



2019 PRO STOCK RULES

December 1, 2018

2019 rule updates shown in **BOLD-Red and underlined**

NOTICE TO COMPETITORS - There have been additions and updates to this rules package for 2019 and it is solely the competitors responsibility to read the information presented here in order to be informed as well as be in compliance with all aspects of the rules in this document.

1 **BODIES**

For 2019 the GEN 6 Fivestar New Gen body will not be approved for competition.

1.1 **2004-18** ABC Five-Star bodies are to be installed just as specs suggest (unless otherwise noted). That means 47" roof height and 4" body height. Will run 6.5" spoiler on ABC cars.

NOTE: for rules regarding approved bodies and their installation please refer to the current A-B-C rulebook (ver.9.0).

- Bodies will be standard fiberglass quarter panels, deck lid filler, hood, roof, and fenders.
- No Carbon Fiber
- Manufacturer's identification labels must be visible and not painted over.
- Body panels must be mounted as produced. No "pulled in" fenders, doors, quarter panels, etc.
- Body air ducts may only allow air into interior NOT exhaust it out.
- **The spoiler must have a 1/2" split in the center to accommodate the centerline template.**
- **Spoiler length will be measured on the back side and will be a maximum 60".**
- **Roof and rear window air deflectors are allowed. A maximum of 2 mounted parallel to each other with a maximum height of 1". Must have a minimum 1" gap at top of rear window to allow for template access.**

Complete ABC Body Rules at www.fivestarbodies.com

NOTE: For 2012 all bodies may run an approved Five Star "Lexan" rub rail.

NOTE (2) Hood and Trunk Lids: For 2012 the hood and trunk **MUST** be hinged to allow it to be flipped open but remain with the vehicle in the event the car needs to be towed from the track. Recommend Fivestar Universal Hinge Kit. This will align with rule 21.2.

- **Radiator shroud must pull air only from the original opening of the ABC nose. No pulling of air from the base of the shroud to the ground.**
- **Rocker panels must be ABC factory approved ONLY.**

- Brake blowers must be installed parallel to the ground.
- NO Plastic or carbon fiber interior panels allowed.
- NO under body air deflectors or panning allowed.
- NO Plastic or carbon fiber interior panels allowed
- The standard opening for the grill screen area, as approved for manufacturer's production, must be maintained at all times. Only ABC manufacturer's standard mesh screen may be used for the radiator opening in the nose. Fivestar screen is 28" x 7.5". AR Body screen is 30" x 7.25".

No tape or other obstruction on the nose allowed.

- :

2003 and older Bodies – See “Appendix B”.

- 1.2 AR Bodies Muscle Car Body will be allowed. This body must be installed as per AR Body specifications and dimensions. See appendix “C” for body chart. These bodies will be closely monitored for any deviations from manufacture dimensions.

NOTE: There will be no weight break for this body package at this time but these bodies will be monitored and adjustments may be made with prior notification

2 WEIGHTS - TREAD WIDTH

Engine Options (2019)

Option #1: Conventional Engine (steel head): 2800 lb. w/7000 Chip @ 58% Left

Option #2: GM Sealed Crate Engine (w/660-MPST seal): 2750 lb. w/6400 Chip @ 58% Left Side

Option #3: Ford McGunegill MEP 425LM Sealed Crate Engine: 2775 lb. w/6400 Chip @ 58% Left Side

Option #4: Ford D347SR Sealed Crate Engine: 2775 lb. w/6400 Chip @ 58% Left Side

Option #5: Mopar ASA 75360 MPST Sealed Crate Engine: 2775 lb. w/6400 Chip @ 58% Left Side

NOTE: Maximum left side weight percentage for ALL cars will be 58% before, during and after event.

2.1 Minimum weight for Conventional Engine is 2800 pounds (full of fuel).

2.2 There is NO penalty for a dry sump engine.

2.3 The GM crate Engine P/N 88958604 must weigh a minimum 2750 lbs (full of fuel)

2.3 The Ford McGunegill MEP 425LM Engine must weigh a minimum 2775 lbs (full of fuel)

2.4 Cars with a 7000 (or less) RPM rev limiter are permitted a maximum 58% left side weight.

2.5 Cars with a 6400 (or less) RPM rev limiter and an approved "crate engine" are permitted a maximum 58% left side weight.

2.6 Cars must be full of fuel for all heat races and features (regular or special events).

2.7 Maximum tread width is 66", minimum is 64". Tread width will be measured at ride height. This may involve pushing front end down to touch 3" ride height block prior to measurement. This procedure will compensate for camber where necessary.

2.8 All ballast must be painted white and the car number must also be painted on it.

2.9 No weight – or other material is to be placed lower than the bottom of the frame rails.

3 FRAME

3.1 2" x 3" fabricated steel tubing or larger.

3.2 RIDE HEIGHT – No formal ride height rule however body MUST meet 3" minimum height for nose and rocker panels. In addition ALL vertical heights MUST pass during pre-race inspection such as crank height and fuel cell. Measurements will be taken with the driver out.

3.3 Minimum wall thickness of .083".

3.4 Minimum allowable wheelbase will be 102". Measurement will be taken from center of front spindle to the center of the rear axle with a 1 inch side to side tolerance.

4 ENGINES

CONVENTIONAL ENGINE (Option #1)

4.1 360 cu.in. Maximum (measured with volume pump or manually).

4.2 10.5:1 maximum compression (10.99 absolute checked with a whistler).

4.3 Measurement of whistler will be final.

4.4 Cast iron heads and cast iron BLOCK only.

4.5 No porting, polishing, blueprinting, acid porting, or reworking of any kind.

4.6 Multi angle valve jobs accepted.

4.7 Flat tappet camshaft only. NOTE: We will be modify the rule to allow roller camshaft for the 150 lap events and the Auto Value 250 with a 25lb penalty

4.8 No mushroom lifters.

4.9 No aluminum rods.

4.10 Roller rockers allowed.

4.11 Must run air breather.

4.12 Any 2 or 4 barrel intake allowed.

4.13 The bowl and short turn on the intake side, below the valve seat, may be reworked in as far as the head bolt. Bowl blending below the valve seat on the exhaust side is limited to one inch. Port matching allowed in maximum 1/2" "

- 4.14 Gasket matching allowed 1/2" in only on ports.
- 4.15 Bowl blend on intake and exhaust down 1/2" max below the valve seat.
- 4.16 Minimum crankshaft (center) height 10". GM crate engine will carry a 11" crank height minimum.
- 4.17 G.M. 2" setback. Ford and Mopar allowed additional 2" setback from front most cylinder centered with upper ball joint. Engine, not body, determines setback.
- 4.18 No Australian, New Zealand or other exotic heads allowed.

4.19 No Plastic, carbon fiber, or fabricated aluminum intakes or other unauthorized parts will be allowed

GM SEALED CRATE ENGINE (Option #2)

NOTE: General Motors "crate engine" will be permitted in 2012. Engine can be purchased through your local GM dealer but must be delivered to Forbes Chev Olds in Halifax or Oleary Buick GMC in Fredericton directly from the factory for sealing. The motor can then be transferred to your dealer or picked up at Forbes or Olearys.

NOTE: A minimum \$50.00 charge will be required for seal installation and recording for inventory of these engines.

Crate Engine Details:

- Must use Holley 650 carb 4150HP # 80541-1
- Carb will bolt directly to the intake using a maximum .065 gasket only. No spacer plate is allowed
- Carb must pass SPEEDWAY 660 No-Go gauges
- These engines are sealed at the intake manifold, cylinder head, front cover, and oil pan with special twist off bolt heads
- The fuel pump pushrod may be replaced with a COMP CAM P/N 4607
- Original timing cover and harmonic balancer must remain as produced
- Headers must be a 1 5/8" to a 1 3/4" stepped header with a 3" collector
- Maximum RPM limit is 6400.
- Crate engines" will maintain a minimum crank height of 11".
- All "crate engines" must be approved by SPEEDWAY 660 officials and tagged for identity purposes before they can enter competition.

The engine part number is superseded to #19318604, due to the following component changes:

<u>Current Part #</u>	<u>New Parts #</u>	<u>Description</u>
<u>#88958604</u>	<u>#19318604</u>	<u>Circle Track Racing Engine Assembly</u>
<u>#12464298</u>	<u>#19300955*</u>	<u>Fast-Burn Aluminum Cylinder head Assy.*</u>

***Cylinder head assembly #19300955 is identified by the Chevrolet "Bowtie" logo engraved on the end surface of the cylinder head. This replaces the "GM Performance Parts" logo that was formerly used. It is also assembled with Chevrolet Performance "blue" beehive-style valve springs, part # 12625033, using compatible spring retainers, seats and split key locks. These components were changed to provide maximum durability and stability at the sustained RPM typically experienced in circle track racing.**

In Addition a spring kit upgrade is available from GM Performance Parts

19300952 – Beehive Valve spring Conversion Kit

Contents: 16 - #19301707 valve spring seat
16 - #19301708 valve spring retainer
32 - #19301709 split key locks
16 - #12625033 valve spring (blue)

MCGUNEGILL FORD SPEC/CRATE ENGINE (Option #3)

NOTE: McGunegill 425 LM "spec/crate engine" will be permitted in 2012. Engine can be purchased through McGunne Engine Performance (MEP www.mcgunegillengines.com). These engines are sealed by MEP and will be required to have registered seals on motors to compete at Speedway 660.

FORD SEALED CRATE ENGINE D347SR (Option #4)

- D347SR is allowed, complete with Holly carburetor model 4150HP# 80541-1.
- Carburetor will bolt directly to the intake using a maximum .065" gasket only.
- No spacer plate is allowed.
- Carburetor must pass Speedway 660 No-Go gauges.
- Headers must be 1 5/8" to a 1 3/4" stepped header with a 3" collector.
- Maximum RPM is 6400.

MOPAR ASA 75360 MPST SEALED CRATE ENGINE (Option #5)

- MOPAR ASA75360 sealed "crate engine" (wet sump only permitted)
- Holley Carburetor model 45150HP # 8054-1 is allowed.
- Carburetor will bolt directly to the intake using a maximum .065" gasket only.
- No spacer plate is allowed.
- Carburetor must pass Speedway 660 No-Go gauges.
- Headers must be 1 5/8" to a 1 3/4" stepped header with a 3" collector.
- Maximum RPM is 6400

CRATE ENGINE INSPECTION

It is important to note that while these engines are factory and track sealed, they are still subject to inspection in a number of manufacture suggested areas. Compliance with these units is critical. Any engines that are found to have been tampered with in ANY manner will automatically result in an immediate disqualification and possible further penalties may be applied.

CRATE ENGINE REPAIR / REFRESH

For 2019 Sussex Engine will be the authorized service center for all crate engines. These engines may be repaired or refreshed. Engines must have been raced at least one season before a refresh will be allowed. The repair/refresh procedure will begin by the team contacting 660 to identify the condition then Sussex will be contacted and perform the appropriate repairs. Sussex Engine will have a list of approved procedures that will be followed to perform the repair /refresh work. The tech director will reseal the engine and a \$100 resealing fee will be charged. Non-compliance to this program will deem the engines to be illegal and will be removed from inventory. Sussex Engine will also perform inspections of any engines in the class for validation and compliance of the rules when required.

5 ELECTRICAL

5.1 Battery: Must be mounted securely outside of driver's compartment. A dry cell battery will be MANDATORY.

5.2 Alternator: The alternator system when used must be working within specifications.

5.3 Starter: The self-starter must be operational. Car must be able to start under its own power.

5.2 A Master Shut-off Switch must be mounted in the middle of the car, such that the driver can reach the switch while belted in the car. The location must be accessible to safety workers outside of the car, regardless of how the car is sitting. It must be fluorescent orange to ease finding it during an emergency. Decals to be used with the switch to indicate OFF and On. May be mounted to cage or dash bars in center.

6 IGNITION

NOTE: The ignition unit may remain in the car for the season. It will not be necessary for the MSD chips to be sealed in the boxes.

Any teams wishing to participate in an MPST event may leave their tour legal box in 660 inventory complete with chip sealed.

The FAST E6 CD # 6000-6700 or Crane HI-6RC CD Ignition # 6000-6701 ignition system will be allowed.(See rule 6.2)

6.1 Ignition systems allowed will be the MSD 6 series boxes. Part no. 6400 (6T), 6401 (6TN), 6420 (6AL), and the 6430 (6ALN). The GM HEI module allowed will be either a stock GM 4-pin module, an approved MSD (#8364) 4-pin module, or an approved MSD (#83645) TCD module. These HEI modules will be subject to the same rules and installation procedures as the MSD boxes. NOTE: If the purchase of a new box is being considered, it is recommended that only the N type boxes be used as they are equipped with the approved wiring and inspection cover as manufactured. (Meet NASCAR Rule 20-6.1).(NOTE 1: No crank triggered ignitions allowed) (NOTE 2: Boxes with external rev limiters will follow the same procedures as the MSD boxes.)

NOTE: MSD Rev limiters (chip type only) must be used. External rev limiters must be MSD part number 8728 (HEI) or 8738 or GM 10037379 (6400,6401 and GM 10037378) only. External rev limiters must be approved following the same procedures as MSD boxes.

6.2 The FAST E6 CD # 6000-6700 or Crane HI-6RC CD Ignition # 6000-6701 ignition system will be allowed. It features a 6-pin, Weatherpack-type harness plug for ease of installation, with a standard mag trigger that can come from any type of magnetic trigger distributor. The ignition box and coil are mounted on a bracket to support the complete unit. These boxes must be mounted on the far right side of the dash with the rpm dials facing the passenger door.

6.3 In accordance with rule 6.1, the non N-type (6T, 6AL) boxes are to be wired as follows:

a) A 6-pin Weatherpack connector (MSD # 8170) must be installed on the box end with the terminal pin assignments as required:

Terminal A- Red (12 volt ignition)

Terminal B- Wire (white preferred) to be made up and installed between the box tach terminal and run to the box end of the MSD connector (# 8170)

Terminal C- Black wire (coil negative)

Terminal D- Orange wire (coil positive)

Terminal E- Green wire (distributor mag -) Original connector is to be removed and this wire is to be routed from the box to the connector (MSD # 8170)

Terminal F- Violet wire (distributor mag +) Original connector is to be removed and this wire is to be routed from the box to the connector (MSD # 8170)

b) The (MSD # 8170) connector will be oriented so the male terminals are installed in the female connector on the box end and the female terminals installed in the male connector on the car harness end.

c) Non N-type boxes (6T, 6AL) are to run the battery power (red) and the battery negative (black) wires as follows:

i) Battery Positive (12 gauge red) is to be installed within a 36" wire run of the box. This may be installed as an example at the battery, solenoid, or battery disconnect switch.

ii) Battery Negative (12 gauge black) is to be installed within a 12-14" wire run of the box.. This should be secured to, as an example, the roll cage near the ignition box.

iii) Quick connect harness connector for power and ground will be a PICO #1890-11 (12 AWG)

d) The non N-type boxes (6T, 6AL) are pre-wired from the factory with a short harness to connect the Green (mag -) and Violet (mag +) wires to the distributor. This connector is to be removed and the wires routed in convoluted split tube covering and be installed in cavity E (mag -) and F (mag +) in the box end of the MSD # 8170 connector.

This procedure may be done by cutting off the connector and splicing in wire to reach the connector.

The made up tach wire from the box terminal to connector # 8170 is to be included in the harness covering the green and violet wires. When completed all three wires are to be enclosed in the approved convoluted wire cover.

NOTE: See APPENDIX "A" for wiring diagram

6.4 In accordance with rule 5.1, the N-type boxes (6TN, 6ALN) are pre-wired and the connector/pin orientation is as manufactured (NASCAR Rule 20-6.1). The car harness and the male connector/female terminal pin assignments are as follows:

- a) Terminal A- Red wire (12 volt ignition)
Terminal B- Brown wire (tach)
Terminal C- Black wire (coil negative)
Terminal D- Orange wire (coil positive)
Terminal E- Green wire (distributor mag -)
Terminal F- Violet wire (distributor mag +)
- b) N-type boxes (6TN, 6ALN) are to run the battery power (red) wire and the battery negative (black) wire as follows:
 - i) The Battery Positive (12 guage red) is to be installed within a 36” wire run of the box. This may be installed as an example at the battery, solenoid, or battery disconnect switch.
 - ii) The Battery Negative (12 guage black) is to be installed within a 12-14” wire run of the box. This should be secured to as an example the roll cage near the ignition box.

iii) Quick connect harness connector for power and ground will be a PICO #1890-11 (12 AWG)

NOTE : See APPENDIX “A” for wiring diagram

6.5 **Wire Harness** is to be loosely secured to and from the box and be attached so the **entire ignition harness** may be removed as necessary. The harness is to be covered with a single split plastic “convoluted” tube type. This will allow the wiring to be easily removed from the covering as needed for inspection. **All wires to the distributor must be run separately and not be a part of a bigger loom or wiring harness.** There is to be a rubber grommet installed in the dash sheet metal so as to allow the magnetic pickup wires to run to the distributor. This harness must be able to be pulled through the grommet from either side of the dash. **The harness is to be visible and easily accessible for inspection purposes.**

6.6 **Box Location:** These ignition boxes are to be installed on the **right side of the dash board** So the driver is unable to reach the box connectors while sitting in the drivers seat with the seat belts **unhooked.** It is recommended that the box be mounted on a bracket perhaps with the coil. **This location will be strictly enforced. Relocation will be required for non-conformity.**

Only ONE ignition box and coil will be allowed.

6.7 **Tach Location:** Tachometers are to be installed on the dash board area in close proximity to the MSD box (recommended one foot radius). It is suggested that the tachometer be installed on a bracket with the MSD box and a *single* ignition coil. **NO** rev-limiting tachometers allowed.

The tachometer may be functional for all heats and features. The tach wire will not be required to be disconnected.

Any team wishing to participate in an MPST event must have the provision for the tach wire disconnect. Tach wire disconnect must be clearly visible near ignition box.

6.8 **Box Switching:**

Any use of another competitors box must have prior approval in person from the team that the box is being requested from. The Speedway tech director and/or tech staff will personally monitor any box switch to ensure proper procedure is followed and to reseal a harness for competition.

SPEEDWAY 660 will carry two MSD 6ALN boxes in inventory. These boxes may be switched for an event with a competitors box at the discretion of officials.

- 6.9 **INSTALLATION NOTE:** It is highly recommended that a small drop of solder be applied to the terminal to wire crimps during installation. This will ensure a positive electrical connection. It is recommended that a weather pack terminal crimper such as a Blue Point PWC 47 or MSD # 8175 (or equivalent) be used.
- 7.0 Wiring diagrams found at the end of this document. (**"APPENDIX A"**)
- 7.1 Ignition boxes must remain as manufactured and cannot be altered.

7 CARBURETOR

- 7.1 Holley 4412 500 CFM stock carburetor.
- 7.2 Choke horn may be removed with a square cut, no taper or bevel may be cut into the body of the carburetor.
- 7.3 Boosters may not be changed. Size and shape may not be altered. Height must be standard. Venturi area must not be altered in any manner. Casting ring must not be removed.
- 7.4 No polishing, grinding, or drilling holes permitted in the body of the carburetor.
- 7.5 Base plate must not be altered in shape or size.
- 7.6 Stock butterflies must not be thinned or tapered. Idle holes may be drilled in butterflies Screw ends may be cut even with shafts but screw heads must remain standard.
- 7.7 Throttle shaft must remain standard and must not be thinned or cut in any manner.
- 7.8 Power valves, and jets may be changed.
- 7.9 **Carburetors must pass all SPEEDWAY 660 No-Go gauge tests**
- 7.10 **There must be two return springs on separate brackets. One spring to be forward mounted and one rearward mounted.**
- 7.11 **A positive throttle stop will be MANDATORY for 2015. This is to prevent a possible hung throttle. Throttle stop may be either firewall or carburetor mounted (i.e. Longacre Primary Throttle Stop bracket, Holley 2 BBL Item # 32732 and Holley 4 BBL Item # 32730).**
- 7.12 **ALL Crate Engine(s):**
- Must use box stock Holley 650 carburetor 4150HP # 80541-1
 - **Carburetor will bolt directly to the intake using a maximum .065 gasket only. NO SPACER PLATE ALLOWED.**
 - **Carburetor must pass all SPEEDWAY 660 No-Go gauge tests**

8 WHEELS

- 8.1 Maximum ten inch measured bead seat to bead seat.
- 8.2 Steel wheels only.
- 8.3 **Bleeder valves will be allowed**

9 SHOCKS

- 9.1 One per wheel regardless of manufacturer
- 9.2 **Sealed steel/aluminum shocks (non rebuildable) and rebuildable shocks will be permitted. Shocks with External adjusters will be allowed. EXTERNAL RESERVOIRS OR CANISTERS WILL BE PERMITTED.**
- 9.3 **For 2019 cars with MPST legal AFCO shocks will be allowed a 50lb total weight break.**

Note: This weight break is only applicable providing there are no external suspension travel limiting devices in use on the car. A bump stop on the shock shaft will qualify for this AFCO only weight break.

10 CLUTCH

- 10.1 Any safe clutch and flywheel may be used.
- 10.2 Scatter shield mandatory with open clutch.
- 10.3 Minimum diameter of clutch discs is 5.5". Magnetic steel plates only (i.e. no carbon fiber)

11 REAR END

- 11.1 **The maximum gear for all cars will be 5.88:1 gear. There will be no minimum gear rule. Built steel head engines MUST run a 7000 rpm limiter.**
- 11.2 **A solid spool or "locker" type rear end will be optional.**
- 11.3 **Differential oil coolers are permitted.**
- 11.4 **Drive axles must magnetic steel only. No other material allowed.**
- 11.5 **The only approved rear differentials will be the rear loading quick change or the non-quick change units. No "Front Quick Change", Ford 9" or any other differential styles will be allowed.**
- 11.6 **All rear ends must have the traditional layout of the ring gear to the left side of the car and the pinion gear to the right side of the car.**
- 11.6 Outboard solid drive flanges on rear end may be replaced with rubber drive plates only.
- 11.7 Lower trailing arms may be solid or have a rubber biscuit on either lower arm. The single panhard bar on the rear suspension will be solid with heim joints on both ends, solidly mounted to the frame on both sides. **No titanium axles, bars, or arms. No Watts link or similar configurations.**
- 11.8 The third link should be a single solid bar with one connecting point (heim joint) on each end which can be adapted to a single torque device between the two connecting points. The third link assembly unit must have no more than one bar, one single linear spring, or one bar, one linear spring and one neoprene or rubber biscuit, or one bar and no more than two biscuits. **No "dual action", "right foot", "pull bars", "two way" or similar assemblies. No gas or liquid pressure devices allowed. No shock, torque arm, 6th coils, extra bars, etc.**

12 COOLING SYSTEM

- 12.1. **Radiator must remain stock in appearance and remain in standard position.**
- 12.2. **Stock type water pump only.**
- 12.3. **Radiator dust screens permitted. No blocking of air flow from nose to radiator.**
- 12.4. **Radiator must include liquid over flow can (minimum capacity 1 liter) mounted ahead of engine firewall. Over flow vent must exit the vehicle at the base of the windshield.**
- 12.5. **No anti-freeze allowed in the cooling system. Water only.**
- 12.6. **No cool down units, pumps, exotic fans allowed. If you have to ask it's not legal.**

13 TRANSMISSION

- 13.1 Any two, three or four speed manual with operating reverse. Gears not to exceed 4 forward gears. Must have at least 2 forward gears and 1 reverse gear in working order.
- 13.2 Clutchless (Bert type) transmissions are allowed as well as Jericos.
- 13.3 Must race 1:1 ratio.
- 13.4 No gear may be closer than 1.23 to 1. (i.e. 3rd gear in a four speed can't be any closer to 1.00 than 1.23)
- 13.5 No variable ratio transmissions.
- 13.6 No 5-speed transmissions.

14 TIRES

- 14.1 **The approved tire for competition will be the Hoosier 1070 on 15" x 10" wheels.**
- 14.2 **Tires raced at Speedway 660 must be purchased from Speedway 660 to be eligible to compete. Tires will be scanned and inventoried.**

NOTE: See Appendix "E" for the 2019 tire policy

15 BRAKES

- 15.1 **Functional four-wheel brakes with a working caliper on each wheel are mandatory. Calipers may be made of steel, cast iron or aluminum only. Cast iron brake rotors only. They cannot be steel or cast iron faced aluminum. No carbon fiber material is allowed. Maximum four pistons per caliper. Maximum one caliper per wheel. Electronic wheel speed sensors or brake activators will not be permitted.**
- 15.2 Fans or blowers in the brake cooling system are permitted. Air may not be blown or forced onto the tire or bead. Air may only be directed to the brake rotors.
- 15.3 **Wheel mounted cooling fans will be allowed.**

16 NUMBERS

- 16.1 Numbers must be on the roof, readable from the right side of the car, and on both front doors, at least 18 inches high and three inches wide.
- 16.2 Must have a six inch number on the top passenger corner of the windshield, painted white.
- 16.3 All numbers must be dark on a light background, or light on a dark background. No gold, silver, or trick numbers.
- 16.4 The driver will be notified of any numbers deemed difficult to score.

17 DRIVE SHAFT

- 17.1 Driveshaft material must be steel or aluminum only. No carbon fiber, titanium, etc.
- 17.2 Only a one piece driveshaft will be permitted.
- 17.3 Driveshaft must be painted white (or bare aluminum) and be surrounded by two 1/4" (minimum thickness) safety hoops.

18 EXHAUST

- 18.1 **Mufflers are mandatory on all cars regardless of bottom or side exhaust exit. Recommended mufflers include but not limited to Howe 3002, 3005, 3006, 3015, 3018, 3044. A maximum decibel reading will not be enforced at this time but it is requested that teams choose a muffler that will provide a measure of noise limitation.**
- 18.2 No stainless steel or carbon fiber headers, mufflers, pipes, etc are permitted. Exhaust may be turned down under car or exit out the right door. If exhaust exits under car, exit must point toward ground ahead of the rear axle. If the exhaust outlet exits through the right door it may not extend out past the door panel. Exhaust flange at door must not have sharp edges. **The bottom of the exhaust outlet is not to exceed twelve (12) inches from ground at exit.**

19 FUEL CELL

- 19.1 Maximum 22 U.S. gallons.
- 19.2 Must have at least 8" ground clearance.
- 19.3 Fuel cell must be mounted behind the rear end.
- 19.4 **An ATL or Fuel Safe FIA /SFI 32.1.certified bag type rubber bladder fuel will be MANDATORY.**
- 19.5 **An Oberg Fuel Line Safety Check Valve #SV-0828 will be Mandatory. It must be installed in the fuel supply line close to the fuel tank.**
- 19.6 **No horse shoe or "U" shaped cells. The front side of cell is to be no closer than 11" to the back of the rear end tube.**

20 FUEL

- 20.1 At this time there is no "spec" fuel identified.

21 DRIVER'S COMPARTMENT

- 21.1 All cars must have a safe roll cage, constructed of 1-3/4" o.d., .090 wall steel tubing. The base of the upright members must be solidly welded to the frame.
- 21.2 Cage must be reinforced by side-to-side members.
- 21.3 Four side bars on drivers side are mandatory.
- 21.4 All roll cages must be approved by technical inspector.
- 21.5 All roll bars within drivers reach must be padded.
- 21.6 Approved aluminum racing seat and four point harness properly mounted to the cage is mandatory.
- 21.7 Crotch belt is recommended.
- 21.8 **Belts must be dated no more than two years old. Minimum date code on belts must be 2017**

- 21.9 Minimum belt width of three inches.
- 21.10 All cars must have an approved window net, properly installed in the left front window opening and must have a quick release. No string type nets allowed.
- 21.11 All cars must be equipped with a quick release steering wheel. Center of the wheel must be padded.
- 21.12 Battery must be mounted securely outside of driver's compartment by a non-conductive cover.

22 BUMPER

- 22.1 Maximum 2" diameter pipe or tubing.
- 22.2 **TOW HOOK/LOOP** must be installed in both front and rear of car to allow for recovery vehicles to quickly lift cars and move them to the pit area. Recommended installation would be a steel cable and/or bracket attached to the frame rails or cage and accessible when the hood and/or trunk lid are opened.

23 COMMUNICATIONS

- 23.1 Any team using talking and/or listening devices **MUST** provide track officials with all their frequencies. Only 100, 400, and 800 MHZ frequencies allowed. NO 900 MHZ frequencies. All frequencies must be able to be monitored by official's multi-channel scanner with NO modification.
- 23.2 All frequencies **MUST** be able to be monitored by track officials. No scrambling allowed.
- 23.3 A scanner (monitoring track officials) must be attached to a spotter with direct communications to the driver.

24 SCORING DEVICES

- 24.1 Transponders will be available at Speedway on raceday.

24.2 TRANSPONDER LOCATION

Transponder mounting bracket will be installed on the inside of the left rear frame rail. The bracket must be mounted 12" from the rear edge of the axle tube to the center of the mounting bracket and the transponder must be vertical to the ground.
(See APPENDIX "D")

25 DRIVER PROTECTION

- 25.1 **The use of head and/or neck restraint system is MANDATORY.**

- 25.2 **Aluminum or carbon fiber full containment seat is MANDATORY. Seat must be secured to the roll cage with a minimum of six (6) grade 8 fasteners.**

- 25.3 **For 2019 a full face helmet with a minimum SNELL rating of SA or SAH 2010 will be MANDATORY. Helmets must accompany the vehicle at time of inspection.**

- 25.4 **The HANS device tether straps will be inspected. While not mandatory at this time, the straps are recommended to be replaced either every 5 years or in the case of hard impact then immediately.**

- 25.5 Full fire suit in good condition is mandatory and must be used when ever the car is on the track.
- 25.6 Fireproof shoes and gloves are MANDATORY.

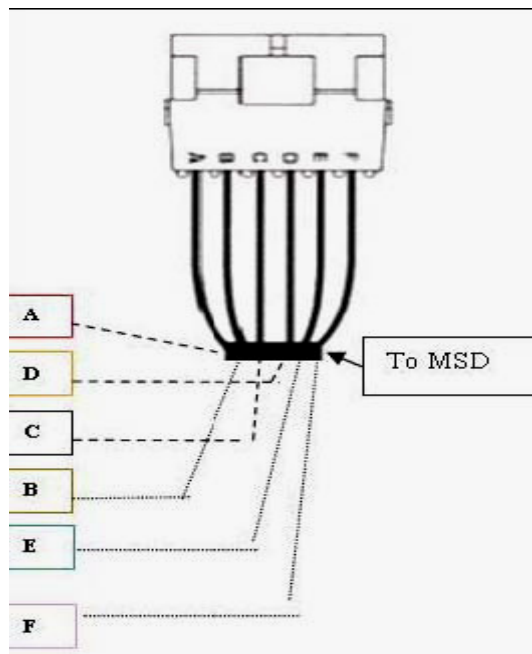
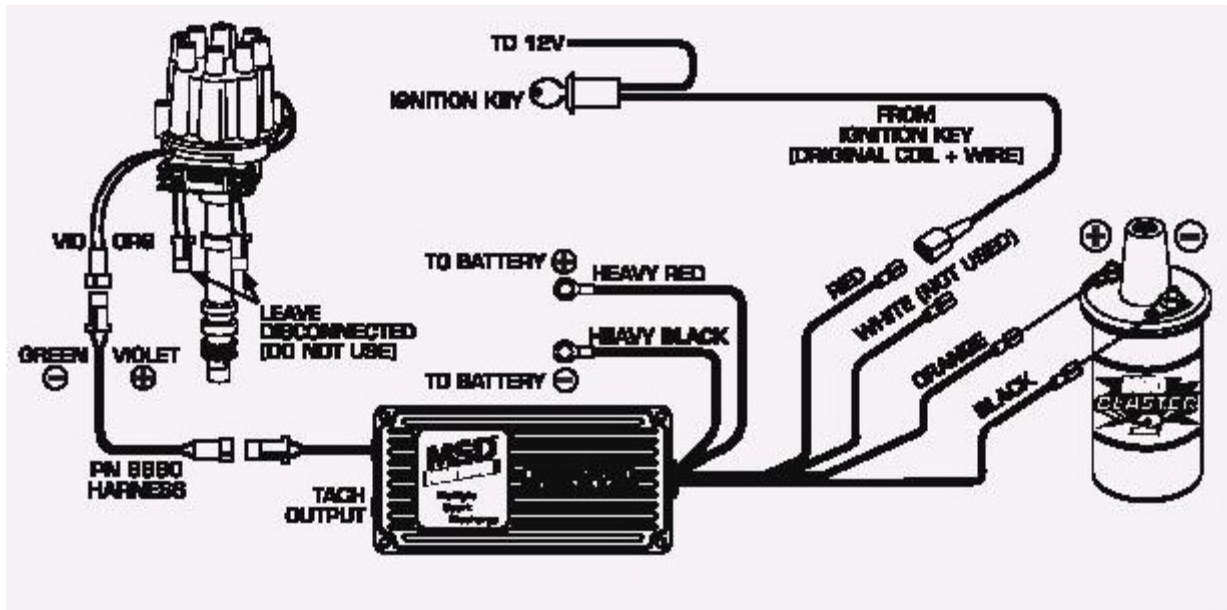
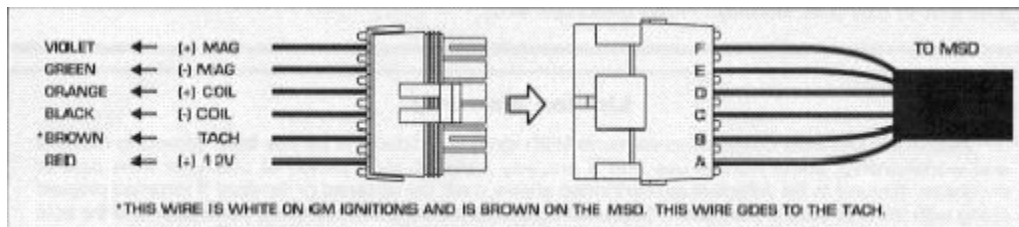
- 25.7 An approved fire extinguisher dated for the current year must accompany car at all times. Fire extinguisher must be a minimum of 2.5lbs.
- 25.8 A fire suppression system is strongly recommended.
- 25.9 A full enclosure seat is strongly recommended.
- 25.10 5 point seat belt harness (minimum 3" wide) mandatory. 2 year maximum belt life
- 25.11 A fire extinguisher of a minimum 5 lb. must be clearly visible in the teams pit area. Extinguisher must display car number on the side.**

26 MISCELLANEOUS

- 26.1 No electronic or manual traction devices.
- 26.2 No onboard wedge adjustments permitted.
- 26.3 Any new technology equipment must be approved by SPEEDWAY 660 before it can be used.
- 26.4 Track reserves the right to amend any rule with prior (fair) notice to competitors.
- 26.5 NO CARBON FIBRE PARTS (unless otherwise specified).**
- 26.6 No titanium of other exotic metals allowed. All drivetrain and suspension fasteners must be magnetic steel only**
- 26.7 No digital gauges, or electronic monitoring computer devices capable of storing or transmitting information (except analog tach) are permitted. **Only analog stepper motor type gauges allowed.**
- 26.7 No wireless devices of any kind allowed.**
- 26.8 No Data Acquisition equipment/wiring is allowed in the car at anytime.**
- 26.8 Speedway 660 reserves the right to confiscate and retain any parts or components that are deemed to be non-conforming to the rules set forth in these pages. The decision of track management will be final

NOTE: For clarification of these rules or for any other technical inquiries please contact the Speedway 660 Tech Director (Don Greer) at dgreer76@gmail.com

APPENDIX "A": IGNITION WIRING DIAGRAMS



(A), (B), (C), (D), (E) and (F) to the 8170 Connector.
 (G) Maximum 36" (H) Maximum 12" (quick-connect plugs recommended)

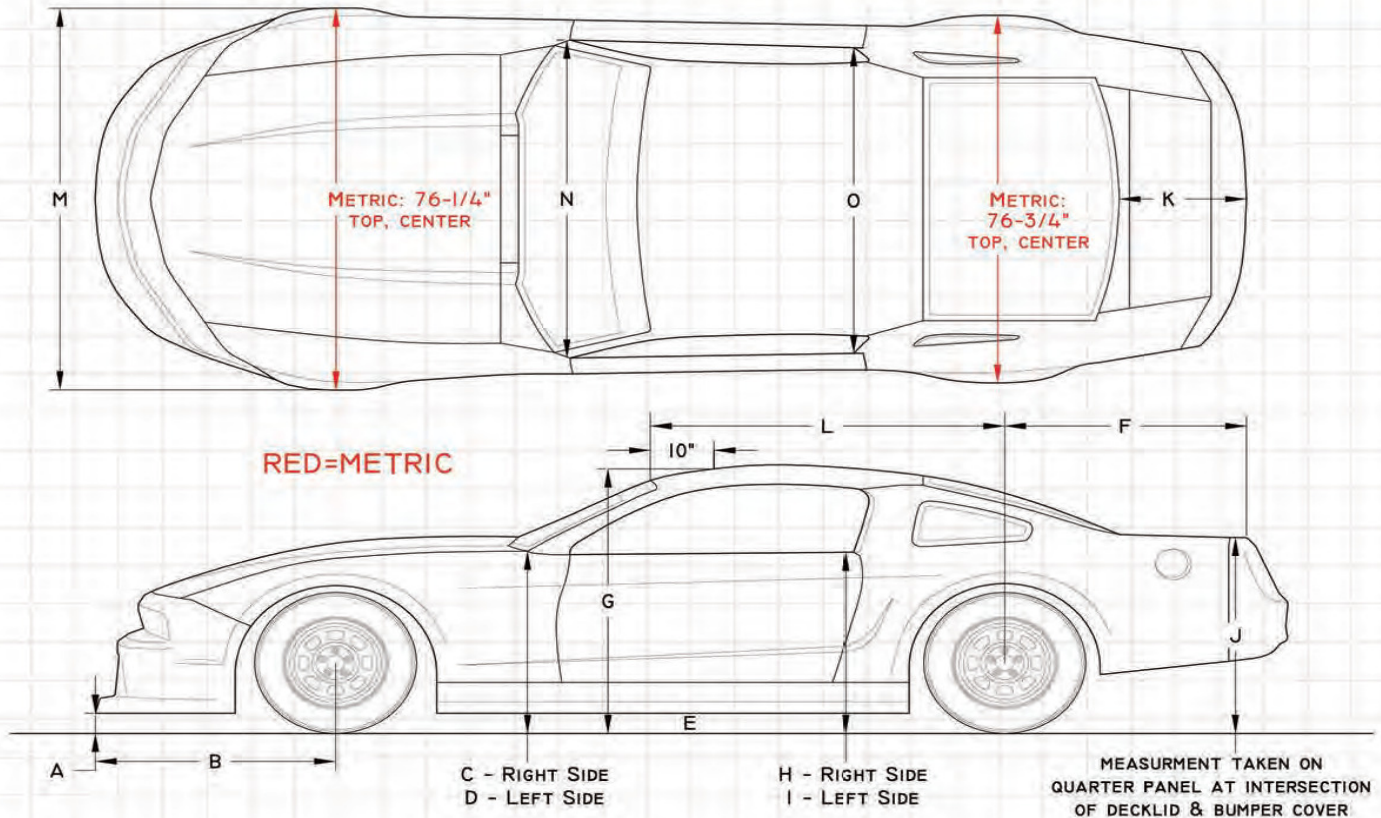
APPENDIX “B” – 2003 and Older Bodies

2003 and older Bodies

- 1.2 All bodies must be stock appearance, steel, fiberglass or aluminum.
- 1.3 Bodies must be installed to meet ALL FiveStar dimensions and angles.
- 1.4 Bodies must meet FiveStar templates with slight (approx 1/2 -3/4") tolerance at the base of windows.
- 1.5 All vertical measurements will be made with **driver OUT of car**.
- 1.6 Roof height must be a minimum of 46". Measured 10" from the top of the windshield on center.
- 1.7 Max deck height will be 34.0" from the ground to the top of deck at base of spoiler (Dimension K).
- 1.8 With the roof height at 46" and the rear deck height at 34 ½" the gap between the template and the rear deck will be no more than ¾ " at the base of the rear window and taper in a straight line to 0 at the spoiler.
- 1.9 Template is expected to fit tight in all other areas.
- 1.10 Nose must fit nose template with hood on and must comply with Dimension A.
- 1.11 Rear deck lid must NOT be riveted to the body. Must be hinged or made easily removable.
Rear deck must not be dished or raked side to side. NOTE: The deck lid opening must be a minimum of 48" wide by 12" deep. This will allow access to fuel cell for safety and inspection.
- 1.12 You are allowed a 6.5" high, 60" wide rear spoiler, with no side boxing.
- 1.13 Rocker panel/skirt must run perpendicular to the ground. (I.e. straight up and down)
- 1.14 Hood must be minimum of 15 lb, if weight must be added it must be molded into the hood and centered.
- 1.15 Body and window panels must be braced sufficiently to prevent bowing at speed. Rear window brace **MANDATORY**.
- 1.16 No cut down fenders or rear bumper covers.
- 1.17 Body **MUST** have min 3.5" ground clearance at all points.
- 1.18 Must run rear window.
- 1.19 Passenger AND drivers side **VENT** windows are permitted. They are not to be longer than 12" from the bottom corner of the "A" pillar rearward. Rear of window must be 90 degrees straight up and not bowed out.
- 1.20 Floor plate must be a minimum of 1/8 inch thick metal.
- 1.21 A plate of 16 gauge metal approximately 15" x 30" must be mounted on driver's door between skin and roll cage.
- 1.22 All jack positioners on cars must be positioned flush with or hidden beneath the door skin.
- 1.23 Exterior rub rails will not be permitted.
- 1.24 Non-conforming body clause: Long quarter paneled (+3.0") cars will be permitted to run limited events provided they run a 5.0" x 60" spoiler. Events allowed include up to three regular race weeks in addition to the 100 lap events and the Peterbilt Stock 250.
- 1.25 ARP Monte Carlo (2002-2003) will be allowed to compete but must fit Fivestar roof template and measurements. Also ARP body must run 5" spoiler. If 2003-4 nose is run car will carry a 25lb penalty. If right side deck exceeds 5.0" car will carry additional 25lb penalty.

APPENDIX "C"

Muscle Car Body Dimension Sheet

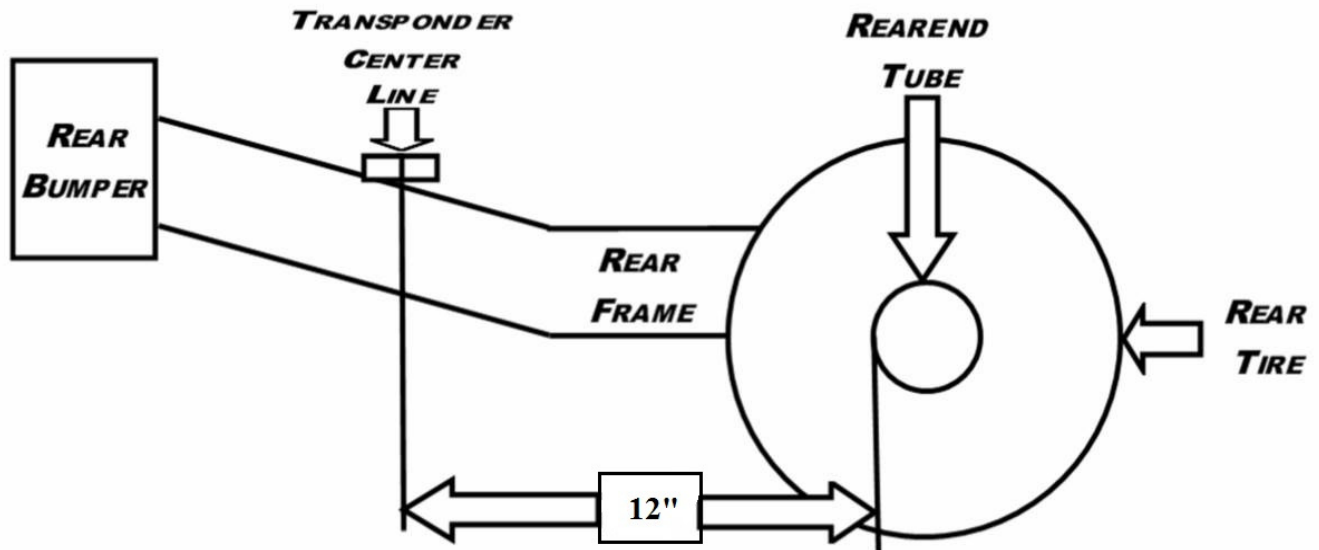


A.	NOSE HEIGHT (MIN): from ground to bottom of nose	4" 4 1/4"
B.	FRONT OVERHANG (MAX): on centerline	46 3/4"
C.	FENDER HEIGHT: RIGHT at front of A-post from ground	32 3/4" 32 1/2"
D.	FENDER HEIGHT: LEFT at front of A-post from ground	32 1/2"
E.	SIDE PANEL CLEARANCE (MIN): from ground	4"
F.	REAR OVERHANG (MAX): from base of spoiler at centerline to axle center	44 1/2"
G.	ROOF HEIGHT MIN): 10" back from windshield, on centerline	48"
H.	DOOR HEIGHT: RIGHT at rear	33 1/4" 33"

I.	DOOR HEIGHT: LEFT at rear	33"
J.	QUARTER PANEL HEIGHT: at bumper cover/decklid intersection	35 1/2"
K.	REAR DECK: at center, from base of spoiler to rear window	21 1/2"
L.	FRONT OF ROOF TO CENTER OF REAR AXLE:	56"
M.	BODY WIDTH: at wheel wells	80" 78 1/2"
N.	DOOR TO DOOR WIDTH: FRONT at "A" post and inside edges of the doors	65 1/4" 66 1/2"
O.	DOOR TO DOOR WIDTH: REAR at "B" post and inside edges of the doors	63 1/4" 64 1/2"

APPENDIX "D"

Transponder Location



Transponder mounting bracket will be installed on the inside of the left rear frame rail. The bracket must be mounted 12" from the rear edge of the axle tube to the center of the mounting bracket and the transponder must be vertical to the ground.

APPENDIX “E”

2019 Speedway 660 Tire Policy

The tire policy contained in this document is intended to provide cost control and fair competition for the purchasing of tires that will be used for this weekly racing class. These rules will be strictly enforced and it is solely the competitor’s responsibility to read the information presented here in order to be informed as well as be in compliance with all aspects of the rules as set forth in this document.

1. For 2019 the approved tires for competition will be the Hoosier 1070. They will be mounted on steel 15”x 10” wheels.
2. A maximum of 8 race tires may be purchased at the start of the season. Competitor that purchases 8 tires must compete in that race.
3. No tires may be purchased on week #2.
4. One tire may be purchased every week (after week #2) except for extended lap races.
5. Pro Stock tires will be registered (scanned) and inventoried into the competitors tire allotment. All race tires will be stored in the tire trailer for race day and will be returned to the trailer at the completion of the event.
6. Tires must have a readable bar code by the Speedway 660 tire scanner. The code is found on both sides of the tire. Any tire that has an unreadable bar code will be deemed illegal.
7. Flat tires will NOT be replaced with a new tire. That is what the 10 tire Inventory is for.
8. Tires may be pre-season ordered ahead of the season opening races. It is recommended to contact for tire sizing.
9. For extended lap races where 4 tires are allowed they must be used for that race only. The tires used will not be allowed as part of inventory.
10. If a competitor comes in for one event and purchases 4 new tires, it is mandatory to put a minimum of hot 40 hot laps at race speed on them before competition.