

# 2023 OFFICIAL RULE BOOK MODIFIED RACING SERIES INC.

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# Modified Racing Series Official Rulebook Modified Racing Series General Rules

## **GENERAL RULES**

A. The rules and/or regulations set forth herein are designed to provide for the orderly conduct of racing events and to establish minimum acceptable requirements for such events. These rules shall govern the condition of all events, and, by participating in these events, all participants are deemed to have complied with these rules. NO EXPRESS OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM PUBLICATIONS OF/OR COMPLIANCE WITH THESE RULES AND/OR REGULATIONS. They are intended as a guide for the conduct of the sport and are in no way a guarantee against injury or death to a participant, spectator or official. The MRS TOUR LLC. shall be empowered to permit minor deviation from any of the specifications herein or impose any further restrictions that in their opinion do not alter the minimum acceptable requirements. NO EXPRESS OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM SUCH ALTERATION OR SPECIFICATIONS.

Any interpretation or deviation of these rules is left to the discretion of series officials. Their decisions are final.

- B. The interpretation and application of the Modified Racing Series Rule Book, by MRS Officials at a given series event, shall be final non-appealable and non-litigable. In order to promote modified racing, to achieve prompt finality in competition results and/or governing of series competition. ALL MEMBERS, INCLUDING COMPETITORS AND OFFICIALS, EXPRESSLY AGREE THAT DETERMINATIONS BY MODIFIED RACING SERIES OFFICIALS AND/OR The MRS TOUR LLC. AS AN ENTITY, TO THE APPLICATION AND INTERPRETATION OF THE MODIFIED RACING SERIES RULES AND GUIDELINES SET FORTH, ARE NON-LITIGABLE AND THEY COVENANT THAT THEY WILL NOT INITIATE OR MAINTAIN LITIGATION OF ANY KIND AGAINST THE MRS TOUR LLC. OR ANY PERSONS ACTING ON BEHALF OF THE MODIFIED RACING SERIES AT ANY TIME, WITH RESPECT TO SUCH DETERMINATIONS OR TO RECOVER DAMAGES OR TO SEEK ANY OTHER KIND OF RELIEF AS A RESULT OF SUCH DETERMINATIONS.
- **C.** Regulations and specifications set forth herein are automatically amended by revisions contained in subsequent Official Technical Bulletins issued by **The MRS TOUR LLC**. or in Rulebook Amendments/Revisions.
- D. All specifications and regulations contained herein are subject to deletions, additions and/or verbal directive of The MRS TOUR LLC. without prior notification.

#### 2023 LICENSING AND REGISTRATION:

- A. Any person who desires to participate in a Modified Racing Series (MRS) Sanctioned event as a car owner, driver, crew member, Modified Racing Series Official, sponsor, manufacturer representative or in a role of support personnel must apply for, receive, and possess a valid and current The MRS TOUR LLC. license or Modified Racing Series credential authorizing participation in that capacity. License or credentials must always be visible.
- B. A Modified Racing Series license is non-transferable. Only the member to whom it is issued may use it. If a licensee intentionally or unintentionally assigns or otherwise permits another person or entity to use or attempts to use the licensee's license, then the licensee shall be subject to disciplinary action and shall indemnify and hold harmless The MRS TOUR LLC from any loss or expense incurred as a result. Once a license is issued to an individual, regardless of who pays for the license, the license is the property of that individual.
- **C.** Owners, Drivers, and crew members are required to sign the appropriate release and registration forms plus pay pit pass fees before being allowed into pit area. Team members are encouraged to carefully read all material before signing. Owners, drivers, and crew members are responsible for finding out about each racetrack rain check pit fee policies.
- **D.** Pit fees and policies may vary at Modified Racing Series sanctioned venues. Modified Racing Series members should be prepared to comply with these policies.



#### **OWNER Membership LICENSE:**

**A.** The fee for a 2023 Modified Racing Series Member license is \$300.00 (Three hundred dollars). Pre- season (04/01/2023) registration \$250.00 (two hundred and fifty dollars).

- B. A Temporary One race Membership is available at \$100.00
- **C.** An Owner's License gives the owner rights to a car number until 12/31 of year purchased and will be awarded all prize and point fund monies.
- **D.** All Modified Racing Series LLC. Owners Licenses include a total of two licenses, one (1) Owner & one (1) Driver's. Owner's with more than one (1) driver must notify MRS of additional driver(s) regarding licensing fees.
- Owners may not sell or transfer owners' rights and/or car number without prior written consent from The MRS TOUR LLC DRIVER LICENSE:
  - **A.** All drivers must hold a valid and current year Modified Racing Series driver's license. Only licensed drivers are eligible to compete and be awarded drivers points.
  - B. The fee for a Modified Racing Series Driver's license is \$120.00 (one hundred & twenty dollars).

# The Modified Racing Series reserves the right to deny, suspend, or terminate any application or license in accordance with the Modified Racing Series Rulebook or under the direction of The MRS TOUR LLC.

#### **Release and Indemnity Agreement:**

- 1. I understand that applications when accepted will cause me to be issued an owner / driver / crew license, which is not an insurance policy and does not give me any right other than to establish my eligibility to procure upon on payment of a fee, a pit pass and track provided competitor insurance limited to activities at that event for a The MRS TOUR LLC. sanctioned event.
- 2. I further agree to purchase a pit pass and competitor insurance before entering the pit area or engaging in competition and in consideration of the foregoing, I do hereby release, remise and forever discharge The MRS TOUR LLC and all officers, directors, agents, employees, the owners and lessees of premises of which events are conducted, the owners, competitors, sponsors and manufacturers of all racing equipment upon the premises, from all liability claims, actions and possible causes of action whatsoever that may accrue to me or my heirs, next of kin and personal representatives from every and any loss, damage and injury (including death) that may be sustained by my person and/or property while in about, in- route into and out of premises of a sanctioned racing event or any premises where The MRS TOUR LLC. events are presented.
- 3. By signing a Modified Racing Series Owner / Driver / Crew Application, I acknowledge that I have read the entire form and understand its content. The owner / driver / crew license is issued pursuant to and governed by The MRS TOUR LLC. rule book. The licensed member assigns use of their name(s) and likeness and race car presented for competition to The MRS TOUR LLC. for use in any medium or material for the purpose of promoting, advertising, recording, and reporting related to The MRS TOUR LLC.

E.



## Modified Racing Series Car Rules Section#: 1, Item#: 1.0 thru 1.17.

### 1.0. GEAR RULE PER TRACK:

LOUDON: 3.82 STAFFORD: 4.86 THOMPSON: 4.68

## 1.1. ELIGIBLE MODELS:

- A. Any safe modified type racecar with a wheelbase between 104" 110", no supers, no sprints, or wings allowed.
- **B.** Maximum tread width 84 inches when measured from outside wheel bead to outside wheel bead.
- **C.** Stafford, Thompson, or Waterford legal SK Mods may use up to a 750 CFM 4-barrel carburetor, may also use a straight rear. Minimum Total Weight: 2550lbs and allowed a maximum 57% Left side weight.

## 1.2. WEIGHT RULE:

- A. Weight and cubic inch MUST be clearly displayed on the right and left side of the hood
- **B.** 56% maximum Left side weight with driver strapped in seat before starting any event. Driver must be in the seat with hands on the steering wheel at 10 & 2 o'clock with helmet in driver's lap.
- **C.** Total weight: 6.8 lbs. x cubic inch + 175lbs. = total weight for all cars except those qualifying Dart Steel Head Cars. Example: 6.8 X 358 CID = 2434 + 175 = 2609lbs
- D. All cars with approved Cast-Iron Heads will receive a 50lb weight break, but cannot weigh less than 2575lbs
- **E.** All cars with properly marked and serial numbered Dart Head# 11510020PF will be given a 25lb weight break. Must also have an RHS# 12902 Intake to qualify for the weight break. But cannot weigh less than 2575lbs.
- F. "Budget "Aluminum head rule cars receive a 25lbs weight break.
- **G.** Weight will be monitored on cast iron headed rule cars, weight may be added or taken away by 25lb increments at the discretion of the MRS Officials.
- H. Minimum weight for any car is 2575lbs with driver before starting any event, a legal SK minimum weight is 2550lbs.
- I. A .025% tolerance on total weight will be allowed. Left side percentage may be checked after the race and must be 56% maximum.

## <u>1.3.</u> BODY:

- A. All cars must be neat appearing.
- B. All body styles and configurations must meet the approval of the MRS Officials. Safety and visibility are the prime concern.
- C. All bodies must be installed on the frame in a manner acceptable to the MRS Officials. The height of the rear quarter panel will be 36" maximum from the bottom of the rear spoiler to the ground. Total height from the top of the spoiler to the ground is 44" maximum.
- D. Bodies may not extend below the frame rails.
- E. No skirts or additional metal may extend below the body. No car will be allowed to compete with excessive body damage. Excessive body damage to be determined by MRS Officials.
- **F.** All cars must have rear wheel openings on left and right side of no less than 12 inches and no more than a 15 radius from the center of the rear axle.
- **G.** At least the top part of the hood is mandatory. Safety clips are required on both front and rear sides. If sides are used than a minimum ground clearance around two (2) inches is required. Hood must cover cowl and top part of radiator with openings only for air cleaner and distributor.



H. No belly pans. 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 up to the discretion of the MRS Officials. Under panel of the front nose piece shall not extend past the rear edge of the harmonic balancer.

### 1.3. Body: (Continued)

- I. Only straight Lexan windshields are allowed on driver's side. Maximum width is 24" and minimum thickness is 1/4".
- J. Front air dams will be no wider than the front clip.
- K. Front air dam length shall terminate at least a minimum of 1/2" behind the furthermost point of the front bumper.
- L. No interior spoilers, wings or wind deflectors allowed. No double panels. All interior sheet metal is subject to MRS Official approval.
- **M.** Spoilers allowed, must meet MRS tech approval. Dimensions: 8" X 48" (8" high by 48" wide), must be centered within rear window pillars.
- N. All body and sheet metal must meet MRS specifications.
- O. Blewett Bars: Must have Two (2) vertical & one (1) horizontal 1½" OD X .095" minimum wall thickness. 1¾" OD X .095" wall thickness is highly recommended. P. No sail panels on body allowed.
- Q. Roof Steel or Approved Fiberglass roof are allowed.
  - Approved MRS Fiberglass Roofs are permitted. All MRS approved roofs will be embedded with a serial number coinciding with manufacturer it used on. (Example: Troyer# 001 or Spafco# 001, number will be located on the inside right front corner.
  - 2.) Any fiberglass roof without a serial number is subject to approval by MRS Officials. MRS reserves the right to deny any unapproved roofs from competition that do not comply.
- **R.** Anti-Intrusion roof plate is mandatory for fiberglass roof cars. It's not required, but highly recommended for steel roofs. Please reference: <u>Section# 4, Illustration A.1.</u>
- S. Roof Height will be measured with driver in car. The overall height will be measured 6" back from back lip of the windshield along the centerline of the roof, minimum of 40". The rear of the roof at the highest point will be a maximum of 43" measured with a minimum 2" frame height.
- **T.** "B" pillars must not extend above the height of the bottom of the rear spoiler as described in <u>Section# 4 Illustration C1.</u> Must be the same style and dimensions from side to side.
- U. Rear tail panel must be enclosed from top of rear frame rail to bottom of the rear spoiler. Maximum tolerance above frame rail is 1/2".

#### V. <u>BODY DIMENSIONS – WIDTH:</u>

**Doors**: Minimum 43" Maximum 45" when measured beneath the car at the rocker panels, at the front of the doors and just in front of the rear wheels.

- Quarter Panel Top: Minimum 49" Maximum 60" when measured across the body at the top rear most part of the quarter panels.
- Bottom: Minimum 58" Maximum 60" when measured between the outer edges of the rear quarter panels at rear bumper height.

#### **BODY DIMENSIONS - LENGTH:**

**Doors:** Minimum 72" Maximum 78" when measured from the center of rear axle housing forward to the front most part of the door.

**Quarter Panels:** Minimum 34" maximum 42" when measured from the center of rear axle housing to rear most part of the body.

**Note:** Exception to the above rules is all pre 2001 chassis cars which are not subject to the full letter of dimensions listed above. These pre 2001 chassis will be "grandfathered" due to the difference in frame width. Exception must be reviewed/given by a MRS Official for approval. (Amended 12/31/05)



## 1.4. CHASSIS:

- A. All front sub-frame assemblies must maintain a minimum of a 30° angle from the side frame rails up to the top of the subframe.
- B. Floor must be complete in driver's compartment. The floor must be minimum 1/8" steel.
- C. Nothing must hang below frame and oil pan.
- D. A steel firewall must separate driver from the fuel tank and engine compartment.

**E.** Firewall separating driver from engine compartment must not be any further back than the lowest area below windshield opening. Steel front firewall will be in front of driver, rear firewall will be located behind driver, also including drive shaft cover. **F.** All firewalls must be sealed on top, bottom, and sides.

- **G.** Driver side Anti-Intrusion door plates are mandatory. See Section# 3.A.4 Anti-Intrusion Door Plates and Section# 4 Illustration D1 for requirements.
- H. All front bumpers must be of rounded type, not to extend outward beyond the edge of frame more than 2" on each side
- I. Rear nerf-bars may extend outward beyond the edge of the tires a maximum of 2". All ends must be capped, and edges must be rounded off.
- J. Bottom of front and rear bumpers must not be lower than 13" and not higher than 15".
- K. The rear bumper safety rule: See Section# 3.A3. Rear Bumper and Section# 4 Illustration B1 rear bumper requirements.
- L. Double side rails are mandatory and must extend outward flush or a maximum of 2" beyond edge of tires.
- M. A fuel cell is mandatory with a maximum capacity of 22 gallons. Maximum of 5 years old on bladder. No plastic fuel cells. Must have rollover check vale in fill plate. Fuel cell must be inside the rear frame and centered with driveline of the car. The fuel cell will be inspected and sealed. Must have rounded and sealed rear fuel cell protector.
- N. Fuel cell height from the ground is 5" when measured with a ride height of 2" (measured on the left side with the driver).
- **O.** Front spindles must be attached to the frame using two (2) tethers per spindle. Tethers must meet MRS specs. Valid for a maximum of 4 years from date on tether.
- P. Front suspension will be independent only. No straight axles.
- Coil Springs: All downward chassis movement while the race car is in competition must be limited only by the normal increasing stiffening of the coil springs or the bottoming of the chassis directly against the racetrack surface whichever occurs first.
   Any device or procedure that in the judgment by a MRS Official that attempts to compromise the above will not be permitted. This refers to, but is not limited to, Bump stops, Coil binding, chain loading devices, etc.
- 2.) ) Only one (1) Spring Rubber per front (LF / RF) Coil-Over. Spring rubber must be rubber material only. No metal material or mixed material.

**2.) Front Sway Bar:** The front sway bar must be used for the purpose of anti-roll only. The front sway bar must rotate freely in its mounts. The movement of the front sway bar must not prevent or restricted beyond that of the normal use of anti-roll bar. Only magnetic steel front sway bars are permitted.

- **Q.** There will be no chassis adjustment controls in the car such as hydraulic weight jackers being attached to the coil springs or sway bar etc.
- R. Shock Rule: Only Non-Adjustable or Single Adjustable Shocks are allowed. No remote or external reservoir shocks allowed. No remote or electronically controlled shocks allowed. Bump stops and/or any other travel limiting device applied at any time on the shock shaft, body or heims are not permitted. MRS Officials will have final decision on what is considered travel limiter device.
- S. No Carbon Fiber or Titanium parts allowed on chassis or interior of race car.



## 1.5. ENGINES:

**A.** All engines will be bubble tested for cubic inches and tested for compression ratio.

Engine must be tested before car is allowed to practice at first race event attended. This procedure will determine cubic inches and compression ratio. Engine will be sealed at two (2) drilled intake bolts.

#### Testing procedure:

- 1.) Motor must be at air temperature.
- 2.) Battery must be fully charged.
- 3.) All spark plugs must be removed from motor
- 4.) Qty: 1cly intake & exhaust push rods & rocker arm must be removed. A MRS Official will state which cylinder.
- **B.** If in the event that a seal is broken, then engine must be retested and resealed before the race event. Engines are subject to testing by MRS Officials at any time.
- C. Dodge and Ford Motors must be preapproved by MRS Officials.
- D. Any stock or aftermarket small block.
  - 1.) No aluminum blocks.
  - 2.) No block lighting permitted.

**EXCEPTION:** Minimum lightening, as determined by MRS Officials will be assessed a minimum of 25lb penalty. Any lightening beyond the minimum as determined by MRS Officials may be assessed up to a 150lb penalty. The penalty will be dependent upon the severity of the lightening of the block.

\*Weight will be placed between the front and rear roll cage hoops, on the outer most part of the right-side frame rail.

#### E. Any intake allowed. (Exception: Budget Aluminum Head Rule)

- F. Any ignition allowed.
- G. No titanium or aluminum connecting rods.
- H. The maximum compression ratio on all engines is: 12:1. Any engine exceeding 12:1 will be accessed a weight penalty (TBD) by a MRS Tech Official. I.

Maximum steel engine valve lift: .725 Max with 0 Lash.

J. Maximum any 1" (inch) aluminum carburetor spacer allowed on all steel head engines

#### K. Ignition / MSD Boxes:

Only one (1) MSD 6ALN ignition box is permitted

Ignition box must be located on the right side of the driver's compartment and must be mounted in clear view.

- **1.)** 6 pin weather tight connector male and female plug is mandatory.
- 2.) See Section# 4, Illustration H1 for proper installation.
- **3.)** Only one (1) active ignition box allowed.

Additional boxes must be removed or capped before car participates in any on-track activity.

4.) MRS Officials may randomly pick cars and swap boxes before any race event.

- 5.) If you run a crank trigger, there must not be an ignition module located in the distributor. L. Any oil system allowed.
- M. Dry sump tanks must be fully enclosed.
- N. Oil coolers are allowed. The location of the oil cooler is up to the discretion of the MRS Officials.
- **O.** Mufflers are required at all events.
- P. Tri-Y headers are only allowed for 18° motors and must be purchased through MRS Series-. PN; Beyea Part# AM TY18S2 with a MRS Tag welded onto the header.



### 1.6. CARBURETORS:

#### All 390 carburetors will be checked with MRS Tech Official gauges for compliance.

- A. No matter what the temperature the carburetor is at, each carburetor must meet the specifications and dimensions. No Cooling of carburetors prior to testing allowed.
- B. All boosters in all carburetors <u>must</u> be safety wired with minimum .020 wire.
- **C.** All carburetors must have two (2) throttle springs.
- D. 390 carburetors for 23° aluminum head engines, or steel head engines that do not meet MRS stock steel head specifications.
  - 1.) Booster OD- .617
  - 2.) Bridge may be removed ID-.450
  - 3.) Booster length .500
  - 4.) Booster installed height .467 E. No tapering of ID or OD of boosters.
- F. Booster leg must remain unaltered.
- G. Throttle shafts must measure .197 including unaltered throttle plates.

## 1.7. 18° ALUMINUM HEAD ENGINES:

- A. MRS Weights.
- B. Engine specs as per MRS Modified Tour type engine rules. For specifications see Section# 3-Reference: 3.A1.
- C. Must run an MRS Modified Tour legal bridged booster 390 carburetors. For specifications, see <u>Section# 3, Reference: 3.A2</u>.
  NOTE: 18° Engines with NASCAR Legal Bridged Booster carburetors, Booster May be shortened to .500" No other alterations allowed.
- D. There will be no SB2 type cylinder heads allowed.
- E. Maximum any 2" (inch) Aluminum carburetor spacer allowed.

#### 1.8. 23° PORTED ALUMINUM HEAD ENGINES:

- A. 12 to 1 compression ratio. Minimum valve angle is 21°
- **B.** For specifications, see Section# 3, Reference: A1.
- C. If any 23° engine should fail to meet the 12 to 1 compression test, it will be allowed to compete, but must run a MRS legal bridged booster 390 carburetors as described in Section# 3, Reference: A2
- D. 390 open-booster carburetors are per MRS rules, see above Section#: 1.6. Carburetor Letters: A thru G.
- E. Maximum 1" (inch) Aluminum carburetor spacer allowed.

## 1.9. Cast Iron Head / Carburetor Options:

- A. Cast iron GM Bow-Tie Part# 140-11034, Part# 1248-0034, Part# 1248-0053, and DART Head Part# 105-100-20PF.
- B. Stock heads: <u>See Section#: 1.12. Stock Cast Iron Head Rule letters: A thru P.</u> May use any 4-barrel Holley carburetor.
- **C.** Any cast iron heads that exceed the Dart head rule will be required to run a 390 cfm Holley open-booster carburetor. MRS legal Holley 390 cfm carburetor max. Also, you will lose the 50lb weight break.

#### 1.10. DART STEEL HEAD RULE:

- A. Must use dart steel head part# 105-100-20 PF to be eligible to use the open carburetor rule.
- 1.) **Open Carburetor Rule:** Means any 4150 Holley stock appearing carburetor, may have aftermarket metering blocks.
- B. The Dart Head Part # 105-100-20 PF must remain in box stock condition with the following Exceptions:
- 1.) Combustion chamber may be polished.
- 2.) Heads may be resurfaced as required.
- 3.) Valve sizes: 2.055 max on Intake / 1.625 max on exhaust. Stainless Steel Valves Only.



4.) Maximum valve angle is 21° No tolerances.

#### 5.) Stage# 1 Intake Port work allowed:

Intake Port may be gasket matched to a max of 1.380 in width 2.380 in height.

Intake port may be worked from the intake flange of the head inward as follows:

Port floor 1.700 in from flange max depth.

Push Rod side of port 1.700 in from flange max depth. Roof of port 1.700 in from flange max depth.

Divider wall side of port .750 in from flange max depth.

Port width at Push Rod Pinch area will be 1.120 max width measured from the un-ported area of the divider wall

Max means the limit but can be less than the max limit.

No material shall be added to any part of the head including, but not limited to the roof and the push rod area.

#### Absolutely No tolerances beyond the max limit. Any work beyond the max limit will be deemed illegal.

6.) Stage# 2 Exhaust Port: Must remain stock as cast, with the exception being:

You may work the area below the bottom cut of the valve seat into the bowl area 1 inch, 360° max limit.

**Example:** Bottom cut of 45° seat in toward valve guide 1 inch, 360°. The roof and side walls of the exhaust port from exhaust mounting flange of head .950 minimum in towards the short side radius must remain untouched as cast.

#### Max and minimum being the limit. Any work done outside the limit will be deemed illegal.

Any fully ported steel head engines beyond Stage# 1 and/or Stage# 2 must weigh 6.9lbs per cubic inch and there will be No 50lb weight break allowed. Same weight of 6.9 is engine compression is over 12:1.

- **C.** Any intake may be used with these heads. Normal intake porting is allowed, but intake must remain in its original exterior dimensions.
- **D.** Steel type stock replacement valve seats are allowed when replacement is needed.
- E. Work allowed on the valve seat, ledge or factory undercut area of Intake bowl is as follows: No angle cuts, metal removal or enlarging of ports allowed below the top of the valve seat that would allow the gauge to drop below the seats as follows: 250 + 1/32" from top of the valve seat on intake of dart heads. F. Measurements will be strictly enforced using MRS Go and No-Go gauges.
- **G.** Intake 1.875" OD of gauge on intake. See Section 4, Illustration E1 & E2 for angles and measurement of Go and No-Go gauges.
- H. Stainless steel valves only.
- I. 11/32 Valve stems only.

#### 1.11. Dart Aluminum Head Rule:

- A. All Dart Aluminum spec heads Part# 11510020PF will be serial numbered by MRS You cannot run an open carburetor on any Aluminum Head package other than the MRS serial numbered ones.
- **B.** Approved Intakes are as follow: Dart# 4411000, Bill Miller Product# 061040 cc, and Edelbrock PN# 2814. ALL INTAKES ARE TO BE BOX STOCK
- **C.** Aluminum Dart Spec Heads will only be allowed to use stainless steel valves on both intake and exhaust. Valve jobs and combustion chambers are to be left to the engine builder.
- D. Valve Sizes: 2.055 Intake Max / 1.625 Exhaust Max
- E. All Valves will be 11/32 max stems
- F. Head may be surfaced Flat cut

#### 1.12. STOCK CAST IRON HEAD RULE:

- A. GM Stock Cast Iron Bow Tie Heads will be subject to a runner volume test: 190 cc maximum.
- B. Any intake may be used with these heads. Normal intake porting allowed; intake must remain in original exterior dimensions.
- C. Heads may be milled, angled or straight cut, both on the block and on the intake surfaces.
- D. All manufacturers' identification numbers must be visible and unaltered on cast iron heads.
- E. Combustion chambers may be polished; cc'd but must maintain stock shape and appearance.
- F. Any intake and exhaust valves allowed: Intake 2.055 maximum diameter / exhaust 1.625 maximum diameter.
- **G.** Flashing may be removed from heads anywhere except in the intake and exhaust runners and ports.



- H. No removal or smoothing of metal will be allowed in the intake or exhaust runners.
- I. Ports and runners cannot be reworked in any way to increase flow.
- J. Reworking the heads in any way to match intake and exhaust manifolds will not be allowed.
- K. Any valve guides. Valve guides must be left at stock height in the intake and exhaust ports and no grinding or smoothing in this area will be allowed.
- L. Work allowed on the valve seat, ledge or factory undercut area of the heads is as follows: angle cuts, metal removal, or enlarging of the ports allowed below the top of the valve seat that would allow the gauge to drop below the seats as follows:
- 1.)  $\frac{1}{2}$  + 1/32" from top of the valve seat on intake of Chevy Bow Tie Heads.
- ½" + 1/32" from top of the valve seat to the top of the gauge on exhaust of Bow Tie Heads. M.
   Measurements will be strictly enforced by using MRS Go & No-Go gauges.
- N. Exhaust: 1.350" OD of the gauge on exhaust.
- 0. Intake 1.718" OD of gauge on intake. See Section 4, Illustration G1 & G2 angles & measurement, MRS Go & No-Go gauges.
- P. Any Cylinder head that you want to race with, must be pre-approved by a MRS Official.

#### 1.13. DRIVE TRAIN:

A. Aftermarket brakes are allowed. No titanium or carbon fiber components allowed. Conventional braking systems only. No enhancing devices or electronics in braking system, Exception brake safety kill

#### switch.

- B. Any brake pads.
- C. Brake bias control is allowed.
- D. Steel spindles only
- E. There will be no oil filled hubs allowed.
- F. Wheel bearings must be tapered cylindrical (Timken Type) bearings. No ceramic bearings are allowed anywhere in the car.
- G. Magnetic steel drive shafts only. 2-inch minimum OD.
- H. Transmissions must meet the following requirements:
- 1.) A standard production transmission, which is available through regular dealers.
- 2.) The only aftermarket transmissions allowed will be the Jericho Part# JEP 2SP or Richmond Part# RIC70200. These aftermarket transmissions may not be modified. A minimum weight of 50lbs (dry) will be enforced. No titanium or carbon fiber parts allowed. No ceramic type roller bearings allowed. No overdrive type transmissions allowed. It is ok to machine the bottom of transmission case for clearance.
- 3.) A maximum of four (4) forward gears.
- 4.) Minimum of two (2) forward and one (1) reverse gear, must be in working order.
- 5.) No automatic or semi- automatic transmission allowed.
- 6.) No transmission will have a gear ration between 1.00 and 1.15) MRS Officials must approve all transmissions.
- I. A multidisc clutch is allowed. Clutches must have steel discs. The clutch, pressure plate and flywheel must be bolted to the end of the crankshaft, No ram couplers, No direct drives.
- No carbon fiber or composite materials. Minimum 5<sup>1</sup>/<sub>2</sub>" clutch. Pressure plates may be aluminum.
- J. No traction control allowed. If caught; your loss total points to date, plus money won for that event.
- K. Aftermarket rear end allowed. No titanium or carbon fiber parts allowed.
- Rear spur gear quick change only. 8" (minimum dia.) ring gear only. No ratchet-type or limited slip differentials. Spool

<u>only</u>.

- L. Only Steel wheels with steel lugs are permitted.
- M. 15" maximum width wheels.



### 1.14. TIRES:

- A. Only Modified Racing Series approved Hoosier tires may be used.
- **B.** Tires may not be chemically treated or altered in any way.
- C. Tires may not be stockpiled.
- D. All tires must be purchased at the track from the MRS authorized tire vendor.
- E. All tires will be inventoried by MRS Official at each race event and are subject to inspection by MRS Officials at any time.
- **F.** Only 2 Left side and 2 Right side tires can be purchased per event. <u>MRS reserves the right to change tire compounds and tire amounts for any unforeseen circumstances.</u>
- G. Tire Cost TBD each. Tire compounds will be determined per the race event.
- **H.** You must pay for your tires in the office trailer along with your registration for the event and give your pink receipt to the tire truck official before entering the tire corral, No Slip-No Tires.
- I. Two (2) people per team in the tire corral for a maximum of 10 minutes
- J. First race of the season or new teams entering during the season are eligible for eight tires, these tires can only be picked out one set at a time per order of tire draw. The second set can be pulled once all teams have gone through their rotation.
- K. Example. Eight (8) tires: two (2) M20 & two (2) M30 for the Race event, two (2) M20 & two (2) 2 M30 for your spare tire inventory. Hoosier or MRS Series may change tire compounds at any time.
- L. Tire inventory is registered to the car owner and car number.

M. All tires purchased <u>must</u> be scuffed prior to leaving the race track .Any tire(s) that are not scuffed (sticker tires) need to be returned to the tire truck until the next race MRS event you attend

. N. Cut Tire Policy: There will be no cut tire replacement slip unless it happens during qualifying.

1) Any/All damage or cut tires that are in question must be reported immediately after the heat race.

Tire must remain on the original rim and brought to the MRS trailer for inspection.

2) Any cut tire may be replaced with a new tire, but the tire must come from your race inventory.

for

#### **Tire Replacement Rules**

**a)** Any new tire must have a 12-lap scuff secession on it for the car to start in its original qualified position. If time does not allow for a scuff session the tire must be put on the front and stay on the front position the entire feature.

**b)** Any tire from the team's inventory (spare or practice) can be used, but it must be adequately scuffed for the car to maintain its qualified position, Tire will be inspected by an MRS Official for meeting the requirements of being adequately scuffed.

\* If in the judgement the replacement tire is not adequately scuffed and there isn't time allowance for a scuff session, then it will be treated as a new tire and will need to be put on a front tire position and remain there for the entire feature.

**O.** Tires may not be changed during the feature unless the original tire is flat or there is wheel damage that creates a safety issue, this must be witnessed by an MRS Official.

The MRS Tech Officials will monitor this situation and their decision will be final. If the car in question has returned to the track, and the MRS Tech Officials and/or Race Director finds that there's no problem with the tire or wheel than the team will be notified that the car will receive a one (1) lap penalty per tire, this will be assessed at the end of the race.

- P. Practice tires: (Due to the current tire situation Practice tires may be limited at any point without notice) At the beginning of the season of the registered car's first race will be allowed to purchase four (4) practice tires, two (2) rights and two (2) lefts after the first attend race event you will be limited to two (2) tires per event for practice. All practice tires will be recorded as such for the registered car tire inventory card. Practice tires maybe rolled into your spare-inventory with a maximum quantity of four (4) tires: two (2) rights & two (2) Lefts.
- Q. You can qualify on any 4 tires from your inventory but must start the feature on a minimum of 3 (2-M30 1-M20) tires purchased the day of the event. TIRE INVENTORY SHEETS must be turned in before heat races !



### 1.15. SAFETY REQUIREMENTS:

- A. Each competitor is solely responsible for the effectiveness of all safety equipment used during a given event.
- B. All cars must have a steel roll cage.
- 1.) Must use a minimum of 1  $\frac{3}{4}$ " OD x .090 tubing.
- 2.) Four horizontal bars are mandatory on the driver's side door, three on the passenger's side.
- 3.) Roll cage must be welded securely to the frame.
- 4.) Threaded pipe, pipe fittings, and lap weld pipe are not permitted.
- 5.) All bars near the driver must be padded with a fire-resistant padding. No rubber foam padding allowed.
- 6.) Blewett Bars: Must have Two (2) vertical & one (1) horizontal 1½" OD X .095" minimum wall thickness. 1¾" OD X .095 wall thickness is highly recommended.
- C. All front and rear firewalls, as well as the drive shaft tunnel must be fully enclosed and made of magnetic steel (.024 min).
- D. Anti-Intrusion roof plate is mandatory for fiberglass roof cars. It's not required, but highly recommended for steel roofs. Please reference to <u>Section# 4, Illustration A1</u>
- E. All cars must have an aluminum racing seat. The seat must be bolted to frame with six (6) %" bolts with minimum of 1" OD flat washers .085 minimum thickness % USS Lawson "Tuff Torq", or equivalent.
- F. Four (4) bolts on the floor of the seat and two (2) on the back-seat frames must be mounted securely to the roll cage.
- 1.) Right side headrest is mandatory.
- 2.) Choice of left side headrest, or auxiliary net is mandatory.
- **G.** Must have a minimum quick release 5-point safety belt with a 2" minimum Lap belt and 2" minimum shoulder harness to accommodate an approved head and neck restrain. These must be securely mounted. Belts must not be more than three (3) years old. No visible wear or tears allowed.
- H. A window net is mandatory and must be of web or mesh style. The net must be secured to the roll cage with two steel rods or bar with top being of quick release design and must fall in a downward direction when released. All cars must have an arrow on the roof, lined up with the top latch for the window net release. Latch must be forward of the driver and accessible. Condition of window net and release must be approved by MRS Officials.
- I. Steering wheel centers must be padded. Steering wheel stop is mandatory on steering shaft below top mounting point. Wheel quick release hub is mandatory. Subject to MRS official approval.
- J. A fire suit is mandatory and must be SFI-5 rated. It must be Nomex material, double-layer, clean and in good condition.
- K. SFI rated fire retardant gloves and shoes are required anytime you are on the racetrack
- L. A full-face helmet is mandatory and must carry at least one (1) of the following certifications:
- 1.) Snell: SA 2015
- 2.) Snell: SAH 2015
- 3.) FIA: 8860-2015
- M. Hans, Hutchins II, Hutchins Hybrid Simpson, or Necks Gen devices are the mandatory head and neck restraints and must be SFI certified. Head and neck restraints are mandatory whenever a driver is on the racetrack.
- N. On board fire suppression system is mandatory. A fully charged fire extinguishing pressurized cylinder must be securely mounted with a visible operating pressure gage and a manually controlled push or pull knob within the drivers reach. This cylinder must contain a minimum of five (5) pounds of fire extinguishing agent visibly designated on the label of Halon 1301 or DuPont FE-36. System must use steel, copper, or aluminum lines. A minimum of two (2) nozzles One (1) nozzle must point in driver's compartment and one (1) must through firewall pointed towards engine compartment.
- O. No fuel lines in driver's compartment.
- P. Fuel tanks must be vented to the outside of the body through the rear panel.
- **Q.** Fuel shut off, must be marked as ON & OFF and be in reach of driver. Also, must be accessible to safety crews. A fuel shut off indicator with an arrow on the passenger side window ledge is required. Arrow to lineup with shut off valve.
- R. Steel or aluminum fuel filters only.
- S. No electric fuel pumps.
- T. Two throttle springs are mandatory and subject to MRS approval.
- U. Toe strap on foot throttle.



### 1.15. SAFETY REQUIREMENTS: (Continued)

- V. All added on weights must be securely mounted outside the driver's compartment with two (2) grade 5 or 8 3/8 bolts. All added weights must be painted white and marked with the car number on them.
   If added weight comes off during any race, the weight may not be added back onto the car to make minimum weight unless approved by MRS Officials. No added-on weight will be below the bottom of the frame rails.
- **W.** Battery is not allowed in the driver's compartment and must be securely fastened down. Positive terminal must be covered. Battery disconnect switch must be labeled ON & OFF and accessible to safety crews from outside the car.
- All cars must have a driveshaft loop at the front and rear of driveshaft positioned within 12 inches of each U joint.
   Loops must be steel plate ¼" x 2" wide and be of a full 360°.
   No drilling holes or lightening material of driveshaft loops. This will be monitored by MRS Officials for compliance.
- Y. Drive shaft must be painted.
- **Z.** All cars must have a radiator overflow can. Radiator overflow hose will exit out the right rear tail cover with a 45-degree fitting at the end of the hose pointing upward. This is mandatory.
  - 1) Same applies for pressurized systems, you must exit out the rear tail panel with a 45-degree fitting pointed upward.
    - 2) Purposeful disconnection or redirection of overflow with the intention of concealing any fluid loss will result in a disqualification.
- AA. All cars must have working water temperature and oil pressure gauges.
- BB. No antifreeze allowed. Water or a non-antifreeze coolant type is allowed.
- CC. Four (4) wheel hydraulic brakes in working order are required.
- DD. Two-way radios: One (1) scanner and/or radio to be used to monitor Race Control per team is mandatory.
- EE. Mirror is allowed in the middle of the car in front of the driver.
- FF. One (1) 4" Peep mirror is allowed.
- **GG.** For safety: Front spindles must be attached to the frame by using two (2) tethers per spindle. Tethers must be in good condition and meet MRS specs. Only Valid for 4 years from date on the tether.

#### 1.16. FUEL:

- A. Sunoco Race Fuel is the "Official Fuel", and New England Racing Fuel Inc. is the approved "Fuel Supplier" for the MRS.
- B. Sunoco Standard Purple 110 Leaded or Sunoco Supreme Blue 112 Leaded are only fuels allowed at all MRS events.
- **C.** The "Official Fuel" will be supplied onsite at all MRS events and must be used for practice, qualifying and the race exactly as supplied by NERF. You will be fully responsible for all fuel purchased in bulk passing a fuel tech inspection. **D.** MRS has the right to sample a competitor's fuel at any time during the event.
- E. Fuel samples may be impounded for testing to the manufacture's specification.
- **F.** 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 per the rulebook.
- G. Any blending and/or mixing of fuels either of or not of the approved fuels is not permitted.
- **H.** No MTBE, ethers, alcohols, ethanol's, nitrogen, nitro compounds, performance additives or any other oxygenates may be blended/mixed or introduced into the fuel supply either at the fuel cell or upstream in the fuel system.

# Note: All competitors must prominently display a Sunoco Racing Fuel patch on his/her driving suit and displays Sunoco Racing Fuel decal on both sides of the car in a location specified by MRS Series.



### 1.17. IDENTIFICATION AND LETTERING:

- A. All cars must be numbered. All numbers must be registered and approved by MRS.
- B. Numbers must be affixed on both doors and on top of roof.
- C. Numbers must be 18" minimum height.
- D. Roof number must be read from the passenger side of the car.
- E. Car number must be affixed on the right rear and on the right front.
- F. All car numbers must be visible and legible.
- **G.** All numbers will be distinctly contrasting to the color of the car for legibility.
- H. Maximum of two-digit numbers, if your number is a duplicate than it must have letter(s) after the number.
   Example: Car# 10 next registered car will be number as car 10ct etc.

All numbers will be subject to visual approval by MRS Officials.

- J. All cars must be neatly painted. No obscenity or other derogatory items will be allowed.
- K. All cars must display contingency sponsors stickers to be eligible for contingency awards.
- L. All cars must run MRS roof sticker and A-post stickers to be eligible for event purse and point fund monies. Any team without a MiltonCAT MRS roof sticker and a-post stickers will have 10% of purse money deducted.
- M. The MiltonCAT MRS roof sticker must be in place at all events to be eligible for season point fund.

Non-Safety or Non-Performance items may be eligible for a 1-week grace period, this will be at the discretion of MRS Officials.

Any interpretation or deviation of these rules and procedures is left to the discretion of the Modified Racing Series Officials and Modified Racing Series Inc. MRS decisions are final.



## Modified Racing Series Race Procedures Section#: 2, Items#: 2.1. thru 2.39.

## <u>2.1.</u> <u>SAFETY:</u>

A. If your race car is immobile, for any mechanical reason, please always use hand signals.

1 ) If this happens while you are on the bottom of the track and you know you will not make it off the track, pull to the infield.

2) If you are on the topside of the track, please exit to the pits.

3) If your car is damaged and requires wrecker assistances, do not get out of your car.

Remain in your car unless you are requested to get out or if you feel you are in immediate danger, (i.e., fire, etc.) 4) Failure to remain in your car will result in a fine.

- **B.** A full fire suit made of double layered, Nomex material, clean and in good condition is mandatory.
- **C.** Fire retardant gloves, shoes, helmet, and head neck restraint are mandatory and must be worn during all practices, heat races, consolation races and features.
- D. All safety items must be SFI approved where applicable.
- E. Check to make sure that your steering wheel is locked into place, seat belts are secured, and window-net is up and secured.
- F. Check fuel caps for tightness.
- **G.** Master shut-off switches must always be full working condition, disabling of master switch with intent will result in fines and penalties.
- H. Empty any overflow bottles before practices, heats, and features.
- I. Cars leaking any fluids will be black flagged and must pit immediately.

#### 2.2. POINT SYSTEM:

#### There will be two-point systems for the MRS as follows:

- 1.) Driver Points Any driver competing in MRS events will earn points based on their finishes for (any) car driven.
- 2.) Owner Points A owner of a car competing at any MRS event will earn points based on where his/her car finishes.

Award of Points for Feature Events			
Finishing Position	Championship Points	Finishing Position	Championship Points
1	50	14	22
2	46	15	20
3	44	16	18
4	42	17	16
5	40	18	14
6	38	19	12
7	36	20	10
8	34	21	9
9	32	22	8
10	30	23	7
11	28	24	6
12	26	25	5
13	24	26	4

#### Award of Points for Feature Events



#### Award of Points for Heat Race Events Finishing Position Championship Points

1	6
2	5
3	4
4	3
5	2
6	1

## 2.2. POINT SYSTEM: (continued)

- A. All monies paid by MRS will be paid to the registered owner of the car.
- B. All monies will be paid by check and mailed to the registered owner following each race event.
- C. Point fund monies will be paid to the top fifteen registered owners based on season ending points (To be eligible they must attempt to qualify for all events.
- **D.** The driver championship will be the total of all points issued to a driver regardless of number of cars he/she has driven during the MRS racing season.
- E. Twenty-five (25) attendance points will be awarded to each owner who registers and/or attempts to qualify a car for any MRS point's race.
- F. Car and Driver must be registered and signed-in before car can go onto the track for practice at each race event.
- G. Owners must notify the MRS Series Race Director if there is to be a driver change.
- H. All Drivers must hold a current Driver's license.
- I. Driver change notification must be done when the car is registered/signed-in for race event and before car goes out for practice. If a driver change is made, then the car will start last in the feature event.
- J. The driver that starts the feature will receive drivers' points.

#### 2.3. HANDICAPPING:

- A. Only registered owners or drivers may draw for position to determine heat line-ups at each event.
- B. Heat Races: Heat races are lined up by draw.
- **C.** Consolation race line-ups will be heads-up from the heat results. Starting positions in the feature for qualified consolation race drivers will be heads-up from consolation race results.
- **D.** Previous Event Winner: The previous feature winner will start in the last qualified position for the feature if the driver finishes in a qualified position following his or her heat race, will start no further back than18th position.
- E. Twenty-four (24) cars will start the feature, unless notified otherwise. Three (3) heats with five(5) cars to qualify and a consi with three(3) cars to qualify. There will be two (2) provisional available. See provisional rules for eligibility information.
- F. MRS Officials reserve the right to adjust the number of cars to qualify thru the heat and consolation race(s).

#### 2.4. PROVISIONALS:

**A.** For the first three (3) race events of the season, all registered Owner's will be eligible for one (1) provisional based on the previous year's owner's points, positions one thru twenty (1-20).

At the fourth (4th) race event or after three (3) completed race events, registered owners in current year's owner's points, positions one thru twenty (1-20), will be eligible for three (3) Provisionals throughout remainder of the season.

B. An owner will be allotted three (3) Provisionals after the first three (3) completed races in the season.



- **C.** The highest owner in current Owners Points that attempted to qualify but does not finish in a qualified position in the consolation race, will have the option to use a provisional at that time. If any of the eligible provisional cars qualify in the consolation race, then the provisional will go to the next eligible owner in points, up to the 20th place in Owner points at the given event.
- **D.** If all eligible provisional cars (1-20 in Owners points) qualify in the heat or consolation race, then the provisional will go to the highest finishing driver, not qualified, in the consolation race finish.
- E. Provisionals will not be confirmed until after the consolation race has completed and post-race tech has been completed.
- F. If an owner chooses to take a provisional and is then unable to race, the owner will be charged with using a provisional, unless otherwise notified differently by an MRS Officials.
- **G.** If an eligible driver in owner series points starts the consolation race but is unable to finish the required distance due to mechanical failure or was involved in an accident; than that driver will/may be eligible for his or her provisional.
- **H.** The provisional will only be issued if the driver attempts to complete all the required laps at race speed, if the Modified Racing Coordinator observes that the driver did not maintain minimum speed due to sandbagging etc. than the next eligible driver will receive the provisional.

#### 2.4 PROVISIONALS: (continued)

I. If the driver inline to receive the provisional is unable to finish the consolation race due to visible damage and/or mechanical failure, then that driver will be allowed his or her provisional. This must be witnessed by an MRS official on the racetrack and/or verified from a MRS official in the pits for the driver to receive the provisional.

\*The series objective is to provide our fans with authentic racing not riding around at half speed, as in saving tires etc.

#### 2.5. CHANGES/SCRATCHING:

- **A.** If a car is going to scratch from a line-up, the owner or driver must notify an MRS handicapping Official, and that person must initial the official line-up sheet.
- **B.** A team may race one (1) car at any given event. No back-up cars will be allowed.
- C. No number changes will be allowed after qualifying has begun.

#### 2.6. HEAT AND CONSOLATION RACES:

- **A.** Cars that are not ready to start their heat due to legitimate mechanical issues can go to the consolation race to qualify. If this occurs, the car must start the consolation race in last position.
- **B.** Cars may be allowed to leave the track and return during any heat or consolation race providing the car has a legitimate reasoning for exiting. If the car is safe and does not go down a lap or more, you may re-entry the racetrack.
- **C.** Any car leaving the track during a heat or consolation race will be placed at the rear of the field if it returns to finish the qualifier.
- D. Maximum number of cars to start a heat race will be fifteen (15). MRS Officials reserve the right to adjust the number of cars in each heat and the number of cars that qualify.
- E. Maximum number of cars to start a consolation race will be fifteen (15). If there are more than fifteen cars required to run the consolation race, then there will be two (2) consolation races with two (2) from each to qualify.
- **F.** If there are 20 cars or less, it is up to the discretion of MRS Officials to run a consolation race or not. If no consolation race is run, unqualified cars will be lined up according to their heat finish.
- G. MRS Officials reserve the right to adjust the number of cars to qualify thru the heat and consolation race(s).

#### 2.7. PRE-GRID (LINEUP AND SCALING):

- A. All cars must meet Modified Racing Series weight rules. All cars will be weighed before feature events, time permitting.
- **B.** There will be a fifteen (15) minute warning before you are called to the scales. At the end of the fifteen (15) minutes all teams are to have their cars on the ground and ready to move to the scales when an MRS Official calls them.



- **C.** Teams will be called to the scales in the order of where they are starting in the feature. Teams must wait for their car to be called before going to the scale.
- **D.** Regular pre-race work on a car must be completed when you're called to the line-up.
- E. If a car is not able to scale when called than a team member must notify an MRS official. If it is a legitimate problem, the officials will observe the work and you will not lose your starting position.
- F. One team member will be allowed to touch the car as it sits on the scales. No pushing down on car when on scales.
- G. If a team does not go to the scales when called, you will forfeit your spot and must start at the rear of the field.
- H. Each car will have two (2) chances to make weight. If a car fails, these two (2) chances you will start in the rear of the field. You are still required to meet weight specifications.
- I. Once a driver is secured in his/her car, only one (1) person will be allowed with the car.
- J. If any work is done to the car other than air pressures without an MRS official present, this may result in the car being placed to the rear of the field in the starting line-up.

#### 2.8. SPOTTERS:

- A. All race teams will have one (1) spotter that is designated for the Spotter Area and signed in with Series Officials.
- **B.** Race teams are responsible for all communication operations and will be expected to have the proper equipment in working order, before and during a given event.
- **C.** Spotter must hold a valid Modified Racing Series Crew Member License. Spotter must have their car number in plain site during race events.
- **D.** All spotters must have two-way communication to the driver as well as the capabilities to hear officials on the race channel. All teams must provide the spotter with a scanner for this to happen.
- E. All cars must have one spotter in the designated area with radio and scanner for heats, consi and features.
- F. There will be a roll call after the driver's meeting to verify that all cars have a spotter.
- **G.** It is the spotter's responsibility to notify the MRS Official of any communications problems with his or her driver.
- H. If a driver does not respond to a request made by officials within 2 laps, they will be moved to the rear of the field.
- I. Cell phones, tablets and/or any other communicating devices, other than the approved two-way radios and/or scanners, is prohibited from being used by the spotter while the race cars are on the track for any practice, heats, consi and feature.
- J. Any misconduct in the spotter's area by a spotter will result in the spotter being removed from the spotter's area and the car in which they are spotting for will be black flagged and disqualified from the race. Probation and fine will follow for the spotter. Misconduct will be determined by MRS Series Director.

#### 2.9. SCORING:

- A. Each car must be equipped with an AMB transponder.
- **B.** Transponders are limited and can be rented. Rental fee is \$50.00 per event with a valid U.S. state driver's license. This fee is non-refundable. Transponders may also be purchased form the Racer's Depot or AMB.
- C. Transponders must be mounted 12" inches back from the center line of the rear axle on the right rear frame rail.
- D. When the caution flag comes out the line-up reverts to the last completed green flag lap.
- E. The last completed lap will be the one that is shown on the electronic scoring system in which all cars have crossed the start/finish line.

## 2.10. PACE LAPS:

- A. Pace laps, with or without the pace vehicle, will begin at the start/finish line when the field gets one to go. The front row cars will hold their RPM until the flagman waves the green.
- **B.** On all starts when the flag man gives the one lap to go before the green there will be No swaying back and forth.
- **C.** Neither front row car will jump on and off the gas causing the cars to bunch up or crash behind them. If this happens, the car(s) on the front row causing the accident will start dead last behind all accident cars, even those cars that had to pit and returned to the racetrack.



D. The inside row will not crowd or run the outside row of cars up high or out of the racing groove. The front row will lead the field down the middle of the backstretch and into turns 3 and 4 running side by side until the flagman displays the green flag.

## 2.11. TAKING INITIAL GREEN FLAG / STARTS:

- A. If you do not take the initial green flag of any event, you will be black flagged and not scored. Coming out of the pits and getting onto the tail end of the field as it takes the initial green is acceptable if directed to do so by a series official.
- **B.** All cars must maintain their lane before the start/finish line on the initial green flag of any race.
- **C.** Only the pole sitter will have lane choice on the initial start and all restarts of the feature only. Pole sitter will choose preferred lane on the front stretch prior to the star/finish line when receiving the one to go signal. Heat and consolation races will not have lane choice at any time.
- **D.** The first non-qualified car of that evening's race will be the alternate car. The alternate car has the option to be completely ready to compete and have his/her spotter standing with the spotter official as the qualified field takes to the track.
- E. If a qualified car fails to take the track and does not take the initial green, the alternate car will be allowed to enter the track at the tail end of the field as the field prepares to go green.

## 2.12. STARTS / RESTARTS:

- A. The Flagman will control all starts. The front row MUST maintain their pace until green flag is waved.
- **B.** On all starts and restarts, drivers will double up and receive the one to go at the same time, unless notified differently by the MRS Race Coordinator.
- **C.** On restarts only, passing may occur as soon as the green is waved. Cars passing before will be penalized two (2) positions per car passed.
- **D.** If car(s) are not up to speed, it will be the race director's option to start these cars at the back of the field. **E.** No pushing the car in front of you.

## 2.13. PASSING FLAG / LAPPED CARS:

- **A.** Cars that are shown the passing flag will go to bottom of the track and stay down. Giving the leaders respect and a racing lane. The leaders, as stated, refers to all lead lap cars.
- B. If a car does not respond within two laps of receiving the lap flag, that car will receive the black flag.
   The driver will pull into the pits for consultation with an MRS Official. He/she may then be allowed back out on the track. C.
   If the same lap car continues this, a second black flag will be flown, and the driver will be disqualified from the event.
- D. After one (1) completed lap, lapped cars will be moved in their order behind all lead lap cars.
- E. Cars that are slow or being lapped repeatedly may be asked to park for the remainder of the event. The black flag will be shown indicating that the car is to safely exit the racetrack by either pulling into the infield or pit area for the remainder of the race.

## 2.14. YELLOW FLAG:

- A. Cars will not race back to the start/finish line at any time.
- **B**. Drivers are required to get in single file **immediately** and stay in their running order unless directed by race control other wise. **C**. Position after Caution:
- 1.) Cars will be lined up according to their positions on the last completed green flag lap, By the computer scoring system.
- 2.) Caution cars and cars that leave the racetracks that are on the lead lap and return will be lined up at the rear of the field ahead of all lapped cars. Officials will check the lineup and adjust as needed.
- 3.) If a MRS Official verifies that you stop or spin to avoid an accident and didn't contact another car, you will be allowed to retain your position that you were running in according to the computer scoring system.



- 4.) Any car that's stops and needs assistance to rejoin the field will be sent to the rear. Unless car(s) were directed to stop by an official, if this occurs, race control will communicate to the spotter and you will retain your position.
- 5.) If car (A) spins car (B), car (A) will be put to the rear of the field and car (B) will be put in front of car (A) at the rear of the field. Both cars will be positioned at the tail end of cars running on the same lap.
- **C.** If a car is the cause of three (3) caution flags, by their own doing, the car maybe directed by race control to withdraw from competition at such time.
- **D.** Any car that purposefully engages in any altercations, which result in a yellow flag being displayed will be sent to the rear and may be disqualified at the Race Director's discretion.
- E. Single car spins without contact or involvement of other cars will be considered quickie yellows. Once the line-up is reset in accordance with electronic scoring, racing will resume. Pitting will be allowed, but no courtesy laps will be given for the pitted cars.

#### 2.15. INTENTIONAL YELLOW FLAG:

**A.** Any car that draws or creates a caution intentionally will be penalized one (1) lap.

### 2.16. RED FLAG:

- A. When the red flag is displayed, all cars will stop immediately when safe to do so.
- B. There will be no moving on the racetrack unless so directed by an official.
- C. When the flagman deems that it is safe for the cars to move, he will throw the yellow flag and at this time cars may pit.
- D. Any cars that were in the pits when the red flag was thrown can continue working on their cars.
- E. Any car involved in the red flag situation that are cleared to move by a track official or safety worker may do so.
- F. You are not to go to the pit area until the red/yellow or yellow flag is thrown.

## 2.17. ANY CAR SPEEDING BY THE ACCIDENT WILL BE PENALIZED:

- A. When the black flag is shown or waved to any driver, it must be obeyed immediately. The flagman may use this flag not only for a disqualification for a rule's infraction, but also when a car has some mechanical defect that might cause an accident or makes it dangerous for other driver.
- B. If a driver is shown the black flag you must slow down, keep clear of other cars, and pull off the track at the first opportunity
- **C.** If the driver does not obey the black flag in three (3) laps, the caution will be displayed and said car will be disqualified from the event.

#### 2.18. POSITION AFTER CAUTION / ONE CAR SPINNING ANOTHER:

- A. No matter what lap or how far from the start/finish line, if car (A) spins car (B), car (A) will be put to the last position and car (B) will be put in front of car (A)
- B. Cars (A) and (B) will be placed ahead of all lapped cars if you were on the lead lap.

## 2.19. RETURNING TO TRACK AFTER PITTING:

- **A.** Any car going to the pit area will be line-up based upon their position when returning to the racetrack. Race Control will notify your spotter of your correct line-up position.
- B. There may be re-entry under the green flag at tracks that can facilitate a safe re-entry. Re-entry following a caution period and/or prior to a restart will be at the discretion of MRS Officials.

#### 2.20. FREE PASS:

A. After the yellow flag is displayed and/or caution lights are illuminated yellow, the first eligible car that is one (1) or more laps down to the leader at the time of a caution will be given one (1) lap back.

1) The Free Pass Car doesn't need to pass the pace car; the lap adjustment will be made through the electronic scoring system.



- **B.** A car is not eligible to receive the "Free Pass" when, in the judgment of the MRS Officials, the car was involved in or the reason for the caution, or the car is in the pits, or the car has been penalized with a discretionary call, or casing an intentional yellow, or verbal abuse to an MRS Officials, or disobeying an MRS request.
  - 1) In the case of an MRS discretionary penalty (one lap penalty), it will be made known to the spotter at the time of the discretionary penalty is imposed.
  - The penalized car may not be eligible for the next "Free Pass" following the penalty but will be eligible for the 2<sup>nd</sup> (next) "Free Pass" when eligible. This can only happen if the "Free Pass" was issued to another competitor since the penalty.
- **C.** Transferring of the "Free Pass" will only occur when the first eligible car is not eligible to receive it, because of a MRS discretionary penalty, or the first eligible car is not in competition at the time the yellow flag was displayed. If this occurs, then the "Free Pass" will be transferred to the next eligible car.
- D. The "Free Pass" car must restart at the tail of the field behind all lead lap cars.
- E. If you receive the free pass you can't pit, if you pit you lose the free pass, and it will be transferred to the next eligible car.

#### 2.21. SINGLE FILE RESTARTS:

A. Cars not on the lead lap will go behind all lead lap cars after the completion of lap number one (1).

#### 2.22. AGGRESSIVE DRIVING:

- A. Officials reserve the right to use the single file restart policy at their discretion.
- **B.** Aggressive driving will be dealt with immediately by the Series Director during a given event. includes practice, qualifying and feature events.
- C. The decision will be the responsibility of the Series Director to determine the penalty to be served for the infraction.

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**D.** Aggressive driving would be considered continuous use of front bumper, chopping, blocking, etc. Any of these can result in you being sent to the rear of the field or disqualification, depending on the severity of the infraction and possible probation.

#### 2.23. REPEAT OFFENSES:

- A. A letter will be sent from the Modified Racing Series, signed by the Series Director.
- B. Teams receiving a letter will be put on probation for the next four (4) races that you are in attendance.
- **C.** Definition of Probation: All on and off-track actions or conduct by owners, drivers, and/or crew members will be closely monitored by MRS Officials.
- **D.** Violation of probation will result in further actions set forth by MRS Officials.

#### 2.24. DISQUALIFICATION:

A. This means no pay and no points for that night. Money for last place position will be put into the point fund.

#### 2.25. WEIGHING CARS:

- **A.** All cars are required to cross the scales before the heat races and feature.
- B. MRS Officials may randomly pick cars to be weighed after completion of each qualifying race or feature.
- C. If weighed after the heat race, then a (twenty) 20lb weight allowance for fuel will be allowed.
- **D.** Cars can be subject to be weighed at any time during a race event by a MRS Officials.



## 2.26. TIRES:

- A. The first five finishing positions and two random positions may have their tires broken down to be checked for any illegal substances or other issues.
  - 1.) The exact tires and how many to be checked will be determined by MRS Officials.
  - 2.) If tires are found illegal, penalties and fine will follow.

### 2.27. OFFICIAL FINISH:

- A. All race finishes will be Green-White-Checkered, if necessary.
- B. A race will be deemed official once the half-way mark (lap) of the event is reached and completed by scoring.

#### 2.28. RAIN OUTS:

- A. If all scheduled qualifying races cannot be completed due to weather or adverse conditions, then the feature line-up may be set by current owner's points.
- **B.** A feature race must reach half of its scheduled distance, and the lap must be complete to be considered official.
- C. If a feature event is rained out, the event may or may not be rescheduled per discretion of the racetrack or MRS Officials.
- D. If a feature event is rained out, not rescheduled, and can be considered complete then the finishing order will be determined by the last completed green flag lap. Accident or pit cars will be placed at the rear of the field in the order that they were running at the last completed green flag lap. Lap cars will be placed in the finishing order in the same manor.
- **E.** If all scheduled qualifying races didn't get completed and the race event is rescheduled, competitors will re-register and re-draw for their heat race qualifying positions.
- F. A feature race that is rained out while in progress and is rescheduled will restart on the last lap completed.
- G. Twenty-five (25) owner's points will be given to cars registered and signed-in at each rained out event.
- H. Tires may be impounded by MRS Officials if the race event is rained out.
- I. All cars must return in the same motor configuration as when the cars left the racetrack for a rain delayed event.
- 1.) All motor seals will be rechecked before any car is allowed on the racetrack for the make-up event.
- 2.) If the motor seal does not match, or unapproved changes have been made, you will restart in the rear of the field and depending on the severity of changes, you may not be permitted to compete, as in being disqualified.

#### 2.29. ENGINE CHANGES:

A. Engine changes are permitted. If an engine is changed at any time during a race event, then the car will start in the last position in the feature providing that you have qualified or there's less than a full field. Must still pass all tech requirements.

#### 2.30. PRACTICE AND TESTING POLICY:

- A. Track rentals and private practice sessions are prohibited.
- B. No practice or testing is permitted at any MRS track by any car/team within seven (7) days of a scheduled MRS race event.
   1.) Any approved pre-season practice sessions will be announced on the MRS Series Website,
  - www.themodifiedracingseries.com
- **C.** The penalty for unauthorized practice is that the car/team involved will be suspended from racing at the next MRS race event at that track.
  - 1.) Additionally; 100 championship points will be taken from both owners and drivers totals for the year.
- **D.** MRS Series tires may be purchased for practice sessions.
  - 1.) All practice tires will be recorded and cannot be used for MRS qualifying events or feature races.



### 2.31. MEMBER CODE OF CONDUCT:

- A. All drivers will race with the utmost respect towards, fellow drivers, race fans, series sponsors, race sponsors, Officials, host tracks, etc. Drivers will compete to the best of their abilities any time that competition is taking place. If, in the opinion of MRS Series Officials, any driver(s) are competing in a disrespectful manner towards drivers, fans, sponsors, etc. the driver will be disgualified from the race event.
- **B.** All MRS members shall not make (or cause to be made) a public statement and/or communicate, criticizes, ridicule, or otherwise disparages any MRS members (race teams, officials, host track, etc.)
  - 1) This includes disparaging comments as it relates to a person's race, nationality, age, sex, religion, etc.
  - Aggressive behavior, language, destruction of personal property and/or physicality towards any MRS Officials, the visiting host track and their employees or any race team members of any kind by MRS individual members, will not be tolerated at any time and will be subject to fines and suspension.
  - 3) This includes but is not limited to; at any series functions (racetracks, car shows, banquet, etc.), in print media, in social media, standard or internet broadcasts or any like forms.
  - 4) Each team will be liable for the actions of their team members, 24 hours prior to and following, on the property of the racetrack of which the event is contested.
  - 5) Any Driver who has a state issued driver's license that is under revocation or suspension will not be allowed to compete in any MRS sanctioned events.

## 2.32. FIGHTING:

A. Fighting and/or physicality of any kind will not be tolerated. Violators will be subject to fines and suspension.

## 2.33. ALCOHOL:

A. No alcohol will be allowed in the pit area. Violation of this rule will be subject to fines, suspension, and testing.

#### 2.34. PIT AREA:

A. Teams will be fined for any garbage, tires, parts, oil, etc. that is left behind in their designated pit area after completion of a race event.

#### 2.35. DRIVERS MEETING:

- A. All drivers and spotters are required to attend driver's meetings at each race event.
- B. If driver and/or spotter is not present when roll call is completed that driver will start at the rear of his/her heat race.

#### 2.36. ROOKIE OF THE YEAR ELIGIBILITY:

- A. For a driver to be considered a Rookie, the driver cannot have previously raced a full season/schedule in any modified touring series.
  - 1.) A driver cannot have participated in more than (6) Modified Racing Series events during any prior season.
- B. Driver must be properly registered. The form must be received by the Modified Racing Series on/or before March 1<sup>st</sup> of the current year. Driver must hold a valid Modified Racing Series license.
- **C.** The competing Rookies must be in good standing with the series, to be eligible to compete for Rookie status. MRS looks at the way you carry yourself throughout the season. The Rookie of The Year Award is awarded to the highest finishing registered Rookie in the final Modified Racing Series point standings.

#### 2.37. BANQUET:

- A. Team participation is required at the annual MRS banquet.
- **B.** The teams are required to have at least one licensed crew member attend if the car owner and or driver are unable to attend.
- C. Casual dress attire is required.



## 2.38. FINES

A. Any unsportsmanlike or disrespectful conduct towards any race teams, series officials, host ted racetrack property, hosted track employees, race fans, media etc. will all be fineable offenses.

The following have been deemed fineable offenses, resulting in a minimum fine of \$50 and may also be accompanied with a suspension, but are not limited to:

- 1) Leaving your pit area with garbage, tires, etc. (Pit Area Rule- 2.34.).
- 2) Alcohol in the pit area (Alcohol Rule- 2.33.).
- 3) Physical contact in an aggressive nature (Fighting Rule- 2.32.).
- 4) Public comments of a disparaging nature (Code of Conduct Rule- 2.31.).
- 5) Multiple infractions of aggressive driving (Repeat Offenses Rule- 2.23.).
- 6) Not adhering to a black flag directive in a timely manner (Black Flag Rule- 2.17.).
- 7) Purposeful contact on the racetrack or pit area, under the yellow flag (Yellow Flag Rule-2.14.).
- 8) Spotter conduct: violation of device rule, abusive behavior, etc. (Spotter Rules- 2.8.).
- 9) Illegal contact of the race car, by team member(s), on the series scales (Pre-grid Rules-2.7.)
- 10) Illegal contact of the race car, by a team member(s), after the scaling process has been completed and cars are lineup (Pre-grid Rules- 2.7.).
- 11) Entering the racetrack without the proper safety equipment in all on-track activities (Safety Rules- 2.1.).
- 12) Abandoning your race car, on the racetrack, at any time (Safety Rules- 2.1.)
- **B.** All individual members will be responsible for paying their fine (team members are responsible for themselves). as well as the team owner.
- C. All money received from fines will be placed into the current MRS year point fund.
- D. Finable violations are not limited to the above examples and all are final.
- E. Multiple infractions of finable offenses may result in suspension.

## 2.39. RULE INTERPRETATION:

**A.** If there is a disagreement or dispute regarding the meaning or application of the MRS Rule Book, the interpretation and application of MRS Officials at the event shall prevail and are final.

Any interpretation or deviation of these rules and procedures is left to the discretion of the Modified Racing Series Officials and Modified Racing Series Inc. All their decisions are final.



## Modified Racing Series References Section#: 3 Items#: 3.A1 thru 3.A4

### 3.A1. Cylinder Head:

**1)** All cylinder heads must be MRS - approved and all modifications must be submitted to MRS before any proposed modifications 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.

#### Sub-Section: 20D - 5.6. OEM Cylinder Heads:

1) The following cylinder heads are the only OEM cylinder heads that have been approved for use in competition and must run a MRS Bridge Booster 390 carburetor.

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

- A. At all MRS 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.
- B. Previously approved cylinder heads with manufacturer's identification and part numbers are listed below:
  - 1) Air Flow Research PN: AFR 215
  - 2) All Pro PN: AP 227
  - 3) Brodix PN: 3941075
  - 4) Chevrolet PN: 10051101
  - 5) Dodge W-7 Casting# P4532442B
    - PN: P5249958 Unportted
    - PN: P5249850 CNC ported
  - 6) Ford PN: M-6049-C302 with 4 Degree Valve Cant
  - 7) Pontiac PN: 10033867
- **C.** MRS 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.

#### Sub-Section 20D - 5.6.1 Eligibility:

To be eligible, the approved cylinder heads must be acceptable to MRS Officials and meet the follow requirements:

- A. The following requirements are for OEM cylinder heads as described in <u>Sub-Section 20D 5.6 Item# A, thru D. see above.</u>
- (1) The valve angle and valve location for General Motors, Dodge and Ford cylinder heads must remain as approved by MRS. Spacing between the valves is 1.935 inches, center to center, for the General Motors cylinder heads. Spacing between the valves is 1.936 inches, center to center, for the Dodge W-8-cylinder heads. Spacing between the valves is .900 Inches, center to center, for the Ford cylinder heads. 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.



#### 3. A1. Cylinder Head: (Continued)

- (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 steel or titanium valves are 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 MRS events, when the previous approved cylinder heads are used, the cylinder heads must meet the following requirements:
- (1) Only steel or titanium valves are 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 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 per approved cylinder heads.
- (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.
- (10) Any head not meeting these criteria. Must run an MRS legal bridged booster 390 carburetors.

#### 20D - 5.6.2 External Changes for OEM cylinder heads are as follows:

**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 other engines), original length, original width as compared to the cylinder heads described in <u>Sub-Section 20D-5.6.</u>

**B.** External modifications for the OEM Ford cylinder head, PN: E3ZM604C3L and the OEM 18-degree General Motors cylinder head, PN: 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. All identification numbers and markings must remain on the cylinder heads. **20D - 5.6.3 Internal Changes for the OEM** extlined or backs are as follows:

#### 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, except where the manufacturer has cast a valve guide support into the roof of the intake port.

The maximum port roof height, port centerline, and spark plug locations must conform to the MRS template.

#### 3.A2. Carburetor:

#### 20D - 5.10 Carburetor

**A.** The carburetor must be MRS-approved. MRS 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 carburetors are eligible for use.

A. The Holley 4150HP Series, list number 80507, and Holley 4150 Series, list number 6895, 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 all engines. The venturis must retain a circular (round) cross

section.

These are the only carburetors eligible for use at MRS Modified Tour Events.

Only Holley replacement or service parts can be used in any carburetor rework.

All carburetor modifications must be acceptable to MRS Officials.

Carburetors and/or carburetor components machined from billet materials will not be permitted.

**B.** Holley 4150HP Series and 4150 Series 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. No machining, reshaping, grinding, polishing, or drilling holes will not be permitted.

No 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-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 addition of material will not be permitted to the boosters. A bonding agent 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 MRS 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 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 (baseplate)

The only throttle bodies permitted will be the Holley throttle bodies with casting numbers 12 R- 6236B or 12R11524B. 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. 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. 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 throttles body must not be altered in shape or size.

## 3.A2. Carburetor: (continued)

#### (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 Philips's head or Allen type head. Idle holes may be drilled in the throttle plates. 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. Throttle shaft rotation must be in the same position 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 shaft 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.

(8) Alterations that, in the judgment of MRS 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.

(9) External modifications and/or altercations to the carburetor will not be permitted.

#### (10) Choke Horn (List Number 6895)

The choke horn may be removed with a square cut, no taper or bevel, must not be cut into the body of the carburetor. The air filter housing gasket ring must remain standard.

#### 3.A3. Rear Bumpers / Side Rails:

## The bumper and side rails must be acceptable to Modified Racing Series Officials and meet the following minimum requirements:

- 1. Rear bumpers must be made from an I-beam extruded from of aluminum.
- 2. Rear bumpers must remain unpainted, as in silver or white in color.
- 3. The width, when measured across the rear of the car must be a minimum of 45 inches and a maximum of 50 inches and be mounted on centerline of the rear sub-frame rails plus or minus (+/-) one (1) inch.
- 4. 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.
- 5. The minimum I-beam size permitted will be 2-3/4 inches by four (4) inches by 3/16 inch thick.
- 6. The bumper must be mounted at rear axle height.
- 7. 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.



- 9. Bumper extensions may be welded or bolted directly to the rear sub-frame cross-member. If bumper extensions are bolted to the rear sub-frame cross-member, four (4) bolts per bumper extension must be used and be 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.
- 10. Four (4) rear bumper mounting bolts per side must be used and be a high quality minimum 3/8-inch diameter solid magnetic steel.
- 11. 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 (See illustration B1).
- 12. Holes and/or modifications that, in the judgment of MRS Officials, have been made with the intent of weight reduction will not be permitted.
- 13. Cars will not be permitted to compete without the front and rear bumper.

## 3.A4. Anti-Intrusion Door Plate Hole Location:

#### See MRS Series Car Rules: Section# 1, Item# 1.4 Chassis, Letter# G

1. 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 & #2B) 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 (A), 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.



# Modified Racing Series Illustrations Section# 4 Item# A1 –G2

Illustration A1 See MRS Series Car Rules: Section# 1., Item# 1.3. Body, Letter# Q & R

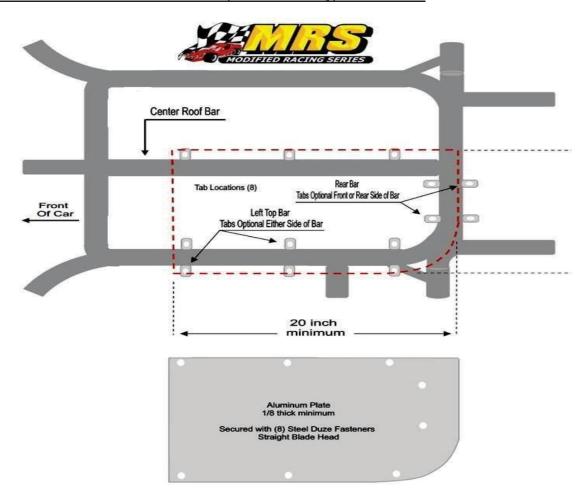




Illustration B1 See MRS Series Car Rules: Section# 1, Item# 1.4. Chassis, Letter# K

2008 REAR BUMPER INSTALLATION

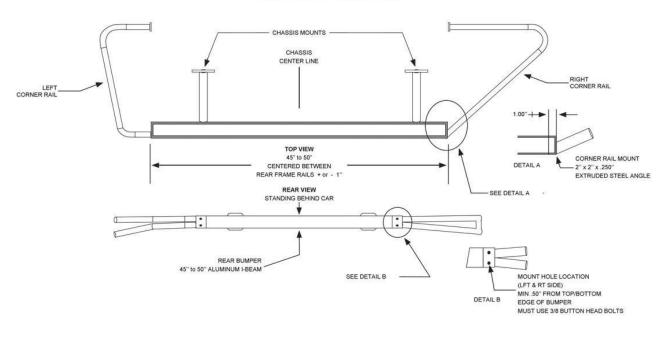


Illustration C1 See MRS Series Car Rules: Section# 1, Item# 1.3. Body, Letter# T

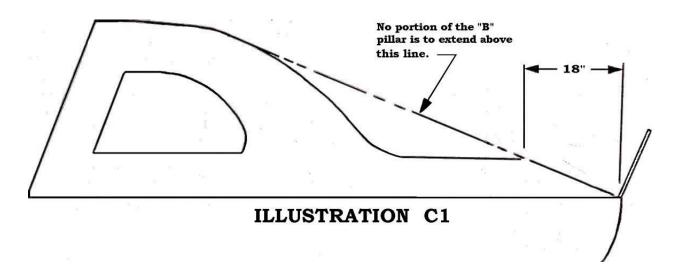
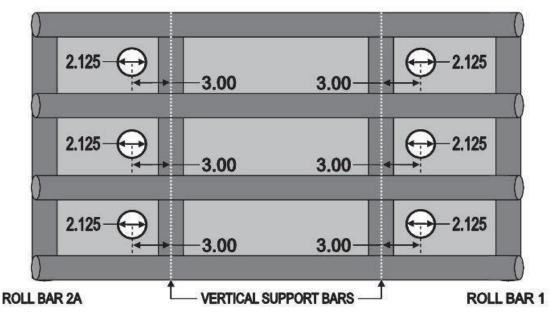


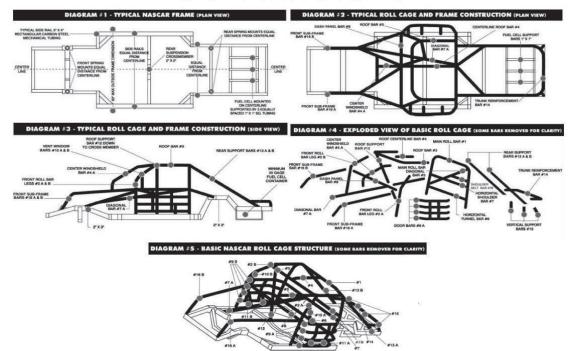


Illustration D1 See MRS References Section# 3, Item# 3.A4. Anti-Intrusion Door Plate Hole Location



2010 ANTI-INTRUSION PLATE HOLE LOCATION DIAGRAM

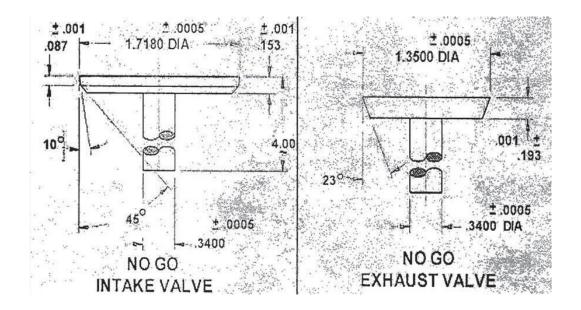
2009 NASCAR RULEBOOK CONSTRUCTION GUIDELINES





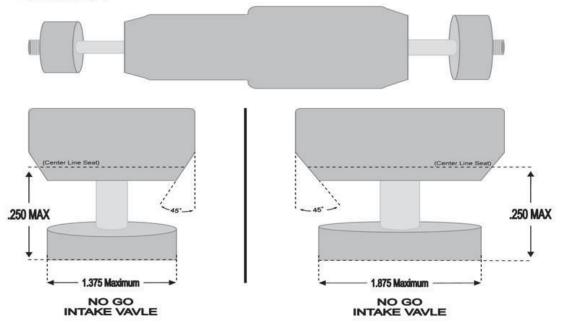
**Illustration E1** 

See MRS Series Car Rules: Section# 1 Item# 1.12. Stock Cast Iron Head Rule, Letter# M & O



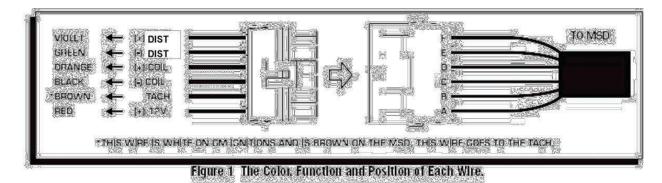
## Illustration E2

See MRS Series Car Rules: Section# 1 Item# 1.12. Stock Cast Iron Head Rule, Letter# M & O DART HEAD





## Illustration H1 See MRS Series Car Rules: Section# 1 Item# 1.5. Engines, Letter# K (#2)





## DECALS MUST BE CURRENT TO BE ELIGIBLE FOR ALL CONTINGENCY AWARDS.

THE SERIES (SPONSORS) STICKERS MUST APPEAR IN THE LOCATIONS WHERE NOTED. CONTINGENCY STICKERS MUST BE ABLE TO BE SEEN. PLEASE PUT UP TOWARDS THE FRONT OF THE CAR:

MiltonCAT location TBD

SUNOCO RACE FUELS

HOOSIER TIRES

FYNE LYNE FABRICATION

**RACING ELECTRONICS** 

SHERWOOD WHEELS

AUTO METER NORTHEAST

RACE CARS- LU-MACS

QA1

**IRON CLAD** 

DECALS WILL BE PROVIDED BY THE MODIFIED RACING SERIES.

