

2020

# **Mini Stock Official Car Specifications**

# **2021** Mini Stock Official Car Specifications

Note: Items Highlighted in RED are additions / changes

All questions and comments in regards to rules should be addressed to the Ontario Dirt Competition Committee web site; <u>https://ontariodirtcomp.com/contact</u>.

## TERMS:

The term "Stock O.E.M. replacement" means that the item/part must have been a standard item/part on the MAKE and MODEL of the vehicle being driven as a racecar. Just because the company that manufactured the vehicle manufactures a part does NOT mean the part is legal. The part must have been available on the specific vehicle being used as a racecar. Stock O.E.M. replacement direct fit, direct replacement part only. Must meet size/weight/material requirements as if factory produced. No Modifications.

The term factory stock/ production or factory produced:

Manufactured by the company who produced the vehicle being used as a race car. Manufactured for the year/make/model of the racecar

#### REMEMBER – BUILD IT LEGAL, KEEP IT LEGAL AND HAVE FUN!

In the spirit of equalizing competition, adjustments may be made as becomes necessary.

#### 1.0 – Mini Stock Competing Models

- 1.1 Open to all cars manufactured between 1979 and current year, self-aspirated only; no turbo or supercharged automobiles.
- 1.2 No convertibles, station wagons, jeeps, trucks, etc.
- 1.3 Front or rear wheel drives allowed, no all-wheel drive or four wheel drive automobiles allowed. No rear or mid- engine cars.
- 1.4 No Porsche.
- 1.5 CRX and any 2 passenger cars will not be allowed.

# 2.0 – Engines

• 2.1 - Three (3) or Four (4) cylinder engines only, must be stock for make, model and

year.

- 2.2 ODCC Committee has the right to make a weight rule to equal out the competition.
- 2.3 Engines no larger than 2.5 liter (2500 cc.)
- 2.4 16 valve engines allowed single cams only.
- 2.5 No V-Tec or variable valve timing.
- 2.6 The following makes and models of dual cam 4cylinder equipped cars will be permitted at a weight of 18.5lbs/Factory Rated Horsepower +100 lbs:
  - -1997- 2011 Ford Focus/ZX2
  - o -1999- 2002 Mercury Cougar
  - o -1994- 1999 Chrysler Neon
  - o -1995- 2005 Cavalier/Sunfire
  - o -2005- 2006 Cobalt/Pursuit/G5
  - o -1991- 2005 Saturn Ion
  - -1996- 2005 Grand Am/Alero
- 2.7 No Rotary type engine.
- 2.8 2 spark plugs per cylinder allowed.
- 2.9 No performance or truck parts of any kind allowed.
- 2.10 No engine modifications to enhance performance are allowed.
- 2.11 No porting or polishing allowed.
- 2.12 Valve size must be stock for that engine.
- 2.13 Milling of head allowed. Must not exceed 190 psi compression.
- 2.13.1 Engines 200 psi 210 psi will add 100 lbs. minimum weight. Cannot exceed 210 psi. 211psi and over cannot compete. No exceptions.
- 2.14 Maximum 0.040 overbore.
- 2.15.1 8 valve engine may run any lift, any duration camshaft.
  - 2.15.2 12 valve engine may run 0.030" over stock valve lift with 50lbs added to minimum weight.
  - 2.15.3 Camshaft Lift must be Canadian or U.S. specs.
  - 2.15.4 Valve springs can be higher pressure than stock.
  - 2.15.5 Multi index timing gears or adjustable sprockets are allowed on 8 and 12 valve engines only.
- 2.16 16 valve engines must have stock or stock replacement camshaft only. Lift and duration must be stock. Valve springs must be stock.
- 2.17 No after-market or performance ignitions allowed. Must remain stock.
- 2.18 No mass air modifications. Must remain stock.
- 2.19 No intake modifications. Must remain stock.
- 2.20 Engine size must be placed on the hood in CC or CID.
- 2.21 Must remain stock stroke.
- 2.22 Stock connecting rods and rod caps. No grinding or polishing.
- 2.23 Engine and any engine parts must be for Canadian and US models.

## 3.0 – Carburetor

- 3.1 Carburetor must be an OEM type. Maximum stock 2 barrel with no alterations. Or Holley (Part #7448) 350 cfm 2 barrel carburetor. Choke can be removed and jets can be drilled larger or changed. No other alterations.
- 3.2 Any 1" adapter or spacer. Intake can be cut to match butterflies of Holley Carburetor.
- 3.3 Electric fuel pumps allowed with inertia or oil pressure switch.
- 3.4 Any air filters allowed. K&N type air filters allowed.
- 3.5 Air breather lid and bottom must be metal. Can be trimmed to the outside diameter of the filter.

## 4.0 – Fuel Injection

- 4.1 Fuel injection and electric fuel pumps are allowed if equipped as stock.
- 4.2 A matched intake and carburetor set-up may replace fuel injection set-up with no modifications.
- 4.3 Electric fuel pump must have inertia or oil pressure shut off switch to shut off fuel pressure in the event of an accident.
- 4.4 Any air filters allowed. K&N type air filters allowed.
- 4.5 Air breather top or bottom can be trimmed air must be pulled through stock size filter.
- 4.6 Stock tube between air filter and throttle body may be replaced but must remain stock diameter and length.
- 4.7 Computer must be stock with no modifications, no removing of rev. limiter.

ECM: Stock ECM only no modifying or reprogramming. ECM can be claimed by the track for \$200.00. If ECM is modified, reprogrammed or claim refused car/driver will be disqualified and loss of all points to date. Driver will be suspended for one year. ECM can be exchanged by official at any time.

• 4.8 – OBD II equipped cars must have a functioning diagnostics port accessible to tech at all times.

# 5.0 – Fuel System

- 5.1 Fuel Cells MANDATORY and securely fastened in the trunk located and vented. No sloppy installations.
- 5.2 Fuel cell filler neck must be grounded to the car.
- 5.3 Fill spout to be located inside trunk.
- 5.4 No aluminum tanks.
- 5.5 Full firewall required between driver's compartment and trunk area.
- 5.6 Automotive Pump Gas only. No race fuel. No additives.
  - 5.7 Plastic fuel cells must be encased in a steel box. (Recommended 20 gauge steel)

# 6.0 – Cooling System

- 6.1 Aluminum radiators with plastic tanks allowed for any year make model and style of car from manufacturer only in stock location.
- 6.2 Aftermarket radiators or racing radiators are allowed.
- 6.3 Oil coolers allowed.

## 7.0 – Electrical System

• 7.1 - Battery must be mounted securely in a Spill proof Container in trunk, under hood, or behind driver seat.

• 7.2 - It is recommended the battery be mounted under the hood and be securely fastened.

#### 8.0 – Exhaust

- 8.1 Stock cast iron exhaust manifold or factory header allowed. Aftermarket header allowed with 50 lbs added to minimum weight.
- 8.2 Exhaust must exit behind driver's door securely fastened.
- 8.3 No part of the exhaust allowed in the driver compartment.
- 8.4 Maximum 2 1/2" OD. exhaust pipe. 2" OD maximum exhaust pipe on cars with engine over 125 hp. By manufacturer's specs.
- 8.5 Stock or stock replacement mufflers are allowed.
- 8.6 Exhaust must be securely fastened.

#### 9.0 - BODIES

- 9.1 Complete stock from original design of make, model and year. Altered bodylines will be significant reason for disqualification. No hood scoops. 5" rear spoiler is allowed.
- 9.2 Floorboard covering such as carpeting, door panels, headliner, and insulation must be removed.
- 9.3 All holes in floor and firewall must be filled, patched with 18 gauge sheet metal.
- 9.4 Rear seat must be removed.
- 9.5 Hood, roof, doors and trunk lid may be gutted. Other inner panels may be gutted as long as the driver is protected.
- 9.6 All doors must be welded or bolted shut.
- 9.7 Side scrub rails allowed and must be rectangular tube (1" x 2" ends beveled tight to body)
- 9.8 Frame connectors are allowed.

## 10.0 – Appearance/Numbering

- 10.1 All cars must be neatly and brightly painted.
- 10.2 Numbers as well as letters should be as large as possible (opposite colour of background) on doors, roof and all four corners of the body. (roof number must be read from right hand side of the car)
- 10.3 Sponsor decals must be placed on designated location.
- 10.4 Year, make, model, engine size in CC, and declared weight must be on hood.

## 11.0 – Bumpers

- 11.1 Bumpers must be securely mounted. Fabricated bumpers allowed but must have a stock appearing cover and must be approved by official.
- 11.2 Tow hook must be installed one on the front and one on the rear of the car for towing purposes.

## 12.0 – Glass

- 12.1 All glass must be removed.
- 12.2 Windshields must be replaced with Lexan or full wire screen of 1" square maximum.
- 12.3 All external lights must be removed.
- 12.4 No mirrors.

#### 13.0 – Firewall

• 13.1 – Car must retain stock front steel firewall in original location and must be sealed to the hood. All holes patched. (20 gauge minimum)

#### 14.0 – Frames

- 14.1- Stock frames only. No modifications allowed except for re-enforcement.
- 14.2 Frame stock appearance must be maintained when strengthening is required so as not to reconstruct as a tube frame.

#### 15.0 – Radios and Communications

- 15.1 No two way radios are allowed.
- 15.2 A working one way radio is mandatory.
- 15.3 Frequency is 454.000.
- 15.4 RACECEIVER One way radios are recommended.
- 15.5 No Mobile Devices allowed in cars during competition.

# 16.0 – Suspension and Transponders

- 16.1 Suspension
- 16.1.1 Stock OEM replacement parts only. No modifications allowed.
- 16.1.2 Aftermarket bushings and bearings allowed. Must be a direct replacement for stock bushings. FWD cars may replace rear wheel bearings with upgraded bearings. Upgraded or aftermarket bushings and bearings must not alter stock suspension geometry.
- 16.1.3 No racing shocks.
- 16.1.4 Springs can be any size or spring rate. Do not have to be the same rate side to side. Springs can be cut. Spring spacers allowed.
- 16.1.5 Front strut mount holes may be elongated to achieve front camber. Other methods must be safe and approved by the Tech Director.
- 16.1.6 Front and rear lower control arms must be stock length
- 16.1.7 Rear camber allowed within stock adjustments. No cambered rear ends (bending axle tubes).
- 16.2 Transponders
- 16.2.1 Transponder must be located 18" back from center line of rear end or rear hub to front leading edge of the transponder or further back is OK. Please also keep as close to the lower part of the frame as possible. DO NOT MOUNT HIGH
- 16.2.2 Cars with Transponders found in locations other than that indicated above during post-race inspection will be penalized.

## 17.0 – Steering

- 17.1 Stock steering for the make and model. No modifications allowed.
- 17.2 No steering quickeners allowed.
- 17.3 Steering wheel quick release allowed.
- 17.4 Center must be padded.
- 17.5 Must have collapsible steering column.

#### 18.0 – Rear ends, Transmission, Clutches, & Flywheels

- 18.1 Any stock transmission for make, model. No modifications allowed.
- 18.2 All gears must be in working order.
- 18.3 Must have two (2) safety hoops 2" x 1/4" within 6" of either end or drive shaft.
- 18.4 Driveshaft must be painted white.
- 18.5 Locking of rear ends or differentials allowed.
- 18.6 Stock unaltered rear end for that make, model and year and must remain square in car.
- 18.7 Clutch pedal must remain stock for make, model and year.

## 19.0 – Wheels, Tires, & Brakes

- 19.1 Right side must have Steel wheels only. No less than 3" backspacing allowed.
- 19.2 Aluminum wheels allowed on left side only.
- 19.3 No mag wheels or wire spoke wheels.
- 19.4 Racing rims allowed and recommended.
- 19.5 Wheels must not stick out past the rub rails or body.
- 19.6 Maximum width of seven inches. (measured inside of bead to inside of bead)
- 19.7 Must use 1" lug nuts. ½" stud recommended.
- 19.8 Wheel spacers are not permitted.
- 19.9 DOT Radial Tires only. No mud, no snow, no ice, no light truck, no all-terrain tires, no racing inspired or designed tires of any sort (even if DOT approved). All season or four season tires allowed. No siping, grooving, cutting or modification the tires allowed. Light grinding is allowed. Tires must have a UTQG tread ware rating 200 or higher.
- 19.10 Stock brake system for make, model and year. All brakes must function at all times. No adjustable brake bias. No after-market proportioning valves.
- 19.11 Brake pedal must remain stock for make, model and year.
- 19.12 All Emergency Brake Handles and Pedals must be disconnected and non-functioning.

# 20.0 – ROLL BARS

- 20.1 A minimum six point roll cage is required. Minimum 1 ½ diameter OD. Minimum thickness .120" wall or 1-3/4" x .095 is recommended.
- 20.2 Must have a minimum of four (4) side door bars on the driver's side running between the front and rear upright bracing. A minimum of two on the passenger side.
- 20.3 Front and rear hoop allowed in front of rad and behind fuel cell and must be concealed behind sheet metal and stock bumpers.
- 20.4 Galvanized, aluminum, or exhaust type tubing is not permitted.
- 20.5 Approved padding must be used at any point where driver contact might occur.
- 20.5 Original frame profile must be maintained while constructing the roll cage.
- 20.6 Intrusion plates are highly recommended on the driver's door roll bars. Intrusion plates may be welded in the door bars or clamped on the exterior door bars. Intrusion Plates as per pictures below. These are becoming mandated by man dated by many sanctioning bodies as they are widely accepted as an important part of driver safety and may become mandatory in the future.



## 21.0 – Weights

- 21.1 Cars with 8 valve engines must weigh 1 lb/cc. Must be 2000lbs minimum.
- 21.2 Cars with 12 valve engines must weigh 1.1 lbs/cc. Must be minimum 2000lbs.
- 21.3 Cars with 16 valve engines must weigh a minimum of 18.5 lbs/Factory Rated Horsepower must be a minimum of 2300lbs.
- 21.4 All Volkswagens Must weight 2500 lbs minimum ALL IN!
- The only weight break/penalty for Volkswagens will be rule 21.9.1 (head and neck restraint -25lb Break)
- 21.5.1 Maximum left side weight 55% with driver's belts tight. Removal of mud will be at the discretion of the Technical Inspector.
- 21.5.2 Added weight must be securely fastened with a minimum of two half inch bolts, weight must be painted white with car number. No floor board or body metal mounting of weight.
- 21.6 Added weight in the driver's compartment must be approved by the Technical Inspector.
- 21.7.1 100 lb added to minimum weight for approved DOHC engines
- 21.7.2 50 lbs added to minimum weight for 0.030" more than stock lift cam on 12 valve engines.
- 21.8 50 lbs added to minimum weight for aftermarket header.
- 21.9.1 25 lbs weight break from minimum weight if a head and neck restraint meeting SFI 38.1 or greater is worn.
- 21.9.2 200 lb weight break for automatic transmission.

## • 22.0 – Seats and Safety Equipment

For all safety equipment: It shall be the sole responsibility of the driver, not The Speedway, their agents/officials or corporate officers to ensure that his/her safety equipment is correctly installed, maintained and properly used. Please refer to manufacturer installation and usage guidelines and adhere to them.

#### • 22.1 – Seats

- 22.1.1 Aluminum professionally built racing seat required. No fiberglass seat allowed.
- 22.1.2 Seat must be securely fastened in six spots, Four (4) on bottom and (2) two on seat back.
- o 22.1.3 Seat must be securely fastened to frame and cage.
- 22.1.4 No floorboard installations allowed.

#### • 22.2 – Seat Belts

- 22.2.1 2016 or newer belts are mandatory. Any belts that are worn or frayed as detected by inspectors must be changed at the recommendation of the tech director.
- 22.2.2 5-point harnesses meeting SFI 16.1 standards are the minimum requirement.

 $\circ$  22.2.3 - Belts must be securely fastened to the frame and roll cage with high quality bolts, not less than 7/16 inch in diameter.  $\frac{1}{2}$ " recommended.

#### 22.3 – Safety Equipment

- 22.3.1 Entrants must wear a proper fitting full-faced SA 2010 SNELL or newer. Approved racing helmet with proper identification, and have no signs of previous damage. No open face helmets allowed.
- 22.3.2 Recommend that helmet be worn at all times when the vehicle is in motion.
- 22.3.2.1 25lb weight break if Head & Neck restraint meeting SFI 38.1 is worn during competition
- o 22.3.3 Window net mandatory. Minimum 1" mesh with release at top only.
- 22.3.3.1 It is required that all window net releases be updated to the quick release seat belt type with releases located and facing the outside of the car. Securely mounted.
- 22.3.4 All bars and sharp contact areas around driver must be padded with roll bar padding.
- 22.3.5 All cars will be required to have in their pits a fire extinguisher capable of extinguishing gas and oil fires. This is to be visible to tech officials and all crewmembers. All crewmembers must be made aware of its location, and knowledgeable in the use of the fire extinguisher.

#### • 22.4 – Fire Suits & Equipment

- 22.4.1 Entrants must wear an SFI 3.2A -1 or better fire retardant racing suit.
- 22.4.2 Fireproof gloves minimum SFI 3.3/1 mandatory.
- 22.4.3 Fireproof footwear, underwear, and head sock recommended.

## 23.0 – Technical Inspection:

The Speedway reserves the right to perform technical inspection on and car at any time.

- 23.1 All new cars must arrive at the track one hour prior to start time and report to the tech inspector.
- 23.2 If car does not meet our rules it will not be able to compete. No exceptions.
- 23.3 All cars are subject to inspection by The Speedway officials at any time and in any manner determined by track officials. All decisions regarding the timing and manner of the inspections, as well as which cars will be inspected, are final.
- 23.4 The Speedway reserves the right to confiscate any illegal components at any time as deemed necessary.
- 23.5 The Speedway reserves the right to impound any car for any reason at any time.

## 24.0 – Post Race Technical inspection

• 24.1 –Post Race Technical Inspection is carried out within the confines of the Tech Area will be completed under the following guideline:

- 24.2 Cars to be inspected MUST proceed immediately to the Tech Inspection area after exiting the race track;
- 24.3 No team members are allowed to touch or remove any part of the race car without receiving prior approval of the HEAD TECH OFFICIAL;
- 24.4 Cars (with Driver) must enter the tech area as instructed by inspectors. Drivers must be move their racecar onto scales or be assisted by track officials only if needed;
- 24.5 Access in the tech area will be restricted to the car driver and two crew members.
- 24.6 The team is responsible for preparing only the area(s) of the race car for inspection as requested by the Head tech official in a timely manner;
- 24.7 Any participant (team) who refuses to allow tech officials to inspect their car at any time or follow inspection directions and procedures will be subject to the following:
  - Immediate disqualification from the event.
  - Loss of points and prize money for that event.
  - Credited with a feature win for handicapping purposes (*if applicable*).
- 24.8 Participants found to be illegal and disqualified during technical inspection shall be subject to the following:
  - o Disqualification from the event.
  - Loss of points and prize money for that event.
  - Credited with a feature win for handicapping purposes (*if applicable*).
  - If found illegal on a double feature night, the car will be declared illegal for both races and will not receive points or prize money for either.
- 24.9 A second infraction for deemed illegal or technical issues will result in the following:
  - Disqualification from the event.
  - Loss of points and prize money for that event.
  - Total Loss of all accumulated points to date.

All questions, concerns or rule clarifications should be addressed to the Ontario Dirt Competition Committee at <u>www.ontariodirtcomp.com/contact</u>

## TRACK CONTACTS:

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