

# 2025 CHARGER RULES

## GENERAL

The Charger division is designed to be an affordable option for racers with older LMSC chassis and components. To retain the integrity of the division and ensure fair competition, the following rules will be enforced closely:

1. Minimum ride height of the chassis and body is 4"
2. Maximum OD of the front sway bar is 1 ½"
3. Centerlink must be between 23-24" in length between the centerlines of idler arm and pitman arm mounting locations.
4. Maximum of 2 ½" difference allowed (left side vs. right side) in the mounting height of the rear track bar measured from the ground to the center of the mounting bolt.
5. Left and right side tubular upper A-frames must be within 1 ½" of each other in length, when measured from the centerline of the bushing hole to the center of the ball joint. See page 3 for diagram.
6. Maximum shim stack thickness on upper A-frames is ½", this includes solid bars and shims.
7. No bump stops, coil binding, or travel limiting devices of any kind allowed. Gas pressurized shocks will be approved for competition with a 25-pound weight penalty. See page 3 for complete list of approved shocks.

## ENGINE/CARB/WEIGHT COMBINATIONS

ENGINE	WEIGHT	R/S WEIGHT	CARB	PLATE
Built Engine	3100	1400	350	¾" max
GM 604 Crate	3100	1400	500	¾" max
GM 603 Crate	3100	1400	390 or 500	1" max (390) or ¾" max (500)
GM 602 Crate	3100	1400	390/650 or 500	1" max (390/650) or ¾" max (500)
Ford 347JR Crate	3100	1400	390 or 500	No spacer (390) or ¾" max (500)

## COMPETING MODELS

1. 1970-2025 rear wheel drive, perimeter chassis cars with a minimum wheelbase of 104". All cars must be approved for eligibility in competition. Head tech man decision is final.

## CAR BODIES

1. All cars must have a minimum of (2) doors, (2) rear quarter panels, deck lid, bumper cover, roof and hood. Body may be metal, plastic, or composite.
2. All bodies must meet roof and spoiler height template specifications.
3. New style bodies will be allowed. All bodies must be approved by speedway.
4. All cars must be painted and lettered professionally.
5. Rocker panels may be fabricated.
6. Front windshields optional. Back window optional. Clear Lexan or plexiglass may be installed in the rear quarter windows. No side windows.
7. Speedway approved window net must be installed in the driver's side window opening.
8. Minimum ride height of the chassis and body is 4". Max overall spoiler height is 39"

9. Rear spoiler 5" high with maximum 60" width (max 300 square inches).
10. Wrecker hookup required front and rear of car.

## FRAME

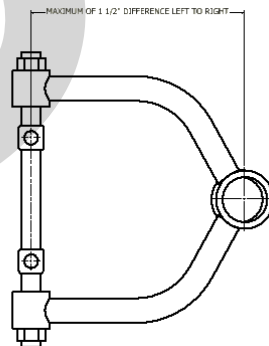
1. Perimeter (LMSC style) chassis only.
2. No offset/straight rail chassis allowed.
3. Frame rail min 2"x 3".
4. A steel firewall must separate the driver from the engine compartment and fuel tank.

## ROLL CAGE

1. A complete speedway approved roll cage.
2. Roll cage must be constructed of roll bar tubing with a minimum outside diameter of one and half 1 ½" inches x .083 wall thickness.
3. Roll cage must be centered on the frame. Perimeter style.
4. Main roll cage uprights must be on top of outside frame rails.
5. Full cage is required with four uprights and four top bars.
6. Roll bars may go through front and rear firewalls.
7. Minimum of three bars in driver's and passenger's door required.
8. All bars within drivers reach must be padded.

## SUSPENSION

1. Adjustable cups allowed on front and rear.
2. Spring spacers, coil over eliminators, or screw jacks may be used on front and rear.
3. OEM type steering box. Aftermarket tie rods, centerlink, idler, and pitman arm allowed.
4. Centerlink must be between 23-24" in length between the centerlines of idler arm and pitman arm mounting locations.
5. Lower A-frames must be OEM design. Lower A-frames must be same length. Aftermarket lowers can be used but must conform to OEM design. Aftermarket spindles allowed.
6. Upper A-frames may be fabricated.
7. Tubular upper A-frames must be within 1 ½" of each other in length, when measured from the center of the bushing hole to the center of the ball joint. See diagram below:



8. The maximum shim stack on the upper A-frame is ½", this will include solid bars and shims.
9. Front sway bar may be OEM or aftermarket. Mounting points may be aftermarket. Maximum OD of the front sway bar is 1 ½".
10. Leaf spring and/or coil spring suspension allowed.
11. Steel rear lower trailing arms required.
12. A fabricated metal top link and track bar allowed.



13. Maximum of 2 ½" difference allowed (left side vs. right side) in the mounting height of the rear track bar measured from the ground to the center of the mounting bolt.
14. Damper shocks may be used.
15. Rubber bushing, metal bushing, Teflon bushings or heim joints allowed.
16. Lowering blocks and trailing arms may be adjustable.
17. Aftermarket or 5x5 design hubs allowed. Wide 5 hubs allowed.

## REAR END

1. 9 inch rear end may be car, truck, or floater. Any ratio. A quick change will be allowed. No cambered rear end housings. +/- .4
2. Detroit locker, or locked rear end units only.

## SPRINGS AND SHOCKS

1. Tie rod or spherical end shocks allowed. OEM aftermarket struts allowed. Coil springs minimum diameter 5". Coil overs allowed. Coil over eliminator allowed. If running coil over eliminators, must have 5" min spring.
2. No canister/chamber shocks allowed. No external reservoirs allowed. No bump stops, coil binding, or travel limiting devices of any kind allowed.
3. The following non-adjustable, oil shocks will be approved for competition: Afco 11 or 13 series, Pro A or AR1 series, QA1 63 series.
  - a. Note: If you have a comparable non-adjustable, oil shock that you would like to run, please contact your track competition director for clarification on whether they will be approved for competition.
4. The following non-adjustable, gas pressurized shocks will be approved for competition with a 25-pound right side weight penalty: Penske 7500 series, Bilstein ASN series, 2Qwik. (no Advanced, JRI, Ohlins, etc. allowed)
  - a. Note: Koni 30 series single adjustable shocks will be approved for competition with no weight penalty.
5. Shock claim rule will be \$250 per shock excluding hardware (coil over kits and mounting hardware).
  - a. Claim requests must be made within 10 minutes of the completion of your race. Claims can be made by driver or owner and presented in writing to track officials with CASH in hand. You must claim at least two shocks and may only claim from a car that finished ahead of you. Driver must finish on lead lap to claim. You must run the claimed shocks the following race. If the other competitor does not agree to the claim, they will be DQ'd with no pay.
6. Only rubber type spacers are permitted in the coil spring with a maximum of 1 full round allowed per coil spring

## BRAKES

1. Metal single brake calipers required. Brakes on all wheels must work.
2. Steel disc brakes may be used on front and rear.
3. Aftermarket brake and clutch pedal allowed.
4. Dual master cylinder allowed. Any type brake bias adjusters allowed.

## WHEELBASE AND TREADWIDTH

1. 104" minimum wheelbase.
2. Cars must not exceed the maximum allowable tread width of 65 ½ inches.



## CRATE ENGINES

1. The following crate engines will be permitted:
  - i) General Motors #88958604
  - ii) General Motors #88958603
  - iii) General Motors #88958602
  - iv) Ford S347JR
2. Crate engines must remain within factory specs and parts as supplied from factory manufacturer. These engines are subject to teardown procedures and legalities determined by track officials. Aftermarket HEI distributor and cap, aftermarket valve covers may be used. Crate motor technical specifications will be based on the following manuals:
  - i) [GM Performance Parts Circle Track Crate Engine Technical Manual – Revised May 2010](#)
  - ii) [Ford Racing 347 Series Sealed Racing Engine Sanctioning Body Specifications Handbook](#)
3. Track management reserves the right to claim any crate engine at factory replacement cost. Anyone refusing the claim is subject to a fine, suspension, or a combination thereof. Refusing a claim will result in the loss of finishing position and points/monies earned for that night.
4. Crate engines are designed to cut the cost of racing. Anyone found tampering with these engines will be fined up to \$1000.00 for each offense and loss of points.
5. Crate engines are a great application for weekly racing if the competitor will leave them alone. Run them as supplied from the factory to ensure legality. Contact Competition Director if you need clarification to this rule.

## BUILT ENGINES

1. Only standard production allowed. GM 350 cubic inch maximum, Ford 351 cubic inch maximum, and Chrysler 360 cubic inch maximum.
2. No polishing or coating inside of block.
3. Overbore of .060 + normal wear permitted.
4. Aftermarket replacement rods allowed.
5. Steel replacement rods allowed.
6. Only solid steel connecting rods permitted. No polishing or machine work will be permitted.
7. Solid steel connecting rods may not be lighter than stock.
8. Flat top or dish 3 ring pistons permitted. Piston must not extend above top of block.
9. Crankshaft with stock stroke must be retained. Minimum weight 50lbs.
10. Crankshaft must not be Knife-edged. No excessive machining or grinding other than balancing. No drilled main journals. Subject to template inspection by Tech Official.
11. Wet sump oil system only.
12. Enlarged oil pan allowed. Kick outs will not be permitted between the bolt holes flange and the top of the added sump. Oil pan 4" minimum ground clearance.
13. No electric fuel pumps allowed.
14. Aftermarket valve covers allowed. Aftermarket pulleys allowed.
15. Engines under 310 cubic inch may be allowed a 390 4 barrel. Check with track officials.

## HEADS

1. Stock OEM production steel heads only. No Vortec heads on built engine.
2. Stock Replacement or SR Head allowed with a 25lb. penalty
3. NO modifications, no porting, polishing, or angle milling. No grinding of any kind. 3 angle valve job ok as per Speedway rule. One cut below valve seat, to bottom of valve guide. Do not radius or blend bottom of cut below valve seat.



4. Chev 62 cc; Ford (Clev) 68cc; Ford (Win) 58cc; Chrysler 68cc min. OEM valve size for cylinder head required. Steel valves required. Valve size maximum:

Chevrolet	2.02 intake	1.60 exhaust
Ford Cleveland	2.05 intake	1.65 exhaust
Ford Windsor	1.89 intake	1.60 exhaust
Chrysler	1.90 intake	1.60 exhaust

## CAM SHAFT

1. Any steel type timing chain allowed.
2. OEM or Aftermarket Valve Springs will be allowed on built engine.
3. Screw in studs and guide plates permitted with any ratio roller rocker arms allowed.
4. Stud girdles are permitted. Poly lock allowed.

## CARBURETOR

1. Built Engines may run a Holley 350 cfm (HP Part# 0-7448 or 0-80787-1) 2-barrel carburetor with a  $\frac{3}{4}$ " spacer.
2. Chevrolet #8602 crate engines may run a Holley 390 cfm (Part# 0-80507-1) or 650 cfm (Part# 80541-1, 80541-2, 80541-3) 4-barrel carburetor with 1" spacer or a Holley 500 cfm (HP Part# 0-4412C or 0-80583-1) 2-barrel carburetor with a  $\frac{3}{4}$ " spacer.
3. Chevrolet #8603 crate engines may run a Holley 390 cfm (Part# 0-80507-1) 4-barrel carburetor with 1" spacer or a Holley 500 cfm (HP Part# 0-4412C or 0-80583-1) 2-barrel carburetor with a  $\frac{3}{4}$ " spacer.
4. Chevrolet #8604 crate engines may run a Holley 500 cfm (HP Part# 0-4412C or 0-80583-1) 2-barrel carburetor with a  $\frac{3}{4}$ " spacer.
5. Ford 347JR crate engines may run a Holley 390 cfm (Part# 0-80507-1) 4-barrel carburetor with no spacer or a Holley 500 cfm (HP Part# 0-4412C or 0-80583-1) 2-barrel carburetor with a  $\frac{3}{4}$ " spacer.
6. New style Holley 500 CFM "Ultra XP" carburetors not allowed on any engine.
7. No polishing, grinding or machine work allowed on any part of carburetor.
8. No alterations except choke hardware may be removed and all vacuum ports must be plugged. Any bowl or metering block may be used. Base plate must not be altered in shape or size.
9. Boosters may not be altered in any manner including size, shape, or height of model #.
10. Any attempt to pull outside air other than through the venturi is not permitted.

## INTAKE AND SPACER

1. Cast iron two-barrel intake or Edelbrock performer aluminum intakes. Chevrolet #2101, Ford Windsor #2181, Cleveland #2665, #2750 and Chrysler #2176 or P#4532852.
2. No high-performance intake manifolds permitted. Intakes must be speedway approved.
3. No porting, polishing, or grinding will be permitted. Do not touch it.
4. Holley 350 CFM 2-barrel may run up to a maximum  $\frac{3}{4}$ " metal spacer with 2 holes (max 1.500 in) centered in spacer with a straight cut. No Bevels. Spacer gaskets .065 max thickness. Must not be coated.
5. Holley 500 CFM 2-barrel may run up to a maximum  $\frac{3}{4}$ " metal spacer with 2 holes (max 1.690 in) centered in spacer with a straight cut. No bevels. Spacer gasket .065 max thickness. Must not be coated.
6. Holley 390 CFM 4-barrel may run up to a 1" open aluminum spacer with no bevels on the General Motors #88958602 and #88958603 crate engines, or with no spacer on the Ford S347JR crate engine. Must not be coated.
7. Holley 650 CFM 4-barrel carburetor may run up to a 1" open aluminum spacer with no bevels on the General Motors #88958602 crate engine. Must not be coated.
8. All carburetors and spacer plates must meet speedway specifications.



## AIR CLEANER

1. Round air cleaner element minimum of 12 inches; maximum of 17 inches.
2. Element must be minimum of 1 ½ "and a maximum of 4 inches in height.
3. Dry type paper element only. No cold air boxes or cowl induction allowed.
4. No tubes, funnels or anything which may control the flow of air are permitted.
5. Air cleaner base must not be above choke horn

## TRANSMISSION AND FLYWHEEL ASSEMBLY

1. OEM standard production automatic, manual transmissions permitted.
2. A multi disk clutch is allowed.
3. Hydraulic clutch control permitted.
4. Must have steel bell housing that is speedway approved.
5. Drive shaft must be of magnetic steel only. Drive shaft must be painted white with two safety loops attached to the bottom of car.

## EXHAUST

1. Regular Headers (4 into 1) will be permitted. No stepped headers. No 180 allowed.
2. Cast iron manifolds permitted.
3. All LH exhaust pipe must exit behind the driver.

## ENGINE LOCATION

1. Engines may be interchanged from one body manufacturer to another.
2. Engine must be centered in chassis. #1 spark plug in line with upper ball joint. Ford max 2 inches back from #1 spark plug
3. Minimum crankshaft height is 12", from the center of crank pulley to the ground.

## COOLING SYSTEM

1. Aluminum radiators permitted.
2. Overflow hose recommended.
3. Antifreeze is not permitted.
4. Electric fans are permitted.
5. All air to the engine must pass through the radiator. No ducting or directing air to the carburetor allowed.

## ELECTRICAL SYSTEM

1. HEI Ignition allowed. MSD allowed. No digital ignition, no digital tacs, no 16v systems.
2. Aftermarket or OEM HEI distributors permitted. All Distributors can be locked up or welded in Crate or Built.
3. Only 1 coil permitted.
4. Only one 12-volt battery permitted.
5. No adjustable timing controls.
6. No open-ended wiring in driver's compartment.
7. Traction devices are not allowed. No computerized systems are allowed.
8. All ignition systems must be acceptable to speedway officials.

## FUEL AND FUEL SYSTEM

1. Race fuel required. No other mixtures of any kind.



2. All Fuel must pass Speedway Fuel specifications. Fuel must be same color.
3. Fuel cells are recommended. Must be securely strapped down with no less than 1/8" steel straps. Fuel cell must be vented high and to the left side.
4. The maximum capacity allowed is 22 gallons.
5. Fuel cells must have 8" minimum ground clearance.

## WHEELS AND TIRES

1. Maximum width 10" on all 4 wheels. 15" Steel wheels only.
2. Air bleeders will not be permitted. No chemical tire treatment allowed.
3. Charger teams will compete on the Hoosier F45\* compound only.
4. Charger teams may purchase four (4) new tires for the first race and one (1) new tire for each subsequent race.
  - a. Note: For a regular one tire event, the new tire MUST be run on Left Side.
5. After the first race, visiting competitors to OCS can purchase one (1) new tire and three (3) scuff tires.
6. Only scuff tires purchased and marked by OCS may be used.
7. Tires will be marked by the speedway and each team will impound tires at the end of each race night for use at their next event.

## WEIGHT

1. 3100 lbs. base weight with driver. No tungsten allowed.
2. Weights must be clearly marked on back of hood.
3. All cars will be weighed with driver in a driving position. Cars may gas up after race.
4. All lead weight must be added to chassis securely.
5. Any car that runs with gas pressurized shocks will incur a 25 pound right side weight penalty.

## SAFETY

1. Seat belts must be a 5- or 6-point harness type in good condition with no visible damage. Seat belts must not be more than five (5) years old.
2. Seat belts must not be mounted to the floor pan.
3. Seat belts must not cross areas that may cut the belts, i.e. not across sheet metal attached to a roll bar.
4. Seat belts must be replaced if they are worn, or the edges are frayed.
5. Aluminum factory made racing seats required.
6. Absolutely no homemade seats.
7. Seats must be mounted in a manner acceptable to track Officials.
8. Seats may not be mounted to the floor pan.
9. A track approved window net must be installed on the driver's side window.
10. Window net must release from the top and drop down.
11. Window net bars must be substantial enough to contain the drivers' arms in the event of a roll over.
12. All cars must have an onboard fire extinguisher.
13. Extinguisher must be mounted so the charge gauge can be checked by track officials.
14. Out of date fire extinguishers are not allowed.

## AMENDMENTS

1. These rules are subject to amendments for competition when ample notice has been given by the speedway. Any car that does not conform to the above rules may be allowed to compete with a weight and/or restrictor plate at the Competition Director's discretion. This decision can be made at any time to give someone a chance to race at the track.



***IF YOU HAVE ANY QUESTIONS OR NEED CLARIFICATION ON ANY RULES, PLEASE CONTACT YOUR SPEEDWAY TECH OFFICIALS/COMPETITION DIRECTOR!***

***ALL RULES ARE SUBJECT TO ADJUSTMENTS BY THE SPEEDWAY COMPETITION DIRECTOR TO ENSURE FAIR COMPETITION!***

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