

## Mid- West Drag Race Series TOP DRAGSTER Rules / Regulations

REVISED 7-11-23-Updated safety rules, and removed minimum weights

REVISED 7-18-23-Corrected max dial in error

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### CLASS OVERVIEW:

Class is for dragster and open-bodied altered-type vehicles only. Alteredds must have open front wheels. Full-fender and/or running-board-equipped street roadsters or Funny Car bodies prohibited. Qualified fields with competition conducted in a dial-in E.T. format. Eight-mile, minimum 3.66-second dial-in; maximum 4.99-second dial-in. Must dial-in within a tenth of the bump spot for Top Dragster class.

### QUALIFYING:

Up to (32) Qualified cars total placed on Sportsman Ladder. Entry must take the starters signal in at least one qualifier to be considered for eliminations. Vehicle must stage under its own power. Manually pushing vehicle into pre-stage or stage prohibited at any time during event.

### TOP DRAGSTER PAYOUTS & ENTRY FEES:

Regular Entry : \$250

Payout: Winner \$3000

R/U \$1000

Semis \$ 500

Qtrs \$ 250

(If less than 9 cars show up the purse is cut in half.)

### DESIGNATION

TD followed by car number. Number must be at least 4 inches high. Minimum weight at the conclusion of run, including driver.

## REQUIREMENTS & SPECIFICATIONS

### ENGINE: 1

#### ENGINE

Any internal combustion engine allowed with any modification. Only one engine may be used. No cubic-inch limit.

Harmonic balancer meeting SFI Spec 18.1 mandatory.

#### EXHAUST SYSTEM

Competition exhaust systems permitted. Exhaust gases must be directed out of the car body, rearward, away from driver and fuel tank. If zoomies are utilized must be turned upward minimum 3 degrees.

#### FUEL

Racing gasoline, gasoline, alcohol, gasohol, ethanol, diesel permitted. Nitromethane and propylene oxide prohibited.

#### FUEL SYSTEM

Fuel lines must be isolated from driver compartment with a subfloor or with steel-braided lines where the engine is located in the rear and the fuel tank is in front of the driver. No part of the fuel system may be mounted on firewall or in flywheel/flex plate area. All entries must have sufficient tank capacity to make full runs; adding of fuel after the engine has started is prohibited. All fuel tanks must be equipped with a positive locking screw-on cap and vented to outside of body.

#### INDUCTION

Any number and type of carburetors or throttle bodies may be used. Electronic fuel injection permitted. Two return springs mandatory. Throttle stops prohibited.

#### LIQUID OVERFLOW

Catch can mandatory for coolant overflow; one-pint (16-ounce) minimum capacity.

#### OIL LINES

All flexible-pressure oil lines, excluding return lines and any line 30 psi or lower in pressure, must pass a minimum 300psi test for 30 seconds with no indications of separation, weeping, leaking, etc.

Competitors may test and tag their own lines. Label must indicate date, psi, and tester ID; label must be impervious to fuel and brake-clean. Lines must be tested and tagged within two years. All lines on supercharged alcohol cars must be routed in such a way that they are not directly in line with cylinder head gaskets at the front, rear, or side of the cylinder heads.

#### OIL-RETENTION DEVICE

All cars must utilize an NHRA-accepted lower engine oil retention device; may use a belly pan in lieu of a device attached to the engine. Pan must run from in front of the front motor plate to in front of the rear motor plate and from frame rail to frame rail. On vehicles without a front motor plate, pan must run from in front of harmonic balancer to in front of rear motor plate and from frame rail to frame rail, All belly pans must incorporate a minimum 2-inch-high lip on all sides. A nonflammable, oil absorbent liner mandatory inside of retention device.

#### SUPERCHARGER

Roots-type, high-helix roots-type, centrifugal or screw-type supercharger permitted. Screw-type supercharger must meet SFI Spec 34.1 and be re-inspected by the manufacturer every three years. Manifold burst panel meeting SFI Spec 23.1 (in addition to panel in supercharger) plus restraint system meeting SFI Spec 14.21 mandatory on all screw-type superchargers. Front-engine cars must use an SFI Spec 14.2 or 14.3 supercharger restraint. Rear-engine cars must have SFI Spec 14.1, 14.2, or 14.3 supercharger restraint. Supercharger restraint straps must be covered with a fire-resistant material. The blower restraint straps and fuel lines must be installed such that when the restraint straps are fully extended, no load is placed on any of the fuel lines. All supercharged dragsters must utilize a torque converter assisted transmission. Aluminum studs (supercharger-to-manifold) mandatory. OEM-type screw supercharger permitted. OEM type screw superchargers do not require a supercharger restraint. "OEM-type" in this case means that it must have originally come with the production engine being used.

#### TURBOCHARGER

The use of single or dual turbochargers is permitted.

#### THROTTLE STOP

The use of throttle stops, stutter boxes, etc. to control down track engine rpm is prohibited. Throttle stops are defined as being mechanical, electronic, or pneumatic. Throttle stop may be present on vehicle but must be disconnected from all controls.

#### STARTER

All entries must be self-starting with an onboard starter and battery.

## VALVE COVERS

Cast or fabricated metal valve covers, using all attachment bolt holes, mandatory on supercharged or turbocharged cars.

## VENT TUBE/BREATHERS

Mandatory for all supercharged engines. Two 1-inch-diameter connections. All breathers must be positive locking.

## DRIVETRAIN: 2

### CLUTCH, FLYWHEEL, FLYWHEEL SHIELD

Flywheel and clutch meeting SFI Spec 1.1, 1.2, 1.3, 1.4, or 1.5 mandatory. Flywheel shield meeting SFI 6.1, 6.2, or 6.3 mandatory on clutch-equipped cars. Engine combination determines the appropriate specifications. See the appropriate SFI Specification or NHRA General Regulations for the motor plate and bolting requirements.

## DRIVELINE

Each end of driveshaft must have round 360-degree driveshaft loops within 6 inches of U-joints. Driveshaft must be covered by 360-degree tube, covering the front U-joint and extending rearward a minimum 12 inches. Minimum thickness of tube is .050-inch chromoly or titanium. Driveshaft tube must utilize a minimum of four attachment points to the chassis, either bolted with minimum 5/16 SAE bolts or welded or 1/4-inch push/pull pins.

## FLEXPLATE

Automatic transmission flexplate meeting SFI Spec 29.1 mandatory.

## FLEXPLATE SHIELD

Flexplate shield meeting SFI Spec 30.1 mandatory. An SFI 6.1 bellhousing is permitted on torque converter assisted planetary transmissions.

## REAR END

Aftermarket axles and axle-retention devices mandatory. Welded spider gears prohibited. Wheel studs must be 5/8-inch minimum. Aftermarket full-floating or live axle assembly permitted. Independent rear suspension prohibited.

#### PINION SUPPORT

Mandatory that all entries have a rear axle and/or pinion housing anti-rotation device of a rigid design attached directly from the frame or suitable crossmember to either the rear axle housing or pinion housing in a manner to prevent rotation in either direction for unsuspended rear ends.

#### TRANSMISSION

Any transmission may be used; however, vehicle must employ positive system to disengage from final drive. All automatic transmissions must have a neutral safety start switch and reverse lockout device. All pressurized units must utilize flexible hoses pressure tested to 300 psi and be clearly labeled as passing the testing process or steel lines and AN fittings to connect with accessory coolers. A minimum 1/8-inch pipe connection using high-pressure line vent to overflow tank (minimum 1-pint capacity) is mandatory. Clutchless transmissions are limited to five forward gears; aftermarket planetary limited to three forward gears.

#### TRANSMISSION SHIELD

A one-piece transmission shield meeting SFI Spec 4.1 is mandatory on all automatic and planetary transmissions.

#### BRAKES & SUSPENSION: 3

##### BRAKES

Minimum of two rear-wheel hydraulic brakes required. Hand brake, if used, must be located inside the car's body or driver's compartment. Steel brake lines mandatory. All brake lines passing the engine on any rear-engine car must be shielded; recommended in all cars.

##### STEERING

If removable steering wheel is used, commercially available quick-disconnect steering wheel adapter meeting SFI Spec 42.1 is mandatory. A device must be used to prevent steering shaft from injuring driver in case of frontal impact. Shaft must attach to steering box via a positive locking device; i.e., no rolled/pressed pins.

## WHEELIE BARS

Permitted. Wheels must be nonmetallic.

## FRAME: 4

### BALLAST

Permitted, 250 pounds maximum, 100 pounds maximum removable. Loose ballast is grounds for disqualification.

## SUSPENSION

Any automotive suspension permitted. Rigid-mounted rear axles permitted. Rigid-mount front axles permitted if wheelbase is 120 inches or more. A device must be utilized that will protect the oil pan from coming in contact with the racing surface in case of excessive frame flex and/or tire or wheel failure. Any front suspension using a beam or tubular axle must have the radius rods attached to the frame. Radius rods not required on front axles that are rigidly mounted 18 inches or less from the kingpin.

## CHASSIS

Must have NHRA serialized sticker affixed to frame for applicable E.T. before participation. Rear-engine dragster must conform to SFI Spec 2.1, 2.3, 2.5, or 2.7. Front-engine dragster must conform to SFI Spec 2.2, 2.4, or 2.6. Alters must conform to SFI Spec 10.1E, 10.2, or 10.3. All side-steer altered must meet the requirements of SFI 10.4 for applicable E.T. prior to competition. Must have current NHRA serialized sticker affixed to the cage before participation.

## ROLL-CAGE PADDING

Roll-cage padding meeting SFI Spec 45.1 mandatory anywhere driver's helmet may come in contact with roll-cage components.

## DEFLECTOR PLATE

Mandatory on rear-engine cars. Must be installed between roll cage and engine on all rear-engine cars to protect driver. Minimum material thickness: .125-inch aluminum or .060-inch steel.

## GROUND CLEARANCE

Minimum 3 inches required from the front of the car to 12 inches behind axle centerline, 2 inches for remainder of car except oil pan and exhaust headers.

## PARACHUTE

Required. Cars running in excess of 170 mph must use dual parachutes.

## WHEELBASE

Rear-engine dragster minimum 150 inches, maximum 300 inches. Front-engine dragster minimum 150 inches, maximum 300 inches. Altered minimum 120 inches and maximum 150 inches. Maximum wheelbase variation from left to right: 2 inches.

## TIRES & WHEELS: 5

### TIRES

Must be automotive type, designed for racing. Minimum diameter of 13 inches on front tires.

### WHEELS

Automotive-type wire wheels permitted on dragster front axle only, provided total car weight does not exceed 1,800 pounds, excluding driver. Front-wheel fairings prohibited. Each car in competition must be equipped with automotive-type wheels, designed for racing. SFI Spec 15.1 rear wheels with bead locks or liners mandatory on any vehicle that runs 4.20 and quicker or 170 mph and faster.

## INTERIOR: 6

### UPHOLSTERY

Optional. For all front-engine open-bodied vehicles supercharged or turbocharged (gasoline- or methanol-burning), a flame-retardant-material-covered seat is mandatory.

## BODY: 7

### BODY

Body and cowl may be constructed of metal, fiberglass, or carbon fiber and must extend forward to firewall. Altered entries must use a reproduction pre-1949 roadster or pre-1949 open (front) wheeled NHRA-accepted body (i.e., 1936-48 Fiat, Volkswagen etc. with roof exit). Driver compartment, frame structure, roll bars, and body must be designed to prevent driver's body or limbs from contact with wheels, tires, exhaust system, or track surface. If driver's body is in contact with belly pan, a crossmember and subfloor are mandatory. Front overhang maximum 30 inches from forward most spindle center.

## AIRFOIL

A positive-locking device must be used to prevent accidental movements. Side-mounted canard-type units are permitted. No part of canards/wings may be within 6 inches of rear tire. A rear wing is mandatory on all cars that exceed 170 mph; minimum area 360 square inches, maximum 750 square inches, minimum height 55 inches (measured vertically from trailing edge to ground). Spill plates must be flat/straight and parallel and measure a minimum of 50 square inches each. Leading edge of wing may be no more than 10 inches forward of the centerline of the rear axle. Wing may not be configured or installed so as to generate negative downforce or lift. Any adjustment or movement during run prohibited.

## FIREWALL

Required. Each car in competition must be equipped with minimum .024-inch steel or .032-inch aluminum firewall.

## FLOOR

Minimum .024-inch steel welded in on driver's side from firewall to rear crossmember. Remainder .032 aluminum, .024-inch steel, or MWDRS-accepted carbon fiber.

## HOOD SCOOP

Permitted.

## WINDSHIELD, WINDOWS

Required, no window tint beyond factory specification permitted.

## SPOILERS/WINGS

Non OEM airfoils or wings permitted; must be permanently attached to frame or roll cage; nonadjustable during run. A positive locking device to prevent movement is mandatory.

## ELECTRICAL: 8

### BATTERIES

All batteries must be securely mounted.



#### DELAY BOX/DEVICE

Permitted. Pneumatic starting-line enhancers are permitted for all applications.

#### IGNITION

Aftermarket electronic ignition boxes must be used unaltered from factory specifications. Timed ignition-interruption devices (stutter boxes) prohibited. Starting-line and/or "high-side" rev limiters permitted. Two-steps, rev limiters, or any other rpm-limiting devices, legal unto themselves but altered or installed so as to function as a down track rpm controller, prohibited. All wiring associated with the ignition system must be fully visible, labeled, and traceable.

#### MASTER CUTOFF

An external master electrical cutoff switch required. If the switch is the "push/pull" type "push" must be the action for shutting off the electrical system, "pull" to turn it on. The off position must be clearly indicated on all cars.

#### TAILLIGHTS

One functional taillight mandatory. Flashing, blinking, or strobe lights prohibited.

#### SUPPORT GROUP: 9

##### DATA RECORDER

Permitted. Data recorders may be used to record functions of a vehicle so long as they do not activate any function on the vehicle. Data recorder may not be activated by the throttle, clutch, brake, etc. Must be activated by a separate switch. Data may be reviewed (printout, replay, etc.) only after the run.

##### FIRE EXTINGUISHER SYSTEM

Minimum 5-pound NHRA-accepted system mandatory on all rear-engine cars WITH an enclosed cockpit. Minimum 20-pound NHRA-accepted system mandatory on all front-engine open bodied vehicles with supercharger or turbocharger(s). System must be divided with a minimum one nozzle directed into the driver compartment and minimum one nozzle directed into the engine compartment.

##### TOW VEHICLES

Golf cart or three- or four-wheeled, Quadrunner/ATV-type tow vehicle permitted. Full-size tow vehicle prohibited.

DRIVER: 10

#### CREDENTIALS

Current NHRA Competition license with appropriate credentials for ET / Speed required for competition. Any run that exceeds your tech ET / Speed may be disqualified. ET may not exceed your competition license credentials.

#### DRIVER RESTRAINT SYSTEM

Driver restraint system meeting SFI Spec. 16.1 or 16.5 mandatory. All belts used in open-bodied front-engine supercharged methanol-burning vehicles must be covered with a fire-resistant covering. Restraint system must be updated at two-year intervals from date of manufacture.

#### ARM RESTRAINTS

Mandatory.

#### HELMET

Full-face helmet meeting Snell M2015, M2020, SA2015, SA2020 or FIA 8890-2015 mandatory; shield mandatory (goggles prohibited). For all open-bodied front-engine or rear-engine supercharged, turbocharged, or nitrous cars, a full-face Snell SA2015, SA2020 or FIA 8890-2015 helmet and shield mandatory (goggles prohibited).

#### NECK COLLAR/HEAD AND NECK RESTRAINT DEVICE/SYSTEM

A head and neck restraint device/system meeting SFI 38.1 mandatory and must display a valid SFI label. At all times that the driver is in the race vehicle, from the ready line until the vehicle is on the return road, driver must properly utilize an SFI 38.1 head and neck restraint device/system, including connecting the helmet as required for full functionality of the device. The head and neck restraint device/system, when connected, must conform to the manufacturer's mounting instructions, and it must be configured, maintained, and used in accordance with the manufacturer's instructions. Modification of the device is prohibited. An SFI 38.1 head and neck restraint device can be used with, or without, a neck collar; when a neck collar is not used, an SFI 3.3 head sock or SFI Spec 3.3 skirted helmet is required.

#### PROTECTIVE EQUIPMENT

Jacket and pants or suit meeting SFI Spec 3.2A/15, gloves meeting SFI Spec 3.3/5, and boots or shoes meeting SFI Spec 3.3/5 mandatory, except front-engine open-bodied vehicles with supercharger or turbocharger(s): Jacket and pants or suit meeting SFI Spec 3.2A/20, gloves meeting SFI Spec 3.3/15, and boots or shoes meeting SFI Spec 3.3/15 mandatory. See General Regulations 10:10.