



## OUTLAW PRO MODIFIED

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Outlaw Pro Modified is a category where boosted and nitrous applications are permitted, meeting the specific rules of the category as listed below. Outlaw Pro Mod (OPM) is contested on a .400 pro tree and is qualified based off of elapsed time, from quickest to slowest. 16-car qualified field, unless 9 or less total entries, which reverts to an 8-car qualified field with a professional pairing ladder.

#### DESIGNATION

OPM followed by car number. Number must be at least four inches high. Competition numbers must be located on both side windows, windshield, and rear window. IHRA mandates the class sponsor decals and IHRA decals on all entries, in all classes. If you choose to apply to our contingency program, those decals are required as well and available at the IHRA registration trailer. The sponsor and IHRA decals must be on the vehicle at the time of technical inspection and will stay on the car for the entirety of the event. Contingency stickers also must be on the vehicle at the time of technical inspection and will be viewed before the final round of eliminations for verification by a IHRA official.

All rules are subject to change at any time given the sole discretion of the IHRA Technical Services Department.

#### MINIMUM WEIGHT REQUIREMENTS

*ALL WEIGHTS INCLUDE DRIVER AT CONCLUSION OF RUN*

There are no minimum weights in this category

#### REQUIREMENTS & SPECIFICATIONS ENGINE: 1

##### COOLING SYSTEM

Radiator permitted, electrically driven fan and water pump is permitted.

##### CYLINDER HEADS

Billet heads are permitted. Maximum one spark plug per cylinder.

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Maximum two valves per cylinder. Modular engine combinations are allowed four valves per cylinder.

### **ENGINE**

Internal-combustion, reciprocating, single-camshaft, 90-degree V-8 automotive-type engine mandatory. Crankshaft centerline must intersect cylinder bore centerlines and be symmetrical. For supercharged entries, a positive method (flange, lip, etc.) must be attached to the intake manifold or engine block to retain both the front and rear manifold to block gaskets in the event the engine crankcase/lifter valley becomes over-pressurized. The flange/lip must extend past the surface of the gasket and be contoured to closely fit the block and manifold surfaces to prevent the gasket(s) from extruding.

### **ENGINE CONTAINMENT SYSTEM**

SFI 7.1 lower engine containment system required. If a flexible 7.1 system is utilized, it must be accompanied by a carbon fiber or aluminum belly pan with a minimum 2-inch vertical lip. Diesel combinations must use engine containment catch pan and fluid absorbing mat in containment catch pan.

### **ENGINE SETBACK**

Maximum of 10-percent of total vehicle wheelbase as measured from the centerline of the forward front spindle to center of front spark plug hole.

### **EXHAUST**

Automotive type system designed specifically for racing required. Exhaust gasses must be directed out of the body towards the rear of vehicle and away from the driver and fuel system. All removable multi-piece exhaust collectors/stacks must be securely fastened with either an IHRA-accepted header tether, a minimum .050-inch (half-inch) stitch weld located on each primary tube or be permanently attached to the vehicle or frame with positive fasteners (i.e., exhaust hangers, support brackets, bolts/nuts, etc.) such that they require tools for removal.

### **FUEL**

IHRA accepted racing gasoline and methanol permitted. The use of nitromethane, nitroparaphins and/or propylene oxide is strictly prohibited.

### **FUEL SYSTEM**

Fuel cell/tank must have pressure cap and be vented to outside of body. Where fuel cells are used, they must meet SFI Spec 28.1. Fuel cells/tanks must be mounted between frame rails and enclosed in a round tube frame, minimum 1.25-inch O.D. x .065-inch chromoly tubing. Extra tank(s) prohibited. Artificial cooling or heating systems prohibited. Circulating systems, not part of normal fuel-pump system, prohibited. Water injection permitted on nitrous oxide entries; only water permitted in water injection system.

### **HARMONIC BALANCER**

SFI 18.1 certification required.

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### **INDUCTION**

Any number and type of carburetors or throttle bodies may be used. Electronic fuel injection permitted, fuel injectors must be placed in either the intake manifold runner or intake manifold plenum.

### **INTAKE MANIFOLD**

An IHRA-accepted burst panel is required on all vehicles.

### **NITROUS OXIDE**

Permitted.

### **OIL SYSTEM**

All pressurized flexible oil lines must pass a minimum 750psi, 30-second test and be tagged to indicate successful testing.

### **SUPERCHARGER**

Screw-type superchargers are permitted and must carry a SFI 34.1 certification. Manifold burst panel meeting SFI Spec 23.1 plus restraint system meeting SFI Spec 14.2.1, including injector restraint straps are mandatory. Cast or billet cases are permitted. All centrifugal superchargers must have a ballistic blanket installed on the compressor housing. 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.

### **THROTTLE**

Throttle control must be manually operated by driver's foot. Electronics, pneumatics, or hydraulics is permitted for starting line/staging RPM limiters only.

### **TURBOCHARGER**

All turbochargers are required to have a ballistic compressor blanket installed on the compressor housings. All turbochargers must have cross bolts in the exhaust to prevent the turbine from discharging in the event of a failure. Cross bolts are to be 3/8" grade 5 minimum and mounted within 1" of the turbine discharge flange.

## **REQUIREMENTS & SPECIFICATIONS DRIVETRAIN: 2**

### **CLUTCH, FLYWHEEL, FLYWHEEL SHIELD & MOTOR PLATE**

Clutch and flywheel meeting SFI 1.3, 1.4 or 1.5 certification required. SFI 29.1 flex plate required on all torque converter equipped cars (SFI 29.2 recommended). The motor plate must be attached to the chassis using at least two welded mounting points with a minimum 3/8-inch Grade 8 bolts and full nuts. At least two additional welded mounting points (using the motor plate, front block plates, etc.) are required to secure the engine to the chassis also with minimum 3/8-inch Grade 8 bolts and full nuts.

### **DRIVELINE**

Driveshaft meeting SFI Spec 43.1 mandatory. Each end of driveshaft must

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have round 360-degree driveshaft loops within 6 inches of the U-joints.

A full 360-degree driveshaft tube mandatory over the yoke, extending from the transmission tail shaft rearward, a minimum length of 12 inches.

Minimum thickness of the driveshaft tube housing is .050-inch chromoly or titanium. Two-piece design accepted with minimum 6 3/8-inch Grade 8 bolts. See General Regulations 2:4. The use of "quick pins" in driveline tube or driveshaft loops is strictly prohibited.

### **FLYWHEEL SHIELD**

SFI 6.3 certification required.

### **TRANSMISSION**

Aftermarket planetary, clutch-less, or automatic transmission permitted. All transmissions must be equipped with an SFI Spec 4.1 transmission shield. Aftermarket converter drive units permitted. When an automatic transmission or converter drive is utilized, an SFI Spec 6.1 or 6.3 flywheel shield and an SFI Spec 29.1 or 29.2 flexplate are mandatory. All entries utilizing a converter must be equipped with a neutral safety switch and a reverse lockout. Bolt together torque converters must be through-bolt design using a minimum Grade 8 bolt. Transmission brake permitted on all converter-equipped entries, electric transbrake release system only. All entries using a torque converter must utilize a belly pan. Lockup converters are permitted.

## **REQUIREMENTS & SPECIFICATIONS BRAKES & SUSPENSION: 3**

### **BRAKES**

Four-wheel brakes with dual master cylinder mounted above the frame rails is required.

### **REAR END**

Automotive type, full-floater rear end required. Titanium wheel studs prohibited. Mark Williams EV4 axle system or Strange STRL-5500SBB accepted.

### **SUSPENSION**

Race car type suspension required. Solid suspension is prohibited. Shock absorbers required on all four wheels.

### **WHEELIE BARS**

Permitted. Wheels must be non-metallic.

## **REQUIREMENTS & SPECIFICATIONS FRAME: 4**

### **BALLAST**

Permitted. Any ballast mounted on, or in front of, forward crossmember is limited to 30 pounds maximum, including bracket. Maximum length of bracket is 12-inches, measured from the front of the crossmember.

Maximum distance from front motor plate to front of weight bracket is 36

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inches. Weight bars, pucks, etc., must use minimum .500-inch-diameter SAE Grade 8 bolts for attachment.

### **CHASSIS**

Current SFI 25.1 certification required.

### **DRIVER**

Must be in stock location, on the left side of the vehicle.

### **FRAME**

Chassis must meet SFI Spec 25.1. Chassis must be recertified yearly by an SFI approved chassis inspector and have a specialized sticker affixed to the roll cage before participation. A panel of .032-inch aluminum, .024-inch steel or carbon fiber must be installed on the inside portion of the roll cage anywhere the driver's legs can come into contact with the roll cage. Panels must be installed in the front and lower portion of the drivers-side X-brace. Panels must attach to the interior side of the tubing or no further than the middle of the tubing, with "impact-type" padding attached to the panels. Padding must extend to be flush with X-brace. Minimum padding thickness is .025-inch. An additional panel(s) of .032-inch aluminum, .024-inch steel or carbon fiber must be installed in the roll cage roof area. The panel(s) must, at minimum, extend from the driver's side roof bar to the centerline of the vehicle. The panel(s) in the funny car cage area must be removable for proper chassis certification processes.

### **GROUND CLEARANCE**

A minimum of 3-inches of ground clearance is mandatory from the front of the vehicle to 12-inches behind the centerline of the front axle. A minimum of 2-inches of ground clearance is mandatory for the remainder of vehicle, except oil pan and exhaust headers.

### **STEERING**

SFI 42.1 steering wheel disconnect is mandatory.

### **WHEELBASE**

Minimum wheelbase of 100-inches, maximum wheelbase of 115-inches. The particular body styles of S-10, Ranger, Dakota trucks are maximum of 125inches. Maximum stagger variation is 2-inches from side-to-side.

### **REQUIREMENTS & SPECIFICATIONS TIRES & WHEELS: 5 TIRES**

Automotive type tires designed specifically for racing are required. Tires cannot be located outside of the body line. Manufacturer, model, and size information must be clearly designated.

### **WHEELS**

Wheels meeting SFI Spec 15.3 with bead locks or liners mandatory. Maximum width of 18-inches. Modification and/or lightening prohibited. Wheel discs or covers are prohibited.

**REQUIREMENTS & SPECIFICATIONS INTERIOR: 6****DRIVER COMPARTMENT**

Driver compartment interior must be aluminum, steel, or carbon fiber. Magnesium prohibited. Sheet metal may not extend into rear window any higher than wheel tubs. Rear wheel wells must be separate for each tire.

Maximum height of rear wheel tubs from ground, 40-inches. Transmission case must be SFI certified or utilize a transmission blanket meeting SFI 4.1. Trunk must be a completely separated from driver compartment with a firewall.

**SEAT**

Driver's seat must be minimum 24-inches high. Seat must be foamed with energy-absorbing material and formed to the driver's body and covered with a minimum one-layer, flame-retardant material. Seat frame must be installed as a permanent part of the chassis.

**WINDOW NET**

SFI 27.1 window net is mandatory. Mechanism for release must have red label and in visible sight for track officials to use externally.

**REQUIREMENTS & SPECIFICATIONS****BODY: 7****BODY**

Funny car or one-piece bodies not allowed even if equipped with doors. Maximum front end overhang of 45-inches as measured from centerline of front spindles. An IHRA-accepted extension may be used to reach 45inches if the front-end overhang of the body is less than 45-inches. All bodies must originate from a production vehicle. No holes permitted in rear of body.

Two hinged openings are permitted. All new cars must be accepted by the IHRA Competition Department prior to construction. All vehicles must be professional finished, painted, lettered, numbered, and decaled.

**BELLY PAN**

Permitted on all cars; mandatory on all entries using a torque converter and all diesel combinations. Pan must extend from frame rail to frame rail and extend from the bellhousing/engine mounting surface to the end of the transmission tail shaft. Nonflammable, oil-absorbent liner is mandatory inside of belly pan.

**DOORS**

Required. Doors must be functional and able to be opened from both the inside and outside of the vehicle. Doors may be fabricated from carbon fiber, fiberglass, or metal. A metal deflector between the fenders and the leading edge of the doors is required.

### **FIREWALL**

Magnesium, aluminum, or composite not allowed. All firewalls must be made of steel or titanium of .024-inch minimum thickness.

### **FLOOR**

Replacing stock floors with .024-inch steel or .032-inch aluminum is allowed. Driver's side floor pan must be .024-inch steel and must be welded in place extending from firewall to back of the driver's seat. Carbon fiber or aluminum may be utilized in the passengers' portion of the flooring in the driver's compartment.

### **HOOD SCOOP**

Allowed. One opening only. Must be finished and painted to follow the body's paint scheme.

### **PARACHUTES**

Dual parachutes required. Separate shroud-line mounting points with 0.500inch sleeved grade-8 bolts required. Safety pins must be red flagged and must be removed prior to burnout.

### **WINDSHIELD, WINDOWS**

Mandatory. May be replaced with 1/8-inch-thick Lexan, plexiglass, or other shatterproof material. An opening with a 4-inch diameter minimum is required on side windows adjacent to the driver.

### **WING, SPOILERS**

Any style rear wing and/or spoiler is permitted. Adjustment during the run is prohibited.

## **REQUIREMENTS & SPECIFICATIONS ELECTRICAL: 8**

### **BATTERY**

Maximum of two batteries allowed. All batteries must be securely fastened.

### **IGNITION**

Electronic starting line RPM limiters (two-steps) are permitted.

### **MASTER CUT-OFF**

Mandatory. An external master electrical shut-off is required, must be clearly labeled, "PUSH OFF."

### **TAILLIGHT**

Functional rear taillight is required. Taillight must be permanently mounted and controlled from the driver's compartment.

**REQUIREMENTS & SPECIFICATIONS****SUPPORT GROUP: 9****COMPUTER**

Permitted.

**DELAY BOXES**

Permitted.

**DATA RECORDERS**

Permitted.

**FIRE SUPPRESSION SYSTEM**

SFI 17.1 system required. System must contain a minimum of 20-pounds of fluid or gas fire suppression agent. One nozzle required inside driver's compartment must be directed at driver's feet. Two or more nozzles must be directed at front of engine and fuel cell. All fire suppression must be released with a single actuation (i.e., single handle, button, or lever). Fire safety pins must be removed before proceeding to burnout area.

**TOW VEHICLES**

Permitted. Tow/push bars must be labeled with reflective tape and/or bright color or striping for safety precautions. A valid driver's license is required to operate any type of tow vehicle. All passengers must be seated inside of the vehicle with all doors closed. Riding in open hatchback, trunk or cargo area is not allowed. ATVs are allowed with a maximum of one passenger who must always be seated. Golf carts are allowed with a maximum of four passengers who must always be seated. Posted pit speeds must always be obeyed. If pit speed is not posted, maximum pit speed will be 10 miles per hour.

**REQUIREMENTS & SPECIFICATIONS DRIVER: 10****CREDENTIALS**

Current IHRA Pro Mod License is required.

**DRIVER RESTRAINT SYSTEM**

Driver restraint system meeting SFI Spec 16.1 certification required (7-point system recommended). Restraint system must be updated at two-year intervals from date of manufacture.

**HEAD AND NECK RESTRAINT**

SFI 38.1 required. An aluminum skid plate located above driver's head is recommended.

**HELMET**

For all cars, a full-face Snell SA2015, or SA2020 helmet and shield mandatory (goggles prohibited). Eject Helmet Removal System (Part # SDR 890-01-30) mandatory and must be installed per manufacturer instructions. A Stand 21 Lid Lifter head sock meeting SFI 3.3 may be used in lieu of the Eject Helmet Removal System.

**HEAD AND NECK RESTRAINT DEVICE/SYSTEM**

A head and neck restraint device/system meeting SFI Spec 38.1 is mandatory.

**PROTECTIVE CLOTHING**

A driver's suit meeting SFI 3.2A/20, gloves meeting SFI 3.3A/20, shoes meeting SFI 3.3/20 and a head sock meeting SFI 3.3 mandatory. A head sock is not required when a helmet manufactured with a skirt meeting SFI 3.3 is used.

**RF SHUTDOWN RECEIVER**

Properly functioning Electrimotion shut-off device (Part # SB001 and RF001) recommended. IHRA will utilize Electrimotion safety shut-off device at all IHRA national events.

**ROLL BAR PADDING**

SFI 45.2 required.