



## 2022 LIMITED DIVISION RULES

**RACECEIVERS ARE MANDATORY!!! SPOTTERS IN TOWER ARE REQUIRED!!!**

### **COMPETING MODELS:**

1960-2021 car models with a minimum wheel base of 105 inches.

Tread width of 65 ½ inches +/- inch as raced.

### **CAR BODIES:**

**Note: \*LMS Chassis Rules Apply\*** All cars MUST meet template specifications per **Anderson Motor Speedway**.

Only stock/stock appearing aftermarket bodies allowed. Hood must fit to windshield.

No panning underside of car.

No side windows or quarter windows. Only a fresh air duct is allowed.

Window net must be installed on driver's side.

Roof height will be 48" measured 10" from windshield.

On all approved 2007 - 2021 models the rear spoiler must not exceed five (5) inches in height and 64-1/2 inches in width. The rear spoiler will be measured from the backside. The rear spoiler must be centered on the rear of the vehicle. Rudders or forward mounting brackets will not be permitted.

On all approved 2007 through 2019 models the maximum rear spoiler height from the ground to the top of the rear spoiler will be 39 inches. On all approved 2021 models the maximum rear spoiler height from the ground to the top of the rear spoiler will be 39-7/8 inches.

Rear bumper must be complete and fastened to the bumper bar. No cutting of bumper cover.

Bumper length will be no greater than 53" from the center line of rear wheel to the edge of the bumper cover.

**ENGINE(S) ALLOWED:**

<u>Engine</u>	<u>Carburetor</u>	<u>Weight: Total/Right side</u>
GM 602	Holley HP 650	3000/1350
GM 603	Holley HP 650	3025/1375
GM 604	Holley HP 650	3100/1400
NASCAR Ford Crate	Holley XP 500	3100/1400
NASCAR Harrington Enforcer	Holley XP 500	3100/1400
NASCAR GM Upgrade	"Holley" 450	3100/1400
NASCAR (2019) Built Engine	Holley XP 500	3100/1400

***\*Note: Any engine package is subject to change if track determines need. Modifications to any rule package will be subject to change if one package is deemed superior to the others.***

**602 CHEVY CRATE**

602 will be allowed to run a stock 650 cfm Holley HP carburetor per NASCAR rules. You may change jets, power valves, acc. pump, etc. No machine work allowed. Engine must remain as it came from GMC per GM specifications, except you may change water pump and distributor. Rocker Arm GM part #19210724 and Adjuster Nut part #88961233 may be used. Scorpion 1.5 Rocker Arm part #SCP1035 with matching Adjuster Nut.

602 CHEVY CRATE - 3000lbs total weight/1350 RS weight.

Option 1 - GM Rocker Arm or Scorpion Rocker Arm may be 1.6, but no mixing of ratios. 3/8" stud ONLY.

**604 CHEVY CRATE**

604 will be allowed to run a stock 650 cfm Holley HP carburetor. You may change jets, power valves, acc. pump, etc. No machine work allowed. Engine must remain as it came from GMC per GM specifications, except you may change water pump and distributor. Rocker Arm GM part #19210724 with matching Adjuster Nut part #88961233. Scorpion 1.5 Rocker Arm part #SCP1035 with matching Adjuster Nut.

604 CHEVY CRATE - 3100lbs total weight/1400 RS weight

No more than 2 gaskets, not to exceed .065" thickness per gasket.

Engine must remain stock as per GM guidelines.

You may replace harmonic balancer with GM part #12551537

A .030 overbore has been approved for the 604 Crate engine. ENGINE ALLOWED The only piston that is approved is the Mahle part #224-3497-030.

Competition Cams Valve Springs part #26975-16 will be permitted.

Total Seal Piston Rings part #CR6264 or part #CR6264-5 will be permitted.

Mahle Piston part #101P36 will be permitted with up to a .005 overbore with no penalty.

Main and Rod Bearings may be replaced with standard "P" bearings with no coating, heat treating or narrowed.

SCAT rod may be used - part number ICR5700

All Crate engines may replace stock valves with Ferrera valves - part #F5001

### **NASCAR LMSC ENGINES**

- **2022 Ford Crate**
- **2022 Harrington Enforcer**
- **2022 GM Upgrade**
- **2019 Built Engine**

**ENGINE LOCATION** - Engines may be interchanged from one body manufacturer to another. Type of engine determines location. All Chevrolet engines must be centered in chassis +/- 1". The center of #1 spark plug must be in line with left upper ball joint (should be as raced). Ford and Dodge may be set back even with right front upper ball joint with front of #1 cylinder head.

**CARBURETOR SPACERS** - Holes must be centered and cut perpendicular with the base of the carburetor. No tapers or bevels. Only 2 gaskets allowed - 1 per side and maximum thickness of .065. No adjustable spacers permitted.

- .750 maximum aluminum adapter allowed on 500HP carburetors.
- Holley #7448 spacer with a maximum metal spacer of 3/4" with 2 holes (max 1.502) centered in spacer with a straight cut. No bevels. Spacer gaskets .065 max thickness.

**CARBURETORS** - Carburetors allowed for Limited competition include:

- 500 cfm – Holley 0-4412 2661
- 500 cfm – Holley 0-4412HBX Ultra XP 2661
- 650 cfm – Holley 0-80541-1 HP
- 450 cfm – Holley Hybrid

**CARBURETOR RE-WORK GUIDELINES** - No polishing, grinding or machine work allowed on any part of carburetor. No alterations except choke hardware may be removed and all vacuum ports must be plugged. Base plate must not be altered in shape or size. Boosters may not be altered in any manner (including size, shape or height of model number). Any attempt to pull outside air other than through the Venture is not permitted.

**AIR CLEANERS** - Round element with minimum of 12" and maximum of 17" allowed. Front facial may go half way around breather and only 4" in height. Top and bottom of air cleaner must remain the same size. Dry type paper element may be maximum height of 4" with minimum of 1 1/2". No tubes, funnels or anything which may direct airflow will be permitted. Base of air cleaner on 2 barrel carburetor may not extend higher than choke horn. Base of air cleaner on 4 barrel carburetor may not extend more than 1 1/2" above mounting ring of carburetor. No cold air boxes or air induction allowed.

**EXHAUST** – Exhaust must exit past the driver. Only 2 into 1 collectors allowed. No stainless steel or Teflon coated headers will be allowed (may be externally Blue Coated to prevent rust). No internal coating of any kind allowed. Header wrap will only be permitted around Driver's foot box. Heat Deflectors will only be permitted between headers and clutch/brake master cylinders. No stepped headers. No 180 degree or cross over headers allowed.

**CLUTCH** - Any single, double or triple clutch allowed (minimum of 5 ½ "). No carbon fiber clutches allowed.

**TRANSMISSION, FLYWHEEL AND DRIVESHAFT** – Three or four speed transmissions allowed, but are required to have working reverse. OEM standard production ONLY. No straight cut or machined gears allowed. No lightened or polished gears allowed. No automatics allowed. No direct drive transmissions allowed.

**FLYWHEEL / DRIVESHAFT** - Must run a steel flywheel. Hydraulic clutch permitted. Must have blow-proof bell housing. Bottom of bell housing may be cut. Driveshaft must be steel between 2 3/4" to 4" diameter. No carbon fiber driveshaft allowed. Driveshaft must be painted white or silver. Must have 2 driveshaft loops.

**REAR END** - Rear ends must be either a floater or quick change. Only a heavy duty quick change rear end allowed with a minimum end bell diameter of least 12". No cambered rear ends +/- .5 degree grace. No aluminum tubes or yokes allowed. No torque limiting devices allowed. No titanium rear end parts allowed. Only Spool, Locker permitted. No Tru Track, No Gold Track.

**FRAME / ROLL CAGE** - Frame rails may be a minimum of 2" x 3" x .083 wall thickness between wheels. Frames must be perimeter style on front and rear, with no offset. No underslung frame rails on rear. Cage must have at least 4 door bars on both side and be centered on top of outside frame rails (Perimeter-style ONLY). All bars must be at least 1 3/4 x .090 tubing. Driver's door bars must be covered by steel plate with 1/8" minimum thickness. The door plate must have access hole in all four (4) corners as a safety precaution. Floorboards may be raised 10" for driveshaft and header clearance and must be sealed off. No boxed interiors. Must have 1 3/4" x .083 windshield bar. All bars within driver's reach must be padded. Stock OEM front sub-frame with tubing frame connector allowed. Stock OEM clip: May fabricate upper control mounts and re-position. Fabricated clip with stock OEM lowers are allowed. Excluding OEM sub-frame cars with stock floor pan ONLY. A steel firewall must separate the driver from the engine compartment and fuel tank. No open holes allowed. No crush panels allowed over 12". The roof halo bar must be a minimum of 40" outside to outside. Anything less than 40" will have to add 25lbs to right side.

**SUSPENSION** - Spring spacers or screw jacks may be used on front and rear of cars. OEM type steering box. Aftermarket tie rods, center link, idler and pitman arms allowed. No rack and pinion. Aftermarket spindles allowed. Lower A-frames must be same length on both sides. No modifications of lower control arm. Stock pocket must be intact. May be heated, but not cut. Ball joint must remain in stock location. May use screw in ball joint insert. Upper A-frames may be fabricated. Front sway bar may be OEM or aftermarket. Mounting points may be aftermarket. Minimum sway bar arm length of 12". Leaf spring, 3 link or truck arms are allowed on rear. Steel rear lower trailing arms required. No damper shocks allowed on top link or track bar allowed. Adjustable lowering blocks allowed on leaf springs. Trailing arms must have same bushings in both arms, either monoball or rubber bushing. Must maintain a minimum thickness of .117. NO spring loaded trailing arms. NO Spring loaded Panhard Bars Allowed. Aftermarket or OEM 5x5 design hubs allowed. No Vogler hubs allowed.

**SHOCKS & SPRINGS** - One (1) shock and spring per wheel.

**Shock Options:**

Option 1 - Only steel body non-adjustable and non-rebuildable shocks allowed. No gas.

Option 2 - AFCO 13 Series, Pro A or AC Series, QA1 62 Series and Integra 310-461XX Series. The above will be the only shocks allowed to run.

Option 3 – NASCAR LMSC Shock Rule as seen in NASCAR rulebook under 20F-12.3.

No bump stops permitted on shocks or chassis. No coil binding of springs. No stopping of travel in any way other than normal increasing stiffness of the springs or bottoming of the chassis against the racetrack. No composite leaf springs allowed. Coil over springs are allowed, but no progressive rate springs allowed.

- Coil over cars – shock and spring angle can be NO MORE than 20 degrees.

**Coil Springs / Spring Mounts / Jacking Bolts**

All downward chassis movement while the race vehicle is in competition must be limited only by the normal increasing stiffness of the springs or the bottoming of the chassis against the racetrack, whichever occurs first. Any device(s) such as chains, cables, etc. that limit the travel of the suspension either up or down will not be permitted.

All coil springs must be constructed using round magnetic steel wire, wound in a clockwise direction. Ovate and flat wire will not be permitted. The coil spring wire diameter must be the same size from the top to the bottom of the springs. All of the coils in a spring must be active. The coil springs in all four (4) wheels must be active in any and all suspension movement.

Coil spring suspension will be limited to either conventional type coil springs or coil over springs. The use of either type of spring on both the front and rear suspension, such as coil springs on the front and coil over springs on the rear, will be permitted. The use of a combination of spring types on both the front and rear suspension, such as a conventional coil spring on one side and a coil over spring on the opposite side, will not be permitted.

**A. Coil-Over Springs**

1. Front coil-over springs must mount to the stock appearing lower A-frames on the centerline of the lower ball joint. The front coil-over assembly must mount through the upper A-frame and remain vertical front to rear with the lower mount. Adjustable mounts of any type will not be permitted. The use of jacking bolts on the coil over assembly will not be permitted. Coil-over spring seats, if used, must be flat nylon or flat steel washer type or top hat style only. Thrust-type bearing plates will be permitted on the spring seats. Load centering spring perches of any type, including but not limited to hydraulic or rubber will not be permitted. Front coil over springs must not exceed a maximum outside diameter of 4-3/4 inches for the entire length of the spring. The coil-over springs may be less than the nominal three (3) inches inside diameter at each end only to match the spring seat diameter. The free height of the bare front coil-over springs must not be more than 16 inches and must not be less than 8 inches. All coils must be evenly spaced after the first coil at the end of the spring.

2. Strut bars will not be permitted for mounting of the coilovers

3. Rear coilovers must be permanently mounted on the outside of the rear sub-frame rails in the same location on the left and right side. Adjustable mounts of any type will not be permitted. The use of jacking

bolts on the coil-over assembly will not be permitted. Coilover spring seats, if used, must be flat nylon or flat steel washer type or top hat style only. Thrust-type bearing plates will be permitted on the spring seats. Load centering spring perches of any type, including but not limited to hydraulic or rubber will not be permitted. Both springs must be mounted to brackets on the rear axle housing in the same location on the left and on the right side. Rear coilover springs must not exceed a maximum outside diameter of 4-3/4 inches for the entire length of the spring. The coil-over springs may be less than the nominal three (3) inches inside diameter at each end only to match the spring seat diameter. The free height of the bare rear coil-over springs must not be more than 16 inches and must not be less than 12 inches. All coils must be evenly spaced after the first coil at the end of the spring.

4. Only one (1) spring per wheel will be permitted.

5. Coilover springs must be heavy-duty magnetic steel and must be constructed with both coil ends closed and ground.

6. Progressive or digressive rate springs will not be permitted.

7. One (1) spring rubber insert, not to exceed one (1) full coil, acceptable to Track Officials will be permitted. Coil spring wire wrap will not be permitted.

## **B. Front Coil Springs**

1. The front coil springs must be heavy-duty magnetic steel and must be constructed with one closed, ground coil end and one (1) open coil end. The closed end of the coil spring should not have a gap larger than 1/8 inch. Grinding of the open coil should not be permitted beyond the first inch of the open coil and should not exceed 1/2 of the coil spring wire diameter.

2. All coils must be evenly spaced after the first coil on the closed end of the spring. All coils must be wound producing the same inside and outside coil diameter plus or minus (+/-) 1/8 inch.

3. The free height of the bare front coil springs must not be more than 10-1/2 inches and must not be less than 6 inches.

4. All front coil springs must maintain a minimum outside diameter of 5-1/4 inches and a maximum outside diameter of 5-3/4 inches.

5. Progressive or digressive rate springs will not be permitted.

6. The front coil spring mounts must be located on the lower A-frame for the bottom mount and the top mount must be a bucket type and be welded to the front sub-frame rails and be the same on both the left and right side. The front coil spring upper mount plate must be attached to the front jacking bolt in a manner acceptable to Track Officials. Mono ball(s), excessive taper, bevels, or other devices on the end of the front jacking bolt, the front coil spring mounting plate, the front coil spring mounting bolt or in the front upper spring mount will not be permitted. The hole in the front coil spring upper mount plate must be round and must not be larger than 1/16 inch diameter than the front coil spring mounting plate bolt. The upper and lower coil spring mount must support the front coil spring for 360 degrees of each coil spring mount when the vehicle is set at the specified inspection heights. The upper coil spring seat must be flat. Thrust type bearing plates with a maximum diameter of 1-1/8 inches will be permitted between the end of the jacking bolt and the face of the spring seat.

7. Heavy-duty solid metal bolts (jacking bolts), with a minimum diameter of 1-1/8 inches, utilizing right-hand threads, and a single thread count of not less than 12 threads per inch for the entire length of the jacking bolt, must be used. The jacking bolts must be installed, using a solid threaded sleeve welded completely into the frame spring bucket, in a manner acceptable to Track Officials for the purpose of raising or lowering the vehicle. Jacking bolts and the threaded sleeves must be the same thread configuration on the left and right side.

8. Front jacking bolts will not be permitted to be located through the frame rails. The front jacking bolts when measured from the inside wall of the front sub-frame rail to the center of the jacking bolt mount must not be less than three (3) inches and not more than four (4) inches. The front jacking bolts must be mounted on the centerline of the front crossmember, plus or minus (+/-) one (1) inch. The front jacking bolts must be in the same location on both sides. The front jacking bolts must be perpendicular to the sub-frame rails. The front jacking bolts must be mounted on the vertical centerline of the lower spring bucket.

9. One (1) spring rubber insert, not to exceed one (1) full coil, acceptable to Track Officials will be permitted. Coil spring wire wrap will not be permitted. C. Rear Coil Springs 1. The rear coil springs must be heavy-duty magnetic steel and must be 1. through 9. remains the same.

### **C. Rear Coil Springs**

1. The rear coil springs must be heavy-duty magnetic steel and must be constructed with both coil ends closed and ground. The closed ends of the coil spring must not have a gap larger than 1/8 inch.

2. All coils must be evenly spaced between the top and bottom closed ends of the spring. All coils must be wound producing the same inside and outside coil diameter.

3. The free height of the bare rear coil springs must not be more than 16 inches and must not be less than 11 inches.

4. Coil springs mounted on the truck trailing arms must not be located outside the rear frame rail kick-ups, and must be equal distance from the centerline of the rear frame rails.

5. All upper and lower rear coil spring mounts must be located between the rear frame side rails. Only one (1) rear jacking bolt frame mount per side will be permitted. Jacking bolts will be permitted to be located through the frame rails. The center of the jacking bolt must not extend further than the center of the frame rail from the inside edge. Jacking bolts located through the frame rails must have a solid sleeve extending through the frame from top to bottom and be welded completely into the frame rails. Heavy-duty solid metal bolts (jacking bolts), with a minimum diameter of 1-1/8 inches, utilizing right-hand threads, and a single thread count of not less than 12 threads per inch for the entire length of the jacking bolt, must be used. Jacking bolts and threaded sleeves must be the same on the left and right side. The rear jacking bolts must be mounted on the vertical centerline of the lower spring mount. Monoball(s), excessive taper, bevels or other devices on the end of the rear jacking bolt, the rear coil spring mounting bolt or in the rear upper spring mount will not be permitted. The hole in the rear coil spring upper mount plate must be round and must not be larger than 1/16 inch diameter than the rear coil spring mounting bolt. The upper and lower coil spring mount must support 100 – LMSC the coil spring for 360 degrees of each coil spring mount. The upper coil spring seat must be flat. Thrust-type bearing plates with a maximum diameter of 1-1/8 inches will be permitted between the end of the jacking bolt and the face of the spring seat



6. The rear coil spring lower mounts must be located in front of the rear axle housing.
7. The rear coil spring upper mounts must be located and welded on the chassis directly above the lower mounts.
8. One (1) spring rubber insert, not to exceed one (1) full coil, acceptable to Track Officials will be permitted. Coil spring wire wrap will not be permitted.
9. All coil springs must maintain a minimum outside diameter of 4-3/4 inches and a maximum outside diameter of 5-1/4 inches.
10. Only one (1) spring per wheel will be permitted.
11. Progressive or digressive rate springs will not be permitted.

**BRAKES** - Single piston steel/aluminum calipers allowed. All 4 of the wheels brakes must be in working order. No titanium brake parts allowed. No carbon fiber brake parts allowed. Aftermarket brake and clutch petals allowed. Dual master cylinder allowed. Brake bias adjusters allowed in driver's compartment.

**COOLING SYSTEM** - Aluminum radiators permitted. Internal or external cooler permitted. Must have overflow turned onto windshield or run into overflow can. No dumping of overflow behind rear wheels. Electric fan permitted. NO ANTI-FREEZE - There will be a \$100.00 fine if caught with anti-freeze in engine.

**ELECTRICAL SYSTEM** - Electronic or point type ignition system allowed. No magnetos permitted. Only a stock appearing coil allowed. Aftermarket distributors allowed on all engines. Only 12 volt battery system allowed. Only 1 MSD ignition box allowed. No adjustable timing controls allowed. Ignition box must be visible and out of drivers reach. Connection must be wire tied together during race competition. No open-ended wiring in driver's compartment. Tachometer must be able to unhook. No digital readouts. Connection must be wire tied together during race competition. No traction control devices are allowed. No computerized systems are allowed at any time. Battery may be mounted outside of driver's compartment in a safe manner. If inside driver's compartment, it MUST have a cover around it and mounted in a safe manner. Battery disconnect must be mounted in driver's compartment where safety personnel can reach easily and quickly. Alternator may not exceed over 14.9 volts output.

**FUEL AND FUEL SYSTEM** - Fuel MUST meet Track Fuel – SUNOCO 110 Octane. Fuel must be purchased from track. Fuel Cells are mandatory; 22 gallon maximum cell. Cell must be wrapped in a steel container. Eight (8") inch fuel cell minimum height with driver in it. Must have minimum of 1/8" straps. Fuel cell bar must extend past fuel cell can by 1".

**WHEELS** - Only steel wheels are permitted. 15" x 10" wheels ONLY. Offset wheels permitted. (Stock Clip Chassis) No bleeders allowed. Wheels must be marked with race team's number on them.

**WEIGHT BALLAST** - Must be painted "white" with car number on it. Must be bolted securely and no less than 5lb blocks. No Tungsten allowed. If found, it will be confiscated. All cars will be weighed with Driver in correct positioning. No weight ballast in Driver compartment.

**WEIGHTS WITH DRIVER IN CAR** - *Weight of cars may be increased/decreased to assure an equal race program. We allow a 1 LB per lap Burn-off following the race.*

**TIRES** - Race tire for the **2022** Season will be **Hoosier F45**. For the first race of the season, a competitor may buy 4 new race tires. These tires WILL be scanned in and kept on record. These tires MUST be turned in following the race into the AMS Tire Barn (a total of 4 scuffs must be kept in the tire crate at all times). The following race a competitor will buy TWO new F45 tires. These tire serial numbers belong to **YOU** and only **YOU** may race them. All tires are subject to inspection by AMS Officials at any time deemed necessary.



**LMS / Limited Division Protest Fees:**

<b>Item(s)</b>	<b>Protest Fee</b>		
Top of Engine	600		
Bottom of Engine	800		
Top & Bottom	1400		
Fuel	60		
Trans, Clutch, Driveshaft	300		
Cam	300		<i>Plus \$100 If Cam Doctor</i>
Plus \$100 If Cam Doctor	100		
Visual Protest (Only Before Race)	25		
Carb	100		
Other	150		
Rear End	400		
Tire Rubber Checked	200		

Top of Engine - Heads, Intake

Bottom of Engine - Bore, Stroke, Deck Height, Cam, Lifters, Crank

Anderson Motor Speedway has the ability to confiscate any part that fails to be in compliance with the rules. If a competitor refuses to have their race part confiscated, he/she is subject to disqualification. The speedway will retain 25% of the protest fee with the remaining 75% going to either the protester if protested car is found **ILLEGAL** **OR** going to the protested car if their car is found **LEGAL**.