

To: ACT Participants & ACT Participating Tracks

From: ACT

Date: January 11, 2018

Subj: Chassis

The following is to clarify the Chassis rule:

Page 1 Item A Number 1

- 1. Frames, Chassis, and Cages
 - Centerline of engine must remain within ½" (1/2 inch) measurement of centerline of tread width, measured from the inner pivot point of equal length front lower control arms on both sides of snout. A-frame suspensions will be measured from lower ball joints.

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2018 New London-Waterford Speedbowl *ACT Late Model Rules*

(Last Updated: 1-25-18)

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All items marked in RED are new and/or are wording changes to the 2017 NLWS ACT Late Model rulebook.

All references to the New London-Waterford Speedbowl in the following rules may be referred to as (NLWS) as an abbreviation of the speedway name and deemed an official recognition of the New London-Waterford Speedbowl in this 2016 rule book.

<u>Drivers & Car Owners are required to familiarize one's self with the General Track Rules as well as the Limited Sportsman rulebook.</u>

By registering as an owner or driver you agree to be knowledgeable and bound by the contents found in these divisional rules and in the General Rules.

TECHNICAL RULES

NOTE: The following is the 2018 ACT Late Model Sportsman rulebook. Any updates to the 2017 rulebook by ACT have been listed in blue. For the purpose of competition at NLWS track specific rules have been highlighted in red.

1) Frames, Chassis, and Cages

- a) All cars will have minimum a 104.5" and a maximum 105.5" wheelbase, which will be measured from the center of the lower ball joint to the center of rear end. Maximum tread width of 64.5".
- b) Tread width to be measured with NLWS tread width gauge
- c) Tubular frames on all models main frame rail members shall have a minimum of:

10" perimeter tubing - .120 wall thickness - measured 2x3x2x3

12" perimeter tubing - .095 wall thickness - measured 3x3x3x3

16" perimeter tubing - .083 wall thickness – measured 4x4x4x4 NO NOTCHING OR CUT OUTS ALLOWED for suspension travel. Please see Exhibit 5. Pg 24.

- d) Sections extending, such as front and rear clips, must be a minimum of 10 inches in perimeter and have a minimum of .083" wall thickness and extend 10 inches minimum beyond wheelbase.
- e) Rear clip must be centered to center section of frame rails. NO offset allowed. Fuel cell must be centered between rear frame rails.
- f) Rear clip must extend beyond fuel cell area.
- g) V-8 engines only and must be placed with center of number one spark plug or center of hex if angle fitted even with center of grease fittings on upper balljoints.
- h) Ford engine will be measured from front of right head to center of right front ball joint. (This will result in one and seven-eighths (17/8) inch setback compared to Chevrolet.)
- i) Centerline of engine must remain within one-half $(\frac{1}{2})$ inch measurement of centerline of tread width, measured from each side of snout.
- j) ACT perimeter chassis, by definition, must maintain equal lower control arm measurements.
- k) Material to be used must be DOM or seamless, .090 minimum wall steel tubing.
- l) Maintain integrity of tubing and wall thickness throughout the construction of Frames, Chassis, and Cage.
- m) Cars must be in full compliance with diagrams found at the rear of rules to be considered ACT Legal Late Model.
- n) All cars required to have a 4-point or main structure of the roll cage and must be symmetrical in all directions, (See roll cage section 5 below).
- o) Minimum one (1) to one and one-half (1 $\frac{1}{2}$) inches diameter tubing inside driver's compartment.
- p) Four curved horizontal door bars on driver's side with minimum of eight (8) inches to edge of seat from inside of door bars required.
- q) Minimum height of door bars 22-1/2 inches from bottom of frame.
- r) Passenger side three curved door bars with minimum 66 inches between driver's side door bars and passenger side door bars, outside to outside, or an "X" bar with approved side body panel supports.
- s) A so-called "Petty Bar" must run from center of cage to upper right front halo.
 - > Main frame rails and clips may not be pierced or drilled or otherwise altered for purpose of reducing weight.
 - > All lead must be painted white, with car # painted in contrasting color.
 - > Bolts must pass through lead, and must be secured with proper sized bolt and nut. No pinch bolts allowed.
- s) Specifications for Perimeter Chassis and Roll Cage
 - i) No offset chassis allowed unless specified in rules.
 - ii) Center Section Frame Rails: Measured from inside to inside at MINIMUM 52 inches with $\frac{1}{4}$ inch tolerance.

Grandfather Rule: Pre-January 31, 2012 for REGISTERED CARS WITH ACT:

Center section frame rails that measure width less than 51.75" and more than 51" will be required to bolt two(2) five (5) lb. pieces of lead, one piece within two inches from the front and one piece

within two inches from the rear of the 47 inch right frame rail. Lead will be painted white and mounted on outside of rail for easy removal for inspection purpose.

Center section frame rails that measure width less than 51.0" and more than 50.0" will be required to bolt two(2) eight (8) lb. pieces of lead, once piece within two inches from the front and one piece within two inches from the rear of the 47 inch right frame rail. Lead will be painted white and mounted on outside of rail for easy removal for inspection purpose.

Center section frame rails that measure width less than 50.0" from inside to inside should contact the ACT office.

iii) Right Frame Rail: Must be minimum 47 inches in length.

Grandfather Rule: Pre-January 31, 2012 for REGISTERED CARS WITH ACT:

Right frame rails that measure less than 47" will be required to bolt on a piece of lead equal to 1 lb. per inch violation to a maximum of three inches. Lead must be painted white and mounted on outside rear of rail for easy removal for inspection purpose.

iv) Offset

- (1) Maximum offset allowed 1" from center line measured ½ inch from center line equally side to side with total maximum 1 inch offset. Center line determined by using the center section measurement (2) above.
- (2) An ABSOLUTE offset tolerance of ¼ inch will be allowed.

Grandfather Rule: Pre-January 31, 2012 for REGISTERED CARS WITH ACT: A violation of the 1" offset allowance for cars built before January 31, 2012 will be at a ¼ inch tolerance. For every additional ¼ " of offset or fraction thereof, a weight penalty of 24 lbs. per inch, or comparable ¼ fraction of inch will be required (i.e. 6 lbs. per ¼").

v) Roll Cage/Halo

- (1) Roll cage structure will be made of one and three quarters (1 ¾) 0.D. inch tubing with .090 minimum wall steel tubing.
- (2) Additional components within center roll cage section must be minimum one and one half $(1 \frac{1}{2})$ inch diameter tubing and minimum .065 wall steel tubing.
- (3) Integrity of roll cage must be maintained.
- (4) Height of roll cage total symmetry to be no less than 40".
- (5) Total height of Halo to be no less than one inch lower than cage.
- (6) Width of Halo measurement minimum 44 inches measured from outside to outside of tubing.
- (7) Rear roll cage posts must be attached to frame rails in a direct diagonal straight line from fire wall (see rulebook diagram for further clarification).

Grandfather Rule: Pre-January 31, 2012 for REGISTERED CARS WITH ACT:

- 1. A roll cage height tolerance of one-half (½) inch will be given with no penalty
- 2. Width of Halo will receive two (2) inches tolerance

- 3. Halos that measure less than 44 inches wide but more than 43 inches wide will be required to weld or securely fasten a one-pound piece of weight to the middle of the right halo bar
- 4. Halos that measure less than 43 inches wide but more than 42 inches wide will be required to weld or securely fasten a two-pound piece of weight to the middle of the right halo bar
- 5. Halos that measure less than 42 inches wide but more than 41 inches wide will be required to weld or securely fasten a three-pound piece of weight to the middle of the right halo bar
- 6. Halos that measure less than 41 inches wide but more than 40 inches wide will be required to weld or securely fasten a four-pound piece of weight to the middle of the right halo bar
- s) 18 gauge steel minimum 18 inches high foot firewall. Top of foot box must be 18 gauge steel. Nine (9) inch high driver's tunnel and 18 inch high behind seat. A "Red Mead" bar or one-eighth (1/8) inch minimum steel plate is mandatory under driver's seat (see diagram below). A foot safety bar is mandatory. A support for headrest or seat back extending to support back of head is mandatory.

2) Interior Detail

- a) A full width dash is required in all cars. Vertical surface of dash must project in a single plane across the car. Top horizontal plane of the dash should carry forward to the firewall and enclose entire area beneath windshield. Instruments must be neatly mounted to vertical plane of dash panel.
- b) Interior of car must be completely enclosed with respect to engine compartment, track surface, tires and rear fuel cell compartment. Interior panels must be minimum of .040 inch thickness of aluminum or steel.
- c) Only one rear view mirror inside car approved. A left side exterior mirror is approved, but cannot extend outside of the windshield "A" pillar.
- d) Lexan rub rails will be permitted.
- e) A maximum 6" deck/shelf allowed on right side of interior door to top.

3) Eligible Bodies - Please refer to Exhibit 6 pg 25

- a) Bodies
 - i) Bodies must be aftermarket made of plastic or aluminum with rubber front and rearbumpers, fiberglass hoods and window frames.
 - ii) ACT approved bodies only. No carbon fiber body panels.
 - iii) Bodies must meet tech visual approval weight penalties may be imposed at tech director's discretion for violations. No mixing and matching of manufacturer body panels.
 - iv) NO high performance bodies are approved for competition.
- b) ABC bodies are required. Fiberglass quarter panels will be allowed. "Rubber" quarter panels may be used upon availability. All ABC bodies must meet manufacturer's "Referee" technical inspection, and be mounted as "out of box." ½" tolerance of any measurement with templates will be allowed, if consistent with majority field of cars.

c) Models as follows:

Dodge Charger
Pontiac Grand Prix
Ford Fusion *
Ford Taurus *
Chevrolet Impala SS
Chevrolet Monte Carlo
Toyota Camry

*Ford Bodies – 2013 was the final year that the ABC Ford body was allowed to compete without a Ford engine. All Ford engine cars must run an approved Ford Body. Local (weekly) competitors should conform to local rules regarding body rules; however, non-Ford Engine cars with Ford Bodies must be approved by ACT to participate in ACT-sanctioned events.

Any variations need tech approval and may carry penalties.

d) Fenders

i) Five Star/AR Bodies Narrow fenders allowed will be:

660-23PLW – Narrow Plastic White Left 660-23PRW – Narrow Plastic White Right 660-23PLB – Narrow Plastic Black Left 660-23PRB – Narrow Plastic Black Right 663-230 - Narrow Plastic Left 663-230 - Narrow Plastic Right

- ii) Only approved fenders are mandatory for ACT Late Model racing, including the Five Star 8" #663-230 L/R when available. Plastic roof panels are optional.
- iii) There will be no "wide fenders" allowed, regardless of the manufacturer.
- e) All body panels must be complete in length and width. Overall workmanship shall be a determining factor as to whether a car shall be approved for competition. Specified components' compliance to templates and overall level of workmanship and appearance will be considered by technical inspectors. Please refer to Exhibit 6. Pg 25.
- f) ABC body measurements must be strictly adhered to templates will be used to measure from front windshield to rear spoiler, and from right quarter panel to left quarter panel, with ½" tolerance, when determined by TSMP or ACT Officials.

4) Spoilers

a) All rear spoilers must be made of lexan and must remain clear; maximum width of 60 inches wide and 5 inches high. All heights reference to ABC body dimensions. No side enclosure, no lips or bends in upper portion of spoiler and must be flush to vertical surfaces of deck lid, and must be mounted center of rear bumper cover.

b) ABC spoiler heights will be according to instruction manual and will be subject to approved inspections. Measurement will be from top flat surface at the end of trunk lid to ground at 34-7/8".

5) Hoods and Trunks

Both hoods and trunks must be hinged. Hoods must have four positive locking pins on leading edge. Trunks must have two positive locking pins.

6) Exhaust/Headers

- a) Exhaust
 - i) Absolutely no additional holes, vents, etc., may be added to body components outside stock configuration.
 - ii) Exhaust holes may be cut.
 - iii) Exhaust may exit outside of car. If exhaust exits under car, must point toward racetrack and maintain 4" ground clearance.
 - iv) Exhaust must exit in duals.
 - iv) Two (2) unaltered mufflers required.
 - v) Mufflers must be Howe #3002 and steel pipe used to extend beyond driver seat, and may not be cut or modified and MUST BE installed in correct flow direction and used in it's entirety.
 - vi) Exhaust pipe exit maximum size three and one half (3 ½) inches.
 - vii) No scavenger systems.
 - viii) MAGNAFLOW Muffler Part #11219 may be used.
 - ix) Either weekly or touring competitors must be in compliance with track and/or local ordinance rules.
- b) Headers are allowed. No 180-degree headers allowed. All four (4) tubes from right and left banks of engine must enter single collector on each respective side of exhaust. No balance tubes or any crossover type exhaust systems allowed. Must be made of mild steel, no stainless. Must exit in duals.

7) Windows

- a) A full stock dimension windshield is mandatory and must be constructed of one-eighth (1/8) inch minimum thickness lexan. Three internal windshield braces spaced at least on five (5) inch centers and roughly centered upon windshield constructed of minimum one (1) inch wide by oneeighth (1/8) inch thick material are mandatory.
- b) Models with rear quarter windows may have stock openings covered with securely-mounted, solid, clear lexan. Rear side window may have approved air vents for driver. "A" pillar windows not to exceed twelve (12) inches in any direction measured from front of door opening. No interior air deflectors allowed.
- c) A full dimension rear glass constructed of minimum one-eighth (1/8) inch thick clear lexan is mandatory and must be held securely in place by minimum of two (2) external straps. Back window must be securely braced internally to prevent significant bowing or distortion atracing speed.

8) Chassis/Body Heights

Minimum ground clearance of any component is four (4) inches and maximum is six and a half (6.5) inches, including bumper, bumper covers, and side skirts. If a valence is used, it must have all bolt holes filled with secure fittings and may not be movable.

9) Weights

- a) Cars must weigh 2770 lbs. following all qualifying and feature events. Cars found under the minimum total weight rule after qualifying will be placed to last in that event. Cars found under the minimum total weight rule after the feature event will be penalized one (1) position per pound under.
 - i) All cars will be weighed with drivers. No substitutes.
 - ii) Cars must have a maximum 57.0% of total weight on left side.
 - iii) All heights will be measured with driver in car, including after heats and features unless otherwise notified.
- b) Ballast weight must be securely attached to main frame rail or major cross member structure. Ballast is not allowed to be placed in front of or behind front or rear tires. No tungsten, lead shot, ball bearing type, or liquid type ballast permitted. No moving weight allowed. Additional brackets or weight holders beyond main frame rails must be approved by technical committee and may require modification or elimination upon inspection. Any questions can be addressed at practice sessions prior to season opening events.

10) Engines

RPM Racing Engines, LLC is the motor builder of record for ACT racing. The following are RPM Racing Engines, LLC approved satellite engine builders:

Butler & MacMaster, (207) 623-8895 Nat's, (508) 336-4142 Larry's Auto Machine, (860) 449-9112 RPM, (802) 524-7406 Redline Performance Engines, (207) 418-1695 RL Racing Engines, (450) 464-0709 Pro-moteur, (450) 759-5362

All motor builders must use RPM Racing Engines, LLC approved motors, procedures, and seals.

- a) Only ACT approved crate engines will receive points in ACT-sanctioned events.
- b) Certain individual track rules (including motors) may be subject to inspection, procedures, weight penalties, restrictor plates, and any other modifications ACT deems necessary in the interest of competition.
- c) #GMC 88958603 or 19318604 ACT sealed motor only.
- d) All motors must be registered each year with NLWS by completing the "Crate Engine Registration form" at the end of these rules.

- e) Engine seals will only be good for a period of two (2) years. After that period, the engine must be inspected and resealed.
- f) Roller rocker arms are approved. Only GM part number 19210724 or GM set number 19210728 PR Scorpion part number 1035BL are approved. These are 1.5 ratio rocker arms.
- g) Contact NLWS with any minor problems (example: pan leak, etc.) for coordinated remedy.
- h) Crate and Spec engine LM must weigh minimum 2800 lbs. ix) Crate engine with conventional clutch option will weigh minimum 2800 lbs. Must run 16# flywheel GM Part#14088646.
- i) Do not take motor to builder other than original builder under any conditions without ACT or NLWS approval.
- j) Ford Motor:
 - i) ACT approved M-6007-S347JR Ford motor only. Must meet all specs as determined by RPM.
 - ii) Ford motor must compensate for set back by having 20 lbs. of lead bolted directly behind upper control arm section of frame rail 10lb. each right side and left side (see diagram). Must be bolted on top, clearly visible. Lead must be painted white with car number and readily available to be moved for weighing purposes. Lead may not be moved from assigned position without consent of ACT or NLWS Official. [See diagram at rear ofrules].
 - iii) Ford Late Model teams are not required to run the mandated ACT restrictor plate. We reserve the right to institute the ACT mandatory restrictor plate to all Ford competitors at any time, if competitive balance dictates that TSMP needs to do so for the quality of our racing product.
 - iv) Only Ford spec motors which are ACT approved will be allowed to compete in ACT-sanctioned events.
 - v) Rear starters are allowed on Ford engines only.

11) Ignition

- a) 6300 RPM MAXIMUM chip required for all engines. The chip rule may be amended in the interest of competition at any time.
- b) MSD distributor is allowed. Must contain light blue springs and blue advance stop. Spring and stop part number 8464, distributor numbers MSD 85551, 8570, 85561 or GM part number 10093387 are only approved parts. No tampering or changing of advancement weights or springs allowed in HEI spec motor distributor. 2018 will be the last season HEI will be allowed.
 - i) MSD #6AL6420 and #64306ALN with max 6300 RPM rev limited chip, recommended with OEM HEI distributor. MSD digital 6AL is allowed in ACT competition with a max rev limit setting of 6300 RPM.
 - ii) MSD must use external coil, not dial.
 - iii) Ends must be original factory MSD or weather pack connectors installed by MSD.
 - iv) It is the responsibility of the competitor to configure harnesses to allow the ACT MSD to connect.
 - v) MSD must be located on the right side of dash panel, as far from driver as possible, and out of reach.
 - vi) All wires must be wrapped in a loom material, and must pass through firewall at first option. Rivets to hold bottom panel must be drilled out.

- vii) Only one MSD box allowed. Any altering of MSD box will result in disqualification and possible suspension.
- viii) The ignition system components, including wiring and connectors must be visible from above and not accessible by the driver at any time while in competition.

12) Miscellaneous Engine

- a) Fan blade recommended.
- b) Very important to close in radiator with no air leaks.

13) Spacers

a) Following carburetor spacers are allowed:

Canton #85060

Moroso #64964 (aluminum)

HVH #SS4412-2AL is approved for Chevrolet engine only.

Any teams using the 604 must use RPM #1445 restrictor-spacer.

14) Heights

- a) Four (4) inch frame height measured at the lowest point including cross members.
- b) 47-inch roof height measured 10 inches back from windshield to ground or ABC body must meet Referee standard.
- c) 11-inch engine height measured from center of crank front to ground.
- d) Skid plate is mandatory if oil pan is below cross member.
- e) Fuel cells must be a minimum height of 8 inches from ground and must be mounted center of rear frame rails. "NO OFFSET".
- f) All heights measured with driver (no substitutes) in car and all measurements are official with NLWS gauges only.

15) Air Cleaner

Air filter housing and fresh air box only.

16) Carburetor

- a) Holley two-barrel model #4412 carburetor must be used. The body, base plate, metering block, and bowl must be a standard Holley 4412 part, HP parts are not permitted. Carburetors and/or carburetor components machined from billet materials are not permitted. OEM type gaskets, jets and power valve must be used.
- b) The diameter of every hole in the carburetor must pass the standard NLWS pin and tooling gauges as part of our routine inspection process.
- c) The only changes that will be allowed are as follows:
 - i) The choke plate and shaft may be removed, but must be permanently sealed.
 - ii) Throttle plate screws may be trimmed flush with the shaft.
- d) Body of carburetor and metering block: No polishing, grinding or reshaping of any part. Drilling of additional holes or plugging holes is not permitted.
- e) Choke horn may not be removed.

- f) Boosters may not be changed. Size or shape must not be altered. Height must remain standard.
- g) Venturi area must not be altered in any manner. Casting ring must not be removed.
- h) Alterations to allow additional air to be picked up below the opening of the venturi such as altered gaskets, base plates, and drilling holes into the carburetor will not be permitted.
- i) Base plate must not be altered in shape or size.
- j) The stock Holley 4412 or Stainless Steel Holly part #346 butterflies must be used. They may not be thinned or tapered. The Butterflies must remain as manufactured, and must maintain the Holley production tolerance thickness of .0438" to .0398". Idle holes may be drilled in butterflies. Screw ends may be cut even with the shaft but screw heads must remain standard.
- k) Throttle shaft must remain standard and must not be thinned or cut in any manner.

17) Fuel and Fuel Systems

- a) Fuel cells mandatory and must be approved by technical inspector. Minimum 15-gallon capacity and maximum 22-gallon fuel cell only. It is mandatory that the fuel cell be enclosed in a 20 gauge welded steel box, with a bolt-on cover constructed of twenty gauge steel and must be protected in back and on sides by .095 1-3/4" O.D. tubing. Fuel cell will be no less than 14 inches from centerline of rear axles to front of fuel cell.
- b) Any fuel line passing through interior must be inside of steel tubing.
- c) Check valve vent is required on all fuel cells.
- d) No "quick fill" fuel mounting allowed. Outside fuel fill optional with cam type fuel cap.
- e) Fuel pump must be mechanical no electric fuel pumps. No fuel pressure regulators allowed.
- f) Oberg SV0828 fuel line safety check valve anti-siphon or a manual shutoff accessible from outside car is mandatory. Manual fuel valve must be within 24" of passenger window and is required to be clearly marked "On/Off" with a fluorescent handle.
- g) The fuels listed below are the only fuels permitted for use in the Late Model Division. Anyblending of fuels or use of any additives is not permitted.
 - i) Sunoco Race Fuel: 260GTX.
 - ii) Any published 2018 ACT approved fuel.
 - iii) No blending of any fuels allowed.
- h) NLWS Officials will take fuel samples as part of their normal inspection process.
- i) Icing or cooling of the fuel system is not permitted in the garage, pit or paddock areas.
- j) Nothing may be placed in the fuel line except a standard fuel filter. The use of any type of fuel catalyst or other fuel-altering device is prohibited.

18) Steering

- a) Any type of front steering allowed. Steering box or rack and pinion are allowed.
- b) Power steering pumps must be driven from the front of motor by belts. Steering columns must have minimum of two (2) U-joints.

19) Suspension

- a) No titanium parts of any kind allowed.
- b) Any spindle made of steel. Removable steering arms must be made of steel. Spindles must be same offset left to right.

- c) Any stock or aftermarket upper and lower control arms allowed. Lower control arms must be same length left and right. Heim joints are allowed. Measurement will be from center of mounting point to center of ball joint housing. Jacking bolts allowed on non-coil over cars only. Only one shock per wheel. Only one spring per wheel. No double springs allowed. No devices to limit or stop suspension travel allowed.
- d) All springs must be made of steel—magnet must stick to spring. Coil-overs permitted. If running coil-over all parts must be same left to right and front to rear. Spring rubbers will be allowed, must be wired in place. Maximum of three (3) spring rubbers in any spring, and must be approved in size and shape by ACT or NLWS. Aluminum, steel or additives are not allowed in spring rubbers. Maximum length of spring rubber allowed is 3.5" on 3" rubber or 4.5" on 5" rubber.
- e) Springs that cost excessive amounts of money will not be allowed in ACT racing, or at NLWS. Violations will be dealt with on an individual basis.
 - i) Maximum cost of spring may not exceed \$200.00 each, as determined by NLWS. Any team found in violation of the maximum \$200.00 cost rule as determined by NLWS will be disqualified from the event and subject to additional penalties.
 - ii) Draco and Renton Spring costing more than \$200.00, or any subsequent spring that ACT or NLWS finds cost prohibitive, according to their price interpretation, will not be allowed at ACT Late Model racing or at NLWS.
 - iii) Any violation of this springs rule will be subject to NLWS penalties.
- f) No suspension traveling limiting devices allowed unless specifically outlined in the ACT rulebook (Examples include, but are not limited to: bump stops, coil binding, chains, or shock mounting locations).
 - i) Cars will be inspected using one and one half (1½) inch ramps and nose of body must hit ground when pushed down and held down by three crewmembers or will be considered illegal. Bumper must be mounted solid. No hingers or slides. Must comply with nose height rule at all times.
 - ii) The intent of this rule does just one thing: it eliminates "bumping" the cars that compete in ACT-sanctioned events.
 - iii) Visual inspection by officials to meet the "No bumping allowed" rule will be up to the Director of Competition and will be considered final.
- g) No jacking bolts or any other travel adjustors allowed (exception: see above).
- h) Shock Adjusters of any kind will not be allowed. No preloaders of any type allowed.
- i) No Coil-Over Eliminators of any kind allowed on ACT Late Model approved cars.

20) Shocks

- a) The only approved brand is KONI and their shocks must be run at all events.
 - i) Only the following model numbers are approved for competition:

KON30-7436

KON30-7499

KON30-7325

KON30-9325

KON30-9436

KON30-7647

- (1) No KONI approved nine (9) inch shocks will be allowed on the front of cars. Approved KONI shocks are mandatory: seven (7) inch on the front and nine (9) on the rear only.
- (2) A seven (7) inch shock at approved race ride height will maintain a maximum compression of within three (3) inches (there will be a reasonable variance not to exceed 0.5 inches at the sole discretion of the technical inspector).
- (3) A nine (9) inch shock at approved race ride height will maintain a maximum of four (4) inches (there will be a reasonable variance not to exceed 0.5 inches which will be at the sole discretion of a NLWS Technical Inspector). Rear shocks must maintain a minimum of $3\frac{1}{2}$ " travel.
- ii) Shock bump stops enclosed with KONI package will not be allowed on ACT approved KONI shocks.
- iii) No changing or altering shocks in any way. iv) Shocks must not be painted, and model numbers must be fully legible. Shock numbers must be visible at all times.
- iv) Shocks may be swapped at any time with ACT or NLWS inventory by ACT or NLWS Technical Inspectors.

21) Sway Bar

- a) Aftermarket one solid bar side to side only. MUST be mounted on bottom side of front clip & work off the lower A-frames. No rear sway bars allowed.
- b) Sway bars must be mounted parallel with front cross member and will be measured from rear of engine with 1" tolerance.
- c) Maximum sway bar diameter 1.75.

22) Brakes and Hubs

- a) Any safety or racing type hubs allowed made of steel, aluminum, or magnesium and of same offset right and left. Five (5) by five (5) or wide five (5) bolt patterns allowed. Front brake rotors must be a minimum of one (1) inch thick and made of steel. Rear brake rotors must be minimum three quarters (34) of an inch and made of steel.
- b) Brakes (all four) must be single piston calipers made of steel and all four must be in goodworking order. Master cylinders and pedals of any type allowed. Brakes will be tested. Brake returns allowed. No brake coolers allowed. Brake ducting allowed with no blowers.
- c) Vents may be installed for front brakes only.

23) Rear Ends

- a) Rear ends must have floating type bearing and hub such as quick change or "non-quick" change, front load quick change, or steel housing-type nine (9) inch floater with steel center section gear carriers only allowed.
- b) No cambered rear ends or rear ends with yaw (dog tracking), or offset or shimmed snouts allowed.
- c) No crowned axles.
- d) All rear ends must be driven with solid drive flange plates.

- e) No titanium parts allowed.
- f) All running gear drainage plugs must be safety wired.
- g) No rear axle tube tow in or out allowed.
- h) Rear ends must have spool only. At select events, a rear end gear rule may be in effect and posted on an event information form.
- i) No gold tracks or any type of ratchet or limited slip.
- j) Drive shafts must be made of steel, and must be painted white.
- k) Truck arm or three-point type rear mounting allowed.
- l) Rear trailing arms may use rubber bushings and heimjoints.
- m) No spring rods.
- n) Rubber snubber allowed on rear trailing links.
- o) One upper link pivot with rubber bushings allowed.
- p) Solid tubular pan hard bar only. One bar, two adjustable heim joints only.
- q) No aluminum truck arms, no fifth coils, no Watts linkage, no torque arms, no mechanical devices to transfer weight while car is in motion allowed.

24) Cooling Systems

- a) Any radiator allowed with catch tank overflow must blow on right lower quarter of windshield.
- b) ACT-approved spec motors may run electric fans.
- c) tock cast water pump or aluminum pumps allowed. Oil coolers allowed.

25) Transmissions/Clutches

- a) Transmission
 - i) Transmissions must be stock GM standard 3-speed.
 - (1) The early Muncie and later Saginaw three-speed stock transmission are the only GM transmissions approved for competition, with the following exceptions:
 - (a) Saginaw three-speed may modify gear ratio with an approved dealer-made cluster gear with 1.35 ratio. Only approved ACT transmission dealers will be used (see below).
 - (b) REM polishing allowed.
 - (c) No rollarized gear on main shaft allowed.
 - (d) No other altering of transmissions will be allowed without written approval by ACT.
 - ii) Sealing of Transmissions
 - (1) ACT & NLWS do not mandate that everyone has to have transmissions sealed.
 - (2) Teams do not have to have transmissions sealed, but may do so if they choose, and those that are sealed, in all likelihood, will not be required to be pulled for inspection.
 - (3) Transmissions will be randomly selected for checking and sealing by ACT and/or NLWS.
 - (4) It would be in the best interest of a competitor who is freshening their transmission to have it sealed as a part of that process.
 - (5) If a transmission is inspected and found to be legal, NLWS will cover the cost to reseal the transmission. If a transmission is found to be illegal, the team will be

responsible for the costs to reseal the transmission. Additionally, penalties will be imposed for illegal components.

(6) Transmissions can be sealed by the authorized dealers listed below.

Magnus – Mike Sangermano 666 Upper Maple Street, Unit A Danielson, Ct 06239 (860) 319-7737 Trans Tech – Brad Roach 28 Lisa Drive Rindge, NH 03461 (603) 899-5410

- iii) Steel type bell housing mandatory for conventional clutch use.
- iv) No carbon fiber materials will be allowed in clutch assembly.
- v) Mandatory bell housing must remain 360 degrees and shall not be altered, except for inspection hole not to exceed 2" in diameter to be drilled in bottom of bell housing. Aluminum bell housing will be allowed with disc clutch and ACT crate motor.
 - a. Please note the following:
 - 1. Certain approved local track transmission rules may apply for ACT competition.
 - 2. There are certain ACT affiliate tracks where stock 4-speed transmission will be allowed to compete). The operative word here is "stock" for both 3-speed and 4-speed transmissions. Transmissions may be impounded, inspected, and sealed by an approved ACT transmission builder.
 - b. Shifter may be any type single or two rod.
- b) Disc clutch assembly that will be the ACT Late Model approved clutch:

Quarter Master 298103 – 7.25 2 disc-V-drive set up GM flex plate: 14088765 ONLY

26) Starters

Reverse mount starts allowed only on Ford engines. Starters must remain in stock location.

27) Tires and Wheels

- a) ACT approved eight (8) inch American Racer tire only. The number of tires allowed by for each event will be announced on a pre-event information form, which will be posted online and dispersed electronically to teams. NLWS competitors are required to register tires for each event. Tire registration form must be submitted to NLWS designated tire coordinator a minimum of 30 minutes prior to post time.
- b) Specified tire mandatory on all four wheels. Tires are available at track. Tires must be on an eight (8) inch rim. Front wheels must maintain same offset left and right 64.5" tread width. Rear wheels must maintain same offset left and right 64.5" tread width. Must be aftermarket racing type wheels made of steel. Wheel spacers may be used, and must be one-piece wheel spacer on wide five hubs. Maximum one one-half (½) inch thick spacer per wheel. Lightening of wheels of any kind not allowed must be stock out of box.
- c) Chemical treating of tires will not be allowed. No shaving of any tires allowed in the Late Model Division. A participant competing in any race at NLWS specifically agrees that he/she acknowledges it is illegal to soak or treat racing tires and that said soaking or treatment of

racing tires is against EPA regulations and further contains carcinogens and hazardous material which are unfit for his/her health and the health of all competitors and spectators. Any participant found violating the rule is subject to suspension.

- d) A durometer rule will be in effect regarding minimum tire hardness at the discretion of ACT or TSMP Inspectors.
- e) Tire clean up with scraper blades allowed. No steel brushing or any form of liquid allowed to clean tires.
- f) Questionable tires, or tires not meeting above criteria as determined by officials, may be confiscated by officials and could result in disqualification, and/or other penalties.
- g) Bleeders are not recommended by American Racer.

28) Miscellaneous

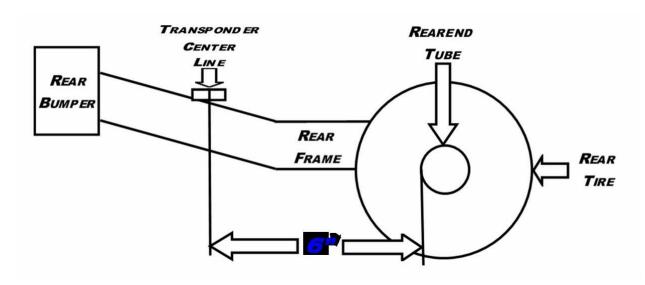
No traction control devices will be allowed.

Exhibit 1: Approved Jack Stands



Exhibit 2: Late Model Transponder Mounting Locations

The transponder must be mounted in compliance with the diagram provided below. It must be mounted on a bracket inside frame rails. The center of the transponder must be six (6) inches back from the rear edge of the rear end tube (see below). The bottom most part of the transponder should not be below the bottom most part of frame. Transponder must be mounted in a direct horizontal plane to the ground with label side down and lights point towards the front or rear of the car. The clearance from the racetrack to the bottom of the transponder should be as close to a maximum of twelve (12) inches as possible.



NOTE: Permanent hardwired or wireless transponders are available for purchase and are mounted in the same orientation and position as the rentals. Also pouches for the rentals can be purchased for permanent mounting (rental transponders must still be returned after each event). To purchase a transponder, please contact either the NLWS office (860) 923-2280 or MyLaps America at (678) 816-4000. Any mounting questions should be directed to John Kelly at (860) 625-7587.

Exhibit 3: Full Perimeter Chassis

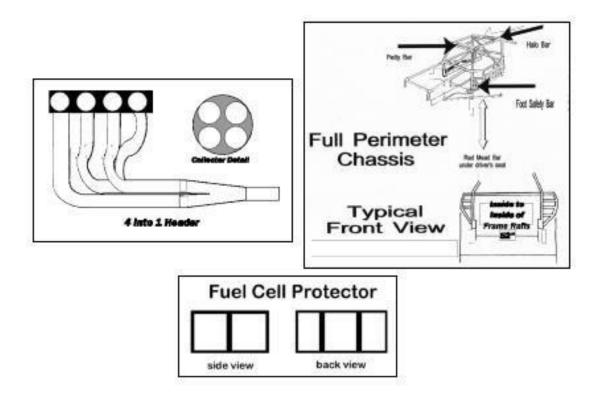
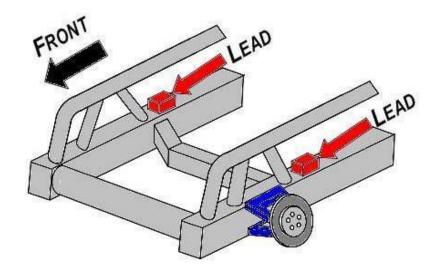


Exhibit 4: Ford Engine Weight



All ACT or NLWS Ford competitors will be required to bolt 20 lbs. of lead directly behind the upper control arm section of the frame rail – 10 lb. each on the right and left sides, respectively – so as to be clearly visible in the diagram above. The lead must be painted white and readily available to be moved for weighing purposes. This lead may not be moved forward from the assigned location.

CHASSIS NOTCHING

Teams <u>MUST</u> comply with 2 x 3 perimeter tubing rule. ACT approved fix for known issues are as follows:

Colored pieces indicate the position of approved known repairs to comply with ACT rules.

Example: SNOUT 1 REPAIR - View from side of snout

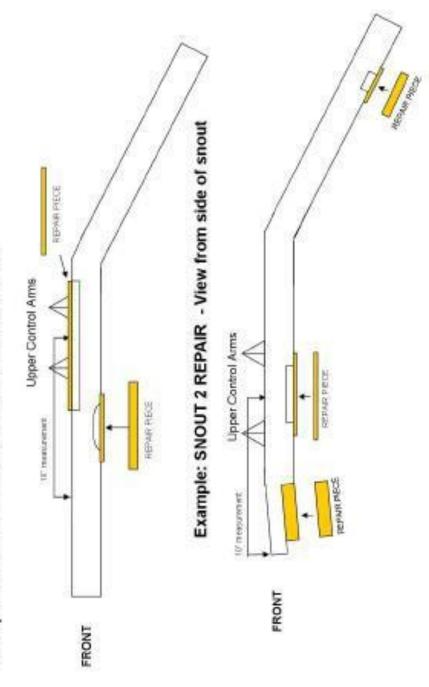
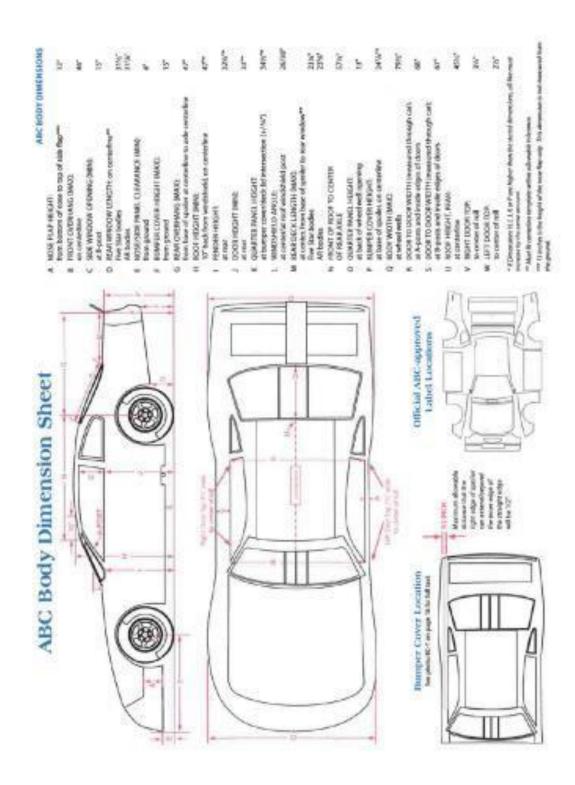


Exhibit 6:



Crate Engine Owner	Team #
Driver	
2018 LATE M	ODEL CRATE ENGINE REGISTRATION
ALL COMPETITORS USING A CRATE ENGINE TO AGREEMENT:	O COMPETE IN ANY TS EVENT MUST COMPLETE THE FOLLOWING
Crate Engine #1 Serial Number: Crate Engine #2 Serial Number: Crate Engine #3 Serial Number:	
Engine builder:	
	rill be allowed to compete and receive prize money and points at NLWS or points issued without registering crate engine with the NLWS Office
AGREEMENT: 1. I agree to the policies regarding the NLWS Lat regulations, this registration, or any other requir	te Model crate engine program, as outlined in the NLWS rules and ements which might be established.
2. I understand that the NLWS Crate Engines are unauthorized freshening or altering in any way is	e not to be tampered with. Any unauthorized breaking of the seals or s a violation of the NLWS rules.
	ine(s) and using it/them to compete in any NLWS- sanctioned event, d all penalties which might be imposed from time to time by the NLWS
	te motor may be confiscated for inspection at any time. If the integrity the NLWS rules and regulations, I further understand that I am subject d my privilege to compete may be forfeited.
purposes will result in penalties. Team will be re	WS Official in Charge to confiscate a crate motor for inspection sponsible to place motor in truck or trailer of NLWS choice for spection and delivery will be borne by NLWS if found legal, and all bund illegal.
I understand and agree to the terms and condition	ons as outlined above.
Crate Engine Owner	Crate Engine Driver
Witness	Witness
Data	Date



