



Fastest piece of Real Estate in Tennessee 2023 Sportsman Rules 062423

***** Be sure to read the General Rules and Flag Rules as they pertain to every division*****

RULE BOOK DISCLAIMER

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 EXPRESSED 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 race director shall be empowered to permit reasonable and appropriate deviation from any of the specifications herein or impose any further restrictions that in his/her opinion does not alter the minimum acceptable requirements. **NO EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM SUCH ALTERATION OF SPECIFICATIONS.** Any interpretation or deviation of these rules is left to the discretion of the officials. Their decision is final.

The management of Veterans Motorplex

These rules are meant to allow older fabricated perimeter chassis and the Sportsman Cars to compete together while creating a level playing field for the different type of vehicles represented here.

VMP Officials retain the right to determine eligibility.

NOTICE: All equipment is subject to the approval of HRS officials. No equipment will be considered as having been approved by reason of having passed through the inspection process unobserved. Any equipment which does not conform to specifications or tolerances contained in this rulebook or in the appropriate Manuals, will not be eligible for approval. Veterans Motorplex reserves the right to adjust the rules such as use restrictor plates, adjust weight etc... when deemed necessary for equal competition purposes.

NOTE: All cars must comply with the rules set forth by the Veteran Motorplex rule book and reference manuals used in the inspection process. All cars and car parts are subject to VMP / HRS technical inspection processes. VMP/HRS is not required to follow any other sanctioning bodies or manufacturers guidelines in its inspection process

Entry Fee: All 50 lap races will have nonrefundable / nontransferable Entry fee. Normal entry fee is \$50. Entry fees will be posted on the entry blank for each race. Race tires must be purchased at the track and may be impounded.

ENTERTAINMENT VALUE

Tighter Field, More Passing, More Competition, More Winners

Never forget we are in the entertainment business we just happen to be using race cars to entertain our fans. Being in the entertainment business the average fan likes close wheel to wheel racing action.. no average fan comes to see one car run off with the race.

We will use whatever means we feel is necessary to make this a fair playing field even down to using Restrictor plates and or adding weight to specific places or removing weight.

Final eligibility for ALL drivers will be at the track's discretion.

Section 1: Safety Equipment: Rules apply at all times car is on track.

- 1.0 Two way radios area approved for this division.
- 1.1 Snell rated SA2000, SA2005, SA2010, or SA2015 or newer helmet required. Roll bar padding required in driver compartment. **Recommended:** Fire Retardant padding. SFI-approved full fire suit required. Fire Retardant gloves, and neck brace (or head and neck restraint) required. **Recommended:** Fire retardant shoes and on board fire extinguisher system. **Recommended:** Fire Retardant head sock and underwear. Driver's side window net required, minimum 16 inch x 20 inch ribbon or mesh style, and must be mounted to roll cage so latch is at top front of window. Minimum three inch (two inch step in belts may be used with head restraint system) wide SFI-approved four point system required must be mounted securely to main roll cage. **Recommended:** Five point safety belt assembly. **Recommended:** Safety belts no more than two years old. Kill switch required within easy reach of driver and must be clearly marked 'OFF and ON'
- 1.2 **Racing Seat.** Aluminum High Back seats only, must be bolted in with .0375 inch bolts.
- 1.3 **Mirrors.** Wink mirrors and wide angle mirrors are permitted.
- 1.4 **Fuel Cells.** Fuel Cell Mandatory. Maximum size 22 gallon. Highly recommend the cell be mounted in a 18 gage steel fuel cell container in a safe and approved manner meaning securely strapped by placing two (2) straps longwise and two (2) straps crosswise around steel container that fuel cell is in and bolting straps to trunk floor. Highly recommend steel Straps minimum 1/8" thick x 1" inch wide. Must be mounted in the center. Fuel cell guard bar mandatory. Highly recommend it to be made from DOM material 1.75" x .083 min. and be a minimum of 1" lower than the fuel cell container. All cells must have a rollover valve.
- 1.5 **Fuel Cell Container.** We highly recommend the Fuel cell be in steel fuel cell container surrounded by a 1"x 1" .083 wall thickness steel tubing frame. Fuel cells must have working rollover valve.
- 1.6 We highly recommend a 1/8" steel plate be in front and behind the entire fuel cell can.
- 1.7 **Fuel Cell Height.** Bottom of fuel cell steel container must be a minimum of 8" off ground. Highly Recommend bottom of fuel cell height be 10" off the ground.
- 1.8 **Fuel.** Highland Rim Fuel. May be required to purchase a specific amount of fuel.
- 1.9 **Fuel additives.** No Oxygen enhancing fuel additives.
- 1.10 **Fuel Line.** Fuel line may be run under car but must be higher than lowest point of the frame and securely attached. Fuel line may be run through car from fuel cell but must be inside a one piece steel pipe and pipe must extend a minimum of 1" out from front and rear firewalls.
- 1.11 **Drive Shaft Loops.** Drive shaft loops required. 2 drive shaft safety loops made of flat steel, ¼" x 2" minimum size) required. Drive shaft loops should be mounted 12" from each end of the drive shaft to prevent drive shaft from falling onto track in case of u-joint failure; and may help prevent drive shaft from coming through floorboard in case of failure.

- 1.12 **White Drive Shafts.** All drive shafts must be painted white. 1/8" scatter shield surrounding drive shaft highly recommended.
- 1.13 **Quick Release Steering Wheel.** Aftermarket quick release steering wheel hubs are legal. **Recommend** pin-less type with no plastic inner components.

Section 2: Bodies & Interiors

- 2.1 **Visiting Cars.** Any visiting cars with Bodies that don't meet our guidelines may be penalized with weight or restrictor plates in order to compete.
- 2.2 **Identification.** All cars in this division must park in designated area and each car must have LS in 4" tall in Bold white letters on top passenger side windshield area. Accurate total weight, engine type, and left side max also required in 1" letters
- 2.3 **Body Styles.** All bodies must be Stock Appearing and approved by tech.
- 2.4 **Bodies. NO FIVE STAR GEN 6 bodies.**

May be stock OEM bodies or approved aftermarket type stock appearing / mounted with manufacturer's dimensions.

No flat shelf/dirt style bodies allowed. LMSC, NGB, style bodies are legal for this division.

Sportsman style Camaro, Mustang and Challenger Muscle Car bodies with plastic quarter panels and fenders are also approved for this division with no weight penalty.

All Bodies must fit approved manufacturers guidelines. All Muscle Cars bodies must be 100% manufacturer recognized & built "no homemade Muscle Car body panels". ALL Muscle Car Bodies must be approved by tech and **Must fit VMP/ HRS measurements and Body**

Templates. Muscle car facials (nose and rear bumper covers) cannot be used unless with a complete Muscle car body.

All bodies must be Stock appearing and have track approved front & rear bumper covers.

- 2.5 **Spoiler Height.** Spoiler may not exceed six (6.5) inches in total height. Maximum width 60"
- 2.6 **Fiberglass, Aluminum and Steel Stock appearing bodies are allowed.** All body panels are subjected to approval by division inspector.
Rear window must be minimum .090 Lexan / Polycarbonate material with minimum 2 window braces. No Plexiglass.
- 2.7 **Vent Windows.** Vent window not to exceed twelve (12) inches along top of door and must continue 90 degrees upward from that point. NACA ducts for driver fresh air is allowed

Section 3: Roll Bars

- 3.1 **Roll Cage.** Must have a minimum 6 point roll cage with minimum 3 door bars in driver's side 2 in passenger side with diagonal bar behind the driver. All roll cage tubing must be 1 3/4" OD .090 wall thickness. Gussets required in all left door bars
- 3.2 **Cage Must Be Approved.** All cages must be style as set forth in the rulebook and approved for workmanship and design.
- 3.3 **Driver Responsible.** Driver is responsible for installation, construction and workmanship of roll cage.
- 3.4 **Roll Bars.** Round steel 1 3/4" x .083 minimum, roll bars are mandatory, roll bars must be welded. We highly recommend 1.75" x .095 DOM roll bar tubing
- 3.5 **Door Bars.** Minimum of four (4) horizontal door bars on the right and left side of car.
- 3.6 **Window Width.** The distance between the "A" post and "B" post may not be greater than 44 inches.
- 3.7 **Fuel Cell Bar.** Rear fuel cell bar /protection hoop mandatory. Minimum 1" below cell.
- 3.8 **Gusset Plate.** Gusset plates at butt welds in driver's compartment required.

Section 4: Battery / Electrical System / Ignition

- 4.1 **Battery Location.** Battery may be moved to driver's compartment behind driver's seat. Must be securely mounted in place and in an approved sealed & vented container vented to the outside of the car with a hose. Battery location must be approved by Competition Director.
- 4.2 **Working Master Switch.** Must have working emergency cut-off master switch within reach of driver & officials.
- 4.3 **12V System.** 12 Volt System ONLY.
- 4.4 **Starters.** Stock style starters only.
- 4.5 **Alternators.** The alternator system, when used, must be mounted to front of the engine in the standard location and must not exceed 14.9 volt single wire system.
- 4.6 **IGNITION:** Any type ignition. NO traction control

Section 5: Communications

- 5.1 **Radios.** Radios are legal in this division.

Section 6: Cooling Systems

- 6.1 **Radiator.** Any metal stock production or racing radiators permitted in stock location.
- 6.2 **Radiator Fan Shroud.** Fan must have a 180-degree shroud covering the top 50% of the fan.
- 6.3 **Operational Overflow and Exit Tube.** Mandatory and operational radiator overflow metal catch can and exit tube installed ahead of firewall.
- 6.4 **Electric Fans.** Electric fans permitted.
- 6.5 **Aero Under Panning.** NO under panning.
- 6.6 **Fans.** All fans underneath the engine compartment must draw air through the lower portion of nose piece.
- 6.7 **Duct Work.** Duct work sides cannot be lower than center piece of duct work.
- 6.8 **Duct work width.** No wider than molded radiator opening in plastic nose.
Duct work should be no wider than molded opening in plastic nose.
- 6.9 **Aluminum Water Pumps.** Aluminum water pumps are allowed.
- 6.10 **Antifreeze.** No antifreeze allowed at any time, \$100.00 fine.
- 6.11 Minimum radiator size is 18" tall x 26": wide

Section 7: Frame Height/ Shocks/Springs

Top 3 finishers must be willing to remove springs and shocks for inspection and they may be impounded for further teching purposes.

- 7.0 Stock OEM Chassis or Fabricated NASCAR LMSC Perimeter Chassis.
- 7.1 **Ground Clearance.** 4" minimum Frame Height on Fabricated Tubular Perimeter chassis.
Weight boxes welded to frame becomes part of the frame, and will be checked as frame height
- Ground Clearance.** 5" minimum Frame Height on Stock frame rail cars.
- 7.2 **Dragging Exhaust.** Dragging exhaust systems will result in immediate black flag.
- 7.3 **Shock Claim rule.** Any brand shock may be claimed for \$200 Each. Must purchase all 4 shocks when claimed. Failure to sell shocks is automatic DQD with 2 race suspension.
- 7.4 **Koni Shock Weight Break.** Any Sportsman car using the same 4 Koni Shocks numbers on the same corners as the Late Models (listed below) will receive a 25 lb weight break for 2022
ONLY one (1) shock per corner (4 total).
- 7.5 **The KONI Shock numbers below are the ONLY Approved** shocks numbers allowed for competition to receive the weight break. All Koni shock numbers are 4 way adjustable on rebound ONLY.
- 7.6 Shock shafts cannot be bent.

7.7 **7" Stroke LEFT FRONT SHOCK ONLY**

Left Front ONLY Pt# 307499 4 compression 9,10,11,12 rebound

7" stroke Right FRONT SHOCKS Two options. Soft compression / Stiffer compression

Right Front Pt# 307436 4 compression 3,4,5,6, rebound

Right Front Pt# 307647 6 compression 4,5,6,7, rebound

9" stroke REAR SHOCKS LR or RR

7.8 Left or Right Rear Pt# 309325 3 compression 2,3,4,5 rebound

Left or Right Rear Pt# 309436 4 compression 3,4,5,6 rebound

You must use one of each of these shocks. Which side you use them on does not matter but you must have the 309325 on one side and the 309436 on the opposite side or the 7" stroke equivalent.

7.9 No bump Stops, coil binding nor any special mounting of shocks etc. that may limit the Travel of the shock.

7.10 No Internal or External bump stops

Coil Springs...

- 7:11 One Single spring per corner.
- 7:12 No stacking of springs (coil-over or conventional).
- 7:13 All Spring measured at freestanding height (spring by itself)
- 7:14 All Springs will be Rated with 1" of compression after preload is set.
- 7:15 Basic Barrell Springs for shock clearance are approved.
- 7:16 Coil spring rubbers... limited to a maximum of 2 full size rubbers... NO Custom made rubbers
- 7:17 Coil over springs can only be mounted outboard in typical Coil Over position
- 7:18 Conventional front springs can only be mounted inboard in OEM position
- 7:19 Rear Conventional or Coil over springs may be mounted outboard on the rear
- 7:20 No Coil spring pre-loader assemblies

Spring Specs for all Chassis in the Sportsman Division

7:21 Conventional inboard Front Springs 5" OD Min. 5.5" OD Max.

(Mounted Inboard in stock OEM Location ONLY)
7.5" min height / 9.5" Maximum Height
Minimum Conventional Front Spring Rate 500 pounds
Maximum Conventional Front Spring Rate 1400 pounds

7:22 Conventional Rear Springs 5" OD Min. 5.5" OD Max.

Mounted out board or on truck arms
Maximum of 700 pound individual Rear Spring Rate

7:23 Coil Over Springs 2.5" ID (Barrel springs for clearance are approved)

Coil over Front Springs (Outboard mounted only)
(Mounted Outboard in typical coil over position ONLY)
11.5 Min height / 14" Maximum Height when free standing
Minimum Coil Over Front Spring Rate 300 pounds
Maximum Coil Over Front Spring Rate 600 pounds

7:24 Rear Coil Overs must be mounted outboard.
Maximum of 650 pound Coil Over Rear Spring Rate

Section 8: Overview... Base Weights per chassis combination

As we continue to monitor and adjust the rules for the Sportsman division throughout the year we simply ask for your patience as our goal is for everyone to be able to be competitive by using different tire compounds, different weights & carburetors etc... Combining multiple types of cars and making everyone competitive is extremely hard. Please understand rules will change as we get farther into this division each year.

8.0 Weight. Minimum weights per chassis / engine combination All weights are after the race

All Sportsman Chassis may use any of the following rear suspensions.

3-Link, 4 Link or Truck Arms. Arm lengths and angles may be changed

Perimeter Chassis Only / No Straight rail chassis. If your chassis's wheelbase is between 105" and 107 3/4" wheelbase it will be considered a LMSC tubing Chassis even if it has a stock frame or stock front clip and tubular frame.

8.1 #1 Factory GM Stock Front Clip 108" Min Wheelbase / with front wedge bolts and outboard shocks. Stock Front clip, stock frame rails to the kick ups on the rear clip. May be tubing from pickup back on rear clip 108" Minimum Wheelbase
Any type differential. Detroit Locker, Tru-Trac, Gleason etc...
Used AR970 Tires on 8" wheels Maximum . 1.250" Sway bar
56.0% Left Side @ 3200 lbs.

8.2 #2 Full Fabricated LMSC Tubing Frame & Front Clip 105" min Wheelbase
(No Strut type front suspensions)
105" Minimum Wheelbase Chassis
Must run Spool or Locked Rear differential ONLY.
Used AR955 tires on 8" wheels Maximum of 1.25" Sway bar.
55.0% Left Side @ 3250 lbs

8.3 #3 108" min, Wheelbase / Stock Front Clip / with Fabricated Tubular Frame rails and rear clip
108" Minimum Wheelbase Chassis
Any type differential. Detroit Locker, Tru-Trac, Gleason etc...
Used AR970 tires on 8" wheels Maximum of 1.25" Sway bar.
55.0% Left Side @ 3250 lbs

8.4 #4 Factory OEM STOCK GM type Frame 108" min. Wheelbase
Typical older SUPER STOCK 4 LINK Chassis
(NO WEDGE Bolts in the Front) 108" min. Wheelbase type Chassis.
Must have Inboard shocks... **Must have Complete factory frame. With exception of rear kickups and to rear of chassis may be min. 2" x 3" tubing.**
May use Any Type Rear Differential
Used AR970 American Racer Tires on 8" or 10" Wheels (subject to change please check with promoter before purchasing your tires). Currently as of 8/20/23 LS AR970 used RS 10" McCreary Speed used
Max. of 1.375" Sway bar. **56.0% Left Side @ 3350 lbs.**
Tires and other rules may change throughout the years in this division until we get the right mix to make this car competitive with the other type cars

Section 9: Suspension

9.0 NO Suspension Travel Limiting Devices

(Examples: Bump Stops, Coil Binding, Chains, or shock mounting locations that do not allow for at least 2" of shock extension and compression (measured at fender opening to wheel) with driver in car when on the ground or jacked up. Must be able to compress front suspension down when on wood blocks per tech inspector.

- 9.1 **Front Suspension. Must use standard GM Style steering box.**
(100 pound penalty for Rack and Pinion Steering)
Any type upper control arms.
Ball Joints. Top or bottom may be Standard or Adjustable.
- 9.2 **Tie Rod Ends** may be stock, adjustable or heim joints to make adjusting bump easier.
- 9.3 **Lower Control Arms.** OEM factory type Lower control arms or fabricated. **(No Strut type lowers) Only GM Factory measurements (A shaped / GM Replica ONLY).**
- 9.4 **Tread Width Stock GM type Frame cars.** Maximum tread **76"** from flat face of outside edge of wheel on one side to the same place on the other side.
Tread Width Fabricated LMSC Perimeter 105" wheelbase cars. Maximum tread 75" from flat face of outside edge of wheel on one side to the same place on the other side.
- 9.5 **Front Shock Location.** Front shock location may be changed from stock location.
- 9.6 Chains, bolts and heim joints may be used in sway bar hookup.
- 9.7 May mix Coil Overs and Conventional Springs. No coil binding.
- 9.8 **Front and rear wedge bolts are approved for all chassis, with the exception of the Super Stock Chassis Super Stocks CANNOT have front wedge bolts.**
- 9.9 Heim Joints and Mono balls are legal in all suspension points.
- 9.10 **Rear Suspension.** Rear suspension must be as produced, either leaf or coil. Adjustable rear shackles allowed on rear leaf springs only.
- 9.11 Stock Rubber bushings and monoballs are approved for competition.
- 9.12 **Rear Suspension.** Four Link (may have adjustable mounts)
- 9.13 **Lower Trailing Arms.** May be adjustable 1 pc solid tube type on Three and Four Links
- 9.14 **Upper Trailing Arms.** May be adjustable 1 pc solid tube type on Three and Four Links
- 9.15 **LMSC type Fabricated Tubular LMSC Perimeter Chassis hook up restrictions**
Truck Arms must be 2 x 3 box tubing or standard steel I-Beam type. Rubber cannot be used in the mounting of the truck arms. No Rubber lowering blocks. No Aluminum Truck arms
Rubber, Spring loaded, shock, sliders etc.. cannot be used in any portion of the Rear suspension (3 Link or Truck Arm) on a **LMSC type Fabricated Tubular LMSC Perimeter Chassis**
- 9.16 **Sliders on Leaf Springs.** No sliders on leaf springs.
- 9.16 No sliders, springs or shocks
- 9.17 **No Spring loaded** 3rd links or upper or lower trailing arms. Solid links only.
- 9.18 **No Shock slider** assemblies allowed on upper or lower links
- 9.19 **IDLER Arms** may be stock or aftermarket adjustable.
- 9.20 **Pitman arms** may be aftermarket.
- 9.21 **Drag Link** Assembly may be adjustable type aftermarket.
- 9.22 No travel limiting bushings or devices of any kind.
- 9.23 NO Rear Sway Bars
- 9.24 Any type Sway Bar. Maximum 1.25" OD (1 ¼")
- 9:24A Sway Bars: Any Type 1.375" OD Sway bar may be used on Stock frame chassis with **INBOARD STOCK MOUNT FRONT SHOCKS**. Must have inboard shocks and no wedge bolts to run this size bar.
OD of ALL SWAY BARS must meet the OD requirement for the type chassis it is. NO over sized lightweight sway bars for 2022.
- 9.25 NO Coil spring Preloader / cages

Section 10: Engine

10.0 Engine Location

10.1 **Engine Location.** Engine must be within ½" of center line of the front clip / frame rails on all chassis.

10.2 **Engine Setback on a Fabricated LMSC tubular chassis.** Maximum engine set back. The #1 spark plug center line (front left plug) can be No further back than the centerline of the Left Wedge Bolt / or left side upper ball joint.

10.2a **Engine Setback for typical OEM Stock Front Clip / Stock Frame Rail Sportsman cars.** Maximum Engine Setback on an OEM stock frame rail car is 2". The #1 spark plug tip can be no farther back than 2" from the left front wedge bolt / ball joint centerline.

10.3 The ultimate goal here is to have close competition and a variety of winning drivers and engine and chassis combinations. This will be a work in progress. Please be patient.

Section 11a: Approved Engine Combinations

Engines that are available to run in this division

602 GM Crate	with a 650 4 bbl gage Legal
5.3 Track Spec Engine Spec Engine	with 78mm Throttle Body per track specs with 4412 500 cfm 2 bbl. Open Top
604 GM Crate	with 4412 500 cfm 2 bbl. Gage Legal
Ford 347 Blue Oval	with 4412 500 cfm 2 bbl. Gage Legal
Mcgunnigill 347 Open Engine	with 4412 500 cfm 2 bbl. Gage Legal with 4178 350 cfm 2bbl. Gage Legal

Only Holley Carburetors and parts approved by Track Tech official

NO ALUMINUM HEADS on Open Engines

Section 11b: Spec Engine Crankshaft & Balancer 19.00

11.1 **Permitted Camshafts.** Standard production crankshaft only. May run aftermarket crankshaft.

11.2 **Unapproved Camshafts.** No 180-degree, NO polishing, scalloped, knife-edge crankshafts.

11.3 **Stroke.** Stroke must be stock stroke within .010, may not be increased or decreased

11.4 **Balancers.** Stock type or any S.F.I. Approved balancers only. No titanium or aluminum.

11.5 **Minimum Weight.** Forty eight pound (48 lb) minimum weight on all crankshafts, including timing chain gear.

11.6 **Increasing/Decreasing Stroke.** No stroking up or down. 3.48 stroke only.

11.7 **Seven Quart Oil Pans.** Seven-quart oil pans allowed.

11.8 **Remote Oil Systems.** No remote oil systems or filters.

11.9 **Oil Filter.** One stock type oil filter in original location.

11.10 **Oil Coolers, Accusumps, Additional Oil Lines.** No oil coolers, accusumps or additional oil lines permitted other than line to oil pressure gauge.

Spec Engine Camshaft, Valve Lifters & Rockers

11.11 **Camshaft.** Cam must be hydraulic. The cam lift will be maximum lift including rocker arm 1.50 rockers. Approved cam total maximum lift is .450 Chev. Ford .480 lift.

11.12 **Lifters.** Must run hydraulic lifters.

11.13 **Lift.** Camshaft lift checked with dial indicator at push rod. Max lift .300.

- 11.14 **Lifters.** Stock appearing, stock size valve lifters only.
- 11.15 **Lifter Size.** Lifters must be of stock diameter for engine application.
- 11.16 **Unapproved Lifters.** No mushroom or roller type lifters. No Rhodes or type anti pump up style lifters.
- 11.17 **Roller Rocker Arms.** No roller rocker arms permitted. Can run 7/16" rocker studs.
- 11.18 **Ratio.** 1.50 ratio rockers only. Cool nuts permitted.
- 11.19 **Stud Girdles.** May run stud girdles
- 11.20 **Valve Lash.** Max allowed valve lash at any time will be zero.
- 11.20a **5.7" maximum rod length. Must be steel magnetic rods. No Titanium or Stainless rod**
- 11.20b **Flat Top Two valve relief eyebrow pistons updated 1/3/22**

Spec Engine Cylinder Heads

- 11.21 **Cast Iron Heads.** The cylinder heads must be completely cast iron, the intake and exhaust ports must be in the original "as cast" configuration. Stock Heads Only.
- 11.22 **Combustion Chamber.** Minimum 62 cc combustion chamber Chevy, Ford 57cc.
- 11.23 **Mopar Products.** Maximum 1.624 in exhaust, minimum 1.920 in intake valves.
- 11.24 **Ford Cleveland.** Maximum 1.655 in exhaust, maximum 2.041 in intake valves.
- 11.25 **Ford Windsor.** Maximum 1.546 in exhaust, 1.940 in intake valves.
- 11.26 **Chevrolet Small Block.** Maximum 1.500 in exhaust, 1.940 in intake valves.
- 11.27 **Porting or Polishing.** No porting or polishing anywhere. No deburring.
- 11.28 **Cutting of Heads.** No cutting of head to install larger valve springs. No more than a single valve spring with damper.
- 11.29 **Vortec Heads.** Vortec heads permitted.
- 11.30 **Angle Plug and Aluminum Heads.** No angle plug or aluminum heads
- 11.31 **Valves.** Stock appearing, steel/stainless valves and in stock location only. No undercut or oversized valves.
- 11.32 **Valve Springs.** Stock diameter valve spring with steel retainers only. Chevrolet maximum 1.25"
- 11.33 **3 Angle Valve Jobs.** 3 angle valve jobs permitted, however no machine or stone marks or blending of angle, past the chamber into the bowl area.
- 11.34 **Rocker Studs.** Screw in or pinned rocker studs are allowed.
- 11.35 **Titanium.** No titanium parts. Locks and retainers must be magnetic steel.
- 11.36 **Unapproved Heads.** No Dart, angle plug, 461, 461x, 462 or "bowtie" heads.
- 11.37 **Stock Replacement Heads.** World Products SR 043610 STOCK REPLACEMENT HEADS (1.5 / 1.940) ALLOWED.
- 11.38 **Confiscation.** Altered heads will be confiscated.
- 11.39 **Approved Intakes.** May run stock 2 bbl or 4 bbl intake, or intake # 14098242, GM marine intake on old type heads or Edelbrock performer # 2101, 2104, or 2116. Must have Edelbrock and part number embossed in top of part. No look-a-like intakes. All must be stock.
- 11.40 **Porting, Polishing & Cutting.** No porting, polishing, or cutting.
- 11.41 **Intake Gasket.** On all engines, only one standard flat gasket may be used between the head and the intake manifold. Maximum gasket thickness .177 inch.
- 11.42 **Intake Water-Cooling.** Intake manifold ½" water-cooling kit allowed.
- 11.43 **Maximum of 1" carburetor spacer with 4 straight through holes 1.688".**

Section 12 CRATE Engines

- 12.1 **Late Model Type Crate Engine / Spacer plates**
604 GM Crate, Ford 347 Blue Oval or Mcgunnigill 347
- 12.1 All the above Crate engines must run Holley 500 cfm 4412 2 barrel with a stock unaltered 1.688" Base plate. Maximum 1" height Aluminum carburetor spacer plate allowed with straight through holes. Must have stock unaltered base plate including butterflies and throttle shafts.

- 12.2 602 (Legal by Yellow GM book) Crate engines may run a Holley 650 or 750 Carburetor with stock size base plate using straight through holes no larger than stock. **CARB. SPACER PLATES (2/3/21)** CVC products no longer makes the 1.688 billet spacer plates so effective immediately the Moroso pt #64991 4 hole billet aluminum Max. 1" thick spacer with Max. 1.696 holes is approved for use in competition
- 12.3 Crate engines may utilize a double roller timing chain.

12.3A BORING OF CRATE ENGINES FOR ALL DIVISIONS ALLOWED IN 2023

BORING OF GM CRATE ENGINES TO BE ALLOWED IN ALL DIVISIONS Beginning 2023

Because of cost and availability of good engine blocks...beginning in 2023 we will allow for ALL GM Crate Engines to be bored a Maximum of .030 overbore but you will have to add weight for the overbore. You cannot use any other weight deductions to do away with adding weight for the overbore. Adding the weight for the overbore is the LAST thing you do when figuring weight. If you are running the Minimum weight because of deductions you must add the overbore on top of the minimum weight **NOT to achieve an absolute minimum weight for the Division.** If you have a overbore engine you must declare it on the Windshield (with 602OB or 604OB Sticker available from the track tech) and the additional weight must be added to the car.

Crate engines must run the correct thickness of head gaskets per GM Yellow book rebuild kits.

602 Approx .030 thick
604 Approx .052 thick

See Chart below for amount of weight to be added for the overbore..

.020 or .030 Maximum Overbore... Must add 20 lbs additional weight plus 1 pound per every .001 over stock bore

Example for a .020 over bore you would add 20 pounds plus 20 pounds for a .020 over bore 40 pounds total added

Example for a .030 over bore you would add 20 pounds plus 30 pounds for a .030 over bore 50 pounds total added

You must use a Specific Part number and manufactured PISTONS and RINGS if you chose to bore a GM Crate Engine Block.

**These are the ONLY Approved GM Crate Engine Piston/Ring manufacturers and part numbers for 602 & 604 Engines
These part number Pistons and Rings are the ONLY pistons and rings approved for competition to bore a crate engine.**

Sealed Power Pistons & Hastings Ring part numbers below are the only approved Pistons and Rings for Competition at Veterans Motorplex at The Rim if you decide to Bore a Crate Racing Engine.

Sealed Power Approved Replacement Pistons

.020 part numbers	602 Sealed Power Dish Piston	#H423DCP.020	Hastings Ring Package	139.020
.030 part numbers	602 Sealed Power Dish Piston	#H423DCP.030	Hastings Ring Package	139.030
.020 part numbers	604 Sealed Power Flat Top piston	#H345DCP.020	Hastings Ring Package	139.020
.030 part numbers	604 Sealed Power Flat Top piston	#H345DCP.030	Hastings Ring Package	139.030

- 12.4 The 2019 Nashville Limited Late Model Spec engine packages may be used with any chassis package.

Section 13 5.3 Concept engine may be used with ANY chassis

5.3 GM FUEL INJECTED CONCEPT ENGINES (LM7 – L59).

Sportsman must run 78MM GM Stock Throttle Body

The following rules apply to all 5.3 Fuel Injected engines for use in the Sportsman division.

If you choose to run the 5.3 engine package you must be willing to swap your bare 5.3 heads at any time for a set of 706 or 862 bare heads with a fresh valve job and recent mill job.

- 13:01 **5.3 Cast Iron Block Engines only. NO ALUMINUM Engine BLOCKS**

- 13:02 Heads: Only 862 or 706 heads permitted. Must use stock type valves. Stock type valve job ONLY. NO unshrouding of the valves. No grinding allowed on the head. Runner cc's must be stock. Minimum 57cc combustion chamber to allow for head clean up.
- 13:03 All internal rotating components must be stock 5.3 rotating assemblies (except the cam. Cam must be HRS Spec Cam) OEM type parts with stock weight and configuration or approved by Tech and HRS management.
- 13:04 May use a maximum of 42 pound. Fuel injectors with NO modifications. All injectors must be tested and approved by tech.
- 13:05 We highly suggest Aluminum or Stainless Fuel Rails
- 13:06 Any type oil pan may be used. Corvette or aftermarket pans such as Champ makes a cost effective 5.3 oil pan for circle track racing. Champ pans are about \$400.
- 13:07 After market remote oil filter housing are approved for competition.
- 13:08 High Volume aftermarket type Melling oil pumps are OK.
- 13:09 We highly suggest using an oil pickup accessory that allows use of both bolt holes to hold the oil pickup tube on. Available for less than \$20
- 13:10 Stock or Stock replacement coil packs **ONLY. NO MSD high voltage type coil packs.**
- 13:11 OEM Stock 5.3 Cranks only.. Stock Bore, Stroke and Weight. Cranks may be balanced
- 13:11a No stroking or destroking.
- 13:12 Zero Deck
- 13:13 **Pistons:** Stock or stock replacement **5.3 OEM Dish Pistons ONLY or Aftermarket replacement. All pistons other than Stock must be approved by Competition Director.**
- 13:14 **Piston Rings:** Only stock or stock replacement type piston rings. **NO FILE FIT RINGS**
- 13:15 ALL Internal components must be OEM STOCK or stock replacement weight and type components for a 5.3 engine.
- 13:16
- 13:17 Valve springs may be upgraded to an Aftermarket Bee-Hive type springs (must be approved)
- 13:18 Aftermarket hardened push rods may be used. Push Rods must be stock dimensions for a 5.3 OEM stock engine.
- 13:19 No metal fabricated, aftermarket or homemade intakes. 1999-2004 Stock Plastic GM truck Intakes ONLY. **NO Trailblazer SS intakes** No porting, polishing or coating of intakes.
- 13:20 Maximum of 1- 4" air intake tube and filter. Air must be drawn in through the nose.
- 13:21 Computer must be mounted on Right side of car no more than 6" below top of door and the computer must be easily accessible and removeable.
- 13:22 May use stock wiring harness for computer or a custom designed wiring harness is available from HRS.
- 13:23 Only stock type **GM CPU's** will be approved by VMP. You will be required to RACE with HRS owned Late Model Race Tuned Computers for all racing events. Computers with the 411 for the last three digits are good computer to tune. Drive by wire computers cannot be used.
- 13:24 HRS will supply **All RACE Tuned Computers to race with for NO Charge...** ALL 5.3 engines must use the track computers to race. Race Tuned LM Computers will be installed before the race in the infield. You are required to have your own practice computer however you may pay to have it Race tuned as the Track CPU's are however it will be locked when tuned. Cost is \$200 to get your computer tuned.
- 13:25 Only HRS approved Stock 78mm Throttle bodies can be used in the Sportsman division. You must use a 3/4" up to a 1" maximum thick aluminum throttle body spacer (smooth bore only) for use of track Restrictor plates. Throttle rod assembly plate may be used to keep from using a throttle cable.
- 13:26 No drive by wire Throttle bodies.
- 13:27 Only 5.3 Stock rocker arms with stock ratio and OEM type lifters allowed. Economical aftermarket versions may be allowed but must be approved by tech before using.
- 13:28 ONLY Schoenfeld 5.3 Is chassis headers or over the top header are allowed.
- 13:28 NO Stainless exhaust or light weight exhaust
- 13:29 May run aftermarket reduction pulleys. These are available from Jegs
- 13:30 Minimum of 2 disc 5.5" clutches allowed. (Special button required). Clutch disc must measure a minimum of 5.5"
- 13:31 Plastic lifter trays may be drilled for better oil flow back to the oil pan

- 13:32 Use of Holley aftermarket Water pump is recommended
Recommended to drill and tap water pump housing for air bleed for heads
- 13:33 Remote mounting of Coil packs is recommended to keep header heat from affecting them.
- 13:34 5.3 Engine cannot run Racing Fuel. Only 93 Octane pump gas may be used in a 5.3 engine.

Anyone interested in running the Stock 5.3 engine may contact Jerry Criswell for a build sheet to help save time at 615-430-3135.

Section 14: Aftermarket Clutch Options / Transmissions

- 14.1 **Small Multiple Clutches** 5.5" 2 disc clutch is the smallest clutch allowed. Aluminum bellhousings may be run with the aftermarket racing clutches but we highly recommend a steel blow proof bellhousing. Clutch Disc Must measure 5.5" minimum.
- 14.2 omitted
- 14.3 **Hydraulic Clutch Linkage.** Hydraulic clutch linkage permitted.
- 14.4 **Inspection Holes.** Cars must provide 2" inspection holes for clutch or torque converters.
- 14.5 **NO Adding Weight to Flywheel.** You cannot add any weight to a flywheel to increase the weight of the flywheel.
- 14.6 All Transmissions must have a minimum of 2 forward and one reverse working gears
- 14.7 Turbo 350 transmissions with working torque convertors are approved
- 14.8 **Direct Drive.** No direct drive transmissions.
- 14.9 No Hightower Transmissions
- 14.10 No Rankin Transmissions
- 14.11 No Transmissions with internal Clutches.. such as Bert, Brinn, Falcon
- 14.12 No Jerico Transmissions
- 14:13 No Straight cut gears in transmissions.

Section 15: Drive Line

- 15.1 **Drive Shaft.** One-piece steel drive shafts only. (Minimum diameter 2¾")
- 15.2 **Drive Shaft.** Drive shafts must be painted white. NO Aluminum drive shafts.

Section 16: Differential

- 16.1 **9" Ford.** 9" Ford rear ends are allowed in all chassis.
- 16.2 **Approved Rear Ends for stock frame rail cars only. Stock OEM rear ends.** Open, locked, limited slip or posi-traction rear ends are acceptable, **Lockers, True Tracks / Gleasons will be allowed in Stock OEM Frame cars ONLY..**
- 16.2a Adjustable links on 3 and 4 links suspensions are approved on ALL Chassis.
- 16.3 **Quick Change Rear ends are approved.**
- 16.4 **Floating Rear Ends.** Full floating re-end type & axle assemblies allowed.
- 16.5 **Axles.** Aftermarket racing axles are recommended.
- 16.6 Fabricated Perimeter type tubular LMSC chassis must use a lock rear end or a SPOOL.

Section 17: Exhaust

- 17.1 **Exhaust Noise. Muffler System Mandatory. NO Straight Headers..** You must have an exhaust pipe muffler system that muffles the sound to 99 or less.
"The City of Millersville, Tennessee enforces 100dba @ 100ft. noise ordinance. Failure to comply with ordinance will prevent your car from being allowed on the track".
- 17.2 **Exhaust Noise Weight break.** Any Car in this division registering 85 DBA or less @ 100ft will be able to deduct 25 lb
- 17.2 **Headers. Any type header except** No Y-pipe headers must be 4 pipes into 1 collector
- 17.3 **Flexible Pipes.** No flexible pipes permitted anywhere or anytime.

- 17.4 **Header Flange.** Sportsman will be permitted a 5/16 header flange max with no spacer of any kind between the head of flange.
- 17.5 **Exhaust Length.** Exhaust must extend past driver's seat or turn out to the sides
- 17.6 **Maximum Length.** Exhaust pipes cannot extend past rocker panel causing an obvious cutting hazard.

Section 18: Brakes

- 18.1 **Pedals.** Aftermarket floor or hanging pedals allowed.
- 18.2 **4 Wheel Brakes.** Must have functional brakes on all 4 wheels at all times.
- 18.3 **Disc Brakes.** Four wheel disc brakes allowed.
- 18.4 **Brake Bias Devices.** Brake bias devices allowed.
- 18.5 **Calipers.** Single piston GM type calipers only. Cast or Aluminum
- 18.6 **Brake Pads.** Brake pad material optional.
- 18.7 **Rotors.** NO Floating Rotors. Must be bolted on solid. No Aluminum or Composite type rotors

Section 19: Wheels & Tires All tires must be purchased from Veterans Motorplex

- 19.0 **Every car will have to start the race season with purchasing New Take off RACE tires from the Tire trailers as tires will be monitored more this year. We will be using barcodes, scanners, index cards to track race tire.**
Your old AR970 Tires may used for practice and test and tune (But not to RACE) or you can turn them in before the season starts for a \$10 credit for every good AR970 tire..
Top 3 finishers tires may be impounded until the next race date.
- 19.1 **No wheel weights**
- 19.2 **Chassis with Out Board mounted Shocks will use 8" Wide Steel Wheels any offset as long as you meet the tread width rules.**
- 19.2a Stock GM Chassis type cars with **Inboard Shocks / No Wedge Bolts** former super stock car may use **8" or 10"** wide steel wheels as long as you meet the tread width rules.
- 19.3 **Bleeder Valves.** No bleeder valves.
- 19.4 **Racing Lugs.** 1" OD steel racing lug nuts are required on all aftermarket wheels.
- 19.5 **All LMSC / Limited cars with fabricated full tubular chassis with OUTBOARD shocks will be on 8" Wheels**
- 19.6 **Former Super Stock cars with INBOARD Stock mounting shocks on the front will use 8 or 10" wheels and 10 or 11" Take off McCreary tires (Tires to be used will be decided on after Tire Tests) Maximum. 1.375" Sway Bar. There will be no limit on the quantity of tires you may purchase.**
- 19.7 **Tire Soaking.** No tire soaking or siping

Section 20: PROTESTS

- 20.1 **Limits.** May protest within 5 positions in front of finishing position. Protesting driver must have run three races prior to protesting.
- 20.2 **Time.** Must present completed protest form and protest money to tech official within 10 minutes of car being protested clearing scale pad. Car being protested then has 10 minutes to file and pay to counter protest.
- 20.3 **Top End Protest (\$250).** Carburetor, Intake, Cylinder Head, Camshaft & Piston Head Configuration.
- 20.4 **Complete Engine Teardown Protest (\$550).** Top End Protest plus Bore, Stroke, Pistons, Rods & Crankshaft.
- 20.5 **Protest of Transmission (\$150.00).** Standard Transmission: Gears, Flywheel, Clutch. Automatic Transmission: Gears, Torque Converter
- 20.6 **Carburetor (\$100).** Protest Carburetor Only.
- 20.7 **Traction Control (\$100).** Check for Traction Control
- 20.8 **Protest Rear End (\$100).** Check Rear End.

- 20.9 **Unapproved Parts.** Any car protested, and disqualified for unapproved parts will lose all points and monies for that night.
- 20.10 **Protest Fee Retention.** Track retains 30% of all protest fees, no matter the outcome.
All post race mechanical protests and appeals may be performed on that night or postponed to Monday or Tuesday night with the vehicle in question being impounded. Determination of a questionable part may take an extended time period.

Section 21: Points

- 21.0 **Points will run from 1st race to last race..**
 We will honor our Champion and the **TOP TEN** in Championship points at our Championship Points Banquet by RSVP only.
 Only our Weekly Racing Series Champions (Divisions with 20 plus race dates) are eligible for Championship point money if money is available.
- 21.1 **Driver Changes.** Pit Booth must be notified of driver changes other than registered *driver in writing* before races begin. It does not matter whom else you have told; you must notify the pit booth in writing of a driver change before the feature event. Failure to do so may result in points being credited to the wrong driver, and may not be changed.
- 21.2 **All Races Count.** All races will count towards point total. **No dropping of bad races.**
- 21.3 **Points.** You must take the green flag in the race to get points.
- 21.4 Exception to 25.3 rule. If a car is damaged in the Qualifying race or preliminary event and not able to compete in the feature event for that division they will receive last place points and pay.
- 21.4a Any **discrepancy** in posted points must be presented in writing to scoring and HRS track owners within 7 days of the event in question.

Heat Races.. All Cars line up in **REVERSE POINTS ORDER for weekly heat races...** Drivers with no points must start behind the points leader in the qualifying race.
 Points leader starts at the rear with last racer in points starting first. (Inexperienced drivers may be required to start behind the points leader).

- 21.5 **PREVIOUS RACE WINNER:** If the Previous Race winner qualifies well enough to be involved in the inversion roll of the dice, they will start no better than one position behind the inversion number. For instance, if a six is rolled on the dice the previous winner will start in the seventh (7th) position in the feature if they were in the top 6 qualifiers. If the previous race winner did not qualify within the inversion number rolled then they will start where they qualified

The Dice will have a 2,3,4,5 and two 6's on it.

- 21.6 After the first 3-point races are ran any new driver starting up having competed in less than 3 qualifying races at HRS may be required to start behind the points leader in all qualifying races (This is mainly if they are inexperienced) until they have ran at least 3 qualifying races to establish themselves and to help minimize damage
- 21.7 **To STOP an experienced driver that starts racing after the season has begun and winning all the qualifying races.... They may be required to start behind the points leader in the heat after they have won a race.**

HEAT RACE POINTS SYSTEM

1ST PLACE	5 POINTS
2ND	4 POINTS
3RD	3 POINTS
4TH	2 POINTS
5TH THRU FIELD	1 POINT

FEATURE POINTS SYSTEM

Points System will award 75 points to the official Winner of any feature event with a 1 point drop for all positions after first place.

Points per finish position

CHAMPIONSHIP POINTS SYSTEM

Points System will award 75 points to the official Winner and drop one point per position after that for 2023.

1st	75	
2nd	74	
3rd	73	
4th	72	
5th	71	
6th	70	
7th	69	
8th	68	
9th	67	
10th	66	
11th	65	
12th	64	Continues to drop 1 point per position through the field

21.8 **Driver Changes.** Pit Booth must be notified of driver changes other than registered driver **in writing* before races begin. It does not matter whom else you have told; you must notify the pit booth **in writing of a driver change before the feature event*. Failure to do so may result in points being credited to the wrong driver, and may not be changed.

21.9 **All Races Count.** All races will count towards point total. **No dropping of bad races.**

21.10 **Points.** You must take the green flag in the race to get points unless you have a problem in a preliminary event.

21.11 If a car is damaged in a qualifying dash or preliminary events and not able to compete in the feature event for that class they will receive last place points.

21.12 Any **discrepancy** in posted points must be presented in writing to scoring and HRS track owners within 7 days of the event in question.

21.13 Points follow the driver (not car owner)

Section: 22 After Race Tech Penalties

The following option simply gives the racer a chance to NOT be DQ'd from the race for a minor weight infraction and to keep most of their points. If your car is wrong within the following guidelines you may accept the DQ with no fine or pay the fine and keep your position and reduction in points.

WEIGHT Infraction	POINTS DEDUCTED	FINE
1-5 LBS LITE	-10 POINTS	-\$100
6-10 LBS LITE	-25 POINTS	-\$200
11 LBS & OVER LITE	DQ	DQ
LEFT Side Weight percentage %		
Up to 0.2% over	-10 POINTS	-\$100
0.3 to 0.499%	-25 POINTS	-\$200
OVER 0.499%	DQ	DQ

TRACK / TREAD WIDTH infractions

UP to 1/8" WIDE
1/8" to 15/32" WIDE
OVER 1/2" WIDE

-10 POINTS
-25 POINTS
DQ

-\$100
-\$200
DQ

TAP Out Rule:

When two drivers are involved in an on the track accident the rule is both cars go to the back of the pack however now we also **have a Tap Out Rule** if one of the drivers involved knows they were the one that caused the accident they can drive to the front stretch and stop at the start / finish line and **TAP on The Roof** of their car signaling the wreck was their fault by accident. If this happens the driver that tapped their roof (**Tapped out**) will go to the Rear of the field and the other driver will get their position back.

***** Be sure to read the General Rules and Flag Rules as they pertain to all classes****