a hearing before the NASCAR Competition Administrator, the party shall request such a hearing in writing and forward an additional \$500.00 non-refundable hearing fee, by certified check or money order payable to NASCAR. Written requests for hearings to the NASCAR Competition Administrator may not be submitted electronically. Requests for a hearing by fax, e-mail, or telephone will not be accepted. To initiate any hearing to the NASCAR Competition Administrator, a NASCAR Member must submit the written request and hearing fee by delivering the written request and initiation fee by hand, U.S. Mail, or overnight courier (e.g., UPS) to the NASCAR Competition Administrator, Post Office Box 2875, Daytona Beach, FL 32120-2875 (hand and Express deliveries should be delivered to One Daytona Blvd., Daytona Beach, FL 32114). The submitting party must retain proof of submission and delivery confirmation. Upon request of the NASCAR Competition Administrator, the submitting party must provide copies of all such proof and confirmation.

B. The NASCAR Competition Administrator will conduct a hearing at the earliest practicable date, notifying the parties of said hearing. The date and place of the hearing will be determined solely by the NASCAR Competition Administrator.

C. The parties may appear in person, by telephone, or by video-conference in hearings before the NASCAR Competition Administrator, subject to approval by the NASCAR Competition Administrator. The parties will have the right to appear on their own behalf and to present witnesses and documentary evidence, but may not appear through a representative or legal counsel or have a representative or legal counsel present during any testimony.

D. Hearings before the NASCAR Competition Administrator will be conducted according to the procedures set forth by the NASCAR Competition Administrator for the hearing. After conducting the inquiry, or holding the hearing, the NASCAR Competition Administrator will determine the merits of the protest (if permissible and properly made), and will take whatever action or order whatever remedy the NASCAR Competition Administrator deems appropriate. The party losing the protest shall pay all costs incurred by NASCAR in connection with the protest. If the protest is sustained, the protest fee (but not the additional hearing fee, if any) will be returned to the protesting Member. If the protest is not sustained, the protest fee (and the additional hearing fee, if any) will be forfeited to NASCAR, and the other party to the protest shall be compensated for an amount not to exceed \$500.00 for any costs incurred in connection with the protest, such amount to be paid from the protest fee. The decision of the NASCAR Competition Administrator regarding any protest (except to the extent there is an imposition of a penalty within the meaning of Section 12) IS FINAL, NON-APPEALABLE AND NON-LITIGABLE.

SECTION 14 - APPEALS TO THE NATIONAL MOTORSPORTS APPEALS PANEL

14-1 Purpose, Scope and Jurisdiction.

Participating in the sport of stock car racing as sanctioned by NASCAR is a privilege for all NASCAR Members. Through this Rule Book, as well as NASCAR special rules, bulletins and/or any applicable agreements to which NASCAR is a party, NASCAR promulgates Rules that create safer, fair and orderly motorsports events. During the course of these events, NASCAR's responsibility is to ensure that the Rules are enforced in a fair, but decisive manner, and when warranted, to penalize those who violate the Rules. NASCAR recognizes the right of a Member to appeal a NASCAR Penalty Notice issued to a Member for violations of these Rules, unless otherwise provided otherwise in these Rules.

If a Member wishes to appeal a Penalty Notice issued by NASCAR to the Member, that Member may file an appeal with the National Motorsports Appeals Panel ("Appeals Panel") in accordance with these Rules. The Appeals Panel provides Members with an impartial and meaningful opportunity to appeal a NASCAR Penalty Notice. Further, the Member is entitled to a second and Final Appeal of the Appeal Panel's decision to the Final Appeals Officer ("FAO") pursuant to the provisions of Section 15 Final Appeal to the National Motorsports Final Appeals Officer.

The Appeals Panel has exclusive jurisdiction to:

- (1) Hear and consider all appeals of any NASCAR Penalty Notice.
- (2) Hear and review any decision by NASCAR to deny, suspend or terminate any NASCAR membership license.

The scope of each appeal is limited to the facts and circumstances surrounding the violation and the proper application of the NASCAR Rules as they relate to the facts. Any speculation as to the impact of an Appeals Decision on a Member or race team (e.g., economic hardships, contractual obligations, etc.) is outside the scope of the Appeals Panel's authority and is not to be considered as part of the appeal.

All decisions of the FAO will be final and binding on all parties.

14-2 Appeals Panel Members

A. The members of the Appeals Panel for 2015 are:

| | |
|-------------------|-----------------|
| Mark Arute | Steve Lewis |
| Christiane Ayotte | Bud Moore |
| Lee Baumgarten | Bill Mullis |
| Johnny Benson | Hunter Nickell |
| Paul Brooks | Don Panoz |
| John Capels | Buddy Parrott |
| Ken Clapp | Dale Pinillis |
| Barbara Cromarty | Cathy Rice |
| Robert L. DuPont | Shawna Robinson |
| Laurel Farrell | Jay Signore |
| Richard Gore | Jimmy Smith |
| Janet Guthrie | Lake Speed |
| Russell Hackett | Lyn St. James |
| David Hall | Kevin Whitaker |
| John Horton | John White |
| Jack Housby | Robert Yates |
| Bill Lester | |

14-3 Appeals Administrator

The Appeals Administrator ("Administrator"), who administrates the appeals process, is a non-decision making administrative NASCAR employee appointed by the President of NASCAR and charged with the duty of organizing and running all levels of the appeals process. In the event of death, retirement or incapacity of the Administrator, the President of NASCAR shall either appoint an acting Administrator until the Administrator is able to resume his/her duties, or appoint a new Administrator. For 2015, the Administrator is George Silbermann.

The role of the Administrator is to ensure that every Appellant who has filed an appeal has the following documents and materials:

A. A copy of the Penalty Notice, which includes a description of the misconduct and Rules violated; and

B. Notice of a scheduled hearing at least 72 hours before the hearing, except in the case of an expedited appeal; a list of potential witnesses to be called by NASCAR and, if applicable, an updated list of potential witnesses to be called by NASCAR at least 24 hours in advance of the hearing;

C. Copies of all Appeal Summaries (as may be provided by the Appellant(s) and NASCAR) at least 24 hours in advance of the hearing.

D. A copy of a sample Decision Form to the parties, if requested.

E. The Administrator shall also make sure to facilitate any logistical needs for the hearing, and respond to any specific questions the Appellant(s) or NASCAR may have about the appeal process.

14-4 NASCAR Member's Appeal Rights

NASCAR Members have the following rights with respect to hearings before Appeals Panels and the FAO:

A. Written notice of the Penalty Notice, stating the alleged violation and Rule or Rules violated;

B. Notice of scheduled hearing no later than 72 hours before the hearing, unless it is an expedited appeal, including a list of potential witnesses to be called by NASCAR;

C. To present favorable witnesses and evidence, subject to the reasonable discretion of the Appeals Panel or FAO; and

D. To be present while NASCAR presents witnesses and evidence;

E. Presumption of innocence. When an appeal is before an Appeals Panel, the burden rests on NASCAR to show that it is more likely than not that a violation of the NASCAR Rule Book, special rules, bulletins or any applicable agreements to which NASCAR is a party has occurred, and that the Penalty Notice issued is within the Guidelines of NASCAR's Rules;

F. Presumption of Correctness. When an appeal is made to the FAO, the burden shifts to the Appellant(s) to show the Appeals Panel ruled contrary to the NASCAR Rules;

G. To have his/her hearing limited to the misconduct specified in the Penalty Notice.

H. To have a written decision provided by the Appeals Panel specifying whether or not it affirms the Penalty Notice or the Rule violated, penalty assessed and any right of appeal thereafter; and

I. To present a second appeal of the Appeal Panel's decision to the FAO.

14-5 Expedited Appeal Procedures

Fairness may demand that an appeal is expedited to finalize decisions before or during The Championship or in other rare circumstances. NASCAR may request to the Administrator for the appeals process described in Sections 14 Appeals to the National Stock Car Racing Appeals Panel, and 15 Final Appeal to the National Motorsports Final Appeals Officer to be expedited. If the Administrator grants the request, the Administrator shall provide the Member an Expedited Appeal Notice, containing:

(1) The expedited deadline the Member has to file for an appeal.

(2) If filed, what the hearing date would be.

To file an appeal, Members must meet the deadline provided in the Expedited Appeal Notice. If a Member receives an Expedited Appeal Notice, the Member should contact the Administrator immediately to discuss expedited procedures and requirements.

14-6 Filing for Appeal

If any NASCAR Member wishes to initiate an appeal of a Penalty Notice, he or she may request an appeal hearing before an Appeals Panel by submitting a written request to the Administrator. The written request must:

A. State the reason for the appeal;

B. Include a list of any and all intended or potential witnesses who agree to testify on your behalf to be called to testify at the hearing; the Appellant may update the witness list at any time up to 24 hours in advance of the hearing by notifying the Administrator;

C. Include any request for temporary deferral of the penalty pending an appeals hearing. Deferral of the penalty request must be for a penalty that is, in fact, allowed to be temporarily deferred under the Rule Book, since some penalties may not be deferred, such as, substance abuse penalties;

D. Send the appeal request to the Administrator within ten (10) calendar days of the issuance of the Penalty Notice, unless it is an expedited appeal. In computing the ten (10) days, the date of issuance of the Penalty Notice is not to be included, and the ten (10) days begins on the day after issuance. Once the ten (10) day period has expired, there is no right to appeal. All expedited appeal requests must comply with the filing deadline stated in the Penalty Notice;

E. Include a \$200.00 non-refundable appeal filing fee, by check or money order (cash will not be accepted), made payable to NASCAR. Payment may be made online by credit card at: <http://appealfees.nascar.com>.

F. The written request may be submitted either electronically by email or by mail per the following:

(1) E-mail submissions shall be sent to the Administrator at the following address: appeals@nascar.com. NASCAR or the Administrator will not accept submissions for appeal via fax or telephonic conversation. The request submission will not be treated as accepted until the appeal filing fee is received at NASCAR. If the fee does not arrive within the the (10) days specified period or if the request does not comply with requirements of this section, it will be treated as incomplete and void. All expedited appeal filing fees must comply with the filing deadline stated in the Penalty Notice.

(2) Written requests are to be submitted either in person or by U.S. Mail or overnight courier (i.e., UPS, etc.) to:

Attn: George Silbermann, Appeals Administrator
NASCAR, Inc.
One Daytona Boulevard
Daytona Beach, FL 32114

G. The NASCAR Member must submit the written request and filing fee within ten (10) calendar days of issuance of the penalty or ruling by NASCAR per the following:

(1) Certified return receipt mail postmarked within the ten (10) calendar days of issuance if using the U.S. Mail.

(2) Dated and posted within the ten (10) calendar days of issuance if using overnight couriers (i.e., UPS or Fed Ex).

(3) If an expedited appeal, the written request and filing fee must comply with deadlines stated in the Expedited Appeal Notice.

H. NASCAR Members filing for appeal hearings must retain proof of submission and delivery confirmation where applicable. Upon request of the Administrator, the Appellant(s) must provide copies of all such proof and confirmation;

I. The Administrator may designate an alternate delivery option in special cases, in his/her sole discretion.

14-7 Scheduling of Hearing Date, Deferral of Penalty

Upon receipt of a valid written request for an Appeal, the Administrator shall set a hearing date at an appropriate time and place as determined in his or her discretion. When necessary, the Administrator may schedule hearings to occur by telephone (non-speaker) or video conference. While the Administrator has complete discretion in scheduling an appeal hearing, such hearings should, as a general matter, be heard within 60 days of receipt of the written request for an appeal and initiation fee. The Administrator must provide notice (written or electronic) of the hearing date and time at least 72 hours in advance to the Appellant(s) and to NASCAR, unless it is an expedited appeal.

Once an appeal is received, the Administrator shall select from the list of Appeal Panel members three names. In seating an Appeals Panel, the Administrator shall take into consideration the panelists' availability, background, professional experience and knowledge. The Administrator shall then:

- (1) Determine whether deferral of the Penalty is appropriate pending the hearing.
- (2) Forward a copy of the written Appellate request to the Appeals Panel.

14-7.1 Deferral of Penalty

After reviewing the written request for penalty deferral, the Administrator may determine whether the Penalty Notice or portions of the penalty under review shall be temporarily deferred until the appeal has been resolved. Series Championship Points, both Car Owner/Driver, penalties may not be deferred, and if the appeal prevails, the practice is to restore points. The Administrator shall have no authority to defer penalties for violations in which the NASCAR Rules expressly exclude eligibility to deferral pending appeal (e.g. substance abuse penalties). If the Administrator temporarily defers execution of the penalty, but later the Appeals Panel upholds the original penalty in whole or in part, it may reinstate the original penalty from the date of the appeal decision, or take such other action as it deems appropriate to effectuate in whole or in part the penalty, including without limitation, disallowance of finishing position, points and/or prize money otherwise earned in any Event during the period of temporary deferral of the penalty. All temporary penalty deferral decisions for each level of hearing are in the sole discretion of the Administrator.

14-7.2 Cost Bond

The Appeals Panel may require the Appellant(s) to post an adequate bond to cover the costs of the appeal or any reasonably foreseeable economic harm to NASCAR or other NASCAR Members that might be caused by the appeal. If the Appeals Panel requires such a bond, the Appeals Panel has sole discretion to specify its form and amount. The Appeals Panel shall inform the Administrator of its decision which will be communicated to the parties.

14-8 Conflict of Interest

NASCAR recognizes that for Panelists to be knowledgeable about motorsports that they may be part of the racing community and may have a variety of relationships throughout the industry. Yet, it is of extreme importance to NASCAR that its Members and the public have confidence in the integrity and impartiality of NASCAR's appellate process, and each Panelist selected to sit on a Panel is asked to discuss any potential conflict they perceive, regarding their service on a Panel, with the Administrator. If the Panelist concludes that a conflict exists or there is an appearance of a conflict, the Panelist will be replaced by the Administrator with another Panelist, and all parties will be notified.

A conflict of interest may consist of, but is not limited to, financial relationships with any of the parties, and a current or historical working or business relationship with any one of the parties. A conflict or the appearance of a conflict does not exist simply because the Panelist and parties know each other and have worked together; rather, the relationship must be of a nature that makes it difficult for the Panelist to render an impartial decision.

14-9 Appeal Summaries

A. In order to assist Appeals Panelists or the FAO to have a better understanding of the issues to be presented at a hearing, both parties may file with the Administrator a brief written summary presenting their case in the appeal ("Appeal Summary"). Neither party is required to submit an Appeal Summary for a hearing, but a summary may be volunteered by either party.

B. If a decision is made to file an Appeal Summary, the Summary shall be sent to the Administrator electronically by email (or by overnight U.S. Mail or overnight courier) at the appropriate address listed in Sub-Section 14-6F Filing for Appeal above, and it must adhere to the following requirements:

- (1) May not be longer than 2 pages (standard-size letter paper, Times New Roman size 12 font, single spaced).
- (2) The summaries may also have attachments or appendices which may include, but are not limited to: video, written statements, diagrams, photographs, charts etc.

C. Must be filed with The Administrator by the deadline of 5:00 pm eastern time on the Friday immediately preceding the beginning of the hearing, unless the Administrator determines that the scheduled time of the hearing necessitates an adjusted deadline.

D. Any summaries filed after the deadline will not be accepted. During expedited appeal proceedings, time requirements will make preparation of voluntary summaries burdensome for both parties; therefore, summaries are not permissible.

E. Appeal Summaries must honor the spirit of the NASCAR Appeals process, in that the summary will be a precise and fact-based description of the party's perception of the facts and does not resemble a formal legal document. The summary may not contain any misrepresentations or personal attacks on any individuals involved in the matter.

F. The Administrator shall distribute summaries to the Appeals Panel and/or FAO and shall also provide a copy to the other party not less than 24 hours in advance of a hearing, unless it is an expedited appeal.

G. Appeals Summaries shall be confidential and not released to the public by either party, or shared or discussed via social media in any manner, whether in whole or in part. Release to the public may result in a penalty. At the end of a hearing, either party may request the Appeals Panel to redact proprietary information from the appendices. If the Decision is appealed to the FAO, the Appeal Summaries become appendices to the Panel's Decision for FAO review.

14-10 Authority of Appeal Panelists

Appeal Panelists have the sole authority to define the scope of relevant testimony, what is admissible or non-admissible, to limit or extend questioning or to seek input from others. Appeals Panelists may ask questions from any parties or witnesses present, at any time during the hearing. Panelists are to make findings and render a decision based on the evidence and within the guidelines of the NASCAR Rules. Appeals Panelists shall not be bound by technical or formal rules of evidence or procedure, except as otherwise provided herein, but shall conduct proceedings in the manner best suited to ascertaining the relevant facts and the merits of the parties' positions, in their sole discretion. They are to deliberate in private.

14-11 Authority to Summon NASCAR Members to Hearing

The Appeals Panel may summon any Member to testify at a hearing. In the discretion of the Panel, the summon may be for a Member to appear in person or telephonically per the Rules in this section. Any Member who is summoned to testify and refuses or fails to appear and/or testify may be subject to disciplinary actions as deemed appropriate by NASCAR, including indefinite suspension or termination of their NASCAR Membership.

If the Appeals Panel finds a Member to be "in contempt" during a hearing, which may be the result from, but is not limited to, such Member's unwillingness to cooperate by providing complete and truthful testimony to the best of his or her knowledge, the Member may be subject to disciplinary action as deemed appropriate by NASCAR, including without limitation, indefinite suspension or termination of their Membership.

14-12 Appearance of Parties

NASCAR Members, whether a party to the appeal or a witness to the incident in question, may appear in person, by telephone (non-speaker phone), or by video-conference in hearings before the Appeals Panelists, subject to approval by the Administrator.

NASCAR Members may not appear through a representative or legal counsel or have a representative or legal counsel present during any portion of the hearing or testimony. NASCAR Officials in the hearing may not be represented by legal counsel or have legal counsel present during any testimony.

Both parties may be in the hearing room to hear both sides present evidence. A party to the hearing is defined as:

- (1) The individual(s) named in the Penalty Notice.
- (2) One NASCAR Official.

If appearance by telephone (non-speaker phone) or video conference is approved by the Administrator, the party or parties (not witnesses) appearing by telephone shall be permitted full access to the hearing, in its entirety.

Recording of the proceedings by any party, NASCAR or witnesses, is prohibited whether appearing in person or via telephone or video-conference.

14-13 No Communications with Appeals Panelists Outside of Hearing

No Member, Competitor, team owner, car owner, car sponsor or other representatives of the Competitor, and the NASCAR Officials involved, may contact or discuss the subject matter of the appeal with any Appeals Panelists outside of the hearing.

14-14 Order of Proceedings

A. The Appeals Panel will ensure that the proceedings are executed in a timely and appropriate manner. Unless otherwise set forth by the Administrator, the hearing shall proceed in the following manner:

- (1) Administrator calls proceedings to order;
- (2) Administrator reads the penalty and basic facts of the violation;

B. The Appeals Administrator may choose to invoke the witness rule if special circumstances warrant. Unless invoked, all witnesses not a party to the proceeding must remain outside the Panel hearing room until called to testify and not discuss their testimony with anyone. In either case, parties to the hearing per Section 14-12 Appearance of Parties may remain in the hearing room to hear both sides present evidence;

C. Since NASCAR has the burden of proving its case, NASCAR presents evidence first;

D. Appellant(s) presents evidence;

E. NASCAR and Appellant(s) are permitted alternating opportunities of Rebuttal, subject to Appeals Panel's discretion;

F. Deliberation Process and Decision Form. The Deliberation Process is private to the Panelists, and the Panelists are expected to not discuss their Deliberations regarding the appeal with others. If Panelists have questions during deliberations, they may ask the Administrator procedural questions or pass questions through the Administrator to the parties;

G. Decision announced to parties by Administrator who then formally closes the proceedings;

H. Decision released publicly.

14-15 Appeal Panel Decision

14-15.1 Finding of Fact/Penalty Notice

Appeals Panel decisions shall be made in a two-step process. The Appeals Panel is to first make a decision on whether NASCAR has shown by a preponderance of the evidence that there has been a violation of the NASCAR Rule Book, special rules, bulletins or any applicable agreements. In the event that a violation is found, the Panel may then proceed to the penalty review phase of the violation, in which the original penalty issued by NASCAR may be upheld, increased, decreased or otherwise adjusted in the Appeals Panel's sole discretion, provided the increase, decrease or adjustment does not conflict with any other provision of the NASCAR *Rules*.

14-15.2 Voting

In order for the Appeals Panel to issue a binding decision, at least a majority of the voting members of the Appeals Panel must concur on the decision. If a majority of voting members of the Appeals Panel cannot agree on a decision of the appeal, or if deliberations continue for a maximum of ten (10) business days, the appeal shall be automatically referred to the FAO for decision. If deliberations continue for a maximum of 24 hours in an expedited appeal, the appeal shall be automatically referred to the FAO for decision. The Administrator will not have any authority to vote on or determine the resolution of an appeal.

If the Appeals Panel determines that the proceedings with respect to any appeal have been instituted or continued by any NASCAR Member for frivolous purposes and/or without merit, the reasonable cost of such proceedings shall be assessed against the NASCAR Member who instituted or continued such proceedings.

14-16 Burden of Proof

14-16.1 Presumption of Innocence

When an appeal is before an Appeals Panel, the burden of proof for the appeals proceeding is on NASCAR to show by a "preponderance of the evidence" that:

- (1) A violation occurred.
- (2) The penalty assessed is within the scope of the Guidelines.

Preponderance of the evidence means that it is more likely than not that:

- (1) A violation occurred.
- (2) The penalty assessed is within the scope of the Guidelines.

Each Appellant(s) appealing a penalty is presumed not to have violated the Rule. Since NASCAR carries the burden, NASCAR shall be permitted as the last to argue, explain or present rebuttal on the facts and violation to the Appeals Panel.

14-17 Execution of Decision

Upon the presentation of all evidence and testimony by both parties, the Appeals Panel shall be permitted to issue a ruling, or retire for further private deliberation. Upon reaching a decision on the matter, the Appeals Panel shall complete a Decision Form provided by the Administrator at the end of the hearing.

Upon completion of the Decision Form by the Appeals Panel, the Administrator will announce the decision to the parties, notify the Appellant(s) of any subsequent appeal options or expedited appeal requirements, if relevant, and formally close the hearing.

14-18 Public Statements

After the hearing has begun, the proceedings shall be treated as confidential, and all parties are prohibited from releasing public statements about the proceedings, except that NASCAR shall be permitted to publicly disclose or announce scheduling

details or pre-hearing decisions of the Appeals Panel or FAO (i.e. decisions to defer a penalty pending hearing). This prohibition ends after the Administrator has announced the decision of the Appeals Panel. The purpose of this rule is to insure the fairness of the proceedings and allow the Appeals Panel to make its determination based only on evidence provided at the hearing. Only after a decision is reached and published can parties make such statement(s) they deem appropriate. Under no circumstances will Appeals Panelists be permitted to discuss publicly the details of the appeals heard and/or their deliberations.

14-19 Publication of Decision

NASCAR shall have the right to publish any decision of the Appeals Panel, including without limitation, the names of the parties involved. A NASCAR Member or other witness involved in a proceeding before the Appeals Panel shall have no claim or cause of action of any kind against NASCAR, its Members, employees, affiliates, the Appeals Panel, or any publisher of any information relating to the final decision, including but not limited to claims of defamation, slander and/or libel, since any such claim(s) shall be deemed to have been waived by the appeal.

14-20 Option for Final Appeal

Once the Appeals Panel has resolved an appeal and announced its decision, the Appellant(s) shall have the option to appeal the decision of the FAO. See Section 15 Final Appeal to the National Motorsports Final Appeals Officer for filing requirements, or if an expedited appeal, contact the Administrator immediately for filing requirements.

SECTION 15 - FINAL APPEAL TO THE NATIONAL MOTORSPORTS FINAL APPEALS OFFICER

15-1 Purpose, Scope and Jurisdiction

The duty of the Final Appeals Officer ("FAO") is to provide NASCAR Members an impartial and additional opportunity to appeal a decision of the National Motorsports Appeals Panel ("Appeals Panel"). The FAO has exclusive jurisdiction to:

- (1) Hear and consider all Appeal Panel's decisions regarding any NASCAR-issued Penalty Notice which penalizes the Appellant(s).
- (2) Hear any decision by NASCAR to deny, suspend or terminate any NASCAR membership or license reviewed by an Appeals Panel.

The scope of each appeal is limited to the correctness of an Appeals Panel's decision to the subject matter of the Penalty Notice and/or the NASCAR decision in question. Any speculation as to the impact of a FAO Decision on a Member or race team (e.g., economic hardships, contractual obligations, etc.) is outside the scope of the FAO's authority and is not to be considered as part of the appeal. All decisions of the FAO will be final and binding on all parties.

15-2 Final Appeals Officer

A. The FAO is appointed by the President of NASCAR. If an appeal pursuant to this Section is received by the Appeals Administrator ("Administrator") during a vacancy in the position of the FAO, or during the incapacity of the FAO, then the President of NASCAR shall appoint an Acting FAO to consider the appeal in accordance with this section.

B. The FAO for 2015 is Bryan Moss.

15-3 Appeals Administrator

The Administrator shall have the same responsibilities for appeals to the FAO as he or she had with respect to those before the Appeal Panels, and his or her duties are the same as described in Section 14 Appeals to the National Motorsports Appeals Panel, unless otherwise set forth herein.

15-4 Filing for Final Appeal

Once the Appeals Panel has resolved an appeal and announced its decision, the Appellant(s) shall have the right to appeal the decision to the FAO. The FAO shall be the final appellate authority within NSACAR, and a NASCAR Member may, as a matter of right, appeal any decision of the Appeals Panel to the FAO. NASCAR, however, is not permitted to appeal a decision of the Appeals Panel.

For any Member wishing to initiate an appeal of an Appeals Panel decision, they are to follow the procedures for filing an appeal found in Section 14-5 Expedited Appeals Procedures and Section 14-6 Filing for an Appeal, except as otherwise provided in this section.

15-5 Scheduling of Hearing Date, Deferral of Penalty and Cost Bond

Upon receipt of a valid written submission for an Appeal to the FAO, the Administrator shall set a hearing date at an appropriate time and place as determined in his or her discretion following the procedures in Section 14-6 Filing for an Appeal as applied to the FAO's appeal hearing.

15-6 Conflict of Interest

If the FAO believes that he or she has a conflict of interest or the appearance of a conflict of interest with respect to his or her acting as FAO in a given appeal, he or she may inform the Administrator that he or she wishes to be removed from that appeal. A conflict of interest may consist of, but is not limited to, current financial relationships with any of the parties, a current or historical working or business relationship with any of the parties, or anything that may otherwise lead to the appearance of impropriety or impairs the integrity of the hearing or decision. A conflict or the appearance of a conflict does not exist simply because the FAO and parties know each other and have worked together; rather, the relationship must be of a nature that makes it difficult for the FAO to render an impartial decision. If the FAO believes he or she has a conflict of interest in a matter, he or she may recuse himself/herself, and the President of NASCAR will appoint a temporary FAO to preside over the hearing and issue a final decision.

15-7 Appeal Summaries

Appeal Summaries used in the Appeals Panel Hearing will be attached to the Appeals Panel's Decision Form provided to the FAO. For expedited appeals, summaries are not permissible per Section 14-9 Appeals Summaries.

15-8 Authority of the FAO

The FAO has the sole authority to define the scope of relevant testimony, what is admissible or non-admissible, to limit or extend questioning or to seek input from others. The FAO may ask questions from any parties or witnesses present, at any time during the hearing. The FAO is to make findings and render a decision based on the evidence within the NASCAR Rules. The FAO shall not be bound by technical or formal rules of evidence or procedure, except as otherwise provided herein. The FAO shall conduct proceedings in the manner best suited to ascertaining the relevant facts and the merits of the parties' positions.

15-9 Authority to Summon NASCAR Members to Hearing

The FAO may summon any Member to testify during a hearing. Any Member who is summoned to testify and refuses or fails to appear and/or testify may be subject to any disciplinary actions as deemed appropriate by NASCAR, including indefinite suspension or termination of their Membership.

If the FAO finds an Appellant(s) to be "in contempt" during a hearing, which may, but is not limited to such Member's unwillingness to cooperate by providing complete and truthful testimony to the best of his or her knowledge, the Member may be subject to disciplinary action as deemed appropriate by NASCAR, including, without limitation, indefinite suspension or termination of their Membership.

15-10 Appearance of Parties

Appearances before the FAO must comply with the procedures in Section 14-12 Appearance of Parties.

15-11 No Communications with the FAO Outside of Hearing

No Appellant(s), Competitor, team owner, car owner, car sponsor or other representatives of the Competitor, nor any NASCAR Officials, shall contact or discuss the subject matter of the Final Appeal with the FAO outside of the hearing.

15-12 Order of Proceedings

The FAO is to ensure that proceedings are executed in a timely and appropriate manner. Unless otherwise determined by the Administrator, the hearing shall proceed in the following manner:

- A. Administrator calls proceedings to order;
- B. Administrator reads the penalty and basic facts of the violation;
- C. The Appeals Administrator may choose to invoke the witness rule if special circumstances warrant. Unless invoked, all witnesses not a party to the proceeding must remain outside the hearing room until called to testify and not discuss their testimony with anyone. In either case, parties to the hearing (per Section 14-12 Appearance of Parties) may remain in the hearing room to hear both sides present evidence;
- D. Since the Appellant(s) has the burden of proving his or her case, Appellant(s) presents evidence first;
- E. NASCAR present(s) evidence;
- F. Appellant(s)/Team and NASCAR are permitted alternating opportunities of Rebuttal, subject to FAO'S discretion;
- G. Deliberation Process and Decision Form prepared by the FAO. If the FAO has questions during deliberations, he or she may ask the Administrator procedural questions or pass questions through the Administrator to the parties;
- H. Decision announced to parties by Administrator, who then formally closes the proceedings;
- I. Decision released publicly.

15-13 The FAO's Decision

15-13.1 Finding of Fact/Penalty Phase

The FAO's decision shall be made in a two-step process. The FAO is to first make a decision on whether the Appellant(s) has shown, by a preponderance of the evidence, that no violation occurred of the NASCAR Rule Book, special rules, bulletins or any applicable agreements to which the NASCAR Member is a party. If the FAO finds a violation has occurred, the FAO will consider whether the penalty set forth in the Penalty Notice or otherwise modified by the Appeal Panel should be upheld, increased, decreased or otherwise adjusted in the FAO's sole discretion, provided the increase, decrease or adjustment does not conflict with any other provision of the NASCAR Rules. If the FAO finds by a preponderance of the evidence the Appellant(s) was denied appellate rights as specified in Section 14-4 NASCAR Member's Appeal Rights, the FAO is to dismiss the Penalty Notice.

If the FAO determines that the proceedings with respect to any appeal have been instituted or continued by any NASCAR Member are frivolous and without merit, the reasonable cost of such proceedings shall be assessed against the NASCAR Member who instituted or continued such proceedings.

15-14 Burden of Proof

15-14.1 Presumption of Correctness

When an appeal by the Appellant(s) is to the FAO, the burden of proof shifts from NASCAR to the Appellant(s) to show by a "preponderance of the evidence" that:

- (1) A violation did not occur.
- (2) The penalty assessed is not within the scope of the Guidelines.
- (3) That he or she was denied appellate rights as specified in Section 14-4 NASCAR Member's Appeal Rights, in the appellate process.

Preponderance of the evidence means that it is more likely than not that:

- (1) A violation did not occur.
- (2) The penalty assessed is not within the scope of the Guidelines.
- (3) That he or she was denied appellate rights as specified in Section 14-1 Purpose, Scope, and Jurisdiction in the appellate process.

Since the Appellant(s) carries the burden, the Member shall be permitted as the last to argue, explain or present rebuttal on the facts and violation to the FAO.

15-15 Execution of Decision

Upon the presentation of all evidence and testimony by both parties, the FAO shall be permitted to issue a ruling, or retire for further deliberations on the matter in private. Upon reaching a decision on the matter, the FAO shall complete a Decision Form provided by the Administrator at the end of the hearing.

Upon completion of the Decision Form, the FAO will review and announce the decision. Appeal Summaries are not to be part of the FAO Decision Form, and summaries are to be returned to the Administrator.

15-16 Public Statements

After the hearing has begun, the proceedings shall be treated as confidential, and all parties are prohibited from releasing public statements about the proceedings, except that NASCAR shall be permitted to publicly disclose or announce scheduling details or pre-hearing decisions of the Appeals Panel or the FAO (such as decisions to defer a penalty pending hearing). This prohibition ends after the FAO has made his or her ruling and issued a decision. Only after a decision is reached and published may parties make a public statement about the appeal to the FAO.

15-17 Publication of Decision

NASCAR shall have the right to publish any decision of the FAO, including without limitation, the names of the parties involved. A NASCAR Member or other witness involved in a proceeding before the FAO shall have no claim or cause of action of any kind against NASCAR, its Members, employees, affiliates, the FAO, Appeals Panel Members or any publisher of any information relating to the final decision, including but not limited to claims of defamation, slander and/or libel, since any such claim or claims shall be deemed to have been waived by the appeal.

SECTION 16 - PRIZE MONEY

16-1 Establishment and Distribution of Prize Money

All Events shall be contested for a guaranteed finishing position purse as set forth in the Official Entry Blank. NASCAR Members agree to abide by decisions of NASCAR in establishing the amount of prize money for each Event. Prize money in all Events that is won by a driver and/or any eligible Competitor of the car owner's team shall be paid to the team's car owner. The car owner, and not NASCAR, shall be solely responsible for the distribution of such prize money to the driver and/or other eligible Competitor(s), and the sole recourse of such driver or other Competitor(s) shall be against the car owner.

SECTION 17 - POINTS AND POINT FUNDS

17-1 Establishment of Point Funds and Awards

NASCAR has established a Competitor's Point Fund for each Touring Series listed as follows: Competitor's Point Fund Awards from each Touring Series Point Fund will be determined and distributed in accordance with this Section 17.

NASCAR K & N Pro Series, East/West

NASCAR Whelen Modified Tour/Whelen Southern Modified Tour

17-2 Funding of Point Funds

The Competitor's Point Fund will be funded by the Promoters in accordance with the Sanction Agreements between each Promoter and NASCAR.

17-3 Award of Points

Championship points for each Point Fund will be awarded as follows:

Drivers and Car Owners

- (1) Points will be awarded to each eligible driver and to each car of a car owner in each Event according to the finishing position of such driver and car in the Event, as follows:

| <u>Finishing Position</u> | <u>Championship Points</u> | <u>Finishing Position</u> | <u>Championship Points</u> |
|---------------------------|----------------------------|---------------------------|----------------------------|
| 1 | 43 | 23 | 21 |
| 2 | 42 | 24 | 20 |
| 3 | 41 | 25 | 19 |
| 4 | 40 | 26 | 18 |
| 5 | 39 | 27 | 17 |
| 6 | 38 | 28 | 16 |
| 7 | 37 | 29 | 15 |
| 8 | 36 | 30 | 14 |
| 9 | 35 | 31 | 13 |
| 10 | 34 | 32 | 12 |
| 11 | 33 | 33 | 11 |
| 12 | 32 | 34 | 10 |
| 13 | 31 | 35 | 9 |
| 14 | 30 | 36 | 8 |
| 15 | 29 | 37 | 7 |
| 16 | 28 | 38 | 6 |
| 17 | 27 | 39 | 5 |
| 18 | 26 | 40 | 4 |
| 19 | 25 | 41 | 3 |
| 20 | 24 | 42 | 2 |
| 21 | 23 | 43 | 1 |
| 22 | 22 | | |

- (2) In addition to the foregoing, one (1) point will be awarded for positions after 43rd place.
- (3) If a car makes a qualifying attempt, but fails to earn one (1) of the available starting positions, the car owner and driver will be awarded points, starting with the position following the last position in the starting field and the car owner will be credited with a qualifying attempt. What constitutes a qualifying attempt will be at the discretion of the Series Director. The car owner and driver will be awarded points on the basis of his/her car's qualifying results.
- (4) A driver will be credited only with points earned in the car in which he/she started the Race, and the starting driver will be credited with all points earned by that car in that Race. To be eligible for points, the car must be entered in the Event. A driver cannot receive points for more than one (1) car in the Race.
- (5) Three (3) additional bonus points will be awarded to each driver and car owner that win the race, one (1) additional bonus point will be awarded to each driver and car owner whose car officially leads a lap, and one (1) additional bonus point will be awarded to the driver and car owner leading the most official laps. (In the event of ties, duplicate points will be awarded.) NASCAR Officials will determine the official leader(s) of the Race. The official lap leader and finishing positions will be determined at the start/finish line.

17-4 Distribution of Point Funds

Point Fund money that is won by a Competitor shall be paid by NASCAR to the Competitor's car owner. The car owner, and not NASCAR, shall be solely responsible for the distribution of such prize money to the Competitor, and the sole recourse of such Competitor shall be against the car owner. Point funds will be distributed at pre-

determined segments during the season. Final point fund distribution will be based on the final Championship point standings at the conclusion of the season, and will be distributed on or before December 31, 2015. In addition to the Competitor's Point Fund, NASCAR will distribute Series Contest Awards as described in the 2015 Driver and Car Owner agreement.

A. Competitors

NASCAR will distribute the Competitor's Point Fund, in accordance with the procedure set forth above, to each eligible Competitor according to the following percentage schedule:

| <u>Place</u> | <u>% of Total</u> | <u>Place</u> | <u>% of Total</u> |
|--------------|-------------------|--------------|-------------------|
| 1..... | 20.0 | 11..... | 2.9 |
| 2..... | 10.0 | 12..... | 2.8 |
| 3..... | 9.0 | 13..... | 2.7 |
| 4..... | 8.0 | 14..... | 2.6 |
| 5..... | 7.0 | 15..... | 2.5 |
| 6..... | 6.0 | 16..... | 2.4 |
| 7..... | 5.0 | 17..... | 2.3 |
| 8..... | 4.0 | 18..... | 2.2 |
| 9..... | 3.5 | 19..... | 2.1 |
| 10..... | 3.0 | 20..... | 2.0 |

B. Miscellaneous Rules

- (1) In the event two (2) or more drivers or car owners have the same number of points (a tie), each driver or car owner will be ranked according to the greatest number of 1st place finishes in 2015 Events for each respective Series as of that time. If a tie still exists, the greatest number of 2nd place finishes, 3rd place finishes, etc., will be used in the same manner, until the tie is broken. If a tie still remains, the driver and/or car owner having the highest finishing position first during the current season in which the driver and/or car owner competed for the respective Series at the time will prevail.
- (2) Eligibility to participate in the Point Fund may be forfeited by any Member violating NASCAR Rules prior to the presentation of the 2015 awards at the Awards Ceremony.

17-5 Manufacturer's Point Championship

Points will be awarded to each car manufacturer (Chevrolet, Dodge, Ford, & Toyota) in each Series that has a manufacturers' program, according to the finishing position of the manufacturer in each Event as follows:

| <u>Finishing Position</u> | <u>Championship Points</u> |
|---------------------------|----------------------------|
| 1 | 9 |
| 2 | 6 |
| 3 | 4 |
| 4 | 3 |
| 5 | 2 |
| 6 | 1 |

A manufacturer will be eligible for points for the best finishing position only, regardless of overall finishing position. (Example: If a Ford finishes in the top three (3) positions and a Chevrolet finishes in the fourth position, Ford will receive nine (9) points and Chevrolet will receive (6) points).

17-6 Administration of Points and Point Funds

A. NASCAR reserves the right to establish, maintain, compile, publish and otherwise operate and award points, Point Funds and trophies through the facilities of the Awards and Achievement Bureau, Inc., under its rules and regulations.

B. All Members agree to abide by decisions of NASCAR Headquarters in the establishment and administration of the Point Funds.

17-7 2015 Championship Point Season

Unless otherwise authorized by NASCAR, the 2015 Championship point seasons will officially close upon the completion of the last scheduled Event for which the Series is a part.

17-8 Payment of Point Fund Awards

Point Fund awards will be awarded at the annual Awards Ceremony at the conclusion of the season with date and location to be announced.

SECTION 18 - FEDERATION INTERNATIONALE de l'AUTOMOBILE

18-1 Federation Internationale de l'Automobile (FIA)

A. The Federation Internationale de l'Automobile, hereinafter referred to as the "FIA" is the international authority entitled to make and enforce rules and regulations for the encouragement and control of automobile competitions (including records). Except as provided in paragraph C of this Section, FIA is the final international court of appeal for appealable disputes arising out of FIA-recognized World Championship Events.

B. The Automobile Competition Committee for the United States-FIA is recognized by the FIA as the National Sporting Authority (ASN) of the U.S.A., and is generally referred to as ACCUS-FIA. NASCAR, IMSA, IndyCar, USAC, SCCA and NHRA are members of ACCUS. ASN Canada is recognized as the National Sporting Authority in Canada.

C. NASCAR is the sole and final authority for the development, maintenance, and distribution of NASCAR Championship Point Funds, the awarding of NASCAR championship points, the naming of manufacturer, Series-sponsored and other NASCAR champions, the scheduling of NASCAR-sanctioned Events, live broadcast and ancillary rights relative to NASCAR-sanctioned Events, determinations regarding the suitability of a racing Facility, control over all aspects of Competition during NASCAR-sanctioned Events, and the governance, interpretation, and implementation of the NASCAR Rules including, but not limited to, NASCAR memberships and licenses, entries, disciplinary action, the NASCAR Substance Abuse Policy, and the determination of driver eligibility, in the manner set forth in NASCAR Rules. Notwithstanding that a particular Event may be listed on the FIA calendar, or count towards an FIA championship, NASCAR reserves sole authority to finally settle any dispute that may arise during such NASCAR Event.

D. All car owners entering NASCAR-FIA listed Events must possess a current, valid FIA Entrant's License. All drivers driving in NASCAR-FIA listed Events must possess a current, valid FIA Driver License of the grade specified in the Official Entry Blank. If the Official Entry Blank permits FIA license holders who do not possess current NASCAR licenses to compete, they must fully meet NASCAR's eligibility requirements as determined by NASCAR's Resume Committee and they will also be required to sign releases and waivers and to acknowledge that they are not eligible for NASCAR Championship Point Funds or any of the benefits of NASCAR membership. They will be bound by the NASCAR Rule Book, as it may be amended from time to time, and any special rules for the Event.

SECTION 19 – NASCAR SUBSTANCE ABUSE POLICY

19-1 Introduction

Through a comprehensive testing program, NASCAR's Substance Abuse Policy rules are designed to keep Events safe for everyone and provide a level playing field. Strong testing programs save lives, prevent injury, gives NASCAR Members additional reasons to say no to illegal drugs and help identify people with substance abuse issues and facilitate their treatment. To those ends, NASCAR prohibits the misuse of alcohol, prescription drugs, and any other substance used in a manner that affects safety or impacts the integrity of the competition, including – but not limited to – illegal or performance enhancing substances. All NASCAR Members are responsible for whatever goes into their body. All Members are required to adhere to NASCAR's Substance Abuse Policy and are subject to reasonable suspicion testing, as well as any subsequent follow-up testing and Road-to-Recovery testing that is necessary. (See sub-section 19-6)

19-2 Administration of this Policy; Program Administrator, the Testing Laboratory and Medical Review Officer (MRO)

The Policy of this program is overseen by NASCAR, but it is administered and implemented through a program administrator, testing laboratories, medical review officers and substance abuse professionals.

A. Program Administrator (PA) - NASCAR has designated David L. Black, Ph.D., D-ABFT, FAIC Aegis Sciences Corporation ("Aegis") as the program administrator (PA). The PA is responsible for, among other things, administering collection of samples/collections under this Policy, coordinating secure shipment of specimens to the testing facility, ensuring thorough and accurate scientific testing of specimens, determining whether any NASCAR Member has tested positive for ingestion of drugs, alcohol or prohibited substances or otherwise violated this Policy, and informing NASCAR and the NASCAR Member of any such violation. In making this determination, the PA shall consider all information derived from the testing process, as well as all information derived from the independent investigation of the Medical Review Officer (MRO). The PA will also facilitate evaluations for NASCAR Members for the Road to Recovery Program by coordinating evaluations with the appropriate substance abuse professional for

advising on the creation of a Road to Recovery Plan that may include substance abuse counseling, treatment or rehabilitation.

B. Testing Laboratory - All testing pursuant to this Policy will be done at the NASCAR designated Testing Laboratory. NASCAR has designated Aegis Sciences Corporation (Aegis) of Nashville, TN to administer the collection, transport, and testing of urine, blood, saliva, hair, and/or breath specimens pursuant to this Policy and to communicate the results to the PA and MRO as needed. NASCAR reserves the right to designate other testing facilities, as needed to facilitate this Policy, throughout the year.

C. The Medical Review Officer (MRO) - NASCAR has designated Douglas Aukerman, M.D., as the independent MRO of this Policy. The MRO is an independent and impartial physician responsible for receiving and reviewing laboratory results generated pursuant to this Policy and determining whether there is a legitimate medical explanation for a positive drug test or refusal to test because of adulteration, substitution, or other non-negative test. Dr. Aukerman is a board certified Sports Medicine physician and a medical review officer certified by the American Association of Medical Review Officers (AAMRO). NASCAR reserves the right to designate other MROs, as needed, to facilitate this Policy throughout the year.

19-3 Prohibited Substances and Acts

A. Prohibited Substances - For the purpose of this Policy, prohibited substances are those substances that, in the PA's and the MRO's determination, in consultation with NASCAR, may adversely affect the safety and well-being and performance of a NASCAR Member at a NASCAR Event, including without limitation illegal drugs. The PA and the MRO, in consultation with NASCAR, may make this determination with respect to a particular substance at any time, including and without limitation at the time of discovery of the substance following a drug test. For the purposes of these rules, federal bans and definitions of illegal substances supersede any state and/or local ordinance, regulation or law allowing use of a substance. NASCAR Members are prohibited from using, having in their system, possessing, purchasing, selling and/or participating in the distribution of any drug that is illegal to possess, use, and/or distribute by the laws of the United States of America and/or any of its 50 states, regardless of the amount, at any time. Illegal acquisition and/or illegal distribution of any prescription or over-the-counter medication are strictly prohibited at any time. In addition to the prohibition of illegal drugs described above, non-medical use of the following non-exhaustive list of drugs is prohibited under this Policy:

- (1) Stimulants
Amphetamine, methamphetamine, Ecstasy (MDMA), Eve (MDEA), MDA, PMA, Phentermine, and other amphetamine derivatives and related compounds.
- (2) Narcotic Analgesics
Including without limitation, alfentanil, fentanyl, hydromorphone, marijuana (cannabis), meperidine, methadone, morphine, oxycodone, oxymorphone, propoxyphene, sufentanil, heroin and/or their chemical and pharmacological analogs and related compounds, as well as codeine, dihydrocodeine, hydrocodone, and codeine analogs and related compounds (including those available over the counter in some countries if taken for a non-medical use).
- (3) Ephedrine Class
Ephedrine, pseudoephedrine, and phenylpropanolamine and/or their chemical and pharmacological analogs and related compound as well as pseudoephedrine (even if purchased as an over the counter medication without a prescription) if used:
 - (a) in a manner that is inconsistent with the instructions provided by the drug manufacturer (e.g., use in concentrations or amounts in excess of the manufacturer's recommended dose); or
 - (b) in a manner or an amount that may cause an increased risk to health, safety, or an impairment of ability to perform his/her duties in relation to a NASCAR Event.
- (4) Benzodiazepines
Including without limitation, alprazolam, diazepam, lorazepam (Ativan), oxazepam (Serax), temazepam (Restoril), Alpha-hydroxy-alprazolam (Xanax), Nordiazepam (Valium) and/or their chemical and pharmacological analogs and related compounds.
- (5) Barbituates
Including without limitation, amobarbital (Amytal), butalbital (Anolor 300, Esgic, Fioricet, Fiorinal), butabarbital (Butisol), phenobarbital (Luminol, Solfoton), pentobarbital (Nembutal, Nembutal Sodium), secobarbital (Seconal) and/or their chemical and pharmacological analogs and related compounds.
- (6) Performance Enhancing Drugs
Including without limitation, Human Growth Hormone (hGH), Human Chorionic Gonadotropin (hCG), Lueterizing Hormone (LH) and Insulin-

like Growth Factor (IGF-1), clenbuterol, anabolic androgenic steroids (“AAS”), including without limitation:

- androstenediol
- androstendione
- bolasterone
- boldenone
- chloroxomesterone (dehydrochlormethyltestosterone)
- clostebol
- dihydroepiandrosterone
- dihydrotestosterone
- dromostanolone
- epitestosterone
- 4-chlortestosterone
- fluoxymesterone
- formebolone
- furazabol
- mesterolone
- methandienone (methadrogenolone)
- methandriol
- methenolone
- methylclostebol
- methyltestosterone
- methyltrienolone
- mibolerone
- nondrolone
- norandrostendione
- norethandrolone
- norethindrone
- oxabolone
- oxandrolone
- oxymesterone
- oxymetholone
- stanozolol
- stenbolone
- testosterone
- trenbolone

(7) Muscle Relaxers

Including without limitation, carisoprodol (Soma) and meprobamate (Miltown, Meprospan).

(8) Sleep Aids

Including without limitation, zolpidem (Ambien).

(9) Beta Blockers

Including without limitation, the following drugs and related compounds:

- alprenolol
- carteolol
- levobunolol
- mepindolol
- metipranolol
- nadolol
- oxprenolol
- penbutolol
- pindolol
- propranolol
- sotalol
- timolol
- acebutolol
- atenolol
- betaxolol
- bisoprolol
- esmolol
- metoprolol
- nebivolol
- amosulalol
- landiolol
- tilisolol

B. Medical and Non-Medical Use of Prescription and Over-the-Counter Medications - NASCAR recognizes that there are many prescription and over-the-counter medications that serve essential or beneficial purposes for the health and well-being of NASCAR Members, and nothing in this Policy is intended to discourage the proper use of these medications. Some medications, even when properly used, may adversely affect the safety and integrity of competition for motorsports events. For example, many types of cough medicines contain codeine, which is a potent narcotic that may result in drowsiness or diminished

alertness. Non-medical use of a prohibited, prescription, or over-the-counter medication by a NASCAR Member is prohibited, and the MRO will examine whether: (1) the medication was used in a manner inconsistent with the instructions provided by the manufacturer, pharmacist and/or the prescribing physician; (2) the medication causes a competitive advantage, or a diminished or impaired ability to perform duties on the day of an Event; (3) the medication was used without a valid prescription from a licensed and treating physician that was given for a legitimate medical purpose; (4) the NASCAR Member failed to advise the issuing physician that another physician was prescribing the same and/or similar medication; and/or (5) the medication was prescribed more than six (6) months prior to a NASCAR Event. For the purposes of these rules, federal bans and definitions of illegal substances supersede any state and/or local ordinance, regulation or law permitting the use of a substance.

C. Alcohol - A NASCAR Member is prohibited from consuming any alcohol 12 hours prior to or during any NASCAR on-track activity or Event. A NASCAR Member with breath, urine, saliva, or blood alcohol level above 20mg per 100ml (.02%) at the time of testing is deemed unfit for race driving, participating or officiating in a NASCAR Event. Nothing in this paragraph shall preclude a NASCAR Official from determining that a NASCAR Member with a breath, urine, saliva, or blood alcohol test level below 20mg per 100ml (.02%) is physically unfit for race driving, participating, or officiating in a NASCAR Event and taking such action as the NASCAR Official may deem appropriate under the NASCAR Rules.

D. Dietary Supplements – Dietary supplements may contain (either purposefully or through contamination) a prohibited substance under this Policy. Any product sold with a warning advising non-use if the purchaser is subject to a drug testing program should be avoided even though such product may be available without a prescription. NASCAR Members may use a variety of apps or internet sources to become more educated about the contents of a supplement, but regardless of that information, the NASCAR Member is responsible for any substance found in their system.

E. Masking Agents – The use or attempted use of any agent or technique that is designed to avoid detection of a prohibited substance and/or falsify, alter, compromise, or otherwise tamper with the integrity of a specimen or test under this Policy is prohibited. This includes providing false urine samples (e.g., urine substitution or synthetic urine), contaminating the urine sample with chemicals or chemical products, using pharmaceutical diuretics to purposefully dilute the urine sample, using masking agents, using Aromatase inhibitors that may be used to biologically manipulate the testosterone/Epitestosterone ratio, and/or using epitestosterone to artificially alter the testosterone/epitestosterone ratio.

F. Substances that mimic effects of banned substances. NASCAR Members are prohibited from using any legal or illegal substance, or combination of substances, including but not limited to synthetics, analogues and/or derivatives of a banned substance.

G. Manner of Use –

- (1) **Safety.** The use of any legal or illegal substance, or combination of substances, which when taken into the human body, can impair the ability of the person to perform safely is prohibited. Under this Policy, any substance or combination of substances used in an unsafe manner is a violation. For example, a combination of drinking 10 cups of espresso, taking cold medicine and using prescribed sleep medication will cause a safety risk, although each substance in small amounts by themselves may not necessarily result in a violation of the SAP.
- (2) **Integrity of Competition.** The use of any legal or illegal substance, or combination of substances, which when taken into the human body, can alter or enhance a person's ability to compete in a manner unfair to other competitors is a violation. For example, a legal substance may be substantially similar to an illegal drug –i.e., an analogue or derivative of an illegal drug –use of that substance will result in a violation of the SAP.

19-4 Prescription Documentation for Prohibited Substances to the Medical Review Officer

Competitors or Officials in the NASCAR K&N Pro Series – East, NASCAR K&N Pro Series - West, NASCAR Whelen Modified Tour, NASCAR Whelen Southern Modified Tour are required to notify and provide proof of prescriptions for all prohibited substances under this Policy to the MRO upon receipt of such a prescription from his/her treating physician. The method to provide this information to the MRO shall be:

- Using a fax cover sheet, print “NASCAR SAP Information”, the Competitor or Official name and phone number, name of medication, the prescribing physician, and the physician's phone number. Attach a copy of the prescription providing the dosage and duration instructions for proper use.
- Fax both the cover sheet and copy of the prescription to the MRO at (888) 595-4949, or email scanned copies to mro@aukmed.net.

- The Competitor's or Official's physician may receive a call from the MRO to discuss the prognosis and expected length of treatment and corresponding duration of the prescription.

19-5 Testing for Prohibited Substances

Under this Policy, all Competitors, Officials and NASCAR Members will be tested on the following basis:

A. Reasonable Suspicion - NASCAR may also require a NASCAR Member to submit to a test or tests if a NASCAR Official has reasonable suspicion that the NASCAR Member has violated any part of this Policy or has a competitive advantage or diminished ability to perform as a result of using any substance in violation with this Policy. Some of the conditions, observations and/or reports that may cause a NASCAR Official to have such a reasonable suspicion are, without limitation, as follows:

- (1) When a NASCAR Member is found or observed in possession of illegal substances or illegal drug paraphernalia at any time.
- (2) Observation of signs, symptoms, and/or behaviors generally understood to accompany the use of prohibited substances or alcohol use or intoxication including, without limitation:
 - a. Physical signs of red or droopy eyes, dilated or constricted pupils;
 - b. Slurred speech, stumbling, or hyperactivity;
 - c. Needle marks;
 - d. Repeated unexplained disappearances from an Event;
 - e. Constantly running nose, red appearance in the face, or persistent sniffing;
 - f. Time distortion, including repeated tardiness and missed appointments;
 - g. Chronic forgetfulness or broken promises;
 - h. Accidents during Events;
 - i. Inability to concentrate or remember, or to maintain attention;
 - j. Mental confusion, paranoia, or presence of abnormal thoughts or ideas;
 - k. Violent tendencies, loss of temper, or irritability;
 - l. Extreme personality change or mood swings;
 - m. Deteriorating personal hygiene or appearance.
- (3) An arrest or conviction for driving while under the influence of alcohol or drugs, or an alcohol or drug related conviction.
- (4) Receipt of a report from a reliable source that a NASCAR Member is under the influence of substances prohibited under this Policy on the day of a NASCAR Event, or, at any time, is using, possessing or selling illegal drugs or substance.
- (5) The results of an examination or test, as provided by the NASCAR Rules, which shows evidence of use of a prohibited substance or alcohol abuse or of adulteration or manipulation of the specimen.
- (6) The odor or aroma of an alcoholic beverage on or about the breath or body of a Competitor, Official or NASCAR Member consistent with use of such a substance or alcoholic beverage on the day of a NASCAR Event.
- (7) Violation of NASCAR safety precautions or careless acts during a NASCAR Event.

B. Follow-up testing - NASCAR Members may be required to undergo follow-up testing as requested by the PA or MRO. Tests may be:

- (1) Administrative. The PA may request follow-up testing for administrative issues.
- (2) MRO requested. The MRO may request follow-up testing for variety of reasons, including but not limited to:
 - a. If the MRO finds that test results are invalid, the MRO may request a follow up test to assist in analysis.
 - b. Monitor or determine therapeutic levels of prescription drugs.
 - c. Determine whether a NASCAR Member is "cycling" or "stacking" performance enhancing substances.
 - d. Assist in the investigative process to determine if there is a legitimate medical reason for test results.
- (3) In its discretion, NASCAR may decide to include drug and/or alcohol testing as a condition of probation. In the rare instances when that occurs, NASCAR will review the situation and determine how many times, for how long, in what circumstances and for what substances a member will be tested as part of probation and whether collections are to be observed.

C. The Road to Recovery / Competition Re-entry - NASCAR Members, who violate this Policy, are required to be tested before returning to NASCAR. In conjunction with the terms and condition of reinstatement of a NASCAR license, the PA will provide for an evaluation with an appropriate substance abuse professional for the purpose of advising on the creation of a the Road to Recovery Plan, which may include substance abuse counseling, treatment or rehabilitation. The PA will

determine how many times the NASCAR Member will be tested, for how long, and for what substances. The PA may also require that collections be under direct observation.

19-6 Specimens For Testing

NASCAR may require a NASCAR Member to submit to a test or tests, including without limitation urine, blood, saliva, hair, and/or breath tests. At the time of testing, the choice of specimen for a particular test is at the discretion the PA, MRO and NASCAR. Also, the type of test performed is at the discretion of the PA, MRO and NASCAR. In the event of disagreement, NASCAR shall make the determination of the specimen for a particular test.

19-7 Refusal to Test

A. Refusing to submit to testing will be treated as if the test was found to be positive. For the purposes of this Policy, NASCAR Members have refused to take a test if they:

- (1) Fail to participate, authorize or cooperate for testing, including failure to follow procedures of sub-section 19-9.
- (2) Fail to appear for a test after being notified of the test.
- (3) Fail to remain for the duration of testing or until all testing requirements are completed.
- (4) Fail to provide sufficient amount of the requested specimen, and the MRO determines that no legitimate medical reason exists for the insufficient specimen.
- (5) Fail to permit or allow a requested observed collection.
- (6) Fail to take a requested follow up test.
- (7) Fail to consult and/or cooperate with the MRO.
- (8) Fail to provide an unadulterated specimen. A test is considered a refusal for any findings of specimens that are adulterated, substituted, including but not limited to a finding of synthetic urine, synthetic marijuana, adulterants, intentional dilution of specimens, etc., and where no legitimate medical explanation supports the laboratory findings.
- (9) Any attempts by NASCAR Members to mask or alter the results of the test will be considered a refusal.

B. Removal from NASCAR Event – If a NASCAR Official directs a NASCAR Member, who refuses to consent to and participate in a test within the time period designated by the NASCAR Official, the NASCAR Member may be removed from the racing premises by a NASCAR Official and may be subject to other emergency action as may be appropriate, including disciplinary action pursuant to NASCAR Rules.

19-8 Authorization for Testing and Release

If a NASCAR Member refuses to execute any authorization for the release of that NASCAR Member's medical records, as deemed relevant in the PA, MRO or NASCAR's discretion, or withdraws such authorization for testing and release pursuant to this Policy, NASCAR Member will not be issued a NASCAR license and, if already issued, the NASCAR license will be suspended until the NASCAR Member executes the above mentioned authorization and release and delivers it to NASCAR. If a NASCAR Official directs a NASCAR Member to submit to a urine, blood, saliva, hair and/or breath test as provided by this Policy, that NASCAR Member must consent to and participate in the test by the time designated by the NASCAR Official. If that NASCAR Member refuses to consent to and participate in such a test or tests within the time period designated by the NASCAR Official, the NASCAR Official may eject the NASCAR Member from the racing premises or take such other emergency action as may be appropriate, and that NASCAR Member will also be subject to disciplinary action pursuant to the NASCAR Rules.

19-9 Collection and Transport of Specimen(s)

The PA will, among other things, be responsible for the following procedures:

A. Identification & Direct Observation - The PA will confirm the identity of the person whose specimen is taken. Where necessary, the PA will conduct direct observation of the collection of the specimen(s) if directed by the MRO or if in the PA's own discretion, the integrity of the testing process requires it. To direct an observed collection, the PA and his/her agents may consider not only their training and experience, but other factors, not limited to, but including: materials brought to the collection site, a temperature of the original specimen was out of range or the NASCAR Member's behavior indicates an attempt to tamper with a specimen, etc.

B. Designated times - The PA will ensure that the specimen(s) are collected within the designated time period. Normally, collection shall be made within one (1) hour or less of the notification of the NASCAR Member that testing will be conducted, unless a different time is designated by the PA and/or a NASCAR Official based on the circumstances.

C. Specimen quality - The PA will promptly measure the temperature of the specimen(s) to ensure it has not been manipulated. Where results indicate that the sample is inappropriate for testing, the PA and/or a NASCAR Official may require the NASCAR Member to provide additional specimen(s) as necessary.

D. Specimen handling - The PA will split specimens into "A" and "B" samples (when possible), label, secure, and transport the specimen(s) to the Testing Laboratory in such a manner as to ensure that the specimen(s) are not misplaced, tampered with, or relabeled.

E. Prescription drug forms - The PA will provide a form to be completed by the NASCAR Member that identifies all prescription and over-the-counter medications consumed by NASCAR Member in the preceding three (3) months.

F. Specimen ownership - Under this policy, all specimens collected, including both "A" and "B" samples, are exclusively the property of NASCAR.

19-10 Procedures if a Test Shows the Presence of Prohibited Substances Adulteration, Substitution – MRO cancelled tests.

A. MRO Requests for an interview and additional information - Once the MRO notifies a NASCAR Member that they have a positive drug test or refusal to test because of adulteration or substitution, or other non-negative test, the NASCAR Member has 72 hours from the time of notification to respond to the MRO's request for an interview and additional information in accordance with the following rules:

- (1) The MRO may request the following information, for example and without limitation: suitable proof of valid medical prescriptions given by a licensed and treating physician, consent to review records of the prescribing physician, or any other reasonable requests that assist the MRO investigation.
- (2) To assist the MRO's investigation, the MRO may also direct the NASCAR Member to undergo further independent medical evaluation from a professional designated by the MRO, at the NASCAR Member's expense. After a medical exam is requested, NASCAR Members have 30 business days to have the test examination conducted. By obtaining a NASCAR membership or license, NASCAR Members have consented for the MRO to contact their physician for the purposes of a MRO investigation. The failure to cooperate with the MRO's investigation, or provide suitable proof in a timely manner shall be treated as confirmation of the positive test.
- (3) PA and MRO Notifications. When required by this policy, the PA or MRO are to make reasonable efforts to notify Members. Reasonable efforts may include the PA or MRO using email, phone or mail to contact the Member via the contact information the Member provided on the license application.
- (4) If the MRO determines that there is no legitimate medical use or legitimate medical explanation for a positive test or refusal to test because of adulteration, substitution, the MRO is to report the results to the PA.

B. PA's Reporting of Results - Once the MRO reports a positive test or refusal to test because of adulteration, substitution, the PA is to consider all information derived from the testing process and information derived from the independent investigation of the MRO, and then make a determination of whether the results are positive. If in consultation with the MRO, the PA decides the results are positive, the PA shall inform NASCAR of a positive result, irrespective of whether the split specimen procedures described in this Rule Book have been completed. Once split specimen procedures are completed, the PA shall then issue to NASCAR either a confirmed negative test result or a confirmed positive test result. If split specimen procedures are waived or never acted upon, the PA shall issue a confirmed positive result and violation of this Policy to NASCAR.

C. Split Specimen Procedures - Once the PA or MRO notifies a NASCAR Member that they have a positive drug test or refusal to test because of adulteration, substitution, or other non-negative test, the NASCAR Member has 72 hours from the time of notification to request in writing a test of the split specimen or B sample in accordance with the following rules:

- (1) All requests to test a "B" sample must be made in writing to the MRO. Please fax your request with a cover sheet to the MRO at (888) 595-4949 or send your request by email to mro@aukmed.net.
- (2) The "B" sample test shall be conducted at Aegis using the "B" specimen from the original collection. The NASCAR Member may be present (either personally or be represented by a qualified toxicologist not affiliated with Aegis) during the second test at his/her own expense. If the NASCAR Member chooses to be present personally or represented by a qualified toxicologist during the "B" sample test, the NASCAR Member must notify the PA and MRO within the 72 hour period in writing mentioned in this sub-section 19-11(A).
- (3) The "B" sample test will be performed in accordance with the same procedures used by Aegis in the original test of the "A" specimen. If the "B" sample fails to confirm the original test, then the specimen and test

will be recorded as negative, and there will be no violation under this Policy. If the "B" sample test confirms the original test, then the specimen and test will be recorded as a confirmed positive test and a violation of this Policy.

- (4) If no "B" sample is available due to the nature of the collection, then the MRO and PA will act upon the procedures in sub-section 19-11(A). The final determination of whether there has been a violation of this Policy will be made by the PA.
- (5) After a "B" sample test is requested, NASCAR Members have 30 business days to have the "B" sample test conducted and results finalized.
- (6) If in consultation with the MRO, the PA decides the results are positive, the PA shall inform NASCAR of a positive result, irrespective of whether the split specimen procedures described in this Rule Book have been completed. If the Program Administrator or MRO is concerned about the safety and integrity of the competition or other exigent circumstances, the Program Administrator or MRO may notify NASCAR of the original "A" specimen positive test prior to the verification of the results.
- (7) Upon notification of the original "A" specimen positive test, NASCAR, in its sole discretion, may temporarily suspend a NASCAR Member's license before the "B" sample test is completed based on the following reasons:
 - a. Concerns regarding the safety of the NASCAR Members and others at the Event or on-track.
 - b. Concerns regarding the fairness of a competition.
 - c. Exigent circumstances,
 - d. Undue delay to accommodate the presence of the NASCAR Member (or his/her representative) at the "B" sample test.NASCAR Members temporarily suspended in this section are ineligible to apply for temporary deferment of the suspension from the Appeals Panel under Rule 14-5. In the interests of safety and integrity of the competition, the temporary suspension shall be executed promptly.
- (8) The "A" and "B" specimen samples remain the exclusive property of NASCAR.
- (9) A NASCAR Member is not entitled to 72 hours to request a "B" sample test when no specimen was produced or tested due to refusal or when the NASCAR Member waives the 72 hours during the MRO interview.
- (10) Uncooperative Member. When the PA or MRO have made repeated attempts to contact the Member regarding notification of a positive test and "B" bottle sample testing procedures, and the Member has not responded to the PA or MRO, then the PA and MRO may report the test as positive after 72 hours from the findings of the test. Lack of cooperation with the PA or MRO by the Member will be treated as a constructive waiver of his "B" bottle sample testing procedures.

D. Cancelled and Negative Tests - If the PA or MRO verifies a test as cancelled or negative, the results will be reported to NASCAR. A cancelled and negative test will not be treated as a violation of this Policy.

E. Suspension of NASCAR License - Upon being notified by the PA or MRO of a verified positive or refusal or any violation of this Policy, NASCAR will suspend a NASCAR Member's license for an indefinite period and/or take such other disciplinary action deemed appropriate under the circumstances pursuant to the NASCAR Rule Book.

F. Publication of Results - By seeking to participate in any NASCAR Event, all NASCAR Members agree that NASCAR may publish the results of any test or tests conducted pursuant to this Policy and the circumstances giving rise to such test or tests to such third parties as NASCAR, in its sole discretion, deems reasonable under the circumstances. NASCAR may also publish any and all violations to this Policy, including but not limited to conduct violations where no testing may have occurred. No NASCAR Member shall have any claim or cause of action of any kind against NASCAR or any director, officer, employee or agent of NASCAR, the PA, Testing Laboratory, or MRO with respect to such publication, and/or shall be deemed to have released any such claim or cause of action.

G. Road to Recovery / Competition Re-entry - NASCAR shall also send the suspended NASCAR Member a letter containing terms and conditions for consideration of reinstatement of the NASCAR Member's NASCAR license. If the NASCAR Member wishes to have NASCAR lift the suspension, the NASCAR Member must agree to NASCAR's terms and conditions. In conjunction with the terms and conditions of reinstatement, the PA will also facilitate an evaluation for the Road to Recovery Program by coordinating an evaluation with the appropriate substance abuse professional for advising on creation of a Road to Recovery Plan that may include substance abuse counseling, treatment or rehabilitation. The PA will determine how many times the NASCAR Member will be tested, for how long, and for what substances. The PA may also require that collections be

under direct observation. Testing will be done at a time and place and under conditions specified by NASCAR and/or the PA, at the NASCAR Member's expense, which will include laboratory fees and all other direct and indirect costs incurred by NASCAR or the laboratory in connection with each test. When a NASCAR Member has, to the satisfaction of the PA, completed the requirements set forth in the letter, the NASCAR Member is eligible for reconsideration of reinstatement of a NASCAR license.

19-11 Disciplinary Action for Prohibited Acts Where There is No Testing for, Prohibited Substances or Alcohol

With respect to any prohibited act described herein, if a NASCAR Official determines that a NASCAR Member has engaged in any such prohibited act, the NASCAR Official may remove the NASCAR Member from the racing premises or take such other emergency action as is appropriate, and that NASCAR Member will also be subject to disciplinary action pursuant to NASCAR Rules.

19-12 Self-Reporting

Pain medications and other substances prohibited or misused under this Policy can be addictive, abused, and generally harmful to the health and well-being of NASCAR Members. A NASCAR Member who believes he/she may have a substance abuse issue or problem is encouraged to seek professional assistance or self-help solutions. No penalty will be imposed under NASCAR's Substance Abuse Policy on a NASCAR Member who voluntarily acknowledges a substance abuse issue or problem to NASCAR's Substance Abuse Program Director prior to notice of a drug test. NASCAR may, however, in the interest of safety, temporarily suspend the NASCAR Member's license until the NASCAR Member has been rehabilitated to the satisfaction of NASCAR. If requested, NASCAR will provide a list of credible drug or alcohol rehabilitation programs. NASCAR strongly encourages both self-help and professional treatment for those suffering from a substance abuse issue or problem. Many worthy programs, both public and private, are available for the treatment of substance abuse addictions. NASCAR will continue its efforts to support a drug-free America and a society in which alcohol is not abused.

19-13 Applicability of the NASCAR Rules

This Policy, as it may be amended from time to time, is binding upon all NASCAR Members in the same manner and to the same extent as the NASCAR Rules.

SECTION 20C NASCAR K & N PRO SERIES, EAST/WEST

Open to NASCAR-approved automobile manufacturers provided they comply with, and adhere to, specifications as outlined for this Series.

NOTICE

ALL MODEL, ENGINE OR EQUIPMENT CHANGES OR MODIFICATIONS NOT SPECIFICALLY ADDRESSED IN THIS RULE BOOK BY NASCAR MUST BE SUBMITTED, IN A COMPLETED FORM/ASSEMBLY, TO NASCAR FOR CONSIDERATION OF APPROVAL, ON OR PRIOR TO SEPTEMBER 2, 2015, UNLESS OTHERWISE AUTHORIZED BY NASCAR, TO BE CONSIDERED FOR COMPETITION FOR THE 2016 SEASON. THE APPLICANT WILL BE NOTIFIED OF APPROVAL OR REJECTION FROM NASCAR. RACE EQUIPMENT WILL NOT BE CONSIDERED AS HAVING BEEN APPROVED BY REASON OF HAVING PASSED THROUGH INSPECTION AT ANY TIME OR ANY NUMBER OF TIMES UNOBSERVED OR UNDETECTED. ANY RACE EQUIPMENT WHICH DOES NOT CONFORM TO SPECIFICATIONS OR TOLERANCES CONTAINED IN THE 2015 NASCAR RULE BOOK, OR IS NOT OTHERWISE APPROVED BY NASCAR, MAY NOT BE USED IN NASCAR COMPETITION IN 2015. ALL SUBMITTED RACE EQUIPMENT MUST BE ACCOMPANIED BY COMPUTER-AIDED DESIGN (CAD) FILES AND/OR MECHANICAL DRAWINGS AND REQUISITE FEE AS DETERMINED BY NASCAR.

20C - 1 **COMPETING MODELS AS SELECTED BY NASCAR**

20C - 1.1 **NASCAR K & N Pro Series Races**

NASCAR K & N Pro Series Races are open to eligible 2004 through 2014 approved models of steel bodied and Grand National-Approved Composite Body passenger car production sedans.

20C - 1.2 **NASCAR K & N Pro Series**

The NASCAR K & N Pro Series will compete with the rules as specified in Section 20C of the Rule Book. If authorized by NASCAR, deviations to these rules may be permitted for stand-alone Events only. All combination Events will be governed by the rules as published in Section 20C of the Rule Book.

20C - 1.3 **APPROVED COMPETITION MANUFACTURERS AND MODELS**

A. 2015 Racing Season:

The following are the only approved models for competition in the NASCAR K & N Pro Series in 2015:

| <u>YEAR</u> | <u>MANUFACTURER</u> | <u>MODEL</u> |
|-------------|---|----------------|
| 2009 – 2014 | Chevrolet | Impala SS |
| 2006 – 2008 | Chevrolet | Monte Carlo SS |
| 2004 – 2005 | Chevrolet | Monte Carlo |
| 2005 – 2014 | Dodge | Charger |
| 2004 | Dodge | Intrepid |
| 2006 – 2014 | Ford | Fusion |
| 2004 – 2005 | Ford | Taurus |
| 2007 – 2014 | Toyota | Camry |
| 2006 – 2010 | Grand National Composite Body Part # AFC 1000 | |
| 2010 – 2014 | Grand National Composite Body Part # AFC 1000-K | |
| 2014 | Grand National (Flange Fit) Composite Body | |
| | Approved Models: | |
| | Chevrolet | - SS |
| | Ford | - Fusion |
| | Tovota | - Camry |

NOTE: All 2003 and older approved models are deleted for 2015 competition.

NOTE: The NASCAR-approved “Spec Engine” is the only eligible engine for use with the Toyota Camry model car.

B. 2016 Racing Season:

Any new car model to be considered for approval for competition in the 2016 season must be submitted by the manufacturer to NASCAR for initial consideration not later than June 19, 2015 unless otherwise authorized by NASCAR. At the manufacturer's expense, the manufacturer must provide all information, materials, electronic files, benchmark production vehicle(s) and race-version vehicle(s) as requested by NASCAR on or before any dates specified by

NASCAR. The manufacturer must cooperate with NASCAR to enable NASCAR to complete all necessary track tests, aerodynamic tests, and other competitive analysis by September 2, 2015 unless otherwise authorized by NASCAR. All new car models submitted to NASCAR for approval by the manufacturer must conform to the same body configuration and meet the spirit and intent of competitive racing as currently evidenced in these Series.

20C - 2 GENERAL CAR BODY REQUIREMENTS

20C - 2.1 Car Bodies

The car body must be acceptable to NASCAR Officials and meet the following minimum requirements:

A. The 2004 through 2014 eligible bodies will be volume production models as selected and approved by NASCAR (See sub-section 20C-1.3).

B. The Grand National-Approved Composite Bodies are approved for competition. The Grand National-Approved Composite Bodies must remain as manufactured and must meet all other specifications as set forth in Section 20C of the NASCAR Rule Book. Alterations, that in the judgment of NASCAR Officials were made to enhance performance, will not be permitted. The Grand National-Approved Composite Bodies must be mounted in accordance to the mounting instructions in the Construction Guidelines (Diagrams #8A, B, C & D) at the rear of the Rule Book. All installations must be acceptable to NASCAR Officials.

C. Cars must be neat appearing. The interior and exterior of all floors, firewalls, roll cage and frame assemblies and the interior of the body panels must be painted using only light / bright colors. Painting of the interior of the front and rear bumper covers is optional. The type of paint used, whether it be flat, satin or high gloss finish, must provide a smooth surface. The paint or vinyl must not be textured. Vinyl may only be used on the exterior of the body panels. Thermal barrier coatings applied to the immediate driver's area may be used. The location of thermal coatings must be acceptable to NASCAR Officials. When the Grand National-Approved (Flange Fit) Composite Body is used, painting the interior of the body panels, with the exception of clear coating, will not be permitted. The manufacturer body panel identification labels must remain unaltered.

D. The exterior dimensions of all bodies must remain as approved by NASCAR. The body must not be offset on the frame. Rocker and quarter panels must not be notched for exhaust pipes.

E. The body for all 105 inch wheelbase cars must be located so that when measured horizontally rearward from the center of the roof at the windshield seam, the distance will be 59 inches plus or minus (+/-) 1/2 inch to the vertical centerline of the rear axle housing on all models.

When the Grand National-Approved Composite Body is used, the body for all 105 inch wheelbase cars must be located so that when measured horizontally rearward from the center of the roof at the windshield seam, the distance will be 57 inches plus or minus (+/-) 1/2 inch to the vertical centerline of the rear axle housing on all models.

F. The body for all 110 inch wheelbase cars must be located so that when measured horizontally rearward from the center of the roof at the windshield seam, the distance will be 60 inches, plus or minus (+/-) 1/2 inch to the vertical centerline of the rear axle housing on all models.

G. When the Grand National-Approved (Flange Fit) Composite Body is used the body must be located so that when measured horizontally from the center of the roof at the divot to the vertical centerline of the rear axle housing must be 49 inches plus or minus (+/-) 1/2 inch for all 110 inch wheelbase cars and 45 inches plus or minus (+/-) 1/2 inch for all 105 inch wheelbase cars.

H. All cars must have complete bodies, hoods, fenders, bumpers and grilles in top quality condition. The exterior sheet metal body parts (such as doors, fenders, quarter panels, etc.) must be a minimum 24 gage (0.025 inch thick) sheet steel. The minimum thickness for any exterior magnetic steel body part is 0.021 inch. Acid dipping or chemical milling will not be permitted. Materials, other than steel, will not be permitted for any parts of the body except those submitted by the manufacturer and approved by NASCAR.

I. Streamlining of the contours of the car, beyond that approved by the Series Director, will not be permitted. Installation of air directional devices, underpans, baffles, shields or the like beneath the car or the car's hood and fender area, front firewall, floor, rear firewall area, rear deck and quarter panel area will not be permitted. If, in the judgment of NASCAR Officials, any part or component of the car not previously approved by NASCAR that has been installed or modified to enhance aerodynamic performance will not be permitted. All cars must remain standard in appearance.

J. A full windshield and rear window in good condition are required. The windshield and rear window must be installed and sealed to the body in their original standard positions. The windshield and rear window must be sealed using sealers and/or adhesives that allow the easy removal of the windshield and rear window.

K. All metal doors must be a fabricated, welded component of the fender, door, and quarter panel assembly.

L. Fenders may not be cut or altered except for wheel or tire clearance which must be approved by the Series Director.

M. Floor pans must be complete and welded in the standard position. Air directional devices, including but not limited to tunnels and air ducts, unless otherwise specified by NASCAR Officials, will not be permitted. Standard factory manufactured and/or fabricated floor pans will be permitted. When a fabricated floor pan is used it must be magnetic sheet steel, a minimum of 22 gage (0.031 inch thick) with all seams welded.

N. Cars must be equipped with complete front and rear bumper covers for the make and model and must be approved by NASCAR.

O. The trunk compartment floor pan must be made of welded sheet steel and remain flat and level with the top of the frame rails and extend to within eight (8) inches of the rear quarter panels on the side. The rear crush panel between the rear frame crossmember and the rear bumper cover must be metal and may extend from the top of the rear frame crossmember to the top of the rear bumper cover. The rear crush panel must remain flat; bends, breaks or radii will not be permitted. The rear crush panel must be a minimum of one (1) inch above the bottom of the rear bumper cover.

P. Any device or duct work that allows air to pass from one area of the interior of the car to another, or to the outside of the car, will not be permitted. This includes, but is not limited to, the inside of the car to the trunk area, or the floors, firewalls, crush panels and wheel wells passing air into or out of the car.

Q. All seams of the interior sheet metal and all interior sheet metal to exterior body panel contact points must be sealed and caulked. This includes, but is not limited to, floors, firewalls, wheel wells, package trays, crush panels and any removable covers.

20C - 2.2 Overall Car Weight

A. Throughout the Event, all cars must weigh a minimum of the following total weights and must maintain a minimum right side weight of 46 percent ready to compete (with fuel, oil, water, etc.) without driver:

| <u>WHEELBASE</u> | <u>BODY</u> | <u>TOTAL WEIGHT</u> | <u>RIGHT SIDE WEIGHT</u> |
|------------------|-------------|---------------------|--------------------------|
| 105 inch | Steel | 3225 lbs. | 1484 lbs. |
| 105 inch | Composite | 3150 lbs. | 1449 lbs. |
| 110 inch | Steel | 3225 lbs. | 1484 lbs. |
| 110 inch | Composite | 3150 lbs. | 1449 lbs. |

NOTE: Cars competing with a minimum roof bar (#3) height of 48 inches and the Grand National-Approved (Flange Fit) Composite Body will be permitted to compete with the minimum total weight and minimum right side weight of 46 percent listed below:

| <u>WHEELBASE</u> | <u>BODY</u> | <u>TOTAL WEIGHT</u> | <u>RIGHT SIDE WEIGHT</u> |
|------------------|-------------|---------------------|--------------------------|
| 105 inch | Composite | 3120 lbs. | 1435 lbs. |
| 110 inch | Composite | 3120 lbs. | 1435 lbs. |

The measurement will be from the lower edge of the roof bar (#3) (15 inches forward of front of the main roll bar (#1)) to the ground.

B. At all road course Events, all cars must maintain a minimum left side and right side weight of 49 percent of the total car weight.

C. Unless otherwise authorized by the Series Director, at all times all weights will be measured by NASCAR Officials using the scales provided by NASCAR. It is the responsibility of each race team to ensure that its car meets the specified minimum weight requirements for this Series on these scales.

D. On major components, the use of non-magnetic and/or hollow fasteners and component mounting hardware with the intent of weight reduction will not be permitted.

E Unless otherwise approved, Race Equipment, including car parts and components, that in the judgment of NASCAR Officials have been constructed to increase the components weight beyond normal standards will not be permitted.

F. Before the use of any composite component(s), the component(s) must be submitted to and approved by NASCAR for use in competition.

20C - 2.3 Added Car Weight

Any weight added to the car must be bolted inside the body shell in an approved weight container and in a position acceptable to NASCAR Officials. All weight containers must be welded directly to the main frame rails, crossmembers attached to the main frame rails, rear sub-frame rails and the rear sub-frame rear crossmember. Weight containers welded to the main frame rails or crossmembers attached to the main frame rails will not be permitted to extend below the bottom surface of the main frame rails or crossmembers attached to the main frame rails.

Added weight must not be mounted beyond the front and rear sub-frame assembly. Added weight must be secured in a manner acceptable to NASCAR Officials that will prevent movement of the added weight while in competition. The weight container must be reinforced at each end to support the weight retention through-bolt. At all times, each end of the weight container must have a weight retention through-bolt of not less than 7/16 inch diameter (installed from the top or side of the weight container) and be sealed with a metal cap or covered with a magnetic steel cap and welded. It is recommended, the front of the weight container be plated and welded completely closed using the same thickness of material as the weight container. A single, round, maximum one (1) inch diameter hole will be permitted in the center of the plate to access added weight. Added weight must be in block form of not less than five (5) pound blocks (no pellets) and painted white with the car number or team identification permanently legible on it. Added weight containers will not be permitted forward of the engine firewall. Material must be acceptable to NASCAR Officials.

20C - 2.4 Car Weights After Competition

A. After a car has qualified, only fluids consumed, as determined by NASCAR Officials, may be replaced.

B. At the end of the Race, the minimum weight of the car must be within one half of one percent (.5%) of the minimum weight requirement of the car at the start of the Race. When cars are weighed after a Race, only water in the radiator, oil in the oil reservoir tank and fuel in the fuel cell may be added. Wheels and tires may not be changed, unless otherwise authorized by NASCAR Officials.

C. The addition of ballast weight, after competition, will not be permitted for any reason.

20C - 3 DETAILED CAR BODY REQUIREMENTS

In addition to the General Car Body Requirements specified in sub-section 20C-2, the following Detailed Car Body Requirements must be maintained.

20C - 3.1 Front Air Dam

A. Approved front air dams must have a minimum ground clearance of four (4) inches for all models. When an air dam extension is attached to the bumper cover it must be a flush-mounted, stationary, securely fastened, single layer not exceeding a maximum of 3/16 inch thick and must be mounted parallel to the bumper cover. The air dam extension must be secured in a manner that will prevent movement of the air dam extension while in competition. All support brackets must be mounted to the rear of the air dam.

B. The leading edge of the air dam must not extend forward of the bumper at the location of the NASCAR B-3 (Front Bumper Lateral) template more than one (1) inch for all steel bodied models. When the Grand National-Approved Composite Body is used the leading edge of the air dam must not extend forward of the bumper at the location of the NASCAR B-3 (Front Bumper Lateral) template more than 2-1/2 inches. When the Grand National-Approved (Flange Fit) Composite Body is used the front air dam must remain as manufactured with no modifications.

C. Modifications to the currently approved nose/bumper will be permitted only below the location of the NASCAR B-3 (Front Bumper Lateral) template and then limited to its forward facing section. The currently approved NASCAR A (Center Overall Longitudinal), B (Front Bumper Cover Center Vertical) and the B-3 (Front Bumper Lateral) templates must continue to fit within the designated tolerances.

D. The outer edge of the lower air dam and front fenders must not extend beyond the limits of the NASCAR measuring device(s). All horizontal panels behind the air dam must not extend rearward more than one (1) inch for all models. Horizontal panels behind the front air dam must be mounted a minimum of one (1) inch above the bottom of the air dam.

E. When the Grand National-Approved (Flange Fit) Composite Body is used a horizontal protective panel mounted to the front air dam flange will be permitted. The panel, if used, must be mounted on the lower side of the front air dam flange. The panel, if used, must be mounted a minimum of one (1) inch rearward of the leading edge and must not extend beyond the trailing edge of the front air dam flange. The panel, if used, must be constructed from either aluminum or plastic (the use of steel or exotic materials will not be permitted) and must not be more than a maximum thickness of 1/2 inch. The mounting and material used must be acceptable to NASCAR Officials.

20C - 3.1.1 Rear Spoilers

A. A NASCAR-approved rear spoiler must be installed at all times during competition. All spoilers must be approved by NASCAR Officials. An approved spoiler must be a flat metal non-adjustable part of the body that controls the flow of air over one (1) surface only. An approved spoiler must be made of aluminum and must be a minimum thickness of 1/8 inch (0.125 inch). The rear spoiler blade must maintain the same thickness over the entire spoiler blade.

B. A solid non-adjustable spoiler must be attached to the rear deck lid. The spoiler must be slotted 1/4 inch to fit the NASCAR A (Center Overall Longitudinal) template in the center for each make of car and must maintain the same contour as the production deck lid and quarter panels as viewed from above and behind. The spoiler must be mounted in such a way as not to flex or bend under pressure and must be fastened with a minimum of six (6), 1/4 inch diameter or larger bolts across the back of the deck lid. Reinforcement of the inside of the deck lid, acceptable to NASCAR Officials, will be permitted. The spoiler mounting flange must not extend beyond the lower edge of the rear deck lid. The spoiler flange must not extend beyond the outer edge of the spoiler. Spoiler braces, if used, must be mounted on the back of the spoiler and there must be a maximum of three (3) spoiler braces per spoiler half with the spoiler braces located 4-1/2 inches inboard from the outer end of each spoiler half and 4-1/2 inches to the left and right of each spoiler half at the center split. The remaining spoiler braces must be spaced equally between the side and center spoiler braces on each spoiler half. Each spoiler brace must bolt to the top of the spoiler not more than 1/2 inch down from the top and must bolt to the deck lid. Each spoiler brace must be made of aluminum and not exceed a maximum of one (1) inch width, including all mounting brackets and hardware. All spoiler braces, when used, must be acceptable to NASCAR Officials. At Events on tracks 1-1/8 miles and more in length, excluding road courses, where a pre-determined spoiler angle is specified, spoiler braces as described above must be used.

C. The spoiler locations as measured by the NASCAR N-1 (Plan View Deck Lid Shape) template from the forward edge of the rear deck lid at the center to where the spoiler meets the deck lid must be 21-5/8 inches for all models.

D. At all NASCAR Series Events, unless otherwise specified, the only spoiler size permitted for use with steel bodied models will be 5-1/2 inches high by 57 inches wide. All spoilers must maintain the same contour as the rear of the car and must be centered on the rear of the car. The spoiler will be measured using the approved NASCAR spoiler template.

E. At all NASCAR Series Events, unless otherwise specified, when the Grand National-Approved Composite Body is used the spoiler sizes permitted will be a minimum of 5-1/2 inches high by 57 inches wide and a maximum of 6-1/2 inches high by 66 inches wide. The minimum size of each spoiler half will be 5-1/2 inches high by 28-3/8 inches wide and a maximum of 6-1/2 inches high by 32-7/8 inches wide. Each spoiler half must be equal in height on both the left side and right side. Each spoiler half may vary in width on both the left side and right side, but must remain within the measurements above. All spoilers must maintain the same contour as the rear of the car. The spoiler will be measured using the approved NASCAR spoiler template.

F. At all NASCAR K & N Pro Series Events, unless otherwise specified, when the Grand National-Approved (Flange Fit) Composite Body is used a NASCAR-approved rear spoiler must be used at all times during competition. The rear spoiler must be from one of the approved manufacturers listed below:

| <u>MANUFACTURER</u> | <u>PART NUMBER</u> |
|----------------------------------|--------------------|
| Five Star Stock Car Bodies | 14001-67033 |
| Richardson Racing Products, Inc. | K&N-61-6.25 |

The rear spoiler must be used exactly as manufactured and supplied by the NASCAR-approved rear spoiler manufacturer without any modifications. The spoiler must be mounted using the mounting holes provided in the spoiler flange in all locations as specified by NASCAR.

G. All spoilers must maintain a minimum angle of 60 degrees at all times except when the Grand National-Approved (Flange Fit) Composite Body is used. When the Grand National-Approved (Flange Fit) Composite Body is used the rear spoiler must maintain a minimum angle of 70 degrees at all times. Spoiler sizes and/or angles may be adjusted at NASCAR's discretion at any time during the Event.

20C - 3.2 WINDOWS / LIGHTS / MIRRORS

20C - 3.2.1 Windshield / Windshield Braces

A. Only approved standard production 1/4 inch thick hard-coated polycarbonate windshields will be permitted.

B. The windshields must be clear or have a maximum of six (6) inches of tint from the top down. Additional windshield tint or tape may be added for adverse sunlight conditions. Unless otherwise authorized by NASCAR Officials, the addition of tint or tape must be confined to the driver's side of the windshield. Additional tint to the right side of the centerline roof bar (#4A) will not be permitted. The windshield must be installed and completely sealed in a standard windshield opening. The windshield must be sealed using sealers and/or adhesives that must allow the easy removal of the windshield. The windshield must be bolted in the corners and along the bottom of the windshield using 1/4 inch diameter button head allen screws. The windshield must be secured flush

across the top at the roof and along the "A" posts using the metal clips as described below with 1/4 inch diameter button head allen screws. All screws must be able to be removed using a 5/32 inch allen wrench. All nuts must be permanently secured. The manufacturers' approved part number must be clearly visible and unaltered in the windshield. The windshield must be from an approved manufacturer and approved by NASCAR. Once approved, the windshields may be used on all approved models.

The following is a list of NASCAR-approved windshields:

| <u>YEAR</u> | <u>MODEL</u> | <u>PART NUMBER</u> |
|--|--------------------------|---|
| 2009 - 2014 | Chevrolet Impala SS | 88958641 |
| 2006 - 2008 | Chevrolet Monte Carlo SS | 88958641 |
| 2004 - 2005 | Monte Carlo | 88958641 |
| 2005 - 2014 | Dodge Charger | 05063020AA |
| 2004 | Dodge Intrepid | 05063020AA |
| 2006 - 2014 | Ford Fusion | M-54310-AA |
| 2004 - 2005 | Ford Taurus | M-54310-AA |
| 2007 - 2014 | Toyota Camry | 00644-53902-00 |
| Grand National-Approved Composite Body | | Five Star Stock Car Bodies 564-6345-CB |

Grand National-Approved (Flange Fit) Composite Body:

| <u>YEAR</u> | <u>MODEL</u> | <u>Five Star Stock Car Bodies</u> |
|-------------|--------------|-----------------------------------|
| 2014 | Chevrolet SS | 14121-63443 |
| 2014 | Ford Fusion | 14311-63443 |
| 2014 | Toyota Camry | 14711-63443 |

C. Windshield tear-offs may be used on the front windshield only. Tear offs must be installed securely to prevent loss during competition. Windshield tear offs must be clear. If windshield tear-offs are used, the maximum size of a pull tab when measured from any point is three (3) inches. Pull tabs, if used, may only be installed on one (1) side of the tear-off. All windshield tear-offs and pull tabs must be acceptable to NASCAR Officials.

D. Two (2) metal clips two (2) inches long and one (1) inch wide by 0.125 inch thick must be evenly spaced a minimum of 12 inches apart on each windshield "A" post. Five (5) metal clips two (2) inches long and one (1) inch wide by 0.125 inch thick must be installed and evenly spaced across the top of the windshield on all bodies except the Grand National-Approved (Flange Fit) Composite Body. All clips must be bolted to the roof panel at the top of the windshield and the "A" posts using 1/4 inch diameter button head allen screws using a 5/32 inch allen wrench. Additionally, a 1/4 inch diameter button head allen screw using a 5/32 inch allen wrench must be installed in the windshield end of each windshield clip. The screw must go through the clip, the windshield, and the windshield bed of the car. At least three (3) metal reinforced non-adjustable braces must be installed on the interior of the windshield bolted to the roll bar or the roof at the top and to the dash panel at the bottom using 1/4 inch diameter bolts. Additional windshield fasteners may be used if acceptable to NASCAR Officials. All windshield fasteners must be removable using only a 5/32 inch allen wrench. The windshield mounting bed must be as produced by the approved manufacturer. Holes and/or other modifications that, in the judgment of NASCAR Officials, were cut or drilled for any purpose other than as specified above, will not be permitted.

E. The windshield "A" post length, when measured from the top of the windshield on each side down to the top of the fender or cowl panel, must be 27-5/8 inches for all models. A magnetic steel inner panel should be welded in place, filling the space between the front roll bar legs (#2 A & B), (see sub-section 20C-18.B(2)), and the "A" post.

F. The width of the "A" post along the sides of the windshield must be two (2) inches for all models.

20C - 3.2.2 Rear Window

A. Only clear standard production 3/16 inch thick polycarbonate is to be used in the rear window opening.

B. The standard production polycarbonate must be formed to the same shape as the original equipment glass and installed flush and sealed in the standard opening. Tint will not be permitted. Access holes in the rear window for the rear jacking bolts and panhard bar adjuster must not exceed a maximum diameter of 1-1/4 inches. The rear window must be secured by two (2) flat stainless steel straps, acceptable to NASCAR Officials one (1) inch wide, and a maximum 1/8 inch thick evenly spaced, and bolted to the rear window mounting bed at the top and the deck support panel at the bottom and bolted to the rear window bed using flush mounted screws on all bodies except the Grand National-Approved (Flange Fit) Composite Body. The rear window and rear window straps must be bolted using flush mounted flat head bolts. The inside of the rear window must be supported by at least two (2) non-adjustable, rigid, one (1) inch wide reinforced metal braces. The rear window mounting bed must be as produced by the

approved manufacturer. Holes and/or other modifications that, in the judgment of NASCAR Officials, were cut or drilled for any purpose other than as specified above, will not be permitted.

C. The Grand National-Approved Composite Body rear window must be installed the same as above but must be from the approved manufacturer and must have the approved part number clearly visible and unaltered in the rear window.

Grand National-Approved Composite Body rear window:
Five Star Stock Car Bodies, Part # 624-6135-CB

Grand National-Approved (Flange Fit) Composite Body rear window:

| <u>YEAR</u> | <u>MODEL</u> | <u>Five Star Stock Car Bodies</u> |
|-------------|--------------|-----------------------------------|
| 2014 | Chevrolet SS | Part # 14121-61353 |
| 2014 | Ford Fusion | Part # 14311-61353 |
| 2014 | Toyota Camry | Part # 14711-61353 |

20C - 3.2.3 Side Window

A. On all tracks less than 1-1/2 miles in length and all road courses, all door windows must be removed. On all oval tracks 1-1/2 miles and more in length, all cars will be required to have installed a full one-piece window on the right side of the car. The window, including its mounting track, must be inset 3/4 inch along the entire length of the roof and the "A" post. The bottom of the window must be inset 3/4 inch at the "A" post and follow a straight line ending flush with the "B" post and at the door top. The mounting track on the door top must be one-piece and extend from the bottom of the "A" post rearward, a minimum of 17-1/2 inches to a maximum of 18 inches. The window must be mounted in a manner acceptable to NASCAR Officials and in such a way that the driver or the track crews can easily remove it. Tape will not be permitted on the side window. The window must be made of standard production 1/4 inch thick, flat, clear, one-piece polycarbonate.

B. The door window opening on the driver's side, when measured across the top of the door panel at the bottom of the opening, must be 36 inches and remain flat and straight for all models. The top door panel at the bottom of the window opening must not be less than two (2) inches wide or more than 2-1/2 inches wide for the entire 36 inches of length. A minimum window opening of 17 inches on the left side and 16 inches on the right side must be maintained from the top of the door panel to the edge of the roof for all models. This dimension must be maintained from the "B" post forward to the top of the "A" post. At the same time, a minimum window opening of 12 inches on the left side must also be maintained from the top of the door panel to the bottom edge of roof bar (#3) for all models. This dimension must also be maintained from the "B" post forward to the top of the "A" post. The distance, when measured from the rear of the door window opening to the front of the quarter window opening ("B" post), must be six (6) inches for all models. The "B" post must be mounted perpendicular to the top of the door panel. The "B" post must not extend further inboard than the door top.

C. The distance, when measured from the bottom of the windshield opening at the top of the fender or cowl filler panel ("A" post) to the rear of the vent deflector, must be 11 inches for all models. The rear vertical edge of the ("A" post) vent deflector must be perpendicular to the top of the door panel.

D. Quarter window openings must maintain the same size, shape and be located in the approved position for the make and model car. Only flat, clear polycarbonate is to be used in the quarter window openings. If quick release fasteners are used, they must be the flush-mount type. All other fasteners must be acceptable to NASCAR Officials. A painted border, a maximum of one (1) inch wide, will be permitted around the outside edge only.

When the Grand National-Approved (Flange Fit) Composite Body is used below are the only quarter windows that will be permitted:

| <u>YEAR</u> | <u>MODEL</u> | <u>Five Star Stock Car Bodies</u> |
|-------------|--------------|--|
| 2014 | Chevrolet SS | Part # 14121-65353L Part # 14121-65353R |
| 2014 | Ford Fusion | Part # 14311-65353L Part # 14311-65353R |
| 2014 | Toyota Camry | Part # 14711-65353L Part # 14711-65353R |

E. All air vents and air ducts in the side window and quarter windows must be clear, and configured for air intake only. Suction ducts will not be permitted. The maximum hose size is three (3) inches. On all oval tracks more than 1-1/8 miles in length, a maximum of two (2) inlets per quarter window and two (2) inlets, a maximum of 9-1/2 inches by 11 inches for the right side window and/or opening will be permitted. Air ducts in the right side window opening must be mounted as far forward as possible. On all oval tracks 1-1/8 miles in length and less and all road courses, a maximum of three (3) inlets per quarter window and one (1) inlet

for the right side window opening will be permitted. A clear vent must be installed in the left side window near the "A" post. The clear vent must accept a minimum of one (1), 2-1/2 inch diameter hose. The clear vent must not be restricted. The maximum overall size for any vent must not exceed 6-1/2 inches in height by 11 inches in length. When the Grand National-Approved (Flange Fit) Composite Body is used the maximum overall size for any vent must be ten (10) inches in length and ten (10) inches in height. Any outward facing lips on the ducts must only be bent once and must not exceed 1/2 inch. Additional intake ducts may be added at the discretion of the Series Director.

20C - 3.2.4 Headlights / Parking Lights

A. Approved headlight, parking light, upper grille and taillight decals must be installed.

B. The Grand National-Approved Composite Body must use the front and rear body graphics (headlights, tail lights, upper grilles, etc.) for brand identity. The body graphics must be from an approved manufacturer and must be acceptable to NASCAR Officials. The following are the only approved body graphics.

Grand National-Approved Composite Body Graphics:
Chevrolet Monte Carlo SS, Impala SS, SS
Dodge Charger
Ford Fusion
Toyota Camry

Grand National-Approved (Flange Fit) Composite Body Graphics:

| <u>YEAR</u> | <u>MODEL</u> |
|-------------|--------------|
| 2014 | Chevrolet SS |
| 2014 | Ford Fusion |
| 2014 | Toyota Camry |

20C - 3.2.5 Rear View Mirror

Multi-view type mirrors, with a maximum width of 26 inches, must be installed at all times during competition. A side mounted rear view mirror may be installed, however, it must be acceptable to NASCAR Officials and must not extend outside of the car at any time or in any position. **Composite material(s) will not be permitted on the rear view mirrors or the mounting hardware.**

20C - 3.3 Dash Panel

A. The left side dash panel between the left side front roll bar leg (#2A) and the center windshield bar (#4A) must be constructed of magnetic sheet steel and welded in place. The dash panel must extend up vertically from the dash panel bar (#8) not less than five (5) inches and break forward to create a horizontal panel parallel to the main frame rails and fill the space between the dash panel bar (#8) and the front firewall. The end of the dash panel at the center of the car must be closed. The lower edge of the dash panel must not be lower than the top of the steering column. The gauge panel must not be less than five (5) inches in height and must be made of metal. A removable magnetic steel inspection panel, a minimum size of eight (8) inches deep by 18 inches wide, for easy access beneath the dash panel area must be installed on the top and fastened with wing-type quick release fasteners. All dash panels must be acceptable to NASCAR Officials.

B. The right side dash panel must be located between the right side front roll bar leg (#2B) and the center windshield bar (#4A) and be welded to the top of the dash panel bar (#8) and the front firewall. The right side dash panel must be constructed of solid magnetic sheet steel. The right side dash panel must be flat and parallel to the main frame rails and fill the space between the right side front roll bar leg (#2B), the center windshield bar (#4A), the dash panel bar (#8) and the front firewall. All right side dash panels must be acceptable to NASCAR Officials.

C. The rearward edge of the left side dash panel, when measured at the center of the windshield rearward, must not be longer than 22 inches and must not be further forward than the dash panel bar (#8). The rearward edge of the right side dash panel cannot be further rearward than the dash panel bar (#8).

D. Holes and/or other modifications in the left side dash panel, or the right side dash panel that, in the judgment of NASCAR Officials, were made with the intent of weight reduction will not be permitted.

20C - 3.4 Firewalls

For driver protection, all firewalls, floors, tunnels, and access panels must be installed and completely secured in place when the car is in competition.

A. The engine firewall must be as wide as the outside of the frame rails and must be magnetic sheet steel, a minimum of 22 gage (0.031 inch thick), with seams welded and mounted vertically without any offsets. A tunnel may be cut into the center of the front firewall, but the tunnel must not be wider than 18 inches at the bottom and the top of the tunnel must be at least 10 inches below the

leading edge of the windshield. The firewall must remain vertical to within eight (8) inches from the top of the frame rails and must connect to the floor pan within seven (7) inches rearward of the vertical firewall. The drive shaft tunnel must not be more than 10 inches wide, when measured at the rear suspension crossmember rearward and must be centered within plus or minus (+/-) one (1) inch and remain parallel to the main frame rails. The top of the drive shaft tunnel must remain parallel to the main frame rails at a maximum height of seven (7) inches above the top of the rear suspension crossmember.

B. A rear firewall of magnetic sheet steel, a minimum of 22 gage (0.031 inch thick) must be located between the trunk area and the driver's compartment and must be welded in place. The rear firewall, as viewed from left to right, must be straight and flat between the rear sub-frame rails. Removable panels and access doors must be sealed at all times during competition.

C. The rear firewall must extend vertically from the rear of the floorboard, at the horizontal tunnel bar (#6), up to a break or radius and then create an angled panel from the vertical rise to the front of the rear jacking bolt crossmember. The vertical rise must not start higher than the horizontal tunnel bar (#6). The angled panel must be flat, with no bends, breaks or radii. A second horizontal rear firewall must be used to seal the remaining area from the rearward edge of the rear jacking bolt crossmember to the rear window mounting bed. This panel may have a step for minimal clearance of the rear shock absorber mounting crossmember. The rear firewall must not be an integral part of the lubrication oil reservoir tank encasement. All rear firewalls must be acceptable to NASCAR Officials.

20C - 3.5 Doors

The door panels must be magnetic sheet steel and be roll-formed to match the approved NASCAR M (Door Vertical) template for each make and model car. The door panel must be welded in place and the door seams smoothed over. When measuring across the body from the top of the door panel at the bottom of the left door window opening, and at 16 inches below the roof panel on the right side, a minimum distance of 66 inches and a maximum distance of 67 inches at the "A" post and a minimum distance of 64-1/2 inches and a maximum distance of 65-1/2 inches at the "B" post will be required. An inner metal trim panel must be installed on the interior side of the door panels at the bottom of the door window opening. The panel must be a minimum of two (2) inches and a maximum of 2-1/2 inches wide and must turn down to the top of the top door bar. All inner panels and double panels, if sealed off, must have a removable access panel large enough for inspections behind the panel.

20C - 3.6 Fenders / Quarter Panels / Rocker Panels

A. All front fenders and rear quarter panels must be installed in their standard location as referenced by the NASCAR-approved model car. The outer edge of the lower air dam and front fenders must not extend beyond the limits of the NASCAR measuring device(s). Wheel openings must follow the radius of the tire and not exceed a maximum of eight (8) inches as measured by the NASCAR measuring device(s). All quarter panels must be roll-formed in a manner acceptable to NASCAR Officials. The quarter panels must be vertically convex and horizontally straight. The tires and wheels must remain inside the body, except as specified in this sub-section. The quarter panels in front of the tires from the axle centerline down must be installed within 1/2 inch of the outer edge of the tire. The front fenders and the quarter panels behind the tires from the axle centerline down must not be installed more than 1-1/2 inches inboard from the outer edge of the tire and any inward facing flange must not exceed one (1) inch in width. At the trailing edge of the front wheel openings, the front fenders may be stiffened by adding a wheel opening support. The support must not extend more than one (1) inch inboard and one (1) inch rearward of the wheel opening. The wheel opening support must not exceed 16 inches in height measured from the bottom of the fender, up the wheel opening. The quarter panels at the rearward edge of the quarter panel/bumper cover when measured from the outside sidewall of the right side tire(s) to the rearward edge of the quarter panel/bumper cover must not be less than 7/8 of an inch and must not extend beyond the limits of the NASCAR measuring device(s).

B. The rocker panels must be installed straight and flush with the bottom of the frame rails. Notching of the rocker panels for the exhaust pipes will not be permitted. When the Grand National-Approved (Flange Fit) Composite Body is used the maximum distance from the left side rocker panel to the right side rocker panel when measured at the front will be 73 inches and 75 inches at the rear. The rocker panels on both the left side and the right side must be evenly spaced from the longitudinal centerline of the chassis.

C. Modifications to any of the body panels, that in the judgment of NASCAR Officials are excessive, will not be permitted.

D. All cars will be required to have installed a vertical extension flush with the outer sheet metal, at the bottom, on both right and left rocker panels. The extensions must be the same front to rear length as the rocker panel, cut only for exhaust and jack clearance, with a minimum of four (4) inches ground clearance on the right side and a minimum of three (3) inches ground clearance on the left

side. The lower portion of the extension may be constructed of a plastic type material. At road course Events, the minimum ground clearance on both the right and the left side vertical extensions must be three (3) inches.

E. The quarter panel/bumper length when measured from the center of the rear axle to the lower trailing edge of the rear bumper corner must be 51-1/2 inches plus or minus (+/-) 1/4 inch for all 110 inch wheelbase cars and 53 inches plus or minus (+/-) 1/2 inch for all 105 inch wheelbase cars except the Grand National-Approved (Flange Fit) Composite Body.

F. The quarter panel area behind the rear tire must be roll formed in a manner acceptable to NASCAR Officials. The quarter panel area behind the rear tire when measured from the leading edge of the side deck lid seam to the lower- most corner, can be a maximum of 35 inches on the right side and a maximum of 36 inches on the left side for all steel bodied and Grand National-Approved Composite Body models except the Grand National-Approved (Flange Fit) Composite Body. The right and left quarter panels, when measuring from the ground to the lower most corner, must be 11 inches plus or minus (+/-) one (1) inch for all models except the Grand National-Approved (Flange Fit) Composite Body.

G. The inner panels must be magnetic sheet steel and enclosed front and rear and installed as to separate the driver's compartment from the wheel wells. The inner wheel wells must be constructed of magnetic sheet steel. The inner wheel well must follow the radius of the wheel opening. The wheel well radius will start at the bottom of the main frame rail and end at the top of the rear sub-frame rail within 25 inches of the rear axle housing. An aluminum crush panel must be installed between the inner wheel well and sealed to the rear quarter panel but must not exceed eight (8) inches in width. The crush panel attached to and sealed to the sides of the trunk floor must be a minimum of one (1) inch above the bottom edge of the quarter panel.

H. All braces used to support fenders and quarter panels must be straight and non-adjustable. All bracing must be constructed using 1/2 inch round or square magnetic steel tubing or 1/4 inch solid magnetic steel rod.

20C - 3.7 Grilles

A. Unless otherwise approved by the Series Director, all cars must be equipped with an approved factory production grille opening(s) for the model car.

B. All grilles must be approved standard height and width and mounted in approved location unless otherwise approved by NASCAR Officials. Grilles may be closed but the closure must be done on the backside of the grille screen.

C. The grille opening must be covered with one (1) or two (2) layers of screen wire attached to the bumper cover. A one (1) inch wide metal strip to hold the screen wire to the bumper cover may be installed only on the outer edges of the grille opening. Baffles or any type of air directional devices, unless acceptable to NASCAR Officials, will not be permitted between the back side of the grille openings and the radiator. The total width of any openings in the lower air dam below the bumper must not exceed the width of the radiator.

D. The upper grille opening for the Grand National-Approved Composite Body, if used, must be the same shape as the model chosen (Chevrolet Monte Carlo SS, Impala SS, SS, Dodge Charger, Ford Fusion & Toyota Camry) and must maintain the size and shape of the Grand National-Approved Composite Body grille opening template. The use of an approved factory production grille opening insert will be permitted. The upper grille must be in the center of the front bumper cover using the centerline of the body. The top center of the grille opening must be located below the hood seam at the center using the following measurements:

| <u>MODEL</u> | <u>MEASUREMENT</u> |
|---|-----------------------------|
| Chevrolet Monte Carlo SS, Impala SS, SS | 5 inches |
| Dodge Charger | 2-1/2 inches |
| | 8 inches with grille insert |
| Ford Fusion | 5 inches |
| Toyota Camry | 6 inches |

E. If the upper grille opening is not used, the approved upper grille opening decal must be installed as described in sub-section 20C-3.2.4.

F. When the Grand National-Approved (Flange Fit) Composite Body is used the simulated upper grille opening in the approved front bumper cover must not be altered or opened for radiator air entry.

G. For radiator air inlet specifications when the Grand National-Approved (Flange Fit) Composite Body is used refer to sub-section 20C-7.3

20C - 3.8 Hood / Roof

A. All hoods and roofs must be submitted by an OEM Manufacturer and must be approved by NASCAR. NASCAR Officials may use hoods and roofs provided by the respective manufacturer as a guide in determining whether a Competitor's hood and roof conforms to the specifications of the NASCAR Rule Book.

B. An inner support frame must be made using a minimum 3/8 inch by 3/8 inch square or minimum 3/8 inch diameter round magnetic steel tube and be

acceptable to NASCAR Officials. The inner hood support frame must be strong enough to prevent the hood from deflecting or sagging while the car is in competition.

C. The hood location must be acceptable to NASCAR Officials.

D. The hood must be equipped with heavy-duty welded metal hinges and metal self-holding devices on both the left and right sides to support the hood when open. When the hood is closed, it must be secured with a minimum of four (4) positive magnetic solid steel pin fasteners, of a minimum 3/8 inch diameter, equipped with clip cables evenly spaced across the front. All removable hood pins must be a minimum of 1/8 inch diameter and must have a minimum one (1) inch inside diameter vertical loop to facilitate ease of removal. Metal hood pin bezels must be installed at all times. Recessed hood pin plate bezels will not be permitted.

E. The hood must be connected to the roll cage using a Vectran® HS V-12 fiber cable on the left and right sides on the underside of the hood. The fiber cable must be constructed from a continuous loop of 1/4 inch diameter 12 strand cable (with a red tracer thread) woven from Vectran® HS V-12 fiber. The cable must attach to a three (3) inch long (front to rear), by two (2) inch wide (left to right), by 12 gage (0.109 inch thick) magnetic steel plate on the underside of the hood sandwiching the hood with a six (6) inch long (front to rear), by five (5) inch wide (left to right), by 16 gage (0.062 inch thick) magnetic steel plate bolted to the upper surface of the hood, without recessing the plate. A minimum of twelve #10 button head allen screws and locking nuts must be used to attach the upper tether mounting plate to the hood. A minimum of six (6) of the original twelve #10 button head allen screws must pass through the upper tether mounting plate, hood panel, and lower tether mounting plate on each side of the hood. The plates must have all corners and edges radiused and deburred and be positioned parallel to the centerline of the car. The Vectran® cables must be attached to the hood plates using a double shear configuration with minimum of 5/16 inch diameter hex head bolts with heavy-duty, large diameter washers and lock nuts, at the rear of the mounting plate, towards the windshield, acceptable to NASCAR Officials and the minimum 5/16 inch diameter attaching bolt must pass through the upper mounting plate, hood panel tether and lower mounting plate. The Vectran® cable must wrap around the front sub-frame bars (#16 A & B) forming a choke type hitch where one end passes through the loop after wrapping around the front sub-frame bars (#16 A & B) or be attached to the front sub-frame bars (#16 A & B). When the hood supports are removed and the hood is laid back towards the top of the windshield, the cables must be taut. Steel cables will no longer be permitted.

F. The roof panel must not be altered in any manner in reference to its height, shape, and size. Roof bracing, acceptable to NASCAR Officials, must be used to maintain the approved roof shapes and heights. The rear of the roof panel at the location of the rear roof lateral template (G) must not have a negative angle of more than 1.5 degrees from the left side to the right side.

G. A strip of aluminum angle, a minimum 1/2 inch high and a maximum of 3/4 inch high, must be attached to the roof, at 90 degrees to the roof surface, on each side to within one (1) inch of the windshield and the rear window. The roof strip (roof rail) must not exceed a maximum thickness of 0.050 inch. The roof strip (roof rail) fasteners must be acceptable to NASCAR Officials. Button head rivets, bolts, and the use of external back up washers will not be permitted. Each roof strip must be mounted parallel to the other, 20 inches from the roof centerline, aligned vertically, and painted to match the roof.

When the Grand National-Approved (Flange Fit) Composite Body is used a one-piece strip of aluminum angle, 3/4 inch high by 3/4 inch wide, must be attached to the roof on both the right side and left side of the roof. The roof angle (roof rail) must not exceed a maximum thickness of 0.050 inch. The roof angle (roof rail) must be attached to the roof in the recessed area of the roof. The roof angle (roof rail) fasteners must be #10 button head bolts, acceptable to NASCAR Officials. Button head rivets and the use of external back up washers will not be permitted. The roof angles (roof rails) must be painted.

H. A welded magnetic sheet steel outer panel must be installed filling the space between the front roll bar legs (#2 A & B) and roof bar (#3) and the "A" post and roof panel. Holes will not be permitted in the panel.

I. The rear portion of the roof panel must be equipped with fully operational hinged air deflectors, (aerodynamic stabilizer), on tracks 1-1/8 miles and more in length, excluding road course Events. The hinged air deflectors must be NASCAR-approved and obtained only through NASCAR-approved sources. The hinged air deflectors must be installed as specified in the instruction sheet supplied with the hinged air deflector kit. The rear edge of the left hinged air deflector must be installed not more than three (3) inches forward of the rear window or not less than 1-1/2 inches forward of the rear window. The internal balance port connecting the right and left air deflector trays must remain unobstructed and functional.

J. A second stationary air deflector (similar to the roof strips described in sub-section 3.8G, above) must also be installed on the rear window. The rear window air deflector must be a minimum of 1-1/2 inches high and a maximum of 1-3/4 inches high mounted parallel to the car centerline. The stationary rear

window air deflector must extend the full length of the rear window. The stationary rear window air deflector and the left side roof rail must be aligned and straight.

K. When the Grand National-Approved (Flange Fit) Composite Body is used a stationary air deflector (similar to the roof angles (roof rails) described in sub-section H above) must also be installed on the rear window on the left side. The rear window stationary air deflector must be attached using the double shear mounting flange and bolt requirements, as shown and described in Diagram # 14 in the rear pages of the Rule Book. The rear window stationary air deflector must match the height, length and contour of the NASCAR R70-020 template. A minimal taper at the rear edge of the rear window stationary air deflector will be permitted to allow for the opening and closing of the deck lid. The rear window stationary air deflector must be constructed using 1/4 inch thick, clear polycarbonate. The rear window stationary air deflector mount must be oriented on the rear window so that the horizontal surface of the rear window stationary air deflector mount is inboard towards the longitudinal centerline of the car. The mounting flange must not be lightened. The rear window stationary air deflector and the left side roof angel (roof rail) must be aligned and straight.

L. An optional, removable hatch may be installed in the roof above the driver to be used as an alternate exit. In addition to the following guidelines, all inspection body templates must continue to fit. (See Diagrams #6 and #7 in the rear pages of the Rule Book).

- (1) The opening for the hatch should be designed to maximize the size as allowed by the configuration of the main roll bar (#1), roof bar (#3) and centerline roof bar (#4).
- (2) The hatch should be constructed from the material removed from the roof, or equivalent, with two (2) steel straps, a minimum of 1-1/2 inches wide, approximately three (3) inches wide running in the longitudinal direction the length of the hatch. These straps serve to hold the shape of the roof and as material which the hinges are welded. The straps may be attached using flush-mount rivets or spot welds, either of which can be used in conjunction with bonding adhesive. Additional steel material should be used close to the outside edges to hold the shape of the hatch.
- (3) The hatch sealing surface and support for the remaining portion of the roof should be created using four (4) L-shaped sheet steel sections which should extend inward from the roof opening and then turn 90 degrees down and terminate with welds at the centerline of the main roll bar (#1), roof bar (#3) and centerline roof bar (#4) as seen from inside the hatch opening.
- (4) The latch/hinge mechanisms must be made of magnetic steel and must consist of a main body with a spring loaded locking pin which when engaged holds the hinge in a double-shear configuration. The mechanism should also have a spring loaded pin which will lift the hatch slightly when the locking pin is disengaged.
- (5) A total of four (4) latch/hinge mechanisms, two (2) at the front and two (2) at the rear, must be mounted to brackets which terminate with welds at the roof bar (#3) in the front and at the main roll bar (#1) in the rear. This configuration must allow the hatch to hinge from the front or back independently, or to be completely removed when all four (4) latches are released.
- (6) A cable-actuated release system must be used for the front latch pair with similar independent system used for the rear. The cable system must release both locking pins with one motion while allowing the hatch to pivot about the remaining unreleased pins. The release must be easily accessible to both the driver and the track crews from inside the driver's compartment.

20C - 3.9 Rear Deck Lids

A. All deck lids must be from the OEM manufacturers and must be approved by NASCAR. NASCAR Officials may use deck lids provided by the respective manufacturer as a guide in determining whether a Competitor's deck lid conforms to the specifications of the NASCAR Rule Book.

B. The deck lid must be installed in operating condition. When closed, the deck lid must be sealed around the entire perimeter of the deck lid opening.

C. The deck lid must be held closed with two (2) positive, minimum 3/8 inch diameter, solid, magnetic steel pin fasteners equipped with clip cables, one (1) on each side. All removable deck lid pins must be a minimum of 1/8 inch diameter and must have a minimum one (1) inch inside diameter vertical loop to facilitate ease of removal. Metal deck lid pin bezels must be installed at all times. Recessed pin plate bezels will not be permitted.

D. The deck lid must have welded hinges acceptable to NASCAR Officials.

E. The deck lid must have a metal self-holding device to keep the lid up when opened.

F. The deck lid must retain the approved shape, contours, and dimensions, as defined by the NASCAR N-1 (Plan View Deck Lid Shape) template, with the

approved inner panel in place. Holes and/or other modifications that, in the judgment of NASCAR Officials, were made with intent of weight reduction will not be permitted.

G. The deck lid must be connected to the trunk reinforcement bar (#14) using two (2) fiber cables, each constructed from a continuous loop of 1/4 inch diameter 12 strand cable (with a red tracer thread) woven from Vectran® HS V-12 fiber. Each fiber cable must attach to a minimum 5/16 inch diameter bolt passing through the spoiler attachment plate with heavy-duty, two (2) inch diameter by 1/8 inch minimum thick flat metal washers and lock nuts, acceptable to NASCAR Officials, on each side. These bolts must be located between 12 inches to 15 inches inboard of the deck lid edge on each side. The remaining end of the cables must attach to the trunk reinforcement bar (#14) using a choke type hitch. One (1) cable must be used on the right side and one (1) on the left side of the deck lid.

H. When the Grand National-Approved (Flange Fit) Composite Body is used one (1) left side stationary air deflector must be installed on the rear deck lid at all times during competition. The deck lid stationary air deflector must be attached using the double shear mounting flange and bolt requirements, as shown in Diagram #14, in the rear pages of the Rule Book. The stationary deck lid air deflector must match the height, length and contour of the NASCAR R70-020 template. The stationary deck lid air deflector must be constructed using 1/4 inch thick, clear polycarbonate. The stationary deck lid air deflector mount must be orientated on the rear deck lid so that the horizontal surface of the stationary deck lid air deflector mount is inboard towards the longitudinal centerline of the car. The stationary deck lid air deflector must be located parallel to and aligned straight with the rear window stationary air deflector and left side roof angle (roof rail). The stationary deck lid air deflector must be located to allow it to by-pass the inside vertical surface of the rear window stationary air deflector. The stationary deck lid air deflector must remain clear and must not have any paint, vinyl, decals and/or text applied on it.

At road course Events, the stationary deck lid air deflector may be shortened up to a maximum of 6-1/2 inches when measured from the base of the rear spoiler forward to the base of the stationary deck lid air deflector. The trailing edge of the stationary deck lid air deflector must be perpendicular to the deck lid surface.

20C - 3.10 Bumper Covers

A. All bumper covers must be from the respective manufacturer and must be approved by NASCAR. NASCAR Officials may use bumper covers provided by the respective manufacturer as a guide in determining whether a Competitor's bumper cover conforms to the specifications of the NASCAR Rule Book. Unless otherwise authorized by the Series Director, cutting and reshaping of bumper covers will not be permitted.

B. The bumper covers, once installed, must fit all approved NASCAR templates.

C. Front and rear bumper cover reinforcement bars must be installed and must be acceptable to NASCAR Officials. The rear bumper reinforcement bar must not be wider than the inside width of the rear bumper cover and must not extend forward along quarter panels. The rear bumper reinforcement bar must be constructed of a minimum one (1) inch outside diameter with a minimum wall thickness of 0.083 inch to a maximum of 1-3/4 inches outside diameter with a maximum wall thickness of 0.090 inch magnetic steel tubing. For inspection purposes, the rear bumper bar must remain uncapped and accessible for inspection from end to end. The rear bumper reinforcement bar must be attached to the rear sub-frame crossmember by welding a maximum of two (2) horizontal tubes of the same diameter or a minimum of one (1) inch outside diameter steel tube as used for the rear bumper reinforcement bar. Holes and/or other modifications in the rear bumper reinforcement bar or attaching bars that, in the judgment of NASCAR Officials, were made with the intent of weight reduction will not be permitted.

D. All manufacturer's front and rear bumper cover part numbers must remain visible and unaltered.

E. The following is a list of approved front bumper covers for steel bodied models:

| <u>YEAR</u> | <u>MODEL</u> | <u>PART NUMBER</u> |
|-------------|--------------------------|--------------------|
| 2009 - 2014 | Chevrolet Impala SS | CCS0700 |
| 2006 - 2008 | Chevrolet Monte Carlo SS | CCS0700 |
| 2004 - 2005 | Chevrolet Monte Carlo | 88958624 |
| 2007 - 2014 | Dodge Charger | 04666257AA |
| 2005 - 2006 | Dodge Charger | 04593635AA |
| 2004 | Dodge Intrepid | 05063022AB |
| 2006 - 2014 | Ford Fusion | M-20826-AA |
| 2004 - 2005 | Ford Taurus | M-17626-CA |
| 2007 - 2014 | Toyota Camry | 00644-52119-00 |

F. The following is a list of approved rear bumper covers for steel bodied models:

| <u>YEAR</u> | <u>MODEL</u> | <u>PART NUMBER</u> |
|-------------|--------------------------|--------------------|
| 2009 - 2014 | Chevrolet Impala SS | CCS0701 |
| 2006 - 2008 | Chevrolet Monte Carlo SS | CCS0701 |
| 2004 - 2005 | Chevrolet Monto Carlo | 88958625 |
| 2005 - 2014 | Dodge Charger | 04593637AA |
| 2004 | Dodge Intrepid | 05045129AA |
| 2006 - 2014 | Ford Fusion | M-21118-AA |
| 2004 - 2005 | Ford Taurus | M-17835-CA |
| 2007 - 2014 | Toyota Camry | 00644-52159 |

G. The difference in the height from the ground to the bottom corner of the rear bumper cover when comparing the left side and right side must not exceed 2-1/2 inches. The right and left bottom corners of the rear bumper covers will be measured with the right quarter panel adjusted to 36 inches and the left quarter panel height adjusted to 35 inches except the Grand National-Approved (Flange Fit) Composite Body.

20C - 3.11 Identification / Marking

A. Numbers / Graphics

- (1) All car number configuration and design is subject to approval by the Series Director. Only single or double digit numbers will be permitted. **The size, color, and style of numbers must be adequate to permit prompt identification by NASCAR Officials at all times.** Numbers must be a solid color, at least 21 inches high, measured vertically, excluding borders and silhouettes, must be neatly attached to or painted on both sides of the car on the center of the door. Door numbers must be a minimum of four (4) inches in width and slant no more than 30 degrees from vertical. The tops and bottoms of all numbers must be even (not staggered). Two digit numbers must not overlap. A solid number 36 inches high, excluding borders and silhouettes, must be neatly attached to or painted on the roof, reading from the driver's side. Solid numbers, as large as possible, must be attached to or painted on the right side outer headlight and taillight covers. The use of number decals is acceptable if NASCAR Officials determine that the number is legible. Mirror foil numbers and decals will not be permitted. Paint schemes using a mirrored or holographic appearance will not be permitted.
- (2) All NASCAR Series East/West car numbers are owned by and will be assigned by NASCAR for use by the car owner. Car numbers are not transferable or assignable by the car owner. Numbers on a car competing in these Series must correspond with the car owner's license that is on file at NASCAR Headquarters, unless otherwise authorized by NASCAR.
- (3) NASCAR Officials may require a Competitor to use a different number in order to avoid duplication or confusion at an Event.

B. Decals / Advertising

- (1) NASCAR may, in its sole discretion, refuse to permit for any reason, or it may restrict or assign the size or placement of, decals, identification, and advertising of any kind including but not limited to the car, equipment, personnel, uniforms, garage and pit areas, promotional materials, and/or support vehicles. All NASCAR Members agree to accept NASCAR's decision in this regard.
- (2) NASCAR may refuse to permit a Competitor to participate in an Event if NASCAR determines that any advertising, sponsorship or similar agreement to which the Competitor (or a car owner, driver or crew member associated with the Competitor) is or will be a party, is detrimental to the sport, to NASCAR, Series Sponsor or to the Promoter for any reason, including without limitation, the public image of the sport.
- (3) Decals, advertising slogans, paint schemes and other graphic designs and text on the car that have not been previously approved by NASCAR must not be used unless and until they have been submitted by the crew chief to NASCAR Headquarters and approved by NASCAR prior to the Event. The review and approval of decals, advertising slogans, paint schemes and other graphic designs and text on the car that have not been previously approved by NASCAR is at the sole discretion of NASCAR and such approval may be withheld for any reason. All NASCAR Members agree to accept NASCAR's decision in this regard.
- (4) Decals, advertising logos, text or identification of sponsors must not be placed on the front of each door and/or each front fender (between the front of the car and the front of the door) other than (a) decals, advertising logos, text or identification of series sponsors, (b) decals,

- advertising logos, text or identification of NASCAR contingency program sponsors, or (c) such other decals, advertising logos, text or identification as NASCAR may in its sole discretion permit or require.
- (5) All decals or adhesive backed emblems supplied by NASCAR contingency program sponsors for advertising or identification on NASCAR K & N Pro Series race cars must be limited in size to the area of a 32 square inch rectangle. Decal sizes will be determined by multiplying the full width and full length of any decal, regardless of the decal shape. Only decals of participating NASCAR contingency program sponsors will be permitted.
 - (6) Decals, advertising logos, text or identification of sponsors will not be permitted on the windshield (except Series Sponsor), rear window, rear quarter windows or rear spoiler. **Teams are required to place a Series Sponsor decal across the windshield as specified by NASCAR.**
 - (7) Decals, advertising logos, text or identification of sponsors, other than the car number, will not be permitted on the door of the car from the rear of the vent deflector to the front edge of the "B" post and from the top of the door panel to the bottom of the rocker panel. Only a rectangular marking one (1) inch wide by three (3) inches high designating the jack post location will be permitted.
 - (8) Decals, advertising logos, text or identification of sponsors, other than the 72 square inch identification for the automobile manufacturer, will not be permitted on the most rearward vertical portion of the rear bumper cover.
 - (9) Decals, advertising logos, text or identification of sponsors, other than the 72 square inch identification for the automobile manufacturer, will not be permitted forward of the hood pins on the front of the car.
 - (10) Decals, advertising logos, text or identification of sponsors must not extend past the seam between the hood and front fenders and the seam between the rear of the hood and the cowl.
 - (11) Decals, advertising logos, text or identification of sponsors must not be on the roof panel, unless otherwise authorized by NASCAR.
 - (12) A yellow stripe, a minimum of four (4) inches in height and 55 inches wide, must be displayed on the vertical portion of the rear bumper cover of any car driven by a rookie driver as determined by the Series Director.

20C - 3.12 Car Body Measurements

20C - 3.12.1 NASCAR Templates

A car must conform to any and all approved NASCAR templates, comparison pieces, and/or other measuring devices as applied and measured by NASCAR Officials. Once a car has passed template inspection at an Event, the car must not be altered in any manner that in the judgment of NASCAR Officials enhances the aerodynamic performance of the car.

20C - 4 GENERAL ENGINE REQUIREMENTS

20C - 4.1 General Engine Eligibility

A. The eligible engines must be production engines as determined, selected and approved by NASCAR. All major components (engine block, heads, etc.) must be produced by the manufacturer for sale in a regular product offering. Prior to being used in competition, all major engine and component parts must be submitted, in a completed form/assembly, to the office of the NASCAR Competition Administrator on or prior to September 2, 2015, for consideration of approval and approved by NASCAR. Each such part may thereafter be used until NASCAR determines that such part is no longer eligible.

B. As an option, Teams may compete in the NASCAR K & N Pro Series with a NASCAR-approved "Spec Engine". If used, the "Spec Engine" must be completely assembled using only NASCAR-approved "Spec Engine" components without any modifications. All parts, pieces and components that are used in the "Spec Engine" must originate from an approved NASCAR supplier. If used, the "Spec Engine" may be purchased in kit form to be assembled by the engine builder of the team's choice, or may be purchased as a completely assembled engine. NASCAR-approved "Spec Engine" kits and assembled engines are available directly from Robert Yates Racing Engines, LLC. Weight adjustments (if any) will be made through NASCAR Technical Bulletins and/or announcements.

Robert Yates Racing Engines, LLC
159 Bevan Drive
Mooresville, North Carolina 28115
Phone: 704-660-7015
Email: dlewis@ryr.com

C. Modifications Permitted

- (1) Wash and clean all parts – HIGHLY RECOMMENDED
- (2) Fit Bearings
- (3) Fit Piston Ring End Gap
- (4) Match Gaskets – Gasket material only
- (5) Carburetor Jetting
- (6) Distributor Timing
- (7) Carburetor floats designed for road courses, acceptable to NASCAR Officials, will be permitted at road course Events only.
- (8) The use of the crankcase windage tray supplied by the NASCAR-approved supplier is optional. If used, it must remain as supplied from the NASCAR-approved supplier with no modifications.
- (9) An additional oil scavenge line from the second stage of the oil pump to the lubrication oil reservoir tank will be permitted. The additional oil scavenge may merge into the oil scavenge line on the first stage of the oil pump. The additional oil scavenge line must use a #10AN fitting on the second stage of the oil pump. The oil pump must remain as supplied from the NASCAR-approved supplier with no modifications.
- (10) A maximum cylinder overbore size of 0.005 inch will be permitted on the NASCAR-approved "Spec Engine" block. The 0.005 inch overbore pistons, piston rings and wrist pins must be purchased from and remain as supplied by the NASCAR-approved supplier with no modifications.
- (11) The installation and fitting of valve guide liners will be permitted. The valve centerline and valve angle must remain the same as supplied by the NASCAR-approved supplier and manufacturer.
- (12) A bonding agent (epoxy) may be used to assist in adhering the emulsion tube plugs to the carburetor metering blocks, if needed to help prevent fuel leakage only. No other modifications to the carburetor metering blocks will be permitted. The carburetor metering blocks must remain as supplied by the NASCAR-approved supplier and manufacturer.
- (13) Decking (milling) of the engine block cylinder head surface to ensure proper sealing will be permitted. The engine block cylinder head surface may be decked (milled) up to a maximum of 0.005 inch. When installed the top of any piston must not be more than 0.015 inch at any point above the engine block cylinder head surface.

D. Modifications Not Permitted

- (1) No honing of engine cylinder bores. (Except as specified below)
- (2) Any and all machine work done to the engine block with the exception of the engine overbore and decking (milling) of the cylinder head surface **must be performed by Robert Yates Racing Engines, LLC only.**
- (3) Pistons, piston rings and wrist pins must remain as supplied by the NASCAR-approved supplier.
- (4) No valve guide fitting. (Except as specified below)
- (5) No machine work to valve seats, valves or valve guides. (Except as specified below)
 - a. The following procedures and specifications must be followed when performing valve maintenance (valve job) on the "Spec Engine". No modifications or deviations from the procedures or specifications will be permitted.
 - b. There are two (2) approved methods of valve seat maintenance for the "Spec Engine".
 - (1) The use of a dedicated carbide cutting tool insert for the intake and exhaust valve seats is available **only through Robert Yates Racing Engines, LLC.**

INTAKE

Part number: WAR-IC-6527

EXHAUST

Part number: WAR-EC-6528

- (2) The programming and application of the supplied coordinates for use with the NEWEN Contour EPOC style machine using a single point cutter are available **only through Robert Yates Racing Engines, LLC.**
- (6) The valves must not be serviced and must be replaced.
- (7) The forged titanium valves utilize a Chrome Nitride coating and are **not** serviceable (including grinding of the valve face).
- (8) Valve guide service with the exception of valve guide liner installation **must be performed by Robert Yates Racing Engines, LLC.** An additional encryption must be placed on the cylinder head reflecting any and all service work being done to the cylinder head.
- (9) Valve springs must be installed at 1.800 inches with an approximate seat pressure of 130 lbs.

- (10) The combustion chamber volume must be 64cc's for compression after the valve maintenance (valve job) has been completed.
- (11) Valve seat replacement must **only be completed by Robert Yates Racing Engines, LLC.**
- (12) No modifications to rocker arms, valve lifters or valve train components – Must remain as supplied by the NASCAR-approved supplier.
- (13) No crankshaft machining or balancing – Must remain as received from the NASCAR-approved supplier.
- (14) No machining of the cylinder heads.
- (15) No modifications to the carburetor and carburetor spacer – Must remain as supplied by the NASCAR-approved supplier.
- (16) No intake manifold modifications – Must remain as supplied by the NASCAR-approved supplier.
- (17) No modifications to CAMSHAFT TIMING –CAMSHAFT TIMING must be to manufacturer's specified settings.

NOTE: The use of a camshaft degree bushing will be permitted in the camshaft timing gear to obtain the manufacturer's camshaft timing specified settings. The manufacturer's camshaft specified settings for the intake centerline must be a minimum of 105.5 degrees and a maximum of 106.25 degrees. No other modifications to the camshaft timing will be permitted.

- (18) No header or collector modifications – Must remain as supplied by the NASCAR-approved supplier.

NOTE: Exhaust headers that are in need of repair and/or recoating must be returned to the NASCAR-approved supplier to have the repair and/or recoating completed and re-encrypted.

- (19) No ignition system modifications – Ignition system must remain as supplied by the NASCAR-approved supplier.

NOTE: As an option, Teams will be permitted to use the crank trigger ignition system Part # 125004, available only through Robert Yates Racing Engines. If the crank trigger ignition system is being used, triggering devices or pick-ups will not be permitted inside the distributor housing. Teams will be permitted to use distributor Part # 187008 available only through Robert Yates Racing Engines with the crank trigger ignition system only.

- (20) No wiring modification – Must remain as supplied by the NASCAR-approved supplier.
- (21) No alternator modification – Must remain as supplied by the NASCAR-approved supplier.
- (22) No fuel pump modification – Must remain as supplied by the NASCAR-approved supplier.

NOTE: As an option Teams will be permitted to use fuel pump Part # 13001 available only through Robert Yates Racing Engines.

- (23) No water pump modification – Must remain as supplied by the NASCAR-approved supplier.
- (24) No oil pan modifications – Must remain as supplied by the NASCAR-approved supplier.

NOTE: As an option Teams will be permitted to use oil pan Part #144003 available only through Robert Yates Racing Engines.

- (25) No oil scavenge or oil pump modification – Must remain as supplied by the NASCAR-approved supplier. (Except as specified below)
The oil pump drive pulley may be changed at the team's discretion, using one (1) of the following approved oil pump drive pulleys:

| <u>MANUFACTURER</u> | <u>PART NUMBER</u> |
|---------------------|--------------------|
| CV Products | CVD11428 |
| CV Products | CVD11430 |

- (26) No modifications will be permitted to the oil pump drive pulley – Must remain as supplied by the NASCAR-approved supplier.
- (27) No accessory mount, drive belt or front timing cover modification – Must remain as supplied by the NASCAR-approved supplier.
- (28) No modifications to the front drive assembly – Must remain as supplied by the NASCAR-approved supplier.

- (29) No modification to part numbers or identification markings – Must remain as supplied by the NASCAR-approved supplier.
- (30) No painting, coatings, polishing or addition of material of any kind.
- (31) No modifications to the bell housing-Must remain as supplied by the NASCAR-approved supplier.
- (32) No modifications to the clutch assembly (including flywheel and starter ring gear) – Must remain as supplied by the NASCAR-approved supplier.
- (33) No modification to the starter – Must remain as supplied by the NASCAR-approved supplier.

NOTE: The following will be the only intake manifold and carburetor spacers approved for use with the NASCAR-approved “Spec Engine”:

| | |
|----------------------------------|---------------------------|
| <u>INTAKE MANIFOLD</u> | <u>PART NUMBER</u> |
| Edelbrock | 2809 |
| <u>CARBURETOR SPACER</u> | <u>PART NUMBER</u> |
| CV Products (1/2 inch thickness) | CV-166 |
| CV Products (1/2 inch thickness) | CV-166-1/8* |

***(drilled and tapped for use with approved ignition interrupt system)**

NOTE: The NASCAR-approved “Spec Engine” is the only eligible engine for use with the Toyota Camry model car.

E. Unless otherwise specified by NASCAR, the same long block engine assembly (engine block, crankshaft, camshaft, connecting rods, pistons, cylinder heads, and valves) must be used for the entire Event, including practice, qualifying and the Race. An engine must not be removed from a car without the approval of the Series Director. The Series Director may require any team that removes an engine to start at the rear of the field, providing the car earns a starting position in the Race. The engine may be removed from a back-up car, without a penalty, at the discretion of the Series Director as follows:

- (1) If a car is wrecked beyond repair in practice before qualifying and a back-up car is used, then an engine change may be permitted provided the change can be accomplished in a timely manner before qualifying.
- (2) If a car is wrecked beyond repair during qualifying and a back-up car is used, an engine change may be permitted, however, the engine change must be completed before the beginning of practice(s), if practice(s) is scheduled that follow qualifying.
- (3) If a car is wrecked beyond repair after qualifying and a back-up car is used, then an engine change may be permitted without an additional penalty.

If a Competitor violates this Rule, in addition to imposition of a penalty pursuant to Section 12, the Series Director may take such action during the Event as he deems appropriate, including but not limited to loss of practice time and/or loss of the opportunity to qualify and/or confiscation of the engine or engine components. Such action shall be deemed an inspection decision not subject to Section 12.

NOTE: In an effort to save time during at track inspections, it is highly recommended that all built engines have the forward most right side and forward most left side intake manifold bolts and the forward most right side and forward most left side lower cylinder head bolts cross drilled for engine sealing. If cylinder head studs are used, it is recommended that the studs be cross drilled above the cylinder head nut or through cylinder head nut and stud. If the cylinder head bolts or studs are drilled, the holes must be drilled a minimum diameter of 0.063 inch to accept the NASCAR engine seal.

It is highly recommended that all NASCAR-approved “Spec Engines” have the forward most right side and forward most left side intake manifold bolts, the forward most right side and the forward most left side lower cylinder head bolts and the right side and left side (second from bottom) front timing cover bolts cross drilled for engine sealing. If the bolts are drilled, the holes must be drilled a minimum diameter of 0.063 inch to accept the NASCAR engine seal.

The right side front and left side rear carburetor studs must be drilled a minimum diameter of 0.063 inch to accept the NASCAR carburetor seal on all engines. All built engines must have the closest intake manifold bolt to each drilled carburetor stud on both the right side and left side drilled a minimum diameter of 0.063 inch to accept the NASCAR carburetor seal.

20C - 4.2 General Engine Characteristics

The following characteristics of the production engine must be maintained in any engine used in competition in a manner acceptable to NASCAR Officials. All parts listed below must originate from approved production castings and forgings. All parts, except spark plugs, should utilize fractional English measurement system fasteners and dimensions (non-metric).

A. ENGINE BLOCK:

- Material
- Number of Cylinders
- Angle of Cylinders
- Cylinder Bore Centerline Spacing
- Number of Main Bearings and Type
- Number of Camshaft Bearings and Type
- Integral or Separate Cylinder Sleeves
- Location of Camshaft
- Overall Configuration

B. CYLINDER HEAD:

- Material
- Number of Valves per Cylinder
- Type of Combustion Chamber
- Location of Spark Plug
- Orientation of Spark Plug
- Arrangement of Valves
- Valve Location in Relation to the Cylinder Bore
- Angle of Valves
- Type of Valve Actuation
- Number of Intake Ports
- Number of Exhaust Ports
- Center Distances of Intake Ports Referenced to the Cylinder Bore
- Center Distances of Exhaust Ports Referenced to the Cylinder Bore
- Angle of Port Face Relative to Mating Face of Head to Block
- Firing Order

20C - 5 DETAILED ENGINE REQUIREMENTS

For purposes of construction, some elements of sub-section 20C-5 are listed below. Changes from the NASCAR-approved standard production automobiles or component parts will not be permitted except as specified in the following NASCAR Rules for engine preparation. In addition to the General Engine Requirements specified in sub-section 20C-4, the engines must also conform to the following Detailed Engine Requirements.

20C - 5.1 Engine Location

A. Engines in all eligible makes and models except when the NASCAR-approved "Spec Engine" is used must not be located further back than the centerline of the forward most spark plug hole on the right side cylinder head in line with the centerline of the right front upper ball joint. When the NASCAR-approved "Spec Engine" is used the engine must not be located further back than one (1) inch from the centerline of the forward most spark plug hole on the right side cylinder head when measured from the centerline of the right front upper ball joint.

B. The longitudinal centerline of the crankshaft must be in the longitudinal centerline of the front sub-frame.

20C - 5.2 Engine Ground Clearance

The engine ground clearance will be measured from the center of the crankshaft accessory drive bolt. All currently approved engines must maintain a minimum of 10 inches and a maximum of 11 inches from the center of the crankshaft to the ground at all times during the inspection process. All NASCAR-approved "Spec Engines" must maintain a minimum of 11 inches and a maximum of 12 inches from the center of the crankshaft to the ground at all times during the inspection process. Nothing may be located directly forward or below the front end of the crankshaft that would prevent crank height inspection.

20C - 5.3 Engine Mounts

- A. All engine mounts must be reinforced steel or aluminum.
- B. Front to rear, adjustable engine mounts will not be permitted.

20C - 5.4 Engine Displacement / Compression Ratio

A. Engine Displacement

Only "small block" V-8 engines with a minimum of 350.000 cubic inch displacement and a maximum of 358.000 cubic inch displacement will be permitted.

The only basic engines designated and approved as "small block" engines are:

DODGE
360 CID

FORD
351C CID

GENERAL MOTORS
350 CID

Engine displacement may be increased or decreased by changing the cylinder bore diameter and/or the crankshaft stroke length. The total cubic inch displacement must not be less than the minimum engine size of 350.000 cubic inch displacement or greater than the maximum engine size of 358.000 cubic inch displacement.

The formula for determining the cubic inch displacement is as follows: Bore x Bore x Stroke x .7854 equals the cubic inch displacement of each cylinder. The cubic inch displacement of each cylinder added together will determine the total cubic inch displacement of the engine. Unless otherwise permitted by NASCAR Officials, a maximum cooling down time of two (2) hours from the official completion time of the Race will be permitted prior to measuring the total cubic inch displacement.

B. Compression Ratio

For all Events, the maximum allowable compression ratio permitted on any cylinder will be 12.0 to 1 on all engines, except the NASCAR-approved "Spec Engine". When calculating the compression ratio, an allowance of one (1) cubic centimeter will be added to the volume for the area around the top of the piston down to the top of the piston ring that will be sealed with grease.

The procedure for calculating the compression ratio is as follows: Bore x Bore x Stroke x .7854 x 16.387 equals the Cylinder Volume of a cylinder at Bottom Dead Center (BDC) in cubic centimeters. The Cylinder Head Pour Volume minus (-) the known volume of the cylinder head plate plus (+) Head Gasket Volume plus (+) 1.00 cc for sealing the piston ring plus (+) the Cylinder Block Volume minus (-) the known volume of the block plate equals (=) Chamber Volume.

$$\text{Compression Ratio} = \frac{\text{Cylinder Volume plus (+) Chamber Volume}}{\text{Chamber Volume}}$$

20C - 5.5 Engine Blocks

All engine blocks must be acceptable to NASCAR Officials and meet the following requirements. NASCAR Officials may use an engine block provided by the respective manufacturer as a guide in determining whether a Competitor's engine block conforms to the specifications of the Rule Book.

20C - 5.5.1 Eligibility

A. Engine blocks must be a product of the manufacturer for the NASCAR-approved engine being used in competition. Approved manufacturers' identification and part numbers and/or casting numbers in the form of cast-in numbers must remain unaltered on the engine block being used in competition.

B. Only the Dodge 360 engine blocks, the Ford 351 Cleveland-type engine blocks and the General Motors 350 engine blocks will be permitted. Aftermarket engine blocks will not be permitted.

NOTE: The NASCAR-approved "Spec Engine" is the only eligible engine for use with the Toyota Camry model car.

C. The engine block must retain all standard external dimensions with the exception of the surfacing of the engine block deck. Angle cutting of the engine block deck will not be permitted.

D. Engine blocks must use individual magnetic steel crankshaft main bearing caps. The main bearing bore size must be the same for all main bearings.

E. Aluminum engine blocks will not be permitted.

20C - 5.5.2 Internal Changes

A. Boring and honing of the cylinders will be permitted. Cylinder bores must remain round.

B. Internal polishing of the engine block will be permitted.

C. Relocation of the camshaft will not be permitted.

20C - 5.5.3 Pistons / Rods

A. Only round aluminum pistons will be permitted.

B. All pistons must be configured with two (2) separate compression piston ring grooves located near the top of the piston and one (1) oil ring groove located below the compression ring grooves. A piston compression ring must be used in each compression ring groove and one (1) oil ring assembly must be used in the oil ring groove.

C. Only solid magnetic steel connecting rods will be permitted.

D. Only round piston pin holes with a fixed location in the piston and the connecting rods will be permitted.

E. Titanium and stainless steel connecting rods will not be permitted.

F. Only two-piece insert style connecting rod bearings will be permitted. Roller bearings will not be permitted.

20C - 5.5.4 Oil Pans / Oil Coolers

The oil pans and oil coolers must be acceptable to NASCAR Officials and meet the following minimum requirements:

A. Oil pans must be made of magnetic steel and may be a maximum of 10 inches wide, measured five (5) inches maximum each side from the center of the crankshaft. The side walls must not angle outward past vertical. The exterior of the oil pan must be of welded one-piece construction. Spacers, other than sealing gaskets, will not be permitted between the oil pan side rails and the engine block surface.

B. Segmented oil pans and/or crankcases will not be permitted. The oil pan and crankcase area must remain open. Additions of materials to the engine block, engine block components, and/or the oil pan to separate the crankcase area from front to rear will not be permitted.

C. A maximum of four (4) oil pump scavenging pick-ups will be permitted into the oil pan. The scavenging pick-ups must draw oil from the inside bottom of the oil pan.

D. Sealed windage trays will not be permitted.

E. A single baffle (windage screen) may be used inside the oil pan providing it is constructed from wire mesh or louvered metal. The baffle (windage screen) must be installed in a straight line from the front to the rear of the oil pan. The baffle (windage screen) must attach to the upper sidewall and to the bottom of the oil pan on the same side. Clearance between the baffle (windage screen) and the engine main bearing caps must not be less than 1-1/2 inches when viewed horizontally. Directional baffles in the bottom of the oil pan must not be higher than one (1) inch.

F. Engine oil coolers must be an oil to air or an oil to water heat exchanger. All engine oil coolers must be located between the front sub-frame rails, in or behind the radiator and forward of the engine. When an oil to air heat exchanger is used, it must have a minimum of nine (9) fins per inch on the cooling tubes. All oil coolers and their installation must be acceptable to NASCAR Officials.

20C - 5.6 Cylinder Head

All modifications must be submitted to NASCAR before any proposed modification will be eligible for approval. Approved manufacturers' identification and part numbers in the form of cast-in part numbers must remain unaltered on the cylinder heads being used in competition. The following cylinder heads are approved for use in competition:

| <u>MANUFACTURER</u> | <u>PART NUMBER</u> | <u>CASTING NUMBER</u> |
|------------------------------|--------------------|-----------------------|
| Dodge | | |
| W8 | P4876281 | P4532933 |
| W8 | P4876697 (CNC) | P4532933 |
| W8 | P4876281 | P4510019 |
| Ford (dated 9/9/91 or later) | | |
| | E3ZM6049C3 | E3ZM6049C3 |
| | E3ZM6049C3L | E3ZM6049C3 |
| General Motors | | |
| 18 Degree | 10134364 | 10134363 |
| 18 Degree | 24502580 | 10134363 |

NASCAR Officials may use a cylinder head provided by the respective manufacturer as a guide in determining whether a Competitor's cylinder head conforms to the specifications of the Rule Book.

20C - 5.6.1 Eligibility

To be eligible, the approved cylinder heads must be acceptable to NASCAR Officials and meet the following requirements:

A. Only stainless steel or titanium valves will be permitted. Exotic materials will not be permitted.

B. Only magnetic steel valve springs will be permitted.

C. Only two (2) valves per cylinder will be permitted.

D. There are no restrictions on the valve size.

E. The valve angle and valve location must remain as approved by NASCAR. Spacing between the valves measured center to center is:

| <u>MANUFACTURER</u> | <u>VALVE ANGLE</u> | <u>SPACING</u> |
|---------------------|----------------------|----------------|
| Dodge W8 | 15 Degrees | 1.936 inches |
| Ford | Intake 7-1/2 Degrees | 1.900 inches |
| | Exhaust 8 Degrees | |
| General Motors | 18 Degrees | 1.935 inches |

Valves must remain in the approved location in relation to the cylinder bore centerline.

F. The top of the intake ports must remain in the approved location measured on the inside top of the port.

G. The vertical centerline of the intake port entrance must be straight and perpendicular to the cylinder head gasket surface. The vertical centerline of the intake port must remain in the approved location. The horizontal centerline of the intake port must be straight and parallel to the cylinder head gasket surface.

H. The vertical and horizontal centerlines of the exhaust port exit must remain in the approved location. The vertical and horizontal centerlines must be straight lines. The horizontal centerline must be parallel to, and the vertical centerline must be perpendicular to, the cylinder head gasket surface.

I. If material is removed from the top or side of the exhaust port, the same amount must be removed from the bottom or opposite side of the port.

J. The rocker arm fastener bolt holes must remain in the approved location.

K. Internal polishing and porting will be permitted.

L. Spark plug holes must remain in the approved location.

M. Angle cutting of the cylinder head to the engine block mating surface will not be permitted.

N. Milling of the cylinder heads will be permitted, but not to exceed 0.175 inch.

O. "O" rings will not be permitted for sealing the cylinder head to the engine block.

20C - 5.6.2 External Changes

A. External modifications for the approved cylinder heads will be permitted providing the external dimensions of the cylinder head have not been changed in respect to original height (plus 0.000 inch for Dodge , plus 0.100 inch for Ford, plus 0.080 inch for General Motors or minus 0.175 inch for all engines), original length, and original width as compared to the cylinder heads described in sub-section 20C-5.6.

B. External modifications for the Dodge W8 cylinder head, part numbers P4876281 (semi-machined) and P4876697 (CNC ported) and casting number P4532933; and part number P4876281 and casting number P4510019; Ford cylinder head, part number E3ZM6049C3L and General Motors 18 degree cylinder head, part number 24502580 will be limited to milling of the head not to exceed 0.175 inch.

C. Painting or coating of the cylinder heads will not be permitted.

20C - 5.6.3 Internal Changes

Except as provided below, internal polishing and porting will be permitted. The addition of foreign material (i.e., epoxy, plastics, etc.) to the production casting will not be permitted. The original internal shape and configuration of the port must not be notched, grooved, channeled or ridged in any way. After porting and/or polishing the intake port walls, port roof and port floor from the intake manifold mating surface to the centerline of the intake valve, air can flow over one (1) surface each. When the manufacturer has cast a valve guide support into the roof of the intake port the valve guide support must be blended into the roof of the intake port, eliminating all sharp edges. The maximum port floor height, maximum port roof height, port centerline, and spark plug locations must conform to the approved NASCAR template.

20C - 5.7 Crankshaft / Harmonic Balancer

20C - 5.7.1 Crankshaft

A. Only one-piece magnetic steel crankshafts will be permitted.

B. Aftermarket crankshafts must have the same design as an OEM type crankshaft for the approved engine and must be acceptable to NASCAR Officials.

C. Only two-piece insert style crankshaft main bearings will be permitted. Roller bearings will not be permitted.

D. Crankshafts may be lightened and balanced. A solid material must be used to balance crankshafts.

20C - 5.7.2 Harmonic Balancer

A. Harmonic balancers must be used and must be used as manufactured. Only SFI 18.1-approved magnetic steel harmonic balancers and balancer hubs, acceptable to NASCAR, will be permitted.

B. Unless otherwise authorized by NASCAR, electronic switching devices, sensors or magnets will not be permitted on or near the harmonic balancer, crankshaft, camshaft or flywheel.

20C - 5.8 Camshaft / Valve Lifters / Rocker Arms

20C - 5.8.1 Camshaft

A. Any magnetic steel roller or flat tappet lifter camshaft will be permitted. The maximum camshaft bearing journal size must not be more than 2.362 inches (60mm).

B. Only standard production design timing chains and belt drives will be permitted for operating the camshaft on all engines. Camshaft timing must be fixed, variable timing devices will not be permitted. All camshaft timing drive systems must be acceptable to NASCAR Officials.

C. Camshafts must be driven in the same direction of rotation as the NASCAR-approved standard production engine crankshaft. The camshaft must maintain the same firing order as the NASCAR-approved production engine.

The approved firing orders using approved cylinder identification are as follows:

| | |
|----------------|-----------------|
| Dodge | 1-8-4-3-6-5-7-2 |
| Ford | 1-3-7-2-6-5-4-8 |
| General Motors | 1-8-4-3-6-5-7-2 |

D. The manufacturer's cylinder identification sequence is as follows:

| Dodge and General Motors | Ford |
|--------------------------|----------------|
| <u>(Front)</u> | <u>(Front)</u> |
| 1 2 | 5 1 |
| 3 4 | 6 2 |
| 5 6 | 7 3 |
| 7 8 | 8 4 |

20C - 5.8.2 Valve Lifters

A. Valve actuation must be limited to one (1) lifter, one (1) push rod and one (1) rocker arm per valve. All valve actuation systems must be acceptable to NASCAR Officials.

B. Only solid magnetic steel flat tappet straight barrel and steel roller lifters will be permitted.

C. The lifter diameter must not exceed a maximum of 0.875 inch for flat tappet lifters and 0.940 inch for roller lifters.

D. Any type of mechanical assistance exerting a force to assist in closing the valve, commonly known as rev-kits, will be permitted.

E. Only magnetic steel one-piece, push rod assemblies without any moving parts, will be permitted.

20C - 5.8.3 Rocker Arms / Valve Covers

A. Only steel or aluminum rocker arms, one (1) per valve that are acceptable to NASCAR Officials may be used.

B. Valve covers must be made of steel or aluminum. Magnesium and other exotic materials will not be permitted.

20C - 5.9 Intake Manifold

A. The approved manufacturers' identification in the form of cast-in part numbers must remain unaltered on the intake manifold.

B. The intake manifold must conform to the NASCAR-approved templates, gauges, scales and other measuring devices.

C. NASCAR Officials may use an intake manifold provided by the respective manufacturer as a guide in determining whether a Competitor's intake manifold conforms to the specifications of the Rule Book.

D. Only open plenum intake manifolds will be permitted. The plenum opening must not be smaller than a minimum size of 3-5/8 inches in width by 3-9/16 inches in length. The maximum plenum opening size must not be larger than 3-3/4 inches in width by 3-11/16 inches in length. The plenum opening must have radiused corners that maintain the shape and configuration of an open four (4) barrel carburetor gasket.

E. The inside floor of the plenum and the carburetor mounting flange must remain in the approved location.

F. The intake runners must maintain the same length as compared to the approved intake manifold with the same part number.

G. Each engine will be permitted a maximum of four (4) approved intake manifolds. New approvals must be preceded by deleting a currently approved manifold. The following intake manifolds are approved for use in competition:

| <u>MANUFACTURER</u> | <u>PART NUMBER</u> |
|---------------------|--|
| Dodge | P4532598 P4532598AB |
| Ford | Ford M-9424-A351 Ford M-9424-X351 Edelbrock 2961 Edelbrock 2991 |

H. Modifications Permitted:

- (1) Polishing in the plenum area is permitted only to "clean up" imperfections in the castings in a manner acceptable to NASCAR Officials.
- (2) Polishing of ports in the intake manifold will be permitted.

I. Modifications Not Permitted:

- (1) Added air directional devices will not be permitted inside the intake manifold.
- (2) The length of the intake manifold runners must not be changed and remain as manufactured.
- (3) Epoxy or fillers will not be permitted on the plenum floor or on the walls of the plenum.
- (4) Air holes will not be permitted to be opened in the intake manifold.
- (5) External modifications to the intake manifold will not be permitted unless approved by the Series Director.
- (6) Painting and/or coating of the intake manifold will not be permitted.

J. Spacers between the engine block and the intake manifold will not be permitted.

K. Spacers between the intake manifold and the cylinder heads will not be permitted.

L. The intake manifold must have a minimum of 1/4 inch of surface on all sides to seal the intake manifold to the cylinder head.

M. The carburetor mounting studs must be solid and remain in the approved location and maintain a stud size of 5/16 inch diameter.

N. Any spacer added between the carburetor (per sub-section 20C-5.10.2) and the intake manifold must be mounted using the approved 5/16 inch diameter, solid carburetor mounting studs and must not be welded to the intake manifold.

O. The intake manifold and the valley tray material must be aluminum. Magnesium and other exotic materials will not be permitted. External coatings will not be permitted.

P. The centerline of the intake ports, as seen from above, must remain in the approved location.

Q. The intake manifold ports must be completely sealed to the cylinder head ports at all times. Intake manifold sealing must be done by using one (1) approved paper-type intake manifold gasket per side. Metal shim type or metal impregnated intake manifold gaskets will not be permitted. The as manufactured thickness of approved intake manifold gaskets must not be less than 0.060 inch and must not be more than 0.125 inch per side. Intake manifold gaskets must be secured to either sealing surface (intake manifold or cylinder head) with an approved adhesive. At NASCAR's discretion the intake manifold and cylinder heads may be leak tested to ensure proper sealing at any time during the Event.

R. Drilling or tapping of the intake manifold plenum or intake runners will not be permitted unless approved by the Series Director.

20C - 5.10 Carburetor

NASCAR Officials may use a carburetor provided by the respective manufacturer as a guide in determining whether a Competitor's carburetor conforms to the specifications of the Rule Book.

20C - 5.10.1 Eligibility

The following carburetors are eligible for use:

A. The Holley 4150HP Series, list number 80507 (390 CFM), four (4) barrel carburetors with a maximum venturi size of 1-1/16 inches and a maximum throttle bore size of 1-7/16 inches are approved for use on all engines except the NASCAR-approved "Spec Engine". The venturis must maintain a circular (round) cross section. This is the only carburetor eligible for use on all engines, except the NASCAR-approved "Spec Engine" in the NASCAR K & N Pro Series. Only Holley replacement or service parts can be used in any carburetor rework. All carburetor modifications must be acceptable to NASCAR Officials. Carburetors and/or carburetor components machined from billet materials will not be permitted.

The Holley 4150HP Series, list number 80509 (830 CFM), four (4) barrel carburetor is the only carburetor approved for the NASCAR-approved "Spec Engine". The carburetor must remain as supplied by the NASCAR-approved supplier (refer to sub-section 20C-4.1B).

B. Holley 4150HP Series, list number 80507 (390 CFM) rework guidelines are as follows:

(1) Carburetor Main Body

The only carburetor main body that will be permitted will be the Holley main body with casting number 6R-7879B. The Holley casting numbers must remain legible on the top of the main body. Main bodies must remain as manufactured. Machining, reshaping, grinding, polishing, or drilling holes will not be permitted. The addition of material(s) such as but not limited to, epoxies, sleeves, inserts or tubes will not be permitted to the carburetor main body.

(2) Carburetor Boosters

One (1), one-piece singular discharge booster per venturi must be used. The type of booster must not be changed. The Holley booster part number 45R-107-1, with the casting number 45R-107 and part number 45R-312R, with the casting number 45R-312 are the only boosters that will be permitted. The Holley casting numbers must remain legible on the top of all booster stems. Size and shape must not be altered. Height and location of the boosters must remain as manufactured. All boosters must maintain a minimum outside diameter of 0.616 inch. The maximum inside diameter of the booster stem passage must not exceed 0.144 inch. The addition of material will not be permitted to the boosters. A bonding agent (epoxy) may be used to assist in adhering the carburetor booster to the carburetor main body, but it must not extend past the carburetor main body booster mounting hole into the carburetor venturis. Each carburetor booster must be secured by a steel wire not less than 0.025 inch in diameter. The wire must be installed in such a manner that in the case of a carburetor booster failure, the carburetor booster should remain suspended in the carburetor without any interference to the operation of the throttle shaft and the throttle plates (butterflies). A minimal size hole, acceptable to NASCAR Officials, must be drilled through the top of the booster barrel, inboard of the booster attaching stem. The 0.025 inch steel wire must loop through the hole in the booster barrel and then be tied to the respective float bowl vent tube. As an alternative to drilling a hole in the booster, the 0.025 inch steel wire must pass through the booster barrel from top to bottom and then be tied to the respective float bowl vent tube.

(3) Carburetor Venturis

The venturi is defined as a constricted throat in the main body air passage. The location of the venturi must remain as produced by the manufacturer. The venturis must not be raised or lowered in the body of the carburetor. The venturis must maintain a circular (round) cross section. The maximum diameter of the venturis must not exceed 1.064 inches. Altering or reshaping of the venturi in any manner will not be permitted.

(4) Carburetor Throttle Body (base plate)

The only carburetor throttle bodies permitted will be the Holley throttle bodies with casting numbers 12R-6236B, 12R-11524B or 12R-11524M. The Holley casting number must remain legible on the left secondary "ear" of the carburetor throttle body casting number 12R-6236B, and on the right secondary "ear" of the carburetor throttle body casting number 12R-11524B or 12R-11524M. The carburetor throttle body must be used as provided by the manufacturer. The positioning of the throttle bores in the carburetor throttle body must be the same as provided by the manufacturer. The throttle bores must be completely round. The throttle bores must not be larger than 1.438 inches. The throttle bores must be straight without taper from top to bottom. The throttle bores must remain perpendicular to the top and bottom of the carburetor throttle body. The carburetor throttle body must not be altered in shape or size.

(5) Throttle Plates (butterflies)

The throttle plates (butterflies) must be magnetic steel and must not be thinned or tapered. The type of screw used to retain the throttle plates (butterflies) to the throttle shafts must be pan head type either straight slotted, phillips head or allen type head. Idle holes may be drilled in the throttle plates (butterflies). The throttle plates (butterflies) must be mounted to the throttle shaft in the approved location.

(6) Throttle Shafts

Holley magnetic steel throttle shafts must be used. Shafts must remain standard production size and must not be thinned or cut in any manner. Throttle shaft rotation must be in the same direction as produced by the manufacturer. The combined thickness of the throttle shaft and the throttle plate (butterflies) must not be less than 0.197 inch. Throttle shaft seals that prevent air leakage must be used on all throttle shafts where the shafts exit the carburetor throttle body. The primary and secondary throttle shafts must each have an independent travel stop to prevent the throttle plates (butterflies) from opening beyond vertical.

(7) Carburetor Metering Blocks

Only Holley metering blocks will be permitted. Surfacing of the metering blocks for improved gasket seal will be permitted. A bonding agent (epoxy) may be used to assist in adhering the emulsion tube plugs to the carburetor metering blocks, if needed to help prevent fuel leakage only.

(8) Carburetor Floats

Carburetor floats must be a Holley replacement or service part acceptable to NASCAR Officials. Carburetor floats designed for road courses, acceptable to NASCAR Officials, will be permitted at road course Events only.

(9) Alterations that, in the judgment of NASCAR Officials, were made to allow additional air to be picked up below the opening of the venturi, such as but not limited to, altered gaskets, throttle bodies, drilling or machining holes into the carburetor will not be permitted.

(10) External modifications and/or alterations to the carburetor will not be permitted.

20C - 5.10.2 Carburetor Spacer / Gaskets

A. Only a one-piece, solid, aluminum carburetor spacer, up to a maximum one (1) inch in thickness, acceptable to NASCAR Officials may be installed between the intake manifold and the carburetor on all engines except the NASCAR-approved "Spec Engine". An open or four (4) hole spacer may be used. The spacer opening must be perpendicular to the base of the carburetor with no taper or bevel. The gasket surfaces of the spacer must conform to the shape of the carburetor base plate. The carburetor spacer used on the NASCAR-approved "Spec Engine" must remain as supplied by the NASCAR-approved supplier (described in sub-section 20C-4.1B).

B. Only two (2) non-metallic gaskets (1 per side), maximum thickness 0.065 inch, will be permitted. Gaskets can only be altered to match the carburetor base plate openings.

20C - 5.10.3 Carburetor Restrictor

A. A carburetor restrictor must be used when required by NASCAR.

B. For Events where a carburetor restrictor is required:

- (1) All model cars will be required to use a 1/8 inch thick aluminum restrictor plate with four (4) holes or a one (1) inch thick, four (4) hole aluminum tapered bore spacer, as specified on the Official Entry Blank, using a maximum 0.065 inch thick gasket.
- (2) A restrictor plate, a four-hole spacer, one (1) inch thick or a one (1) inch thick, four (4) hole aluminum tapered bore spacer, and necessary sealing gaskets will be issued by NASCAR for competition. Spacer(s) between the restrictor plate or tapered bore spacer and the intake manifold or above the NASCAR-issued four-hole spacer or tapered bore spacer will not be permitted.
- (3) Restrictor plates and spacers or tapered bore spacers used for testing must be furnished by the Competitors, unless otherwise authorized by the Series Director.
- (4) Competitors must use the restrictor plate or tapered bore spacer as designated on the Official Entry Blank to prepare for the Event. A final restrictor plate or tapered bore spacer size will be determined after the completion of the final practice prior to the Race. Any attempts to, and/or actions that result in, pulling air from sources other than normal approved methods through the air filter and carburetor venturis, such as, but not limited to, drilling of holes or altering of carburetor restrictor(s) or gaskets will not be permitted.
- (5) When the NASCAR-approved "Spec Engine" is used taller carburetor studs will be required to allow for proper installation of the carburetor and carburetor restrictor.

20C - 5.10.4 Carburetor Fuel Filter

Fuel filter(s) on the pressure side of the fuel pump must only be used at the carburetor fuel bowl inlets. The location and size of the fuel filter(s) must be acceptable to NASCAR Officials.

20C - 5.11 Forced Air Induction

Fuel injection, superchargers or turbochargers will not be permitted.

20C - 5.12 Carburetor Air Filter / Air Intake

The air filter housing, including the filter, must be installed at all times during practice or competition. Performance enhancing additives or chemicals will not be permitted in the air filter housing, air filter, or the air intake area.

20C - 5.12.1 Carburetor Air Filter / Air Filter Housing

A. Only a round dry type, unaltered paper or dry type gauze air filter element maintaining a minimum of 14 inches and a maximum of 16 inches outside diameter will be permitted. The air filter element must maintain a minimum of 1-1/2 inches and a maximum four (4) inches in height. The air filter element must maintain a consistent height when measured anywhere around the circumference of the air filter element. All air filter elements must remain as manufactured. All air must be filtered through the element.

B. Only a round NASCAR-approved composite or metal air filter housing will be permitted. The top and bottom of the air filter housing must be solid and must be the same diameter. The top and the floor of the air filter housing from the air filter element to the outside edge of the air filter must remain parallel to the top and bottom of the air filter element. A maximum of a one (1) inch lip will be permitted from the air filter element to the outside edge of the air filter housing top and bottom. The air filter housing must be centered on the carburetor and seated on the air filter housing gasket ring. The air filter housing carburetor mounting ring must have one (1) round hole. Tubes, funnels or any other device (other than a single vertical vane, centered in the housing, extending front to rear) that may control the flow of air will not be permitted inside of the air filter or between the air filter housing and the carburetor. Two (2) 1/4 inch diameter drain holes must be drilled in the bottom of the air filter housing at the lowest point. Additional holes will not be permitted.

C. Tape may only be used in a manner acceptable to NASCAR Officials.

20C - 5.12.2 Air Intake / Cowl / Cowl Flaps

A. Only cowl air induction (cold air box) will be permitted. The cowl opening must be connected to the air filter housing by extending the metal cowl air deflector to the sides of the air filter housing by the straightest possible line to the outer circumference of the housing. Similarly, the floor of the cowl air deflector must be attached flush to the bottom of the air filter housing with only one smooth bend or single radius allowed from the windshield to the air filter housing. The floor of the cowl air deflector must not be below the floor of the air filter housing. Steps, ridges, vanes, venturis, air deflectors or restrictions will not be permitted in this area.

B. The cowl-opening top panel when complete must be acceptable to NASCAR Officials. A non-adjustable rectangular opening a maximum of 20 inches long by 2-1/2 inches wide may be cut in the sheet metal at the center of the cowl top panel. An air entrance flange (air deflector) using a piece of sheet metal with a single radius may be installed under the cowl top panel opening. The air entrance flange (air deflector) must be a minimum of 14 inches wide and a maximum of 20 inches wide.

C. The front of the cowl must seal to the back of the hood when the hood is closed. This must be done by attaching flat sheet metal in the area between the windshield and the hood and sealing with weather stripping at the back of the hood and along the windshield.

D. On tracks 1-1/8 miles and more in length, excluding road courses, the outer areas of the flat sheet metal must have hinged trap doors (cowl flaps) that are rectangular in shape designed to cover three (3) inch by 14 inch openings. The hinges must be mounted on the forward edge of the trap door in such a way that air movement will keep the trap doors closed when the car is moving forward. The three (3) inch by 14 inch rectangular openings must begin three (3) inches from the fender of the car and extend inward toward the center of the car as seen from above. Springs that hold the trap door closed will not be permitted.

20C - 6 ENGINE / CAR ELECTRICAL SYSTEM

All engine/car electrical system components must be approved by NASCAR. Prior to being used in competition, all major engine/car electrical system components must be submitted, in a completed form/assembly, to the office of the NASCAR Competition Administrator for consideration of approval and approved by NASCAR. Each such part may thereafter be used until NASCAR determines that such part is no longer eligible.

20C - 6.1 Ignition System

A. Magnetos or computerized systems will not be permitted.

B. Crank trigger ignition systems will not be permitted.

C. Adjustable timing controls will not be permitted.

D. Retard or ignition delay devices will not be permitted.

E. The ignition system wiring must not contain any open wires or terminals. Unused ignition amplifier box wires must be terminated and/or sealed to prevent connection in a manner acceptable to NASCAR Officials.

F. Each car must have primary ignition system components and may have optional backup ignition system components. The backup ignition system components must be disconnected from the primary system components using primary/backup switch(s). The ignition systems must consist of an ignition amplifier box, coil, distributor pickup and optional rev limiter (internal/external).

G. Ignition system components including, but not limited to, ignition amplifier boxes, coils and external rev limiter must be mounted to a removable ignition system mounting plate, as described in sub-section 20C-6.1H.

H. A removable ignition system mounting plate, acceptable to NASCAR Officials, must be attached to the right side dash panel and located to the right side of the center windshield bar (#4A) as described in sub-section 20C-3.3 with a minimum of four (4), minimum 1/4 inch diameter bolts. The removable ignition system mounting plate must be metal. The components must be visible for ease of inspection through the windshield and be wired such that the plate can be easily removed for inspection purposes.

I. NASCAR Officials may at their discretion inspect, test and/or destructively test ignition system components including ignition amplifier boxes, tachometers, distributors, etc.

J. NASCAR Officials may use approved ignition system components provided by the respective manufacturer as a guide in determining whether a Competitor's ignition system components conform to the approved components.

20C - 6.1.1 Ignition System Wiring

A. All ignition system wiring, including wiring to the ignition amplifier box, distributor and/or any gauges must be acceptable to NASCAR Officials.

B. With the exception of the distributor pickup wire pairs and coil wire pairs, each ignition system wire must remain separate and inaccessible during competition.

C. Ignition system wires must be continuous from the start connector to the end connector. Splices, bare and punctured wires will not be permitted in the ignition system.

D. All connectors must allow for the application of a NASCAR seal.

E. The distributor pickup signal must be carried by a shielded wire pair with one (1) shielded ground wire. The wire pair may be twisted within the shield. The shielded ground wire must be located and grounded at the end nearest the ignition amplifier box.

F. Only the distributor pickup wire pairs can be contained within a shielding wrap with one (1) wire pair per shielding wrap. Tape, heat shrink wrap, and/or banded wire looms will not be permitted in the ignition system wiring.

G. A dedicated single ground stud must be located on, or as close as possible to, the dash panel bar (#8). All ignition system components must be grounded at this stud. Accessory components must not be connected to this stud. A ground wire may be run from this stud to the battery ground or main ground stud.

H. Additional connectors may be permitted at the NASCAR Officials discretion to facilitate removal for inspection purposes.

I. The use of tracer wire color schemes is acceptable to specify backup components.

J. Accessory component wiring, including power and ground wires, must remain completely separate from the ignition system wiring and away from ignition system components. Ignition system components must draw power from the battery side of the starter solenoid. When the starter solenoid is an integral part of the starter assembly, ignition system components must draw power from a single stud terminal block located visibly on the bottom of the dash panel bar (#8), near the removable ignition system mounting panel. Power must be supplied to the single stud terminal from the master power switch. Accessory components and switches will not be permitted to draw power from the ignition system wiring at any point.

20C - 6.1.2 Ignition Amplifier Box

A. Ignition amplifier boxes and rev limiters that are analog only, which **do not** contain programmable, computerized, or memory circuits, will be permitted.

B. Rev limiting devices acceptable to NASCAR Officials may be required and must be attached and wired to the ignition amplifier box(s) in a visible manner. Terminals and pin connections designed for the rev limiter connection must have the ability to apply a NASCAR seal. Rev limiter chips must have the ability to apply a NASCAR seal.

C. The ignition amplifier box(s) may have either an internal rev limiter or be connected to an external rev limiter.

D. Each ignition amplifier box is allowed six (6) ignition wires, two (2) power leads and either a rev limiter pin connection or approved rev limiter connection terminal. If originally equipped with a single white points trigger wire and the white points trigger wire is not used with an interrupt switch/system or required by the distributor, the white points trigger must be terminated and sealed to prevent connection in a manner acceptable to NASCAR Officials. If a remote interface control box is connected to the white point trigger wire, this wire must be encased in a grounded shield.

E. The ignition amplifier box must use a connector of the Packard Electric type (MSD part #8170) or the Deutsch Connector type (MSD part #8180) to facilitate testing of the ignition components during inspection. The wiring sequence must be the same as the General Motors or Ford ignition amplifier boxes. The wire color, gage, and pin assignment must follow the table below:

| <u>Pin</u> | | <u>Description</u> | <u>Color</u> | <u>Gage</u> |
|------------|----------------|--------------------|----------------|-------------|
| <u>MSD</u> | <u>Deutsch</u> | | | |
| A | 5 | Power | Red | 16-18 |
| B | 2 | Tachometer Signal | Green or Brown | 16-18 |
| C | 6 | Coil (-) | Black | 16-18 |
| D | 1 | Coil (+) | Orange | 16-18 |
| E | 3 | Pickup (-) | Green | 16-18 |
| F | 4 | Pickup (+) | Violet | 16-18 |

F. The ground negative (-) lead wire must be a continuous single black minimum 12 gage wire and the positive (+) power lead must be a continuous single red minimum 12 gage wire.

G. Modifications to ignition amplifier boxes will not be permitted.

20C - 6.1.3 Distributor

A. The distributor must mount in the approved location and maintain the same firing order as the approved factory produced engine for the make and model engine as described in sub-section 20C-5.8.1C.

B. Only two (2) ignition pickups of the magnetic, optical or Hall-effect type will be permitted in the distributor.

C. The distributor must have a single connection to the coil selector, two (2) shielded distributor pickup wire pairs connecting the distributor pickup to the ignition amplifier box, eight (8) spark plug wire connections, and may have two (2) power wires for distributor pickups that require a power source. Power leads must never be contained in a common connector with the signal wires.

D. The positive (+) pickup wire must be a single continuous 16-18 gage violet wire and the negative (-) pickup wire must be a single continuous 16-18 gage green wire. These two (2) wires must be a pair encased by a grounded shield. The ground must run to the dedicated ignition ground stud.

E. A distributor which uses a remotely mounted interface control box(s), must have the interface control box mounted on the removable ignition system mounting plate. Wiring from the distributor interface control box and the signal wire from the interface control box to the ignition amplifier must be encased in a grounded shield. The interface control box must be used as produced by the manufacturer with no modifications and may be sealed by NASCAR Officials. The interface control box must be accessible and removable for inspection purposes.

F. When not used with the remote interface control box, the optional power wires must each be a single continuous 16-18 gage red wire connected to the primary/backup switch. The distributor end of the wire must have a connector of the Packard Electric type (MSD part #8174), or a NASCAR-approved equivalent, to facilitate testing of the ignition components during inspection.

20C - 6.1.4 Coils

A. The positive (+) coil wire must be a single continuous 16-18 gage orange wire and the negative (-) coil wire must be a single continuous 16-18 gage black wire. The coil wire pair may be twisted.

B. The coil wires may use a connector of the Packard Electric type (MSD part #8173) or NASCAR approved equivalent. If used, Pin "A" must be the negative (-) pickup wire and Pin "B" must be the positive (+) wire.

C. At least six (6) inches of the secondary spark wire from the coil selector to the distributor must remain easily accessible on the removable ignition system mounting plate for RPM sensor application.

D. A coil secondary spark wire selector will be permitted.

E. A firewall feed through connector may be used between the coil and distributor.

20C - 6.1.5 Tachometers

A. Tachometers, if used, must be mounted to either the steering column or the dash gauge panel. The mounting must be acceptable to NASCAR Officials. In all cases, tachometer wiring must be as visible as possible, and easily accessible for inspection.

B. Tachometers should have a maximum of three (3) wires connected to the ignition system allowing for a ground, power and a tachometer signal.

C. The tachometer must have a connector of the Packard Electric type (MSD part #8172), or NASCAR-approved equivalent, to facilitate testing during inspection. The tachometer connector must be located on or at the removable ignition system mounting plate. The wire color, gage, and pin assignment must follow the table below.

| <u>Pin</u> | <u>Description</u> | <u>Color</u> | <u>Gage</u> |
|------------|--------------------|----------------|-------------|
| A | Ground | Black | 16-18 |
| B | Power | Red | 16-18 |
| C | Tachometer Signal | Green or Brown | 16-18 |

D. The tachometer signal wire must be run from the tachometer as a single continuous green or brown 16-18 gage wire to connect the primary and backup ignition amplifier boxes to the tachometer through blocking diode(s).

E. The tachometer power wire must be connected to the battery side of the starter solenoid.

F. If an illuminated tachometer is used, the light power and ground wires must connect into the tachometer power and ground between the tachometer and the tachometer connector.

G. Tachometers with integral shift lights, or pit road speed lights will be permitted.

H. If an external shift light or pit road speed light is used, its signal input must come from the primary and/or backup ignition amplifier boxes and not as an output from the tachometer.

20C - 6.1.6 Interrupt Switch

A. An auxiliary on/off button that will shut off the ignition system must be mounted on the steering wheel within reach of the driver's thumb when the hands are in the normal driving position. The auxiliary switch must shut off the engine immediately when depressed and the engine must not restart until the button is depressed again.

B. A NASCAR-approved ignition interrupt system which contains a manifold vacuum switch and a brake line pressure switch (and may include a brake pedal position switch) may be used at the crew chief's option, in conjunction with or to replace the auxiliary on/off button on the steering wheel.

C. The button/interrupter should be mounted inline of the red 16-18 gage power between the main ignition switch and the primary/backup switch. When the button/interrupter is engaged the ignition amplifier box must automatically shut off. If the ignition amplifier box is originally equipped with a single, white points trigger wire, this wire may be used with an interrupt switch/system.

D. The button/interrupter must use a connector of the Packard Electric type (MSD part #8173), or NASCAR-approved equivalent, to facilitate testing of the ignition system during inspection.

E. Unless otherwise authorized by the Series Director, switches and/or any device other than those described above that are designed to interrupt the operation of the engine will not be permitted.

20C - 6.1.7 Main Ignition Switch

The main ignition switch must be an on/off toggle type and be located next to the starter switch in the main switch panel. The switch must connect power to the input of the interrupter device.

20C - 6.1.8 Primary / Backup Switch

A single switch may be used to select the primary or backup ignition system and it must be mounted on the dash panel.

20C - 6.2 Spark Plugs

Any make or brand of spark plugs may be used. All spark plugs must thread into the cylinder heads using only M14 x 1.25 threads.

20C - 6.3 Alternator

A single alternator system with an internal voltage regulator and one (1) output wire must be used. External voltage regulators will not be permitted. The alternator must be mounted on the front of the engine with the center higher than the center of the water pump. Only standard production V-type or flat type V-ribbed alternator drive belts will be permitted. Cog type belts will not be permitted.

20C - 6.4 Starter

The self-starter must be in working order and in the approved location. Gear reduction starters acceptable to NASCAR Officials will be permitted.

20C - 6.5 Battery

A. Only NASCAR-approved batteries with a maximum nominal voltage of 12 volts will be permitted. Each battery(s) must be of the gel cell or absorption glass mat design, weighing a minimum of 17 pounds.

B. The battery(s) must be located in a battery box inside the left or right rear quarter panel in front of the left or right rear tire. Any battery(s) installed during the Race must be installed in the battery(s) box.

20C - 6.6 Electrical Switch Locations

A. A labeled on/off rotary-type master switch, with "on" being in the clockwise direction, must be located at or on the front of the dash panel at the longitudinal centerline of the car. The switch must be wired to the battery cable in a manner that will disconnect all electrical power in the car.

B. All ignition, starter and accessory electrical switches must be located on the front of the dash panel. Within the switch panel, accessory switches must be located to the right or below the main ignition switch. All electrical switches must be labeled.

C. Accessory wiring must remain separated from the ignition wiring system.

20C - 6.7 Accessories

A. Except as provided below, cars and drivers will not be permitted to carry onboard computers, automated electronic recording devices, electronically actuated devices, micro-processors, recording devices, filming devices, electronic digital memory chips, traction control devices, digital readout gauges and the like, even if inoperable or incomplete. Competitors will not be permitted to have or have had on his/her person or in his/her possession or in his/her car a device(s) at an Event designed specifically to enhance the traction capabilities of the car, even if inoperable or incomplete.

B. For broadcasting and media related purposes, NASCAR may allow or require selected cars to compete with broadcast telemetry or other positioning and informational systems. Unless otherwise authorized or required by NASCAR, the broadcast telemetry signal from these systems will be limited to the following parameters:

- (1) RPM (inductive pickup on the secondary wire only).
- (2) Transmission gear selection.
- (3) MPH (taken from sensors on the drive shaft or rear wheel only).
- (4) Brake pedal application.
- (5) Throttle position indicator (must not be attached to the carburetor).
- (6) Camera positioning and video switching.
- (7) All camera locations and styles must be approved by NASCAR.
- (8) Upon request of NASCAR Officials, Competitors must install the required camera(s) and broadcast system(s) in a manner and location acceptable to NASCAR Officials.

C. NASCAR may require cars to carry NASCAR-approved on-board impact accelerometers mounted in a standard location and manner approved by NASCAR. It is recommended that the mounting bracket be installed in the car. The mounting bracket must be welded to the top of the main frame rail on the left side of the seat and must be parallel with the bottom of the seat with the arrow on the bracket pointing forward. NASCAR shall own any and all data generated and/or collected by such accelerometers and shall control the use and dissemination of such data.

D. Two (2) NASCAR-approved timing and scoring transponder mounting brackets must be installed. One (1) on the left and one (1) on the right side of the fuel cell container, 14 feet, two (2) inches rearward of the leading edge of the front of the car to the front edge of the transponder bracket, mounted vertically with the square tab on the bottom, not higher than the bottom of the container. The brackets must be fastened with 3/16 inch diameter small head pop rivets (from the outside) through the holes in the center of the bracket with 3/16 inch diameter rivet washers on the inside. As an option, magnetic steel transponder brackets welded to the rear sub-frame side rails will be permitted. When approved weight containers interfere, the transponder bracket must be welded to the outside vertical surface of the weight container.

E. NASCAR may require cars to carry NASCAR-approved on-board data loggers equipped with designated sensors mounted in a standard location and manner approved by NASCAR. NASCAR shall own any and all data generated and/or collected by such data loggers and shall control the use and dissemination of such data. All competitors must cooperate with NASCAR Officials with the installation and operation of such data logging systems.

F. Unapproved remote lap timing or speed sensing devices will not be permitted.

G. All electrical wiring harnesses, switches and connectors must be acceptable to NASCAR Officials. All wiring must be point-to-point and each wiring connection must be easily traceable and removable from the car for inspection purposes.

H. Competitor's use of filming and recording devices will be limited to internal review of pit stops only and not for promotion, resale or other commercial exploitation without NASCAR's prior, written approval. Filming or recording device(s) will not be permitted on board the race car at any time unless previously approved by NASCAR.

I. Electronic oil, water and fuel pressure gauges and oil and water temperature gauges must be approved by NASCAR and they must be completely independent of the ignition system. All gauge sending units and sensors must be located forward of the front firewall above the engine. When using a common manifold type mount for multiple sensors and sending units, an air gap space must be visible between each sensor or sending unit mounting port.

J. Gauges used in competition, including but not limited to tachometer, oil pressure gauge, oil temperature gauge, water temperature gauge and voltmeter, must be installed and functional at all times during competition. Ignition and accessory switches and interrupter system components must be installed at all times during competition.

K. All electrical outlets used to connect the remote generator to the car must be located behind the driver's seat but not further rearward than the "B" post on the left side or secured in the left "B" post.

L. Water bottles must not be in the car during qualifying. Hydration systems, when used, must be installed in the same location for qualifying and the Race. The containers must be securely mounted to the chassis in a manner acceptable to NASCAR Officials.

M. For all road course Events, all cars must be equipped at all times with a functional defogger and a rear window flashing light part #40R00FRN and should be equipped with a functional windshield wiper motor. The rear window flashing light must be an independent system and must be activated during all wet weather conditions. The rear window flashing light must be located inside of the upper left section of the rear window. Installation of all components must be acceptable to NASCAR Officials.

20C-6.8 In-Car Radio Communications

A. The in-car radio must be analog only and must not be capable of transmitting or receiving in a digitized, encrypted or scrambled format as determined by NASCAR. Keypad style and/or password protected radios will not be permitted. Scanning and/or channel hopping transmissions to or from the in-car radio will not be permitted. All transmissions to and from the in-car radio must be in the 450.000MHz-470.000MHz range, and all in-car radio transmitting and receiving frequencies including squelch codes should be registered annually in the NASCAR Radio Data Base <http://freqcoordination.nascar.com>. All frequency changes must be updated prior to being used during an Event and confirmed by NASCAR's Official Radio Supplier. The in-car radio is not permitted to transmit or receive any type of telemetry (data) signal or information other than audio communications and must remain independent from any electronic system in the car. Teams will not be permitted to rebroadcast transmissions to or from the in-car radio at any time during an Event. It is strongly recommended that all in-car radio frequencies be licensed for use by the Federal Communications Commission (FCC) and meet all applicable regulations and guidelines.

B. Only one (1) NASCAR-approved, two-way radio and one (1) radio push to talk button will be permitted. It is not permitted to have any frequency of any Competitor installed in the radio at any time. The car is permitted only one (1), approved radio wiring harness.

C. Other than antennas that are approved for broadcasting and media related purposes only, a single, NASCAR-approved, radio antenna, must be mounted on the exterior of the body, positioned not more than two (2) inches to the right or left of the roof centerline and in the center of the length measurement of the roof, will be permitted.

D. At all times during practice(s), qualifying and the Race the spotter must have radio communications with the driver and must monitor the NASCAR frequency. Spotters must be in the designated spotter location at all times during competition. The radio frequency being used will be made available by NASCAR Officials.

E. Driver to driver radio communications will not be permitted.

20C - 7 ENGINE COOLING SYSTEM

All engine cooling system components must be approved by NASCAR. Prior to being used in competition, all major engine cooling system components must be submitted, in a completed form/assembly, to the office of the NASCAR Competition Administrator for consideration of approval and approved by NASCAR. Each such part may thereafter be used until NASCAR determines that such part is no longer eligible.

Icing, freon-type chemical or refrigerants must not be used in or near the engine compartment.

20C - 7.1 Water Pump

A. Only aluminum mechanical water pumps turning in the same direction as the crankshaft rotation and in the approved location will be permitted.

B. Water pump impellers may be altered.

C. Coolant flow must be in the same direction as the approved production engine.

D. Only standard production V-type or flat type V-ribbed water pump drive belts will be permitted.

20C - 7.2 Fan / Fan Shroud

A. Engine-driven fans, if used, must be operational and belt driven from the crankshaft. Free spin or clutch type fans will not be permitted.

B. Electric engine cooling fans are optional. When an electric fan is used, it must be mounted parallel to the radiator.

C. If an engine-driven fan is used, it must be a standard magnetic steel fan with a minimum of four (4) blades and must meet the following requirements:

- (1) The minimum diameter of the fan must not be less than 14 inches.
- (2) The fan blades must be a minimum of 3-1/2 inches wide.

D. The installation, type and location of the fan(s) must be acceptable to NASCAR Officials.

20C - 7.3 Radiator Ducts / Radiator Air Inlet

A. Composites will not be permitted for constructing radiator air ducts. When ducting air from the grille to the radiator and/or the oil cooler, the floor of the ductwork must be higher than the bottom of the front air dam by a minimum of one (1) inch. The top of the radiator air duct must not be below the top of the manufacturer's grille opening. The radiator air duct from the grille opening to the radiator must not be wider than the width of the outside of the front sub-frame rails. The floor of the ductwork may extend rearward a maximum of one (1) inch beyond the backside of the radiator. The floor panel, top panel, and side panels of the radiator ductwork must be stationary, non-adjustable panels. Air dividers must be acceptable to NASCAR Officials.

B. One (1), optional, lower panel may be installed below the radiator ductwork floor. The lower panel must be constructed of a maximum 1/8 inch thick aluminum. The maximum width of the lower panel, including any other components (i.e., tubing, braces, straps, etc.), must not be more than 33 inches. The lower panel may extend rearward a maximum of one (1) inch beyond the backside of the radiator. The bottom surface of the lower panel must be higher than the bottom of the front air dam by a minimum of one (1) inch. A maximum of 1-1/2 inch tall vertical sides may be added to the lower panel.

C. When ducting air to the radiator, all air entering the radiator duct from the front of the car must pass through grille openings that were either submitted by the manufacturer or are acceptable to NASCAR Officials. In all cases, air openings must remain between the front sub-frame rails.

D. When the Grand National-Approved (Flange Fit) Composite Body is used all air entering the radiator duct must enter through an approved radiator air inlet located in the lower portion of the front bumper cover. All radiator air inlet openings must be located centered on the chassis longitudinal centerline. The use of radiator air inlet inserts will be permitted.

The radiator air inlet openings must be covered with one (1) or two (2) layers of screen wire attached to the front bumper cover only. A one (1) inch wide metal strip to hold the screen wire to the front bumper cover may be installed on the outer edges of the radiator air inlets only.

E. A polycarbonate window, or a removable panel or door, must be in the top of the duct forward of the radiator for inspection of the backside of the grille and radiator. The opening must be a minimum of four (4) inches by a minimum of six (6) inches.

F. When an electric fan is used, shrouds or panels rearward of the radiator will not be permitted. When an engine-driven fan is used, the shroud must cover the entire circumference of the fan and must not extend more than one (1) inch rearward of the trailing edge of the fan blade.

20C - 7.4 Radiator

A. The radiator must remain stock appearing. Radiator cores and tanks must be constructed from aluminum material. The radiator core must be a standard automotive fin and tube design acceptable to NASCAR Officials. Bar and plate radiator cores will not be permitted. The radiator core must not be wider than the inside width of the front sub-frame rails. Radiator tanks must be installed on the sides of the radiator core. The radiator must remain in the standard position not to exceed two (2) inches from vertical.

B. Radiator dust or shaker screens will be permitted.

C. Radiator installation must be acceptable to NASCAR Officials.

D. The radiator overflow tube must be located at the right cowl area ahead of the windshield. A one-half gallon minimum, one (1) gallon maximum, aluminum overflow container must be located in line with the overflow tube. Additional water tanks, reservoirs or containers used to increase coolant capacity will not be permitted.

E. All radiator cooling tubes must be operational. All cooling fins and tubes must be evenly spaced top to bottom and side to side and must remain at a 90 degree angle to the side tanks. The spacing and width must be acceptable to NASCAR Officials.

F. Radiator hoses or hose and pipe combinations, between the engine and the radiator, must not exceed a maximum of two (2) inches inside diameter for the entire length of the assembly.

20C - 8 ENGINE LUBRICATION

All engine lubrication system components must be approved by NASCAR. Prior to being used in competition, all major engine lubrication system components must be submitted, in a completed form/assembly, to the office of the NASCAR Competition Administrator for consideration of approval and approved by NASCAR. Each such part may thereafter be used until NASCAR determines that such part is no longer eligible.

20C - 8.1 Oil

Any oil is permissible. Combustion enhancing additives will not be permitted.

20C - 8.2 Oil Pressure

Oil pressure may be regulated at the discretion of the crew chief.

20C - 8.3 Oil Filters

Oil filters and breather caps acceptable to NASCAR Officials will be permitted.

20C - 8.4 Oiling System

A. A dry sump oiling system must be used consisting of a single engine oil pump, a metal lubrication oil reservoir tank, approved oil lines, and an overflow expansion tank.

B. A single engine mounted, engine-driven, oil pump with a maximum of five (5) stages will be permitted. The body of the oil pump must not exceed 9-1/2 inches in length and 3-1/2 inches in cross-section. The maximum overall length of the oil pump including seals, bearings, adjusters, bolt-on end plates and covers, not including the front end of the shaft, will be 10 inches maximum. The oil pump must be acceptable to NASCAR Officials.

C. All oil must be pumped by the engine-driven engine oil pump. Additional oil pumps or re-circulating pumps will not be permitted.

D. The lubrication oil reservoir tank must be located behind the driver's seat and forward of the rear jacking bolt crossmember. The lubrication oil reservoir tank must be located to the right of the inside edge of the left side rear sub-frame rail and to the left of the driveshaft tunnel. The lowest component of the lubrication oil reservoir tank, including all connectors, oil lines, and fittings must not be located lower than the bottom surface of the main frame rails. The lubrication reservoir tank must be encased with a minimum 22 gage (0.031 inch thick) leak proof magnetic sheet steel box covered with a magnetic sheet steel top. The lubrication oil reservoir tank cover must not be fastened with quick release fasteners. The lubrication oil reservoir tank encasement flat cover must be bolted in place and remain securely fastened to the top perimeter of the lubrication oil reservoir tank encasement at all times during competition. Teams must take any steps necessary to ensure the integrity of the sealing of the oil reservoir tank flat cover to the top perimeter of the lubrication oil reservoir tank encasement, regardless of situations and/or conditions. The left side of the lubrication oil reservoir tank encasement must be located to the right of the inside edge of the left side rear sub-frame rail. The right side of the lubrication oil reservoir tank encasement must not be located further to the right than a maximum distance of 25-1/4 inches from the inside of the left main frame rail. The distance of 25-1/4 inches is based on the distance between the main frame rails measured inside to inside of 52 inches. The distance will be proportionally calculated from varying NASCAR-approved main frame rail widths as described in sub-section 20C-11.2A. Quick disconnect fittings will not be permitted. Oil lines must not pass through or against the exhaust pipes. Oil lines that pass through the driver's compartment must be located inside the roll cage. Location, installation, venting and air ducting of the lubrication oil reservoir tank encasement must be acceptable to NASCAR Officials. Unless otherwise authorized by the Series Director, the same lubrication oil reservoir tank must be used for the entire Event (practice, qualifying, and the Race).

E. The engine oil system must have a functional, vented overflow expansion tank (a minimum of 1/2 gallon capacity should be used). The vent hose from the lubrication oil reservoir tank to the overflow tank must be protected by a covering acceptable to NASCAR Officials. The location and installation of the tank must be acceptable to NASCAR Officials.

F. The oil pressure line to the oil pressure gauge and/or the oil pressure sending unit must be stainless steel, full coverage, outer braid protected synthetic rubber hose attached with threaded, nipple design hose end fittings should be covered with flame resistant covering acceptable to NASCAR Officials.

20C - 9 ENGINE EXHAUST SYSTEM

The exhaust systems and components must be acceptable to NASCAR Officials and meet the following minimum requirements.

20C - 9.1 Exhaust Headers

A. Exhaust tubing must not cross over or under the engine.

B. Coated headers will be permitted.

C. Thermal wrap will not be permitted on the exhaust headers or collectors.

D. Spacers will not be permitted between the cylinder head and the exhaust header flange. Only one (1) gasket, maximum 0.075 inch thickness, may be used between the cylinder head and exhaust header flange.

20C - 9.2 Exhaust Pipes

A. All cars must have a complete exhaust pipe system at all times and exhaust pipe(s) should exit on the right side of the car.

B. Exhaust pipe(s) from the exhaust header collector take-off must not be larger than 3-1/2 inches inside diameter when a round exhaust pipe(s) is used.

C. The exhaust pipe(s) must not exit more than 24 inches forward of the front edge of the rear wheel opening to the front edge of the exhaust pipe.

D. The exhaust pipe exit width must not exceed 11 inches for one (1) pipe or 22 inches for a combined two (2) pipe system.

E. The exhaust pipe(s) must extend outside the rocker panel but not to exceed a maximum of 1/4 inch.

F. The exhaust pipe(s) must be secured beneath the frame with a minimum of three (3) inches of ground clearance.

G. Frames, rocker and quarter panels must not be notched to accommodate exhaust pipes.

H. Exhaust pipes must be fastened to the headers in a secure manner acceptable to NASCAR Officials.

I. All exhaust pipe connections must be a sealed, interference fit, and acceptable to NASCAR Officials.

J. Each exhaust pipe must be secured to the car with a minimum of two (2) 1/8 inch thick by one (1) inch wide magnetic steel "U" shaped brackets.

K. Exhaust pipes must be made from magnetic steel tubing.

L. Thermal wrap will be permitted to be used on the exhaust pipe under the driver's compartment area only.

M. Sound level requirements may be specified at designated tracks and will be noted on the Official Entry Blank for that Event.

20C - 9.3 Heat Shields

Heat shields, when used to cover the exhaust headers, must be a flat piece of metal not more than four (4) inches wide and not longer than the length of the valve cover.

20C - 10 DRIVE TRAIN

All drive train systems and drive train system components must be approved by NASCAR. Prior to being used in competition, all drive train systems and drive train system components must be submitted, in a completed form/assembly, to the office of the NASCAR Competition Administrator for consideration of approval and approved by NASCAR. Each such part may thereafter be used until NASCAR determines that such part is no longer eligible. All drive train fasteners and mounting hardware must be made of solid magnetic steel.

20C - 10.1 Clutch

A. Only mechanical foot pedal, cable or hydraulic operated clutches will be permitted. Pneumatic assisted clutches will not be permitted.

B. The clutch assembly must be bolted to the flywheel located inside the bell housing.

C. Multiple disc clutches will be permitted up to a maximum of three (3) discs. The disc clutch housing assembly and cover must be made from aluminum or steel. The clutch cover must be the push type design.

D. Only solid magnetic steel pressure plates and magnetic steel floater plates, without any holes will be permitted.

E. Only full circle, fully faced magnetic steel clutch discs with a diameter of 7-1/4 inches will be permitted. Minimal cooling slots will be permitted in the clutch discs.

F. Clutches must be a positive engagement design. Slider or slipper clutch designs will not be permitted.

20C - 10.2 Flywheel

A. Only a solid magnetic steel flywheel, bolted to the crankshaft, will be permitted. Holes and/or other modifications to the flywheel that, in the judgment of NASCAR Officials, are for weight reduction will not be permitted.

B. The minimum starter ring gear outside diameter must be 12-7/8 inches.

20C - 10.3 Bell Housing

A. Only special production aluminum or magnetic steel bell housings acceptable to NASCAR Officials will be permitted.

B. The maximum distance from the machined surface at the back of the engine block to the machined surface at the front of the transmission case must not exceed 6-3/8 inches including any spacers.

C. For all engine block-mounted starters, the starter mounting position must remain on the right side for Ford and General Motors engines and the left side for Dodge engines.

20C - 10.4 Transmission

A. Transmissions must be standard production design. The transmission must be from an approved manufacturer. NASCAR Officials may use a transmission provided by the respective manufacturer as a guide in determining whether a Competitor's transmission conforms to the specification of the Rule Book.

B. Unless otherwise specified by NASCAR, the same transmission must be used for practice, qualifying, practice after qualifying and the start of the Race. A transmission must not be removed from a car without the approval of the Series Director. The Series Director may require any team that removes a transmission to start at the rear of the field, providing the car earns a starting position in the Race. The transmission may be removed from a backup car, without a penalty, at the discretion of the Series Director as follows:

- (1) If a car is wrecked beyond repair during qualifying and a backup car is used, a transmission change may be permitted, however, the transmission must be installed before the beginning of practice(s), if practice(s) is scheduled, that follow qualifying.
- (2) If a car is wrecked beyond repair during or after qualifying and a backup car is used, then a transmission change may be permitted without an additional penalty.

If a Competitor violates this Rule, in addition to imposition of a penalty pursuant to Section 12, the Series Director may take such action during the Event as he deems appropriate, including but not limited to, loss of practice time and/or loss of the opportunity to qualify, and/or confiscation of the transmission or transmission components. Such actions shall be deemed an inspection decision not subject to Section 12.

C. NASCAR may, at its discretion, require that all cars compete with a final drive gear ratio specified by NASCAR Officials for each Event.

D. The complete transmission assembly, as raced, must weigh a minimum of 80 pounds. This minimum weight will include the shifter assembly, internal oil pump assembly (if used) and lubricant. This minimum weight will **not** include the shift lever and rear mount.

E. Only four (4) forward speed manual transmissions will be permitted.

F. All forward gears and reverse gear must be in working order.

G. Fourth gear ratio must be 1.00:1 (direct). Transmission gear ratios between 1.00:1 and 1.28:1 will not be permitted for the remaining forward transmission gears, except road course Events. Overdrive gears will not be permitted.

H. Fourth gear must be the primary gear engaged on all tracks, except road course Events, during competition.

I. All transmissions must have the input shaft and its main drive gear constantly engaged. This assembly must be constantly engaged with the countershaft and its cluster and reverse gears.

J. Only manual shift linkage using the H-pattern type will be permitted on the transmission. The shift lever must be metal. All shift rods connecting the shifter mechanism to the transmission must be made of metal.

K. Only fire resistant type shifter boots will be permitted. The shifter boots must meet the SFI 48.1 specification and display a valid SFI 48.1 label visible on the outside surface of the shifter boot. Shifter boots must not be used beyond two (2) years from the date of manufacture. Quick release fasteners will not be permitted to secure the shifter boot to the transmission tunnel. The shifter boot when installed, must mount directly to the transmission tunnel and must be completely sealed. Installation of the shifter boot must be acceptable to NASCAR Officials.

L. Only external threaded-type probe heaters into liquid, acceptable to NASCAR Officials, will be permitted to heat the transmission. Heating pads and/or blankets will not be permitted for warming the transmission.

M. External transmission oil coolers acceptable to NASCAR Officials will be permitted. Quick disconnect fittings on the oil lines will not be permitted. Transmission oil cooler pumps must be mechanically driven. Transmission lubrication systems must be of the wet sump design only. (Electric pumps will not be permitted).

N. Transmission vent/breather hose and filler assemblies must be located within the transmission tunnel and must not extend forward of the vertical front firewall. Remote transmission reservoirs and/or fill tubes will not be permitted.

O. All transmissions must be prepared with two (2) top cover or side cover bolts and two (2) tail housing bolts and two (2) transmission to bell housing bolts drilled to accept installation of a 1/8 inch minimum diameter NASCAR seal.

20C - 10.5 Drive Shaft

A. The drive shaft, universal joints and yokes must be magnetic steel. Only a one-piece magnetic steel drive shaft with a minimum diameter of 3-1/2 inches and a minimum thickness of 0.065 inch will be permitted. All drive shafts must be painted white.

B. Two (2) 360 degree solid magnetic steel brackets, not less than two (2) inches wide and 1/4 inch thick, must be placed around the drive shaft. The front bracket must be welded to the rear suspension crossmember and the rear bracket must be welded to the horizontal tunnel bar (#6).

20C - 10.6 Rear Axle

A. Ford 9" design and Quick Change rear axle housings will be permitted and must meet the following requirements:

Ford 9" design:

- (1) The rear axle ring and pinion and housing must be the Ford 9" design. The carrier housing and related components must be made of magnetic steel. The carrier housing must be from an approved manufacturer. The following carrier housing is approved for competition: Ford M-4141-(B), (E), (H), or (J).
- (2) Only a one-piece, all-magnetic steel rear end axle housing will be permitted. Only magnetic steel axle tubes with a minimum three (3) inch outside diameter and a minimum 0.219 inch wall thickness meeting ASTM A-513 Type 5 specification will be permitted. The axle housing center section must be made of magnetic steel with a minimum thickness of 0.187 inch meeting ASTM A-569 series specification.
- (3) Only approved magnetic steel Detroit locker-type differentials acceptable to NASCAR Officials will be permitted for the Ford 9" design. The locker type differentials, when jacked up with the transmission engaged, must permit either wheel to turn freely by hand for one (1) full turn-360 degrees, while the opposite wheel remains stationary. The locker-type differential must be from an approved manufacturer. Any major design modifications to an approved locker assembly must be submitted to NASCAR for approval prior to use in competition. A minimum of 10, solid 7/16 inch diameter, hex head or 12 point cap screws must be installed attaching the ring gear to the differential locker housing at all times during competition.

Quick Change:

- (1) Only quick change rear end center sections with a minimum cross section height of 12 inches at the center of the rear axle with a side bell minimum diameter of 12 inches and magnetic steel spur gears on the back side will be permitted.
- (2) Only a magnetic steel lower jackshaft and driveshaft yoke will be permitted in the quick change rear end center section.
- (3) Only magnetic steel axle tubes will be permitted.
- (4) Only approved magnetic steel or aluminum Detroit locker-type limited slip differentials acceptable to NASCAR Officials will be permitted. The locker-type differentials, when jacked up with the transmission engaged, must permit either wheel to turn freely by hand for one (1) full turn – 360 degrees, while the opposite wheel remains stationary. The locker-type differential must be from an approved manufacturer. Any major design modifications to an approved locker assembly must be submitted to NASCAR for approval prior to use in competition.

B. Full floating magnetic steel double splined rear axles must be used. Hollow or drilled rear axles will not be permitted. The rear axle outer drive spline must be 24-spline, not less than 1-1/4 inches long, and must have a maximum outside diameter of 1.562 inches. Inner rear axle splines must be straight without any crown.

C. Only standard production, 24-spline, magnetic steel drive plates will be permitted. Magnetic steel drive plates must be one-piece with a single straight cut internal spline. Grease fittings will not be permitted on the drive plates or axle caps.

D. Rear end differential oil coolers, acceptable to NASCAR Officials, will be permitted. If used, the rear end differential oil cooler must be mounted behind the rear firewall, outside the driver compartment. Quick disconnect fittings on the oil lines will not be permitted. Rear end differential oil pumps must be mechanically driven. Rear end lubrication systems must be of the wet sump design only. (Electric pumps will not be permitted). Remote rear end differential reservoirs and/or fill tubes will not be permitted.

E. Cambered rear axle housings will not be permitted. Camber will be checked using NASCAR gauges at the official NASCAR inspection station. Camber will be checked with air pressure set at the tire manufacturer's recommended technical inspection inflation pressures for the Event. The maximum rear axle housing toe that will be permitted, using the NASCAR gauges at the official NASCAR inspection station, will be plus or minus (+/-) 0.5 degree.

F. The axle housing must be centered between the frame rails plus or minus (+/-) 1/2 inch.

G. If axle housing support bars are used, only one (1) end may be adjustable to change the length of the bar.

H. Only external threaded-type probe heaters into liquid, acceptable to NASCAR Officials, will be permitted to heat the rear end assembly. Heating pads and/or blankets will not be permitted for warming the rear end assembly.

I. NASCAR may, at its discretion, require that all cars compete with a final drive gear ratio specified by NASCAR Officials for each Event.

J. For purposes of checking a pre-determined final drive gear ratio, when jacked up, both rear wheels must rotate in the same direction with each traveling the same rotational distance.

K. An axle housing may not be changed at an Event without the authorization of the Series Director and must be inspected before installation.

20C - 10.7 Wheels / Lug Bolts / Lug Nuts

A. Wheels must be from an approved manufacturer and must be approved by NASCAR or SFI. Wheels manufactured after January 1, 2006 must be SFI-approved, and the wheels must meet the SFI 35.1 specification, display a valid label and must be acceptable to NASCAR.

B. Only 15 inch diameter five (5) lug steel wheels weighing a minimum of 27 pounds (uncoated without valve hardware) with a 9-1/2 inch rim width and a 4-1/2 inch offset (backspacing) reinforced center will be permitted.

C. Only approved wheels with two (2) valve stem holes will be permitted. One (1) valve stem hole must be located at the outer edge of the wheel as designated by the tire manufacturer. The second valve stem hole must be located either in front of the wheel center or in a window of the wheel center just behind the edge of the wheel center. Wheel center windows must remain open at all times.

D. Valve stem hardware specified by the tire manufacturer must be used. Valve stem caps must be installed at all times during competition.

E. All wheels must have a single car number visible with 1-1/4 inch high numbers on the inside and outside of the rim.

F. Only solid, one-piece heavy-duty 5/8 inch diameter by 18 threads per inch magnetic steel lug bolts will be permitted. The same style lug bolt must be used for practice, qualifying and the Race. Design modifications to the lug bolts will not be permitted.

G. Only standard one (1) inch hex by minimum 0.650 inch thick, fully-threaded, solid, one-piece magnetic steel lug nuts, with a maximum cross-section of one (1) inch (measured on the flat), tapered on one (1) side and flat on one (1) side will be permitted. The first thread on each lug bolt must be visible from the front of the lug nut when the lug nut is installed. Design modifications to the lug nuts will not be permitted.

H. Electroplated wheels will not be permitted.

I. Any device, modification or procedure to the tire, wheel or valve stem hardware, that in the judgment of NASCAR Officials is used to release pressure (beyond normal pressure adjustments) from the tire and/or inner shield, will not be permitted.

20C - 10.8 Tires

Only approved tires will be permitted. Approved tires are those tires that comply with the requirements of this rule and are recommended in writing, with prior notification to NASCAR, by the NASCAR-approved tire manufacturer for use by Competitors in the Event.

20C - 10.8.1 Physical Requirements

A. All four (4) tires must be of the same make, and the same tread design.

B. On all tracks specified by NASCAR, inner shields must be used.

20C - 10.8.2 Tire Manufacturer Obligations

A. The tire manufacturer must provide NASCAR with the following information in writing two (2) weeks prior to the date of the Event:

(1) Tire identification markings for each tire must be unique to one (1) particular size, construction and rubber compound combination.

(2) The recommended position on the car for each tire being used in the Event.

B. The same tires must be made available to each Competitor.

20C - 10.8.3 Tire Measurement Procedure

A. Bias-ply tires must not exceed a maximum sidewall measurement of 13.65 inches at 30 pounds air pressure mounted on a 15 inch wheel with a 9-1/2 inch rim width.

B. NASCAR Officials will use a NASCAR-approved measuring device to measure the size of new tires. New tires may be selected at any Event by NASCAR Officials for measurements. Tires to be measured must be mounted on an approved 15 inch wheel having a 9-1/2 inch rim width. Thirty pounds of air pressure will be used for the measurements.

20C - 10.8.4 Tire Usage Rules

A. All tires must be used in approved positions. Approved positions are those positions on the car recommended in writing, with prior notification to NASCAR, by the NASCAR-approved tire manufacturer for its tires used by Competitors in the Event.

B. Unless otherwise authorized by the Series Director, all tires to be used for practice or qualifying must be purchased and mounted at the Event from the NASCAR-approved tire supplier.

C. Unless otherwise authorized by the Series Director, at all tracks teams will be required to use sticker tires (new tires) for qualifying.

D. Immediately following a qualifying attempt, wheels and tires from all qualified cars may be impounded by NASCAR Officials. Unless otherwise

authorized by the Series Director, all tires used in qualifying must be used for the start of the Race. The impounded tires will be returned when the cars are prepared for the Race. If the tires are removed from the car, the tires must be replaced in the positions on the race car from which they were removed.

E. Unless otherwise authorized by NASCAR Officials, Competitors will not be permitted to make tire changes prior to the completion of the first official green flag lap of the Race.

F. The Series Director may approve the replacement of an impounded tire when recommended by the tire manufacturer's representative without a starting position penalty provided the replacement tire carries the same manufacturer identification number as the tire used for qualifying.

G. The NASCAR-approved tire supplier may re-balance, re-mount or change inner shields under the supervision of NASCAR Officials.

H. Tire or wheel warming, using heaters, blankets, micro-wave or any other method will not be permitted.

I. When required, the inner shield must be the same brand as the tire manufacturer.

J. Should identification numbers, code numbers, or serial numbers be defaced on any previously approved tire(s), the tire(s) will be ineligible for competition.

K. Tires that, in the judgment of NASCAR Officials, have been altered by unauthorized treatment will not be permitted.

L. The Series Director may establish a tire change rule for the particular Event being run. This rule shall be made known to all the Competitors at the Pre-Race driver's meeting.

M. The Series Director may allow a single hose, a maximum of four (4) inches in diameter, for tire cooling as recommended by the tire supplier.

N. Competitors presenting cars for inspection must have their tires inflated to the recommended technical inspection inflation pressures as specified by the participating tire manufacturer for the Event. If tire pressure(s) are not at the recommended technical inspection inflation pressures after competition, tires will be adjusted to the recommended technical inspection inflation pressures as specified by the participating tire manufacturer for the Event.

20C - 11 FRAMES

All frames and frame components must be approved by NASCAR. Prior to being used in competition, all frames and frame components must be submitted to the office of the NASCAR Competition Administrator for consideration of approval and approved by NASCAR. Each such part may thereafter be used until NASCAR determines that such part is no longer eligible.

20C - 11.1 General Frame Eligibility

All frames must be acceptable to NASCAR Officials. All frames must have a legible unpainted identification code stamped into the roll cage on the right side of horizontal shoulder bar (#7) near the intersection with the main roll bar (#1). This code will include in this order: the builder, date of manufacture, and a sequence number (example - BPC-1099-53). The frame used must meet the minimum requirements described in the following paragraphs. All frame designs must be submitted in blueprint form for acceptance to the office of the NASCAR Competition Administrator at least 60 days before the design can be entered in competition. If the NASCAR Competition Administrator accepts the modification as set forth in the submitted blueprints, the Competitor must submit for inspection a completed frame and roll cage at least 30 days prior to the intended date of competition. Acceptance of the submitted blueprint does not guarantee acceptance of the completed frame and roll cage design, and the Competition Administrator may decide not to accept such design even if it is the same as the blueprint form. If the Competition Administrator accepts the completed frame and roll cage, it may thereafter, be used in competition in the form accepted, unless and until the form is no longer approved by the Competition Administrator.

20C - 11.2 Frame Requirements

All frame components must be made of magnetic steel and welded. The frame must consist of a front and a rear sub-frame connected to the main frame on which the roll cage is welded. Sub-frames must not be offset from the main frame longitudinal centerline. Holes and/or other modifications to the frame, frame supports, weight containers, front and rear sub-frames, crossmembers, or any other frame components that, in the judgment of NASCAR Officials, were made with the intent of weight reduction will not be permitted.

A. Main Frame - The main frame must consist of two (2) side rails of magnetic steel box tubing three (3) inches in width by four (4) inches in height with a minimum wall thickness of 1/8 inch meeting the ASTM A-500 specification with a minimum length of 65 inches. These frame rails must be parallel to each other and parallel to the chassis longitudinal centerline with a minimum distance between the frame side rails measured inside to inside of 50 inches for 110 inch wheelbase cars and 52 inches for 105 inch wheel base cars with a maximum outside to outside frame rail width of 60 inches. A crossmember, a minimum of two (2) inches in height by two (2)

inches in width with a minimum wall thickness of 1/8 inch meeting the ASTM A-500 specification must be placed between the main frame rails to support the mounting location for the rear suspension trailing arms. These mounting locations must not be offset from the main frame rail longitudinal centerline. Added weight containers, welded to the main frame rails, must be the same section as the main frame rails with a minimum wall thickness of 0.083 inch meeting the ASTM A-500 specification.

B. Front Sub-Frame - The front sub-frame rails must be made of magnetic steel box tubing two (2) inches in width by three (3) inches in height with a minimum wall thickness of 0.083 inch meeting the ASTM A-500 specification. The front sub-frame must extend from the lower radiator support rearward to the forward end of the main frame rails, incorporating the attachments for the steering linkage, suspension and engine. The length of the front sub-frame front rails when measured from the center of the front jacking bolt forward must be a minimum of 25-1/2 inches. The inside width of the front sub-frame rails must be a minimum of 29 inches at the steering box mount and they must be parallel to the longitudinal centerline. The sub-frame front rails must remain parallel to the longitudinal centerline of the main frame. The inside width of the front sub-frame rear rails (rails extending from the center of the jacking bolt rearward), measured inside to inside at the rear of the engine block, must not exceed 34 inches. The front sub-frame must connect to the main frame rail by welding the sub-frame attachment point to within three (3) inches of the end of the main frame rail. Only coil spring front suspension may be used. The jacking bolts must be solid magnetic steel and must align within plus or minus (+/-) one (1) inch of the spindle centerline (at zero (0) degrees caster). At any point along the sub-frame rails, the distance to each rail from the longitudinal centerline must be the same.

C. Rear Sub-Frame - The rear sub-frame rails must be made of magnetic steel box tubing two (2) inches in width by three (3) inches in height with a minimum wall thickness of 0.083 inch meeting the ASTM A-500 specification and with a minimum inside rail width of 37 inches measured at the fuel cell mounting location. The rear sub-frame rails must extend rearward from the main frame rails up and over the rear axle, down and back, and must remain parallel with the main frame rails at the fuel cell mounting location as viewed from the side. The rear sub-frame must incorporate the mounting locations for the rear springs, shock absorbers, panhard bar, sway bar and fuel cell ending with a crossmember that must be two (2) inches in width by three (3) inches in height with a minimum wall thickness of 0.083 inch meeting the ASTM A-500 specification. The rear crossmember must be located a minimum of eight (8) inches, (five (5) inches if a quick change rear end is used), behind the fuel cell recessed well. For 110 inch wheelbase cars, the rear sub-frame rails must connect to the main frame rails not less than 57 inches from the front end of the main frame rails. For 105 inch wheelbase cars, the rear sub-frame rails must connect to the main frame rails within five (5) inches of the rear end of the main frame rails. At any point along the sub-frame rails, the distance to each rail from the longitudinal centerline must be the same. The rear support bars (#13 A & B) must extend to the rear of the sub-frame rails to within one (1) inch of the rear edge of the fuel cell. Other than the bottom support frame for the fuel cell recessed well, as described in sub-section 20C-16.3F, nothing may be mounted lower than the bottom of the fuel cell recessed well behind the rear axle housing.

D. The frame and roll cage assembly must be painted using only light/bright colors.

20C - 12 SUSPENSION

All suspension systems and components must be approved by NASCAR. Prior to being used in competition, all suspension systems and components must be submitted, in a completed form/assembly, to the office of the NASCAR Competition Administrator for consideration of approval and approved by NASCAR. Each such part may thereafter be used until NASCAR determines that such part is no longer eligible. All suspension fasteners and mounting hardware must be made of solid magnetic steel.

Rear Suspension

A. Only a two (2) link truck trailing arm-type rear suspension will be permitted. The rear suspension will be coil springs mounted on the truck trailing arms and must not be located outside the rear frame rail kick-ups, and must be equal distance from the longitudinal centerline of the car.

- (1) For all cars competing with a 110 inch wheelbase, mounting points on the axle housing must be evenly spaced, plus or minus (+/-) 1/2 inch, and welded to the axle housing to prevent movement.
- (2) For all cars competing with a 105 inch wheelbase, mounting points on the axle housing must be evenly spaced and welded to the axle housing to prevent movement.

B. The front truck trailing arm brackets must be one-piece, welded magnetic steel, not less than 3/16 inch thick. Both forward truck trailing arms must be attached to the truck trailing arm mounting brackets with one (1) solid one-piece minimum 3/4 inch diameter magnetic steel bolts. An eccentric-type adjuster may be used on only one (1) forward truck trailing arm mounting point. The maximum

distance between the front truck trailing arm mounts must not exceed 12-1/2 inches, measured center to center at the truck trailing arm front mounting bushings. Hydraulic or spring loaded mounting points or links will not be permitted. Truck trailing arms using heim joints (spherical rod ends), will not be permitted. Standard-type bushings acceptable to NASCAR Officials must be used. Bushings for truck trailing arms that, in the judgment of NASCAR Officials, allow excessive vertical or horizontal movement will not be permitted.

C. Truck trailing arms when measured from the center of the front mounting bushing to the center of the rear axle locating pin, in a straight line, must maintain an equal length on the left side and the right side with a maximum length of 52 inches. All truck trailing arms must rise at a single angle, a minimum of eight (8) degrees and a maximum of 16 degrees, at the center of the rear axle tube when compared to the forward length of the truck trailing arm.

D. I-Beam style truck trailing arms must be stitch welded a minimum of every eight (8) inches top and bottom the entire length of the truck trailing arm. Truck trailing arms must be constructed using two (2) C-channels of a minimum of (1) inch in width by three (3) inches in height magnetic steel with a minimum nominal wall thickness of 1/8 inch meeting the ASTM A-569 specification, welded back to back, creating a vertical wall of two (2), 1/8 inch wall thicknesses with a completed overall size of 2-1/4 inches in width by three (3) inches in height. The minimum thickness of truck trailing arm material that will be accepted by NASCAR Officials is 0.117 inch. Each C-channel (meeting the ASTM standard C-channel shape) must have a three (3) inch vertical wall with a one (1) inch upper and lower horizontal lip folded at a 90 degree angle to the vertical wall using a maximum of 1/4 inch bend radius. Two (2), maximum 13/16 inch inside diameter, steel tubes must be installed on the longitudinal centerline of the truck arm at the U-bolt mounting location. The tubes are a welded component of the truck arm assembly and must be completely welded to both halves of the truck arm. The truck trailing arms may be vertically reinforced from the rear of the lower coil spring mounting pad rearward. The height of the front truck trailing arm may be tapered from the truck trailing arm bushing rearward but the taper must not exceed six (6) inches in length.

E. All truck trailing arms must be attached to the rear axle housing using solid, round 3/4 inch outside diameter U-bolts over the rear axle housing and through the truck trailing arms with nuts securing the truck trailing arms to the rear axle housing. Each U-bolt treaded end must have only one (1) standard 3/4 inch hex nut and only one (1), SAE flat washer. Jam (double) nuts and beveled washers will not be permitted on the U-bolts. Truck trailing arm U-bolt retainers must be adequately tightened as defined by industry standard torque recommendations for a 3/4 inch diameter fine threaded fastener. Any spacers used between the rear axle housing and the truck trailing arms must be made of a solid metal block. Any device(s) that will permit movement or rotation of the rear end housing will not be permitted.

F. All truck trailing arms and mounting brackets must be acceptable to NASCAR Officials. Holes and/or other modifications to the truck trailing arms and mounting brackets that, in the judgment of NASCAR Officials, have been made with the intent of weight reduction or weight addition will not be permitted.

G. The rear axle housing must be held in the center of the car, side to side, by a single, straight, round, tubular magnetic steel panhard bar with a maximum outside diameter of 1-1/4 inches for the entire length of the panhard bar. The panhard bar must be a minimum length of 33 inches connected to the rear end of one (1) truck trailing arm and to a bracket welded to the frame rail on the opposite side on all tracks 1-1/8 miles or more in length. On tracks less than 1-1/8 miles in length, the rear axle housing may be held in the center of the car, side to side, by a single, straight, round, tubular magnetic steel panhard bar connected to the rear end of one (1) truck trailing arm or a bracket attached to the rear axle tube and to a bracket welded to the frame rail on the opposite side. The panhard bar mounting bolt at the truck trailing arm must include a 1/8 inch thick magnetic steel washer with an outside diameter larger than the body of the heim joint (spherical rod end). Variable height adjustments to the panhard bar must be made by means of a movable threaded-screw bracket and must be made from the frame mount side only. The frame side panhard bar mounting bolt must extend through the front and rear of the panhard bar bracket and panhard bar to create a positive stop. The upper adjustment to the threaded-screw bracket (located just under the rear window) must share the same vertical centerline with the threaded-screw bracket. The truck trailing arm side of the panhard bar, panhard bar brackets and/or components must not be lower than the lowest edge of the respective rear wheel.

H. At road course Events, the panhard bar mounting configuration may be reversed.

20C - 12.1 Coil Springs / Spring Mounts / Jacking Bolts

All downward chassis movement while the race car is in competition must be limited only by the normal increasing stiffness of the springs or the bottoming of the chassis against the race track, whichever occurs first. Any device or

procedure that in the judgment of NASCAR Officials attempts to detract from or compromise the above will not be permitted.

Only coil spring suspension will be permitted. All coil springs must be constructed using solid, round magnetic steel wire, wound in a clockwise direction. Ovate and flat wire will not be permitted. The coil spring wire diameter must be the same size from the top to the bottom of the spring. All of the coils in a spring must be active. The coil springs at all four (4) wheels must be active and permit suspension movement. All coil springs must not be colder than ambient temperature.

A. Front Coil Springs

- (1) The front coil springs must be heavy-duty magnetic steel and must be constructed with one (1) closed, ground coil end and one (1) open coil end. The closed end of the coil spring must not have a gap larger than 1/8 inch. Grinding of the open coil end will not be permitted beyond the first inch of the open coil end and must not exceed 1/2 of the coil spring wire diameter. Front coil springs must be constructed with a minimum wire diameter of 0.575 inch.
- (2) The minimum number of active coils for each spring must be 4-1/2 coils. Coil count and spacing will be referenced on a line perpendicular to the closed end of the coil spring at the end of the spring wire of the closed end of the coil spring. All coils must be evenly spaced after the first coil on the closed end of the spring and remain even to the completion of the 4th full coil. Additional coils (more than 4-1/2) will be permitted providing the additional coils are active, the coil spring meets the free height requirements (see sub-section 20C-12.1A(3), below) and the gap at the end of the coil spring wire at the open end of the coil spring is larger than 1/8 inch. All coils must be wound producing the same inside and outside coil diameter plus or minus (+/-) 1/8 inch.
- (3) The free height of the bare front coil springs must not be more than 9-1/2 inches and must not be less than 7-1/2 inches.
- (4) All front coil springs must maintain a minimum outside diameter of 5-1/4 inches and a maximum outside diameter of 5-3/4 inches.
- (5) Progressive or digressive rate springs will not be permitted.
- (6) Coil springs may be coated but coating thickness and material must be acceptable to NASCAR Officials.
- (7) Unless otherwise authorized by the Series Director, coil spring rubber inserts will not be permitted for qualifying or prior to the start of the Race. After the completion of one (1) green flag lap in a Race, one (1) coil spring rubber insert, not to exceed one (1) full coil of the front coil spring, acceptable to NASCAR Officials, will be permitted.
- (8) The front coil spring mounts must be located on the lower A-frames for the bottom mount, and the top mount must be a bucket-type and be welded to the front sub-frame rails. The front coil spring upper mount plate must be attached to the front jacking bolt, in a manner acceptable to NASCAR Officials. Monoball(s), excessive taper, bevels, or other devices on the end of the front jacking bolt or in the front upper spring mount plate will not be permitted. The upper coil spring mount plate must support the front coil spring for 360 degrees.
- (9) Heavy-duty solid magnetic steel bolts (jacking bolts), with a minimum diameter of 1-1/8 inch, utilizing right-hand threads, and a single thread count of not less than 12 threads per inch for the entire length of the jacking bolt, must be used. The jacking bolts must be installed, using a solid threaded sleeve either welded or bolted with a minimum of four (4), 5/16 inch diameter grade-8 bolts and nuts or threaded into the frame spring bucket, in a manner acceptable to NASCAR Officials for the purpose of raising or lowering the car. Jacking bolts and the threaded sleeves must be the same thread configuration on the left and right side.
- (10) NASCAR-approved coil spring wire wraps may be used on the front coil springs. Coil spring wire wraps must be installed on active coils only. The following coil spring wire wraps are approved for use in competition:

| <u>MANUFACTURER</u> | <u>PART NUMBER</u> |
|---------------------|--------------------|
| Eibach | UB0205-5-JA |
| Eibach | UB0205-2-JA |

B. Rear Coil Springs

- (1) The rear coil springs must be heavy-duty magnetic steel and must be constructed with both coil ends closed and ground. The closed ends of the coil spring must not have a gap larger than 1/8 inch.
- (2) The maximum number of coils for each rear coil spring must not exceed 10 coils. All coils must be evenly spaced between the top and bottom closed ends of the spring. Coil count will be referenced on a line perpendicular to either closed end of the coil spring at the end of the spring wire. All coils must be wound producing the same inside and outside diameter.

- (3) The free height of the bare rear coil springs must not be greater than 16 inches and must not be less than 11 inches.
- (4) All rear coil springs must maintain a minimum outside diameter of 4-3/4 inches and a maximum outside diameter of 5-1/4 inches.
- (5) Progressive or digressive rate springs will not be permitted.
- (6) Coil springs may be coated but coating thickness and material must be acceptable to NASCAR Officials.
- (7) Coil spring rubber inserts not to exceed two (2) full coils of the rear coil spring at any time, acceptable to NASCAR Officials, will be permitted. The smallest allowable spring inserts will be 1/2 of a full coil.
- (8) All upper and lower rear coil spring mounts must be located between the rear sub-frame side rails. Only one (1) rear jacking bolt solid threaded mounting sleeve per side will be permitted. All rear jacking bolts and all jacking bolt sleeves must be a minimum of one (1) inch diameter thread, utilize right-hand threads and a single thread count of not less than 12 threads per inch for the entire length of the jacking bolt and mounting sleeve. All rear jacking bolts must be made of magnetic steel. All jacking bolt mounting sleeves must be welded into the rear sub-frame assembly. Jacking bolts and the threaded sleeves must be the same thread configuration on the left and right side. Rear jacking bolts will be permitted to extend through the frame rails. The center of the jacking bolt must not extend further than the center of the frame rail from the inside edge. Jacking bolts located through the frame rails and/or jacking bolt crossmember must have a solid sleeve extending through the frame or crossmember from top to bottom and be welded completely into the frame rails or crossmember.
- (9) The rear coil spring lower mounts must be located on the truck trailing arms forward of the rear axle centered on the truck trailing arm I-beam. The rear coil spring lower mounts must be located on the rear truck trailing arms directly below the upper rear coil spring mounts when viewed from the rear and the side of both mounts when the car is on the ground at ride height. Jacking bolts, upper and lower spring mounts, and the spring must be on a common centerline perpendicular to the ground.
- (10) The rear coil spring upper mounts must be located and welded on the chassis directly above the lower mounts. The upper adjustment to the jacking bolts (located just under the rear window) must not be located further rearward than the center of the rear axle housing. The distance between the upper adjustment to the jacking bolts must be the same as the distance between the centers of the upper rear spring mounts.
- (11) Monoball(s), excessive taper, bevels or other devices on the end of the rear jacking bolt or in the rear upper spring mount will not be permitted.
- (12) Coil spring wire wraps will not be permitted on rear coil springs.

20C - 12.2 Sway Bars (Anti-Roll Bars)

Front and rear sway bars, when used must be used for the purpose of anti-roll only. Pre-loading of the sway bar(s) beyond the limits of the driver's weight in the driver's seat or on the left door top will not be permitted. The front and rear sway bars must freely rotate in their mounts. The movement of the front and rear sway bar arms must not be prevented or restricted beyond that of normal use as an anti-roll bar.

A. The main body of the front and rear sway bar must be made of one-piece magnetic steel.

B. The front sway bar (anti-roll bar) mounting tube must be a welded component of the front sub-frame assembly, mounted below the sub-frame rails, using a maximum of three (3) inch outside diameter round steel tubing.

C. The front sway bar arms must be constructed of magnetic steel and must not exceed a maximum of 1-1/8 inch in width. Only one (1), one-piece sway bar arm per side must be used on the front sway bar. Sway bar arms must be attached to the lower control A-frames. Heim joints (spherical rod ends) may be used for attaching the sway bar arms to the lower A-frames only. During qualifying and the Race, all upper and lower sway bar arm links must be attached to their respective mounting bracket using only positive nut and bolt mounting fasteners. Holes and/or other modifications that, in the judgment of NASCAR Officials, have been made with the intent of weight reduction will not be permitted.

D. Rear sway bars will be permitted at road courses only. The rear sway bar, if used, must be mounted in a manner acceptable to NASCAR Officials.

- (1) The rear sway bar must be mounted above the rear axle tubes.
- (2) Only one (1), one-piece sway bar arm per side must be used on the rear sway bar.
- (3) Heim joints (spherical rod ends) may be used on the rear sway bar connecting links.

20C - 12.3 Shock Absorbers

A. Shock absorbers and components must be from an approved manufacturer. The only shock absorbers and internal components permitted will be those submitted by the manufacturer and approved by NASCAR. Approved shock absorbers and internal components will be displayed on an approved display board submitted by the manufacturer. Shock absorbers must provide a resultant force dependent upon piston velocity and must be acceptable to NASCAR Officials. Shock absorbers and components must be used as supplied by a manufacturer and approved by NASCAR. Shock absorbers and components must be available to all Competitors and must meet the following minimum requirements:

Modifications to the approved shock absorbers and internal components will not be permitted except as follows.

- (1) Bleed holes may be added or changed in the shock absorber pistons.
- (2) Valve shim pre-load may be changed by machining the piston surface.

B. All approved shock absorbers must be of the nitrogen-gas pressurized mono-tube, deflective disc valve type with an integral gas reservoir with all components as displayed on each manufacturer's display board at the NASCAR Inspection Station. Only a single piston is permitted in the main body and only a single floating piston is permitted in the integral gas reservoir. Steel deflective disc valve shims must seal the primary metering faces of the single piston in the main shock body.

C. Each shock absorber must consist of the following components:

- (1) Shock body – Shock absorber bodies must be made of aluminum.
- (2) Gas reservoir
- (3) Divider piston (the divider piston located in the gas reservoir must be installed to the manufacturer's specifications without any modifications)
- (4) Piston
- (5) Shaft (the shaft must not have any sleeves, spacers or any other device that could limit the travel of the shaft into or out of the main body)
- (6) Shims
- (7) Shock absorber base valves will not be permitted.

D. Shock absorbers must meet the following dimensions:

| | |
|------------------------------------|--|
| Overall Length (Extended) | 24.75 Inches Maximum (center to center) |
| Piston/Shock Body Outside Diameter | 2.00 Inches Maximum |
| Piston/Shock Body Length | 10.75 Inches Maximum |
| Gas Reservoir Outside Diameter | 2.60 Inches Maximum |
| Gas Reservoir Length | 3.80 Inches Maximum |
| Shock Shaft Diameter | 0.540 Inches Minimum and 0.630 Inches Maximum |

NOTE: The internal bore of the shock absorber body must remain as supplied by the manufacturer. The internal bore diameter of the shock absorber body must be the same from top to bottom. Tapers, steps, grooves and other misalignments will not be permitted. Modifications which provide position sensitive piston travel will not be permitted.

E. Only a single manual external shaft bleed adjustment through a tapered needle into a fixed orifice in the hollow shaft, acceptable to NASCAR Officials will be permitted on the shock absorbers. Changes in shock absorber force must not be made by the position of the shock absorber shaft, only by the velocity of the shaft through the compression and rebound stroke. Only one (1) piston per shock with one (1) shim stack on compression side and one (1) shim stack on the rebound side of piston will be permitted.

F. NASCAR Officials may use a shock absorber and internal components provided by the respective manufacturer as a guide in determining whether a Competitor's shock absorber and internal components conform to the specification of the Rule Book. All approved internal components must be used in only the respective manufacturer's shock absorber.

G. Suspension travel must not be limited by the shock absorber.

H. The gas reservoir must not be filled with any material other than in a gas form. Oils or any other types of liquid or materials that are not NASCAR-approved will not be permitted in the gas reservoir side of the shock absorber divider piston.

I. Oil volume on the piston side of the divider piston must be within 1-1/4 inches of the open end when the shaft and the piston assembly is removed.

J. Shock piston bleed holes, if added, must be drilled into the piston oil port.

K. A maximum of one (1) shock absorber per wheel will be permitted.

L. Shock absorbers must be mounted on the car with the gas reservoir to the top.

M. Shock absorbers will not be permitted inside of the front or rear coil springs. Shock absorbers will not be permitted inside of the upper A-frames. During qualifying and the Race, all upper and lower shock absorber mounting eyelets

must be attached to their respective mounting bracket using only positive nut and bolt mounting fasteners.

N. Rear shock absorber upper mounts must be located inside the frame and the mounts must be non-adjustable components welded directly to the rear shock absorber crossmember.

O. Rear shock absorber lower mounts must be attached to the inside of the truck trailing arms rearward of the rear axle housing. The rear shock absorber lower mounts must not be lower than five (5) inches when measured from the ground. The center of the lower mounting bolt must not be higher than the top surface of the truck trailing arm at the shock absorber mount. All rear shock absorbers must be mounted behind the rear axle housing a maximum distance of two (2) inches when measured from the rear of the axle tube to the shock absorber shaft. The lateral distance between the lower rear shock absorber mount centerlines, must be between 35 inches and 37 inches. The rear shock absorbers may not angle inboard towards the center of the car more than 30 degrees from vertical.

P. Heating pads and/or blankets will not be permitted for warming the shock absorbers.

Q. During shock absorber inspection, the shock absorbers and the shock absorber fluid must not be less than the ambient temperature or more than 100 degrees Fahrenheit, determined by the NASCAR temperature monitoring devices used by NASCAR Officials.

R. The front shock absorber nitrogen gas pressure must not be less than 25 PSI or greater than 300 psi.

S. The rear shock absorber nitrogen gas pressure must not be less than 25 PSI or greater than 175 psi.

T. After being charged, at any time, the front and rear shock absorbers must fully compress and fully extend the entire length of the shock absorber shaft with the external adjustment set in any position. Shocks will be checked using the NASCAR measuring device. All Shock absorbers must compress or extend a distance of six (6) inches in a time span of 1-1/2 minutes or less with the external adjustment set in any position.

U. It is the responsibility of the crew chief, not NASCAR, to ensure the shock absorbers are used in accordance with the manufacturer's instructions and specifications.

20C - 12.4 A-Frames

A. A-frames must have a stock appearance and be made of magnetic steel. All lower A-frames must be a one-piece welded assembly constructed of flat plate and rectangular box tubing. Holes and/or other modifications that, in the judgment of NASCAR Officials, have been made with the intent of weight reduction will not be permitted.

B. A metal, non-adjustable lower spring seat may be bolted inside the lower A-frame spring bucket using four (4), 5/16 inch diameter bolts. The bolts must be evenly spaced in the bottom of the lower A-frame spring bucket. Only four (4) bolt holes will be permitted in the lower A-frame spring bucket. Additional holes for "clocking" of the spring seat must be installed in the spring seat. The lower spring seat must have a minimum two (2) inch inside diameter hole, located on center, for inspection purposes. The lower coil for the front coil spring must be in contact for 270 degrees with the lower spring seat at all times.

C. The lower A-frames for all 110 inch wheelbase cars must be the same length, plus or minus (+/-) 1/2 inch, and mount in the approved position (i.e., left and right must agree; offsets will not be permitted).

D. The lower A-frames for all 105 inch wheelbase cars must be the same length and mount in the approved position (i.e., left and right must agree; offsets will not be permitted).

E. The minimum thickness of the lower A-frames must be 0.090 inch. Lower A-frames must be constructed with one (1) front bushing pivot and one (1) rear bushing pivot. Strut type lower A-frames will not be permitted.

F. Heim joints (spherical rod ends) will not be permitted on upper and lower A-frames.

G. The lower A-frames must attach to the chassis using two (2), minimum 1/2 inch diameter magnetic steel bolt and nut assemblies per side. Only one (1) non-adjustable lower A-frame mounting hole per side will be permitted.

H. Only one (1) eccentric per side on the lower A-frame mounting points will be permitted.

I. The upper A-frame cross-shafts must maintain a minimum diameter of 3/4 inch. The upper A-frames must attach to the chassis using two (2), minimum 1/2 inch diameter magnetic steel bolt and nut assemblies per side.

J. The upper A-frame tubing must be round and maintain a minimum outside diameter of one (1) inch and have a minimum thickness of 0.083 inch.

K. Ball joints must be heavy-duty magnetic steel construction and must be acceptable to NASCAR Officials. The ball joints must not have any adjustment with the exception of a free play adjustment in the housing for the ball and socket.

20C - 12.5 Spindles / Wheel Bearings / Hubs

- A. One-piece, non-adjustable, heavy-duty magnetic steel spindles must be used. Steering arms, if separate, must be bolted to the spindles using two (2) minimum 5/8 inch diameter, grade 8, magnetic steel bolts. Hollow or drilled spindles will not be permitted.
- B. Only magnetic steel hubs acceptable to NASCAR Officials will be permitted. Holes and/or other modifications that, in the judgment of NASCAR Officials, are made or used with the intent of weight reduction will not be permitted.
- C. Wheel bearings must be magnetic steel, tapered roller bearings and bearing races. The bearings, races and seals must be assembled separately in the hubs.
- D. Offset hubs will not be permitted.
- E. Offset spindles will not be permitted.

F. The front spindles must be linked to the front sub-frame using two (2) Vectran® HS V-12 fiber cables. One eye of the cables must loop over the upper portion of the spindle and must be secured, and the other eye must loop over either the upper or lower portion of the solid, magnetic steel jacking bolt, minimum diameter 1-1/8 inches, and be securely retained with a heavy-duty metal washer, minimum two (2) inches in diameter and minimum 1/8 inch thick steel, or minimum 1/4 inch thick aluminum, and a locking nut. The fiber cable must be constructed from a continuous loop of 5/16 inch diameter 12 strand cable (with a red tracer thread) woven from Vectran® HS V-12 fiber. Spindle tethers must be installed using the supplied nylon thimble or a metal sleeve that prevents the spindle tether from coming in contact with the jacking bolt threads.

20C - 12.6 Tread Width Requirements

- A. A minimum center to center front and rear tread width of 60-1/4 inches and a maximum tread width of 60-3/4 inches will be permitted. The tread width will be determined by measuring from the rear left outside wheel bead surface to the rear right outside wheel bead surface at spindle height. A minimum of 70 inches and a maximum of 70-1/2 inches must be maintained.
- B. Only magnetic steel spacers, with a maximum outside diameter of seven (7) inches, acceptable to NASCAR Officials, will be permitted between the brake rotor mounting hat and the wheel to adjust the tread width to within the specifications as stated above. When spacers are used, there may be a maximum difference in thickness of 1/2 inch between the left and right side, while maintaining the tread width as stated above, but the front and rear do not have to be the same thickness.

20C - 12.7 Wheelbase Requirements

- A. All cars competing with a 110 inch wheelbase must measure the wheelbase as follows, one side measurement must be 110 inches. The opposite side wheelbase must measure a minimum of 109-1/2 inches and a maximum of 110-1/2 inches.
- B. All cars competing with a 105 inch wheelbase must measure the wheelbase as follows, one side measurement must be 105 inches. The opposite side wheelbase must measure a minimum of 104-1/2 inches and a maximum of 105-1/2 inches. Any device or procedure which has the ability to dynamically change the wheelbase beyond normal travel parameters will not be permitted.

20C - 12.8 Body Height / Ground Clearance Requirements

20C - 12.8.1 Body Height Requirements

A. All cars competing must maintain a minimum roof height. The car height off the ground and the body height, including the rake or the degrees of body angle, shall be determined by measuring the overall height of the car at a distance of 10 inches behind the top of the windshield on the roof centerline on all cars except when the Grand National-Approved (Flange Fit) Composite Body is used, it will be measured at the divot on the roof centerline. The following are the minimum height requirements:

| <u>WHEELBASE</u> | <u>BODY</u> | <u>MINIMUM ROOF HEIGHT</u> |
|------------------|------------------------|----------------------------|
| 110 inches | Steel | 51 inches |
| 110 inches | Composite | 50-1/2 inches |
| 110 inches | Composite (Flange Fit) | 54 inches |
| 105 inches | Steel | 50-1/2 inches |
| 105 inches | Composite | 50-1/2 inches |
| 105 inches | Composite (Flange Fit) | 54 inches |

After competition, the car height off the ground and the body height, including the rake or the degrees of body angle, shall be determined by measuring the overall height of the car at a distance of 10 inches behind the top of the windshield on the roof centerline on all cars except when the Grand National-Approved (Flange Fit) Composite Body is used, it will be measured at the divot on the roof centerline. The following are the minimum height requirements after competition:

| <u>WHEELBASE</u> | <u>BODY</u> | <u>MINIMUM ROOF HEIGHT</u> |
|------------------|------------------------|----------------------------|
| 110 inches | Steel | 50-3/4 inches |
| 110 inches | Composite | 50-1/4 inches |
| 110 inches | Composite (Flange Fit) | 53-3/4 inches |
| 105 inches | Steel | 50-1/4 inches |
| 105 inches | Composite | 50-1/4 inches |
| 105 inches | Composite (Flange Fit) | 53-3/4 inches |

B. Competitors presenting cars for inspection must have their tires inflated to the recommended technical inspection inflation pressures as specified by the participating tire manufacturer for the Event. If tire pressure(s) are not at the recommended technical inspection inflation pressures after competition, tires will be adjusted to the recommended technical inspection inflation pressure(s) as specified by the participating tire manufacturer for the Event.

C. The quarter panel height will be measured with NASCAR quarter panel height gauges. The gauges will contact the quarter panel and the rear spoiler at the edge of the rear deck lid seam. The left side must measure a minimum of 34 inches and a maximum of 35 inches. The right side must measure a minimum of 35 inches and a maximum of 36 inches. When the Grand National-Approved (Flange Fit) Composite Body is used the height of the rear of the car will be measured with NASCAR-approved rear height gauges. Both the left side and right side must measure a minimum of 44 inches and a maximum of 44-1/2 inches. The gauges will contact the top surface of the rear spoiler 23 inches left and right of the deck lid centerline.

D. At road course Events, the quarter panel height must be a minimum of 35 inches and a maximum of 36 inches on the left side and the right side. When the Grand National-Approved (Flange Fit) Composite Body is used the height of the rear of the car must be a minimum of 44 inches and a maximum of 44-1/2 inches on the left side and the right side.

20C - 12.8.2 Ground Clearance Requirements

A. Except as provided in sub-section B below, the left side frame rail and rocker panel clearances must be a minimum of five (5) inches and the right side frame rail clearance must be a minimum of six (6) inches measured at the end of the frame rail ahead of the right rear tire.

B. For road course Events, the frame rail and rocker panel clearances on the highest side of the car must be a minimum of six (6) inches when measured at the end of the frame rail ahead of the rear tire on that side. The lowest frame rail must have a minimum clearance of five (5) inches.

C. The front air dam clearance must be a minimum of four (4) inches.

D. All suspension parts clearance must be a minimum of four (4) inches.

E. The exhaust pipe clearance must be a minimum of three (3) inches.

F. The left side vertical extension clearance must be a minimum of three (3) inches and the right side vertical extension clearance* must be a minimum of four (4) inches.

*At road course Events, the right side vertical clearance must be a minimum of three (3) inches.

G. The engine ground clearance from the center of the leading edge of the crankshaft accessory drive bolt must be a minimum of 10 inches and a maximum of 11 inches for all currently approved engines and a minimum of 11 inches and a maximum of 12 inches for all NASCAR-approved "Spec Engines". Nothing may be located that would interfere with the NASCAR engine ground clearance inspection.

20C - 12.9 Car Height Adjustment / Handling Devices

A. The only device permitted for adjusting the height of a car will be the front and rear jacking bolts, as described in sub-section 20C-12.1.A (8) and 20C-12.1B(2). Adjustments will be permitted during an Event but must be done in a manner that results in the car maintaining body height requirements, as described in sub-sections 20C-12.8.1.

B. Any device(s) for adjusting the handling characteristics or the car's height, which can be activated by the driver, will not be permitted inside of the driver's compartment.

C. Electrical, pneumatic, hydraulic, remote control, or any other devices that change the handling characteristics or height of the car will not be permitted.

D. Devices and/or procedures to, or used to, reduce or hold the car lower than the normal stiffness of the springs will not be permitted.

E. Front jacking bolt adjustments made during the Race may only be made with approval from the Series Director.

20C - 13 STEERING COMPONENTS

All steering components must be approved by NASCAR. Prior to being used in competition, all major steering components must be submitted, in a completed form/assembly, to the office of the NASCAR Competition Administrator for consideration of approval and approved by NASCAR. Each such part may thereafter be used until NASCAR determines that such part is no longer eligible.

A. All cars must be equipped with a magnetic steel steering shaft with a collapsible section acceptable to NASCAR Officials.

B. Tie rods, drag links and steering component parts must be solid, heavy-duty magnetic steel. The tie rod ends must not have any adjustment with the exception of a free play adjustment in the housing for the ball and socket. Holes and/or other modifications in steering components that, in the judgment of NASCAR Officials, have been made with the intent of weight reduction will not be permitted.

C. The tie rod adjusting sleeve must not be more than five (5) inches in length. Heim joints (spherical rod ends) will not be permitted on any steering linkage.

D. The center-top of the steering post must be padded with at least two (2) inches of resilient material acceptable to NASCAR Officials.

E. A quick-release steering wheel coupling with a magnetic steel housing must be used. The steering wheel coupling must meet the SFI 42.1 specification and display a valid SFI 42.1 label on the outside surface.

F. The steering shaft, forward of the firewall, must have a minimum of two (2) universal joints or a collapsible steering shaft. The use of universal joints in the steering shaft must be acceptable to NASCAR Officials.

G. Rack and pinion steering will not be permitted.

H. Steering wheels must have solid, magnetic steel spokes.

I. Hydraulic power assist steering will be permitted. The power steering pressure pump must be mounted on the front of the engine and must be engine driven through a V-type or flat type V-ribbed belt.

J. The steering box must be constructed of magnetic cast steel and approved by NASCAR. The Delphi (formerly Saginaw) type 600 and 700 Series steering boxes are the only currently approved steering boxes.

20C - 14 BRAKES / BRAKE COOLING

All brakes and brake cooling components must be approved by NASCAR. Prior to being used in competition, all brakes and brake cooling components must be submitted, in a completed form/assembly, to the office of the NASCAR Competition Administrator for consideration of approval and approved by NASCAR. Each such part may thereafter be used until NASCAR determines that such part is no longer eligible. Holes and/or other modifications in the braking system or components that, in the judgment of NASCAR Officials, have been made with the intent of weight reduction will not be permitted.

20C - 14.1 Brake Components

A. Only disc brakes with magnetic cast iron or cast steel round rotors using aluminum mounting hats will be permitted. All mounting hats must be installed over the outside of the hub between the wheel and the hub. Only metal brake calipers will be permitted. Each brake caliper mounting bracket must mount solid to the rear axle housing or front spindle.

B. Brakes must be operational on all four (4) wheels at all times,

C. Only one (1) brake caliper per wheel using only two (2) brake pads per caliper will be permitted. Brake calipers must be acceptable to NASCAR Officials.

D. Only brake calipers submitted by the manufacturer and approved by NASCAR for use in the NASCAR K & N Pro Series will be eligible for competition. A complete list of approved brake calipers may be obtained by contacting the office of the NASCAR Competition Administrator at the NASCAR R&D Center in Concord, North Carolina. NASCAR Officials may use a brake caliper provided by the respective manufacturer as a guide in determining whether a Competitor's brake caliper conforms to the specifications of the Rule Book.

E. A maximum of six (6) pistons may be used in all front brake caliper assemblies. A maximum of four (4) pistons may be used in all rear brake caliper assemblies.

F. Floating calipers will not be permitted.

G. Brake pads must have a magnetic steel backing plate.

H. **Brake rotors must be used as manufactured.** Brake rotors must be a minimum diameter of 12 inches. Front brake rotors must be a minimum thickness of 1-1/4 inches. Rear brake rotors must be a minimum thickness of one (1) inch. All brake rotors must be attached to the mounting hat with positive fasteners.

I. Master cylinders must be from an approved manufacturer. Master cylinder(s) must be metal and must be the push-piston type and be mounted solid on the engine side of the firewall. Only single-stage master cylinders will be permitted. Only one (1) bore size, per master cylinder, will be permitted. Pull type master cylinders will not be permitted.

J. Overhead metal brake and clutch pedals must be mounted no further than 10 inches back from the firewall and must be made of metal. Clutch and brake pedals must be mounted above the steering column and must be foot operated. The type and design must be acceptable to NASCAR Officials. Only mechanical, hand operated, cable driven brake bias adjustment systems will be permitted. Aluminum brake pedals will not be permitted. Holes and/or other modifications in the brake pedal arm that, in the judgment of NASCAR Officials, have been made with the intent of weight reduction will not be permitted.

K. Mechanical brake pressure proportioning systems and their location, acceptable to NASCAR Officials, will be permitted. Electronic or remote control devices will not be permitted.

L. Electronic wheel speed sensors or brake actuators will not be permitted.

M. Power assisted braking systems will not be permitted.

N. Quick disconnect fittings on the brake lines will not be permitted.

O. Brake pad retraction devices will not be permitted.

20C - 14.2 Brake Cooling

A. On all cars, all air used for brake cooling must enter through the front of the vertical air dam wall above the valance and below the front bumper. Only a maximum of three (3) approved, maximum four (4) inch diameter, round air inlets which connect to a maximum of three (3), four (4) inch diameter flexible hoses on the back side of the vertical air dam wall will be permitted. The round air inlets must be mounted in the vertical air dam wall at a minimum distance of 14-1/2 inches from the car's longitudinal centerline. One (1) in-line fan will be permitted to be used in each cooling hose. Mounting of brake cooling components must be acceptable to NASCAR Officials.

B. Liquid or gas cooling of the brakes will not be permitted.

C. Brake fluid may be cooled by re-circulating the fluid through the brake hydraulic system.

D. A maximum of two (2), three (3) inch diameter cooling hoses per rear brake will be permitted. One (1) in-line fan per hose may be used. The in-line fans must be mounted to supply air drawn from outside the driver's compartment. All in-line fans, hoses and air scoops must not be lower than the bottom of the truck trailing arms.

20C - 15 FUEL

NASCAR reserves the right to have all cars use the same brand of fuel in a given Event. When this right is exercised, it will be stated on the Official Entry Blank or in other NASCAR Bulletins for that Event, and the specific brand of fuel will be named the "Official Fuel". In all such cases, fuel used for practice, qualifying, and the Race itself will be supplied at the track by the "Official Fuel" supplier and must be used exactly as supplied by the "Official Fuel" supplier's dispensing equipment at the track. At an Event where an "Official Fuel" has been named, NASCAR Officials will use a sample of the actual fuel provided at the track by the fuel supplier to determine whether the fuel used by a Competitor conforms to the specifications in the Rule Book.

20C - 15.1 Definition

In the event there is no "Official Fuel" at a given Event, the term "Fuel" wherever used in this document, shall be understood to mean automotive gasoline that complies with the specifications given in sub-section 20C-15.2. NASCAR Officials will use a sample of the actual fuel(s) provided at the track by the fuel supplier(s) to determine whether the fuel used by a Competitor conforms to the specifications in the Rule Book.

20C - 15.2 Specifications

A. The fuel must be automotive gasoline only.

B. The gasoline must comply with ASTM D-4814 entitled "Standard Specification for Automotive Spark-Ignition Engine Fuel", except limited to liquid hydrocarbons only, Class A, B, C, D, or E, but without regard to geographical or seasonal limitation.

C. The gasoline must not be blended with alcohols, ethers or other oxygenates, and it must not be blended with aniline or its derivatives, nitro compounds or other nitrogen containing compounds.

D. Icing or cooling of fuel will not be permitted during the Event in the garage, pit or racing premises.

20C - 15.3 Fuel Samples

NASCAR has the right to sample a Competitor's fuel at any time during the Event. Samples will be impounded for observation and/or testing by NASCAR and/or any outside laboratories at NASCAR's discretion.

20C - 16 FUEL SYSTEM

All fuel systems and fuel system components must be approved by NASCAR. Prior to being used in competition, all fuel systems and fuel system components must be submitted, in a completed form/assembly, to the office of the NASCAR Competition Administrator for consideration of approval and approved by NASCAR. Each such part may thereafter be used until NASCAR determines that such part is no longer eligible.

A. NASCAR Officials will not permit the use of any previously approved fuel cells, containers, or check valves that appear to be damaged, defective, or do not function properly. Fuel cell vent pipe check valves must be used. Check valves and the fuel cell must be acceptable to NASCAR Officials.

B. Pressure systems will not be permitted. Any concealed pressure type containers, feed lines, or actuating mechanisms will not be permitted, even if inoperable. Icing, freon type chemicals or refrigerants must not be used in or near the fuel system.

20C - 16.1 Fuel Cell

A. Only the following fuel cell bladders are approved by NASCAR for use in competition:

| | |
|-----------------------------|-------------------------------------|
| Aero Tec Laboratories, Inc. | Aircraft Rubber Manufacturing, Inc. |
| (ATL) | (FUEL SAFE) |
| FB 222 D | RB 122 E |
| FB 222 E | RB 122 E-L |
| FB 322 D | RB 022 E |
| FB 522 D | |

Waterman Racing Components
(WRC)
NAS-220

B. Modifications to the approved fuel cell bladders, including the nut ring, will not be permitted.

C. Standard foam, acceptable to NASCAR Officials and used as provided by an approved fuel cell manufacturer, must be used.

D. All approved fuel cells must be equipped with a steel ball fuel filler and fuel vent check valve assembly that meets the following minimum requirements:

- (1) The fuel cell check valve housing must be manufactured of aluminum or magnetic steel plate not less than 1/4 inch thick. A cast aluminum check valve housing assembly will not be permitted. The bottom surface of the check valve plate must be flat. Spacers will not be permitted between the check valve plate and the fuel cell bladder. Only one (1) gasket with a maximum thickness of 0.065 inch will be permitted between the check valve plate and the fuel cell container.
- (2) The solid steel ball check valves must be encased in a four (4) rail carriage. The carriage rails must be constructed of solid aluminum or magnetic steel not less than 1/4 inch thick by not less than 3/4 inch wide material. The carriage rails must be positioned such that the surface of the 1/4 inch thick edge rides against the steel check ball. Outside surfaces of the carriage must not have any sharp edges. The carriage must not be altered in any way and must remain perpendicular to the fuel check valve top flange plate.
- (3) The fuel filler check valve carriage must not exceed a maximum depth of 8-1/2 inches. The maximum inside diameter of the filler neck including the check ball seat must not exceed 2-1/8 inches. When seated, at least 1/2 of the check ball must be visible. The diameter of the solid steel check ball must be 2-3/8 inches. The filler neck must not be made of cast aluminum.
- (4) The fuel vent check valve carriage must not exceed a maximum depth of 8-1/2 inches. The maximum inside diameter of the vent pipe neck including the check ball seat must not exceed 1-1/4 inches. When seated, at least 1/2 of the check ball must be visible. The diameter of the solid steel check ball must be 1-3/8 inches. The fuel vent check valve neck must not be made of cast aluminum.
- (5) The fuel inlet tube and vent tube must have a bead around its outside circumference for hose retention.

E. For road course Events, NASCAR Officials may require the complete check valve assembly be installed to accommodate a right side fuel filler.

F. Fuel cells must not be used beyond five (5) years after the date of manufacture.

20C - 16.2 Fuel Cell Container

The fuel cell container must be acceptable to NASCAR Officials

A. The fuel cell must be encased in a container of not less than 22 gage (0.031 inch thick) magnetic sheet steel with a bolt-in removable end panel.

B. The fuel cell may be encased in a container of not less than 20 gage (0.037 inch thick) magnetic sheet steel of welded construction to form a seamless box without removable panels. Only a single opening will be permitted in the container. Such opening must be located at the center of the top of the container, must include the bolt pattern for the fuel cell bladder, and must not be larger than necessary for insertion and fastening of the fuel cell bladder.

The outside dimensions for the fuel cell container size must be 33 inches in width by 17 inches in depth by 9-1/4 inches in height.

C. Handles must be attached at the top of each end in the center of the fuel cell container for removal from the recessed well. Handles must not interfere with the NASCAR inspection gauge.

D. Holes in the fuel cell container will not be permitted except for two (2), 1/8 inch drain holes in the bottom of the fuel cell container.

E. The fuel cell container must be coated bright red.

20C - 16.3 Fuel Cell / Fuel Cell Container Installation

The fuel cell and the fuel cell container must be installed in a manner acceptable to NASCAR Officials.

A. The fuel cell and the fuel cell container must be installed in a recessed well of not less than 22 gage (0.031 inch thick) magnetic sheet steel welded to the trunk floor. The recessed well must be a minimum of 34 inches and a maximum of 34-1/2 inches in length, when measured from the left side to the right side. The vertical corners from top to bottom and the horizontal corners from front to rear of the recessed well should be reinforced using a one (1) inch by one (1) inch, 16 gage (0.062 inch thick) corner reinforcement, or the complete recessed well end cap, welded to the outside of the recessed well. The vertical walls of the fuel cell recessed well must be at 90 degrees to the fuel cell recessed well floor without any offset seams to interfere with the installation of, or create a void between, the wall of the fuel cell recessed well and the fuel cell container. The location of the recessed well must not exceed a maximum distance of 29-1/2 inches when measured from the center of the rear axle tube rearward to the rear vertical wall of the fuel cell recessed well.

B. The fuel cell and the fuel cell container must be installed as far forward as possible in the trunk compartment with equal distance between the frame rails. The fuel cell container height, when measured from the floor of the recessed well to the leading edge of the deck lid at the rear window, must be a minimum of 27-1/4 inches and a maximum of 30-1/4 inches. The fuel cell container must maintain the same height on all four (4) corners. When the fuel cell container is installed in the recessed well, the top of the fuel cell container must not be lower than the top of the rear sub-frame side rails and the rear sub-frame crossmember.

C. The fuel cell container, installed in the recessed well, must be secured on the top by a flat fuel cell top rack made of one (1) inch by one (1) inch by 0.065 inch minimum thick square magnetic steel tubing meeting the ASTM A-513 specification, bolted without removable spacers to the rear sub-frame rails and the front and rear fuel cell crossmembers or brackets welded to the rear sub-frame rails or the fuel cell crossmembers. The flat fuel cell top rack must consist of two (2) tubes lengthwise and two (2) tubes crosswise centered in the area from the fuel cell fill plate to the outside of the fuel cell container across the top of the fuel cell container. The flat fuel cell top rack must be attached using eight (8) minimum 5/16 inch diameter magnetic steel mounting bolts tightened to a minimum of 20 foot pounds. All fuel cell top rack mounting bolts must pass vertically through the top rack and be secured to the rear sub-frame or the fuel cell mounting crossmembers. When upright stands are needed to fill the space between the rear sub-frame rails, mounting spacers, or the fuel cell crossmembers and the flat fuel cell top rack, these upright stands must be completely welded to the sub-frame rails, mounting spacers, or the fuel cell mounting crossmembers. The flat fuel cell top rack must not be located more than 9-1/4 inches above the floor of the recessed well.

D. The front and rear fuel cell crossmembers must be constructed using one (1) inch wide by three (3) inches in height by 0.065 inch minimum thick magnetic steel tubing meeting the ASTM A-500 specification. The front and rear fuel cell crossmembers must remain straight and 90 degrees to the rear sub-frame rails.

E. The bottom support frame must be constructed using three (3) tubes, one (1) inch by one (1) inch by 0.065 inch minimum thick square magnetic steel tubing meeting the ASTM A-513 specification, equally spaced (and should be 9-1/2 inches center to center) across the recessed well. These tubes must be completely welded to the fuel cell front and rear crossmembers. The bottom of the fuel cell recessed well must be stitch welded to both sides of each one (1) inch by one (1) inch vertical and horizontal support frame tube. The support tubes must extend down the front and rear, and under the fuel cell container recessed well and must be located according to the construction guidelines at the rear of the Rule Book (refer to the Construction Guidelines at the rear of the Rule Book).

F. Holes in the fuel cell recessed well will not be permitted except for four (4) maximum 1/2 inch diameter drain holes in the corners of the floor of the recessed well.

G. A rear firewall (including any removable panels or access doors) of magnetic sheet steel not less than 22 gage (0.031 inch thick) must be located between the trunk area and the driver's compartment and must be welded in place (refer to sub-section 20C-3.4B & C). The rear firewall, as viewed from left to right, must be straight and flat between the rear sub-frame rails. Removable panels and access door must be sealed at all times during competition.

20C - 16.4 Fuel Filler / Vent

20C - 16.4.1 Fuel Filler

At Events where refueling is required during the Event, the fuel filler must be acceptable to NASCAR Officials and meet the following minimum requirements:

A. Dry coupling systems using a probe on the fuel filler cans and a receptacle on the car, must be used. Dry coupling receptacles must be bolted from the inside of the quarter panel and at an angle on the left rear quarter panel. The mounting must be as near to the top of the panel and as far back as possible. When the Grand National-Approved Composite Bodies are used there must be a ground cable installed. The ground cable must be installed from the metal mounting flange of the dry coupling receptacle to the fuel cell filler plate.

B. The check valve filler neck inside diameter must not exceed 2-1/8 inches. The outside diameter must not be less than 2-1/4 inches and not more than 2-1/2 inches.

C. The maximum filler spout size is 4-1/4 inches outside diameter by eight (8) inches long, then tapering over the next 8-1/2 inches to 2-1/2 inches outside diameter extending to an overall length of 18 inches.

D. A minimum of six (6) inches of 2-1/2 inches maximum inside diameter flex hose must be used between the end of the filler spout and fuel cell neck.

E. For road course Events, NASCAR Officials may require the fuel filler to be installed on the right side.

20C - 16.4.2 Fuel Cell Vent

The fuel cell must be vented as follows:

A. A single, one (1) inch minimum up to a 1-1/4 inch maximum inside diameter vent to the outside of the body must be installed at and sealed to the left rear corner in the taillight area only. The vent must have a self-closing flap type valve that can only be opened by inserting a wire or flat metal strip to allow refueling. The vent tube must not extend more than two (2) inches outside the car's bodywork. The vent tube must remain perpendicular to the taillight.

B. The fuel cell check valve vent hose neck must not exceed 1-1/4 inches inside diameter and three (3) inches length. The fuel cell check valve vent hose neck must have a bead around its outside circumference for hose retention. The fuel cell vent flexible hose must have a maximum inside diameter of 1-1/2 inches and a maximum length of 60 inches when measured from the outside end of the fuel cell check valve vent pipe to the top of the fuel cell fill plate. The fuel cell vent hose must be transparent, neoprene or convoluted Teflon® and must be acceptable to NASCAR Officials. The hose must be secured with two (2) hose clamps at the fuel cell fill plate.

C. When fuel is added during a pit stop, a crew member must catch any overflowing fuel into a container acceptable to NASCAR Officials. The overflow container must be metal and coated red.

D. For road course Events, NASCAR Officials may require the vent to be installed on the right side.

20C - 16.5 Fuel Lines and Fuel Pump

Electrical devices or electrical connections will not be permitted on the fuel cell and fuel lines rearward of the engine block. Engine compartment mounted fuel pressure regulators must be mounted in an area on or forward of the front firewall above the engine block and between the cylinder heads. Fuel pressure may only be measured from a fuel line or engine mounted regulator at the intake manifold. Fuel lines from the carburetor will not be permitted on the cockpit side of the front firewall. Fuel pressure gauge isolators or sensors for electronic fuel pressure gauges must remain on the engine side of the front firewall.

20C - 16.5.1 Fuel Lines

The fuel lines and fuel line connections must be acceptable to NASCAR Officials and meet the following minimum requirements:

A. The size, material and location of the fuel cell pickup must be acceptable to NASCAR Officials.

B. Only one (1) maximum 5/8 inch inside diameter fuel line with a maximum AN-10 fitting, will be permitted from the fuel cell to the carburetor. The length of the fuel line inside the trunk area from the fuel cell to the rear firewall must not exceed 45 inches including the fittings and fuel filter (if used).

C. All fuel lines must be stainless steel, full coverage, outer braid protected synthetic rubber hose attached with threaded, nipple design hose end fittings and should be covered with flame resistant covering acceptable to NASCAR Officials. This includes the fuel line to the fuel pressure gauge and/or sending unit.

D. The fuel line from the fuel cell to the fuel pump may be relocated to prevent vapor lock. The fuel line running through the driver's compartment must be enclosed in a straight or parallel to the drive shaft and transmission tunnel (as viewed from above) maximum 1-1/4 inch outside diameter metal tube, painted red and labeled "FUEL LINE", mounted near the floor pan between the transmission

tunnel and the inside of the right side frame rail. The fuel line must not be mounted more than six (6) inches above the floorpan then rising toward the firewalls forward of the dash panel bar (#8) and rearward of the horizontal tunnel bar (#6). The fuel line must not be mounted to any roll bars inside the driver's compartment.

E. A NASCAR-approved check valve mounted at the fuel line outlet on the fuel cell may be used.

F. Additional lines or extra length must not be used on the fuel system. Extra fuel lines or fuel cells, concealed or otherwise, will not be permitted.

G. Quick disconnect fittings will not be permitted.

H. Only one (1) fuel filter may be used between the fuel cell and the fuel pump. The fuel filter must be mounted on the rear firewall forward of the fuel cell container. The fuel filter must be located on or near the center of the firewall and the fuel line must pass through the right half of the firewall. The size of the fuel filter, without fittings and end caps, must not exceed 8-1/2 inches in length and 2-1/2 inches outside diameter and must have a minimum wall thickness of 0.100 inch. The fuel filter assembly must meet or exceed a minimum pressure rating of 150 psi and must be acceptable to NASCAR Officials.

20C - 16.5.2 Fuel Pumps

Only one (1) fuel pump, acceptable to NASCAR Officials meeting the following requirements, will be permitted:

A. Mechanical, lever-action, camshaft actuated pumps in the approved location will be permitted.

B. A NASCAR-approved, remote cable driven mechanical fuel pump will be permitted. The pump must be driven off of the rear of the engine oil pump. The cable driven fuel pump must be mounted in the trunk area on the rear firewall, forward of the fuel cell container near the center of the chassis. If a remote fuel pump is used, the fuel line fitting on the inlet side of the remote fuel pump may be a manufacturer certified, crash-worthy, break-away, self sealing type. It is recommended that the remote cable assembly meet the SFI 8.1 specification.

C. Electric fuel pumps will not be permitted.

D. Liquid cooling of the fuel pump will not be permitted.

20C - 16.6 Fuel Filler Cans

A. Unless authorized by NASCAR, only two (2) approved maximum 12 gallon fuel filler cans will be permitted in the pits at all tracks.

B. The metal fuel filler cans must be coated red and be acceptable to NASCAR Officials. (See Diagram in the rear pages of the Rule Book for a NASCAR-approved fuel filler can.) The only decals used beyond those of NASCAR Officials that will be permitted on any fuel filler can will be those of a participating fuel supplier that is approved by NASCAR. The fuel filler can must be metal, ventilated and equipped with a flexible filler nozzle.

C. The use of two (2) fuel filler cans at the same time to refuel the car will not be permitted.

D. Elevated fuel drums or refueling towers will not be permitted.

E. Only metal fuel filler cans without dry coupling system fuel probes, coated red, acceptable to NASCAR Officials, will be permitted to be used to refuel the car in the garage area or pit area. When adding or removing fuel to/from the car in the garage area, the car must be outside of the garage structure. When teams are parked behind the team's transporters in the garage area, the car must be moved away from the transporters before adding or removing fuel to/from the car. NASCAR Officials may require that fuel be added or removed to/from the car in a designated area of the garage.

F. Fuel filler cans must not be stored in the garage structure.

G. The fuel filler cans must only be transported from the fuel station to the pit area in a cart acceptable to NASCAR Officials.

H. When installing or removing fuel can couplers, power tools **MUST NOT** be used. It is recommended that a non-conductive nut driver be used.

20C - 17 PERSONAL SAFETY EQUIPMENT

A. General

(1) Each Competitor is solely responsible for the effectiveness of personal safety equipment used during an Event. NASCAR IS NOT RESPONSIBLE FOR THE EFFECTIVENESS OF ANY PERSONAL SAFETY EQUIPMENT.

(2) Each Competitor is expected to investigate and educate himself/herself fully with respect to the availability and effectiveness of personal safety equipment. NASCAR may, from time to time, schedule information sessions with Competitors and safety experts. Each Competitor is expected to attend and participate in such sessions.

B. Protective Clothing

IT IS THE RESPONSIBILITY OF THE DRIVER AND CREW MEMBER, NOT NASCAR, TO ENSURE THAT HE/SHE MAINTAINS, WEARS AND PROPERLY USES PROTECTIVE CLOTHING.

DRIVERS – Unless otherwise authorized, while on the track during the Event, Drivers must comply with the following:

| | <u>Use Required</u> | <u>Use Recommended</u> | <u>SFI Specification (minimum)</u> | <u>SFI Specification (recommended)</u> | <u>SFI Label Visibly Displayed</u> |
|------------------|---|----------------------------|--|--|--|
| Uniform | X | | 3.2A/5 | | Outside Surface of Left Sleeve |
| Shoes | X | | 3.3 | | X |
| Gloves | X | | 3.3 | | X |
| Head Socks | | X | 3.3 | | X |
| Helmet Skirts | | X | 3.3 | | X |
| Underwear | | X | | 3.3 | |
| Socks | | X | | 3.3 | |
| Helmet | X Refer to Section 20D17.1A Helmets | | | | |

CREW MEMBERS – During race conditions, any crew member who steps into the car servicing area must comply with the following:

| | <u>Use Required</u> | <u>Use Recommended</u> | <u>SFI Specification (minimum)</u> | <u>SFI Specification (recommended)</u> | <u>SFI Label Visibly Displayed</u> |
|------------------|---|----------------------------|--|--|--|
| Uniform | X | | 3.2A/1 | 3.2A/5 | Outside Surface of Left Sleeve |
| Shoes | X | | 3.3 | | X |
| Gloves | | X | | | X |
| Head Socks | | X | | | X |
| Helmet Skirts | | X | | | X |
| Underwear | | X | | 3.3 | |
| Socks | | X | | 3.3 | |
| Helmet | X Refer to Section 20D17.1A Helmets | | | | |

FUEL HANDLER (CREW MEMBER) – During race conditions, any crew member involved in fueling the car or handling or transporting fuel in the garage or pit area must comply with the following:

| | <u>Use Required</u> | <u>Use Recommended</u> | <u>SFI Specification (minimum)</u> | <u>SFI Specification (recommended)</u> | <u>SFI Label Visibly Displayed</u> |
|---|---|----------------------------|--|--|--|
| Uniform | X | | 3.2A/5 | | Outside Surface of Left Sleeve |
| One-Piece Uniform | | X | | 3.2A/5 | Outside Surface of Left Sleeve |
| Shoes | X | | 3.3 | | X |
| Gloves | X | | 3.3 | | X |
| Apron | X | | 52.1 | | X |
| Underwear | | X | | 3.3 | X |
| Socks | | X | | 3.3 | X |
| Head Socks* | X | | 3.3 | | X |
| Helmet Skirt* | X | | 3.3 | | X |
| Full-face Helmet with Covering Face Shield | X Refer to Section 20D17.1A Helmets | | | | Helmet Certification Label Affixed to Helmet At All Times |

*Head socks and/or helmet skirt

C. Other Safety Devices

- (1) It is required that each car have, within the driver's reach, a manually controlled push or pull knob which activates a built-in, fully charged fire extinguishing pressurized cylinder with a visible, operating pressure gauge. It is recommended that an automatic thermally activated discharge nozzle be used in addition to the manually controlled push or pull knob. This extinguisher system must meet the SFI 17.1 specification and display a valid SFI 17.1 label. This extinguisher must be certified by the manufacturer every two (2) years. An additional manufacturer's label with a visible date code must be located directly below the pressure gauge on the surface of the cylinder. This fire extinguisher cylinder must be securely mounted to the right of the driver's seat. The fire extinguisher cylinder and its mount(s) must not be beyond the inside edge of the right side main frame rail. The mounting system must secure both ends of the cylinder for its full circumference to the structure of the car and be acceptable to NASCAR Officials. Hose clamps, worm drive clamps or cable ties will not be permitted. A device(s) must be installed to keep the cylinder from sliding out of the mounting system. Clamp style or "figure eight" mounts must completely encircle the circumference of the 1-3/4 inch outside diameter of the roll bar. This cylinder must contain a minimum of five (5) pounds of fire extinguishing agent, visibly designated on the label as DuPont FE-36, 3M NOVEC 1230 or equivalent type agent. The primary purpose of this system is to protect the driver. Nozzle(s) must be designed for the extinguishing agent used and should not be pointed directly at the driver, but should be mounted to provide flooding of the driver's compartment to the manufacturer's recommendation. If engine compartment nozzle(s) are used with this cylinder, the fire extinguishing cylinder size must be increased to a minimum of 10 pounds of fire extinguishing agent, visibly designated on the label as DuPont FE-36, 3M NOVEC 1230 or equivalent type agent to be used for this system. All discharge lines and fittings must be steel or steel reinforced hose although nozzles may be aluminum. Cylinders for all agents must be DOT-approved steel or aluminum. Carbon fiber or composite cylinders will not be permitted.
- (2) It is required that each car have an additional fire extinguishing cylinder solely dedicated to extinguish the fuel cell area (trunk) and as an option, the same fire extinguishing cylinder may also be directed to the engine compartment with the use of a T-type fitting and thermally activated discharge nozzles. This extinguisher must meet the SFI 17.1 specification and display a valid SFI 17.1 label. This extinguisher must be certified by the manufacturer every two (2) years. An additional manufacturer's label with a visible date code must be located directly below the pressure gauge on the surface of the cylinder. This fire extinguisher cylinder must be mounted in the driver's compartment to the right of the drivers seat. The fire extinguisher cylinder and its mount(s) must not be beyond the inside edge of the right side main frame rail. The mounting system must secure both ends of the cylinder for it's full circumference to the structure of the car and be acceptable to NASCAR Officials. Hose clamps, worm drive clamps or cable ties must not be used to mount this cylinder. A device(s) must be installed to keep the cylinder from sliding out of the mounting system. Clamp style or "figure eight" mounts must completely encircle the circumference of the 1-3/4 inch outside diameter of the roll bar. This cylinder must contain a minimum of 10 pounds of fire extinguishing agent, visibly designated on the label as DuPont FE-36, 3M NOVEC 1230 or equivalent type agent. This cylinder must be activated by an automatic, thermally activated discharge nozzle(s) recommended by the manufacturer for this application. This automatic system may have a manual and/or pneumatic override from the driver-activated system. If the engine compartment discharge option is used, then an additional automatic, thermally activated discharge nozzle must be located under the hood forward of the firewall. All discharge lines and fittings must be steel or steel reinforced hose although nozzles may be aluminum. When routing pressurized fire extinguisher lines (thermally activated) either to the trunk area or the engine compartment, the lines will only be permitted to pass through the firewall near the longitudinal centerline of the vehicle. These lines must not pass through floorboards, wheel wells, or crush panels. All cylinders must have an indicator gauge and identifying label readily visible for inspection purposes. The gauge must be compatible with the agent used in the cylinder. Cylinders for all agents must be DOT-approved steel or aluminum. Carbon fiber or composite cylinders will not be permitted.

- (3) All entrants should have in their garage or pit area as part of their equipment, at all times, a fully charged minimum 10 pound, Class B fire extinguisher with a visible, operating pressure gauge.

D. Passengers will not be permitted in or on a race car at any time.

20C - 17.1 Helmets / Head and Neck Restraint Devices / Systems

A. Helmets

- (1) Drivers must wear a full-face helmet carrying at least one (1) of the following certifications:
- FIA 8860-2004
 - FIA 8860-2010
 - Snell SA 2005
 - Snell SA 2010
 - Snell SAH 2010
 - SFI 31.1/2005

Helmet certification (label) must be affixed to the helmet at all times.

Helmets should be fitted with a NASCAR-approved helmet removal system. The following systems are currently approved:

Eject™ Helmet Removal System

- (2) The driver must wear the helmet in accordance with the directions provided by the helmet supplier and/or manufacturer. Any modification to the helmet for any purpose should not detract from its effectiveness. Helmet surface protrusions such as visor tear-off posts should be removed.
- (3) During Race conditions, any crew member who steps into the car servicing area must wear a helmet.
- (4) During Race conditions, any crew member involved in fueling the car must wear a full-face helmet with a covering face shield and a fire resistant head sock or helmet skirt.

Helmets should be fitted with a NASCAR-approved helmet removal system. The following systems are currently approved:

Eject™ Helmet Removal System

- (5) IT IS THE RESPONSIBILITY OF THE DRIVER/CREW MEMBER, NOT NASCAR TO ENSURE THAT HIS/HER HELMET IS APPROVED, CORRECTLY WORN, MAINTAINED AND PROPERLY USED.

B. Head and Neck Restraint Devices/Systems

- (1) At all times during an Event (practice, qualifying and competition), drivers must connect their helmet to an approved head and neck restraint device/system which is SFI-approved and acceptable to NASCAR. The device/system must meet the SFI 38.1 specification and must display a valid SFI 38.1 label. The head and neck restraint device/system, when connected, must conform to the manufacturer's mounting instructions, and it must be configured, maintained and used in accordance with the manufacturer's instructions.
- (2) IT IS THE RESPONSIBILITY OF THE DRIVER, NOT NASCAR, TO ENSURE THAT HIS/HER DEVICE/SYSTEM IS SFI-APPROVED, CORRECTLY INSTALLED, MAINTAINED AND PROPERLY USED.
- (3) The following are the SFI-approved Head and Neck Restraint Devices/Systems that are currently acceptable to NASCAR:

| <u>MANUFACTURER</u> | <u>MODEL</u> | <u>OPTIONS</u> |
|--------------------------------|----------------------|--------------------------|
| HANS | Professional Series | Fixed or Sliding Tethers |
| HANS | Extra/Economy Series | Fixed or Sliding Tethers |
| HANS | Pro Ultra | Sliding Tethers |
| HANS | Sport Series | Fixed or Sliding Tethers |
| HANS | Sport II Series | Sliding Tethers |
| Simpson (formerly Hutchens) | Hybrid | Fixed Tethers |
| Simpson | Hybrid Pro, carbon | Fixed Tethers |

C. SFI 38.1-approved head and neck restraint devices/systems will remain approved for use in competition until their expiration date which is five (5) years after the date of manufacture. At this time, the head and neck restraint device/system must be returned to the manufacturer for inspection and re-certification.

20C - 17.2 **Seat Belts**

A. Each car must be equipped with an SFI 16.5-approved, minimum 6-point seat belt restraint system that displays a valid SFI 16.5 label. It is recommended that a 7-point (third anti-submarine belt) seat belt restraint system be used. The shoulder harness and lap belt assembly must not be more than three (3) inches (nominal) in width. The shoulder harness must not be less than two (2) inches wide (nominal) as it passes over the approved head and neck restraint system. Approved seat belt restraint systems must have a latching mechanism attached to the lap belt or, if a cam lock latching mechanism is used, it must be attached to the lap belt, the shoulder harness or the anti-submarine belts. This latching mechanism must provide a common connection and release for the lap belt, shoulder harnesses and the anti-submarine belts, and must be designed with a quick and easy one-handed, gloved release of all belts in all conditions. It must have one (1) of two (2) approved release designs:

- (1) **Latch/Lever:** Utilizes a lever opening away from the body in a right to left hand movement, parallel to the lap belt with complete release of all belts. The lever must have a provision to prevent an unintentional release.
- (2) **Cam Lock:** A circular handle or raised surface that turns in both directions for a motion of not less than 30 degrees before completely releasing all belts. A downward facing tab or toggle may be used, provided that its length does not extend more than 1/2 inch beyond the outer diameter of the release mechanism unless a provision to prevent unintentional rotation or release is provided.

B. The seat belt restraint system must be installed in accordance with the directions provided by the system supplier and/or manufacturer. In addition, please note the following guidelines:

- (1) Lap belts must be installed and used in such a manner that, when secured to the latching mechanism, the seat belt webbing travels in a straight, clear and free path from the belt mount through the seat opening to the latching mechanism. Lap belt mounts must be able to swivel without binding or interference. When the driver is buckled in the seat, the free end of the seat belt webbing must rest in a position clearly aligned over the seat belt webbing entering any adjustment or latch release hardware.
- (2) On the left lap belt, if a roller adjuster is used, it must have tension springs installed and it must be attached to and be a part of the latch release mechanism directly without any webbing loop. The roller adjuster must not be attached to the lap belt mounting tab at the frame. A 3-bar slider, threaded to the manufacturer's instructions, may be used for the left lap belt length adjustment, in the absence of the roller adjuster. The 3-bar slider must be positioned outside the seat opening and as close to the mounting tab as possible. On the right lap belt, if a roller adjuster is used, it must have tension springs installed and the adjuster may be located anywhere on the belt except at the frame mounting tab. A webbing link may be used to connect the roller adjuster to the latching mechanism or a 3-bar slider, threaded to the manufacturer's instructions, may be used for the right lap belt length adjustment, in the absence of the roller adjuster. The 3-bar slider must be positioned outside the seat opening and as close to the mounting tab as possible. Wrap-around style lap belt mounts and clip-on/hook/eyebolt style mounts will not be permitted, only tab style lap belt mounts secured with a nut and bolt will be permitted for aluminum seats. NASCAR-approved composite material seats must use the lap belt mounts which are integral with the seat and must be of the same mount style as approved with the seat.
- (3) Shoulder belts must mount to horizontal shoulder bar (#7) or shoulder belt bar (#7B) only (as shown in the Diagram in the rear pages of the Rule Book). If shoulder belt mounting brackets are used, the shoulder belt mounting brackets must not exceed three (3) inches in length and be a minimum 1-3/4 inches in width. The shoulder belt mounting brackets must be made of solid magnetic steel with a minimum thickness of 3/16 inch welded to the horizontal shoulder bar (#7) or shoulder belt bar (#7B). The shoulder belt mounting holes must have a minimum edge-to-hole distance of 1/4 inch. If the shoulder belt bar (#7B) is used, and the center-to-center distance from the horizontal shoulder bar (#7) is more than four (4) inches, then the shoulder belts must mount directly to the shoulder belt bar (#7B) or to tabs welded directly to the shoulder belt bar (#7B). The opening in the seat for this type of belt must be either a single or double open slot with a finished inside edge or a grommet installed. Only individual shoulder harness belts will be permitted. Y-type shoulder harnesses will not be permitted. Wrap-around shoulder harness mounts will be permitted provided the belts do not cross behind the driver and all wrap-around mount style shoulder

belts must be retained by a guide on horizontal shoulder bar (#7) or shoulder belt bar (#7B) to prevent lateral movement of the belt on the roll bar. Shoulder belts may cross behind the driver provided they use a tab-style mount and not a wrap-around mount. The seat opening for these crossed shoulder belts must be a single, open slot with a finished inside edge or grommet where the shoulder belts cross behind the driver. Each shoulder belt using a tab mount must use an individual mounting tab or a steel sleeve welded through horizontal bar (#7) or shoulder belt bar (#7B) and be secured with a nut and bolt. Roller adjusters on the shoulder harnesses must have tension springs installed. Sternum or cross belts using metal or hard surface hardware will not be permitted.

- (4) Approved anti-submarine belts must be mounted to the seat frame or a steel reinforced seat bottom mount. Either wrap-around or tab-style anti-submarine belt mounts will be permitted and must be installed in accordance with the directions provided by the system supplier and/or manufacturer.

C. The manufacturer's label must not be located under the adjusting mechanism when the driver is buckled in the seat and has tightened the seat belts and shoulder harness. If the label is under the adjusting mechanism, the label may be removed and relocated in a manner that does not affect the integrity of the belt material. The date of manufacture must remain visible on the belt at all times. Seat belt restraint systems must not be used beyond two (2) years after their date of manufacture.

D. The driver must use the seat belt restraint system at all times on the race track, in accordance with the instructions and/or recommendations of the system supplier and/or manufacturer, as set forth above.

E. The SFI 16.5-approved seat belt restraint systems will remain approved for use in competition until their expiration date which is two (2) years after the date of manufacture. The seat belt restraint systems must be used as a complete restraint system. Brands may not be mixed.

F. IT IS THE RESPONSIBILITY OF THE DRIVER, NOT NASCAR, TO ENSURE THAT HIS/HER SEAT BELT RESTRAINT SYSTEM AND ALL COMPONENTS ARE SFI 16.5-APPROVED AND LABELED, CORRECTLY INSTALLED, MAINTAINED AND PROPERLY USED.

20C - 17.3 Seats

A. IT IS THE RESPONSIBILITY OF THE DRIVER, NOT NASCAR, TO ENSURE THAT HIS/HER SEAT, HEADREST/HEAD SURROUND ASSEMBLY AND ALL SEAT COMPONENTS ARE CORRECTLY INSTALLED, MAINTAINED AND PROPERLY USED.

B. Each car must be equipped with an SFI 39.1 approved seat and headrest/head surround assembly displaying valid SFI 39.1 labels and be acceptable to NASCAR. Custom-manufactured aluminum seats constructed from solid aluminum sheet material from the seat bottom to above the driver's shoulders, acceptable to NASCAR, will be permitted. NASCAR-approved composite material seats will be permitted. Composite material seats and/or seats which incorporate lap and/or shoulder belt anchorages are subject to additional testing with documentation supplied to NASCAR. Each composite seat must have a unique, identifier that matches records on file with NASCAR. Seats constructed of multiple materials, including composite materials, must be SFI 39.1-approved and must be acceptable to NASCAR. The SFI 39.1-approved seat and headrest/head surround assembly will remain approved for use in competition until their expiration date which is two (2) years after the date of manufacture. Once a seat and headrest/head surround assembly has reached the expiration date, the seat and headrest/head surround assembly must be inspected and recertified by the seat manufacturer. All seat interiors must be lined with inserts and/or padding. It is recommended that a minimum thickness of two (2) inches of SFI 45.2 insert/padding be used. It is recommended that the padding meet the SFI 45.2 specification and display a valid SFI 45.2 label. All non-SFI 45.2 insert/padding materials must be 1/2 inch thick or less. No gaps or non-SFI 45.2 specification approved material(s) may be present between the seat structure and driver's uniform in the area directly under the driver with the exception of standard seat cover upholstery (1/4 inch thick maximum) or flame retardant knit materials. The area directly under the driver extends from the driver's waist (belt line) forward to the front edge of the sub-strap pass through holes, or four (4) inches forward of the lap belt mount, whichever is greater, as well as extends five (5) inches to both the left and right of the driver's centerline. It is recommended, a minimum thickness of 3/4 inches of insert/padding meeting the SFI 45.2 specification be used in this area directly under the driver. The area directly under the driver is shown in Diagram #13, in the rear pages of the Rule Book. A 3/8 inch diameter inspection through-hole must be located on the driver's centerline between the leading edge of the lap belt pass through holes as shown in Diagram #13, in the rear pages of the Rule Book. All seat coverings and/or upholstery should be flame retardant.

C. Seats manufactured or recertified after January 1, 2014, must use the insert/padding meeting the SFI 45.2 specification and display a valid SFI 45.2 label. All non-SFI 45.2 insert/padding materials must be 1/2 inch thick or less. No gaps or non-SFI 45.2 specification approved material(s) may be present between the seat structure and driver's uniform in the area directly under the driver with the exception of standard seat cover upholstery (1/4 inch thick maximum) or flame retardant knit materials. The area directly under the driver extends from the driver's waist (belt line) forward to the front edge of the sub-strap pass through holes, or four (4) inches forward of the lap belt mount, whichever is greater, as well as extends five (5) inches to both the left and right of the driver's centerline. A minimum thickness of 3/4 inches of insert/padding meeting the SFI 45.2 specification must be used in this area directly under the driver. The area directly under the driver is shown in Diagram #13, in the rear pages of the Rule Book. A 3/8 inch diameter inspection through-hole must be located on the driver's centerline between the leading edge of the lap belt pass through holes as shown in Diagram #13, in the rear pages of the Rule Book. All seat coverings and/or upholstery should be flame retardant.

D. The seat and headrest/head surround assembly must be installed in accordance with the directions provided by the system supplier and/or manufacturer. SFI 39.1 seats and headrest/head surround assemblies must not be modified or altered. The back of the seat, at the shoulder level, must be positioned as close to the horizontal shoulder bar (#7) as possible.

E. All seats must have padded seat leg extensions on the left side and the right side. Leg extensions must be securely mounted to the seat and car structure. Leg extensions must be padded. It is recommended that the padding meet the SFI 45.2 specification and display a valid SFI 45.2 label. Composite material seat leg extensions should meet the SFI 56.1 specification for flammability. All leg extension coverings and/or upholstery should be flame retardant.

F. Headrests/head surround assemblies must be designed to provide rigid support around both sides of the helmet and across the back and from the forward most point of the helmet chin bar in addition to allowing extra length for forward head motion during impact. The left side of the headrest/head surround assembly may be shortened to permit egress of the driver but must not be shortened to a location rearward of the helmet chin bar. Foam, tape or other non-original coverings may not be added to the headrest without the approval of the seat manufacturer and must be acceptable to NASCAR Officials. The headrest/head surround assembly must be rigidly bolted to the top of the seat using a minimum of 5/16 inch diameter bolts, except for the NASCAR-accepted composite seats. Steel brackets welded to the roll cage must be a minimum 1/8 inch thick and aluminum brackets welded to the headrest/head surround assembly should be a minimum 3/16 inch thick. All bolts must have a minimum of 3/4 inch of metal from the center of the mounting bolt to the edge of the bracket. In addition, it is recommended that the headrest/head surround assembly be bolted to the shoulder supports with a minimum 3/16 inch thick brackets and a minimum 5/16 inch diameter bolts. The headrest/head surround assembly must not extend into the window opening beyond the area defined by the upper roll cage. All headrests must be fabricated in a rigid construction and of materials which provide adequate support in an impact. The headrest/head surround assembly must be padded with flat impact absorbent material, a minimum of four (4) inches thick on the right side and a minimum of 2-1/2 inches thick on the left side, meeting the SFI 45.2 specification. At road course Events only, as an option to the preceding impact absorbent material requirements, the arrangement of the impact absorbent material in the headrest/head surround assembly may be changed to a minimum of three (3) inches thick on both the right side and left side. The headrest/head surround must be padded with flat impact absorbent material, meeting the SFI 45.2 specification.

G. Optional strap-type headrest supports or nets must be equipped with a quick release fastener accessible by the driver.

H. The upper seat back must be secured to horizontal shoulder bar (#7) or to a bracket that is secured to horizontal shoulder bar (#7) with a minimum of three (3) high quality 5/16 inch minimum diameter bolts through the horizontal shoulder bar (#7). For aluminum seats, if a seat bracket is used to attach the seat to the horizontal shoulder bar (#7), the bracket must be constructed using a minimum of 3/16 inch thick metal plate, and it must have a minimum of 3/4 inch of metal from the center of the mounting bolt to the edge of the bracket or the bracket may utilize the composite seat bracket design. For composite seats, the seat bracket must attach the seat to the horizontal shoulder bar (#7) and must be constructed from magnetic steel.

Minimum upper seat bracket thicknesses:

Hendrick: 0.090 inch

Sabell: 3/16 inch

Sparco: 3/16 inch

The magnetic steel seat bracket to be used with a composite seat must be constructed according to the manufacturer's instructions, including all required gussets and reinforcements (see Diagrams #12A & B, in the rear pages of the Rule Book). All gussets must be solid and must run from the centerline of the seat mounting hole to the centerline of the roll cage mounting hole. The outer diagonal gusset edge must be straight unless the gusset is relieved to make room for the horizontal shoulder bar (#7). Holes and or other modifications that, in the judgment of NASCAR Officials.

The seat bracket must be fastened to the seat with a minimum of four (4) high quality 5/16 inch minimum diameter bolts for aluminum seats, and two (2) high quality 5/16 inch minimum diameter bolts for composite seats.

I. The seat bottom must be secured to the car's frame/roll cage assembly with a tubular seat frame in a symmetrical fashion with a minimum of two (2) high quality 5/16 inch minimum diameter bolts per side. Seat mount brackets and/or mounting systems must be a minimum of 1/4 inch thick. All mounting brackets must have a minimum of 1/2 inch of metal from the center of the mounting bolt to the edge of the bracket. All seat mounting brackets, welded to the frame rail, frame crossmembers, floors, roll bars, or removable seat mounting frame assemblies, must be made of a minimum of 1/4 inch magnetic steel if single shear or a minimum of 3/16 inch if the double shear configuration is used. If a slotted mount is used to mount the seat to the seat frame, the seat must be bolted to the seat frame bracket using an additional bolt to prevent sliding. When mounting through aluminum seats or brackets, large diameter washers must be used.

J The seat shoulder support angle should not exceed 25 degrees from vertical when measured where the driver's shoulder contacts the seat with the seat installed in the car. Additional angle may be added to the bottom of the shoulder support for driver arm clearance, if necessary. The interior shoulder support surface should be positioned perpendicular to the seat back in a plan view.

K. Rib/chest support structures, if used, should not interfere with the natural ingress and egress of the driver from the seat. Rib/chest support structures, if used, should provide full coverage from the seat back to the front of the driver's chest. Partial rib/chest supports constructed of foam, meeting the SFI 45.2 specification, will be permitted. Rib/chest support structures should not continue forward past the front of the driver's chest and should not curve or wrap around the front of the driver's chest. Rib/chest support foam, meeting the SFI 45.2 specification will be permitted to curve or wrap around the front of the driver's chest.

20C - 17.4 Window Net

A. A window net meeting the SFI 27.1 specification and displaying a valid SFI 27.1 label must be installed in the left side door window opening. The Window net must not be used beyond two (2) years from the date of manufacture.

B. The window net must be a rib-type construction made from minimum 3/4 inch, maximum one (1) inch wide material, with a minimum one (1) inch square opening between the ribs. The minimum window net size must be 20 inches wide by 14 inches high.

C. All window net mounts must be welded directly to the roll cage and must not attach to the door top or exterior body panel. All window net mounts must be constructed using a minimum 1/2 inch diameter solid magnetic steel rod or a minimum one (1) inch wide by 1/8 inch thick flat magnetic steel and must be acceptable to NASCAR Officials. The lower window net mounting bar must not extend above the door top.

D. The window net when in the closed position must fit tightly and be secured with a lever-type quick release latch acceptable to NASCAR Officials. The lever must be secured by a detent ball in the lever and may be supplemented by a Velcro®, fastener only; pins or clips will not be permitted. The latch must be mounted at the top in the front to the roof bar (#3) or at the top of the left front roll bar leg (#2A) near the roof bar (#3).

20C - 18 Roll Bars

A. As a minimum, all cars are required to have the basic and typical roll cage configured as shown in Diagrams #2, #3, #4, and #5. Unless otherwise specified below, all roll bars must be made from round magnetic steel seamless tubing 1-3/4 inches by 0.090 inch thick minimum wall thickness meeting the ASTM A-519 specification. Electric resistance welded tubing, aluminum and/or other soft metals will not be permitted. Roll bar joints and intersections must be welded according to the ASTM specification for the material being welded. A maximum of one (1), maximum 1/8 inch diameter hole may be drilled at each welded roll cage joint for the purpose of purging the tubes when welding. Once constructed and installed, the roll cage must be acceptable to NASCAR Officials. Holes and/or other modifications that, in the judgment of NASCAR Officials, were made with the intent of weight reduction will not be permitted. Modifications or alterations which detract from or compromise the integrity or effectiveness of any roll cage component will not be permitted.

B. Basic NASCAR Roll Cage Structure

- (1) The main roll bar (#1 in Diagram #5) must be a continuous length of tubing with one end welded perpendicular to the top of the right frame rail and one end welded perpendicular to the top of the left frame rail and with both rising vertically a minimum of 21-1/4 inches before bending inward to maintain a minimum clearance with the "B" posts and follow along the inner surface of the roof panel with minimum clearances for both the roof panel and the hinged air deflectors. The main roll bar (#1) must also be braced with one (1) diagonal bar (#5) and two (2) horizontal bars (#6) and (#7). All bends in the main roll bar (#1) must be as symmetrical as minimum clearances permit.
- (2) The distance from the center of each of the front roll bar legs (#2 A & B) to the center of the main roll bar (#1) must not measure less than 42-3/4 inches. Each of the front roll bar legs (#2 A & B) must be constructed from a continuous length of tubing. One leg must be welded perpendicular to the top of the right frame rail and one leg welded perpendicular to the top of the left frame rail with both legs rising vertically a minimum of 21-1/4 inches before bending inward and rearward to maintain a minimum clearance with the "A" posts. Both legs must follow along the inner surface of each respective "A" post. The front roll bar legs (#2 A & B) must be welded to the roof bar (#3) near the upper corners of the windshield.
- (3) The roof bar (#3) must be a continuous length of tubing extending forward from the outer edges of the main roll bar (#1) with minimum clearance to the roof panel and remains parallel to the main frame rails. The roof bar must follow the contour of the windshield as it bends across the front maintaining a minimum clearance to the top of the windshield. The center to center width of the roof bar (#3) must be a minimum of 43-1/4 inches, and a minimum distance of 28-3/4 inches must be maintained from the centerline of the roof bar (#3) to the centerline of the main roll bar (#1).
- (4) The centerline roof bar (#4) must be a continuous length of tubing, extending from the main roll bar (#1) forward to the roof bar (#3) near the car's centerline. The center windshield bar (#4A) must extend forward from the roof bar (#3) near the car's centerline and bend downward following the back of the windshield with minimum clearance. The center windshield bar (#4A) must pass through the top of the dash panel and attach to a support bar under the dash panel at the firewall.
- (5) The main roll bar diagonal bar (#5), must form a straight line, with no bends, and must begin near the upper left bend of the main roll bar (#1) behind the driver's head and after intersecting the horizontal shoulder bar (#7), it must be welded to the lower right side of the main roll bar (#1) where the horizontal tunnel bar (#6) is welded to the main roll bar (#1).
- (6) Two (2) horizontal bars (#6 & #7) must each be a continuous length of tubing and must be welded, with no bends, inside the vertical legs of the main roll bar (#1) with the horizontal tunnel bar (#6) welded just above the drive shaft tunnel and the horizontal shoulder bar (#7) at a minimum height of 21-1/4 inches above the main frame rails. An additional shoulder belt bar (#7B) must be a continuous length of tubing and may be added above the horizontal shoulder bar (#7) to facilitate shoulder harness mounting height. The shoulder belt bar (#7B) must be welded to the main roll bar (#1) and the main roll bar diagonal bar (#5) or it may be a bent tube constructed of 1-3/4 inches by 0.090 inch minimum wall thickness steel, round tubing, meeting the ASTM A-519 specification, welded at each end to the horizontal shoulder bar (#7) to form a loop above the horizontal shoulder bar (#7). The shoulder belt bar (#7B) must not be forward of the plane of the main roll bar (#1).
- (7) The diagonal bar (#7A) must be welded near the center of the horizontal shoulder bar (#7). The diagonal bar then extends forward to a junction with the roof support bar (#12) and continues through the firewall. This diagonal bar must be welded to the right front sub-frame rearward of the spring bucket. This bar must be made from 1-3/4 inches by 0.065 inch minimum wall thickness magnetic steel seamless round tubing.
- (8) The dash panel bar (#8) must be a continuous length of tubing, with no bends, welded beneath the dash panel between the two (2) front roll bar legs (#2 A & B) at a minimum height of 21-1/4 inches above the main frame rail.
- (9) (a) The door bars (#9 A & B), on both the left and right sides, must have a minimum of four (4) bars equally spaced from top to bottom that must be welded horizontally between the vertical uprights of the main roll bar (#1) and the front roll bar legs (#2 A & B). All door bars must each be a continuous length of tubing. The top door bar

on each side must maintain a minimum vertical height of 21-1/4 inches from the top of the main frame rails to its centerline and match up with the intersection of the dash panel bar (#8) at the roll bar legs (#2A & B) at the front and the intersection of the horizontal shoulder bar (#7) at the main roll bar (#1) at the rear. All door bars must be convex in shape. The door bars (#9 A & B) must have a minimum of six (6) vertical supports per side with two (2) equally spaced between each door bar. These supports must be made from a minimum of 1-3/4 inches by 0.090 inch wall thickness magnetic steel seamless round tubing (not numbered but shown in the left side view of Diagrams #3, #4 and #5, in the rear pages of the Rule Book).

- (b) All cars must have a 13 gage (0.0897 inch thick) magnetic steel anti-intrusion plate(s) must be securely welded to the outside of the left side door bars. The anti-intrusion plate(s) must fill the area between the horizontal centerlines of the top and bottom door bars, and the vertical centerlines of the main roll bar (#1) and the left front roll bar leg (#2A). The plate(s) must be formed to match the curvature of the door bars. Individual plates welded in the openings between each door bar will not be permitted to be inset more than 1/4 inch from the tangent or outside surface of the door bar. Plate(s) welded between the vertical upright bars should be as large as possible. All plate(s) must have the corners welded with one (1) inch of weld followed by a maximum of three (3) inches of surface not welded and followed again by a minimum one (1) inch weld.

To facilitate emergency removal of the left side door bars (#9A), the anti-intrusion plate must have six (6), 2-1/2 inch diameter holes cut in the anti-intrusion plate, with three (3) holes near each end of the plate in the following locations:

The upper two (2) holes must be centered vertically between the left side door bars (#9A-1&2), at an on-center distance of three (3) inches from the center of the left front roll bar leg (#2A) and the main roll bar (#1).

The middle two (2) holes must be centered vertically between the left side door bars (#9A-2&3), at an on-center distance of three (3) inches from the center of the left front roll bar leg (#2A) and the main roll bar (#1).

The lower two (2) holes must be centered vertically between the left side door bars (#9A-3&4), at an on-center distance of five (5) inches from the center of the front roll bar leg (#2A) and the main roll bar (#1). Refer to Diagram #9 in the rear pages of the Rule Book.

- (10) The vertical vent window bars (#10 A & B) must each be a continuous length of tubing, welded from the upper surface of the top door bars on the right side and left side to the front roll bar legs (#2 A & B). The vertical vent window bars (#10 A & B) must be perpendicular to the top door bars (#9 A & B).
- (11) The two (2) angular supports (#11 A & B) must be welded to the top of the main frame rail and to the bottom surface of the second door bar from the bottom.
- (12) The roof support bar (#12) must be a continuous length of tubing, with no bends, that extends from the right front corner of the roof bar (#3) and down to the rear suspension crossmember. The roof support bar (#12) must be welded near the intersection with the front roll bar leg (#2 B) and the roof bar (#3).
- (13) The rear support bars (#13 A & B) must be continuous lengths of tubing welded to the left and the right back side of the main roll bar (#1) near the roof panel at the top. They must extend to and be welded to the top of the rear sub-frame rail within one (1) inch of the rear edge of the fuel cell.
- (14) The trunk reinforcement bar (#14) must be a continuous length of tubing forming a loop directly above the rear sub-frame side rails and the rear-most crossmember and be welded to the rear support bars (#13 A & B). The trunk reinforcement bar (#14) must maintain a minimum height of five (5) inches from the top of the rear crossmember to the trunk reinforcement bar (#14's) center. The truck reinforcement bar (#14) must remain parallel to the rear sub-frame rear side rails and rear crossmember.
- (15) Three (3) rear vertical support bars (#15), evenly spaced, must be welded perpendicular to the top of the rear crossmember and to the bottom surface of the trunk reinforcement bar (#14). These vertical supports must be made from a minimum of 1-3/4 inches by 0.090 inch wall thickness magnetic steel seamless round tubing.
- (16) The two (2) front sub-frame bars (#16 A & B) must each be a continuous length of tubing a minimum 1-3/4 inch diameter by 0.090 inch wall

thickness magnetic steel seamless round tubing. They must be welded to the right side and the left side of the front roll bar legs (#2 A & B) at a minimum height of 21-1/4 inches. The front sub-frame bars (#16 A & B) must extend forward through the firewall, turn down, and must be welded to the front sub-frame rails forward of the spring buckets near the radiator mount.

C. Gussets

- (1) Gussets must be used at the intersection where the main roll bar (#1) and the front roll bar legs (#2 A & B) meet the main frame, and the gussets must be constructed using a minimum one (1) inch wide by two (2) inches high magnetic steel box tubing.
- (2) Gussets must be used at the intersection where the front roll bar legs (#2 A & B) intersect the roof bar (#3), and the gussets must be constructed from a minimum 0.095 inch thick triangular-shaped magnetic steel flat plate measuring a minimum of 1-1/2 inches long on each side that is to be welded.
- (3) Gussets must be used at the intersection of main roll bar (#1) and the front roll bar legs (#2 A & B) with door bars (#9 A & B) and the gussets must be constructed from a minimum 0.095 inch thick triangular-shaped magnetic steel flat plate measuring a minimum of 1-1/2 inches long on each side that is to be welded.
- (4) Gussets must be used at the intersection of main roll bar (#1) and the rear support bars (#13 A & B), and the gussets must be constructed from a minimum 0.095 inch thick triangular-shaped magnetic steel flat plate measuring a minimum of 1-1/2 inches long on each side that is to be welded.

D. For the approved location of the various roll bars, please reference both the basic roll cage diagrams and the typical roll cage diagrams in the rear pages of the Rule Book.

E. Modifications to the basic and typical roll cage design described above must be submitted in blueprint and/or computer aided design (CAD) files for acceptance to the office of the Competition Administrator at least 60 days before the design can be entered in competition. If the Competition Administrator accepts the modification as set forth in the submitted files, the Competitor must submit for inspection a completed frame and roll cage at least 30 days prior to the date of intended competition. Acceptance of the submitted blueprint and/or computer aided design (CAD) files does not guarantee acceptance of the completed frame and roll cage design, and the Competition Administrator may decide not to accept such design even if it is the same as the submitted files. If the Competition Administrator accepts the completed frame and roll cage, it may then be used in competition in the form accepted, unless and until the form is no longer approved by the Competition Administrator.

F. All roll bars within the driver's reach must be covered with impact absorbent material manufactured to the SFI 45.1 specification and be acceptable to NASCAR Officials. Impact absorbent material used on roll bars must meet the SFI 45.1 specification and be imprinted on the outside surface with the SFI logo.

G. All references to the roll cage, roll bars, roll cage bars or the roll cage bar design specified in other sections of the Rule Book refer to sub-section 20C-18.

H. At the discretion of NASCAR Officials, additional material and/or tubing may be required to be welded to any car that does not conform to the January 1, 2015 roll cage or roll bar specifications as described in sub-section 20C-18.

SECTION 20D
NASCAR
WHELEN MODIFIED TOUR
WHELEN SOUTHERN MODIFIED TOUR

Open to NASCAR-approved automobile manufacturers provided they comply with, and adhere to, specifications as outlined for this Series.

NOTICE

ALL MODEL, ENGINE OR EQUIPMENT CHANGES OR MODIFICATIONS NOT SPECIFICALLY ADDRESSED IN THIS RULE BOOK BY NASCAR MUST BE SUBMITTED, IN A COMPLETED FORM/ASSEMBLY, TO NASCAR FOR CONSIDERATION OF APPROVAL ON OR PRIOR TO SEPTEMBER 2, 2015, UNLESS OTHERWISE AUTHORIZED BY NASCAR, TO BE CONSIDERED FOR COMPETITION FOR THE 2016 SEASON. THE APPLICANT WILL BE NOTIFIED OF APPROVAL OR REJECTION FROM NASCAR. RACE EQUIPMENT WILL NOT BE CONSIDERED AS HAVING BEEN APPROVED BY REASON OF HAVING PASSED THROUGH INSPECTION AT ANY TIME OR ANY NUMBER OF TIMES UNOBSERVED OR UNDETECTED. ANY RACE EQUIPMENT WHICH DOES NOT CONFORM TO SPECIFICATIONS OR TOLERANCES CONTAINED IN THE 2015 NASCAR RULE BOOK, OR IS NOT OTHERWISE APPROVED BY NASCAR, MAY NOT BE USED IN NASCAR COMPETITION IN 2015. ALL SUBMITTED RACE EQUIPMENT MUST BE ACCOMPANIED BY COMPUTER AIDED DESIGN (CAD) FILES AND/OR MECHANICAL DRAWINGS AND REQUISITE FEE AS DETERMINED BY NASCAR.

20D - 1 COMPETING MODELS AS SELECTED BY NASCAR

20D - 1.1 NASCAR Whelen Modified / Whelen Southern Modified Tour Races

NASCAR Whelen Modified / Whelen Southern Modified Tour Races are open to eligible approved models of metal bodied passenger car production sedans.

20D - 1.2 NASCAR Whelen Modified / Whelen Southern Modified Tour Races

NASCAR Whelen Modified / Whelen Southern Modified Tour Races will compete with the rules as specified in Section 20D of the Rule Book. If authorized by NASCAR, deviations to these rules may be permitted for stand-alone Events only. All combination Events will be governed by the rules as published in Section 20D of the Rule Book.

20D - 1.3 Approved Competition Manufacturers
2015 Racing Season

The following are the only approved manufacturers for competition in the NASCAR Whelen Modified/Whelen Southern Modified Tour in 2015:

APPROVED MANUFACTURERS

CHEVROLET
DODGE
FORD
PONTIAC
TOYOTA

OTHER APPROVED MANUFACTURERS

Other manufacturers may be selected when available providing they are the same in body configuration and meet the spirit and intent of competitive racing as currently evidenced in NASCAR Whelen Modified / Whelen Southern Modified Tour racing.

20D - 2 GENERAL CAR BODY REQUIREMENTS

20D - 2.1 Car Bodies

The car body must be acceptable to NASCAR Officials and meet the following minimum requirements:

A. Cars must be neat appearing. The interior and exterior of all floors, firewalls, roll cage and frame assemblies and the interior of all body panels should be painted using only light/bright colors. The type of paint used, whether it be flat, satin or high gloss finish, must provide a smooth surface. The paint or vinyl must not be textured. Vinyl may only be used on the exterior of the body panels. Thermal barrier coatings applied to the immediate driver's area may be used. The location of thermal coatings must be acceptable to NASCAR Officials.

B. All bodies must be installed on the frame in a manner acceptable to NASCAR Officials. Window openings should remain stock appearing and should maintain the original manufacturers' window opening configuration. Bodies must not be wider than the standard width from the front of the door panel to the rear of the quarter panels when measured beneath the car at the rocker panels. A minimum distance of 43 inches and a maximum distance of 45 inches will be permitted across the body at the bottom of the front windshield opening. A minimum of 43-1/2 inches and a maximum distance of 50 inches will be permitted across the body when measured at the bottom of the doors directly below the bottom of the front windshield opening. The outer vertical surface of the left side and right side door and quarter panel assemblies may only be a flat or convex surface. The distance from the outermost surface of any door or quarter panel to the top and bottom edge of that panel must not be more than four (4) inches. The outer surface of the left side and right side door and quarter panel assemblies must be straight from front to back. Bodies must not extend below the frame at the side rails. Skirts or additional metal must not extend below the body.

C. The floor area directly beneath the seat forward to the front engine firewall must be made using a minimum 1/8 inch thick magnetic steel. The remainder of the floor area to the right and rear of the seat must be made from a minimum 22 gage (0.031 inch thick) magnetic sheet steel. All floor area panels must be welded together.

D. Streamlining of the contours of the car, beyond that approved by the Series Director will not be permitted. Installation of air directional devices, underpans, baffles, shields or the like beneath the car or the car's hood and front firewall, floor, rear firewall area, rear deck and quarter panel area will not be permitted. When fabricating the door and quarter panels, any accent lines or offsets whether they are tapered or flat will be limited to one (1) inch maximum in width. Should conditions require a larger window opening than 13-1/2 inches, a hinged door may be installed on the driver's side door. The door must be installed using a magnetic steel full length hinge and be equipped with a magnetic steel spring loaded latch. The maximum size shall be 22 inches in length by a maximum 5 inches in height. The door must be fabricated neatly without any protruding sides or edges and must be acceptable to NASCAR Officials. If, in the judgment of NASCAR Officials, any part or component of the car not previously approved by NASCAR that has been installed or modified to enhance aerodynamic performance, will not be permitted. Bodies must have a standard appearing windshield opening and the windshield "A" post must follow standard configuration.

E. Cars will not be permitted to compete with excessive body damage (excessive body damage to be determined by the Series Director.)

F. Belly pans will not be permitted. A belly pan will be defined as any object or material that alters the flow of air under the car. Determination of whether any material or object is or is not a belly pan shall be in the discretion of the NASCAR Officials. The bottom panel of the front nose panel must not extend rearward past the rear edge of the harmonic balancer.

G. The driver's compartment may be enclosed with additional sheet metal. All interior sheet metal must be a minimum 22 gage (0.031 inch thick) welded magnetic sheet steel. Interior sheet metal must not be higher than or enclose a standard window opening. Sheet metal in the driver's compartment must be horizontal from the top of the drive shaft tunnel to the right side door bars or angle from the top of the drive shaft tunnel upwards to the top of the right side door. Angled or horizontal sheet metal must extend from the rear firewall or the back of the seat a minimum of 26 inches forward. The interior sheet metal behind the main roll bar (#1) may be roll formed upward to the top of the shoulder bar (#7). The sheet metal must extend rearward and at the center of the rear axle housing, the sheet metal may angle upward and seal to the bottom of the rear window opening. Interior spoilers, wings, or wind deflectors will not be permitted. Double panels will not be permitted. All interior sheet metal must be acceptable to NASCAR Officials.

H. All seams of the interior sheet metal and all interior sheet metal to exterior sheet metal contact points must be sealed. This includes, but is not limited to, floors, firewalls, crush panels.

20D - 2.2 Overall Car Weight

A. All specified minimum weight requirements will be with fuel, oil, and water (with driver) and the car race ready. Throughout the Event, the minimum weight requirement of 2,645 pounds and a maximum weight requirement of 3,200 pounds will be required in this Series regardless of the cubic inch displacement. Cars will not be permitted to have more than 55% of the total weight as left side weight.

B. For all engines with a cubic inch displacement of 358.000 cubic inch displacement or larger, a minimum weight requirement of 6.9 pounds per cubic inch plus 175 pounds will be required.

C. When the NASCAR-approved "Spec Engine" is used, a minimum weight requirement of 2,620 pounds must be maintained throughout the Event. Cars will not be permitted to have more than 55% of the total weight as left side weight.

D. Unless otherwise authorized by the Series Director, at all times all weights will be measured by NASCAR Officials using the scales provided by NASCAR. It is the responsibility of each race team to insure that its car meets the specified minimum weight requirements for this Series on these scales.

E. On major components, the use of non-magnetic and/or hollow fasteners and component mounting hardware with the intent of weight reduction will not be permitted.

F. Unless otherwise approved, Race Equipment, including car parts and components, that in the judgment of NASCAR Officials have been constructed to increase the components weight beyond normal standards, will not be permitted.

G. Before the use of any composite component(s), the component(s) must be submitted to and approved by NASCAR for use in competition.

20D - 2.3 Added Car Weight

Added weight must be in approved block form of not less than five (5) pound blocks (no pellets). Tungsten and other unapproved metals or materials will not be permitted. Added weight must be securely bolted to the frame rail with a minimum of two (2), 3/8 inch diameter high quality bolts and painted white with the car number or team identification permanently legible on it. Dislodged weight will not be permitted to be returned to the car for weighing after the Race. Any added weight containers should be welded directly to the main frame rails, rear sub-frame rails and/or the crossmembers attached to the main frame rails. Added weight will not be permitted inside the driver's compartment. Material and mounting must be acceptable to NASCAR Officials.

20D - 2.4 Car Weights After Competition

A. After a car has qualified, only fluids consumed, as determined by NASCAR Officials, may be replaced.

B. At the end of the Race, the minimum weight of the car must be within one half of one percent (.5%) of the minimum weight requirement of the car at the start of the Race. When cars are weighed after a Race, only water in the radiator, oil in the reservoir tank, and fuel in the fuel cell may be added. Wheels and tires may not be changed, unless otherwise authorized by NASCAR Officials.

C. The addition of ballast weight, after competition, will not be permitted.

20D - 3 DETAILED CAR BODY REQUIREMENTS

In addition to the General Car Body Requirements specified in sub-section 20D-2, the following Detailed Car Body Requirements must be maintained.

20D - 3.1 Front Air Dam

An approved air dam may be mounted to the front underside of the cars. The optional metal or vinyl front air dam must be mounted perpendicular to the ground and not more than three (3) inches behind the front edge of the nose panel. The front nose panel and air dam must not extend past the rear edge of the front bumper. The nose panel and air dam must not extend past the outside edge of the front frame rails. The nose panel and air dam must have a minimum ground clearance of two (2) inches. All support brackets must be mounted to the rear of the air dam. Horizontal or flat air deflectors must not extend past the outer edges of the front nose panel side walls.

20D - 3.1.1 Rear Spoilers

A. A NASCAR-approved rear spoiler must be installed at all times during competition. All spoilers must be approved by NASCAR Officials. An approved spoiler must be a flat non-adjustable part of the body which controls the flow of air over one (1) surface only. Spoiler sizes will be reviewed as testing and/or Race competition dictate, and adjustments may be made during testing, official practice, or prior to Events such as time trials and/or qualifying Races, etc.

B. All rear spoilers and spoiler mounting points must be acceptable to NASCAR Officials. A solid rear spoiler of a minimum 1/4 inch thick clear polycarbonate only must be installed on the rear center panel where the center panel and the rear vertical body panel intersect and meet the requirements that follow:

C. The only rear spoiler size permitted will be eight (8) inches high by 48 inches wide, measured at the mounting point on top of the rear panel. The rear spoiler must be installed in the center at the rear of the quarter panels where the rear panel meets the center panel sheet metal. During the Race, the rear spoiler must not extend past the rear edge of the rear bumper. Decals or logos will not be permitted on the rear spoiler.

D. A maximum of two (2) one (1) inch wide adjustable supports will be permitted on the front of the spoiler.

E. A maximum of three (3) supports must be attached to the rear of the spoiler. The supports, front or rear, must be attached to the spoiler using a solid one-piece of one (1) inch by one (1) inch aluminum angle mounted to the rear side and one (1) inch down from the top of spoiler.

F. All cars must maintain a minimum height of 32 inches and a maximum height of 35 inches, measured from the ground to the spoiler mounting point at the top of the rear vertical body panel.

20D - 3.2 Windows / Lights / Mirrors

20D - 3.2.1 Windshield

A. A single one-piece flat 1/4 inch thick clear polycarbonate windshield must be used on the driver's side.

B. The windshield must be mounted flush to the left side "A" post, the front edge of the roof panel and at the cowl or dash panel. The windshield must cover the area from the left side "A" post to the center windshield bar (#4A) and from the front edge of the roof panel to the cowl or dash panel. The windshield must be mounted using a minimum of three (3), evenly spaced, non-winged type quick release fasteners on each of the following, the left side "A" post, the front edge of the roof panel, the cowl or dash panel and the center windshield bar (#4A). Tabs welded to the center windshield bar (#4A) will be permitted. Hose clamps or tie wraps will not be permitted.

C. A complete steel windshield screen (with maximum openings of one (1) inch by two (2) inches) must be installed in the right side of the windshield opening. The windshield screen must cover the right side windshield opening from the center windshield bar (#4A) to the right side front roll bar leg (#2B) and from the front of roof bar (#3), at the top, down to the cowl or dash panel. The windshield screen must be mounted using only positive, non-winged type quick release fasteners. Tabs welded to the center windshield bar (#4A) and front roll bar leg (#2B), will be permitted.

D. Decals will not be permitted on the windshield.

E. All windshields, windshield screens and their installation must be acceptable to NASCAR Officials.

20D - 3.2.2 Rear Window

Rear windows will not be permitted.

20D - 3.2.3 Side Window Glass

A. All side window glass must be removed.

B. The minimum side window opening on all models must be 13-1/2 inches when measured from the top of the door panel to the bottom of the roof bar (#3) or the roof drip rail (whichever is closest). Door panels must not be cut or notched to meet this specification.

20D - 3.2.4 Headlights / Parking Lights

All cars must be equipped with a solid rear vertical body panel. The rear vertical body panel must extend down to the top of the frame and have a maximum 1-1/2 inch lip on the bottom edge.

20D - 3.2.5 Rear View Mirror

Multi-view type mirrors, with a maximum size of 2-1/8 inches in height by 21-1/2 inches in width, must be installed at all times during competition and must be mounted in the upper center of the windshield opening. The rear view mirror must not extend outside of the car at any time or any position. A side mounted rear view mirror may be installed; however, it must be acceptable to NASCAR Officials and must not extend outside of the car at any time or in any position. **Composite material(s) will not be permitted on the rear view mirrors or the mounting hardware.**

20D - 3.3 Dash Panel

All dash panels must be acceptable to NASCAR Officials. The dash panel must permit egress of the driver on the right side.

20D - 3.4 Firewalls

For driver protection, all firewalls, floors, tunnels, and access panels must be installed and completely secured in place when the car is in competition.

A. A front and rear firewall of not less than 22 gage (0.031 inch thick) magnetic sheet steel must separate the driver from the engine compartment and fuel cell.

B. The front firewall must be positioned below the leading edge of the windshield.

C. The front firewalls must be sealed and welded in place.

D. The rear fire wall center panel must be a minimum of 28 inches wide and must extend from the rear vertical body panel forward to the horizontal shoulder bar (#7).

E. The rear firewalls must be sealed and securely mounted in place and be acceptable to NASCAR Officials.

20D - 3.5 Doors

A. All door panels must be magnetic sheet steel or aluminum (if aluminum is used it must be a minimum 0.040 inch thick) and mounted in a manner acceptable to the NASCAR Officials. Any seams, creases or accent lines fabricated in the doors must be made parallel with the top of the door.

B. A minimum distance of 72 inches up to a maximum distance of 78 inches will be permitted when measured from the center of the rear axle housing forward to the front of the door. A minimum distance of 43 inches and a maximum distance of 45 inches will be permitted when measured across the car at the front outside edge of the door panel.

C. An inner panel must be installed from the left side door panel to the outside edge of the left side main frame rail. The inner panel must extend from the front firewall rearward to the rear firewall. The inner panel must be magnetic sheet steel or aluminum (if aluminum is used it must be a minimum 0.040 inch thick) and installed in a manner acceptable to the NASCAR Officials. Aluminum crush panels must be installed at the front and rear firewalls and must extend outward to the left side door panel and extend upward from the inner panel to the top of the left side door panel.

20D - 3.6 Quarter Panels

Quarter panels must be acceptable to NASCAR Officials and made of magnetic sheet steel or aluminum (if aluminum is used it must be a minimum of 0.040 inch thick) and meet the following minimum requirements:

A. The top of the quarter panels and door panels must maintain the same degree of rake from the front windshield "A" post to the rear vertical body panel on both the left side and right side.

B. All cars must have rear wheel openings on the right side a minimum of 11 inches and a maximum of 14 inches radius measured from the center of the rear axle housing.

C. The minimum size for any quarter window opening will be nine (9) inches high by 14 inches wide. If a "B" post is used on the rear roof quarter panel, the rear roof quarter panel must have the minimum quarter window opening. If a "B" post is not used, the leading edge of the rear roof quarter panel window opening must be located a maximum of 12 inches forward of the center of the rear axle housing. All quarter window openings and their location must be acceptable to NASCAR Officials.

D. A minimum distance of 34 inches (measured any place at the rear of the quarter panels) and a maximum distance of 42 inches measured from the center of the rear axle to the rear vertical panel of the body will be permitted. Both the right and left side rear quarter panels must be equal in length. A minimum distance of 49 inches and a maximum distance of 56 inches will be permitted when measured across the body at the top of the door panels at the front of the rear wheel openings. A minimum distance of 55 inches and a maximum distance of 60 inches will be permitted when measured at the bottom of the door panels at the front of the rear wheel openings. A minimum distance of 58 inches and a maximum distance of 60 inches will be permitted between the outer edges of the quarter panels measured at the rear bumper height. The bottom edge of the left side and right side quarter panels must not be located inboard of the top edge.

E. The height of the rear quarter panels when measured from the ground to the top of the rear quarter panel at the spoiler mounting location must be a minimum of 32 inches and a maximum of 35 inches.

F. The rear quarter panels must maintain a minimum of eight (8) inches ground clearance behind the rear wheels.

G. The rear vertical body panel located between the quarter panels must maintain a minimum of 32 inches and a maximum of 35 inches when measured from the ground to the top of the panel at the rear spoiler mounting point. The panel must be solid with no open holes and be mounted flush at the rear of the quarter panels. The center panel must not be higher than the top of the rear quarter panels. The lower edge of the rear panel must not be more than one (1) inch above the top of the rear bumper or rear bumper mounts.

H. The right side quarter panel assembly at any point must not extend outward beyond the inside edge of the right side rear tire contact patch as viewed from the rear and above. The right side rear quarter panel assembly behind the right side rear tire to the outside edge of the right side rear frame rail when measured must not be more than a maximum of 11-1/2 inches.

20D - 3.7 Grilles

A. The grille air intake housing at the radiator must maintain a rectangular shape across the front of the nose with the opening being at least as wide as it is high and covering a minimum of 130 square inches. Only a single layer of screen wire, with a minimum 1/4 inch by 1/4 inch opening, will be permitted in the opening to allow for proper cooling.

B. Only metal grille air intake housings will be permitted.

C. Horizontal or flat air deflectors must not extend past the outer edge of the grille air intake housing.

D. The top and bottom panel of the grille air intake housing must mount flush with the side panels.

20D - 3.8 Hood / Roof

A. All cars must be equipped with a hood manufactured from a single piece of metal or fiberglass and be acceptable to NASCAR Officials.

B. The hood must be manufactured so that it will completely cover the engine compartment from the left side to the right side, turn down a minimum of four (4) inches on each side, and cover (if used) the engine side panels. Only openings for the carburetor air filter housing, air filter, valve cover breathers and the distributor will be permitted. Holes for cooling the carburetor or engine will not be permitted. No portion of the hood may be higher than the bottom of the carburetor air filter housing and air filter. Hoods must be fastened with positive pin fasteners evenly spaced across the front and rear.

C. Engine cover side panels will be permitted. Louvers will be permitted.

D. The roof panel must be from an approved manufacturer and be made of magnetic steel. All roof panels and their installation must be acceptable to NASCAR Officials. Unless otherwise authorized, the following are the only roof panels approved for competition:

| <u>MANUFACTURER</u> | <u>PART NUMBER</u> |
|---------------------|--------------------|
| General Motors | 22699260 |
| Ford | F8RZ6350202AA |
| PTM Corporation | NMT-111 |

E. Roof support posts must remain stock appearing and maintain the original manufacturer's configuration. All "A" posts must maintain a maximum width of 3-3/4 inches from the top mounting point to the bottom mounting point. The panel at the bottom of the "A" post must maintain a maximum length of 18 inches (including any portion of the panel that is recessed into the hood). The rear "C" post must be mounted to the rear quarter panels and maintain a minimum width of 48 inches. All roof panels must be installed in a manner and a position that is acceptable to NASCAR Officials. The front of the roof must be secured in three (3) places—one (1) in the center and one (1) on each side. The roof must be installed using non-winged type dzus fasteners.

F. An optional roof hatch may be installed above the driver to be used as an alternate exit. Installation of the roof hatch must be acceptable to NASCAR Officials.

G. The rear roof quarter panel must be made from a single piece of metal without any creases, breaks or extra rolled designs. The quarter window panel must be neatly attached at the roof and the top of the quarter panels. The top of the rear quarter window panel must not be higher than a straight line when measured from the most rearward point of the roof down to the rear top of the quarter panel at the spoiler mounting point. The front edge of the "B" post must be located a maximum of 24 inches forward of the center of the rear axle housing. The installation of all rear quarter window panels and "B" posts must be acceptable to NASCAR Officials.

H. Radio antennas will not be permitted to be mounted on the roof panel.

20D - 3.9 Rear Deck Lids

The rear deck lid must be magnetic sheet steel.

20D - 3.10 Bumpers / Side Rails

Any bumper or side rail that has been damaged or flattened beyond repair and/or is not functional during an Event will not be permitted. The bumper and side rails must be acceptable to NASCAR Officials and meet the following minimum requirements:

A. Front bumpers must be made of two (2) pieces of 1-1/2 inches minimum to 1-3/4 inches maximum round magnetic steel tubing four (4) inches to six (6) inches apart, center to center, mounted to the front frame rails, spindle height, with a minimum of four (4) vertical connectors will be permitted. Two (2) vertical connectors must be welded in the center of the radiused corners with the remaining two (2) spaced between the corner uprights. The front bumper must be convex in shape with rounded corners, and mounted at the front frame rails. The maximum width of the front bumper must not exceed more than two (2) inches per side of the front frame rails. The maximum distance from the center of the front spindle to the front of the front bumper must not be less than 30 inches and not more than 30-1/2 inches.

B. Rear bumpers must be made from an I-beam extruded from aluminum. The width, when measured across the rear of the car must be a minimum of 48 inches and a maximum of 50 inches and be mounted on centerline of the rear sub-frame rails plus or minus (+/-) one (1) inch. Each end of the rear bumper (from the mounting side) must be cut square and capped with a minimum 0.125 inch thick

aluminum. All bumper caps must be welded and sharp edges must be filed smooth. The minimum I-beam size permitted will be 2-3/4 inches by four (4) inches by 3/16 inch thick. The bumper must be mounted at rear axle height. A maximum distance of 46 inches measured at the center of the rear axle to the rear edge of the bumper will be permitted. Bumper extensions must be a minimum of 1-1/2 inch by 1-1/2 inch square magnetic steel tubing with a minimum wall thickness of 0.125 inches. Bumper extensions may be welded or bolted directly to the rear sub-frame crossmember. If bumper extensions are bolted to the rear sub-frame crossmember, four (4) bolts per bumper extension must be used and be a high quality minimum 3/8 inch diameter solid magnetic steel. Bumper extensions must have a rear bumper mounting flange a minimum of 1/4 inch thick flat magnetic steel welded completely to the bumper extension. Four (4) rear bumper mounting bolts per side must be used and be a high quality minimum 3/8 inch diameter solid magnetic steel. All mounting bolts must have a minimum of 1/2 inch of metal from the center of the mounting bolt to the edge of the mounting flange. When the rear bumper mounting bolts are fully tightened, mounting bolts must be completely flush with the mating surface, angled or beveled washers will be permitted. Grinding or machining of the rear bumper at the rear bumper mounting points will not be permitted (see Diagram #10, in the rear pages of the Rule Book). Holes and/or modifications that, in the judgment of NASCAR Officials, have been made with the intent of weight reduction, will not be permitted. Cars will not be permitted to compete without the front and rear bumper.

C. All cars must be equipped with rear corner rails and side rails. All rails must be constructed using a minimum 0.083 inch thick magnetic steel seamless tubing with an outside diameter of a minimum 1-1/4 inches and a maximum of 1-3/4 inches. Side rail bars must be constructed using the following guidelines.

- (1) Right side bars must be constructed by using two (2) pieces of magnetic steel seamless tubing. The bottom bar must attach to the rear of the frame rail and extend upward and outward even with the outside of the tires, or up to a maximum of 1/2 inch outside of the tires. The bottom side bar must extend forward parallel with the frame rail and angle in to the front sub-frame rail with minimal tire clearance. The bottom bar must be mounted centerline with the rear axle and front spindle. The top side bar must be attached centerline with the main roll bar (#1) at the intersection with the horizontal shoulder bar (#7) extending outward and forward to the forward most point of the bottom bar. The top bar must turn down, be centered on, and attach to the bottom bar. The top bar must have an additional support bar attached to the front roll bar leg (#2B) centered on the dash panel bar (#8). An additional support bar must be added in the center. The bar must be attached to the frame rail and side bar. Two (2) additional vertical support bars must be added, one (1) at the rear and one (1) in the center of the side rail bar. The distance measured at the front, center to center, of the top and bottom bars at the turn down area must be a minimum of six (6) inches. The distance measured at the rear center to center must be a maximum nine (9) inches and minimum six (6) inches. Right side rail bars must be attached using high quality minimum 5/16 inch diameter solid magnetic steel bolts. Pins or clips will not be permitted.
- (2) Left side rail bars must be constructed using the same guidelines described above except that the rear support bar may be a radiused bar that attaches to the main roll bar (#1) at the intersection with the horizontal shoulder bar (#7) extending down and attached to the frame rail. Left side rail bars must be mounted by centering the two (2) parallel side rail bars with the center of the rear axle and the front spindle or left side bars may be raised a maximum of two (2) inches from center. Left side rail bars must be attached using high quality minimum 5/16 inch diameter solid magnetic steel bolts. Pins or clips will not be permitted.
- (3) Rear corner rails must be constructed using two (2) pieces of magnetic steel seamless tubing a minimum of 1-1/4 inches and maximum 1-3/4 inches in diameter. Both pieces of tubing must be identically formed and welded to a steel bumper bracket at the rear. The left and right rear corner rail mounting brackets must be a minimum of two (2) inches by two (2) inches, minimum 1/8 inch thick magnetic extruded steel angle and must attach to the rear surface of the rear bumper with two (2) high quality minimum 3/8 inch diameter solid magnetic steel bolts per side. All mounting bolts must have a minimum of 1/2 inch of metal from the center of the mounting bolt to the edge of the rear corner rail mounting flange and must be a minimum of one (1) inch from the end of the rear bumper. When the rear corner rail mounting bolts are fully tightened, mounting bolts must be completely flush with the mating surface, angled or beveled washers will be permitted. Grinding or machining of the rear bumper at the rear corner rail mounting points will not be permitted (see Diagram #10, in the rear pages of the Rule Book). The tubing must angle out and upward even with the outside of the tires, or up to a

maximum of 1/2 inch outside of the tires and maintain a six (6) inch dimension measured center to center. The corner bumpers must then turn in with a minimal tire clearance to the rear quarter panels. Additional support bars must be installed behind the body panels to the rear frame rails and/or roll cage. The front mounting flanges of the rear corner rails must be attached using high quality minimum 5/16 inch diameter solid magnetic steel bolts. Pins or clips will not be permitted.

- (4) Cars will not be permitted to compete without side rails and rear corner rails.

20D - 3.11 Identification / Marking

A. Numbers / Graphics

- (1) All car number configuration and design is subject to approval by the Series Director. Only single or double-digit numbers will be permitted. **The size, color, and style of numbers must be adequate to permit prompt identification by NASCAR Officials at all times.** Numbers must be a solid color, at least 18 inches high, measured vertically, excluding borders and silhouettes, must be neatly attached to or painted on both sides of the car on the center of the door. Door numbers must be a minimum of four (4) inches in width, and slant no more than 30 degrees from vertical. The tops and bottoms of all numbers must be even (not staggered). Two (2) digit numbers must not overlap and must have a minimum of 3/4 inch separation. A solid number 18 inches high, excluding borders and silhouettes, must be neatly attached to or painted on the center of the roof, reading from the passenger side. Solid numbers, as large as possible, must be attached to or painted on the right outer nose and taillight covers. The use of number decals is acceptable if NASCAR Officials determine that the number is legible. Mirror foil numbers, and decals will not be permitted. Paint schemes using a mirrored or holographic appearance will not be permitted.
- (2) All NASCAR Whelen Modified Tour and Whelen Southern Modified Tour car numbers are owned by and will be assigned by NASCAR for use by the car owner. Car numbers are not transferable or assignable by the car owner. Numbers on a car competing in these Series must correspond with the car owner's license that is on file at NASCAR Headquarters, unless otherwise authorized by NASCAR.
- (3) NASCAR Officials may require a Competitor to use a different number in order to avoid duplication or confusion at an Event.

B. Decals / Advertising

- (1) NASCAR may, in its sole discretion, refuse to permit for any reason, or it may restrict or assign the size or placement of decals, identification, and advertising of any kind including but not limited to the car, equipment, personnel, uniforms, garage and pit areas, promotional materials, and/or support vehicles. All NASCAR Members agree to accept NASCAR's decision in this regard.
- (2) NASCAR may refuse to permit a Competitor to participate in an Event if NASCAR determines that any advertising, sponsorship or similar agreement to which the Competitor (or a car owner, driver or crew member associated with the Competitor) is or will be a party, is detrimental to the sport, to NASCAR, Series Sponsor or to the Promoter for any reason, including without limitation, the public image of the sport.
- (3) Decals, advertising slogans, paint schemes and other graphic designs and text on the car that have not been previously approved by NASCAR must not be used unless and until they have been submitted by the crew chief to NASCAR Headquarters and approved by NASCAR prior to the Event. The review and approval of decals, advertising slogans, paint schemes and other graphic designs and text on the car that have not been previously approved by NASCAR is at the sole discretion of NASCAR and such approval may be withheld for any reason. All NASCAR Members agree to accept NASCAR's decision in this regard.
- (4) Decals, advertising logos, text or identification of sponsors must not be placed on the front of each door and/or each side of the hood (between the front of the car and the front of the door) other than (a) decals, advertising logos, text or identification of series sponsors, (b) decals, advertising logos, text or identification of NASCAR contingency program sponsors, or (c) such other decals, advertising logos, text, or identification as NASCAR may in its sole discretion permit or require.
- (5) All decals or adhesive-backed emblems supplied by NASCAR contingency program sponsors for advertising or identification on NASCAR Whelen Modified Tour and Whelen Southern Modified Tour race cars are limited in size to the area of a 32 square inch rectangle. Decal sizes will be determined by multiplying the full width and full length of any decal, regardless of the decal shape. Only decals of participating NASCAR contingency program sponsors will be permitted.

- (6) Decals, advertising logos, text or identification of sponsors will not be permitted on the windshield or rear spoiler.
- (7) Decals, advertising logos, text, or identification of sponsors, other than the car number, will not be permitted on the door of the car from the front edge of the door to the front edge of the "B" post.
- (8) **The Series sponsor decal "Whelen" must be displayed and centered on the front edge of the roof.**
- (9) A yellow stripe must be displayed on the vertical portion of the rear bumper of any car driven by a rookie driver as determined by the Series Director.

20D - 4 GENERAL ENGINE REQUIREMENTS

20D - 4.1 General Engine Eligibility

A. The eligible engines must be production engines as determined, selected, and approved by NASCAR. All major components (engine blocks, heads, etc.) must be produced by the manufacturer for sale in a regular product offering. Prior to being used in competition, all major engine and component parts must be submitted, in a completed form/assembly, to the office of the NASCAR Competition Administrator on or prior to September 2, 2015 for consideration of approval and approved by NASCAR. Each such part may thereafter be used until NASCAR determines that such part is no longer eligible.

B. As an option, Teams may compete in the NASCAR Whelen Modified Tour/Whelen Southern Modified Tour with a NASCAR-approved "Spec Engine". If used, the "Spec Engine" must be completely assembled using only NASCAR-approved "Spec Engine" components without any modifications. All parts, pieces and components that are used in the "Spec Engine" must originate from an approved NASCAR supplier. If used, the "Spec Engine" may be purchased in kit form to be assembled by the engine builder of the Team's choice, or may be purchased as a completely assembled engine. NASCAR-approved "Spec Engine" kits and assembled engines are available directly from Robert Yates Racing Engines, LLC. Weight adjustments (if any) will be made through NASCAR Technical Bulletins and/or announcements.

Robert Yates Racing Engines, LLC
159 Bevan Drive
Mooresville, North Carolina 28115
Phone: 704-660-7015
Email: dlewis@ryr.com

C. Modifications Permitted

- (1) Wash and clean all parts - HIGHLY RECOMMENDED
- (2) Fit Bearings
- (3) Fit Piston Ring End Gap
- (4) Match Gaskets – Gasket material only
- (5) Carburetor Jetting
- (6) Distributor Timing
- (7) Carburetor floats designed for road courses, acceptable to NASCAR Officials, will be permitted at road course Events only.
- (8) The use of the crankcase windage tray supplied by the NASCAR-approved supplier is optional. If used, it must remain as supplied from the NASCAR-approved supplier with no modifications.
- (9) A maximum cylinder overbore size of 0.005 inch will be permitted on the NASCAR-approved "Spec Engine" block. The 0.005 inch overbore pistons, piston rings and wrist pins must be purchased from and remain as supplied by the NASCAR-approved supplier with no modifications.
- (10) The installation and fitting of valve guide liners will be permitted. The valve centerline and valve angle must remain the same as supplied by the NASCAR-approved supplier and manufacturer.
- (11) A bonding agent (epoxy) may be used to assist in adhering the emulsion tube plugs to the carburetor metering blocks, if needed to help prevent fuel leakage only. No other modifications to the carburetor metering blocks will be permitted. The carburetor metering blocks must remain as supplied by the NASCAR-approved supplier and manufacturer.
- (12) Decking (milling) of the engine block cylinder head surface to ensure proper sealing will be permitted. The engine block cylinder head surface may be decked (milled) up to a maximum of 0.005 inch. When installed the top of any piston must not be more than 0.015 inch at any point above the engine block cylinder head surface.
- (13) As an option, teams will be permitted to use the engine valley tray cover mounted breather system available **only through Robert Yates Racing Engines**. If used, it must remain as supplied from the NASCAR-approved supplier with no modifications.

D. Modifications Not Permitted

- (1) No honing of engine cylinder bores. (Except as specified below)
- (2) Any and all machine work done to the engine block, with the exception of the engine overbore and decking (milling) of the cylinder head surface, **must be performed by Robert Yates Racing Engines, LLC only**. An additional encryption must be placed on the engine block reflecting any machine work being done including the cylinder overbore.
- (3) Pistons, piston rings and wrist pins must remain as supplied by the NASCAR-approved supplier.
- (4) No valve guide fitting. (Except as specified below)
- (5) No machine work to valve seats, valves or valve guides. (Except as specified below)
 - a. The following procedures and specifications must be followed when performing valve maintenance (valve job) on the Spec Engine. No modifications or deviations from the procedures or specifications will be permitted.
 - b. There are two (2) approved methods of valve seat maintenance for the Spec Engine.
 - (1) The use of a dedicated carbide cutting tool insert for the intake and exhaust valve seats are available **only through Robert Yates Racing Engines, LLC**.

INTAKE

Part number: WAR-IC-6527

EXHAUST

Part number: WAR-EC-6528

- (2) The programming and application of the supplied coordinates for use with the NEWEN Contour EPOC style machine using a single point cutter are available **only through Robert Yates Racing Engines, LLC**.
- (6) The valves must not be serviced and must be replaced.
- (7) The forged titanium valves utilize a Chrome Nitride coating and are **not** serviceable (including grinding of the valve face).
- (8) Valve guide service with the exception of valve guide liner installation **must be performed by Robert Yates Racing Engines, LLC**. An additional encryption must be placed on the cylinder head reflecting any and all service work being done to the cylinder head.
- (9) Valve Springs must be installed at 1.800 inches with an approximate seat pressure of 130 lbs.
- (10) The combustion chamber volume must be 64cc's for compression after the valve maintenance (valve job) has been completed.
- (11) Valve seat replacement must **only be completed by Robert Yates Racing Engines, LLC**.
- (12) No modifications to rocker arms, valve lifters or valve train components – Must remain as supplied by the NASCAR-approved supplier.
- (13) No crankshaft machining or balancing – Must remain as received from the NASCAR- approved supplier.
- (14) No machining of the cylinder heads.
- (15) No modifications to the carburetor and carburetor spacer – Must remain as supplied by the NASCAR- approved supplier.
- (16) No intake manifold modifications – Must remain as supplied by the NASCAR- approved supplier.
- (17) No modifications to CAMSHAFT TIMING – CAMSHAFT TIMING must be to manufacturer's specified settings.

NOTE: The use of a camshaft degree bushing will be permitted in the camshaft timing gear to obtain the manufacturer's camshaft timing specified settings. The manufacturer's camshaft specified settings for the intake centerline must be a minimum of 105.5 degrees and a maximum of 106.25 degrees. No other modifications to the camshaft timing will be permitted.

- (18) No ignition system modifications – Ignition system must remain as supplied by the NASCAR-approved supplier.

NOTE: As an option, teams will be permitted to use the crank trigger ignition system Part # 125004 available only through Robert Yates Racing Engines. If the crank trigger ignition system is being used, triggering devices or pick-ups will not be permitted inside the distributor housing. Teams will be permitted to use distributor Part # 187008 available only through Robert Yates Racing Engines with the crank trigger ignition system only.

- (19) No wiring modification – Must remain as supplied by the NASCAR-approved supplier.
- (20) No alternator modification – Must remain as supplied by the NASCAR-approved supplier.
- (21) No fuel pump modification – Must remain as supplied by the NASCAR-approved supplier.

NOTE: As an option teams will be permitted to use fuel pump Part # 131001 available only through Robert Yates Racing Engines.

- (22) No water pump modification – Must remain as supplied by the NASCAR-approved supplier.
- (23) No oil pan modifications – Must remain as supplied by the NASCAR-approved supplier.

NOTE: Must use the NASCAR-approved “Spec Engine” oil pan Part #144010 available only through Robert Yates Racing Engines.

- (24) No oil scavenge or oil pump modification – Must remain as supplied by the NASCAR-approved supplier. (Except as specified below)
- (25) The oil pump drive pulley may be changed at the team’s discretion, using one (1) of the following approved oil pump drive pulleys:

| <u>MANUFACTURER</u> | <u>PART NUMBER</u> |
|---------------------|--------------------|
| CV Products | CVD11428 |
| CV Products | CVD11430 |

- (26) No modifications will be permitted to the oil pump drive pulley – Must remain as supplied by the NASCAR-approved supplier.
- (27) No accessory mount, drive belt or front timing cover modification – Must remain as supplied by the NASCAR-approved supplier.
- (28) No modifications to the front drive assembly – Must remain as supplied by the NASCAR-approved supplier.
- (29) No modification to part numbers or identification markings – Must remain as supplied by the NASCAR-approved supplier.
- (30) No painting, coatings, polishing or addition of material of any kind.
- (31) Exhaust Headers (refer to sub-section 20D-9.1C)

E. If the “Spec Engine” bell housing, clutch assembly (including flywheel and starter ring) and starter are used they must remain as supplied by the NASCAR-approved supplier.

NOTE: The following will be the only intake manifold and carburetor spacers approved for use with the NASCAR-approved “Spec Engine”.

| <u>INTAKE MANIFOLD</u> | <u>PART NUMBER</u> |
|------------------------|--------------------|
| Edelbrock | 2809 |

| <u>CARBURETOR SPACER</u> | <u>PART NUMBER</u> |
|----------------------------------|--------------------|
| CV Products (1/2 inch thickness) | CV-166 |
| CV Products (1/2 inch thickness) | CV-166-1/8* |

***(drilled and tapped for use with approved ignition interrupt system)**

F. Unless otherwise specified by NASCAR, the same long block engine assembly (engine block, crankshaft, camshaft, connecting rods, pistons, cylinder heads, and valves) must be used for the entire Event, including practice, qualifying and the Race. An engine must not be removed from a car without the approval of the Series Director. The Series Director may require any team that removes an engine to start at the rear of the field, providing the car earns a starting position in the Race. The engine may be removed from a back-up car, without a penalty, at the discretion of the Series Director as follows:

- (1) If a car is wrecked beyond repair in practice before qualifying and a back-up car is used, then an engine change may be permitted provided the change can be accomplished in a timely manner before qualifying.
- (2) If a car is wrecked beyond repair during qualifying and a back-up car is used, an engine change may be permitted, however, the engine change must be completed before the beginning of practice(s), if practice(s) is scheduled, that follow qualifying.

- (3) If a car is wrecked beyond repair after qualifying and a back-up car is used, then an engine change may be permitted without an additional penalty.

If a Competitor violates this Rule, in addition to imposition of a penalty pursuant to Section 12, the Series Director may take such action during the Event as he deems appropriate, including but not limited to loss of practice time and/or loss of the opportunity to qualify and/or confiscation of the engine or engine components. Such action shall be deemed an inspection decision not subject to Section 12.

NOTE: In an effort to save time during at track inspections, it is highly recommended that all built engines have the forward most right side and forward most left side intake manifold bolts and the forward most right side and forward most left side lower cylinder head bolts cross drilled for engine sealing. If cylinder head studs are used, it is recommended that the studs be cross drilled above the cylinder head nut or through cylinder head nut and stud. If the cylinder head bolts or studs are drilled, the holes must be drilled a minimum diameter of 0.063 inch to accept the NASCAR engine seal.

It is highly recommended that all NASCAR-approved "Spec Engines" have the forward most right side and forward most left side intake manifold bolts, the forward most right side and the forward most left side lower cylinder head bolts and the right side and left side (second from bottom) front timing cover bolts cross drilled for engine sealing. If the bolts are drilled, the holes must be drilled a minimum diameter of 0.063 inch to accept the NASCAR engine seal.

The right side front and left side rear carburetor studs must be drilled a minimum diameter of 0.063 inch to accept the NASCAR carburetor seal on all engines. All built engines must have the closest intake manifold bolt to each drilled carburetor stud on both the right side and left side drilled a minimum diameter of 0.063 inch to accept the NASCAR carburetor seal.

20D - 4.2 General Engine Characteristics

The following characteristics of the production engine must be maintained in any engine used in competition in a manner acceptable to NASCAR Officials. All parts listed below must originate from approved production castings and forgings. All parts, except spark plugs, should utilize fractional English measurement system fasteners and dimensions (non-metric).

A. ENGINE BLOCK:

Material
Number of Cylinders
Angle of Cylinders
Cylinder Bore Centerline Spacing
Number of Main Bearings and Type
Number of Camshaft Bearings and Type
Integral or Separate Cylinder Sleeves
Location of Camshaft
Overall Configuration

B. CYLINDER HEAD:

Material
Number of Valves per Cylinder
Type of Combustion Chamber
Location of Spark Plug
Orientation of Spark Plug
Arrangement of Valves
Valve Location in Relation to the Cylinder Bore
Angle of Valves
Type of Valve Actuation
Number of Intake Ports
Number of Exhaust Ports
Center Distances of Intake Ports Referenced to the Cylinder Bore
Center Distances of Exhaust Ports Referenced to the Cylinder Bore
Angle of Port Face Relative to Mating Face of Head to Block
Firing Order

20D - 5 DETAILED ENGINE REQUIREMENTS

For purposes of construction, some elements of sub-section 20D-5 are listed below. Changes from the NASCAR-approved standard production automobiles or component parts will not be permitted except as specified in the following NASCAR Rules for engine preparation. In addition to the General Engine Requirements specified in sub-section 20D-4, the engines must also conform to the following Detailed Engine Requirements.

20D - 5.1 Engine Location

The engine location must be approved by NASCAR Officials. The engine must be mounted between the frame rails in front of the driver. The longitudinal centerline of the crankshaft when measured to the centerline of the lower ball joint, on both the left side and right side, must be within two (2) inches in distance. The engine must not be tilted.

20D - 5.2 Engine Ground Clearance

The engine ground clearance will be measured (with the driver in the car) at the oil pan. A minimum height of two (2) inches from the bottom of the oil pan to the ground must be maintained at all times during the inspection process.

20D - 5.3 Engine Mounts

All engine mounts must be acceptable to NASCAR Officials and meet the following minimum requirements:

- A. Engine mounts must be reinforced steel or aluminum.
- B. All engine mounts must be securely bolted.

20D - 5.4 Engine Displacement / Compression Ratio

A. Engine Displacement

- (1) Only "small block" V8 engines with a minimum of 350.000 cubic inch displacement will be permitted.
- (2) To clarify the identification of a "small block" engine, listed below are the basic engines designated and approved as "small block" engines. Any engine not listed will be designated as a large block engine and will not be permitted, regardless of the engine size.

DODGE
360 CID

GENERAL MOTORS
350 CID

FORD
351C CID

- (3) The engine displacement may be increased or decreased by boring or stroking. The formula for determining cubic inch displacement is as follows: Bore x Bore x Stroke x .7854 equals cubic inch displacement of each cylinder. The cubic inch displacement of each cylinder added together will determine the total cubic inch displacement of the engine. Unless otherwise permitted by NASCAR Officials, a maximum cooling down time of two (2) hours from the official completion time of the Race will be permitted prior to measuring the total cubic inch displacement.

B. Compression Ratio:

- (1) For all Events, the maximum compression ratio permitted on any cylinder will be 12.0 to 1 on all engines except the NASCAR-approved "Spec Engine". When calculating the compression ratio, an allowance of one (1) cubic centimeter will be added to the volume for the area around the top of the piston down to the top of the piston ring that will be sealed with grease.
- (2) The procedure for calculating the compression ratio is as follows: Bore x Bore x Stroke x .7854 x 16.387 equals the Cylinder Volume of a cylinder at Bottom Dead Center (BDC) in cubic centimeters. The Cylinder Head Pour Volume minus (-) the known volume of the cylinder head plate plus (+) Head Gasket Volume plus (+) 1.00 cc for sealing the piston ring plus (+) the Cylinder Block Volume minus (-) the known volume of the block plate equals (=) Chamber Volume.

$$\text{Compression Ratio} = \frac{\text{Cylinder Volume plus (+) Chamber Volume}}{\text{Chamber Volume}}$$

20D - 5.5 Engine Blocks

All engine blocks must be acceptable to NASCAR Officials and meet the following requirements. NASCAR Officials may use an engine block provided by the respective manufacturer as a guide in determining whether a Competitor's engine block conforms to the specifications of the Rule Book.

20D - 5.5.1 Eligibility

A. Engine blocks must be a product of the manufacturer for the NASCAR-approved engine being used in competition. Approved manufacturers' identification and part numbers and/or casting numbers in the form of cast-in numbers must remain unaltered on the engine block being used in competition.

B. Only the Dodge 360 engine blocks, the Ford 351 Cleveland-type engine blocks and General Motors 350 engine blocks will be permitted. Aftermarket engine blocks will not be permitted.

C. The engine block must retain all standard external dimensions with the exception of the surfacing of the engine block deck. Angle cutting of the engine block deck will not be permitted.

D. Engine blocks must use individual magnetic steel crankshaft main bearing caps. The main bearing bore size must be the same for all main bearings.

E. Aluminum engine blocks will not be permitted.

F. The General Motors cast iron engine blocks, part numbers 22551657, 22551659, 22551788 and 22551790, will not be permitted.

20D - 5.5.2 Internal Changes

A. Boring and honing of the cylinders will be permitted. Cylinder bores must remain round.

B. Internal polishing of the engine block will be permitted.

C. Relocation of the camshaft will not be permitted.

20D - 5.5.3 Pistons / Rods

A. Only round aluminum pistons will be permitted.

B. All pistons must be configured with two (2) separate compression piston ring grooves located near the top of the piston and one (1) oil ring groove located below the compression ring grooves. A piston compression ring must be used in each compression ring groove and one (1) oil ring assembly must be used in the oil ring groove.

C. Only solid magnetic steel connecting rods will be permitted.

D. Only round piston pin holes with a fixed location in the piston and the connecting rods will be permitted.

E. Titanium and stainless steel connecting rods will not be permitted.

F. Only two-piece insert style connecting rod bearings will be permitted. Roller bearings will not be permitted.

20D - 5.5.4 Oil Pans / Oil Coolers

The oil pans and oil coolers must be acceptable to NASCAR Officials and meet the following minimum requirements:

A. Oil pans must be made of magnetic steel. Spacers, other than sealing gaskets, will not be permitted between the oil pan side rails and the engine block surface.

B. Segmented oil pans and/or crankcases will not be permitted. The oil pan and crankcase area must remain open. Additions of materials to the engine block, engine block components, and/or the oil pan to separate the crankcase area from front to rear will not be permitted.

C. A maximum of four (4) oil pump scavenging pick-ups will be permitted into the oil pan. The scavenging pick-ups must draw oil from the inside bottom of the oil pan.

D. Sealed windage trays will not be permitted.

E. A single baffle (windage screen) may be used inside the oil pan providing it is constructed of wire mesh or louvered metal. The baffle (windage screen) must be installed in a straight line from the front to the rear of the oil pan. The baffle (windage screen) must attach to the upper sidewall and to the bottom of the oil pan on the same side. Clearance between the baffle (windage screen) and the engine main bearing caps must not be less than 1-1/2 inches when viewed horizontally. Directional baffles in the bottom of the oil pan must not be higher than one (1) inch.

F. Engine oil coolers must be either an oil to air or an oil to water heat exchanger mounted adjacent to the engine. The oil cooler must be mounted inside the body panels. The oil cooler may be mounted in front of the engine firewall or to the right of the driver beneath the angled interior sheet metal. The oil cooler air intakes mounted in the front body panels must not be larger than five (5) inches in width and 10 inches in length. A maximum of two (2) cooling ducts with a maximum three (3) inch diameter flexible hose in the front body panels will be permitted. Any outward facing lips on the cooling ducts must only be bent once and the lip must not exceed one (1) inch. The oil cooler air intake mounted above the interior sheet metal must not be larger than five (5) inches in width and 10 inches in length. The outside edges of the oil cooler must be completely sealed with sheet metal. All oil coolers and their installation must be acceptable to NASCAR Officials.

20D - 5.6 Cylinder Head

All modifications must be submitted to NASCAR before any proposed modification will be eligible for approval. Approved manufacturers' identification in the form of cast-in part numbers must remain unaltered on the cylinder heads being used in competition.

A. OEM Cylinder Heads:

The following cylinder heads are the only OEM cylinder heads that have been approved for use in competition:

| <u>MANUFACTURER</u> | <u>PART NUMBER</u> | <u>CASTING NUMBER</u> |
|------------------------------|--------------------|-----------------------|
| Dodge W8 | P4876281 | P4532933 |
| | P4876697 (CNC) | P4532933 |
| | P4876281 | P4510019 |
| Ford (dated 9/9/91 or later) | E3ZM6049C3 | E3ZM6049C3 |
| | E3ZM6049C3L | M6049C3 E3ZM6049C3 |
| General Motors 18 Degree | 10134364 | 10134363 |
| | 24502580 | 10134363 |

B. At all NASCAR Whelen Southern Modified Tour **stand-alone** Events, previously approved 22 and 23 degree valve angle aluminum V-8 cylinder heads are eligible for General Motors engines. Previously approved Ford and Dodge aluminum V-8 cylinder heads are eligible for Ford and Dodge engines.

Previously approved cylinder heads with manufacturers' identification and part numbers are as listed:

| <u>MANUFACTURER</u> | <u>PART NUMBER</u> | <u>CASTING NUMBER</u> |
|---------------------|-----------------------|--------------------------|
| Air Flow Research | | AFR215 |
| All Pro | | AP227 |
| Brodix | | 3941075 |
| Chevrolet | | 10051101 |
| Dodge W 7 | P5249958 (Unported) | P4532442B |
| | P5249850 (CNC ported) | P453244B |
| Ford | | M 6049 C302 |
| | | With 4 Degree Valve Cant |
| Pontiac | | 10033867 |

NASCAR Officials may use a cylinder head provided by the respective manufacturer as a guide in determining whether a Competitor's cylinder head conforms to the specifications of the Rule Book.

20D - 5.6.1 Eligibility

To be eligible, the approved cylinder heads must be acceptable to NASCAR Officials and meet the following requirements:

A. The following requirements are for the approved OEM cylinder heads described in sub-section 20D-5.6 A above:

- (1) The valve angle and valve location must remain as approved by NASCAR. Spacing between the valves measured center to center is:

| <u>MANUFACTURER</u> | <u>VALVE ANGLE</u> | <u>SPACING</u> |
|---------------------|----------------------|----------------|
| Dodge W8 | 15 Degrees | 1.936 inches |
| Ford | Intake 7-1/2 Degrees | 1.900 inches |
| | Exhaust 8 Degrees | |
| General Motors | 18 Degrees | 1.935 inches |

Valves must remain in the approved location in relation to the cylinder bore centerline.

- (2) The top of the intake ports must remain in the approved location measured on the inside top of the port.
- (3) The vertical centerline of the intake port entrance must be straight and perpendicular to the cylinder head gasket surface. The vertical centerline of the intake port must remain in the approved location. The horizontal centerline of the intake port must be straight and parallel to the cylinder head gasket surface.
- (4) The vertical and horizontal centerlines of the exhaust port exit must remain in the approved location. The vertical and horizontal centerlines must be straight lines. The horizontal centerline must be parallel to, and the vertical centerline must be perpendicular to, the cylinder head gasket surface. If material is removed from the top or side of the exhaust port, the same amount must be removed from the bottom or opposite side of the port.
- (5) The rocker arm fastener bolt holes must remain in the approved location.
- (6) Only stainless steel or titanium valves are permitted. Exotic materials will not be permitted
- (7) Only magnetic steel valve springs are permitted.

- (8) Only two (2) valves per cylinder will be permitted.
- (9) There are no restrictions on the valve size.
- (10) Internal polishing and porting will be permitted.
- (11) Spark plug holes must remain in the approved location.
- (12) Angle cutting of the cylinder head to the engine block mating surface will not be permitted.
- (13) Milling of the heads will be permitted, but not to exceed 0.175 inch.
- (14) "O" rings will not be permitted for sealing the cylinder head to the engine block.

B. At all NASCAR Whelen Southern Modified Tour **stand-alone** Events, when the previously approved cylinder heads are used, the cylinder heads must meet the following requirements:

- (1) Only steel or titanium valves will be permitted.
- (2) Only magnetic steel valve springs will be permitted.
- (3) Only two (2) valves per cylinder will be permitted.
- (4) There are no restrictions on the valve size.
- (5) Internal polishing and porting will be permitted.
- (6) Spark plug holes must remain in the approved location.
- (7) Valve angle must remain as manufactured within two (2) degrees from the approved valve angle on the previously approved cylinder heads in NASCAR's possession.
- (8) Valves must remain in the approved location in relation to the cylinder bore centerline.
- (9) "O" rings will not be permitted for sealing the cylinder head to the engine block.

20D - 5.6.2 External Changes

A. External modifications for the approved OEM cylinder heads will be permitted providing the external dimensions of the cylinder head have not been changed in respect to original height (0.000 inch for Dodge, plus 0.100 inch for Ford and 0.080 inch for General Motors or minus 0.175 inch for all engines), original length, and original width as compared to the cylinder heads described in sub-section 20D-5.6A.

B. External modifications for the OEM Ford cylinder head, part number E3ZM6049C3L and the OEM 18 degree General Motors cylinder head, part number 24502580 will be limited to milling of the head not to exceed 0.175 inch.

C. External modifications for the previously approved 22 and 23 degree General Motors cylinder heads will be permitted providing the external dimensions of the cylinder head have not been changed in respect to original height (plus or minus 0.100 inch) original length and original width. A maximum of 3.000 inches height must be maintained on intake flange side of head from the head to block surface to the valve cover rail. On cylinder heads manufactured with a raised valve cover rail for oil retention purposes a maximum of 3.200 inches will be permitted.

D. Painting or coating of the cylinder heads will not be permitted.

20D - 5.6.3 Internal Changes

Internal changes for the OEM cylinder heads are as follows:

A. Air flow improvements by internally polishing and porting will be permitted.

B. Improvements or modifications to the cylinder head may be done by removing material from the production casting.

C. The addition of foreign material (i.e., epoxy, plastics, etc.) to the production casting will not be permitted.

D. Internal porting and/or polishing will be permitted. The original internal shape and configuration of the port must not be notched, grooved, channeled, or ridged in any way. After porting and/or polishing the intake port walls, port roof and port floor from the intake manifold mating surface to the centerline of the intake valve, air can flow over one (1) surface each. When the manufacturer has cast a valve guide support into the roof of the intake port the valve guide support must be blended into the roof of the intake port, eliminating all sharp edges. The maximum port floor height, maximum port roof height, port centerline, and spark plug locations must conform to the approved NASCAR template.

20D - 5.7 Crankshaft / Harmonic Balancer

20D - 5.7.1 Crankshaft

A. Only one-piece magnetic steel crankshafts will be permitted.

B. Aftermarket crankshafts must have the same design as an OEM type crankshaft for the approved engine and must be acceptable to NASCAR Officials.

C. Only two-piece insert style crankshaft main bearings will be permitted. Roller bearings will not be permitted.

D. Crankshafts may be lightened and balanced. A solid material must be used to balance crankshafts.

20D - 5.7.2 Harmonic Balancers

Harmonic balancers must be used and must be used as manufactured. Only SFI 18.1-approved magnetic steel harmonic balancers and balancer hubs, acceptable to NASCAR, will be permitted.

20D - 5.8 Camshaft / Valve Lifters / Rocker Arms

20D - 5.8.1 Camshaft

A. Any magnetic steel roller or flat tappet camshaft will be permitted. The maximum camshaft journal size must not be more than 2.362 inches (60mm).

B. Only standard production design timing chains, gear drives, and belt drives will be permitted for operating the camshaft on all engines. Camshaft timing must be fixed; variable timing devices will not be permitted. All camshaft timing drive systems must be acceptable to NASCAR Officials.

C. Camshafts must be driven in the same direction of rotation as the NASCAR-approved standard production engine crankshaft. The camshaft must maintain the same firing order as the NASCAR-approved production engine.

The approved firing orders using approved cylinder identification are as follows:

| | |
|----------------|-----------------|
| Dodge | 1-8-4-3-6-5-7-2 |
| Ford | 1-3-7-2-6-5-4-8 |
| General Motors | 1-8-4-3-6-5-7-2 |

D. The manufacturer's cylinder identification sequence is as follows:

| Dodge and General Motors | | Ford | |
|--------------------------|---|---------|---|
| (Front) | | (Front) | |
| 1 | 2 | 5 | 1 |
| 3 | 4 | 6 | 2 |
| 5 | 6 | 7 | 3 |
| 7 | 8 | 8 | 4 |

20D - 5.8.2 Valve Lifters

A. Valve actuation must be limited to one (1) lifter, one (1) push rod and one (1) rocker arm per valve. All valve actuation systems must be acceptable to NASCAR Officials.

B. Solid magnetic steel flat tappet straight barrel valve lifters will be permitted. Roller tappets, mushroom valve lifters and any type of mechanical assistance exerting a force to assist in closing the valve, commonly known as rev-kits will be permitted.

C. Only magnetic steel one-piece, push rod assemblies without any moving parts, will be permitted.

20D - 5.8.3 Rocker Arms / Valve Covers

A. Only steel or aluminum roller bearings rocker arms, one (1) per valve, that are acceptable to NASCAR Officials may be used. Split shaft rocker arm assemblies will be permitted.

B. The rocker arm fastener bolt holes may not be relocated more than 0.100 inch in any direction measured from the centerline of the approved rocker arm fastener hole.

C. Valve covers must be made of steel or aluminum. Magnesium and other exotic materials will not be permitted.

20D - 5.9 Intake Manifold

A. The intake manifold must be approved by NASCAR. The approved manufacturers' identification in the form of cast-in part numbers must remain unaltered on the intake manifold.

B. The intake manifolds must conform to the NASCAR-approved templates, gauges, scales and other measuring devices.

C. NASCAR Officials may use an intake manifold provided by the respective manufacturer as a guide in determining whether a Competitor's intake manifold conforms to the specifications of the Rule Book.

D. Only open plenum intake manifolds will be permitted. The plenum opening must not be smaller than a minimum size of 3-5/8 inches in width by 3-9/16 inches in length. The maximum plenum opening size must not be larger than 3-3/4 inches in width by 3-11/16 inches in length. The plenum opening must have radiused corners that maintain the shape and configuration of an open four (4) barrel carburetor gasket.

E. The inside floor of the plenum and the carburetor mounting flange must remain in the approved location.

F. The plenum will be defined as the area inside the opening of the intake manifold from the plenum opening at the carburetor mounting flange down to the floor of the plenum. Included in the plenum area will be where the runner walls

attach at the top and bottom in the plenum. The intake manifold runners will be defined as starting at the point of attachment both at the top and the bottom in the plenum area of the intake manifold.

G. The intake runners must maintain the same length as compared to the approved intake manifold with the same part number.

H. The centerline of the intake ports, as seen from above, must remain in the approved location.

I. Each engine will be permitted a maximum of two (2) approved intake manifolds. New approvals must be preceded by deleting a currently approved manifold. The following intake manifolds are approved for use in competition:

| <u>MANUFACTURER</u> | <u>PART NUMBER</u> |
|-----------------------------|--|
| DODGE | Dodge P4532598 Dodge/Arrington – P4532590 |
| FORD | Ford Edelbrock 2991-Victor 351Y Ford M9424-W351 |
| GENERAL MOTORS 18 DEGREE | Edelbrock 2995 GM 24502653 Spider |

Modifications Permitted:

- (1) Polishing in the plenum area will be permitted only to "clean up" imperfections in the castings in a manner acceptable to NASCAR Officials.
- (2) Polishing of ports in the intake manifold will be permitted.

Modifications Not Permitted:

- (1) Added air directional devices will not be permitted inside the intake manifold.
- (2) The length of the intake manifold runners must not be changed and remain as manufactured.
- (3) Epoxy or fillers will not be permitted on the plenum floor or on the walls of the plenum.
- (4) Air holes will not be permitted to be opened in the intake manifold.
- (5) External modifications to the intake manifold will not be permitted unless approved by the Series Director.
- (6) Painting and/or coating of the intake manifold will not be permitted.
- (7) Drilling or tapping of the intake manifold plenum or intake runners will not be permitted unless approved by the Series Director.

J. At all NASCAR Whelen Southern Modified Tour **stand-alone** Events, previously approved intake manifolds may be used. These intake manifolds must meet the following requirements:

- (1) Only open plenum intake manifolds will be permitted. The plenum opening must not be smaller than a minimum size of 3-5/8 inches in width by 3-9/16 inches in length. The plenum opening must have radiused corners that maintain the shape and configuration of an open four (4) barrel carburetor gasket.
- (2) The plenum will be defined as the area inside the opening of the intake manifold from the plenum opening at the carburetor mounting flange down to the floor of the plenum. Included in the plenum area will be where the runner walls attach at the top and bottom in the plenum. The intake manifold runners will be defined as starting at the point of attachment both at the top and the bottom in the plenum area of the intake manifold.
- (3) In the center of the plenum, from the base of the carburetor to the floor of the intake manifold between the intake runners, there must be an open area of 1-3/4 inches minimum diameter. This will be checked with a gauge.
- (4) The inside floor of the plenum must remain in the approved location and be the same shape as compared to the approved manifold with the same part number.
- (5) The floor of the intake manifold between the intake runners must have a single plane, smooth, unaltered surface.
- (6) The carburetor mounting flange must remain in the approved location and maintain the same configuration as compared to the approved intake manifold with the same part number.
- (7) The centerline of the intake ports, as seen from above, must remain in the approved location.

At all NASCAR Whelen Southern Modified Tour **stand-alone** Events the following intake manifolds have been approved for competition:

| <u>MANUFACTURER</u> | <u>PART NUMBER</u> | <u>DESCRIPTION</u> |
|---------------------|--------------------------------|--------------------|
| Brodix | HV-1005 | HV-1-H |
| | HV-1013 | HV-SP-1 |
| Chevrolet | GM 10051103 | |
| Dodge | Dodge W-7 P4532598 | |
| | Dodge/Arrington P4532590 | |
| Edelbrock | 2926 General Motors, High Port | |
| | 2990 Ford Victor 351-AH-11 | |
| | 2981 Ford Victor Jr 351-W | |
| Ford | M-9424 - A351 | |
| | M-9424 - E351 | |
| Holley | 30041 | |
| | 300-105 | |
| Pontiac | GM 10093374 | |

Modifications Permitted:

- (1) Polishing in the plenum area will be permitted.
- (2) Polishing of ports in the intake manifold will be permitted.

Modifications Not Permitted:

- (1) Added air directional devices will not be permitted inside the intake manifold.
- (2) Air holes will not be permitted to be opened in the intake manifold.
- (3) External modifications to the intake manifold will not be permitted.
- (4) Painting and/or coating of the intake manifold will not be permitted.
- (5) Drilling or tapping of the intake manifold plenum or intake runners will not be permitted unless approved by the Series Director.

K. Spacers between the engine block and the intake manifold will not be permitted.

L. Spacers between the intake manifold and the cylinder head will not be permitted.

M. The intake manifold must have a minimum of 1/4 inch of surface on all sides to seal the intake manifold to the cylinder head.

N. The carburetor mounting studs must be solid and remain in the approved location and maintain a stud size of 5/16 inch diameter.

O. Any spacer added between the carburetor (per sub-section 20D-5.10.2) and the intake manifold must be mounted using the approved 5/16 inch diameter, solid carburetor mounting studs and must not be welded to the intake manifold.

P. The intake manifold ports must be completely sealed to the cylinder head ports at all times. Intake manifold sealing must be done by using one (1) approved paper-type intake manifold gasket per side. Metal shim type or metal impregnated intake manifold gaskets will not be permitted. The as manufactured thickness of approved intake manifold gaskets must not be less than 0.060 inch and must not be more than 0.125 inch per side. Intake manifold gaskets must be secured to either sealing surface (intake manifold or cylinder head) with an approved adhesive. At NASCAR's discretion the intake manifold and cylinder heads may be leak tested to ensure proper sealing at any time during the Event.

Q. The intake manifold and the valley tray material must be aluminum. Magnesium or other exotic materials will not be permitted.

20D - 5.10 Carburetor

NASCAR Officials may use a carburetor provided by the respective manufacturer as a guide in determining whether a Competitor's carburetor conforms to the specifications of the Rule Book.

20D - 5.10.1 Eligibility

The following Series carburetors are eligible for use:

A. The Holley 4150HP Series, list number 80507 (390 CFM), four (4) barrel carburetors with a maximum venturi size of 1-1/16 inches and a maximum throttle bore size of 1-7/16 inches are approved for use on all engines except the NASCAR-approved "Spec Engine". The venturis must maintain a circular (round) cross section. This is the only carburetor eligible for use on all engines except the NASCAR-approved "Spec Engine" in the NASCAR Whelen Modified / Whelen Southern Modified Tour Events. Only Holley replacement or service parts can be used in any carburetor rework. All carburetor modifications must be acceptable to NASCAR Officials. Carburetors and/or carburetor components machined from billet materials will not be permitted.

The Holley 4150HP Series, list number 80509 (830 CFM), four (4) barrel carburetor is the only carburetor approved for the NASCAR-approved "Spec Engine". The carburetor must remain as supplied by the NASCAR-approved supplier (refer to sub-section 20D-4.1B).

B. Holley 4150HP Series, list number 80507 (390 CFM), rework guidelines are as follows:

(1) Carburetor Main Body

The only carburetor main body that will be permitted for the Holley 4150HP Series will be the Holley main body with casting number 6R-7879B. The Holley casting numbers must remain legible on the top of the main body. Main bodies must remain as manufactured. Machining, reshaping, grinding, polishing, or drilling holes will not be permitted. The addition of material(s) such as but not limited to, epoxies, sleeves, inserts, or tubes will not be permitted to the carburetor main body.

(2) Carburetor Boosters

One (1), one-piece singular discharge booster per venturi must be used. The type of booster must not be changed. The Holley booster part number 45R-107-1, with the casting number 45R-107 and part number 45R-312R, with the casting number 45R-312 are the only boosters that will be permitted. The Holley casting numbers must remain legible on the top of all booster stems. Size and shape must not be altered. Height and location of the boosters must remain as manufactured. All boosters must maintain a minimum outside diameter of 0.616 inch. The maximum inside diameter of the booster stem passage must not to exceed 0.144 inch. The addition of material will not be permitted to the boosters. A bonding agent (epoxy) may be used to assist in adhering the carburetor booster to the carburetor main body, but it must not extend past the carburetor main body booster mounting hole into the carburetor venturis. Each carburetor booster must be secured by a steel wire not less than 0.025 inch in diameter. The wire must be installed in such a manner that in the case of a carburetor booster failure, the carburetor booster should remain suspended in the carburetor without any interference to the operation of the throttle shaft and the throttle plates (butterflies). A minimal size hole, acceptable to NASCAR Officials, must be drilled through the top of the booster barrel, inboard of the booster attaching stem. The 0.025 inch steel wire must loop through the hole in the booster barrel and then be tied to the respective float bowl vent tube. As an alternative to drilling a hole in the booster, the 0.025 inch steel wire must pass through the booster barrel from top to bottom and then be tied to the respective float bowl vent tube.

(3) Carburetor Venturis

The venturi is defined as a constricted throat in the main body air passage. The location of the venturi must remain as produced by the manufacturer. The venturis must not be raised or lowered in the body of the carburetor. The venturis must maintain a circular (round) cross section. The maximum diameter of the venturis must not exceed 1.064 inches. Altering or reshaping of the venturi in any manner will not be permitted.

(4) Carburetor Throttle Body (base plate)

The only carburetor throttle bodies permitted will be the Holley throttle bodies with casting numbers 12R-6236B, 12R-11524B or 12R-11524M. The Holley casting number must remain legible on the left secondary "ear" of the carburetor throttle body with casting number 12R-6236B, and on the right secondary "ear" of the carburetor throttle body with casting number 12R-11524B or 12R-11524M. The carburetor throttle body must be used as provided by the manufacturer. The positioning of the throttle bores in the carburetor throttle body must be the same as provided by the manufacturer. The throttle bores must be completely round. The throttle bores must not be larger than 1.438 inches. The throttle bores must be straight without taper from top to bottom. The throttle bores must remain perpendicular to the top and bottom of the carburetor throttle body. The carburetor throttle body must not be altered in shape or size.

(5) Throttle Plates (butterflies)

The throttle plates (butterflies) must be magnetic steel and must not be thinned or tapered. The type of screw used to retain the throttle plates (butterflies) to the throttle shafts must be pan head type either straight slotted, phillips head or allen type head. Idle holes may be drilled in the throttle plates (butterflies). The throttle plates (butterflies) must be mounted to the throttle shaft in the approved location.

(6) Throttle Shafts

Holley magnetic steel throttle shafts must be used. Shafts must remain standard production size and must not be thinned or cut in any manner. Throttle shaft rotation must be in the same direction as produced by the manufacturer. The combined thickness of the throttle shaft and the throttle plate (butterflies) must not be less than 0.197 inch. Throttle shaft seals that prevent air leakage must be used on all throttle shafts where the shafts exit the carburetor throttle body. The

primary and secondary throttle shafts must each have an independent travel stop to prevent the throttle plates (butterflies) from opening beyond vertical.

(7) Carburetor Metering Blocks

Only Holley metering blocks will be permitted. Surfacing of the metering blocks for improved gasket seal will be permitted. A bonding agent (epoxy) may be used to assist in adhering the emulsion tube plugs to the carburetor metering blocks, if needed to help prevent fuel leakage only.

(8) Carburetor Floats

Carburetor floats must be a Holley replacement or service part acceptable to NASCAR Officials. Carburetor floats designed for road courses, acceptable to NASCAR Officials, will be permitted at road course Events only.

(9) Alterations that, in the judgment of NASCAR Officials, were made to allow additional air to be picked up below the opening of the venturi, such as but not limited to, altered gaskets, throttle bodies, drilling or machining holes into the carburetor will not be permitted.

(10) External modifications and/or alterations to the carburetor will not be permitted.

20D - 5.10.2 Carburetor Spacer / Gaskets

A. A one-piece, solid, four (4) hole, aluminum carburetor spacer, one (1) inch in thickness, must be installed between the intake manifold and carburetor on all engines except the NASCAR-approved "Spec Engine". The spacer openings must be perpendicular to the base of the carburetor with no taper or bevel. The gasket surfaces of the spacer must conform to the shape of the carburetor base plate. The carburetor spacer used on the NASCAR-approved "Spec Engine" must remain as supplied by the NASCAR-approved supplier (as described in sub-section 20D-4.1B).

B. Only two (2) non-metallic gaskets (one (1) per side) a maximum thickness 0.065 inch will be permitted. Gaskets can only be altered to match the carburetor base opening.

20D - 5.10.3 Carburetor Restrictor

A. A carburetor restrictor must be used when required by NASCAR.

B. For Events where a carburetor restrictor is required:

Currently approved Built Engines:

(1) All model cars competing with a currently approved built engine will be required to use a 1/8 inch thick aluminum restrictor plate with four (4) holes, as specified on the Official Entry Blank, using a maximum 0.065 inch thick gasket.

(2) A restrictor plate, a four-hole spacer, one (1) inch thick, and necessary sealing gaskets will be issued by NASCAR for competition. Spacer(s) between the restrictor plate and the intake manifold or above the NASCAR-issued four-hole spacer will not be permitted.

(3) Restrictor plates and spacers used for practice must be furnished by the Competitors, unless otherwise authorized by the Series Director.

NASCAR-approved "Spec Engine":

(1) All model cars competing with the NASCAR approved "Spec Engine" will be required to use a one (1) inch thick, four (4) hole aluminum tapered bore spacer, as specified on the Official Entry Blank, using maximum 0.065 inch thick gaskets.

(2) Tapered bore spacers and necessary sealing gaskets will be issued by NASCAR for competition. Spacer(s) between the tapered bore spacer and the intake manifold or above the tapered bore spacer will not be permitted.

(3) Tapered bore spacers used for testing must be furnished by the Competitors, unless otherwise authorized by the Series Director.

(4) Competitors must use the carburetor restrictor as designated on the Official Entry Blank to prepare for the Event. A final carburetor restrictor size will be determined after the completion of the final practice prior to the Race. Any attempts to, and/or actions that result in, pulling air from sources other than normal approved methods through the air filter and carburetor venturis, such as, but not limited to, drilling of holes or altering of carburetor restrictor(s) or gaskets will not be permitted.

20D - 5.10.4 Carburetor Fuel Filter

Fuel filter(s) on the pressure side of the fuel pump must only be used at the carburetor fuel bowl inlets. The location and size of the filter(s) must be acceptable to NASCAR Officials.

20D - 5.11 Forced Air Induction

Fuel injection, superchargers or turbochargers will not be permitted.

20D - 5.12 Carburetor Air Filter / Air Intake

The air filter housing, including the filter, must be installed at all times during practice or competition. Performance enhancing additives or chemicals will not be permitted in the air filter housing, air filter or the air intake area.

20D - 5.12.1 Carburetor Air Filter / Air Filter Housing

A. Only a round dry type, unaltered, paper or dry type gauze air filter element maintaining a maximum 14 inches diameter will be permitted. The air filter element must maintain a minimum of 1-1/2 inches, maximum five (5) inches in height. The air filter element must maintain a consistent height when measured anywhere around the circumference of the air filter element. All air filter elements must remain as manufactured. All air must be filtered through element.

B. Only a round metal air filter housing acceptable to NASCAR Officials will be permitted. The top and bottom of the air filter housing must be solid and must be the same outside diameter as the air filter element. The air filter housing must be centered on the carburetor and seated on the air filter housing gasket ring. The air filter housing carburetor mounting ring must have one (1) round hole. It is permissible to attach a shield to the front area of the air filter housing up to a maximum of one half of the air filter circumference. It must not be higher than the height of the air filter element. Tubes, funnels, spacers, or any other device that may control the flow of air will not be permitted inside of the air filter or between the air filter housing and the carburetor.

20D - 5.12.2 Air Intake

Air ducts or baffles will not be permitted on or leading to the air filter housing or air filter.

20D - 6 ENGINE / CAR ELECTRICAL SYSTEM

All engine/car electrical system components must be approved by NASCAR. Prior to being used in competition, all major engine/car electrical system components must be submitted, in a completed form/assembly, to the office of the NASCAR Competition Administrator for consideration of approval and approved by NASCAR. Each such part may thereafter be used until NASCAR determines that such part is no longer eligible.

20D - 6.1 Ignition System

A. Either a crank trigger or distributor type ignition system may be used. If the crank trigger ignition system is being used, triggering devices or pick ups will not be permitted inside the distributor housing.

B. Magnetos or computerized systems will not be permitted.

C. Adjustable timing controls will not be permitted.

D. Retard or ignition delay devices will not be permitted.

E. The ignition system wiring must not contain any open wires or terminals. Unused ignition amplifier box wires must be terminated and/or sealed to prevent connection in a manner acceptable to NASCAR Officials.

F. Each car must have primary ignition system components and may have optional backup ignition system components. The backup ignition system components must be disconnected from the primary system components using primary/backup switch(s). The ignition systems must consist of an ignition amplifier box, coil, distributor pickup and optional rev limiter (internal/external).

G. Multiple primary/backup individual component switches will not be permitted, as described in sub-section 20D-6.1F.

H. Ignition system components, including but not limited to, ignition amplifier boxes, coils and external rev limiters must be mounted to a removable ignition system mounting plate, as described in sub-section 20D-6.11.

I. A removable ignition system mounting plate, acceptable to NASCAR Officials, must be attached to the right side floor panel and must be within four (4) inches of the right side door bars (#9B). The removable ignition system mounting plate must be made of solid (no holes) metal measuring a maximum size of 12 inches by 16 inches and installed using a minimum of four (4), minimum 1/4 inch diameter mounting bolts. The right side floor pan must be reinforced at the mounting bolt holes. The installation must be acceptable to NASCAR Officials. Ignition system components must be located on the removable ignition system mounting plate with the ignition amplifier box wires and connectors directed toward the front of the car. The ignition system mounting plate, ignition system components, wiring and connectors must be covered with a flat clear polycarbonate cover. The flat clear polycarbonate cover must be the same size as the ignition system mounting plate. The flat clear polycarbonate cover installation and size must be acceptable to NASCAR Officials. The ignition system components, including wiring and connectors must be visible from above and be wired such that the ignition system mounting plate can be easily removed for inspection purposes.

J. NASCAR Officials may, at their discretion, inspect, test and/or destructively test ignition system components including ignition amplifier boxes, tachometers, distributors, etc.

K. NASCAR Officials may use approved ignition system components provided by the respective manufacturer as a guide in determining whether a Competitor's ignition system components conform to the approved components.

20D - 6.1.1 Ignition System Wiring

A. All ignition system wiring, including wiring to the ignition amplifier box, distributor and/or any gauges must be acceptable to NASCAR Officials.

B. Ignition system wires must be continuous from the start connector to the end connector. Splices, bare and punctured wires will not be permitted in the ignition system.

C. The distributor pickup signal must be carried by a shielded wire pair with one (1) shielded ground wire. The wire pair may be twisted within the shield. The shielded ground wire must be located and grounded at the end nearest the ignition amplifier box.

D. Only the distributor pickup wire pairs can be contained within a shielding wrap with one (1) wire pair per shielding wrap. Ignition system wiring must remain visible and accessible. Taping wires together, heat shrink wrap and/or banded wire looms will not be permitted in the ignition system wiring.

E. All connectors must allow for the application of a NASCAR seal.

F. Additional connectors may be permitted at the NASCAR Officials discretion to facilitate removal for inspection purposes.

G. A dedicated single ground stud must be used. All ignition system components must be grounded at this stud. Accessory components must not be connected to this stud. A ground wire may be run from this stud to the battery ground or main ground stud.

H. The use of tracer wire color schemes is acceptable to specify backup components.

I. Accessory component wiring, including power and ground wires, must remain completely separate from the ignition system wiring and away from ignition system components. Ignition system components must draw power from the battery side of the starter solenoid. Accessory components and switches will not be permitted to draw power from the ignition system wiring at any point.

20D - 6.1.2 Ignition Amplifier Box

A. Ignition amplifier boxes and rev limiters that are analog only, which **do not** contain programmable, computerized or memory circuits, will be permitted.

B. Rev limiting devices acceptable to NASCAR Officials may be required and must be attached and wired to the ignition amplifier box(s) in a visible manner. Terminals and pin connections designed for the rev limiter connection must have the ability to apply a NASCAR seal. Rev limiter chips must have the ability to apply a NASCAR seal.

C. The ignition amplifier box(s) may have either an internal rev limiter or be connected to an external rev limiter.

D. Each ignition amplifier box is allowed six (6) ignition wires, two (2) power leads and either a rev limiter pin connection or approved rev limiter connection terminal. If originally equipped with a single white points trigger wire and the white points trigger wire is not used with an interrupt switch/system or required by the distributor, the white points trigger wire must be terminated and sealed to prevent connection in a manner acceptable to NASCAR Officials.

E. The ignition amplifier must have a six (6) pin female connector attached to its output leads of the Packard Electric type (MSD part #8170) or the Deutsch Connector type (MSD part #8180) to facilitate testing of the ignition components during inspection. The wiring sequence must be the same as the General Motors or Ford ignition amplifier boxes. The wire color, gage, and pin assignment must follow the table below:

| <u>Pin</u> | | <u>Description</u> | <u>Color</u> | <u>Gage</u> |
|------------|----------------|--------------------|----------------|-------------|
| <u>MSD</u> | <u>Deutsch</u> | | | |
| A | 5 | Power | Red | 16-18 |
| B | 2 | Tachometer Signal | Green or Brown | 16-18 |
| C | 6 | Coil (-) | Black | 16-18 |
| D | 1 | Coil (+) | Orange | 16-18 |
| E | 3 | Pickup (-) | Green | 16-18 |
| F | 4 | Pickup (+) | Violet | 16-18 |

F. The ground negative (-) lead wire must be a continuous single black minimum 12 gage wire and the positive (+) power lead must be a continuous single red minimum 12 gage wire.

G. Modifications to ignition amplifier boxes will not be permitted.

20D - 6.1.3 Distributor

A. The distributor must mount in the approved location and maintain the same firing order as the approved factory produced engine for the make and model engine as described in sub-section 20D-5.8.1C.

B. Only two (2) ignition pick ups of the magnetic, optical or Hall effect type will be permitted in the distributor.

C. The distributor must have a single connection to the coil selector, two (2) shielded distributor pickup wire pairs connecting the distributor pickup to the ignition amplifier box, eight (8) spark plug wire connections, and may have two (2) power wires for distributor pickups that require a power source.

D. Distributors which use a remote interface control box will not be permitted.

20D - 6.1.4 Coils

A. The positive (+) coil wire must be a single continuous 16-18 gage orange wire and the negative (-) coil wire must be a single continuous 16-18 gage black wire. The coil wire pair may be twisted.

B. The coil wires may use a connector of the Packard Electric type (MSD part #8173) or NASCAR-approved equivalent. If used, Pin "A" must be the negative (-) pickup wire and Pin "B" must be the positive (+) wire.

C. A coil secondary spark wire selector will be permitted.

D. A firewall feed through connector may be used between the coil and distributor.

20D - 6.1.5 Tachometers

A. Tachometers, if used, must be mounted to either the steering column or the dash gauge panel. The mounting must be acceptable to NASCAR Officials. In all cases, tachometer wiring must be as visible as possible, and easily accessible for inspection.

B. Tachometers should have a maximum of three (3) wires connected to the ignition system allowing for a ground, power and a tachometer signal.

C. The tachometer must have a connector of the Packard Electric type (MSD part #8172), or NASCAR-approved equivalent, to facilitate testing during inspection. The tachometer connector must be located on or at the removable ignition system mounting plate. The wire color, gage, and pin assignment must follow the table below.

| <u>Pin</u> | <u>Description</u> | <u>Color</u> | <u>Gage</u> |
|------------|--------------------|----------------|-------------|
| A | Ground | Black | 16-18 |
| B | Power | Red | 16-18 |
| C | Tachometer Signal | Green or Brown | 16-18 |

D. The tachometer signal wire must be run from the tachometer as a single continuous green or brown 16-18 gage wire to connect the primary and backup ignition amplifier boxes to the tachometer through blocking diode(s).

E. The tachometer power wire must be connected to the battery side of the starter solenoid.

F. If an illuminated tachometer is used, the light power and ground wires must connect into the tachometer power and ground between the tachometer and the tachometer connector.

G. Tachometers with integral shift lights, or pit road speed lights will be permitted.

H. If an external shift light or pit road speed light is used, its signal input must come from the primary and/or backup ignition amplifier boxes and not as an output from the tachometer.

20D - 6.1.6 Interrupt Switch

A. An auxiliary on/off button that will shut off the ignition system must be mounted on the steering wheel within reach of the driver's thumb when the hands are in the normal driving position. The auxiliary switch must shut off the engine immediately when depressed and the engine must not restart until the button is depressed again.

B. A NASCAR-approved ignition interrupt system which contains a manifold vacuum switch and a brake line pressure switch (and may include a brake pedal position switch) may be used at the crew chief's option, in conjunction with or to replace the auxiliary on/off button on the steering wheel.

C. The button/interrupter should be mounted inline of the red 16-18 gage power wire between the main ignition switch and the primary/backup switch. When the button/interrupter is engaged the ignition amplifier box must automatically shut off. If the ignition amplifier box is originally equipped with a single, white points trigger wire, this wire may be used with an interrupt switch/system.

D. The button/interrupter must use a connector of the Packard Electric type (MSD part # 8173), or NASCAR-approved equivalent, to facilitate testing of the ignition system during inspection.

E. Unless otherwise authorized by the Series Director, switches and/or any device other than those described above that are designed to interrupt the operation of the engine will not be permitted.

20D - 6.1.7 Main Ignition Switch

The main ignition switch must be an on/off toggle type and be located next to the starter switch in the main switch panel. The switch must connect power to the input of the interrupter device.

20D - 6.1.8 Primary / Backup Switch

A single switch may be used to select the primary or backup ignition system and it must be mounted on the dash panel.

20D - 6.2 Spark Plugs

Any make or brand of spark plugs may be used. All spark plugs must thread into the cylinder heads using only M14 x 1.25 threads.

20D - 6.3 Alternator

A single alternator system with an internal voltage regulator and one (1) output wire must be used. External voltage regulators will not be permitted. The alternator must be mounted on the front of the engine with the center higher than the center of the water pump. Only standard production V-type or flat type V-ribbed alternator drive belts will be permitted.

20D - 6.4 Starter

The self-starter must be in working order and in the approved location. Gear reduction starters acceptable to NASCAR Officials will be permitted.

20D - 6.5 Battery

A. Only NASCAR-approved batteries with a maximum nominal voltage of 12 volts will be permitted. Each battery(s) must be of the gel cell or absorption glass mat design, weighing a minimum of 17 pounds.

B. The battery must be located between the frame rails. The battery must be located under the hood or floor of the car. If located under the floor, the battery must be completely encased. If located under the hood, the battery must have a suitable cover. The battery must not be forward of the radiator or rear of the rear end housing of the car. The battery location must be acceptable to NASCAR Officials.

20D - 6.6 Electrical Switch Location

A. A labeled on/off rotary-type master switch, with "on" being in the clockwise direction, must be located on the cowl or panel behind the windshield opening on the right side of the driver. The switch must be wired to the battery cable in a manner that will cut off all electrical power in the car. The switch must be easily accessible and in plain view.

B. All ignition, starter and accessory electrical switches must be located on the front of the dash panel or to the right of the driver in a manner acceptable to NASCAR Officials. All electrical switches must be labeled.

C. Accessory wiring must remain separated from the ignition system wiring.

20D - 6.7 Accessories

A. Except as provided below, cars and drivers will not be permitted to carry onboard computers, automated electronic recording devices, electronically actuated devices, micro-processors, recording devices, filming devices, electronic digital memory chips, traction control devices, digital readout gauges and the like, even if inoperable or incomplete. Competitors will not be permitted to have or have had on his/her person or in his/her possession or in his/her car a device(s) at an Event designed specifically to enhance the traction capabilities of the car, even if inoperable or incomplete.

B. For broadcasting and media-related purposes, NASCAR may allow or require selected cars to compete with broadcast telemetry or other positioning and informational systems. Unless otherwise authorized or required by NASCAR, the broadcast telemetry signal from these systems will be limited to the following parameters:

- (1) RPM (inductive pickup on the secondary wire only).
- (2) Transmission gear selection.
- (3) MPH (taken from sensors on the driveshaft or rear wheel only).
- (4) Brake pedal application.
- (5) Throttle position indicator (must not be attached to the carburetor).
- (6) Camera positioning and video switching.
- (7) All camera locations and styles must be acceptable to NASCAR.
- (8) Upon request of NASCAR Officials, Competitors must install the required camera(s) and broadcast system(s) in a manner and location acceptable to NASCAR Officials.

C. NASCAR may require cars to carry NASCAR-approved on-board impact accelerometers mounted in a standard location and manner approved by NASCAR. It is recommended that the mounting bracket be installed in the car. The mounting bracket must be welded to the floor near the left side frame rail at the forward edge of the front of the seat and must be parallel with the bottom of the seat with the arrow on the bracket pointing forward. NASCAR shall own any and all data generated and/or collected by such accelerometers and shall control the use and dissemination of such data.

D. Two (2) NASCAR-approved timing and scoring transponder mounting brackets must be installed. One (1) on the left and one (1) on the right side rear frame rail, 150 inches rearward of the leading edge of the front bumper to the front edge of the transponder bracket, mounted vertically with square tab on the bottom, not higher than the bottom of the frame, unless otherwise authorized by NASCAR Officials. The bracket will be fastened to the frame with 3/16 inch diameter small head pop rivets (from the outside) through the holes in the center of the bracket. When approved weight containers interfere, the transponder bracket must be welded to the outside vertical surface of the weight container.

E. NASCAR may require cars to carry NASCAR-approved on-board data loggers equipped with designated sensors mounted in a standard location and manner approved by NASCAR. NASCAR shall own any and all data generated and/or collected by such data loggers and shall control the use and dissemination of such data. All Competitors must cooperate with NASCAR Officials with the installation and operation of such data logging systems.

F. Unapproved remote lap timing or speed sensing devices will not be permitted.

G. All electrical wiring harnesses, switches, and connectors must be acceptable to NASCAR Officials. All wiring must be point-to-point and each wiring connection must be easily traceable and removable from the car for inspection purposes.

H. Competitor's use of filming and recording devices will be limited to internal review of pit stops only and not for promotion, resale or other commercial exploitation without NASCAR's prior, written approval. Filming or recording device(s) will not be permitted on board the race car at any time unless previously approved by NASCAR.

I. Electronic oil, water and fuel pressure gauges and oil and water temperature gauges must be approved by NASCAR and they must be completely independent of the ignition system. All gauge sending units and sensors must be located forward of the front firewall.

J. Gauges used in competition, including but not limited to tachometer, oil pressure gauge, oil temperature gauge, water temperature gauge and voltmeter, must be installed and functional at all times during competition. Ignition and accessory switches and interrupter system components must be installed at all times during competition.

K. All electrical outlets used to connect the remote generator to the car must be in a location acceptable to NASCAR Officials.

L. Water bottles must not be in the car during qualifying. Hydration systems, when used, must be installed in the same location for qualifying and the Race. The containers must be securely mounted to the chassis in a manner acceptable to NASCAR Officials.

20D-6.8 In-Car Radio Communications

A. The in-car radio must be analog only and must not be capable of transmitting or receiving in a digitized, encrypted or scrambled format as determined by NASCAR. Keypad style and/or password protected radios will not be permitted. Scanning and/or channel hopping transmissions to or from the in-car radio will not be permitted. All transmissions to and from the in-car radio must be in the 450.000MHz-470.000MHz range, and all in-car radio transmitting and receiving frequencies including squelch codes should be registered annually in the NASCAR Radio Data Base (<http://freqcoordination.nascar.com>). All frequency changes must be updated prior to being used during an Event and confirmed by NASCAR's Official Radio Supplier. The in-car radio is not permitted to transmit or receive any type of telemetry (data) signal or information other than audio communications and must remain independent from any electronic system in the car. Teams will not be permitted to rebroadcast transmissions to or from the in-car radio at any time during an Event. It is strongly recommended that all in-car radio frequencies be licensed for use by the Federal Communications Commission (FCC) and meet all applicable regulations and guidelines.

B. Only one (1) NASCAR-approved, two-way radio and one (1) radio push to talk button will be permitted. It is not permitted to have any frequency of any Competitor installed in the radio at any time. The car is permitted only one (1), approved radio wiring harness system.

C. Other than antennas that are approved for broadcasting and media related purposes only, a single, NASCAR-approved, radio antenna will be permitted inside the car. Radio antennas will not be permitted to be mounted on the roof panel.

D. At all times during practice(s), qualifying and the Race the spotter must have radio communications with the driver and must monitor the NASCAR frequency. Spotters must be in the designated spotter location at all times during competition. The radio frequency being used will be made available by NASCAR Officials.

E. Driver to driver radio communications will not be permitted.

20D - 7 ENGINE COOLING SYSTEM

All engine cooling system components must be approved by NASCAR. Prior to being used in competition, all major engine cooling system components must be submitted, in a completed form/assembly, to the office of the NASCAR Competition Administrator for consideration of approval and approved by NASCAR. Each such part may thereafter be used until NASCAR determines that such part is no longer eligible.

A. Icing, freon type chemicals or refrigerants must not be used in or near the engine compartment.

B. Portable cooling machines or devices will not be permitted.

20D - 7.1 Water Pump

A. Only aluminum mechanical water pumps, turning in the same direction of crankshaft rotation and in the approved location, will be permitted.

B. Water pump impellers may be altered.

C. Coolant flow must be in the same direction as the approved production engine.

20D - 7.2 Fan

A. Engine-driven fans if used, must be operational and belt driven from the crankshaft. Free spin or clutch fans will not be permitted.

(1) The pitch of the fan blades may be changed.

(2) The minimum diameter of the fan must not be less than 14 inches.

(3) Engine-driven fans must have a minimum of four (4) blades.

(4) Flat fan blades will not be permitted.

B. Electric cooling fans will be permitted in place of a standard steel fan on the back side of the radiator only.

C. The installation, type, and location of the fan(s) must be acceptable to NASCAR Officials.

20D - 7.3 Radiator Ducts

When ducting air from the air intake housings to the radiator, air directional shields or dividers will be permitted within the duct. All air entering the air intake housing must pass through the radiator.

20D - 7.4 Radiator

The engine cooling radiator must be acceptable to NASCAR Officials and meet the following minimum requirements:

A. The radiator must remain stock appearing. Radiator cores and tanks must be constructed from aluminum material. The radiator core must be a standard automotive fin and tube design acceptable to NASCAR Officials. Bar and plate radiator cores will not be permitted. The radiator core must not be wider than the inside width of the front sub-frame rails. Radiator tanks must be installed on the sides of the radiator core. The radiator must remain in the standard position in front of the engine.

B. Radiator dust or shaker screens will be permitted.

C. Radiator installation must be acceptable to NASCAR Officials.

D. The radiator overflow tube may be relocated to the rear of the car.

E. All radiator cooling tubes must be operational. All cooling fins and tubes must be evenly spaced top to bottom and side to side and must remain at a 90 degree angle to the side tanks. The spacing and width must be acceptable to NASCAR Officials.

F. Radiator hoses or hose and pipe combinations, between the engine and the radiator, must not exceed a maximum of two (2) inches inside diameter for the entire length of the assembly.

20D - 8 ENGINE LUBRICATION

All engine lubrication system components must be approved by NASCAR. Prior to being used in competition, all major engine lubrication system components must be submitted, in a completed form/assembly, to the office of the NASCAR Competition Administrator for consideration of approval and approved by NASCAR. Each such part may thereafter be used until NASCAR determines that such part is no longer eligible.

20D - 8.1 Oil

Any oil is permissible. Combustion enhancing additives will not be permitted.

20D - 8.2 Oil Pressure

Oil pressure may be regulated at the discretion of the crew chief.

20D - 8.3 Oil Filters

Oil filters and breather caps acceptable to NASCAR Officials will be permitted. Oil filter breather caps must not be mounted in the rear firewall.

20D - 8.4 Oiling System

A. A dry sump oiling system must be used consisting of a single oil pump, a metal lubrication oil reservoir tank, approved oil lines, and an overflow expansion tank.

B. A single engine-mounted, engine-driven, oil pump with a maximum of five (5) stages will be permitted. The body of the oil pump must not exceed 9-1/2 inches in length and 3-1/2 inches in cross-section. The maximum overall length of the oil pump including seals, bearings, adjusters, bolt on end plates and covers, not including the front end of the shaft, will be 10 inches maximum. The oil pump must be acceptable to NASCAR Officials.

C. All oil must be pumped by the engine-driven engine oil pump. Additional oil pumps or re-circulating pumps will not be permitted.

D. The lubrication oil reservoir tank must be located to the rear of the leading edge of the engine firewall or mounted behind the driver's compartment to the inside edge of the left frame rail or beneath the right side sheet metal and inside the edge of the right side frame rail. The lowest component of the lubrication oil reservoir tank, including all connectors, oil lines, and fittings must not be located lower than the bottom surface of the main frame rails. Oil lines must not pass through or against the exhaust pipes and must be located inside roll cage. Location, installation, venting and air ducting of the lubrication oil reservoir tank encasement must be acceptable to NASCAR Officials. Unless otherwise authorized by the Series Director, the same lubrication oil reservoir tank must be used for the entire Event (practice, qualifying, and the Race).

E. The engine oil system must have a functional, vented, overflow, expansion tank (a minimum of 1/2 gallon capacity should be used). The vent hose from the lubrication oil reservoir tank to the overflow tank must be protected by a covering acceptable to NASCAR Officials. Location and installation of the tank must be acceptable to NASCAR Officials.

F. The oil pressure line to the oil pressure gauge and/or the oil pressure sending unit must be stainless steel, full coverage, outer braid protected synthetic rubber hose attached with threaded, nipple design hose end fittings and should be covered with flame resistant covering acceptable to NASCAR Officials.

G. All gauge sending units and sensors must be located forward of the front firewall.

20D - 9 ENGINE EXHAUST SYSTEM

The exhaust systems and components must be acceptable to NASCAR Officials and meet the following minimum requirements.

20D - 9.1 Exhaust Headers

A. All cars must use tube header-type exhaust systems.

B. The exhaust header flange must mount directly to the cylinder head without any spacers between the flange and the cylinder head. A maximum header flange thickness of 1/2 inch will be permitted.

C. When the NASCAR-approved "Spec Engine" is used, teams will be permitted to use any exhaust header and it must be acceptable to NASCAR Officials. The exhaust header must be round tube header-type. Materials used in the exhaust header must be either magnetic steel or stainless steel. A maximum header flange thickness of 1/2 inch will be permitted. Cast exhaust header flanges will not be permitted. The exhaust header collector size must be 3-1/2 inches outside diameter.

D. Exhaust header assemblies must remain outside of the body panels from the front fire wall rearward.

20D - 9.2 Exhaust Pipes

A. 180 degree exhaust systems will not be permitted.

B. Exhaust pipes must come out aft of the engine at the cowl and must extend a minimum of six (6) inches past the cowl.

C. Exhaust connectors will not be permitted between the left side exhaust pipe and the right side exhaust pipe.

D. Exhaust pipes must have mufflers at designated tracks that will be noted on the Official Entry Blank for that Event. Only Kooks (part number QCN350-3 -1/2 inch) Quad Core mufflers will be permitted. The mufflers must be acceptable to NASCAR Officials.

E. Exhaust pipe assemblies must remain outside of the body panels from the front fire wall rearward.

20D - 9.3 Heat Shields

Heat shields, when used to cover the exhaust headers, must be a flat piece of metal not more than six (6) inches wide and not longer than the length of the valve cover.

20D - 10 DRIVE TRAIN

All drive train systems and drive train system components must be approved by NASCAR. Prior to being used in competition, all drive train systems and drive train system components must be submitted, in a completed form/assembly, to the office of the NASCAR Competition Administrator for consideration of approval and approved by NASCAR. Each such part may thereafter be used until NASCAR determines that such part is no longer eligible. All drive train fasteners and mounting hardware must be made of solid magnetic steel.

20D - 10.1 Clutch

A. Only mechanical foot pedal, cable or hydraulic operated clutches will be permitted. Pneumatic assisted clutches will not be permitted.

B. The clutch assembly must be bolted to the flywheel located inside the bell housing.

C. Multiple disc clutches will be permitted up to a maximum of three (3) discs. The disc clutch housing assembly and cover must be made from aluminum or steel. The clutch cover must be the push-type design.

D. Only solid magnetic steel pressure plates, and magnetic steel floater plates, without any holes will be permitted.

E. Only full circle, fully faced magnetic steel clutch discs with a minimum diameter of 5-1/2 inches will be permitted. Minimal cooling slots will be permitted in the clutch discs.

F. The clutch must be mounted inside the bell housing.

G. Clutches must be a positive engagement design. Slider or slipper clutch designs will not be permitted.

H. Dog clutch or direct drives will not be permitted.

20D - 10.2 Flywheel

Any steel or aluminum flywheel, bolted to the crankshaft, will be permitted but must be acceptable to NASCAR Officials. Holes and/or other modifications to the flywheel, that in the judgment of NASCAR Officials, are for weight reduction, will not be permitted.

20D - 10.3 Bell Housing

A. Only special production aluminum or magnetic steel bell housings acceptable to NASCAR Officials will be permitted.

B. The maximum distance from the machined surface at the back of the engine block to the machined surface at the front of the transmission case must not exceed 6-3/8 inches including any spacers.

C. It is recommended that a 3/4 inch hole be drilled in the top of the bell housing directly over the starter ring gear to manually turn the engine for checking the compression ratio limit. This will be the only modification permitted on the approved aluminum bell housings.

D. Holes and/or other modifications that, in the judgment of NASCAR Officials, have been made with the intent of weight reduction will not be permitted.

E. For all engine block-mounted starters, the starter mounting position must remain on the right side for Ford and General Motors engines and the left side for Dodge engines.

20D - 10.4 Transmission

A. Transmissions must be standard production design. The transmission must be from an approved manufacturer. NASCAR Officials may use a transmission provided by the respective manufacturer as a guide in determining whether a Competitor's transmission conforms to the specifications of the Rule Book.

B. Unless otherwise specified by NASCAR, the same transmission must be used for practice, qualifying, practice after qualifying and the start of the Race. A transmission must not be removed from a car without the approval of the Series Director. The Series Director may require any team that removes a transmission to start at the rear of the field, providing the car earns a starting position in the Race. The transmission may be removed from a backup car, without penalty, at the discretion of the Series Director, as follows:

- (1) If a car is wrecked beyond repair during qualifying and a backup car is used, a transmission change may be permitted, however, the transmission must be installed before the beginning of practice(s), if practice(s) is scheduled, that follow qualifying.
- (2) If a car is wrecked beyond repair during or after qualifying and a backup car is used, then a transmission change may be permitted without an additional penalty.

If a competitor violates this Rule, in addition to imposition of a penalty pursuant to Section 12, the Series Director may take such action during the Event as he deems appropriate, including but not limited to, loss of practice time and/or loss of the opportunity to qualify, and/or confiscation of the transmission or transmission components. Such action shall be deemed an inspection decision not subject to Section 12.

C. NASCAR may, at its discretion, require that all cars compete with a final drive gear ratio specified by NASCAR Officials for each Event.

D. High gear must be 1.00:1 (direct) and be the primary gear engaged on all tracks, except road course Events, during competition.

E. The transmission must be acceptable to NASCAR Officials and meet the following requirements:

- (1) Standard production OEM type Muncie or T-10 manual four (4) speed transmissions with OEM type angle cut forward gears will be permitted. Square cut forward gears will be permitted in OEM type Muncie or T-10 manual four (4) speed transmissions.
- (2) The Jerico #2-SP two (2) speed manual transmission and the Jerico #3-SP three (3) speed manual transmission will be permitted. Straight-cut forward gears will be permitted.
- (3) NASCAR-approved four (4) speed conversions with gears removed will be permitted. Transmissions may be of the top-load or left side-load designs only.

F. Only aluminum or magnesium transmission housings will be permitted.

G. All transmissions must have the input shaft and its main gear constantly engaged. This assembly must be constantly engaged with the countershaft and its cluster and reverse gears.

H. Transmission gear ratios between 1.00:1 and 1.18:1 will not be permitted. The only high gear transmission ratio permitted will be 1.00:1.

I. A forward gear and reverse gear must be in working order.

J. Only manual, left-side mounted, shift linkage will be permitted on the transmission. The shift lever must be metal. All shift rods connecting the shifter mechanism to the transmission must be made of metal.

K. Only fire resistant type shifter boots will be permitted. The shifter boots must meet the SFI 48.1 specification and should display a valid SFI 48.1 label visible on the outside of the shifter boot. Shifter boots must not be used beyond two (2) years from the date of manufacture. Quick release fasteners will not be permitted to secure the shifter boot to the transmission tunnel. The shifter boot, when installed, must mount directly to and must be completely sealed to the floor of the car. Installation of the shifter boot must be acceptable to NASCAR Officials.

L. Heating pads and/or blankets will not be permitted for warming the transmission.

M. All transmissions must be prepared with two (2) top cover or side cover bolts and two (2) tail housing bolts and two (2) transmission to bell housing bolts drilled to accept installation of a 1/8 inch minimum diameter NASCAR seal.

20D - 10.5 Drive Shaft

A. The drive shaft, universal joints and yokes must be magnetic steel. Only a one-piece magnetic steel drive shaft with a minimum outside diameter of two (2) inches and a minimum thickness of 0.090 inch or a minimum outside diameter of 2-1/2 inches and a minimum wall thickness of 0.065 inch will be permitted. All drive shafts must be painted white.

B. Two (2), 360 degree solid magnetic steel brackets, without holes or slots, not less than two (2) inches wide and 1/4 inch thick, must be placed around the drive shaft and be welded or fastened to the crossmember of the car. As an option the rear drive shaft bracket may be bolted directly to the torque arm using a minimum of two (2) high quality 3/8 inch minimum diameter bolts.

20D - 10.6 Rear Axle

The rear axle must be acceptable to NASCAR Officials and meet the following requirements:

A. Only aluminum or magnesium quick change rear end center sections equipped with aluminum or magnesium side bells will be permitted. Quick change rear end center sections must have a minimum cross section height of 12 inches at the center of the rear axle with a side bell minimum diameter of 12 inches and magnetic steel spur gears on the back side.

B. Only a magnetic steel lower jackshaft and driveshaft yoke will be permitted in the quick change rear end center section.

C. Full floating magnetic steel double splined rear axles must be used.

D. Only locked rear drive axle assemblies will be permitted at all times during an Event.

E. Only magnetic steel axle tubes will be permitted.

F. The distance, measured from the center of the rear end housing to the rear hubs, left and right, at the point the wheels bolt on, must be within three (3) inches in length.

G. The rear end must be mounted so that the inside edge of the left rear tire is even with or outside the outermost edge of the left side frame rail.

H. Heating pads and/or blankets will not be permitted for warming the rear end assembly.

I. Any method or transmission gear higher than 1.18:1 designed to override the gear rule will not be permitted. The only high gear transmission ratio permitted will be 1.00:1. A tire circumference and air pressure minimum limit may also be in effect.

J. NASCAR may, at its discretion, require that all cars compete with a final drive gear ratio specified by NASCAR Officials for each Event.

K. For purposes of checking a pre-determined final drive gear ratio, when jacked up both rear wheels must rotate in the same direction with each traveling the same rotational distance.

20D - 10.7 Wheels / Lug Bolts / Lug Nuts

The wheels must be acceptable to NASCAR Officials and meet the following requirements:

A. Only 15 inch diameter five (5) lug reinforced magnetic steel wheels with a maximum width of 15 inches will be permitted.

B. Any offset (backspacing) will be permitted.

C. Steel valve stem hardware recommended by the manufacturer must be used. Valve stem caps must be installed at all times during competition.

D. Only solid, one-piece, heavy-duty 5/8 inch magnetic steel lug bolts and standard one (1) inch hex, fully threaded, solid, one-piece magnetic steel lug nuts, tapered on at least one (1) side, will be permitted. The first thread on each lug bolt must be visible from the front of the lug nut when the lug nut is installed. The same style lug bolt must be used for practice, qualifying and the Race. Design modifications to the lug bolts will not be permitted.

E. Bead locks will not be permitted.

F. Any device, modification or procedure to the tire, wheel or valve stem hardware, that in the judgment of NASCAR Officials is used to release pressure (beyond normal pressure adjustments) from the tire and/or inner shield, will not be permitted.

20D - 10.8 Tires

Only approved tires will be permitted. Approved tires are those tires that comply with the requirements of this rule and are recommended in writing, with prior notification to NASCAR by the NASCAR-approved tire manufacturer for use by Competitors in the Event.

20D - 10.8.1 Physical Requirements

A. All four (4) tires must be the same make and the same tread design.

B. Any approved tire will be permitted provided the tire does not exceed the maximum sidewall measurement of 16.45 inches at 20 pounds air pressure mounted on a 15 inch width rim.

20D - 10.8.2 Tire Manufacturer Obligations

A. The tire manufacturer must provide NASCAR with the following information in writing two (2) weeks prior to the date of the Event.

(1) Tire identification markings for each tire must be unique to one (1) particular size, construction, and rubber compound combination.

(2) The recommended position on the car for each tire being used in the Event.

B. The same tires must be made available to each Competitor.

20D - 10.8.3 Tire Measurement Procedure

A NASCAR-approved measuring device will be used to determine the maximum size of the tire. Tires may be selected at each Event by NASCAR Officials for measurements. Tires to be measured must be mounted on a 15 inch wheel of the proper rim width. Twenty pounds air pressure will be required for the measurements.

20D - 10.8.4 Tire Usage Rules

A. All tires must be used in approved positions. Approved positions are those positions on the car recommended in writing with prior notification to NASCAR, by the NASCAR-approved tire manufacturer for its tires used by Competitors in the Event.

B. Unless otherwise authorized by the Series Director, all tires to be used for practice or qualifying must be purchased and mounted at the Event from the NASCAR-approved tire supplier.

C. Unless otherwise authorized by the Series Director, at all tracks teams will be required to use sticker tires (new tires) for qualifying.

D. Immediately following a qualifying attempt, wheels and tires from all qualified cars may be impounded by NASCAR Officials. Unless otherwise authorized by the Series Director, all tires used in qualifying must be used for the start of the Race. The impounded tires will be returned when the cars are prepared for the Race. The tires must be replaced in the positions from which they were removed.

E. Unless otherwise authorized by NASCAR Officials, Competitors will not be permitted to make tire changes prior to the completion of the first official green flag lap of the Race.

F. The Series Director may approve the replacement of an impounded tire when recommended by the tire manufacturer's representative without a starting position penalty provided the replacement tire carries the same manufacturer identification number as the tire used for qualifying.

G. The NASCAR-approved tire supplier may re-balance or re-mount tires under the supervision of NASCAR Officials.

H. Tire or wheel warming, using heaters, blankets, micro-wave or any other method will not be permitted.

I. Should identification numbers or serial numbers be defaced on any previously approved tire, this tire will be ruled ineligible for competition.

J. Tires that, in the judgment of NASCAR Officials, have been altered by unauthorized treatment will not be permitted.

K. Hand grooving, buffing, grinding, and/or cutting on any area of the racing tire will not be permitted.

L. The Series Director may establish a tire change rule for the particular Event being run. This rule shall be made known to all the Competitors at the Pre-Race driver's meeting.

M. Competitors presenting cars for inspection must have their tires inflated to the recommended technical inspection inflation pressures as specified by the participating tire manufacturer for the Event. If tire pressure(s) are not at the recommended technical inspection inflation pressures after competition, tires will be adjusted to the recommended technical inspection inflation pressures as specified by the participating tire manufacturer for the Event.

20D - 11 FRAMES

All frames and frame components must be approved by NASCAR. Prior to being used in competition, all frames and frame components must be submitted to the office of the NASCAR Competition Administrator for consideration of approval and approved by NASCAR. Each such part may thereafter be used until NASCAR determines that such part is no longer eligible.

20D - 11.1 General Frame Eligibility

All frames must be acceptable to NASCAR Officials. The frame used must meet the minimum requirements described in the following paragraphs. All frame designs must be submitted in blueprint form for acceptance to the office of the NASCAR Competition Administrator at least 60 days before the design can be entered in competition. If the NASCAR Competition Administrator accepts the modification as set forth in the submitted blueprints, the Competitor must submit for inspection a completed frame and roll cage at least 30 days prior to the intended date of competition. Acceptance of the submitted blueprint does not guarantee acceptance of the completed frame and roll cage design, and the Competition Administrator may decide not to accept such design even if it is the same as the blueprint form. If the Competition Administrator accepts the completed frame and roll cage, it may thereafter, be used in competition in the form accepted, unless and until the form is no longer approved by the Competition Administrator.

20D - 11.2 Frame Requirements

All frame components must be made of magnetic steel and welded. The frame must consist of a front and a rear sub-frame connected to the main frame on which the roll cage is welded. Holes and/or other modifications to the frames, frame supports, weight containers (if applicable), front and rear sub-frames, crossmembers, and any other frame components that, in the judgment of NASCAR Officials, were made with the intent of weight reduction, will not be permitted. A minimum ground clearance of two (2) inches must be maintained on any part of the frame. Any frame rejected by NASCAR Officials will not be permitted to compete.

A. Main Frame - The side rails must be magnetic steel box tubing a minimum of two (2) inches in width by three (3) inches in height and a maximum of three (3) inches by four (4) inches and must have a minimum wall thickness of 1/8 inch meeting the ASTM A-500 specification. The distance from the centerline of the driveline to the left side frame rail, measured anywhere along the frame, must be within eight (8) inches of the distance from the centerline of the driveline to the right frame rail. A minimum width of 34 inches, and maximum 46 inches, measured from the center of the left frame rail to the center of the right frame rail, must be maintained in the driver's compartment.

B. Front Sub-Frame - The front sub-frame assembly must be made of magnetic steel box tubing two (2) inches in width and three (3) inches in height with a minimum wall thickness 0.083 inch meeting the ASTM A-500 specification. A minimum of 27 inches, and a maximum of 32 inches, measured from the center of the left frame rail to the center of the right frame rail, must be maintained from the mounting point of the upper A-frames forward. All front sub-frame assemblies

must maintain a minimum of a 30 degree angle from the side frame rails up to the top of the sub-frame. All sub-frame assembly support bracing must be a minimum wall thickness 0.090 inch by 1-3/4 inches round magnetic steel seamless tubing. The front sub-frame bars (#16 A & B), left and right, must extend from the roll cage to the sub-frame and must have a downward radius bent into the bars before they are welded to the sub-frame. The left and right front sub-frame bars (#16 A & B) must not have any additional braces added between the front roll bar legs (#2 A & B) and where they attach to the front sub-frame assembly. A flex support tube may be added to the front sub-frame bars (#16 A & B) at the radius and extend forward and be attached to a crossmember.

C. Rear Sub-Frame - The rear sub-frame assembly must be made of magnetic steel box tubing two (2) inches in width and three (3) inches in height with a minimum wall thickness of 0.083 inch meeting the ASTM A-500 specification. A minimum width of 31 inches and a maximum of 46 inches, measured from the center of the left frame rail to the center of the right frame rail, must be maintained on the rear sub-frame assembly, with the exception for suspension and tire clearance. All rear sub-frame assemblies must maintain a minimum angle of 18 degrees from the rear axle housing up to the top of the sub-frame rail assembly.

D. A fuel cell reinforcement bar, using a minimum 1-1/2 inches seamless magnetic steel tubing, must be installed behind the fuel cell. This reinforcement bar must be as wide as the fuel cell and as low to the ground as the fuel cell with a minimum of two (2) uprights from the reinforcement bar to the rear frame crossmember, evenly spaced behind the fuel cell. An X crossmember made of one (1) inch magnetic steel tubing must be installed beneath the fuel cell from corner to corner. The X crossmember must be welded or bolted to the rear frame rails in a secure manner. Two (2) additional support bars, one (1) at each corner of the reinforcement bar, must extend forward and be welded to the rear frame assembly.

E. The frame and roll cage assembly should be painted using only light/bright colors.

20D - 12 SUSPENSION

All suspension systems and components must be approved by NASCAR. Prior to being used in competition, all suspension systems and components must be submitted, in a completed form/assembly, to the office of the NASCAR Competition Administrator for consideration of approval and approved by NASCAR. Each such part may thereafter be used until NASCAR determines that such part is no longer eligible. All suspension fasteners and mounting hardware must be made of solid magnetic steel.

20D - 12.1 Coil Springs

All downward chassis movement while the race car is in competition must be limited only by the normal increasing stiffness of the springs or the bottoming of the chassis against the race track, whichever occurs first. Any device or procedure that in the judgment of NASCAR Officials attempts to detract from or compromise the above will not be permitted.

Only coil spring suspension will be permitted. All coil springs must be constructed using round magnetic steel wire, wound in a clockwise direction. Ovate and flat wire will not be permitted. The coil spring wire diameter must be the same size from the top to the bottom of the springs. All of the coils in a spring must be active. The coil springs at all four (4) wheels must be active and permit suspension movement. All coil springs must not be colder than ambient temperature.

A. Coil Over Front Springs

- (1) Coil over springs must mount to the lower A-frames.
- (2) Strut bars will not be permitted for mounting of coil over front springs.
- (3) Coil over springs must be heavy-duty magnetic steel and must be constructed with both coil ends closed and ground.
- (4) Only one (1) spring per wheel will be permitted.
- (5) Coil springs may be coated but coating thickness and material must be acceptable to NASCAR Officials.
- (6) Unless otherwise authorized by the Series Director, coil spring rubber inserts will not be permitted for qualifying or prior to the start of the Race. After the completion of one (1) green flag lap in a Race, one (1) coil spring rubber insert, not to exceed one (1) full coil of the front coil spring, acceptable to NASCAR Officials, will be permitted.
- (7) Progressive or digressive rate springs will not be permitted.

B. Coil Over Rear Springs

- (1) The rear spring position may be changed, but both rear springs must be located either inside or outside of the frame rails.
- (2) Coil over springs must be heavy-duty magnetic steel and must be constructed with both coil ends closed and ground.
- (3) Only one (1) spring per wheel will be permitted.
- (4) Coil spring rubber inserts not to exceed two (2) full coils of the rear coil spring at any time, acceptable to NASCAR Officials, will be permitted. The smallest allowable spring inserts will be 1/2 of a full coil.
- (5) Progressive or digressive rate springs will not be permitted.

20D - 12.2 Sway Bars (Anti-Roll Bars)

Front sway bar(s), when used, must be for the purpose anti-roll only. The front sway bars must freely rotate in their mounts. The movement of the front sway bar arms must not be prevented or restricted beyond that of normal use as an anti-roll bar.

- A. Only magnetic steel front sway bars will be permitted.
- B. Rear sway bars (anti-roll bars) will not be permitted.

20D - 12.3 Shock Absorbers

A. Coil over shock absorbers may be used. Shock absorbers and coil over shock and spring, by visual reference, must remain within the outline of the body and no holes can be cut in the outer body for the mounting of shocks.

B. Shock absorbers must provide a resultant force dependent upon piston velocity and must be acceptable to NASCAR Officials. Shock absorbers and components must be acceptable to NASCAR Officials. Shock absorbers and components must be used as supplied by a manufacturer and approved by NASCAR. Shock absorbers and components must be available to all Competitors and must meet the following minimum requirements:

- (1) Shock absorbers must be either a mono-tube or twin-tube telescoping type. Mono-tube shock absorbers must be of the nitrogen-gas pressurized, deflective disc valve type with an integral gas reservoir and with steel deflective disc valve shims sealing the primary metering faces of the single piston in the main shock body. Shock absorber bodies must be made of aluminum. If the shock absorber is of the twin-tube type then it must use a maximum 1.375 inch diameter piston with compression bypass valves that are the coil-spring loaded disc type or the coil-spring loaded spool or poppet valve type and a compression head (may also be called foot valve or head valve). The twin-tube shock absorber may use a gas cell located between the tubes. An external gas reservoir will not be permitted. Inertial valves will not be permitted. Twin-tube shock absorbers and internal components must remain as produced by the manufacturer, approved by NASCAR, and as displayed on the approved component shock board and as such, are not considered to be interchangeable and will not be permitted to be modified by the Competitor.
- (2) Mono-tube shock absorbers must meet the following dimensions:

| | |
|------------------------------------|--|
| Overall Length (Extended) | 23.60 Inches Maximum (center to center) |
| Piston/Shock Body Outside Diameter | 2.16 Inches Maximum |
| Piston/Shock Body Length | 10.00 Inches Maximum |
| Gas Reservoir Outside Diameter | 2.60 Inches Maximum |
| Gas Reservoir Length | 3.80 Inches Maximum |
| Shock Shaft Diameter | 0.500 Inches Minimum and 0.630 Inches Maximum |

NOTE: The internal bore of the shock absorber body must remain as supplied by the manufacturer. The internal bore diameter of the shock absorber body must be the same from top to bottom. Tapers, steps, grooves and other misalignments will not be permitted. Modifications which provide position sensitive piston travel will not be permitted.

- (3) Changes in shock absorber force must not be made by the position of the shock absorber shaft, only by the velocity of the shaft through the compression and rebound stroke. Only one (1) piston per shock with one (1) shim stack on compression side and one (1) shim stack on the rebound side of piston, will be permitted.
- (4) Only a single, manual, external shaft bleed adjustment through a tapered needle into a fixed orifice in the hollow shaft, acceptable to NASCAR Officials, will be permitted on the shock absorbers of the mono-tube type.
- (5) Only a single manual external adjustment, with an adjusting pin (allen head screw) tapered to regulate bleed and pressure of the spring on the valve will be permitted on the shock absorbers of the twin tube type.
- (6) The shock absorber shaft must not have any sleeves or spacers, that could limit the travel of the shaft into or out of the main body.

C. Shock absorbers and internal components are subject to inspections.

D. NASCAR Officials may use a shock absorber provided by the respective manufacturer as a guide in determining whether a Competitor's shock absorber conforms to the specifications in the Rule Book.

E. A maximum of one (1) shock absorber per wheel will be permitted.

F. Quick disconnect shock mounts will not be permitted. The shocks must be attached with nuts and bolts.

G. External shock absorber reservoirs will not be permitted.

- H. Remote or electronically controlled shock absorbers will not be permitted.
- I. Heating pads and/or blankets will not be permitted for warming the shock absorbers.
- J. Air scoops, covers or any aerodynamic devices on or around the front shock absorbers will not be permitted.
- K. It is the responsibility of the crew chief, not NASCAR, to ensure the shock absorbers are used in accordance with the manufacturer's instructions and specifications.

20D - 12.4 A-Frames

- A. The upper A-frames, lower A-frames and ball joints must be acceptable to NASCAR Officials and meet the following minimum requirements.
- B. All A-frames must be made of magnetic steel.
- C. The ball joints must not have any adjustment with the exception of a free play adjustment in the housing for the ball and socket.
- D. When attaching the upper A-frames to the mounting plate, only standard type castor-camber shims or washers will be permitted.

20D - 12.5 Spindles / Wheel Bearings / Hubs

The spindles, wheel bearings, and hubs must be acceptable to NASCAR Officials and meet the following minimum requirements:

- A. Heavy-duty magnetic steel spindles must be used.
- B. The front spindles must be equipped with two (2) tether attachment brackets mounted on the front of the spindle as shown and described in Diagram (#15) in the rear pages of the Rule Book. The tether attachment brackets must be 3/16 inch thick magnetic steel and be completely welded to the spindle tower and spindle steering arm. The tether attachment brackets must have a 1/2 inch minimum diameter mounting hole and use a 1/2 inch minimum diameter bolt for the attachment of the front spindle tethers. The mounting holes must have a minimum of 3/4 inch of metal from the center of the mounting bolt to the edge of the bracket.
- C. Wheel bearings must be magnetic steel, tapered roller bearings and bearing races. The bearings, races and seals must be assembled separately in the hubs.
- D. Aluminum or magnetic steel hubs will be permitted. Only standard type wide five hubs using an inner bearing race with a maximum inside dimension of 1.995 inches and an outer bearing with a maximum inside dimension of 1.885 inches will be permitted. This does not apply to the 5 X 5 design steel hub designs. All hubs must use a moly type grease. Hubs that require oil as a lubricant will not be permitted.

E. The front spindles must be linked to the frame using two (2) Vectran® HS V-12 fiber cables on both the left side and right side. The fiber cables must be attached around the frame rearward of the upper A-frame mounts and forward of the front sub-frame bars (#16 A&B) using a choker-type hitch. The fiber cables must be attached to the tether attachment brackets mounted on the front spindles as described in 12-5B using a 1/2 inch minimum diameter magnetic steel bolt. The fiber cables must be constructed from a continuous loop of 5/16 inch diameter 12 strand cable (with a red tracer thread) woven from Vectran® HS V-12 fiber. The fiber cables must have the dated sleeve attached to the center of the continuous loop. The fiber cables must be from the approved manufacturer listed below:

MANUFACTURER
Amick Industries

PART NUMBER
MD-103R2

The fiber cables and components (including expiration date and part number) must be in good quality condition and must remain as manufactured. The fiber cables must not be used past their expiration date which is three (3) years after the date of manufacture.

20D - 12.6 Tread Width Requirements

- A. All cars must maintain the following tread width requirements. A minimum front and rear tread width of 82 inches and a maximum tread width of 83-3/4 inches will be permitted. The tread width will be determined by measuring the left outside wheel bead surface to the right outside wheel bead surface at spindle height.
- B. Aluminum or steel spacers will be permitted to utilize the maximum allowable tread width.

20D - 12.7 Wheelbase Requirements

- A. On either side of the car the minimum wheelbase that will be permitted is 106 inches and the maximum wheelbase that will be permitted is 108 inches.

B. When measuring the wheelbase, the maximum allowable difference must not exceed one (1) inch plus or minus (+/-) on the opposite side. Any device or procedure which has the ability to dynamically change the wheelbase beyond normal travel parameters will not be permitted.

20D - 12.8 Body Height / Ground Clearance Requirements

20D - 12.8.1 Body Height Requirements

A. Body height will be determined by measuring (with the driver) the overall height of the car six (6) inches back from the leading edge of the roof at the roof centerline. The minimum height must be 40 inches. The rear of the roof at the highest point must not be more than 3-1/4 inches higher than the actual front measurement.

B. Competitors presenting cars for inspection must have their tires inflated to the recommended technical inspection air pressure as specified by the participating tire manufacturer for the Event. If tire pressure(s) are not at the recommended technical inspection pressure(s) after competition, tires will be re-inflated to the recommended technical inspection pressure(s) as specified by the participating tire manufacturer for the Event.

20D - 12.8.2 Ground Clearance Requirements

The frame rail and sheet metal ground clearance will be a minimum of two (2) inches. All ground clearance requirements will be measured with the driver in the car.

20D - 12.9 Car Height Adjustment / Handling Devices

A. The only device permitted for adjusting the height of a car will be the front and rear coil over spring units as described in sub-sections 20D-12.1 and 20D-12.3. Adjustments will be permitted during an Event but must be done in a manner that results in the car maintaining body height requirements, as described in sub-section 20D-12.8.1.

B. Any device(s) for adjusting the handling characteristics or the car's height, which can be activated by the driver, will not be permitted inside of the driver's compartment.

C. Electrical, pneumatic, hydraulic, remote control, or any other devices, which change the handling characteristics or height of the car, will not be permitted.

D. Devices and/or procedures to, or used to, reduce or hold the car lower than the normal stiffness of the springs will not be permitted.

E. Car height adjustments will not be permitted on the left front suspension during a Race unless approved by the Series Director.

20D - 13 STEERING COMPONENTS

All steering components must be approved by NASCAR. Prior to being used in competition, all major steering components must be submitted, in a completed form/assembly, to the office of the NASCAR Competition Administrator for consideration of approval and approved by NASCAR. Each such part may thereafter be used until NASCAR determines that such part is no longer eligible.

A. Rack and pinion steering will be permitted.

B. All cars must be equipped with a magnetic steel steering shaft.

C. Tie rods, drag links and steering component parts must be heavy-duty. Holes and/or other modifications in steering components that, in the judgment of NASCAR Officials, have been made with the intent of weight reduction, will not be permitted.

D. The center top of the steering post must be padded with at least two (2) inches of resilient material acceptable to NASCAR Officials.

E. A quick-release steering wheel coupling with a magnetic steel housing acceptable to NASCAR Officials must be used. The steering wheel coupling must meet the SFI 42.1 specification and display a valid SFI 42.1 label on the outside surface. The magnetic steel housing must not be covered with plastics or coatings.

F. The use of universal joints in the steering shaft must be acceptable to NASCAR Officials. It is recommended that a minimum of two (2) universal joints be used forward of the firewall.

G. Steering wheels must have solid, magnetic steel spokes.

H. The power steering pressure pump must be mounted and driven off the front of the engine.

20D - 14 BRAKES / BRAKE COOLING

All brakes and brake cooling components must be approved by NASCAR. Prior to being used in competition, all brakes and brake cooling components must be submitted, in a completed form/assembly, to the office of the NASCAR Competition Administrator for consideration of approval and approved by NASCAR. Each such part may thereafter be used until NASCAR determines that such part is no longer eligible.

Holes and/or other modifications in the braking system or components that, in the judgment of NASCAR Officials, have been made with the intent of weight reduction will not be permitted.

20D - 14.1 Brake Components

A. Only disc brakes with magnetic cast iron or cast steel round rotors will be permitted. Only metal brake calipers will be permitted.

B. Brakes must be operational on all four (4) wheels at all times. Valves of any type will not be permitted in the brake lines that will reduce or cut off the flow of brake fluid to a single wheel.

C. Inboard brakes will not be permitted.

D. Only one (1) brake caliper per wheel using only two (2) brake pads per caliper will be permitted. Front brake calipers must be mounted on the rear of the spindles on both the left side and right side. Brake calipers and mounting must be acceptable to NASCAR Officials. Brake calipers must be from an approved manufacturer. NASCAR Officials may use a brake caliper provided by the respective manufacturer as a guide in determining whether a Competitor's brake caliper conforms to the specifications of the Rule Book.

E. A maximum of six (6) pistons will be permitted in all brake calipers.

F. Brake pads must have a magnetic steel backing plate.

G. **Brake rotors must be used as manufactured.** Brake rotors must be acceptable to NASCAR Officials.

H. Master cylinder(s) and reservoir(s) should be mounted on the engine side of the front firewall. The master cylinder(s) must be metal and must be the push-piston type. Only single-stage master cylinders will be permitted. Only one (1) bore size, per master cylinder, will be permitted. Pull type master cylinders will not be permitted.

I. Holes and/or other modifications in the brake pedal arm that, in the judgment of NASCAR Officials, have been made with the intent of weight reduction will not be permitted.

J. Only mechanical, hand operated, cable driven brake bias adjustment systems will be permitted.

K. Inline brake proportioning systems will not be permitted.

L. Electronic wheel speed sensors or brake actuators will not be permitted.

M. Power assisted braking systems will not be permitted.

N. Quick disconnect fittings on the brake lines will not be permitted.

O. Brake pad retraction devices will not be permitted.

20D - 14.2 Brake Cooling

A. One (1) air duct per wheel may be used for brake cooling using a maximum three (3) inch diameter brake hose. All scoops must be acceptable to NASCAR Officials. The maximum dimension of the front and rear brake air scoops will be three (3) inches by eight (8) inches. Front air scoops may be mounted to the outside of the front frame rails with the leading edge of the brake scoops not farther forward than the frame rail at the rear edge of the front bumper mount. Front air scoops may also be mounted to the sway bar arm or spindle. All brake scoops must be mounted vertical and must be operational. The rear brake air scoops mounted in the quarter panel or door must be painted the same color as the car. If the rear brake ducts are routed beneath the car, they must not be mounted lower than the bottom of the frame rail and must be mounted in a 1/2 inch by 1/2 inch angle frame. Only maximum three (3) inch brake blowers, one (1) per rear wheel, will be permitted. Brake scoops (NACA duct) mounted in the door or quarter panels must be flush with the outside of the body. A 1/2 inch air deflector may be attached to the rear brake scoops. If the brake scoops are not operational, they must be blocked off. Screens and air ducts, from the opening to the brakes, must be acceptable to NASCAR Officials.

B. Only mechanical type brake fluid recirculating systems will be permitted. Motor driven brake fluid recirculators will not be permitted.

C. Liquid or gas cooling of the brakes will not be permitted.

20D - 15 FUEL

NASCAR reserves the right to have all cars use the same brand of fuel in a given Event. When this right is exercised, it will be stated on the Official Entry Blank or in other NASCAR Bulletins for that Event and the specific brand of fuel will be named the "Official Fuel". In all such cases, fuel used for practice, qualifying, and the Race itself will be supplied at the track by the "Official Fuel" supplier and must be used exactly as supplied by the "Official Fuel" suppliers dispensing equipment at the track. At an Event where an "Official Fuel" has been named, NASCAR Officials will use a sample of the actual fuel provided at the track by the fuel supplier to determine whether the fuel used by a Competitor conforms to the specifications in the Rule Book.

20D - 15.1 Definition

In the event there is no "Official Fuel" at a given Event, the term "Fuel", wherever used in this document, shall be understood to mean automotive gasoline that complies with the specifications given in sub-section 20D-15.2. NASCAR Officials will use a sample of the actual fuel(s) provided at the track by the fuel supplier(s) to determine whether the fuel used by a Competitor conforms to the specifications in the Rule Book.

20D - 15.2 Specifications

A. The fuel must be automotive gasoline only.

B. The gasoline must comply with ASTM D-4814 entitled, "Standard Specification for Automotive Spark Ignition Engine Fuel," except limited to liquid hydrocarbons only, Class A, B, C, D, or E, but without regard to geographical or seasonal limitation.

C. The gasoline must not be blended with alcohols, ethers or other oxygenates and it must not be blended with aniline or its derivatives, nitro compounds or other nitrogen containing compounds.

D. Icing or cooling of the fuel system will not be permitted during the Event in the garage, pit, or racing premises.

20D - 15.3 Fuel Samples

NASCAR has the right to sample a Competitor's fuel at any time during the Event. Samples will be impounded for observation and/or testing by NASCAR and/or any outside laboratories at NASCAR's discretion.

20D - 16 FUEL SYSTEM

All fuel systems and fuel system components must be approved by NASCAR. Prior to being used in competition, all fuel systems and fuel system components must be submitted, in a completed form/assembly, to the office of the NASCAR Competition Administrator for consideration of approval and approved by NASCAR. Each such part may thereafter be used until NASCAR determines that such part is no longer eligible.

A. NASCAR Officials will not permit the use of any previously approved fuel cells, containers, or check valves that appear to be damaged, defective or do not function properly. Fuel cell vent pipe check valves must be used. Check valves and the fuel cell must be acceptable to NASCAR Officials.

B. Pressure systems will not be permitted. Any concealed pressure type containers, feed lines or actuating mechanism will not be permitted, even if inoperable. Icing, freon type chemicals or refrigerants must not be used in or near the fuel system.

20D - 16.1 Fuel Cell

A. Only the following fuel cell bladders are approved for use in competition.

AERO TEC LABORATORIES, INC.

(ATL)

PART NUMBER

FB 222 B

FB 322 B

AIRCRAFT RUBBER MANUFACTURING, INC.

(FUEL SAFE)

PART NUMBER

RB024

RB124

B. The NASCAR-approved nominal fuel cell size shall be 24-1/4 inches by 16-3/8 inches by 13-1/4 inches.

C. Modifications to the approved fuel cell bladders, including the nut ring, will not be permitted.

D. The maximum fuel cell capacity, including the filler spout and overflow, must not exceed 24 gallons.

E. Materials other than standard foam, as provided by an approved fuel cell manufacturer, will not be permitted.

F. All approved fuel cells must be equipped with a steel ball or fuel resistant flap type fuel filler and a steel ball or steel poppet fuel vent check valve assembly that meets the following minimum requirements:

FUEL CELL CHECK VALVE HOUSING

(STEEL BALL TYPE)

- (1) The fuel cell check valve housing must be manufactured of aluminum or magnetic steel plate not less than 1/4 inch thick. A cast aluminum check valve housing assembly will not be permitted. The bottom surface of the check valve plate must be flat. Spacers will not be

permitted between the check valve plate and the fuel cell bladder. Only one (1) gasket, with a minimum thickness of 0.065 inch will be permitted between the check valve plate and the fuel cell container.

- (2) The solid steel ball check valve must be encased in a four (4) rail carriage. The carriage rails must be constructed of solid aluminum or magnetic steel not less than 1/4 inch thick by not less than 3/4 inch wide material. The carriage rails must be positioned such that the surface of the 1/4 inch thick edge rides against the steel check ball. Outside surfaces of the carriage must not have any sharp edges. The carriage must not be altered in any way and must remain perpendicular to the fuel cell check valve top flange plate.
- (3) The fuel filler check valve carriage must not exceed a maximum depth of 8-1/2 inches. The maximum inside diameter of the filler neck including the check ball seat must not exceed 2-1/8 inches. When seated at least 1/2 of the check ball must be visible. The diameter of the solid steel check ball must be 2-3/8 inches. The filler neck must not be made of cast aluminum.
- (4) The fuel vent check valve carriage must not exceed a maximum depth of 8-1/2 inches. The maximum inside diameter of the vent pipe neck including the check ball seat must not exceed 1-1/4 inches. When seated, at least 1/2 of the check ball must be visible. The diameter of the solid steel check ball must be 1-3/8 inches. The fuel vent check valve must not be made of cast aluminum.

(FLAP TYPE)

- (1) The fuel cell check valve housing must be from an approved manufacturer and be made of aluminum or magnetic steel plate not less than 3/16 inch thick. A cast aluminum check valve housing assembly will not be permitted. The bottom surface of the check valve plate must be flat. Spacers will not be permitted between the check valve plate and the fuel cell bladder. Only one (1) gasket with a maximum thickness of 0.065 inch will be permitted between the check valve plate and the fuel cell bladder.
- (2) The fuel filler check valve assembly equipped with a fuel resistant flap (Viton) mounted in the center of its circumference must maintain a minimum outside diameter of 3-1/2 inches. The maximum inside diameter of the fuel filler inlet must not exceed 2-1/8 inches. The fuel filler check valve assembly must not be made of cast aluminum.
- (3) The fuel vent check valve carriage must not exceed a maximum depth of four (4) inches. The maximum inside diameter of the vent pipe neck including the check ball seat must not exceed 1-1/4 inches. The diameter of the solid steel ball/poppet must be 1-3/8 inches. The fuel vent check valve neck must not be made of cast aluminum.

G. The fuel inlet tube and vent tube should have a bead around its circumference for hose retention.

H. Fuel cells must not be used beyond five (5) years after the date of manufacture.

20D - 16.2 Fuel Cell Container

The fuel cell container must be acceptable to NASCAR Officials.

A. The fuel cell must be encased in a container of not less than 22 gage (0.031 inch thick) magnetic sheet steel. The fuel cell must be fitted within the container so that the maximum capacity, including the filler spout will not exceed 24 gallons.

B. The maximum fuel cell container size must be 25 inches in length by 16-3/4 inches in width by 13-5/8 inches in depth (inside dimensions).

C. Interior magnetic sheet steel must allow access to the top of the fuel cell for inspection.

D. The fuel cell should be coated bright red.

20D - 16.3 Fuel Cell / Fuel Cell Container Installation

The fuel cell and fuel cell container must be installed in a manner acceptable to NASCAR Officials.

A. The fuel cell and fuel cell container must be installed as far forward as possible in the trunk compartment behind the rear axle and maintain a minimum ground clearance of six (6) inches.

B. The fuel cell container must be secured by one (1) inch by one (1) inch by 0.065 inch minimum thick square steel tubing meeting the ASTM A-513 specification or one (1) inch by 1/8 inch thick magnetic steel straps two (2) lengthwise and two (2) crosswise. The straps must be located as close to the fuel filler check valve housing as possible.

C. A firewall of magnetic sheet steel not less than 22 gage (0.031 inch thick) must be located between the trunk and the driver's compartment.

20D - 16.4 Fuel Filler / Vent Requirements

20D - 16.4.1 Fuel Filler

At Events where refueling is required during the Event, the fuel filler must be acceptable to NASCAR Officials and meet the following minimum requirements:

A. Dry coupling systems, using a probe on the fuel filler cans and receptacle on the car, must be acceptable to NASCAR Officials. Dry coupling receptacles must be bolted from the inside of the quarter panel and at an angle on the left rear quarter panel. The mounting must be as near to the top of the panel and as far back as possible.

B. The check valve filler neck inside diameter must not exceed 2-1/8 inches. The outside diameter must not be less than 2-1/4 inches and not more than 2-1/2 inches.

C. The maximum filler spout size is 4-1/4 inches outside diameter by eight (8) inches long, then tapering over the next 8-1/2 inches to 2-1/2 inches outside diameter, extending to an overall length of 18 inches.

D. A minimum of six (6) inches of 2-1/2 inches maximum diameter flex hose must be used between the end of the filler spout and the fuel cell neck.

20D - 16.4.2 Fuel Cell Vent

The fuel cell shall be vented as follows:

A. A single, one (1) inch minimum up to a 1-1/4 inch maximum inside diameter vent to outside of body must be installed at and sealed to the left rear corner in the taillight area only. The vent must have a self-closing flap-type valve at all tracks, that can only be opened by inserting a wire or flat metal strip to allow refueling.

B. The fuel cell check valve vent hose neck inside diameter must not exceed 1-1/4 inches inside diameter and three (3) inches in length. The fuel cell check valve vent hose must have a bead around its outside circumference for hose retention. The fuel cell vent flexible hose must have a maximum inside diameter of 1-1/2 inches and a maximum length of 60 inches when measured from the outside end of the fuel vent pipe to the top of the fuel cell fill plate. The hose must be secured with two (2) clamps at the fuel cell fill plate.

C. When fuel is added during a pit stop, a crew member must catch any overflowing fuel into a container acceptable to NASCAR Officials. The overflow container must be metal and coated red.

20D - 16.5 Fuel Lines / Fuel Pump

Electrical devices or electrical connections will not be permitted on the fuel cell, and fuel lines rearward of the engine block. Engine compartment mounted fuel pressure regulators must be mounted in an area on or forward of the front firewall above the engine block and between the cylinder heads. Fuel pressure may only be measured from a fuel line or engine mounted regulator at the intake manifold. Fuel lines from the carburetor will not be permitted on the cockpit side of the front firewall. Fuel pressure gauge isolators or sensors for electronic fuel pressure gauges must remain on the engine side of the front firewall.

20D - 16.5.1 Fuel Lines

The fuel lines and fuel line connections must be acceptable to NASCAR Officials and meet the following minimum requirements:

A. The size, material, and location of the fuel cell pickup must be acceptable to NASCAR Officials.

B. Only one (1), maximum 5/8 inch inside diameter fuel line with a maximum AN-10 fitting, will be permitted from the fuel cell to the carburetor.

C. All fuel lines must be stainless steel, full coverage, outer braid protected synthetic rubber hose attached with threaded, nipple design hose end fittings and should be covered with flame resistant covering acceptable to NASCAR Officials. This includes the fuel line to the fuel pressure gauge and/or sending unit.

D. The fuel line from the fuel cell to the fuel pump may be relocated to prevent vapor lock. If the fuel line runs through the right side of the driver's compartment, it must be enclosed in a straight or parallel to the drive shaft and transmission tunnel (as viewed from above) one (1) inch outside diameter metal tube, coated red and labeled "FUEL LINE".

E. A NASCAR-approved check valve mounted at the fuel line outlet on the fuel cell may be used.

F. Additional lines or extra length must not be used on the fuel system. Extra fuel lines or fuel cells, concealed or otherwise, will not be permitted.

G. An on / off, in-line fuel shutoff valve must be mounted within easy reach of the driver and labeled "FUEL SHUTOFF".

H. Quick disconnect fittings will not be permitted.

I. Only one (1) fuel filter may be used between the fuel cell and the fuel pump. The fuel filter must be mounted on the same side as the fuel line. The size of the fuel filter must be acceptable to NASCAR Officials.

20D - 16.5.2 Fuel Pump

Only one (1) fuel pump, acceptable to NASCAR Officials meeting the following requirements, will be permitted.

A. Mechanical, lever-action, camshaft actuated fuel pumps in the approved location will be permitted.

B. A NASCAR-approved remote, cable-driven mechanical fuel pump will be permitted. The pump must be driven off of the rear of the engine oil pump. The cable driven fuel pump must be mounted in the trunk area forward of the fuel cell container near the center of the chassis. If a remote fuel pump is used, the fuel line fitting on the inlet side of the remote fuel pump may be a manufacturer certified, crash-worthy, break-away, self sealing type. It is recommended that the remote cable assembly meet the SFI 8.1 specification.

C. Electric fuel pumps will not be permitted.

D. Liquid cooling of the fuel pump will not be permitted.

20D - 16.6 Fuel Filler Cans

A. Unless authorized by NASCAR, only two (2) approved maximum 12 gallon metal fuel filler cans will be permitted in pits for refueling at all tracks.

B. The metal fuel filler cans must be coated red and be acceptable to NASCAR Officials. (See Diagram in the rear pages of the Rule Book for a NASCAR-approved fuel filler can.) The only decals used beyond those of NASCAR Officials that will be permitted on any fuel filler can will be those of a participating fuel supplier that is approved by NASCAR. The fuel filler cans must be metal, ventilated and equipped with a flexible filler nozzle.

C. The use of two (2) fuel filler cans at the same time while refueling the car will not be permitted.

D. Elevated fuel drums or refueling towers will not be permitted.

E. Only metal fuel filler cans without dry coupling system fuel probes, coated red, acceptable to NASCAR Officials, will be permitted to be used to refuel the car in the garage or pit area. When adding or removing fuel to/from the car in the garage area, the car must be outside of the garage structure. When teams are parked behind the team's transporters in the garage area, the car must be moved away from the transporters before adding or removing fuel to/from the car. NASCAR Officials may require that fuel be added or removed to/from the car in a designated area of the garage.

F. Fuel filler cans must not be stored in the garage structure.

G. Fuel filler cans must only be transported from the fuel station to the pit area in a cart acceptable to NASCAR Officials.

H. When installing or removing fuel can couplers, power tools **MUST NOT** be used. It is recommended that a non-conductive nut driver be used.

20D - 17 PERSONAL SAFETY EQUIPMENT

A. General

(1) Each Competitor is solely responsible for the effectiveness of personal safety equipment used during an Event. NASCAR IS NOT RESPONSIBLE FOR THE EFFECTIVENESS OF ANY PERSONAL SAFETY EQUIPMENT.

(2) Each Competitor is expected to investigate and educate himself/herself fully with respect to the availability and effectiveness of personal safety equipment. NASCAR may, from time to time, schedule information sessions with Competitors and safety experts. Each Competitor is expected to attend and participate in such sessions.

B. Protective Clothing

IT IS THE RESPONSIBILITY OF THE DRIVER AND CREW MEMBER, NOT NASCAR, TO ENSURE THAT HE/SHE MAINTAINS, WEARS AND PROPERLY USES PROTECTIVE CLOTHING.

DRIVERS – Unless otherwise authorized, while on the track during the Event, Drivers must comply with the following:

| | <u>Use Required</u> | <u>Use Recommended</u> | <u>SFI Specification (minimum)</u> | <u>SFI Specification (recommended)</u> | <u>SFI Label Visibly Displayed</u> |
|------------------|---|----------------------------|--|--|--|
| Uniform | X | | 3.2A/5 | | Outside Surface of Left Sleeve |
| Shoes | X | | 3.3 | | X |
| Gloves | X | | 3.3 | | X |
| Head Socks | | X | 3.3 | | X |
| Helmet Skirts | | X | 3.3 | | X |
| Underwear | | X | | 3.3 | |
| Socks | | X | | 3.3 | |
| Helmet | X Refer to Section 20D17.1A Helmets | | | | |

CREW MEMBERS – During race conditions, any crew member who steps into the car servicing area must comply with the following:

| | <u>Use Required</u> | <u>Use Recommended</u> | <u>SFI Specification (minimum)</u> | <u>SFI Specification (recommended)</u> | <u>SFI Label Visibly Displayed</u> |
|------------------|---|----------------------------|--|--|--|
| Uniform | X | | 3.2A/1 | 3.2A/5 | Outside Surface of Left Sleeve |
| Shoes | X | | 3.3 | | X |
| Gloves | | X | | | X |
| Head Socks | | X | | | X |
| Helmet Skirts | | X | | | X |
| Underwear | | X | | 3.3 | |
| Socks | | X | | 3.3 | |
| Helmet | X Refer to Section 20D17.1A Helmets | | | | |

FUEL HANDLER (CREW MEMBER) – During race conditions, any crew member involved in fueling the car or handling or transporting fuel in the garage or pit area must comply with the following:

| | <u>Use Required</u> | <u>Use Recommended</u> | <u>SFI Specification (minimum)</u> | <u>SFI Specification (recommended)</u> | <u>SFI Label Visibly Displayed</u> |
|---|---|----------------------------|--|--|--|
| Uniform | X | | 3.2A/5 | | Outside Surface of Left Sleeve |
| One-Piece Uniform | | X | | 3.2A/5 | Outside Surface of Left Sleeve |
| Shoes | X | | 3.3 | | X |
| Gloves | X | | 3.3 | | X |
| Apron | X | | 52.1 | | X |
| Underwear | | X | | 3.3 | X |
| Socks | | X | | 3.3 | X |
| Head Socks* | X | | 3.3 | | X |
| Helmet Skirt* | X | | 3.3 | | X |
| Full-face Helmet with Covering Face Shield | X Refer to Section 20D17.1A Helmets | | | | Helmet Certification Label Affixed to Helmet At All Times |

*Head socks and/or helmet skirt

C. Other Safety Devices

- (1) It is required that each car have, within the driver's reach, a manually controlled push or pull knob which activates a built-in, fully charged fire extinguishing pressurized cylinder with a visible, operating pressure gauge. It is recommended that an automatic thermally activated discharge nozzle be used in addition to the manually controlled push or pull knob. This extinguisher system must meet the SFI 17.1 specification and display a valid SFI 17.1 label. This extinguisher must be certified by the manufacturer every two (2) years. An additional manufacturer's label with a visible date code must be located directly below the pressure gauge on the surface of the cylinder. This fire extinguisher cylinder must be securely mounted beyond the right side of the driver's seat, above the interior sheet metal on the horizontal shoulder bar (#7) or on the top right side door bar. Mounts must be secured to the horizontal shoulder bar (#7) or the top right side door bar and it must use a mounting system acceptable to NASCAR Officials which secures both ends of the cylinder for its full circumference and attaches securely to the roll cage structure of the car. Hose clamps, worm drive clamps or cable ties will not be permitted. A device(s) must be installed to keep the cylinder from sliding out of the mounting system. Clamp style or "figure eight" mounts must completely encircle the circumference of the 1-3/4 inch outside diameter of the roll bar. This cylinder must contain a minimum of five (5) pounds of fire extinguishing agent, visibly designated on the label as DuPont FE-36, 3M NOVEC 1230 or equivalent type agent. The primary purpose of this system is to protect the driver. Nozzle(s) must be designed for the extinguishing agent used and should not be pointed directly at the driver, but should be mounted to provide flooding of the driver's compartment to the manufacturer's recommendation. If engine compartment nozzle(s) are used with this cylinder, the fire extinguishing cylinder size must be increased to a minimum of 10 pounds of fire extinguishing agent, visibly designated on the label as DuPont FE-36, 3M NOVEC 1230 or equivalent type agent to be used for this system. All discharge lines and fittings must be steel or steel reinforced hose although nozzles may be aluminum. Cylinders for all agents must be DOT-approved steel or aluminum. Carbon fiber or composite cylinders will not be permitted.
- (2) It is recommended that each car have an additional fire extinguishing cylinder solely dedicated to extinguish the fuel cell area (trunk) and as an option, the same fire extinguishing cylinder may also be directed to the engine compartment area with the use of a T-type fitting and thermally activated discharge nozzles. This extinguisher must meet the SFI 17.1 specifications and display a valid SFI 17.1 label. This extinguisher must be certified by the manufacturer every two (2) years. An additional manufacturer's label with a visible date code must be located directly below the pressure gauge on the surface of the cylinder. This cylinder must be mounted beyond the right side of the driver's seat above the interior sheet metal on the horizontal shoulder bar (#7) or the top right side door bar in the driver's compartment and it must use a mounting system acceptable to NASCAR Officials which secures both ends of the cylinder for its full circumference and securely attaches to the roll cage structure of the car. Hose clamps, worm drive clamps or cable ties will not be permitted. A device(s) must be installed to keep the cylinder from sliding out of the mounting system. Clamp style or "figure eight" mounts must completely encircle the circumference of the 1-3/4 inch outside diameter of the roll bar. This cylinder must contain a minimum of 10 pounds of fire extinguishing agent, visibly designated on the label as DuPont FE-36, 3M NOVEC 1230 or equivalent type agent. This cylinder must be activated by an automatic, thermally activated discharge nozzle(s) recommended by the manufacturer for this application. This automatic system may have a manual and/or pneumatic override from the driver-activated system. If the engine compartment discharge option is used, then an additional automatic, thermally activated discharge nozzle must be located under the hood forward of the firewall. All discharge lines and fittings must be steel or steel reinforced hose although nozzles may be aluminum. When routing pressurized fire extinguisher lines (thermally activated) either to the trunk area or the engine compartment, the lines will only be permitted to pass through the firewall near the longitudinal centerline of the vehicle. All cylinders must have an indicator gauge and identifying label readily visible for inspection purposes. The gauge must be compatible with the agent used in the cylinder. Cylinders for all agents must be DOT-approved steel or aluminum. Carbon fiber or composite cylinders will not be permitted.

- (3) All entrants should have in their garage or pit area as part of their equipment, at all times, a fully charged minimum 10 pound Class B fire extinguisher with a visible, operating pressure gauge.

D. Passengers will not be permitted in or on a race car at any time.

20D - 17.1 Helmets / Head and Neck Restraint Devices / Systems

A. Helmets

- (1) Drivers must wear a full-face helmet carrying at least one (1) of the following certifications:
- FIA 8860-2004
 - FIA 8860-2010
 - Snell SA 2005
 - Snell SA 2010
 - Snell SAH 2010
 - SFI 31.1/2005

Helmet certification (label) must be affixed to the helmet at all times.

Helmets should be fitted with a NASCAR-approved helmet removal system. The following systems are currently approved:

Eject™ Helmet Removal System

- (2) The driver must wear the helmet in accordance with the directions provided by the helmet supplier and/or manufacturer. Any modification to the helmet for any purpose should not detract from its effectiveness. Helmet surface protrusions such as visor tear-off posts should be removed.
- (3) During Race conditions, any crew member who steps into the car servicing area must wear a helmet.
- (4) During Race conditions, any crew member involved in fueling the car must wear a full face helmet with a covering face shield and a fire resistant head sock or helmet skirt. The head socks and/or helmet skirts must meet the SFI 3.3 specification and must visibly display a valid SFI 3.3 label.

Helmets should be fitted with a NASCAR-approved helmet removal system. The following systems are currently approved:

Eject™ Helmet Removal System

- (5) IT IS THE RESPONSIBILITY OF THE DRIVER/CREW MEMBER, NOT NASCAR, TO ENSURE THAT HIS/HER HELMET IS APPROVED, CORRECTLY WORN, MAINTAINED AND PROPERLY USED.

B. Head and Neck Restraint Devices/Systems

- (1) At all times during an Event (practice, qualifying and competition), drivers must connect their helmet to an approved head and neck restraint device/system which is SFI-approved and acceptable to NASCAR. The device/system must meet the SFI 38.1 specification and must display a valid SFI 38.1 label. The head and neck restraint device/system, when connected, must conform to the manufacturer's mounting instructions, and it must be configured, maintained and used in accordance with the manufacturer's instructions.
- (2) IT IS THE RESPONSIBILITY OF THE DRIVER, NOT NASCAR, TO ENSURE THAT HIS/HER DEVICE/SYSTEM IS NASCAR-APPROVED, CORRECTLY INSTALLED, MAINTAINED AND PROPERLY USED.
- (3) The following are the SFI-approved Head and Neck Restraint Devices/Systems that are currently acceptable to NASCAR:

| <u>MANUFACTURER</u> | <u>MODEL</u> | <u>OPTIONS</u> |
|--------------------------------|----------------------|--------------------------|
| HANS | Professional Series | Fixed or Sliding Tethers |
| HANS | Extra/Economy Series | Fixed or Sliding Tethers |
| HANS | Pro Ultra | Sliding Tethers |
| HANS | Sport Series | Fixed or Sliding Tethers |
| HANS | Sport II Series | Sliding Tethers |
| Simpson (formerly Hutchens) | Hybrid | Fixed Tethers |
| Simpson | Hybrid Pro, carbon | Fixed Tethers |

C. SFI 38.1-approved head and neck restraint devices/systems will remain approved for use in competition until their expiration date which is five (5) years after the date of manufacture. At this time, the head and neck restraint device/system must be returned to the manufacturer for inspection and re-certification.

20D - 17.2 **Seat Belts**

A. Each car must be equipped with an SFI 16.5-approved, minimum 6-point seat belt restraint system that displays a valid SFI 16.5 label. It is recommended that a 7-point (third anti-submarine belt) seat belt restraint system be used. The shoulder harness and lap belt assembly must not be more than three (3) inches (nominal) in width. The shoulder harness must not be less than two (2) inches wide (nominal) as it passes over the approved head and neck restraint system. Approved seat belt restraint systems must have a latching mechanism attached to the lap belt or, if a cam lock latching mechanism is used, it must be attached to the lap belt, the shoulder harness or the anti-submarine belts. This latching mechanism must provide a common connection and release for the lap belt, shoulder harnesses and the anti-submarine belts, and must be designed with a quick and easy one-handed, gloved release of all belts in all conditions. It must have one (1) of two (2) approved release designs:

- (1) **Latch/Lever:** Utilizes a lever opening away from the body in a right to left hand movement, parallel to the lap belt with a complete release of all belts. The lever must have a provision to prevent an unintentional release.
- (2) **Cam Lock:** A circular handle or raised surface that turns in both directions for a motion of not less than 30 degrees before completely releasing all belts. A downward facing tab or toggle may be used, provided that its length does not extend more than 1/2 inch beyond the outer diameter of the release mechanism unless a provision to prevent unintentional rotation or release is provided.

B. The seat belt restraint system must be installed in accordance with the directions provided by the system supplier and/or manufacturer. In addition, please note the following guidelines:

- (1) Lap belts must be installed and used in such a manner that, when secured to the latching mechanism, the seat belt webbing travels in a straight, clear and free path from the belt mount through the seat opening to the latching mechanism. Lap belt mounts must be able to swivel without binding or interference. When a driver is buckled in the seat, the free end of the seat belt webbing must rest in a position clearly aligned over the seat belt webbing entering any adjustment or latch release hardware.
- (2) On the left lap belt, if a roller adjuster is used, it must have tension springs installed and it must be attached to and be a part of the latch release mechanism directly without any webbing loop. The roller adjuster must not be attached to the lap belt mounting tab at the frame. A 3-bar slider, threaded to the manufacturer's instructions, may be used for the left lap belt length adjustment, in the absence of the roller adjuster. The 3-bar slider must be positioned outside the seat opening and as close to the mounting tab as possible. On the right lap belt, if a roller adjuster is used, it must have tension springs installed and the adjuster may be located anywhere on the belt except at the frame mounting tab. A webbing link may be used to connect the roller adjuster to the latching mechanism or a 3-bar slider, threaded to the manufacturer's instructions, may be used for the right lap belt length adjustment, in the absence of the roller adjuster. The 3-bar slider must be positioned outside the seat opening and as close to the mounting tab as possible. Wrap-around style lap belt mounts and clip-on/hook/eyebolt style mounts will not be permitted; only tab style lap belt mounts secured with a nut and bolt will be permitted for aluminum seats. NASCAR-approved composite material seats must use the lap belt mounts which are integral with the seat and must be of the same mount style as approved with the seat.
- (3) Shoulder belts must mount to horizontal shoulder bar (#7) or shoulder bar (#7B) only (as shown in the Diagram in the rear pages of the Rule Book). If shoulder belt mounting brackets are used, the shoulder belt mounting brackets must not exceed three (3) inches in length and be a minimum 1-3/4 inches in width. The shoulder belt mounting brackets must be made of solid magnetic steel with a minimum thickness of 3/16 inch welded to the horizontal shoulder bar (#7) or shoulder belt bar (#7B). The shoulder belt mounting holes must have a minimum edge-to-hole distance of 1/4 inch. If the shoulder belt bar (#7B) is used, and the center-to-center distance from the horizontal shoulder bar (#7) is more than four (4) inches, then the shoulder belts must mount directly to the shoulder belt bar (#7B) or to tabs welded directly to the shoulder belt bar (#7B). The opening in the seat for this type of belt must be either a single or double open slot with a finished inside edge or a grommet installed. Only individual shoulder harness belts will be permitted. Y-type shoulder harnesses will not be permitted. Wrap-around shoulder harness mounts will be permitted provided the belts do not cross behind the driver and all wrap-around mount style

shoulder belts must be retained by a guide on horizontal shoulder belt bar (#7) or shoulder belt bar (#7B) to prevent lateral movement of the belt on the roll bar. Shoulder belts may cross behind the driver provided they use a tab-style mount and not a wrap-around mount. The seat opening for these crossed shoulder belts must be a single, open slot with a finished inside edge or grommet where the shoulder belts cross behind the driver. Each shoulder belt using a tab mount must use an individual mounting tab or steel sleeve welded through horizontal shoulder bar (#7) or shoulder belt bar (#7B) and be secured with a nut and bolt. Roller adjusters on the shoulder harnesses must have tension springs installed. Sternum or cross belts using metal or hard surface hardware will not be permitted.

- (4) Approved anti-submarine belts must be mounted to the seat frame or a steel reinforced seat bottom mount. Either wrap-around or tab-style anti-submarine belt mounts will be permitted and must be installed in accordance with the directions provided by the system supplier and/or manufacturer.

C. The manufacturer's label must not be located under the adjusting mechanism when the driver is buckled in the seat and has tightened the seat belts and shoulder harness. If the label is under the adjusting mechanism, the label must be removed and relocated in a manner that does not affect the integrity of the belt material. The date of manufacture must remain visible on the belts at all times. Seat belt restraint systems must not be used beyond two (2) years after their date of manufacture.

D. The driver must use the seat belt restraint system at all times on the race track, in accordance with the instructions and/or recommendations of the system supplier and/or manufacturer, as set forth above.

E. The SFI 16.5-approved seat belt restraint systems will remain approved for use in competition until their expiration date which is two (2) years after the date of manufacture. The seat belt restraint systems must be used as a complete restraint system. Brands may not be mixed.

F. IT IS THE RESPONSIBILITY OF THE DRIVER, NOT NASCAR, TO ENSURE THAT HIS/HER SEAT BELT RESTRAINT SYSTEM AND ALL COMPONENTS ARE SFI 16.5-APPROVED AND LABELED, CORRECTLY INSTALLED, MAINTAINED AND PROPERLY USED.

20D - 17.3 Seats

A. IT IS THE RESPONSIBILITY OF THE DRIVER, NOT NASCAR, TO ENSURE THAT HIS/HER SEAT, HEADREST/HEAD SURROUND ASSEMBLY AND ALL SEAT COMPONENTS ARE CORRECTLY INSTALLED, MAINTAINED AND PROPERLY USED.

B. Each car must be equipped with an SFI 39.1 seat and headrest/head surround assembly displaying valid SFI 39.1 labels and be acceptable to NASCAR. Custom-manufactured aluminum seats constructed from solid aluminum sheet material from the seat bottom to above the driver's shoulders, acceptable to NASCAR, will be permitted. NASCAR-approved composite material seats will be permitted. Composite material seats and/or seats which incorporate lap and/or shoulder belt anchorages are subject to additional testing with documentation supplied to NASCAR. Each composite seat must have a unique, identifier that matches records on file with NASCAR. Seats constructed of multiple materials, including composite materials, must be 39.1-approved and must be acceptable to NASCAR. The SFI 39.1-approved seat and headrest/surround assembly will remain approved for use in competition until their expiration date which is two (2) years after the date of manufacture. Once a seat and headrest/head surround assembly has reached the expiration date, the seat and headrest/head surround assembly must be inspected and recertified by the seat manufacturer. All seat interiors must be lined with inserts and/or padding. It is recommended that a minimum thickness of two (2) inches of SFI 45.2 insert/padding be used. It is recommended that the padding meet the SFI 45.2 specification and display a valid SFI 45.2 label. All non-SFI 45.2 insert/padding materials must be 1/2 inch thick or less. No gaps or non-SFI 45.2 specification approved material(s) may be present between the seat structure and driver's uniform in the area directly under the driver with the exception of standard seat cover upholstery (1/4 inch thick maximum) or flame retardant knit materials. The area directly under the driver extends from the driver's waist (belt line) forward to the front edge of the sub-strap pass through holes, or four (4) inches forward of the lap belt mount, whichever is greater, as well as extends five (5) inches to both the left and right of the driver's centerline. It is recommended, a minimum thickness of 3/4 inches of insert/padding meeting the SFI 45.2 specification be used in this area directly under the driver. The area directly under the driver is shown in Diagram #13, in the rear pages of the Rule Book. A 3/8 inch diameter inspection through-hole must be located on the driver's centerline between the leading edge of the lap belt pass through holes as shown in Diagram #13, in the rear pages of the Rule Book. All seat coverings and/or upholstery should be flame retardant.

C. Seats manufactured or recertified after January 1, 2014, must use the insert/padding meeting the SFI 45.2 specification and display a valid SFI 45.2 label. All non-SFI 45.2 insert/padding materials must be 1/2 inch thick or less. No gaps or non-SFI 45.2 specification approved material(s) may be present between the seat structure and driver's uniform in the area directly under the driver with the exception of standard seat cover upholstery (1/4 inch thick maximum) or flame retardant knit materials. The area directly under the driver extends from the driver's waist (belt line) forward to the front edge of the sub-strap pass through holes or four (4) inches forward of the lap belt mount, whichever is greater, as well as extends five (5) inches to both the left and right of the driver's centerline. A minimum thickness of 3/4 inches of insert/padding meeting the SFI 45.2 specification must be used in this area directly under the driver. The area directly under the driver is shown in Diagram #13, in the rear pages of the Rule Book. A 3/8 inch diameter inspection through-hole must be located on the driver's centerline between the leading edge of the lap belt pass through holes as shown in Diagram #13, in the rear pages of the Rule Book. All seat coverings and/or upholstery should be flame retardant.

D. The seat and headrest/head surround assembly must be installed in accordance with the directions provided by the system supplier and/or manufacturer. SFI 39.1 seats and headrest/head surround assemblies must not be modified or altered. The back of the seat, at shoulder level, must be positioned as close to the horizontal shoulder bar (#7) as possible.

E. All seats must have padded seat leg extensions on the left side and right side. Leg extensions must be securely mounted to the seat and car structure. Leg extensions must be padded. It is recommended that the padding meet the SFI 45.2 specification and display a valid SFI 45.2 label. Composite material seat leg extensions should meet the SFI 56.1 specification for flammability. All leg extension coverings and/or upholstery should be flame retardant.

F. Headrests/head surround assemblies must be designed to provide rigid support around both sides of the helmet and across the back and from the forward most point of the helmet chin bar in addition to allowing extra length for forward head motion during an impact. The left side of the headrest/head surround assembly may be shortened to permit egress of the driver but must not be shortened to a location rearward of the helmet chin bar. Foam, tape or other non-original coverings may not be added to the headrest without the approval of the seat manufacturer and must be acceptable to NASCAR Officials. The headrest/head surround assembly must be rigidly bolted to the top of the seat using a minimum of 5/16 inch diameter bolts, except for the NASCAR-accepted composite seats. Steel brackets welded to the roll cage must be a minimum of 1/8 inch thick and aluminum brackets welded to the headrest/head surround assembly should be a minimum of 3/16 inch thick. All bolts must have a minimum of 3/4 inch of metal from the center of the mounting bolt to the edge of the bracket. In addition, it is recommended that the headrest/surround assembly be bolted to the shoulder supports with a minimum 3/16 inch thick brackets and a minimum 5/16 inch diameter bolts. The headrest/head surround assembly must not extend into the window opening beyond the area defined by the upper roll cage. All headrests must be fabricated in a rigid construction and of materials which provide adequate support in an impact. The headrest/head surround assembly on both the left side and right side must be padded with flat impact absorbent material, a minimum of 2-1/2 inches thick, meeting the SFI 45.2 specification and display a valid SFI 45.2 label. On all headrest/head surround assemblies the area between the side of the driver's helmet and the flat impact absorbent material must not be more than 1/2 inch on both the left side and right side.

G. Optional strap-type headrest supports or nets must be equipped with a quick release fastener accessible by the driver.

H. The upper seat back must be secured to horizontal shoulder bar (#7) or to a bracket that is secured to horizontal shoulder bar (#7) with a minimum of three (3) high quality 5/16 inch minimum diameter bolts through the horizontal shoulder bar (#7). For aluminum seats, if a seat bracket is used to attach the seat to the horizontal shoulder bar (#7), the bracket must be constructed using a minimum of 3/16 inch thick metal plate and it must have a minimum of 3/4 inch of metal from the center of the mounting bolt to the edge of the bracket or the bracket may utilize the composite seat bracket design. For composite seats, the seat bracket must attach the seat to the horizontal shoulder bar (#7) and must be constructed from magnetic steel.

Minimum upper seat bracket thicknesses:

Hendrick: 0.090 inch

Sabell: 3/16 inch

Spraco: 3/16 inch

The magnetic steel seat bracket to be used with a composite seat must be constructed according to the manufacturer's instructions, including all required gussets and reinforcements (see Diagrams # 12A & B, in the rear pages of the Rule Book). All gussets must be solid and must run from the centerline of the seat mounting hole to the centerline of the roll cage mounting hole. Outer diagonal

gusset edge must be straight unless the gusset is relieved to make room for the horizontal shoulder bar (#7). Holes and or other modifications that, in the judgment of NASCAR Officials, were made with the intent of weight reduction will not be permitted.

The seat bracket must be fastened to the seat with a minimum of four (4) high quality 5/16 inch minimum diameter bolts for aluminum seats, and two (2) high quality 5/16 inch minimum diameter bolts for composite seats.

I. The seat bottom must be secured to the car's structure with a minimum of two (2) high quality 5/16 inch minimum diameter bolts per side. Seat mount brackets or slotted mounting systems welded to the seat frame must be a minimum of 1/4 inch thick. All mounting brackets must have a minimum of 1/2 inch of metal from the center of the mounting bolt to the edge of the bracket. All seat mounting brackets, welded to the frame rail, frame crossmembers, floors, roll bars, or removable seat mounting frame assemblies, must be made of a minimum 1/4 inch magnetic steel if single shear or a minimum of 3/16 inch if the double shear configuration is used. If a slotted mount is used to mount the seat to the seat frame, the seat must be bolted to the seat frame bracket using an additional bolt to prevent sliding. When mounting through the aluminum seats or brackets large diameter washers must be used.

J. The seat shoulder support angle should not exceed 25 degrees from vertical when measured where the driver's shoulder contacts the seat with the seat installed in the car. Additional angle may be added to the bottom of the shoulder support for driver arm clearance, if necessary. The interior shoulder support surface should be positioned perpendicular to the seat back in a plan view.

K. Rib/chest support structures, if used, should not interfere with the natural ingress and egress of the driver from the seat. Rib/chest support structures, if used, should provide full coverage from the seat back to the front of the driver's chest. Partial rib/chest supports constructed of foam, meeting the SFI 45.2 specification, will be permitted. Rib/chest support structures should not continue forward past the front of the driver's chest and should not curve or wrap around the front of the driver's chest. Rib/chest support foam, meeting the SFI 45.2 specification will be permitted to curve or wrap around the front of the driver's chest.

20D - 17.4 Window Net

A. A window net meeting the SFI 27.1 specification and displaying a valid SFI 27.1 label must be installed in the left side door window opening. The window net must not be used beyond two (2) years from the date of manufacture.

B. The window net must be a rib-type construction made from minimum 3/4 inch, maximum one (1) inch wide material, with a minimum one (1) inch square opening between the ribs. The minimum window screen size must be 22 inches wide by 16 inches high.

C. All window net mounts must be welded directly to the roll cage and must not attach to the door top or body exterior sheet metal. All window net mounts must be a minimum 1/2 inch diameter solid magnetic steel rod or a minimum one (1) inch wide by 1/8 inch thick flat magnetic steel and must be acceptable to NASCAR Officials. The lower window net mounting bar must not extend above the door top.

D. The window net, when in the closed position, must fit tightly and be secured with a lever-type quick release latch acceptable to NASCAR Officials. The lever must be secured by a detent ball in the lever and may be supplemented by a Velcro®, fastener only, pins or clips will not be permitted. The latch must be mounted at the top in the front to the roof bar (#3) or at the top of front roll bar leg (#2A) near roof bar (#3). The forward edge of the window screen, when in the closed position, must be in line with or forward of the steering wheel.

20D - 18 Roll Bars

A. As a minimum, all cars are required to have the basic and typical roll cage configured as shown in Diagrams #11A, B & C in the rear pages of the Rule Book. Unless otherwise specified below, all roll bars must be made from round magnetic steel seamless tubing 1-3/4 inches by 0.090 inch minimum wall thickness meeting the ASTM A-519 specification. Electric resistance welded tubing, aluminum and/or other soft metals will not be permitted. Roll bar joints and intersections must be welded according to the ASTM specification for the material being welded. A maximum of one (1), maximum 1/8 inch diameter hole may be drilled at each welded roll cage joint for the purpose of purging the tubes when welding. Once constructed and installed, the roll cage must be acceptable to NASCAR Officials. Holes and/or other modifications that, in the judgment of NASCAR Officials, were made with the intent of weight reduction will not be permitted. Modifications or alterations which detract from or compromise the integrity or effectiveness of any roll cage component will not be permitted.

B. Basic NASCAR Roll Cage Structure

- (1) The main roll bar (#1 in Diagrams #11A & B) must be a continuous length of tubing with one end welded to the top of the right frame rail and one end welded to the top of the left frame rail and with both rising

- to maintain a minimum clearance with the "B" posts and follow along the inner surface of the roof panel with a minimum clearance for the roof panel. The main roll bar (#1) may be tilted a maximum of 20 degrees rearward. The main roll bar (#1) must also be braced with one (1) diagonal bar (#5) and one (1) horizontal shoulder bar (#7). All bends in the main roll bar (#1) must be as symmetrical as minimum clearances permit.
- (2) The distance from the center of each of the front roll bar legs (#2 A & B) to the center of the main roll bar (#1) must not measure less than 39-1/2 inches. Each of the front roll bar legs (#2 A & B) must be constructed from a continuous length of tubing. One leg must be welded perpendicular to the top of the right frame rail and one leg welded perpendicular to the top of the left frame rail with both legs rising vertically a minimum of 21-1/4 inches before bending inward and rearward to maintain a minimum clearance with the "A" posts. Both legs must follow along the inner surface of each respective "A" post. The front roll bar legs (#2 A & B) must be welded to the roof bar (#3) near the upper corners of the windshield opening or extend rearward along the outer edge of the roof and be welded to the main roll bar (#1).
 - (3) The roof bar (#3) which may be incorporated into the front roll bar legs (#2A & B) extends forward from the outer edges of the main roll bar (#1) with minimum clearance to the roof panel and remain parallel to the main frame rails. The roof bar must follow the contour of the windshield opening as it bends across the front and be within four (4) inches to the top of the windshield opening. The roof bar (#3) must extend from the edge of the roof on the left side across to the right side. The center to center width of the roof bar (#3) must be a minimum of 39 inches, and a minimum distance of 37-1/2 inches must be maintained from the center of the roof bar (#3) to the center of the main roll bar (#1).
 - (4) The centerline roof bar (#4) must be a continuous length of tubing, extending from the main roll bar (#1) forward to the roof bar (#3) near the car's centerline or be a diagonal bar from the intersection of the main roll bar (#1) and the roof bar (#3) on the right side and extend to the intersection of the roof bar (#3) and the left front roll bar leg (#2A) on the left side. The center windshield bar (#4A) must extend forward from the roof bar (#3) near the car's centerline and bend downward and be welded to the dash panel bar (#8) near the car's centerline.
 - (5) The main roll bar diagonal bar (#5), must form a straight line, with no bends and must begin near the upper left bend of the main roll bar (#1) behind the driver's head and after intersecting the horizontal shoulder bar (#7), it must be welded to the lower right side of the main roll bar (#1).
 - (6) One (1) horizontal shoulder bar (#7) must be a continuous length of tubing and must be welded, with no bends, inside the vertical legs of the main roll bar (#1) at a minimum height of 15-1/2 inches above the main frame rails. An additional shoulder belt bar (#7B) must be a continuous length of tubing and may be added above the horizontal shoulder bar (#7) to facilitate shoulder harness mounting height. The shoulder belt bar (#7B) must be welded to the main roll bar (#1) and the main roll diagonal bar (#5) or it may be bent tube constructed of 1-3/4 inches by 0.090 minimum wall thickness steel, round tubing, meeting ASTM A-519 specification, welded at each end to the horizontal shoulder bar (#7) to form a loop above the horizontal shoulder bar (#7).
 - (7) The dash panel bar (#8) must be a continuous length of tubing, with no bends, welded beneath the dash panel between the two (2) front roll bar legs (#2 A & B) at a minimum height of 15-1/2 inches above the main frame rail.
 - (8) (a) The door bars (#9 A & B), on both the left and right sides, must have a minimum of four (4) bars equally spaced from top to bottom that must be welded horizontally between the vertical uprights of the main roll bar (#1) and the front roll bar legs (#2 A & B). The top door bar on each side must maintain a minimum vertical height of 15-1/2 inches from the top of the main frame rails to its centerline and match up with the intersection of the dash panel bar (#8) at the roll bar legs (#2A & B) at the front and the intersection of the horizontal shoulder bar (#7) at the main roll bar (#1) at the rear. All door bars must be convex in shape. The door bars (#9 A & B) must have a minimum of six (6) vertical supports per side with two (2) equally spaced between each door bar. These supports must be made from a minimum of 1-3/4 inches by 0.090 inch wall thickness magnetic steel seamless round tubing (not numbered but shown in the left side view of diagram #3). Right side door bars must cover a minimum of 25 inches of door length and may be either four (4) horizontal bars with six (6) vertical studs or two (2) horizontal bars

and two (2) bars configured in an X design. If the X design is used, a vertical bar must connect through the center of the X from the top horizontal bar to the frame.

- (b) A 13 gage (0.0897 inch thick) magnetic steel anti-intrusion plate(s) must be securely welded to the outside of the left side door bars. The anti-intrusion plate(s) must fill the area between the horizontal centerlines of the top and bottom door bars, and vertical centerlines of main roll bar (#1), and the left front roll bar leg (#2A). The plate(s) must be formed to match the curvature of the door bars. Plate(s) welded between the vertical upright bars should be as large as possible. All plate(s) must have the corners welded with one (1) inch of weld followed by a maximum of three (3) inches of surface not welded and followed again by a minimum one (1) inch weld.

To facilitate emergency removal of the left side door bars (#9A), the anti-intrusion plate must have six (6), 2-1/8 inch diameter holes cut in the anti-intrusion plate, with three (3) holes forward of the front vertical supports and three (3) holes rearward of the rear vertical supports in the following locations:

The upper two (2) holes must be centered vertically between the left side door bars (#9A-1&2), at an on-center distance of three (3) inches from the center of the front vertical support and the rear vertical support.

The middle two (2) holes must be centered vertically between the left side door bars (#9A-2&3), at an on-center distance of three (3) inches from the center of the front vertical support and the rear vertical support.

The lower two (2) holes must be centered vertically between the left side door bars (#9A-3&4), at an on-center distance of three (3) inches from the center of the front vertical support and the rear vertical support (see Diagram #9A, in the rear pages of the Rule Book).

- (9) All cars must have a foot protection bar acceptable to NASCAR Officials installed on the left side of the roll cage. The foot protection bar must be located at or in front of the pedal assembly, when viewed from the side and above. The foot protection bar must be completely welded to the left front roll bar leg (#2A) and extend forward and be completely welded to the main frame rail or front sub-frame.
- (10) The vertical vent window bars (#10 A & B) must each be a continuous length of tubing welded from the upper surface of the top door bars on the right side and left side to the front roll bar legs (#2 A & B). The vertical vent window bars (#10 A & B) must be perpendicular to the top door bars (#9 A & B). A minimum of one (1) vertical bar must extend from the roof bar (#3) radiused outward and turn down to the top horizontal door bar (#9A) on the driver's side. The vertical bar must be a minimum 1-1/2 inch diameter by 0.090 inch wall thickness magnetic steel seamless round tubing and must be located in line with the driver and must not extend forward of the left side headrest/head surround assembly.
- (11) The two (2) angular supports (#11 A & B) must be welded to the top of the main frame rail and to the bottom surface of the bottom door bar on both the left and right side.
- (12) The rear support bars (#13 A & B) must be continuous lengths of tubing welded to the left and the right back side of the main roll bar (#1) near the roof panel at the top. They must extend to and be welded to the top of the rear sub-frame rail within one (1) inch of the rear edge of the fuel cell.
- (13) The two (2) front sub-frame bars (#16 A & B) must be a minimum 1-3/4 inch diameter by 0.083 inch wall thickness magnetic steel seamless round tubing. They must be welded to the right side and the left side of the front roll bar legs (#2 A & B) at a minimum height of 15-1/2 inches. The front sub-frame bars (#16 A & B) must extend forward, turn down, and must be welded to the front sub-frame rails.

C. Gussets

- (1) Gussets must be used at the intersection where the main roll bar (#1) and the front roll bar legs (#2 A & B) meet the main frame, and the gussets must be constructed using a minimum one (1) inch wide by two (2) inches high magnetic steel box tubing.
- (2) Gussets must be used at the intersection where the front roll bar legs (#2 A & B) intersect the roof bar (#3), and the gussets must be constructed from a minimum 0.095 inch minimum thickness triangular-shaped magnetic steel flat plate measuring a minimum of 1-1/2 inches long on each side that is to be welded.

- (3) Gussets must be used at the intersection of main roll bar (#1) and the front roll bar legs (#2 A & B) with door bars (#9 A & B) and the gussets must be constructed from a minimum 0.095 inch minimum thickness triangular-shaped magnetic steel flat plate measuring a minimum of 1-1/2 inches long on each side that is to be welded.
- (4) Gussets must be used at the intersection of main roll bar (#1) and the rear support bars (#13 A & B), and the gussets must be constructed from a minimum 0.095 inch minimum thickness triangular-shaped magnetic steel flat plate measuring a minimum of 1-1/2 inches long on each side that is to be welded.

D. For the approved location of the various roll bars, please reference both the basic roll cage diagrams and the typical roll cage diagrams in the rear pages of the Rule Book.

E. Modifications to the basic and typical roll cage design described above must be submitted in blueprint and/or computer aided design (CAD) files for acceptance to the office of the NASCAR Competition Administrator at least 60 days before the design can be entered in competition. If the Competition Administrator accepts the modification as set forth in the submitted files the Competitor must submit for inspection a completed frame and roll cage at least 30 days prior to the date of intended competition. Acceptance of the submitted blueprint and/or computer aided design (CAD) files does not guarantee acceptance of the completed frame and roll cage design, and the Competition Administrator may decide not to accept such design even if it is the same as the submitted files. If the Competition Administrator accepts the completed frame and roll cage, it may then be used in competition in the form accepted, unless and until the form is no longer approved by the Competition Administrator.

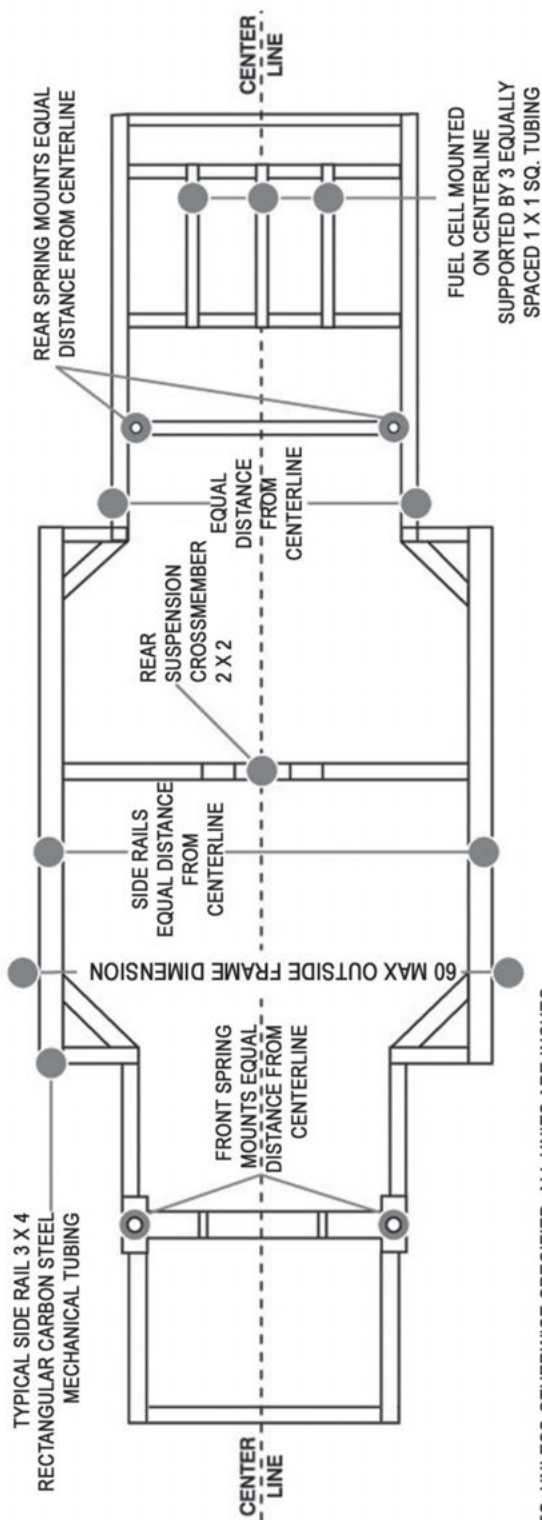
F. All roll bars within the driver's reach must be covered with impact absorbent material manufactured to the SFI 45.1 specification and be acceptable to NASCAR Officials. Impact absorbent material used on roll bars must meet the SFI 45.1 specification and be imprinted on the outside surface with the SFI logo.

G. All references to the roll cage, roll bars, roll cage bars or the roll cage bar design specified in other sub-sections of the Rule Book must refer to sub-section 20D-18.

H. At the discretion of NASCAR Officials, additional material and/or tubing may be required to be welded to any car that does not conform to the January 1, 2015 roll cage or roll bar specifications as described in sub-section 20D-18.

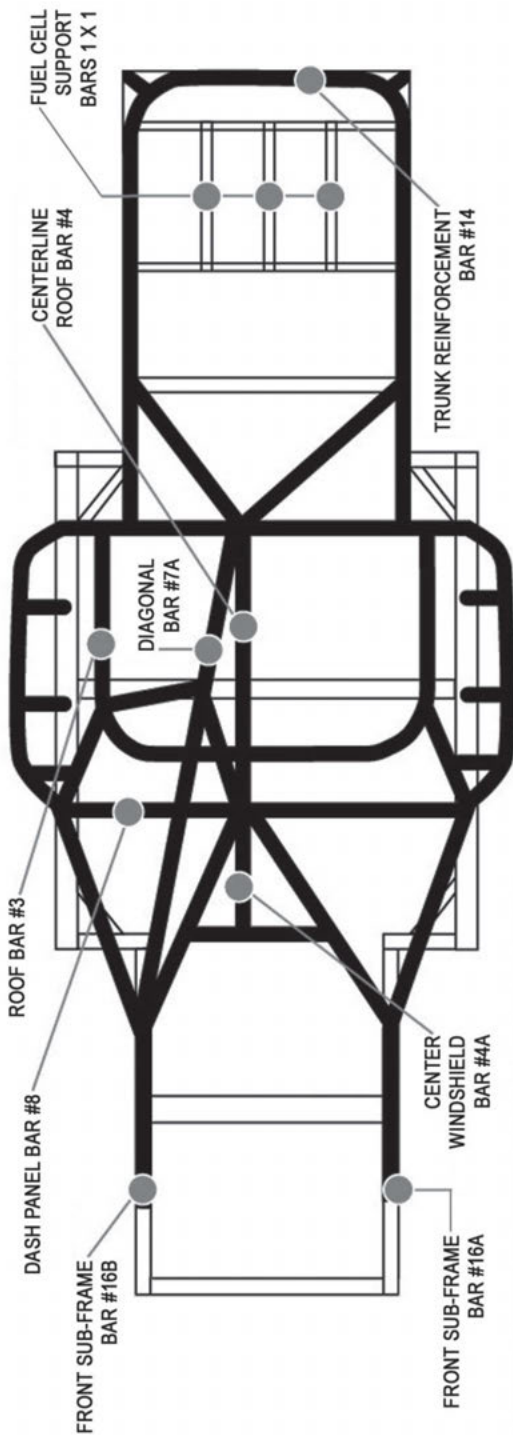
CONSTRUCTION GUIDELINES

DIAGRAM #1 - TYPICAL NASCAR FRAME (PLAN VIEW)



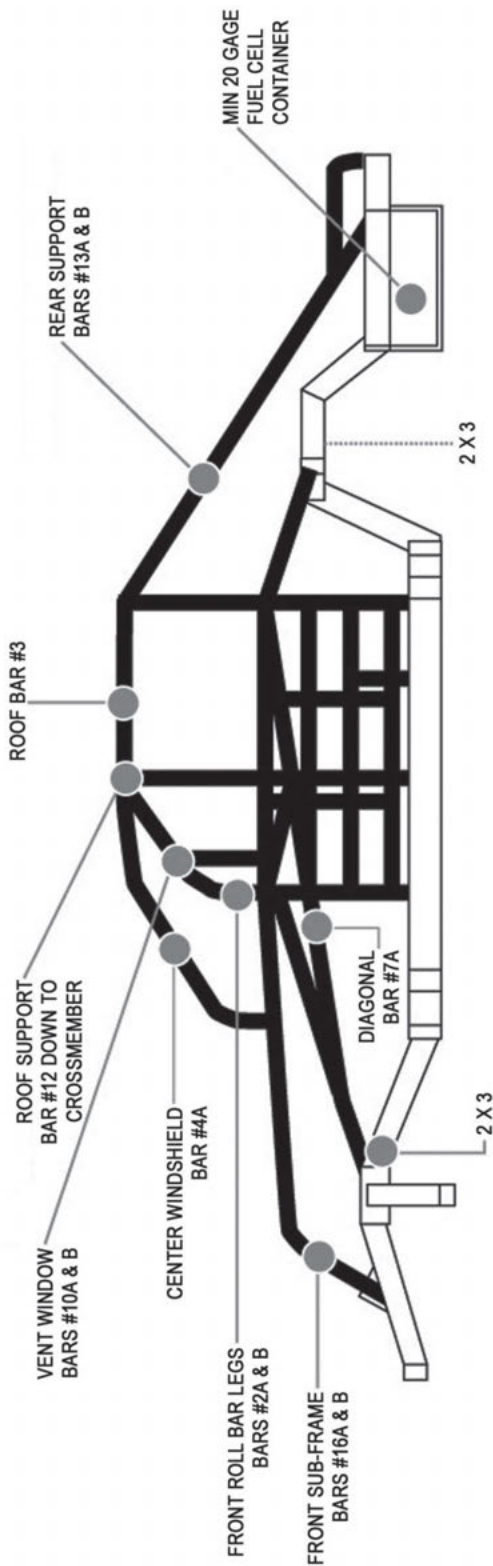
NOTES: UNLESS OTHERWISE SPECIFIED, ALL UNITS ARE INCHES.

DIAGRAM #2 - TYPICAL ROLL CAGE AND FRAME CONSTRUCTION (PLAN VIEW)



NOTES: UNLESS OTHERWISE SPECIFIED, ALL UNITS ARE INCHES.

DIAGRAM #3 - TYPICAL ROLL CAGE AND FRAME CONSTRUCTION (SIDE VIEW)



NOTES: UNLESS OTHERWISE SPECIFIED, ALL UNITS ARE INCHES.

DIAGRAM #4 - EXPLODED VIEW OF BASIC ROLL CAGE

(SOME BARS REMOVED FOR CLARITY)

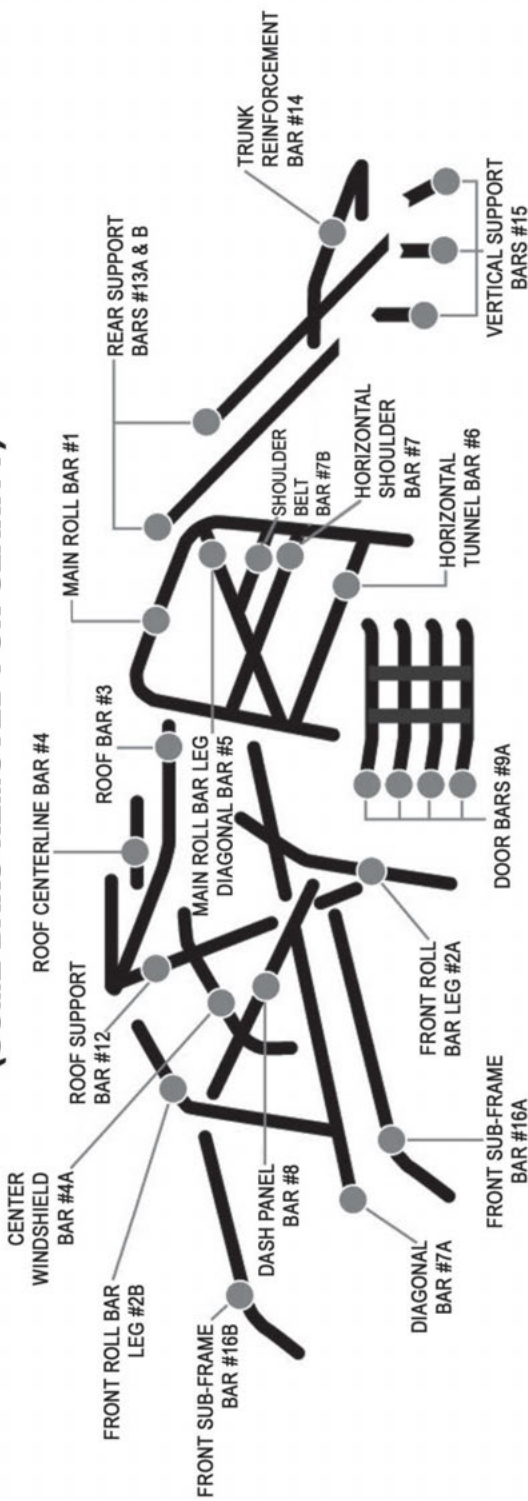


DIAGRAM #5 - BASIC NASCAR ROLL CAGE STRUCTURE

(SOME BARS REMOVED FOR CLARITY)

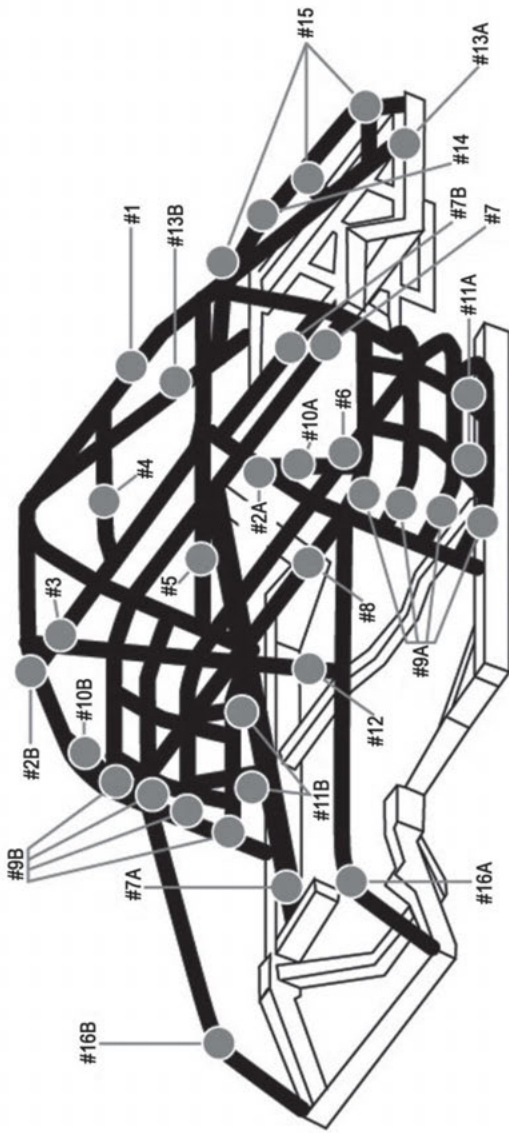
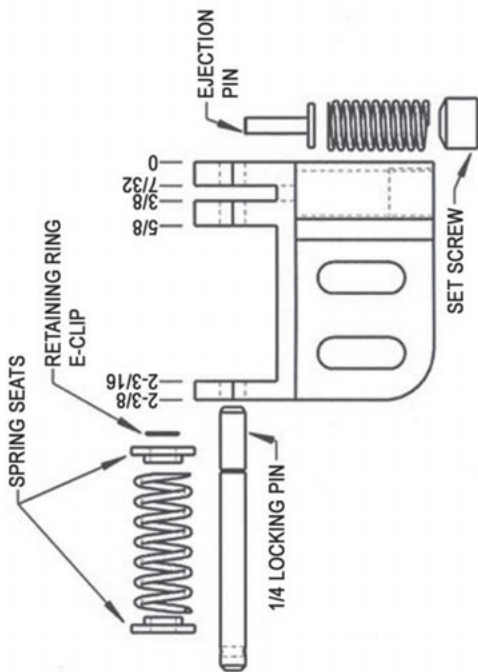
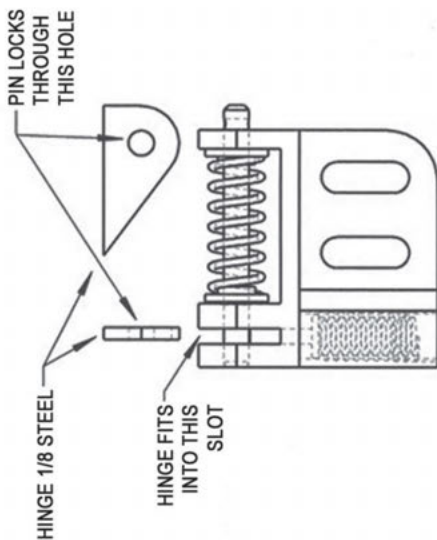
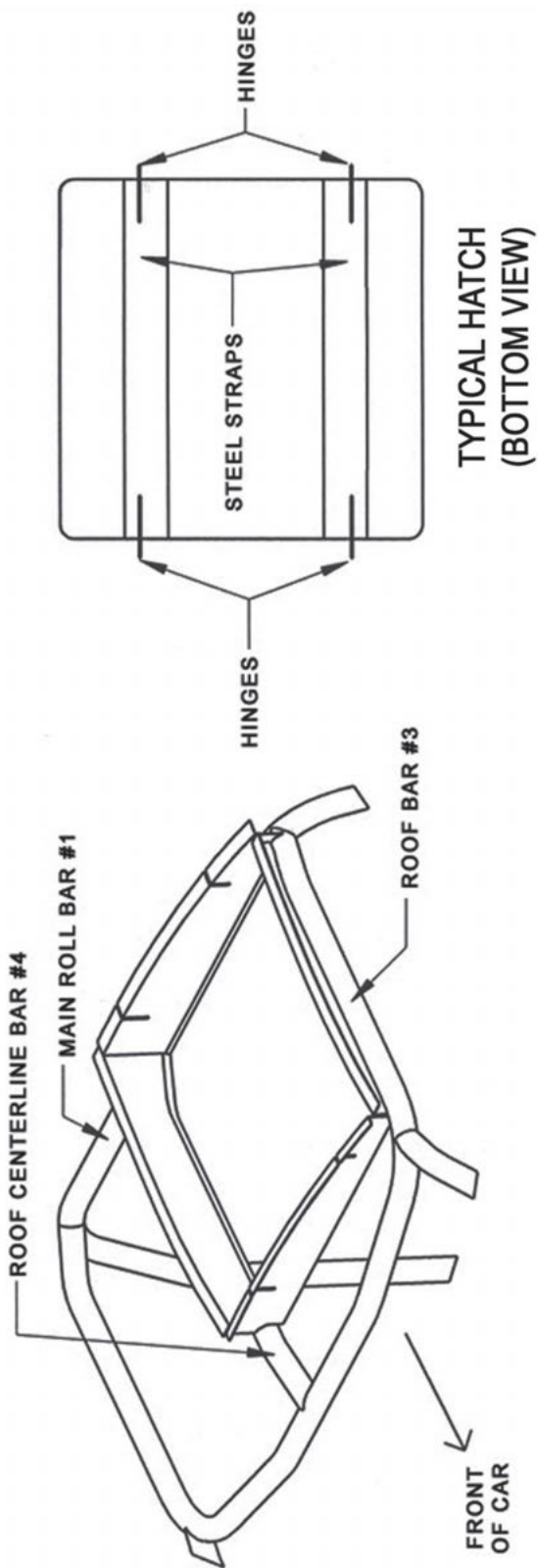


DIAGRAM #6 - ALTERNATE EXIT LATCH MECHANISM



NOTES: UNLESS OTHERWISE SPECIFIED, ALL UNITS ARE INCHES.

DIAGRAM #7 ROOF HATCH



GRAND NATIONAL-APPROVED COMPOSITE BODY MOUNTING INSTRUCTIONS

The following are the body mounting and body location requirements for the Grand National-Approved Composite Body.

1. The body location when measured horizontally rearward from the center of the roof at the windshield seam to the vertical centerline of the rear axle housing will be 60 inches plus or minus (+/-) 1/2 inch for all 110 inch wheelbase cars, and 59 inches plus or minus (+/-) 1/2 inch for all 105 inch wheelbase cars.

2. The body mounting points must incorporate the hood hinges and deck lid hinges. The body mounts must use a minimum 1/8 inch thick magnetic steel plate mounted underneath the body and connected to the front sub-frame bars (#16A & B) on the front and connected in the rear to support bars (#13A & B) with a minimum 3/8 inch diameter round or square magnetic steel tubing using 1/4 inch flush mounting bolts.

3. The front of the roof must be mounted using a minimum of three (3) magnetic steel tabs welded to the front of the roof bar (#3) and attaching to the front of the roof with 1/4 inch diameter bolts. The 1/4 inch diameter bolts must pass through the windshield clips. These mounting points must use the three (3) center windshield clips. The rear of the roof must be mounted using a minimum of three (3) mounting tabs welded to the main roll bar (#1) extending rearward to the air deflector (roof flap) trays (if used) and attaching to the air deflector (roof flap) trays (if used) with a minimum 3/8 inch diameter bolts with a minimum 3/4 inch diameter washers. If the air deflector (roof flap) trays are not used the rear of the roof must be attached with a minimum 3/8 inch diameter flush mounting bolts.

4. The rear of the body must be mounted using the area designated for the deck lid pin fasteners. These body mounting points must use a minimum 1/8 inch thick magnetic steel plate mounted underneath the body with the deck lid pin fastener passing through the body and the mounting plate, the outer edges of the mounting plate must also be pop-rieveted to the body. The mounting plate must be connected to either the trunk reinforcement bar (#14) or to the rear crossmember with a minimum 3/8 inch diameter round or square magnetic steel tubing. It must also have a brace mounted inside the rear of the trunk opening that follows the shape of the rear of the trunk opening and be connected to each of the rear body mounting points with a minimum 3/8 inch diameter round or square magnetic steel tubing and the body pop-rieveted to the tubing. The brace must be connected to either the trunk reinforcement bar (#14) or the rear crossmember with a minimum of two (2) supports using a minimum 3/8 inch diameter round or square magnetic steel tubing.

5. The front of the body must have a brace installed that follows the shape of the front bumper cover where the leading edge of the hood meets the front bumper cover. It must be mounted underneath the upper edge of the front bumper cover with a minimum 3/8 inch diameter round or square magnetic steel tubing and attached to the body with 1/4 inch diameter flush mounting bolts or pop-rieveted to the brace. The brace must be connected to front sub-frame bars (#16A & B) and the front sub-frame or front bumper mounting bars with a minimum 3/4 inch diameter round or square magnetic steel tubing.

6. The side of the body must be mounted to the rocker panel. The rocker panel must extend from the bottom of the main frame rail outward to the inside edge of the body and must have a 90 degree bend upward two (2) inches and the bend inward 3/4 inch. The body must attach to the rocker panel using a minimum of eight (8) 1/4 inch diameter flush mounting bolts evenly spaced. The rocker panel must be installed the full length of the side from wheel opening to wheel opening. The rocker panel must be a minimum of 24 gage (0.025 inch thick) magnetic sheet steel.

The Grand National-Approved Composite Body must meet all other specifications as set forth in Section 20C of the NASCAR Rule Book. All body mounting requirements must be acceptable to NASCAR Officials.

DIAGRAM #8A COMPOSITE BODY MOUNTING INSTRUCTIONS

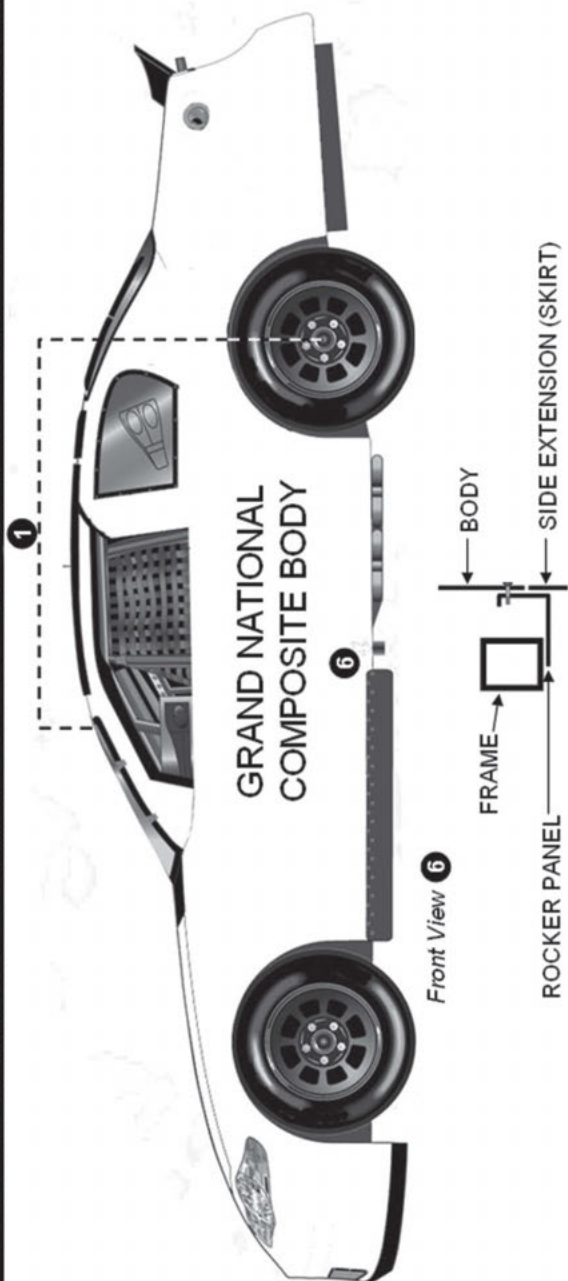
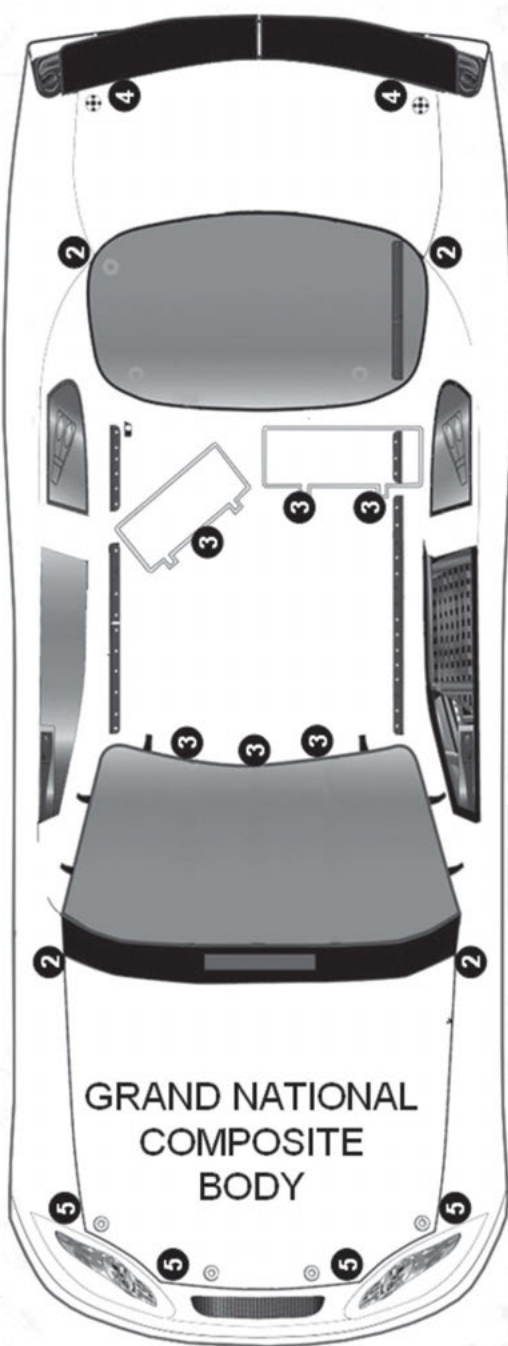


DIAGRAM #8B COMPOSITE BODY MOUNTING INSTRUCTIONS



GRAND NATIONAL-APPROVED IFlange Fit) COMPOSITE BODY MOUNTING INSTRUCTIONS

The following Grand National-Approved (Flange Fit) Composite Body mounting instructions are to be used with Diagrams (#8C & D). To use these instructions, the numbered paragraphs each relate to corresponding numbers shown in Diagrams (#8C & D). Each paragraph explains the requirements for the mounting of the Grand National-Approved (Flange Fit) Composite Body.

1. The body must be mounted on the chassis centerline from front to rear with no offset. The body must remain as manufactured with no modifications.

2. The body location when measured horizontally rearward from the center of the roof at the divot to the vertical centerline of the rear axle housing must be 49 inches plus or minus (+/-) 1/2 inch for all 110 inch wheelbase cars and 45 inches plus or minus (+/-) 1/2 inch for all 105 inch wheelbase cars.

3. The greenhouse must be mounted to the roll cage using the mounting points provided in the greenhouse. The greenhouse must be mounted to the roll cage using 3/8 inch minimum diameter round or square magnetic steel tubing. The front cowl must be attached to the leading edge of the dash. The rear panel (package tray) must be attached to the interior sheet metal.

4. The body mounting points must incorporate the hood hinges and rear deck lid hinges. The body mounts must use a 1/8 inch minimum thick magnetic steel plate mounted underneath the body and connected to the front sub-frame bars (#16A & B) on the front and connected in the rear to support bars (#13A & B) with 3/8 inch minimum diameter round or square magnetic steel tubing using 10/32 inch minimum diameter flush mounting bolts.

5. The front bumper cover must be installed with a 3/8 inch minimum diameter round or square tubing brace that follows the shape of the front bumper cover where the leading edge of the hood meets the front bumper cover. The brace must be mounted underneath the upper edge of the front bumper cover using 10/32 inch minimum diameter flush mounting bolts or pop-riveted to the brace. The brace must be connected to the front sub-frame bars (#16A & B) and the front sub-frame or front bumper mounting bars with 3/4 inch minimum diameter round or square tubing. The lower edge of the front bumper cover must be connected to the front bumper or lower bumper cover braces with either 10/32 inch minimum diameter flush mounting bolts or pop-riveted. The front bumper cover body braces mounted on both the right and left side of the front bumper cover must be non-adjustable braces.

6. The upper rear of the quarter panels must be installed using a minimum 1/8 inch thick magnetic steel plate mounted underneath the rear quarter panels. The outer edges of the mounting plate must be connected to the rear quarter panels under the inner edge of the quarter panel using 10/32 inch minimum diameter flush mounting bolts or pop-riveted. The mounting plate must be connected to either the trunk reinforcement bar (#14) or to the rear crossmember using minimum 3/8 inch diameter round or square tubing. The rear bumper cover must be installed with a minimum 3/8 inch diameter round or square tubing brace that follows the shape of the rear bumper cover where the deck lid waterfall meets the rear bumper cover. The brace must be mounted underneath the upper edge of the rear bumper cover using 1/4 inch diameter flush mounting bolts or pop riveted to the brace. The brace must be connected to either the trunk reinforcement bar (#14) or the rear crossmember with a minimum of two (2) supports using a minimum of 1/4 inch solid round magnetic steel rod. The lower edge of the rear bumper cover must be connected to the rear bumper with either 10/32 inch minimum diameter flush mounting bolts or pop-riveted.

7. The flange fit front fenders, door panels and rear quarter panels must be connected to the chassis and greenhouse using only 10/32 inch minimum diameter flush mounting bolts, pop rivets will not be permitted. The body panel flanges must be connected using only 10/32 inch minimum diameter mounting bolts and 1/2 inch minimum outside diameter washers, pop rivets will not be permitted. The body mounting braces and locations must be acceptable to NASCAR Officials.

8. The lower side of the body must be mounted to the rocker panel. The rocker panel must extend from the bottom of the main frame rail outward to the inside edge of the body and must have a 90 degree bend upward a minimum of 1-1/2 inches and bend inward a minimum of 1/2 inch. The rocker panel must be installed the full length of the side from wheel opening to wheel opening. The rocker panel must be a minimum of 24 gage (0.025 inch thick) magnetic sheet steel. The body must attach to the rocker panel using a minimum of eight (8) 10/32 inch minimum diameter flush mounting bolts evenly spaced from front to rear.

9. All additional body mounting braces and locations must be acceptable to NASCAR Officials

The Grand National-Approved (Flange Fit) Composite Body must meet all other specifications as set forth in Section 20C of the NASCAR Rule Book. All body mounting requirements must be acceptable to NASCAR Officials.

DIAGRAM #8C (FLANGE FIT) COMPOSITE BODY MOUNTING INSTRUCTIONS

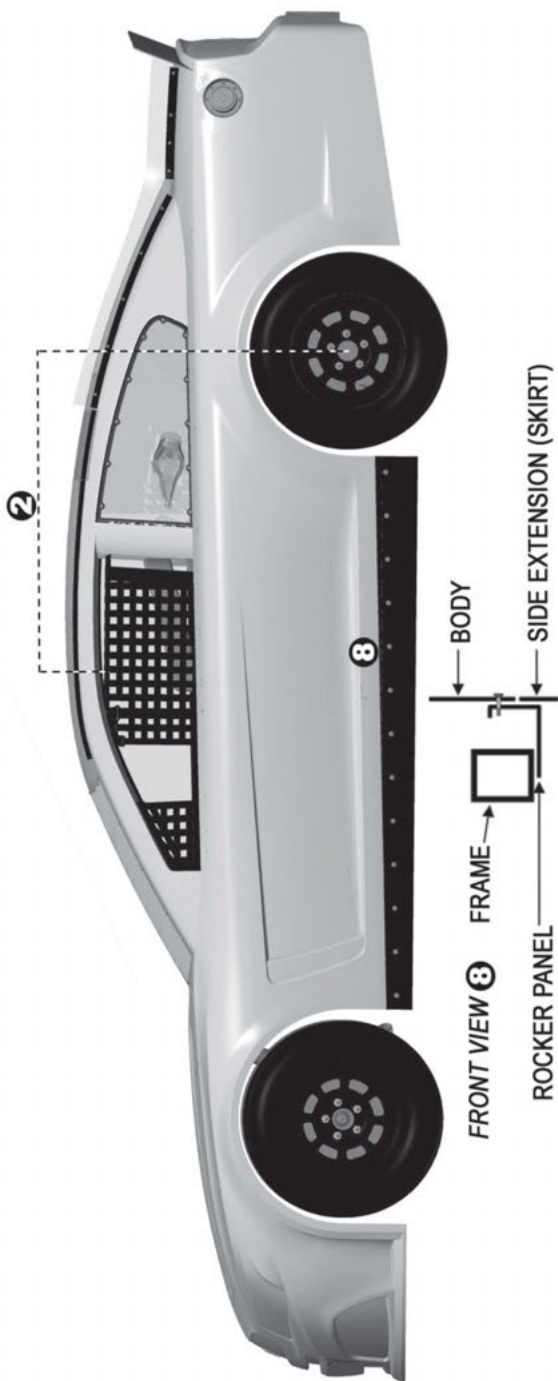
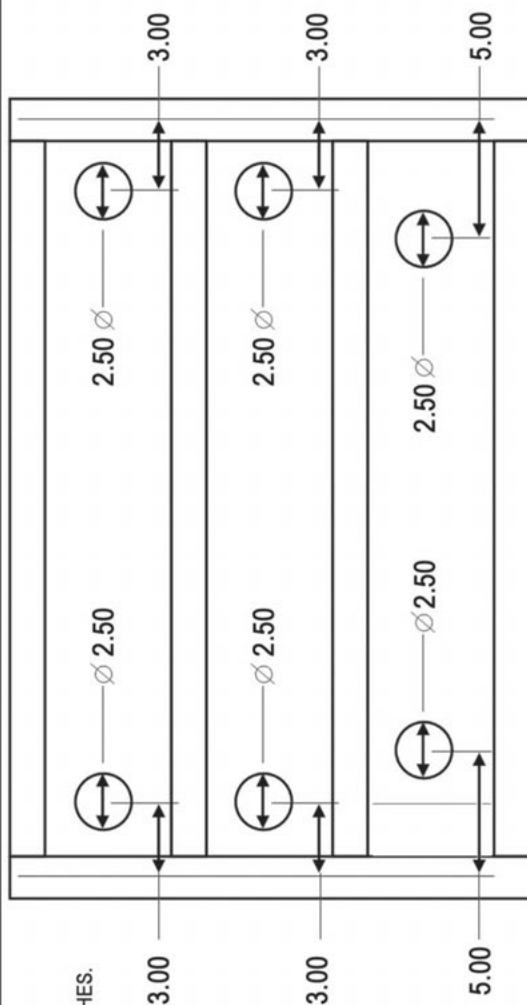


DIAGRAM #8D (FLANGE FIT) COMPOSITE BODY MOUNTING INSTRUCTIONS



DIAGRAM #9 ANTI-INTRUSION PLATE HOLE LOCATION - EAST/WEST

NOTES: UNLESS OTHERWISE
SPECIFIED, ALL UNITS ARE INCHES.



VERTICAL BAR 2A

VERTICAL BAR 1

DIAGRAM #9A ANTI-INTRUSION PLATE HOLE LOCATION - (MODIFIED)

NOTES: UNLESS OTHERWISE SPECIFIED, ALL UNITS ARE INCHES.

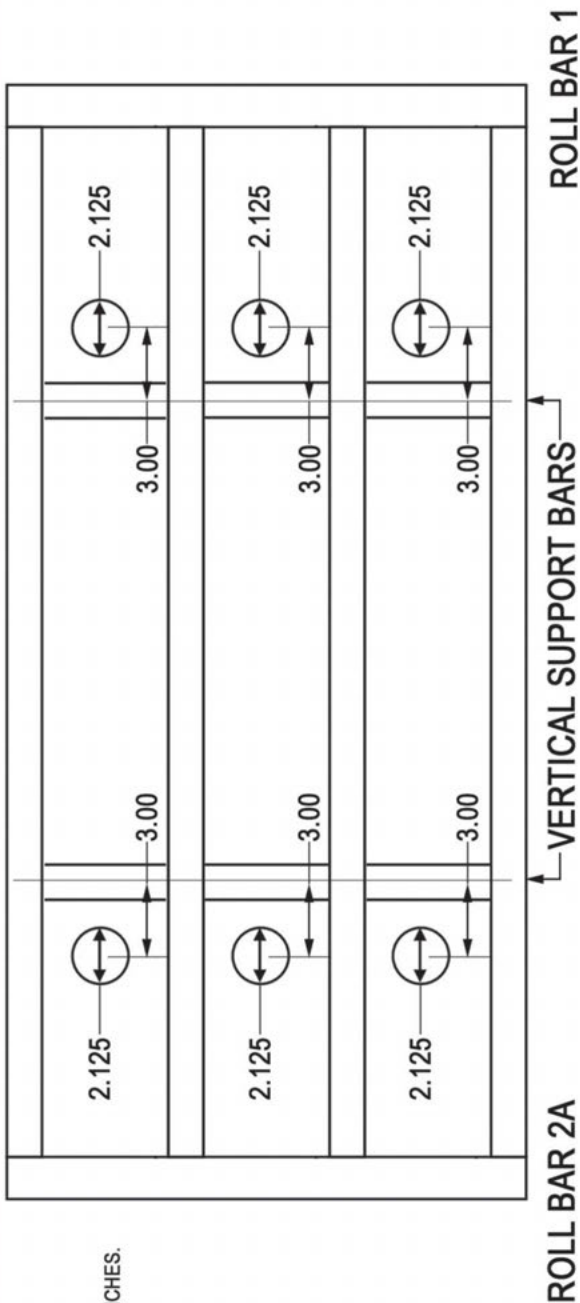
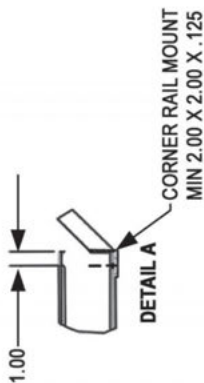
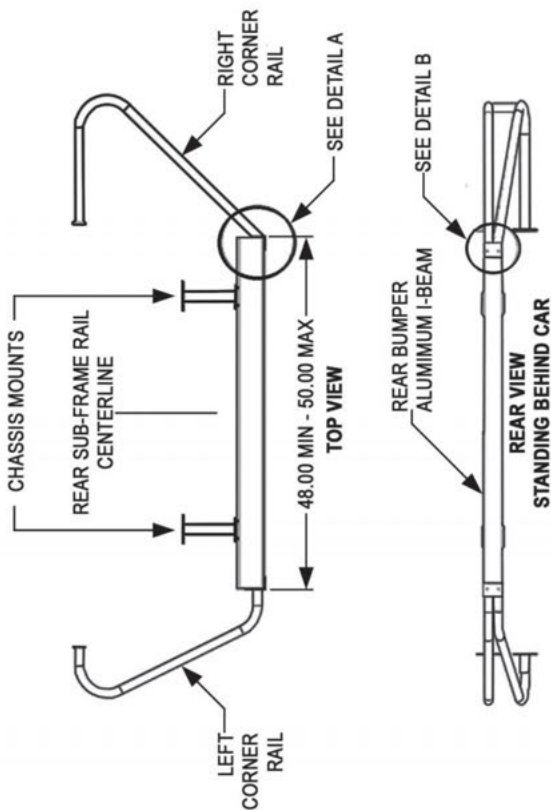


DIAGRAM #10 - REAR BUMPER INSTALLATION - (MODIFIED)



NOTES: UNLESS OTHERWISE SPECIFIED, ALL UNITS ARE INCHES.

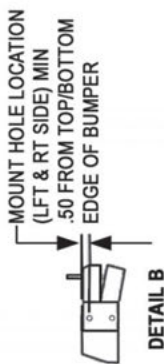


DIAGRAM 11A - TYPICAL ROLL CAGE & FRAME CONSTRUCTION (MODIFIED)

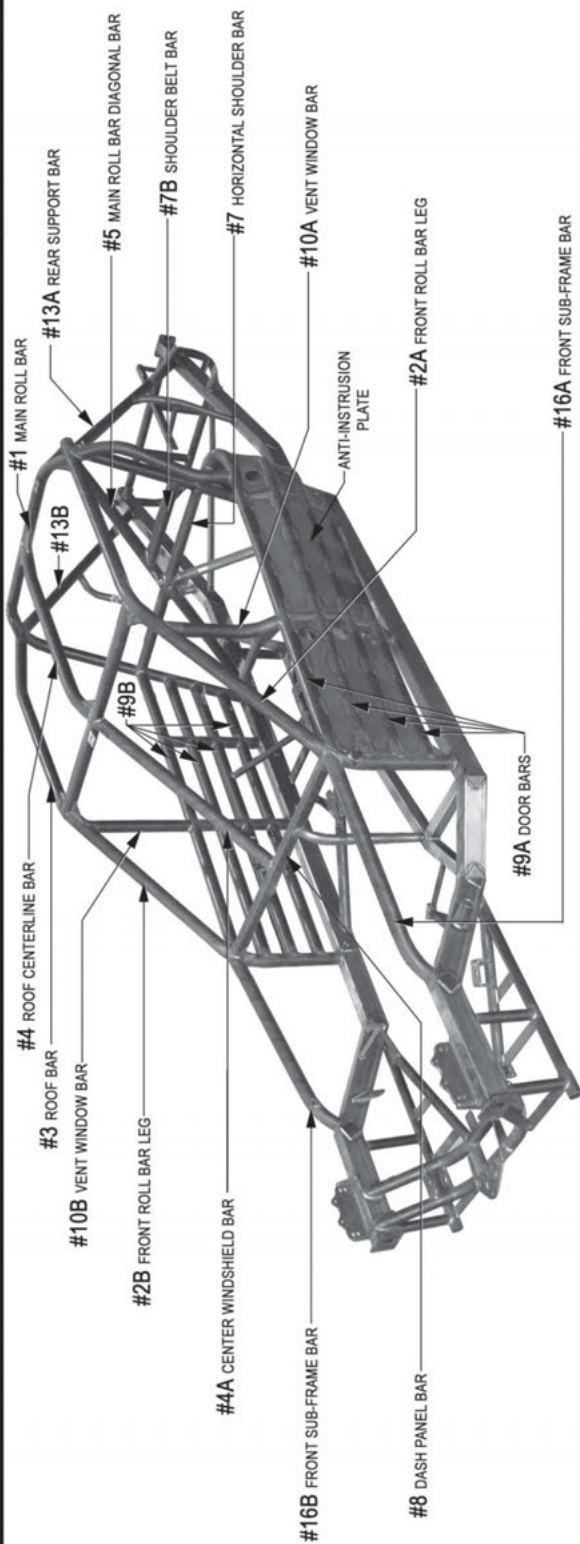


DIAGRAM #111B - TYPICAL ROLL CAGE & FRAME CONSTRUCTION (MODIFIED)

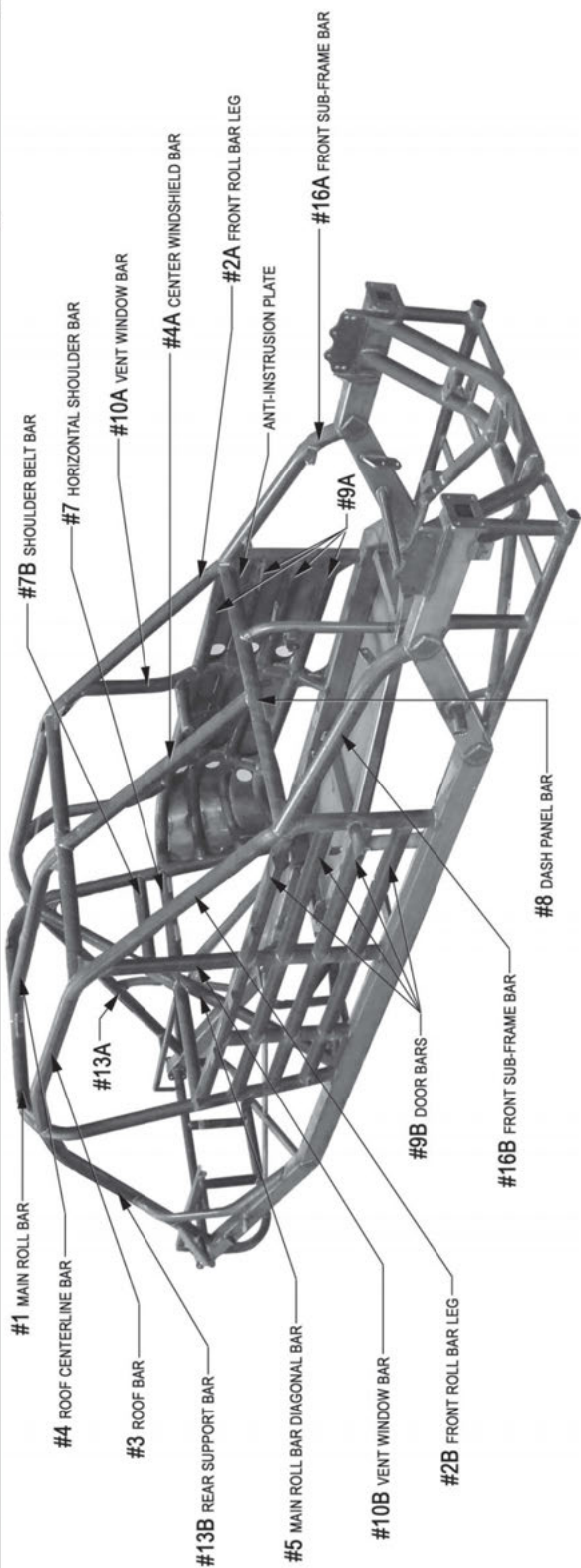


DIAGRAM #11C

TYPICAL ROLL CAGE AND FRAME CONSTRUCTION (MODIFIED)

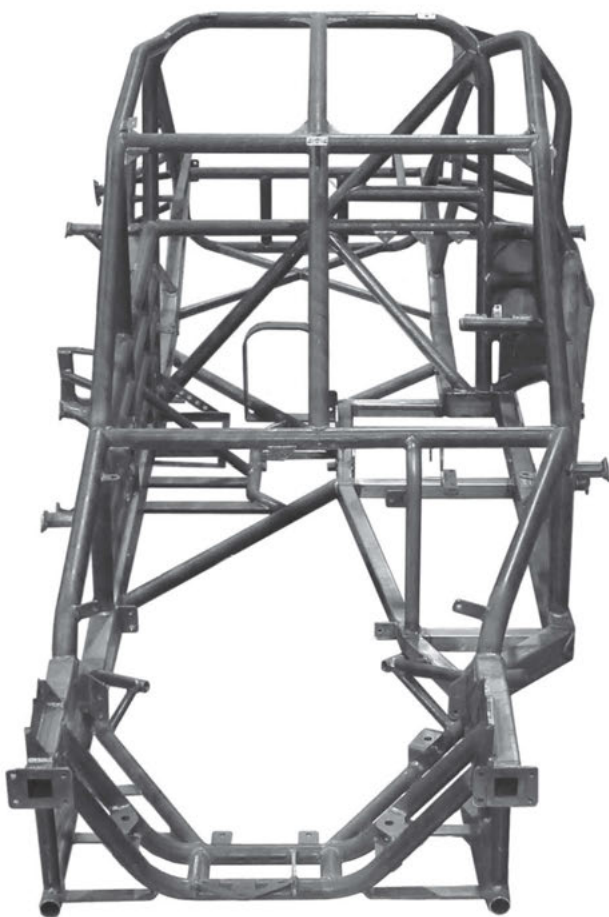
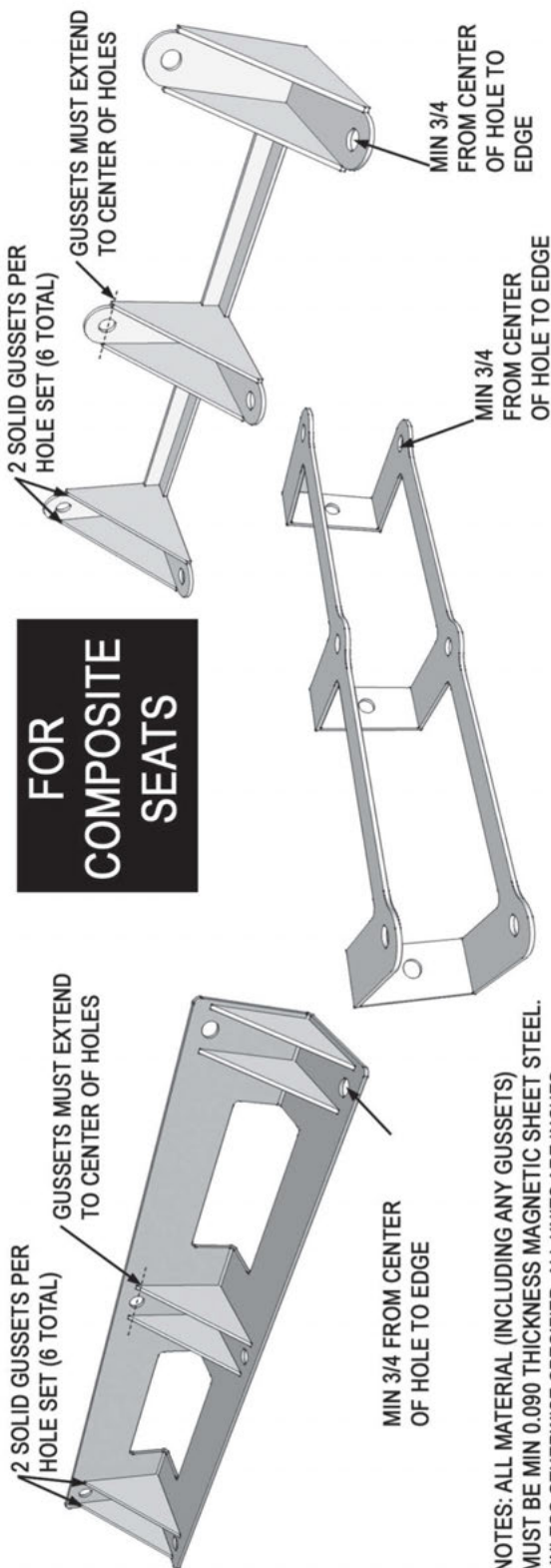


DIAGRAM #12A UPPER SEAT BACK MOUNTING BRACKET - HENDRICK



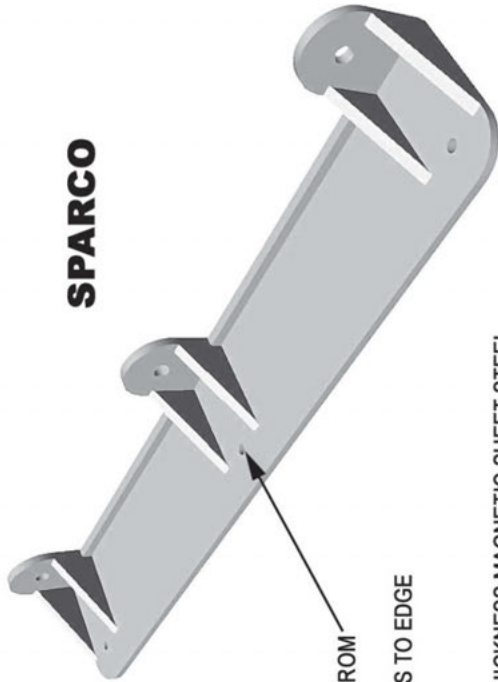
NOTES: ALL MATERIAL (INCLUDING ANY GUSSETS) MUST BE MIN 0.090 THICKNESS MAGNETIC SHEET STEEL. UNLESS OTHERWISE SPECIFIED, ALL UNITS ARE INCHES.

DIAGRAM #12B UPPER SEAT BACK MOUNTING BRACKET

FOR
COMPOSITE
SEATS

SABELT

SPARCO



MIN 3/4 FROM
CENTER
OF HOLES TO EDGE

NOTES: ALL MATERIAL MUST BE MIN 3/16 THICKNESS MAGNETIC SHEET STEEL.
UNLESS OTHERWISE SPECIFIED, ALL UNITS ARE INCHES.

DIAGRAM 13 - SEAT PADDING

TOP VIEW



SIDE VIEW



FRONT VIEW

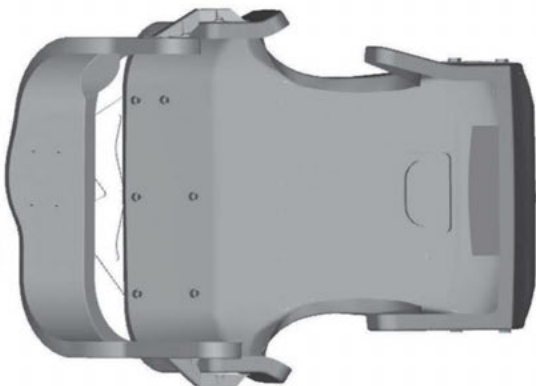


DIAGRAM #14 STATIONARY AIR DEFLECTOR MOUNTING

2015 STATIONARY AIR DEFLECTOR - REAR WINDOW

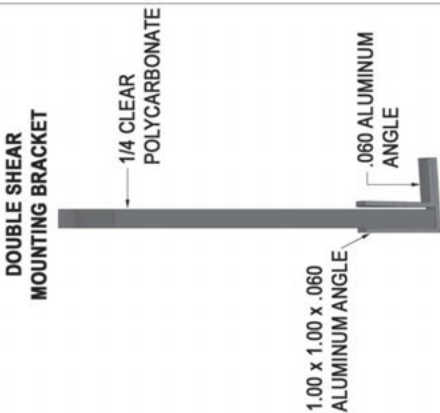
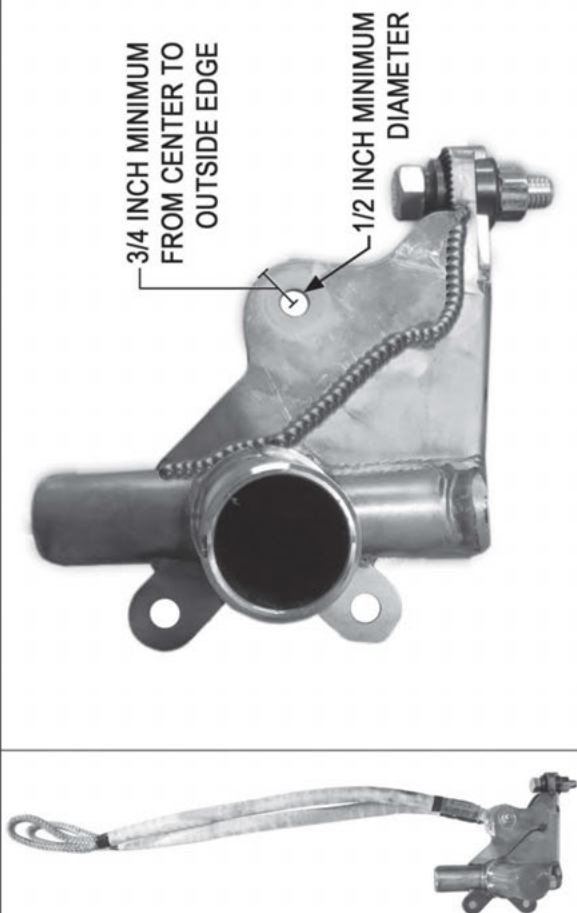
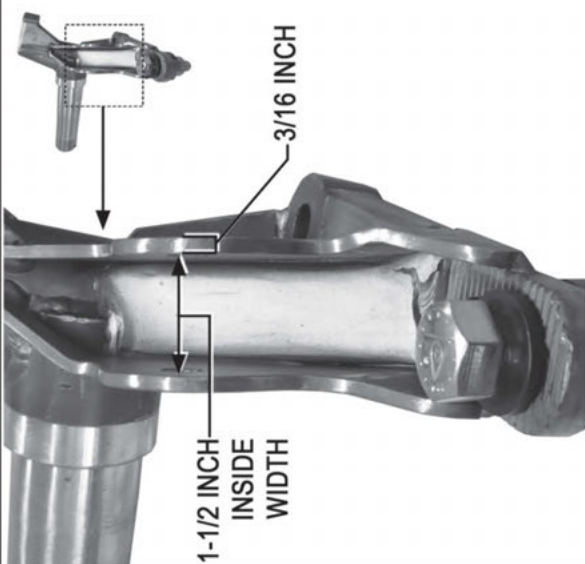
DOUBLE
SHEAR
MOUNT

DIAGRAM #15 MODIFIED SPINDLE TETHER MOUNTING BRACKETS





APPROVED REFUELING CAN

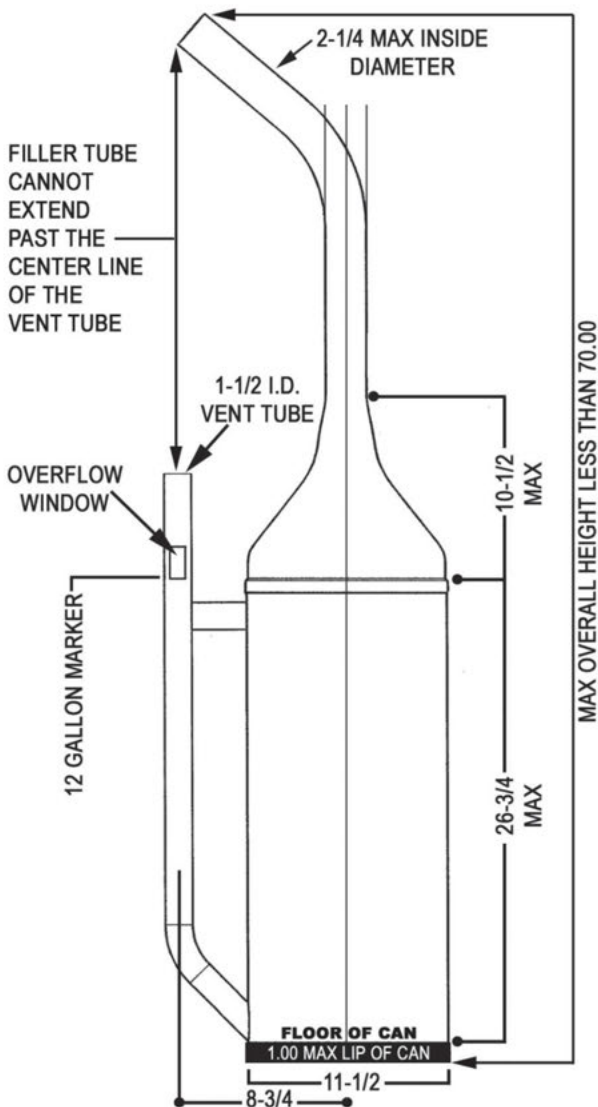
**APPROVED
MAXIMUM CAPACITY
12 GALLONS**



MATERIAL:

MIN 0.050 THICK ALUMINUM

**NOTES: UNLESS OTHERWISE SPECIFIED,
ALL UNITS ARE INCHES.**



CAR REQUIREMENTS INDEX

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