



## **2021 Challenger/Charger**

**As of 1 February 2021**

**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. **COASTAL PLAINS RACEWAY TECH** shall be empowered to permit any and all deviation from any of the specifications herein or impose any further restrictions to keep the competition close. Any interpretation or deviation of these rules is left to the discretion of the **COASTAL PLAINS RACEWAY TECH** officials, their decision is final.*

Make note that these rules are in addition to the CPRP General rules that apply to all drivers and crews and for all race classes. The intent of these rules is to help provide fair and safe racing to the fullest extent possible.

### **COMPETING MODELS**

1970-2019 rear wheel drive body cars with a minimum wheelbase of 104" Wheelbase.

#### **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. All bodies must be approved by speedway.
4. All cars must be painted and lettered professionally.
5. Rocker panels may be fabricated but must maintain 4" ground clearance.
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. Body height minimum 4 inches. 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. Stock OEM front sub frame with tubing frame connector allowed.
2. OEM stock clip must have factory OEM mounting points for weight break. Rear trailing arm mounts may be fabricated.
3. Fabricated clip and lowers allowed with weight penalty.
4. Frame rail min 2"x 3". Minimum 3 inch Crossmember, Oil Pan, and Exhaust Clearance.
5. Body and Chassis rails must maintain 4" ground clearance with driver.
6. 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.
9. Perimeter Chassis 55% Max LS. A Older Chassis Non Perimeter May Be Allowed With A 2% Penalty

## **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.
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. Front sway bar may be OEM or aftermarket. Mounting points may be aftermarket.
8. Leaf spring and/or coil spring suspension allowed.
9. Steel rear lower trailing arms required.
10. A fabricated metal top link and track bar allowed.
11. Damper shocks may be used.
12. Rubber bushing, metal bushing, Teflon bushings or heim joints allowed.
13. Lowering blocks and trailing arms may be adjustable.
14. Aftermarket or 5x5 design hubs allowed. Wide 5 and Coilovers allowed.

## **REAR END**

1. 9 inch rear end may be car, truck, or floater. Any ratio. A standard 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.
2. Aftermarket metal body shocks allowed. No canister shocks allowed. Shocks must be same size from top to bottom excluding threads. Coil springs minimum diameter 5". If Running Coil Over eliminators must have 5" min spring. Coil Overs Allowed.
3. Coil over eliminator allowed. No Coil Binding Or Travel Limiting devices. No Bumpstops
4. Shocks may be claimed for \$175 a shock excluding hardware. A claim must be made no longer than 10 minutes after the checkered flag falls. Driver must finish on lead lap to claim. Only allowed if claim is in front of you not behind you in the finishing order. A driver or Owner can Claim must be made in CASH and presented to head tech man before the 10 minutes is up. If driver or owner refuses the claim the driver will be DQed with no pay.

## **BRAKES**

1. Metal 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 ENGINE chev#8602, chev#8603 may run a 390 4 Barrel carb. A chev#8604, Ford crate engines will be allowed but must run up to a 450 2 bbl carb.
1. This Crate engine can be used as all supplied parts from factory manufacturer. These engines are subject to teardown procedures and legalities determined by tech committee. Aftermarket HEI distributor and Cap, Aftermarket valve covers may be changed. The 604 Nascar engine allowed with a 350 or 450 carb. The staff at Dillon Motor Speedway has invested a lot of time and money to be "up to date" on these engines, therefore make sure the engine is legal or it will be caught.
  2. DMS Reserves the right to claim any Crate Engine that competes at the Dillon Motor Speedway. DMS Owner Ron Barfield can trade a new Crate Engine of the same part number for the one in the race car at the completion of an event at the Dillon Motor Speedway! If the Claim is denied the Car Owner will be subject to penalty and a fine!
  3. 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.
  4. Crate Motor is a great application for Local Racing if the competitor will leave them alone. Run them as supplied from the factory to ensure legality. Contact Tech Official if

you need clarification to this rule.

BUILT DMS ENGINE may run up to a 500 2 Barrel Carb

1. Only stock production engines allowed. Chevrolet 350 cubic inch maximum, Ford 351 cubic. MASS Street Stock Engine Combinations Allowed per MASS Rulebook. inch, Chrysler 360 cubic inch plus overbore.

1. . No polishing or coating inside of block.

2. Overbore of .060 + normal wear permitted.

3 Aftermarket replacement rods allowed.

4. Replacement rods may not be lighter than OEM stock rods.

5. Only solid steel connecting rods permitted. No polishing or machine work will be permitted.

6. Solid steel connecting rods may not be lighter than stock.

7. Flat top or dish 3 ring pistons permitted. Piston must not extend above top of block.

8. Crankshaft with stock stroke must be retained. Minimum weight 50lbs.

9. 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.

10. Wet sump oil system only.

11. 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.

12. No electric fuel pumps allowed.

13. Aftermarket valve covers allowed. Aftermarket pulleys allowed.

14. Engines under 310 cubic inch may be allowed a 390 4 barrel. Check with series officials

## HEADS

1. Stock OEM production steel heads only. No Vortec heads on built engine.

2. Stock Replacement or SR Head allowed with a 50lb. penalty

2.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.

3. Chev 70cc min; Ford (Clev) 68cc; Ford (Win) 58cc; Chrysler 68cc min; Chev 62 cc. OEM valve size for cylinder head required. Steel valves required. Valve size maximum:

Chevrolet 1.94 intake 1.50 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. Hydraulic or flat tappet cam and OEM diameter lifters with a maximum lift of Chev .480, Ford .512 Dodge .500 at valve with valve lash as ran in race. Lift will be measured at the retainer.

2. Any steel type timing chain allowed.

3. OEM or Aftermarket Valve Springs will be allowed on built engine.

4. Screw in studs and guide plates permitted with any ratio roller rocker arms allowed.
5. Stud girdles are permitted. Poly lock allowed.

### **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 #7448 spacer a maximum  $\frac{3}{4}$ " metal spacer No Bevels. Spacer Gaskets .065 max thickness. Must not be coated.
5. Holley #4412 spacer a maximum  $\frac{3}{4}$ " metal spacer with 2 holes (max 1.690) centered in spacer with a straight cut. No bevels. Spacer gasket .065 max thickness. Must not be coated.
6. Crate Motors may run up to a 1 inch thick aluminum spacer with no bevels. Must not be coated. All carburetors and spacer plates must meet speedway specifications.

### **CARBURETOR**

Up To A 390 4 Barrel Carb Or Up To A 500 2 Barrel Carb on 602 or 603 Crate Engine and Built Engines Can Run Up To A 500 2 Barrel. A LMSC, 604 engines may run up to a Holley 2bbl carb "450". A "450 carb adapter blend ring  $\frac{3}{8}$ "

See below for rework guidelines:

1. No polishing, grinding or machine work allowed on any part of carburetor.
2. 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.
3. Boosters may not be altered in any manner including size, shape or height of model #.
4. Any attempt to pull outside air other than through the venturi is not permitted.

### **AIR CLEANER**

1. Round air cleaner element minimum of 12 inches; maximum of 17 inches.
2. Element must be minimum of  $1\frac{1}{2}$ " 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. OEM Steel Clutch and Flywheel over 33 lbs. receives a 50 pound weight break.
3. A  $7\frac{1}{4}$  Multi Disk Clutch is allowed as base weight. A  $5\frac{1}{2}$  Multi Disc Clutch will be allowed with a 50lb. weight penalty. OEM Clutch and Flywheel receives 50 pound weight brake.

4. Hydraulic clutch control permitted.
5. Must have steel bell housing that is speedway approved.
6. 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. Engine and header pipe clearance must be a min height of three inches (3inch) with driver.

### **COOLING SYSTEM**

1. Aluminum radiators permitted. Any radiator allowed.
2. Overflow hose recommended.
3. Antifreeze is not permitted.

### **ELECTRICAL SYSTEM**

1. HEI Ignition allowed for base weight. 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. Any type 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. 15" Steel wheels only.
2. Air bleeders will not be permitted. No chemical tire treatment allowed.
3. Tires used for qualifying and race must be approved by the speedway.
4. Any car tires from any source other than speedway tire building will be disqualified.
5. Hoosier Scuffed F45

3100 lbs. base weight with driver. No tungsten allowed.

Cars With OEM Front Clip and OEM Floorboard Chassis receive 100lb weight break

Cars With OEM Front Clip Fab Chassis or 5x5 Equipped Cars receive 50lb weight break.

55% left side maximum weight percentage on all cars. Weights Must Be on back of hood.

World Products Heads or 5 ½ inch clutch must add 50lbs.

All cars will be weighed with driver in a driving position. Cars may gas up after race.

All lead weight must be added to chassis securely.

602, 603 Crate engine equipped cars get a 50 pound weight break

Any car that runs a 350 carb on any motor combination receives a 100 lb weight break.

MSD Allowed.

## **AMMENDMENTS**

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 tech committee's discretion. This decision can be made at anytime to give someone a chance to race at the Dillon Motor Speedway.

2. Older Nascar Late Model Stock Perimeter Chassis Cars may be Approved for competition. Head Tech Man decision on weight penalty is Final!

3. Up to A 390 4 Barrel Carb or Up to A 500 2 Barrel Allowed on Crate Engines. Up to A 500 2 Barrel Built DMS 70 cc Engines are allowed. LMSC Built Engines, 604 or DMS Built with Less than 62cc head engines may run up to a Holley 2bbl 450 Carb. If You decide to run a 350 carb on any motor combination you can have a 100 lb. weight break or trade for canister non same size shocks but not both. Tech Man Decision is FINAL! Your weight must be written on the back of the hood

\*\*\*\*ANY RULES YOU DO NOT UNDERSTAND OR YOU NEED CLARIFICATION, PLEASE CONTACT SPEEDWAY OFFICALS.