

2025 Late Model Stock Rules

The Late Model Stock division will be run under the [2025 NASCAR Advance Auto Parts Series rules](#), with the following allowances.

Weights (minimum):

• Built Chevy and Ford –	3050 lbs Overall 1375 Right Side
• Chevy 604 Crate –	3050 lbs Overall 1360 Right Side
• Ford 347SR –	3100 lbs Overall 1400 Right Side
• HMS Enforcer (Harrington Spec)-	3100 lbs Overall 1400 Right Side
• Chevy Upgrade	3050 lbs Overall 1350 Right Side

Engines and carbs, etc. as per NASCAR rule book with any exceptions below

Approved Engines

1. "Built" or "Upgrade" engine as per 2025 NASCAR rulebook

Carburetors allowed are the Holley 500 HP Series part #080583-1 or the Holley 500CFM Ultra HP and XP 2BBL aluminum body carburetor part numbers 4412HB, 4412HBX, 4412BK and 4412BKX. These carburetors must remain as manufactured. The only changes allowed will be to change jets, power valve, screw in air bleeds in the main body, and screw in emulsion bleeds in the metering block. See NASCAR rulebook.

2. GM Fast burn 350/400 Circle Track Engine part# 88958604

Fast burn crate engine will use the Holley 650 Carburetor part #0-80541-1/2/3 with spacer plate as per NASCAR guidelines 20F – 5.10.2 Must remain factory stock with no modifications. Only changes allowed are the power valve, squirters, screw-in air bleeds, and jets. Recommended that boosters be epoxied to carburetor body. Only Holley replacement parts allowed. A one piece paper gasket maximum .065" thickness must be installed between the carburetor and the intake manifold.

- Engine must remain completely stock except for valve covers and oil pan. See Late Model Stock NASCAR rulebook for oil pan rules.
- All crate engines must be located with the # 1 spark plug lining up to right side upper ball joint.
- GM 604 Crate Motors may run any 1.5 or 1.6 aluminum self-aligning rocker arms with **3/8"** stud. A combination of 1.5 and 1.6 rocker arms is approved, however, 1.6 rockers must be on the intake valves with 1.5 rockers on the exhaust valves.
- GM 604 Crate Motors **without** the new style 'Beehive springs' may use aftermarket retainers, keepers, locators/spacers, but all parts must be magnetic steel. Shimming will be permitted to maintain 1.78" installed height as per GM Performance parts Circle Track Engine Technical manual.
- GM 604 valve springs must remain as specified in the GM Performance Parts Circle Track Engine Technical Manual. (No Aftermarket Springs)
- Crate motor technical specifications will be based on the GM Performance Parts Circle Track Crate Engine Technical Manual part# 88958668 revised **2015**.

3. Ford part # M-6007 D347SR engine

D347SR engine will use the Holley 650 Carburetor part #0-80541-1/2/3 **with** spacer plate as per NASCAR guidelines 20F – 5.10.2 section D. Must remain factory stock with no modifications. Only changes allowed are the power valve, squirters, screw-in air bleeds, and jets. Recommended that boosters be epoxied to carburetor body. Only Holley replacement parts allowed.

- A one piece paper gasket maximum .065" thickness that matches the exterior dimensions of the carburetor throttle base plate must be installed between the carburetor and the intake manifold.
- Engine must remain completely stock except for valve covers and oil pan. See Late Model Stock NASCAR rulebook for oil pan rules.
- All crate engines must be located with the # 1 spark plug lining up to right side upper ball joint.
- Crate motor technical specifications will be based on the 347 Series Ford Racing Tech Spec Manual.

4. HMS Enforcer (Harrington Spec)

- Carburetor Holley 650 part #0-80541-1/2/3 stock out of the box. Only changes allowed are the power valve, squirters, screw-in air bleeds and jets. Recommended that boosters be epoxied to carburetor body. Only Holley replacement parts allowed.
- A one piece solid aluminum open hole carburetor spacer, a maximum 1" in thickness, may be used between the intake manifold and the carburetor. The spacer must be centered on the intake manifold with a single open hole which must be cut perpendicular with the base of the carburetor. Taper, bevels, or any other modifications will not be permitted. A one piece paper gasket maximum .065" thickness that matches the exterior dimensions of the carburetor throttle base plate must be installed between the carburetor and the intake manifold as per NASCAR guidelines 20F – 5.10.2 section D
- Engine must be located with the # 1 spark plug lining up to right side upper ball joint.
- HMS Enforcer engine technical specifications will be based on the HMS Enforcer Technical Manual.
- Any engine items not covered in HMS Enforcer Technical manual or Hickory Motor Speedway Track rules, refer to NASCAR Late Model Stock rulebook.

Optional Carburetor/Spacer for GM part# 88958604, Ford part # M-6007 D347SR Crate Engines, or HMS Enforcer.

- Holley HP80507-I 390 cfm Must remain factory stock with no modifications. Only changes allowed are the power valve, squirters, screw-in air bleeds, and jets. Recommended that boosters be epoxied to carburetor body. Only Holley replacement parts allowed.
- When using optional approved Holley HP80507-I 390 cfm, only a one piece open hole solid aluminum carburetor spacer, a maximum 1" in thickness, may be used between the intake manifold and the carburetor. The spacer must be centered on the intake manifold with a single open hole which must be cut perpendicular with the base of the carburetor. Taper, bevels, or any other modifications will not be permitted.
- A one piece, one hole paper gasket. Maximum .065" thickness that matches the exterior dimensions of the carburetor throttle base plate must be installed between the carburetor and spacer. A one piece paper gasket maximum .065" thickness must be installed between the spacer and the intake manifold. The gasket must not be larger than the top of the intake.

5. Built Chevy, and Ford carburetor as per 2025 NASCAR Rulebook

All cars must start race(s) with the same Carburetor used in qualifying. Removal of carburetor anytime after qualifying must be approved and accompanied by track official(s). All carburetors are subject to technical inspection at any time.

Crate Engine Claimer

Crate engines will be controlled by HMS Tech officials and/or a claimer rule.

Claimed engine will include all components that ship with the motor in the original crate. Claimed engine must pass track technical inspection. If the claimed motor is found illegal the claim will be voided and the claimee will be disqualified from the event. Claim amount is \$10,000 604 crate, \$12,000 for D347SR. The claimee will receive a certificate for a new crate motor from a dealer of HMS's choice.

Carburetor Claimer

Crate engine 650 part #0-80541-1/2/3 and Holley HP80507-I 390 cfm carburetors will be controlled by HMS Tech officials and a claimer rule. Carburetor will include the components that ship with a new unit from the manufacturer. Claimed carburetor must pass track technical inspection. Claim amount is \$1,200. The claimee will receive a certificate for a new carburetor from a dealer of HMS's choice.

Tire Rule

All LMSC competitors may purchase up to 4 race tires per event. (unlimited practice tires)

All race tires must be purchased from MTP Tire the day of the event and will be impounded until released for qualifying. Tires will be the Hoosier F-45 Star

- 1) All NASCAR Advance Auto Parts Weekly Series Late Model Stock Cars must complete at least 20 laps of the first Twin event for those race tires to be eligible to race in the second Twin event. If 20 laps is not completed, you must purchase 4 scuffs from the tire barn to be eligible to race in the second Twin event.
- 2) In the event of a cut tire, flat, or another reason that the Hickory Motor Speedway NASCAR officials deem a tire/wheel to be unsafe, (Hickory Motor Speedway NASCAR official must approve the change) the competitor may put a scuff on from their own stock to complete the first event. After the event, you must purchase 1 or more scuffs (based on what was changed) from the tire barn to be able to race in the second Twin event.
- 3) All Race Tires are scanned when sold.
- 4) Teams will be allowed beginning on the first race, after the race event to "stockpile" up to 4 scanned tires in the tire barn that were raced on March 1st, 2025, or any future NASCAR Advance Auto Parts Weekly Series events for the remainder of the 2025 race season. These tires must have a minimum of 20 race laps on them and can be accessed only in the event of a situation involving the present rule with Options 1, # 1, 2 and 3.
- 5) Competitors competing for the first time at Hickory Motor Speedway in the NASCAR Advance Auto Parts Weekly Series Late Model Stock Cars, must use the present rule, under option 1, #1, 2 and 3 until they have the opportunity to "stockpile" 4 scanned tires for future events.

NASCAR 2025 Rulebook Exceptions

20F - 12.1 COIL SPRINGS / SPRING MOUNTS / JACKING BOLTS / SPINDLES

(SUSPENSION TRAVEL)

- Bump Stops will be permitted. (Subject to HMS Track officials approval)
- All Cars with one piece billet spindles must add 20lbs RS

20F - 12.3 Shock Absorbers

One (1) shock absorber per wheel. Approved shocks are:

Penske----- 7500 Series
Bilstein----- ASN , SN Series, XVA, **AS2, AS2-BV Series**
Advanced Racing
Suspensions-----4000/4200 Series
JRI-----ST/08 Series

- All shocks must be non-adjustable or single adjustable only
- No external reservoirs of any kind. Neither piggy-backed or remote
- Base Valves are permitted.

Notes

Crate motors are not required to be sealed at Hickory Motor Speedway. If an unsealed crate motor is raced, it will be checked as if it were a "built" motor but MUST be completely stock except for valve covers and oil pan. If a competitor visits with a crate motor sealed at one of the consortium tracks, they need to be prepared to remove the seals. Because the "break off bolts" are difficult to remove, HMS recommends removing them before racing or being prepared to remove them in post race inspection. If a Hickory regular wants to have a sealed engine to race at other tracks, please call the speedway office.

All racers are encouraged to have their carburetor checked by track officials PRIOR to qualifying. If a carburetor does not pass Post-Qualifying or Race Technical Inspection it may result in a disqualification and/or loss of points and/or loss of any prize money. The carburetor will be confiscated by the track and will not be returned.

HMS reserves the right to adjust these rules at any time during the season.

For more information, call Speedway Offices at 828-464-3655 or contact the HMS Technical Director, Danny Ranger (252) 377-0525 or via email at pitbull1482@yahoo.com