

2019 Charger Rules

	Cu In	Weight	L/S Weight	Carb	Plate
GM Built	350	3100	1400	350	¾ inch max
Ford Built	351	3100	1400	350	¾ inch max
Dodge Built	360	3100	1400	350	¾ inch max
GM 602	350	3100	1400	500	Track plate required
GM 603	350	3100	1400	500	Track plate required
Ford	347JR	3100	1400	500	Track plate required

This class is for old style LMSC chassis and components if you want to run new Chassis and lightweight parts this class may not be for you. More than anything else we will be enforcing this to retain the integrity of this class

- 1- Metric frame cars may remove 25 lbs total weight and must retain 45% left side weight**
- 2- All 350 carburetors may run a ¾ in spacer plate**
- 3- All 500 carburetors must run a track spacer plate**
- 4- 500 cfm Ultra carburetors not allowed (4412 Holley only)**

CAR BODIES

- 1- Body must remain stock appearing.
- 2- No reinforcements permitted with the exception of hood, front fender wells and trunk lid. Reinforcements may not alter stock appearance.
- 3- Anything that bolts in may be removed.
- 4- Firewalls must remain stock appearing and in the stock location.
- 5- Floorpans must remain stock for car make and model.
- 6- Hood may be fiberglass and must have 5 magnetic steel hood pins with at least 3 across the front
- 7- All hood and cowl air vents must be removed or covered.
- 8- Minimum of 4" ground clearance on all bodies and bumper covers.
- 9- All glass, interior finish, chrome and any flammable materials must be removed.
- 10- Windshield required 1/16th minimum Lexan required. Rear glass is optional.
- 11- Quarterpanel's and fenders may be cut for tire clearance only.
- 12- Front inner fenders may be removed.
- 13- Aftermarket or fabricated steel bodies and replacement panel allowed but must remain stock appearing for the make and model. Roof must be OEM for make and model.
- 14- Any aftermarket or fabricated body must be 22 gage steel.
- 15- Roof height minimum 10 inches back of windshield is 49 inches. Measured from the top of the windshield

- 16- Composite or fiberglass bodies and/or panels may be allowed. This may incur a weight penalty.
- 17- If side skirts are used they must still adhere to the 5 inch ground clearance

WEIGHT

- 1- All weights with the driver after qualifying and the race.
- 2- All cars must maintain a minimum 45% left side weight at all times.
- 3- All lead must be securely mounted outside the driver's compartment and be painted white with the car number on it.
- 4- All added weight must be located between the centerline of the front spindles and the centerline of the rearend

ENGINE

- 1- Only standard production allowed. GM 350 cubic inch maximum, Ford 351 cubic inch maximum and Chrysler 360 cubic inch maximum.
- 2- Engine may be interchanged within manufacture only.
- 3- Engine may be balanced.
- 4- Steel racing oil pan permitted.
- 5- No windage trays in the oil pan.
- 6- No polishing or painting allowed inside of the block.
- 7- Maximum of .060 overbore permitted
- 8- Four bolt main block permitted with stock caps only.
- 9- Aluminum and aftermarket pulley's allowed

CRANKSHAFT

- 1- Stock crankshaft with stock stroke must be retained
- 2- Crankshaft casting numbers must not be removed
- 3- Crank journals may be ground for undersize bearings only.
- 4- Minimum crank weight will be 50 pounds
- 5- No other machine work allowed
- 6- Crankshaft minimum height is 12 inches.

RODS

- 1- Forged connecting rods only
- 2- No polishing or machining allowed

PISTONS

- 1- Pistons must not extend above the deck of the block *0.000 deck*
- 2- Flat top or dish pistons only
- 3- Aftermarket pistons may be used however the piston must match the stock piston including piston rings, wrist pins and skirts
- 4- No part of the piston may be altered to reduce weight
- 5- Piston and rod minimum weight will be 1200 grams.

CAMSHAFTS

- 1- Camshafts must be magnetic steel
- 2- Cam and lifters will have a maximum lift of .500
- 3- Roller rocker arms allowed.

CYLINDER HEADS

- 1- Cylinder heads must remain stock for make of the engine.
- 2- Stock production steel heads only.
- 3- No angle plug heads allowed.
- 4- Maximum valve size Intake 1.94" and Exhaust 1.60".
- 5- No necked down valve stems
- 6- Maximum valve spring wire size is .188 inch.
- 7- No cutting of the head for large valve springs.
- 8- Poly locks permitted on rocker arm studs.
- 9- Screw in rocker arm studs permitted.
- 10- No angle cut heads permitted.
- 11- All casting numbers must be retained and unaltered.
- 12- No modification permitted this includes porting, polishing, grinding or port matching.
- 13- A three angle valve job per Late Model Stock rules allowed.
- 14- Combustion chamber minimum of 62cc's.
- 15- Angle plug heads may be used however you must run a 25 pound right hand side weight addition

INTAKE and SPACER

- 1- Only the following Edelbrock aluminum intakes will be permitted. GM #2101, Ford with 4bbl heads #2665, Ford with 2bbl heads #2750 Ford Windsor #2181 and Chrysler #2176.
- 2- No porting, polishing or gasket matching will be allowed.
- 3- Only a one piece solid aluminum space .750 inch thick may be installed between the intake and the carburetor.
- 4- Spacer must be centered on the intake manifold.

- 5- Spacer must have two holes with 1.5 inch openings that match the base of the carburetor. Holes must be centered.
- 6- Only two paper gaskets one per side a maximum of .065 inch thick allowed.
- 7- No adjustable spacers allowed.
- 8- No other modifications allowed.

CRATE ENGINE GM 88958602 and GM Circle Track Crate 88958603

- 1- This the engine must be complete as supplied by the manufacture including but not limited to distributor, oil pan, intake manifold, valve covers, timing chain cover, vibration damper (etc.)
- 2- Any non approved modifications may result in confiscation of the entire motor including but not limited to a to intake, starter, valve covers, rocker arms, valve springs (etc.)
- 3- Crankshaft height will be a minimum of 12 inches
- 4- Crate motor technical specifications will be based on the GM Performance Parts Circle Track Crate Engine Technical Manual. Part number 88958668 revised May 2010

INTAKE and SPACER CRATE ENGINE

- 1- The intake manifold must be stock for the 8602 and the 8603 crate motors.
- 2- Only OCS track spacer allowed on crate engines
- 3- Spacer must be centered on the intake manifold.
- 4- Spacer must have two holes with 1½ inch openings that match the base of the carburetor.
- 5- Only two paper gaskets one per side, Maximum thickness of 0.065 will be allowed.
- 6- No adjustable spacers allowed.

CARBURETOR

350/350HP Holley

- 1- No polishing, grinding or drilling of holes will be permitted in the body of the carburetor.
- 2- Choke may be removed and all holes must be permanently sealed.
- 3- Choke horn may not be removed or altered.
- 4- Boosters may not be altered in any manner this includes size, shape or height.
- 5- Venturi area must not be altered in any manner. Casting ring must not be removed.
- 6- Base plate must not be altered in size or shape.
- 7- Stock butterflies must not be thinned or tapered.
- 8- Idle holes may be drilled in butterflies.
- 9- Screw ends may be cut even with the shaft, but screw heads must remain standard.
- 10- Throttle shaft must remain standard and must not be thinned in any manner.

- 11- Any attempt to pull air other than through the venturi will not be permitted.
- 12- Only Holley metering blocks can be used
- 13- Surfacing of the metering block for improved gasket seal will be permitted.

AIR CLEANER

- 1- Round air cleaner a minimum of 12 inches and a maximum of 17 inches in diameter permitted.
- 2- Top and bottom of the air filter must be the same size.
- 3- Element must be a minimum of 1.5 inch and a maximum of 4 inches in height.
- 4- Paper element only no cloth permitted.
- 5- No tubes, funnels or anything else that may direct air flow allowed inside air filter housing.
- 6- No shield around the air filter will be permitted.
- 7- Base of the air filter housing may not exceed the top of the carburetor choke horn.

COOLING SYSTEM

- 1- Aluminum radiators permitted.
- 2- Antifreeze not permitted.
- 3- Electric fans are permitted.
- 4- Radiators must be stock appearing and installed in the stock location.
- 5- All air to the engine must pass through the radiator. No ducting or directing air to the carburetor allowed.

EXHAUST

- 1- Single flange tube headers permitted
- 2- Maximum tube size is 1 5/8ths inch
- 3- No wrap around or 360 degree headers.
- 4- OEM stock cast exhaust manifolds permitted.
- 5- Exhaust collectors and exhaust pipes must not exceed 3 inches OD.
- 6- All exhaust must exit under the car and behind the driver.
- 7- No thermal wrap permitted.

TRANSMISSION and FLYWHEEL

- 1- Three or four speed stock type transmissions permitted. All forward and reverse gears must be in working order from the driver's seat of the car.
- 2- No racing or lightweight transmissions must be cast iron housings.
- 3- All clutches and pressure plates must remain stock type.
- 4- No drilling or lightening of the clutch or pressure plate allowed
- 5- Clutch disc without springs recommended.

- 6- Stock clutch minimum dimensions are 10.5 inches.
- 7- Racing type clutches minimum is 7.25 inch are allowed
- 8- No aluminum clutch flywheel components allowed.
- 9- Steel bell housing or scattershield required
- 10- Hydraulic clutch slave system may be used to operate clutch.

DRIVESHAFT

- 1- Driveshaft must be painted white.
- 2- Driveshaft must be magnetic steel only.
- 3- Minimum OD of driveshaft will be 2 ¾ inch.
- 4- Two magnetic steel safety straps must be installed one at the front of the driveshaft and one at the rear. Straps must encompass 360 degrees on the driveshaft.

REAR END

- 1- Stock rear ends allowed. 10 and 12 bolt rear ends, Ford 8 ½ and 9 inch allowed.
- 2- Quick change rear ends allowed.
- 3- Differentials may be locked. Detroit locker or limited slip.
- 4- No Torsions, Gleason's, Gold- Trac (ect)
- 5- Floating type rear ends allowed
- 6- Metric cars may have adjustable coil spring spacers
- 7- Leaf spring cars may have a maximum 3" adjustable lowering blocks and adjustable spring shackles at the rear
- 8- No horizontal leaf springs "Sliders" allowed.
- 9- Front of the leaf springs and trailing arms must remain in the stock location on frame and unibody.
- 10- Reinforcements of the front mounting locations allowed, but must remain in the stock location and be nonadjustable.
- 11- Rear trailing arms must be stock appearing for make and model
- 12- Mono ball permitted.
- 13- Left and right must be the same length.
- 14- Cars with factory panhard bar must be stock appearing.
- 15- No cambered or toed rear ends allowed.

SPRINGS, SHOCKS and AFRAMES

- 1- Heavy duty springs optional as long as they fit in the original position.
- 2- No coating of the springs allowed.
- 3- Front shocks may be moved outboard for easy control and inspection.
- 4- Only one shock per wheel
- 5- No external reservoirs
- 6- Shock claim rule will be \$400 for all 4 shocks.
- 7- If shocks are claimed they must be raced on the claiming car next race.

- 8- Only rubber type spacers are permitted in the coil spring with a maximum of 1 full round allowed per coil spring.
- 9- Tubular upper A-frames must measure within 1 3/4 inch of each other left to right. Measured from the center of the ball joint to the center of the frame rail
- 10- No coil binding or bump stops allowed

METRIC FRAME

- 1- Frames must be stock.
- 2- No shortening or altering in any way
- 3- Frame rails must be stock for make and model of the car.
- 4- No interchanging of frames from car makes.
- 5- Lower A arms must remain unaltered except to mount shocks and sway bars.
- 6- No slitting of frame mounting holes.
- 7- Tubular nonadjustable magnetic steel upper A arms allowed.
- 8- Must resemble stock upper A arm configuration.
- 9- No heim joints allowed.
- 10- Upper A arms must retain a stock appearing mounting location.
- 11- Upper mounts may be reinforced or replaced
- 12- No adjustable slugs
- 13- Engine must remain in the stock location.
- 14- Solid engine and transmission mounts are permitted.
- 15- Stock spindles, steering boxes, steering arms, idler arms and center links only.
- 16- No dropped spindles.
- 17- Tie rod ends and ball joints must be stock appearing.
- 18- No monoballs permitted.
- 19- An "X" may be added between the inside of the frame rails for driver safety.
- 20- A 1 piece unaltered OEM sway bar if used must connect to the lower A frame in a stock location.
- 21- Sway bar mounting at the frame must be in the stock location and a maximum of 1/2 inch drop for the bushing or spacer.
- 22- Aftermarket heavy duty sway bars must remain unaltered, this includes all mounts also.
- 23- Maximum OD of 1 1/4 inch sway bar.
- 24- No slappers, spline bars or 3 piece bars allowed.
- 25- A minimum 5 inch ground clearance for the frame, body, spoilers and leaf spring shackles.

OLD STYLE LMSC FRAMES

- 1- Old style LMSC frames only
- 2- No offset allowed on the frame
- 3- Tubular nonadjustable magnetic steel upper A arms allowed
- 4- Lower A arms must remain unaltered except to mount shocks and sway bars
- 5- Spindles must be the same left and right

- 6- No drop spindles
- 7- Truck arms must be the same length
- 8- The front of the truck arms may have a maximum difference of 1 1/2 inch from parallel
- 9- All suspension parts must be magnetic steel
- 10- Frame rails must be parallel to each other
- 11- Kick outs on the front clip must be the same length
- 12- No drop snout frames allowed
- 13- A maximum of 2 inch difference allowed in the mounting of the track bar measured from the ground to the center of the mounting bolt
- 14- Maximum OD of 1 1/4 inch sway bar

WHEELS

- 1- Maximum width is 10 inches.
- 2- Steel wheels only.
- 3- Minimum weight of 17 lbs each.
- 4- Air bleeders not permitted.
- 5- Offset must be the same on all 4 wheels.
- 6- No welding allowed on the wheels.

FUEL and FUEL SYSTEM

- 1- Fuel must test to OCS standard.
- 2- No mixtures or additives of any kind.
- 3- No nitrous oxide permitted.
- 4- Cooling of the fuel not permitted.
- 5- Fuel cells mandatory.
- 6- The maximum allowed fuel capacity is 22 gallons.
- 7- Fuel cells must have working check valves
- 8- Foam must be installed as manufactured.
- 9- Fuel cell must be mounted equal distance between the frame rails and as far forward as possible.
- 10- Fuel cells must have a minimum ground clearance of 8 inches.
- 11- Fuel cell must be mounted in an approved steel can.
- 12- Right side fuel fill not permitted.
- 13- Electric fuel pump not permitted.
- 14- A fuel cell protector bar must be installed at the rear of the frame.
- 15- Fuel lines going through the driver's compartment must be mounted in a steel tube.
- 16- No electric fuel pumps allowed.

ELECTRICAL SYSTEM

- 1- Starter must be in working order.
- 2- Battery may be relocated but must be bolted down securely and covered or placed in a battery box.
- 3- Only 1 12 volt battery permitted.
- 4- HEI distributor permitted.
- 5- No ignition boosters or crank trigger ignition allowed.
- 6- Ignition firing order must remain stock for engine make.

BRAKES

- 1- Stock type OEM brake calipers allowed.
- 2- Only 1 piston per caliper.
- 3- No brake bias adjusters allowed within drivers reach inside car.
- 4- All 4 brakes must work.
- 5- All rotors must be magnetic steel
- 6- No scalloped rotors.

ROLL CAGE

- 1- A full roll cage is required
- 2- Roll bars must be welded and made of a minimum wall thickness of .090 seamless tubing.
- 3- Roll bars must be at least 1 ½ inch OD.
- 4- Roll bar may be extended through the firewall and loop around radiator.
- 5- Roll bars may be extended to the rear deck also.
- 6- Fuel cell protector must be installed behind fuel cell.
- 7- Right side cage must have 4 bars in the door area.
- 8- Drivers door roll bars should have intrusion plates welded to the outside a minimum of 1/8 inch plates.
- 9- Refer to the Whelen All American Series rulebook for cage construction guidelines.

SPOILER

- 1- Spoilers must not be over 5 inches in height.
- 2- Spoilers must be the same width of the deck lid.
- 3- Spoiler must be securely mounted at the rear of the deck lid.
- 4- Spoilers must maintain a 40 to 50 degree angle.
- 5- Spoiler side panels not permitted.

BUMPERS

- 1- Bumpers must be stock appearing and in stock location for make and model car.
- 2- ABS tail and nose covers allowed.
- 3- Support bars behind the bumper covers must be 1 ¾ inch OD or 2 inch square.

WHEELBASE

- 1- Wheelbase must remain stock with a half inch tolerance for make and model being used.
- 2- Old LMSC will be 105 inch +- ½ inch
- 3- Wheelbase will be measured by stringing the left-hand side and then measuring both sides.

TREADWIDTH

- 1- Maximum allowable treadwidth is 65 1/2 inches.
- 2- Spacers will be permitted to reach the maximum allowable treadwidth.
- 3- Only one spacer per wheel
- 4- If spacers are used must be the same thickness on the left and right hand side.
- 5- Spacers do not have to be the same size front and rear.
- 6- A one half inch tolerance will be allowed from front to rear treadwidth; however neither may exceed the 65 ½ inch maximum.

SEAT BELTS

- 1- Seat belts must be a 5 point harness type
- 2- Seat belts must be in date in accordance with the manufactures date on the label. The belts may be recertified
- 3- Seat belts must not be mounted to the floor pan
- 4- Seat belts must not cross areas that may cut the belts i.e. not across sheet metal attached to a roll bar
- 5- Seat belts must be replaced if they are worn or the edges are frayed

SEATS

- 1- Aluminum factory made racing seats required.
- 2- Absolutely no homemade seats
- 3- Seats must be mounted in a manner acceptable to OCS Officials
- 4- Seats may not be mounted to the floor pan

WINDOW NETS

- 1- An OCS approved window net must be installed on the driver's side window
- 2- Window net must release from the top and drop down
- 3- Window net bars must be substantial enough to contain the drivers arms in the event of a roll over

FIRE EXTINGUISHER

- 1- All cars must have an onboard fire extinguisher
- 2- Extinguisher must be mounted so the charge gage can be checked by OCS Officials
- 3- Out of date fire extinguishers are not allowed

GROUND CLEARANCE

- 1- Minimum ground clearance for the body, chassis and any component mounted to the body or chassis is 4 inches
- 2- Minimum ground clearance for the exhaust pipes is 3 inches
- 3- Minimum ground clearance for the fuel cell is 8 inches



