



# FWD Drag Series Class Rules

Updated 2015

## FWD DRAG SERIES

### Designations

**FWD** preceded by car number. Designed for full-bodied front wheel drive cars. The class is run on a .4 second Pro tree.

### Minimum weights

Forced induction engines: 900kg

Non-forced induction engines: 800kg

## CLASS REQUIREMENTS

### FWD 1.1 Engine:

Engine swaps permitted. Maximum 2 power adders. Redundant power adders, such as a dual stage nitrous system or twin turbo, will be counted as one power adder. Engine must be in stock, transverse configuration. Rotation permitted but vehicle must retain the original firewall. Engine mods allowed i.e. new internals and modified cylinder heads. Max 6 cylinders. Max capacity 3.5 litre.

### FWD 1.2 Exhaust:

All cars must be equipped with exhaust collectors or headers installed to direct exhaust away from car, driver and fuel tank. If silencers are used, they must be securely attached to exhaust system and car body or frame. Flexible tubing or flex pipe prohibited. Noise regulation now applies and is set at 120dba.

### FWD 1.3 Fuel:

Commercially available racing fuel permitted. Nitromethane prohibited.

### FWD 1.4 Fuel System:

Fuel Cell permitted.  
See GSR 1:5.

### FWD 1.5 Liquid Overflow:

See GSR 1:7.

### FWD 1.6 Supercharger, Turbocharger:

Permitted. Air to Air and Liquid to Air Intercoolers allowed. Liquid intercoolers limited to water and/or ice only. No external liquid spray systems permitted on intercoolers/radiators  
See GSR 1:12, 1:13, 4:2

**FWD 1.7 Nitrous Oxide:**

Commercially available nitrous oxide permitted, including for supercharged and turbocharged engines. Nitrous bottle(s) in driver compartment must be equipped with a relief valve and vented outside of driver's compartment. Bottle(s) must be certified for use at the working pressure (minimum 124 bar rating) and permanently mounted (no hose clamps or tie wraps). Hoses from bottle(s) to solenoid must be high-pressure steel-braided. Commercially available, thermostatically controlled, blanket-type warmer accepted. Any other external heating of bottle(s) prohibited. See GSR 1:9, 9:7.

**FWD 1.8 Vent Tubes, Breathers:**

Tubes must terminate into an acceptable permanently attached catch can with a minimum capacity of 2.0 ltr. The catch-tank must be baffled to keep overflow off track. A sight glass or tube is recommended to verify that tank is empty prior to run. Breather/vent tubes must be mechanically secured (tie-wraps prohibited) to the fittings and fittings locked at both ends.

**FWD 2.1 Flywheel Shield:**

All cars using a clutch and running quicker than 11.99 or faster than 217 km (135 mph) must be equipped with a flywheel shield made of 6 mm (1/4-inch)-minimum-thickness steel plate. Shield must surround the bell housing completely except for area of flywheel shield adjacent to differential and axle shaft. Shield may be multi-piece with pieces bolted together using minimum 9.4 mm (3/8-inch)-diameter M10 class 8.8 or Grade 8 bolts; may be attached to engine and/or bell housing. In lieu of shield, a blanket meeting S/FI Spec 4.1, completely surrounding the bell housing, is permitted. In the event of non-availability of an SFI 6.6, 6.2 or 6.3 Shield; or of clearance/impracticability problems, the following options can be implemented: A fabricated ¼ inch (6mm) thick 6 inch x 12 inch (150mm x 320mm) approx. steel shield is permitted, fitted to the profile of the firewall in line with the flywheel/clutch. The shield must be secured to the firewall with a minimum of six (6) 3/8 inch (10mm) 10.9 grade bolts and washers. See GSR 2:5, 2:6, 2:9, 2:10.

**FWD 2.2 Transmission,**

Non OEM transmission casings prohibited. **Non OEM bellhousing permitted.**

**FWD 2.2 Transmission, Automatic:**

All cars using an automatic transmission and running quicker than 10.99 or faster than 217 km (135 mph) must be equipped with an approved transmission ballistic blanket as meeting SFI Spec 4.1 Transmission brake permitted. Functioning Neutral safety Switch mandatory.

**FWD 2.3 Transmission, Manual:**

Automated, timer-type, pneumatic, electric, electronic, hydraulic, etc. shifting mechanism prohibited; Each individual shift must be a function of the driver and controlled manually. (Driver must pull the lever.) **Sequential transmissions prohibited.**

**FWD 3.1 Brakes:**

Four-wheel hydraulic brakes mandatory. Carbon Fibre brake rotors prohibited. See GSR 3:1.

**FWD 3.2 Steering:**

Must retain full, original OEM type steering gear. See GSR 3:2, 3:3, 4:1.

**FWD 3.3 Suspension, Front:**

See GSR 3.4

**FWD 3.3.1 Suspension, Rear:**

Strut tower braces, lower tie bars, sway bars, and limit straps are permitted. Rear suspension must maintain minimum shock travel of 25 mm (1 inch). All rear suspensions must use at least one working shock absorber per wheel. Suspension modifications limited to bolt-on items only. Only OEM suspension mounts/attachment points may be utilized. Spindle mounts prohibited.

**FWD 3.4 Wheelie Bars:**

Prohibited.

**FWD 4.1 Ballast:**

Permitted. See GSR 4:2.

**FWD 4.2 Chassis:**

OEM chassis, with OEM floor pan and firewall mandatory. Modifications permitted to allow for tubed front end.

See GSR 4:10, 4:11, 10:6.

**FWD 4:6 ROLL CAGE.**

Mandatory. **Type depending on E.T.** Must be recertified every three years.

See GSR: 4.4, 4.11, 4.11.1, 10.6 and 10.7.

**FWD 4.3 Ground Clearance:**

Minimum 76 mm (3 inches) from front of car to 305 mm (12 inches) behind centreline of front axle, 51 mm (2 inches) for remainder of car (except for exhaust more than 305 mm (12 inches) behind centreline of front axle).

**FWD 4.4 Parachute:**

Mandatory on any car running 240 km (150 mph) or faster.

See GSR 4:8.

**FWD 4.5 Wheelbase:**

Must retain original wheelbase for body used, plus or minus 25,4 mm (1 inch). Maximum wheelbase variation from left to right is 25,4 mm (1 inch).

**FWD 5.1 Tyres:**

DOT or racing slicks permitted with a maximum width of 267 mm (10.5 inches) and maximum height of 661 mm (26 inches). Re-treads, space saver spares, or any other non-DOT or E-marked approved tyre prohibited.

**FWD 5.2 Wheels:**

Must be automotive-type wheels suitable for street or racing use. Minimum wheel size 13 inches unless originally equipped with smaller wheels and vehicle is equipped with original engine. Wheel studs must be threaded into hex portion of wheel nut a distance at least equal to the diameter of the stud. Spindle mounts prohibited.

See GSR 5:2.

**FWD 6.1 Interior:**

See GSR 6.1, 6.2.

**FWD 7.1 Body:**

Body must be from an original production car. **Pickup and SUV bodies prohibited.** Body kits permitted but must retain full-bodied appearance, with minimum 2 functional doors. Doors must open and close from inside and outside. Lightweight body panels permitted.

**FWD 7.2 Tail Light.**

All vehicles must have as minimum requirement one working tail light for night operations. Strobe, flashing, high intensity, laser, infrared, photo sensitive or other light emitting/receiving device prohibited. Any type of lights that may distract other drivers are prohibited. Also see Class Requirements.

**FWD 7.3 Competition Numbers & Graphics:**

See GSR 7:2: Any car competing must display the driver's Competition number. Numbers must be a minimum 152 mm (6-inches high) and 38 mm (1 1/2-inches) wide. Class designation letters must be a minimum 76 mm (3-inches) high and 25.4 mm (1-inch) wide. Driver's competition number and class designation must be displayed in a legible manner in a contrasting colour to the vehicle's background colour, or light colour on windows, in a prominent position, and be clearly visible to the Tower personnel. Class and numbers must be in the form of permanent decals or paint.

**FWD 7.4 Firewall:**

OEM firewall mandatory. See GSR 6:1,7:5. However, sufficient modification to firewall is permitted to allow fitment of mandatory flywheel shield (See SP/F 2.1).

See GSR 7.5

**FWD 7.5 Floor:**

OEM floor pan, front to rear, mandatory. Spare wheel wells may be removed to allow space for fuel cell.

See GSR 7.6

**FWD 7.6 Windshield/Windows:**

Complete OEM windscreen mandatory, Polycarbonate side and rear windows permitted.

**FWD 8.1 Batteries:**

Batteries must be securely mounted; may not be located in driver compartment unless sealed off per General Safety Regulations.

See GSR 8:1.

**FWD 8.2 Ignition:**

Two steps, rev limiters, etc. permitted.

See GSR 8:1, 8:3, 8:4, 8:5.

**FWD 8.3 Master Cut-off:**

Mandatory on any car where battery is relocated to the Boot area of vehicle unless O.E.M.

Plastic "T" handles in cut-off switches prohibited.

See GSR 8:4, 8:5.

**FWD 9.1 Computer:**

See GSR 9:1.

**FWD 9.2 Data Recorder:**

Permitted. See GSR 9:2.

**FWD 9.3 Fire Extinguisher System:**

Permitted; must be securely mounted.

See GSR 9:3.

**FWD 9.4 Tow Vehicles:**

Prohibited.

**FWD 9.5 Warm-Ups:**

See GSR 9:4, 9:11.

**FWD 10.1 Credentials:**

All drivers must have a valid MSA licence. Minimum "non-race national B"

**FWD 10.2 Driver Restraint System:**

Three-inch-wide driver restraint system labelled as meeting SFI Spec 16.1 with 2 year Certification or FIA with 5 year Certification mandatory in any car required to have a roll cage. System must include crotch strap. All other cars, OEM restraint system mandatory with a minimum of 3-points driver restraint system.

See GSR 10:5, 10:11.

**FWD 10.3 Helmet:**

See GSR: 10.7 and MSA Competitors year book ( Blue book).

**FWD 10.4 Neck Collar:**

Mandatory on driver of any car running 10.99 seconds or quicker or 217 km (135 mph) or faster. See GSR 10:8.

**FWD 10.5 Protective Clothing:**

See GSR 10:10. Protective clothing dependent on ET and/or mph of vehicle.