# **Owens Electric Stock Compacts 2020 Rules**

UPDATED....3/12/2020

#### **TECHNICAL RULES:**

Front Wheel Drive Overview In an effort to introduce **new** people to the fun and excitement of stock car racing, MT Lawn Speedway has developed the F.W.D division. (Front wheel drive cars). These cars are not intended to be performance, race-type vehicles. These cars are to be **Stock** with only modifications outlined below. The goal is to have inexpensive (almost disposable) cars to race. **Any effort to make them lighter, go faster or handle better is illegal.** Only modifications for safety outlined herein are allowed.

## **Eligible Cars:**

1. Car must be a subcompact style, 4 or 6 cylinder models. A select few midsize vehicles are permitted with prior approval of the technical director. Car must be a **STOCK**, street legal vehicle with modifications for safety. DOHC engine is permitted.

2. Convertibles, 4-wheel drive, rear engine, mid-engine and trucks are not permitted.

## Safety Equipment:

1. All Cars must have a roll cage.

Roll cage must be 4 or 6 point design and constructed of 1.75" or 1.5" (minimum), .095" steel tubing.
Tubing must be roll cage tubing (HREW, CREW, or DOM). All tubing connections, seams, bracing, etc must be fully welded (no "tack welds" permitted). Cage must be sufficiently attached to the floor/unit frame of the vehicle by welding to the rocker rail or to ¼" minimum thickness sandwich plates bolted through the floor. Reinforcing plate, tubing, or steel angle on the inside of the rocker rails is required.
Main hoop of cage must include a diagonal reinforcing bar.

5. Roll cage must include a minimum of 3 door bars per side, connected with spacing bars between each door bar. Driver's side bars must be arched away from the driver's seat area. Driver's door bars must be connected by tubing, or bracing, to the rocker rail. to. Driver's door bars must be covered with steel plate on the outside (minimum 1/8" thickness).

6. Roll cage design must include a minimum of 5 bars extending side to side (top of main hoop, front of halo, dash bar, middle of main hoop, and bottom of main hoop). An additional bar connecting the left and right side door bars behind the driver's seat is permitted. Bars extending through the firewall to the front uni-rail(s) are permitted, but may not extend forward of the strut towers. Diagonal bracing from the a-pillar bars (front uprights) to the dash bar is strongly encouraged. Diagonal support bars extending from the main hoop to the rear are encouraged, and may extend to a distance no closer than 10" from the rear bumper.

7. Safety padding on the driver's door roll cage bars is required. Safety padding on any roll cage bar that a driver's limbs or body may contact is also required.

8. Core supports may be reinforced or replaced with tubing. Core support structure may not extend rearward beyond the strut towers. Tubing directly connecting the core support to the roll cage is not permitted.

9. An aluminum racing seat is Required. Seat must be mounted to the roll cage using 1" minimum diameter tubing or material with equivalent or better strength, and bolted with a minimum of six 3/8" or larger (grade 5 or better) bolts with washers to prevent "pull through". Use of seat "halo type" head restraints and shoulder supports are strongly encouraged.

Window Nets are Mandatory and fastened at all times while on the track.

Head and Neck Restraints Mandatory with a minimum of a Neck Collar.

10. A minimum of a three inch wide, five (or six) point safety harness is required, and must be attached with grade 8 hardware (or better) to the roll cage and/or seat mount. Belts must have a certification date no earlier than 2012, and must have certification tags still attached. Seat belts must be used and securely latched for all events, and at any time the car is on the racing surface.

11. A fuel pump shut off switch is required, and must be mounted at the left front (driver's side) of the interior, in a location that can be reached easily by both the driver and track safety personnel, and the switch must be clearly labeled.

12. An Electrical engine shut off switch is required and must be be labeled within in reach of the driver.

## Body:

1.All exterior trim, including lights, body moldings, mirrors, all glass etc. must be removed, except for the complete factory front windshield. Windshields may be replaced with Lexan. Lexan windshields must have a minimum of 3 upright, support bars spaced no more than 5" apart. These support bars must be at least  $\frac{1}{2}$ " in diameter. Cracked windshields which impede the driver's vision must be replaced.

2. The outer body must remain unchanged and fully stock. Aluminum or fiberglass is not permitted.

3. The rear window frame on hatchback cars may be removed. If removed, the deck portion must be replaced with sheet metal to retain stock appearance.

4. Hoods and trunks must have hood pins for easy access and not be bolted down.

5. Doors must be bolted or welded shut. Stock door hinges must remain in place.

6. The stock steel floor pan, trunk area, trunk floor and wheel wells must be retained and unaltered. Lightening of these components is not permitted. Sharp, protruding objects on car or in driver's compartment must be removed. **No** Gutting of other Body panels.

7. The driver's door inner panel must remain in place or be suitably replaced by padding.

8. All flammable material must be removed and you may remove the factory dashboard.

9. Front firewall must be sealed with no holes. A complete firewall must seal the trunk area from the driver's compartment. The factory, rear seat back framing, may serve as a firewall.

10. There can be no additional weight or ballast attached to the vehicle.

11. Sunroof openings must be entirely covered with steel or welded closed.

## Tires and Wheels:

1. Any 13", 14", 15" or 16" D.O.T. Series 70, 75 or 78, all season or all weather tire may be used. Tires must have a standard road tread design with visible regular tread grooves. Tires must be the same size and Series on all four corners.

# Each Tire Must have a Treadwear of 400 or above.

Low profile, racing or snow tread tires are prohibited. Tire shaving and buffing is prohibited. Recapped and retreaded tires are prohibited. .

2. Soaking tires or use of tire treatment, including "armor-all" is prohibited.

- 3. Right and Left Side wheels can be steel racing wheels with a 3 1/2" offset or Stock wheels...
- 4. Only maximum 7" wheels are permitted. Offsets and spacers are prohibited.
- 5. Tires and wheels shall not extend beyond the bodywork in an unsafe manner.

6. Wheel stud threads must be visible above the top of the lug nuts. 1" lug nuts are permitted and encouraged.

7. The right front wheel may have a maximum of 2" of camber. Adding camber to other wheels is prohibited.. Remaining 3 wheels on car MUST be straight up. Car must remain in Alignment from front to rear and MUST track straight.

## Suspension, Drive train, and Brakes:

1. Suspension must remain factory stock for the make and model with no alterations . Vehicles must maintain original track width.

2. Car must maintain a minimum of 5" ride height. No body panel, skirting, or frame rail lower than 5" above the ground is permitted...

3. All four brakes must work. ABS sensors must be disconnected or removed. Functioning ABS systems are not permitted.

4. Deviation from stock brakes is not permitted. Brake bias, braking assisting or traction controlling devices are not permitted.

# Engine and Transmission:

1. Engine must be 4 or 6 cylinder and stock for the model, year and make of the car. No JDM Conversions.

Vtec and Ecotec allowed but Must have factory plug in. No toggle switch to activate. No Chipped ECU's

Engine factory production 156 or More horsepower will be subject to a throttle body restrictor.

Maximum displacement for V6 is 3.5 liters and Must run factory automatic transmission. 2. Engine must be in stock location.

- 3. Engine must have a single carburetor or factory fuel injection not to exceed 2 barrels.
- 4. Factory air cleaners are required
- 5. Intake and exhaust manifold must be stock manufacturer's original.

6. Headers of any kind are not permitted, even if stock.

7. Turbo or Rotary engines are not permitted.

## 8. Any car that has an improved inner engine for performance will be disqualified.

9. Compression ratio may not be altered from stock.

10. Exhaust must be a single, completely sealed factory designed system and must remain factory quiet. Turbo, Glass Pack or similar style mufflers are not permitted.

11. Exhaust system must exit behind the driver and the last 6" of the exhaust pipe must not exceed 2" inner diameter and must be visible for inspection. Flexpipe or side exiting exhausts are not permitted.

12. Car may utilize the stock factory location for the battery or the battery may be moved to a safe location inside the car in a covered, spark-proof box made for this application.

13. All ignition systems must remain stock. Aftermarket or racing improved ignitions is not permitted. A racing style on/off switch may be added for the purpose of starting and shutting off the engine. Aftermarket plug wires and cap are permitted.

#### 14. NO Chipped Ecu's

15. The factory, stock steering column must be unaltered except for a safety breakaway may be added.

16. Radiator must contain water only. Antifreeze is not permitted. Penalty when caught.

17. Fuel Cells Highly Recommended !!! Factory stock fuel tanks, located in front of the rear wheels may be used with the addition of at least 2 additional steel straps. All other fuel tanks or cells must be mounted in the trunk area between the rear wheels, as far forward as possible. These tanks must be secured with steel straps, bolts and oversized washers. A complete, steel firewall must be between the tank and driver's compartment. Fuel lines may not run through the driver's compartment.

18. Transmission must be factory stock for the car. 3, 4, 5 speed or automatic transmissions are required. No locked Differentials.

19. Fuel is restricted to pump gasoline or racing gasoline. Alcohol (methanol or ethanol) or E85 fuel is not permitted. Any car suspected of using alcohol or E85 will be disqualified. Fuel additives (benzene, nitro methane) are not allowed. Use of benzene or nitro methane will result in expulsion from the Event.

#### IF TRACK PERSONAL OR TECH DEPT FEELS ONE TYPE OF ENGINE / CAR IS DOMINATING THE CLASS / DIVISION WE RESERVE THE RIGHT TO TAKE ACTION TO KEEP ALL CARS COMPETITIVE FOR THE BETTERMENT OF RACING.