IHRA Motorsports 2013 Rulebook Supplement

This supplement provides competition and technical information for specialized vehicles that may be used at IHRA or affiliated events not included in the official rulebook. IHRA may allow additional vehicles for exhibition purposes if adequate information is provided by the party in question and written approval has been received prior to the exhibition.

TOP FUEL

TF proceded by car number. Nitromethane burning dragsters, vehicles built specifically for all-out drag racing competition. Push starts prohibited. Tow vehicles permitted. 2,200 lbs. minimum weight.

Requirements & Specifications

All entires must utilize the accepted Electrimotion safety shutoff contoller.

AIRFOIL
Front positive-locking device to prevent accidental movement required. Sidemounted canard-type units permitted, securely mounted. No part of wing to be within 6" of front tire.

BODY
Body and cowl must be metal, fiberglass or carbon fiber/kevlar extending forward to firewall. 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. Sub-flooring, inside but independent of body, required where driver's legs rest on belly pan or chassis. Front overhang not to exceed 30", measured from centerline of front spindle to forward most point of car. Ground effects prohibited and include rocker skirts, belly pans, or any configuration under the body that creates a tunnel for the passage of air. Air deflector plates located behind the driver are restricted to a maximum 17" x 17".

FRONT WHEEL FAIRINGS
Prohibited.

WINDSCREENS
Required.

WINGS & SUPPORTS
Rear wing supports must meet SFI Spec 2.3K. Wing configuration limited to one only with maximum three elements. Maximum area of rear wing (total of all stages and/or elements), canards and airfoils mounted behind front spindles restricted to 1500 square inches. Trailing edge of wing may not extend more than 50" behind center line of rear axle. Maximum height of any wing as measured vertically from the trailing edge of wing to ground is 90". Strut mounting points may not be forward of motor plate. Distance from main to secondary mounting points must be 30" minimum. No part of the wing or wing supports may attach to any engine, bellhousing or transmission components. Attaching bolts to be 7/16" grade 8 bolts. Balllock pins prohibited. Any adjustment or movement during run prohibited. Pressurization of wing struts, up to a maximum of 200 psi, is permitted. Spill plates must be flat, vertical and parallel. Spill plate must attach to wing at right angle. Maximum spill plate dimensions 1/4" x 22" x 22". Front wing (element) may not exceed 66.5" in total width including spill plates. One inch off set from vehicle centerline permitted.

BALLAST
Permitted. See general regulations.

BRAKES
Dual spots or equivalent mandatory; minimum two-rear-wheel hydraulic brakes. Hand brake, if used, must be located inside body or driver compartment. Steel brake lines required. Brake lines passing engine or blower drive on any rear-engine car must be shielded. Automated and or secondary braking systems prohibited.

CHASSIS
All cars must meet SFI 2.3, 2.2 Spec. Plating of chassis prohibited. Chassis must have a current Chassis Certification prior to Competition. Cars without cross member above driver's legs must have a device to prevent driver's legs from projecting outside chassis.

DEFLECTOR PLATE
The minimum thickness of the deflector plate must be 1/8 inch 6061 T6 aluminum or 1/16" steel or titanium. If this thickness listed above is used, the plate must be clearly stamped by manufacturer to certify that the correct material was used. Deflector plate must be installed between roll cage and engine extending from1" above top blower pulley to 1" below bottom pulley and no less than 1" wider than each pulley. On any enclosed engine/driver configuration, a full bulkhead must be installed to completely seal the driver from the engine. Minimum attachment for any plate is four 5/16" bolts. All competitors in Top Fuel must incorporate roll cage shielding in addition to the existing deflector plate. The shield must be, at a minimum, higher than the top of the driver's helmet and must be shaped to conform to the roll cage.

GROUND CLEARANCE
Minimum 3” from front of car to 12” behind centerline of front axle, 2” for remainder of car, except oil pan and exhaust headers.

PINION SUPPORT
Rear axle and/or pinion housing anti-rotation device mandatory.

SKID PLATE
Skid plates mandatory minimum 3 square inches must make contact before frame and oil pan.

STEERING
A device must be used to prevent a long steering shaft from injuring driver in case of frontal impact. Quick disconnect steering wheel meeting SFI 42-1 spec mandatory.

THROTTLE
Throttle actuating method on rear-engine cars must be protected where it passes blower-drive section. Electronic operation prohibited.

WHEEL BASE
Minimum 250”. Maximum 300” to long side. Maximum wheel base variation from left to right: 2 inches. Minimum front tread width is 26”.

WHEELS &TIRES
Wire wheels prohibited. Front wheels meeting SFI 15.2 mandatory. Minimum diameter of front wheels is 17”. Rear-wheel discs or covers prohibited. Tires must be automotive type recommended by manufacturer for Top Fuel racing. Beadlock rear wheels meeting SF1 15.3 mandatory. Maximum width of wheels 16”.

WHEELIE BAR
Mandatory. Wheels must be nonmetallic.

ENGINE
Any internal combustion, reciprocating, 90 degree, single camshaft automotive engine permitted. Any configuration totaling 500 ci. Limited to one engine only. No electronic or electronically controlled fuel injection permitted. Must be equipped with SFI 7.1 engine containment device. Maximum bore center spacing 4.900”. All engines must be IHRA accepted prior to competition.

EXHAUST SYSTEM: Competition exhaust permitted. Exhaust must be directed out of car to rear, away from driver and fuel system.

FUEL: nitromethane mandatory, maximum 90% at 60 degrees.

FUEL INJECTOR: Maximum allowable injector opening is 65 square inches excluding cross shaft in fully open position. Maximum height is 46” measured from crankshaft centerline.

FUEL SYSTEM: Fuel lines must be isolated from driver’s compartment by a subfloor or be braided steel where engine is located in rear and fuel tank is in front of driver. Fuel tanks must be mounted above bottom frame rail. Fuel cells accepted. Electronic or electrically controlled fuel system prohibited. All fuel inlet fittings must be double barb or double bead design and secured with double clamps. Fuel block, down nozzle and manifold lines must be positioned to not obstruct the exit of manifold pressure from burst panel. No fuel may be routed through the frame on any chassis constructed after 1/1/02.

IGNITION: All system and related allowance must be IHRA approved. Limited to a maximum of 2 magnetos with output of 44 amps or less. The use of micro-processor battery-related ignition systems and accessories is prohibited. Must be equipped with a functional on/off switch that will de-energize the system inside the driver’s area. See General Regulations.

OIL LINES: Oil pressure lines must pass a minimum pressure test and be clearly labeled as passing the testing process. If the filter or dry sump tank are not mounted directly to the engine, 1 inch of free travel is mandatory on all lines.

OIL PAN: Steel reinforced oil pan gaskets mandatory. Dry sump oil system permitted. (Carbon Fiber prohibited). All pans and dry sump systems must be IHRA accepted.

OIL RETENTION DEVICE: Aluminum catch can mandatory on all entries. Designs must not extend forward of the drivers seat cross member or rearward of the pinion flange. The unit must incorporate a minimum of 4” high bulkheads for oil retention. All units
must extend up the outside of the frame to the top frame rail on the sides and both in front and behind the motorplate. If the rear portion is multi-piece, the side panels must affix inside the lower unit to direct oil back into the catch pan.

SUPERCHARGER: Supercharger manifold burst panel meeting SFI 23-1 mandatory. 19” rotor length maximum, 11 1/4” case width, 5.840 rotor cavity diameter. Restricted to roots type rotor helix angle not to exceed that of standard 71 series GM-type rotor. Variable speed devices prohibited. All entries must utilize a belt guard designed to shield both fuel and oil lines. See General Regulations.

SUPERCHARGER RESTRAINT: SFI 14-3 Mandatory.

VALVE COVERS: Cast or billet metal valve covers using all attachment bolt holes mandatory (Carbon Fiber prohibited). Steel reinforced valve cover gaskets mandatory.

VALVE COVER RESTRAINT: SFI 14-4 Mandatory.

VENT TUBES: Minimum two vent tubes with 1.250 inside diameter mandatory. Tubes must connect to an IHRA accepted overflow tank. Minimum capacity is 8 quarts. All hose connections must be double clamped. All entries must utilize a secondary attachment method for the hardware that connects the valve covers to the vent tubes. All tubing material must be flame resistant and be IHRA accepted prior to use.

CLUTCH/FLYWHEEL SHIELD: Flywheel and clutch meeting SFI 1.3 mandatory. Flywheel shield meeting SFI Spec. 6.2 mandatory. Maximum depth 9.4 with four .750 diameter bolts securing bellhousing to motorplate, with two bolts above and two bolts below the crankshaft centerline. All other fasteners must be .4375 diameter. See SFI spec. 2.3K for specific requirements. See General Regulations.

TRANSMISSION: Prohibited. Positive system to disengage engine from final drive required. Clutch hold-down device recommended. Minimum requirement for reverser is a ballistic shield meeting SFI 4.1 spec. See General Regulations.

REAR END: Full-floating or live axle assembly required. Periodic Magnaflux check of axles recommended. Rear-end ratio of 3.20:1 mandatory on supercharged entries. Nonsupercharged entries may run any desired rear-end ratio provided it is utilized in an IHRA accepted housing.

All entires must utilize the accepted Electrimotion safety shutoff contoller.

ARM RESTRAINTS: Mandatory. Must meet SFI 3.3.

DRIVER RESTRAINT SYSTEM: a minimum of a 7 point SFI 16.1 with two year expiration from date of manufacture mandatory. All belts and harnesses must be covered with fire-resistant material. Abrasion plates mandatory on seat belts where wrapped around frame and exposed to abrasion should the frame contact the ground. The system must maintain proper alignment in the direction of pull. All tabs and brackets must be in double shear and mounted in a way that will permit the system to pivot. The shoulder belt section must be made up of 2 separate belts with their own mount and mounting point. See General Regulations.

ENGINE CONTAINMENT: Must be equipped with SFI 7.1 engine containment device. The containment system must include the oil pump and related components. The use of chassis mounted flexible (soft) engine containment systems is prohibited. Engine containment possibilities may include: a) The addition of ballistic oil pans with additional material that will cover a large amount of the engine block that will aid the “diaper” in containment. b) More efficient/larger crankcase overflow systems. c) Better coverage area, as well as attachment methods of existing engine containment systems.

FIRE EXTINGUISHER SYSTEM: Required when driver sits behind engine. Rear engine cars with an enclosed cockpit require a minimum 5 Ib. fire extinguisher system. Safety pin must be red flagged.

HELMET: SA-2000 or newer or SFI 31.2 mandatory. Eject Helmet Removal Systems part # SDR 890-01-30 mandatory and must be installed as per manufacturers instructions

HEAD AND NECK RESTRAINT: SFI 38.1 mandatory.

PARACHUTES: Dual parachutes required. Two separate shroud line mounting points with sleeved 1/2” bolts required. Shroud lines from mounting point to parachute pack must be covered with flame retardant material. Safety pins must be red flagged.

PROTECTIVE CLOTHING: All suits must be re-certified on a 5 year interval. Driver’s suit meeting SFI Spec 3.2A/15, gloves 3.3/15, boots/shoes 3.3/15, and head sock 3.3. mandatory. Drivers in front-engined cars must use suit meeting SFI Spec 3.2A/20, gloves 3.3/20, boots 3.3/20, and head sock 3.3. A head sock is not mandatory when helmet is manufactured with a skirt labeled as meeting SFI Spec. 3.3. Neck collar meeting SFI 3.3, must be a complete circle.

ROLL BAR PADDING: Additional roll bar padding mandatory anywhere the drivers head my contact the cage. SFI 45.1 may be used in the others areas as well.

SEAT: All seats must include an energy absorbing material that is formed to the driver’s body. Flame retardant seat covering required if metallic seat is used.

COMPUTER: See General Regulations.

CREDENTIALS: Valid IHRA Competition License required.

DATA RECORDERS: See General Regulations.

ELECTRONIC DEVICES: See General Regulations.

WARM UPS: When starting the vehicle it must be fully within the competitors pit space. No part of the vehicle may extend beyond the end of the transporter. If parked on an end or open pit space, it is mandatory that a vehicle be parked to shield the area while the vehicle is running.

PRO FUEL

PFD, preceded by car number. Reserved for injected nitromethane-burning dragsters built specifically for drag racing competition. All entries must incorporate a fan friendly theme in the appearance of the vehicle. Cars are weighed at conclusion of run, including driver. Weight break is 5.00 lbs per cubic inch. 2,100 lbs minimum.

Requirements & Specifications

The requirements and specifications are the same as Top Fuel with the following exceptions.

CYLINDER HEADS: Aftermarket billet heads permitted. Maximum two valves per cylinder; maximum two spark plugs per cylinder.

FUEL SYSTEM: Fuel lines must be isolated from driver compartment by a subfloor or housing where engine is located in rear and fuel tank is in front of driver. Pressurized fuel tanks prohibited. Fuel tanks must be mounted above bottom framerail. Fuel cells permitted. Maximum two fuel pumps. Electronic or electrically controlled fuel system prohibited, however the use of electronic or electrically activated switches to activate pneumatic components is permitted. The use of propylene oxide and/or nitrous oxide is prohibited. The tank and lines may be insulated only to the inlet of the fuel pump. Circulatory systems are prohibited from use on the car or in the pits as a method of cooling the fuel. The use of non-metallic storage containers for fuel is prohibited at all Nitro Jam events.

INJECTOR SCOOP: Maximum injector scoop opening of 1 square foot, with top of opening no higher than 24 inches above the top of roll cage. Scoop may not extend more than 18 inches forward of the center of the forward engine cylinder, may not extend more than 12 inches behind the center of the rear engine cylinder, and may not exceed 24 inches in width.

VENT TUBE BREATHERS: IHRA-accepted catch can/vent tube system mandatory. Double clamps are required on each end of all hoses used in the vent system, including the dry-sump vents. Minimum 1 1/4-inch inside diameter hoses are required from each valve cover to the catch can inlets and/or framerails and from each framerail outlet to both catch can inlets. Minimum catch can(s) capacity is an eight-quart sump.

CLUTCH, FLYWHEEL, FLYWHEEL SHIELD: Flywheel and clutch meeting SFI Spec 1.3 or 1.4 and flywheel shield meeting SFI Spec 6.2 mandatory on all cars.

ROLL CAGE: Chassis must meet SFI Spec 2.1 or 2.3, Plating of chassis prohibited; painting permitted. Chassis must be inspected yearly by IHRA and have serialized sticker affixed to frame before participation. Roll-cage padding meeting SFI Spec 45.1 mandatory where driver's helmet may come in contact with roll-cage components. Additional padding, mounted on flat stock and fastened to the roll cage on both sides of the driver's helmet, mandatory. Additional padding must be IHRA-accepted, securely mounted using bolts or locking fasteners, and must include a flame-retardant covering. All wiring must be external of the framerails; routing of cables, hydraulic, or pneumatic lines inside the chassis is permitted. Pressurization of framerails in lieu of air bottles is prohibited.

WHEELBASE & FRONT TREAD WIDTH: Minimum 150 inches; maximum 300 inches on long side. Maximum wheelbase variation from left to right: 2 inches. Minimum front tread width 26 inches.

REAREND: Full floating assembly mandatory. 2.90 Rear gear mandatory.

TIRES: Tires must be specified for racing use by manufacturer. Maximum rear tire: 18 inches wide x 118 inches maximum circumference. Minimum rear tire circumference: 108 inches. Tires are to meet size requirements when installed and ready to run at manufacturer's recommended operating pressures.

WHEELS: Beadlock rear wheels meeting SFI Spec 15.3 mandatory; maximum width: 16 inches. Wire wheels prohibited. Rear-wheel discs or covers prohibited

ELECTRICAL COMPONENTS: Electrical and electronic components are restricted to ignition systems, data recorders, electrical gauges or indicators, engine shutoff and parachute release systems only. The use of electrical/electronic timers to control clutch management system is permitted. Electrimotion shutoff controller part number SB001AFD mandatory on all entries and must be installed as per manufacturers specifications.

CREDENTIALS: Valid IHRA PFD or ND license mandatory. All drivers must be actively involved in our fanfest activities at the Nitro Jam events

PROSTALGIA NITRO FUNNY CAR

PN/FC, preceded by number. Reserved for 1955-1979 American bodies, nitro-burning Funny Cars built specifically for drag racing competition. All entries must incorporate a fan friendly theme in the appearance of the vehicle. Minimum weight at conclusion of run: 2,250 pounds, including driver.

Requirements & Specifications

ENGINE: Any internal-combustion, American-made automotive engine permitted. Maximum cubic inches 500; maximum bore center spacing 4.840 inches, must maintain bore centers +/- .015-inch from stock. Blocks and cylinder heads must retain all physical characteristics of stock-production components. Billet blocks allowed. Accepted billet heads and block must remain as manufactured.

LOWER CONTAINMENT: Engine must be equipped with an SFI Spec 7.1 lower-engine ballistic/restraint device. A bellypan Is mandatory in addition to the lower engine restraint). The units must incorportate a minimum of 4 inch high bulkheads for oil retention.The pan must extend up the outside of the frame to the top frame rail on sides and on front. If the unit is multi-piece the panels must affix inside the lower unit to direct oil back into the catch pan. The rear bulkhead must be a minimum of 1 inch an form a seal to the motorplate. Oil absorbant liner mandatory

EXHAUST SYSTEM: Double-pipe insulated exhaust headers mandatory. Double tube must extend to start of bend at bottom of body.

FUEL: Nitromethane and methanol permitted. All other fuels prohibited.

FUEL SYSTEM: Maximum of 21 gpm pump. Down nozzles prohibited. Maximum number of nozzles is 24. (16 in manifold and 8 in injector hat.)Maximum injector opening is 45 square inches excluding cross shaft.

NITROUS OXIDE: Prohibited.

SUPERCHARGER: Limited to the use of a 6-71 or 14-71 roots-type supercharger. High Helix units prohibited. OEM or IHRA accepted front driven case mandatory. Specification limits: 5.840 inch rotor cavity a bd 11.250 case width on all models. Maximum rotor length is 15 inches on 6-71 and 19 inches on 14-71 units. The rear of the supercharger on all 6-71 units may not extend beyond the motorplate mounting surface on the rear of the engine block. An SFI supercharger restraint system, aluminum studs, SFI 23.1 burst panel and a supercharger belt guard are mandatory.
Supercharger overdrive combinations:
18.99 % on 6-71 combinations
14.99 % on 14-71 combinations

THROTTLE: Throttle control must be manually operated by driver's foot; electronics, pneumatics, hydraulics, or any other device may in no way affect the throttle operation. Throttle must incorporate a positive-action return system.

VALVE COVERS: Cast or fabricated metal valve covers using all attachment bolts mandatory. Carbon fiber/composite valve covers prohibited.

VENT-TUBE BREATHERS: Vent tubes must be double clamped at each connection. Minimum diameter, 1.25 inches for all breather tubes. An 8-quart minimum tank mounted behind the driver is mandatory. All entries must utilize a secondary attachment method for hardware that connects the valve covers to the vents tubes. All tubing material must be flame resistant and be IHRA accepted prior to use.

CLUTCH, FLYWHEEL, FLYWHEEL SHIELD: Flywheel and clutch meeting SFI Spec 1.3 or 1.4 and flywheel shield meeting SFI Spec 6.2 mandatory. Clutch management system prohibited. Clutch specifications are limited to a maximum of a 6 finger 3 disc on all entries. Release of clutch must be the result of a manual operation by the drivers foot.

DRIVELINE COVER: Driveline must be covered in .024-inch steel or .0625-inch aluminum 360-degree full cover. Couplers mandatory. Rear cover must surround the coupler. Front cover must surround the driveshaft from the back of the reverser to the end of the splicer sleeve in the area of the driver's leg. All covers must be securely mounted to frame, either by a suitable crossmember or third member.
REAR END: Aftermarket full-floating or live axle assembly mandatory. Any commercially available ratio permitted.

TRANSMISSION: Two-speed transmission and reverser required. Transmission must be planetary-type design. OEM type units prohibited. A ballistic shield covering all units mandatory; must meet SFI Spec 4.1.

BRAKES: Four-wheel hydraulic brakes mandatory. Application and release of brakes must be a function of the driver; electronics, neumatics, or any other device may in no way affect or assist brake operation. Hand brake, if used, must be located inside body or driver compartment. Steel brake lines mandatory.

STEERING: Conventional automotive-type rod ends must be a minimum of 3/8-inch shank diameter and must be installed with washers to prevent bearing pullout. Removable steering wheel, if used, must meet SFI Spec 42.1.

BALLAST: Permitted. Must be secured with minimum of two 3/8-inch, Grade 8 fasteners, per 100 pounds.

GROUND CLEARANCE: Minimum 3 inches from front of car to 12 inches behindcenterline of axle; 2 inches for the remainder of the car, except oil pan and headers.

PARACHUTES: Dual parachutes mandatory. Fire-resistant protective covers must be on all parachute packs and unpacked shroud lines.

ROLL CAGE: Chassis must have manufacturers's name, serial number, and date of manufacture. Chassis must meet SFI Spec 10.1E. Plating of chassis prohibited; painting permitted. Chassis must be inspected yearly by IHRA and have serialized sticker affixed to frame before participation. Pressurization of framerails in lieu of air bottles is prohibited. Roll-cage padding meeting SFI Spec 45.1 mandatory where driver's helmet may come in contact with roll-cage components. Additional padding, mounted on flat stock and fastened to the roll cage on both sides of the driver's helmet, mandatory. Additional padding must be IHRA-accepted, securely mounted using bolts or locking fasteners, and must include a flame-retardant covering.

SUSPENSION: Rigid rear suspension mandatory. Front suspension optional.

WHEEL BASE: Minimum: 118 inches; maximum: 125 inches, measured on long side. Maximum wheelbase variation from left to right: 2 inches.

TIRES: Race-only spec tires on front mandatory. Size of rear tires limited to 36-inch diameter x 17-inch wide.

WHEELS: SFI 15.1 or 15.3 beadlock wheels mandatory.

SHEET METAL: Driver-compartment interior, firewall, seat, etc. must be aluminum or steel Magnesium or carbon fiber prohibited.

UPHOLSTERY: Minimum one-layer, Nomex-type material mandatory as seat upholstery, with manufacturer's name displayed.

BODY: Limited to 1955 to 1979 American-made bodies. Bodies must resemble the original mass-produced make and model. Body must lift off as a one-piece unit.

ESCAPE HATCH: A working escape hatch must be installed in top of body to permit easy driver exit. Minimum size, 18 inches x 17 inches. Roof hatch must be permanently attached and hinged at front. Must have release mechanism, operable from both inside and outside of car.

FIREWALL & FLOORS: Must be constructed of .032-inch aluminum or .024-inch steel. Firewall must completely seal driver from engine compartment

SPOILER: Allowed front and rear. Rear spoiler limited to roof height and body width (no modern type spoilers or spillplates permitted). Front spoiler limited to overall overhang measurement of 40 inches.
COMPUTERS: Computers prohibited.

DATA RECORDERS: Data recorders permitted. Cannot perform any function in fuel, clutch, or driver management.

IGNITION: Mag limited to single point-type only (no electronic mags or mag amp boxes allowed). Timing advance or retard functions must be a direct function of the driver by mechanical or pneumatic means. A positive ignition shutoff within the reach of the driver is mandatory.

FIRE SYSTEM: Fire extinguishing system must meet SFI Spec 17.1. Minimum 20-pound or more fire extinguishing system mandatory. System must be divided so that a minimum of 15 pounds is directed into engine compartment and the remaining 5 pounds or more should be dispersed in driver compartment by a nozzle placed at driver's feet. Must be installed per manufacturers specifications. Fire-bottle activation cables must be installed inside framerail where cable passes engine/bellhousingarea. Carbon fiber bottles prohibited.

WARM-UPS: When starting vehicle in the pit area, vehicle must be fully within the confines of the assigned space. No part of the car may extend past the trailer.

ARM RESTRAINTS: Mandatory.

CREDENTIALS: Valid IHRA Prostalgia Funny Car license mandatory. All drivers must be actively involved in fanfest activities at Nitro Jam events.

DRIVER RESTRAINT SYSTEM: Three-inch driver restraint system meeting SFI Spec 16.1 mandatory. All belts and mounting points must be covered with a fire-resistant material. Restraint system must be updated at two-year intervals from date of manufacture or as specified by manufacturer.

HELMET: Helmet meeting Snell, SA-2000 or newer mandatory. Helmet must meet applicable SFI and/or Snell specs with fresh air system installed. Compressed air only. Air can be supplied on demand or by constant pressure. Eject Helmet Removal Systems # SDR 890-01-30 mandatory and must be installed as per manufacturers instructions.

HEAD AND NECK RESTRAINT DEVICE/SYSTEM: 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-approved head and neck restraint device/system, including connecting the helmet as required for full functionality of the device. The device/system must meet SFI Spec 38.1 and must display a valid SFI label. 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.

PROTECTIVE CLOTHING: Driver's suit meeting SFI Spec 3.2A/20, gloves 3.2A/20 boots 3.2A/20 and head sock 3.3 mandatory. All jacket and pants or driver suits that meet SFI Spec 3.2A/20 must be recertified on a five-year interval. A head sock is not mandatory when helmet is manufactured with a skirt labeled as meeting SFI Spec. 3.3.

Nitro Funny Car

Reserved for supercharged, fuel-burning Funny Cars built specifically for drag racing competition. Minimum weight at conclusion of run: 2,400 pounds, including driver.

REQUIREMENTS & SPECIFICATIONS

Requirements and Specifications are the same as Top Fuel with following exceptions.

AIRFOILS / WINGS
Prohibited.

BODY
IHRA accepted coupe or sedan body mandatory. Contour of body must resemble same configuration and design for specific body selected. Maximum width variation from front to rear is 6 inches. Minimum body width is 60 inches. Bodies are measured at centerline of front and rear axles. Fender flares or lips, maximum 1 inch permitted on forward half of front and rear wheel openings; may not extend rearward of spindle or

axle centerlines. Lips must be mounted in line with wheel opening, and may not be mounted in front of opening. A body header flange lip is allowed and can measure a maximum of 1 inch or as wide as the body, whichever is less. Enclosing the wheelwells or the use of wheel fairings is prohibited. Front and rear wheelwell must maintain OEM radius and contour. wheelwell openings: front, minimum 5 inches measured vertically from centerline of the front axle to wheelwell opening; rear, minimum 8 inches measured vertically from centerline of rear axle to wheelwell opening. Trailing edge of rocker minimum 18 inches measured directly from centerline of rear axle. Front overhang not to exceed 40 inches from centerline of front axle. Taillight area may be hinged (top only) for air venting, maximum 100 square inches, one per side, and must be rectangular; any other holes in rear of body prohibited. Maximum height of hood cowling 5 inches, may be no wider than base of A-pillars. Roofs may be chopped maximum 2 inches. Complete removal of roof prohibited. Minimum roof width 32 inches. Minimum width at A -pillar 48.75 inches; minimum width at C-pillar 49.50 inches. Rocker panel extensions may not be more than 1 inch wide. No underbody streamlining will be permitted. Bodies must be removable from a rear-release mechanism that must be accessible in the taillight panel area. Body (hood) burst panel, minimum 288 square inches, mandatory. Underside of body, including any roof area, must be covered with an IHRA accepted flame-retardant covering or coating.

ESCAPE HATCH
A working escape hatch must be installed in top of body to permit easy driver exit. Minimum size, 18 inches x 17 inches. Roof hatch must be permanently attached and hinged at front.

FIREWALL/DASH
Must be of aluminum or steel. Dash may be minimum .040-inch aluminum, firewall minimum .050-inch aluminum. Distance from center of hole to edge of panel, 3/4-inch minimum. Distance from top of bellhousing shroud cutout to “V” of firewall, 6 inches minimum. Minimum .050-inch doubler plate permitted. One-piece, .050-inch dash/firewall permitted. Firewall must be equipped with fire windows measuring no greater than 25 square inches on either side of firewall in vicinity of valve covers to warn driver of fire. Fire-resistant plastics such as Lexan or Plex 70 mandatory.

REAR BUMPERS
Must be equipped with rear bumper consisting of a minimum vertical surface of 3 inches, maximum allowable cutout for parachute shroud lines 4 inches by 30 inches. The trailing edge of rear bumper may not extend more than 54 inches from the centerline of the rear axle. Maximum measurement from trailing edge of rear bumper to ground 29 inches at rear tire pressure of 4.5 PSI.

REAR SPOILER
Rear spoiler cannot be “built in” to body. Maximum rear-spoiler width, including spill plates and attachment points, 54 inches. Rear-spoiler spill plates cannot be located forward of the centerline of the rear axle and onto rear quarter. Spill plates cannot be more than 5 inches above the roof line, or 60 inches from the ground, whichever is LESS. Trailing edge of spill plate may not be more than 60 inches past the centerline of the rear axle. Spill plate supports permitted on one side of spill plate only, not both. Lip on rear edge of spill plate (vertical), 1/2-inch maximum. The trailing edge of rear spoiler may not extend more than 56 inches past the centerline of the rear axle, may not be more than 4 inches above the roof line or higher than top of spill plates, whichever is LESS, and the forward and trailing edge may not be mounted so as to preclude a “wing” configuration. Wicker on spoiler not to exceed 2 inches for-ward or back. Vortex prohibited on car body. Any adjustment or movement during run prohibited. Airflow through spoiler or past the underside of spoiler, other than hinged taillight area, prohibited.

SHEET METAL
Driver compartment interior, firewall, seat, etc. must be aluminum or steel.

DRIVELINE COVER
Each end of driveshaft must have a full 360-degree cover of mini-mum 1/16-inch steel or 1/8-inch aluminum. Rear cover must surround the coupler. Front cover must surround the driveshaft from the back of the reverser to the end of the splicer sleeve in the area of the driver’s legs. All covers must be securely mounted to frame, suitable cross member, reverser, or third member

CHASSIS
Chassis must have manufacturer’s name, serial number, and date of manufacture. Chassis must meet SFI Spec 10.1E. Plating of chassis prohibited, painting permitted. Chassis must be inspected yearly by IHRA and have serialized sticker affixed to frame before participation. All wiring must be external of the framerails; routing of cables, hydraulic or pneumatic lines inside the chassis is permitted. Pressurization of framerails in lieu of air bottles is prohibited. All competitors in NFC must incorporate roll cage shielding in addition to the existing deflector plate. The shield must be, at a minimum, higher than the top of the driver’s helmet and must be shaped to conform to the roll cage.

WHEELBASE
Minimum, 124 inches; maximum, 125 inches; measured on long side. Maximum wheelbase variation from left to right: 2 inches. Rear tread width cannot be outside of body line nor more than 3 inches inside body line. Front tread width must be no more than 6 inches inside body line. Measurements will be taken from outside edge of tire to inside edge of body.

ENGINE
Dry Sump System mandatory.

EXHAUST
Double-pipe insulated exhaust headers mandatory.

FUEL INJECTOR HAT
Maximum fuel injector air inlet opening: 65 square inches, excluding cross shaft. The maximum accepted height from the crankshaft centerline to the top of the injector hat is 34.0 inches. Electronic or electrically controlled fuel injection prohibited.

IGNITION SYSTEM
The MSD 8971 Pro Mag Digital Retard Control and MSD 7570 Graphic Editor are the only accepted units for competition. Ignition systems and/or components must be utilized in an unaltered manner consistent with the manufacturer's installation and instruction books unless otherwise approved. Maximum two spark plugs per cylinder.

FIRE EXTINGUISHER SYSTEM
Fire extinguishing system must meet SFI Spec 17.1. Minimum 20-pounds or more IHRA-accepted fire extinguishing system mandatory. System must direct a minimum of 15 pounds into engine compartment by outlets in front of each header. Remaining 5 pounds must be dispersed in driver compartment near driver's feet.

HEAD AND NECK RESTRAINT
SFI 38.1 mandatory.

PROTECTIVE CLOTHING
Driver's suit meeting SFI Spec 3.2A/20, gloves 3.3/20, boots 3.3/20, and head sock 3.3 mandatory. All jacket and pants or driver suits that meet SFI Spec 3.2A/20 must be recertified on a five-year interval. A head sock is not mandatory when helmet is manufactured with a skirt and labeled as meeting SFI Spec. 3.3. Fresh air system mandatory.

CREDENTIALS
Valid Competition License required.

Alcohol Funny Car

Numbers must be at least 4" high on both sides of the car. Minimum Weight: 2,200 lbs.

REQUIREMENTS & SPECIFICATIONS

AIRFOILS, WINGS
Prohibited.

BODY
Must be coupe or sedan of type originally mass produced by an automobile manufacturer. Body must have originally measured 63" wide or more at centerline of front and rear axle. Minimum body width 60" when mounted. Bodies will be measured from centerline of existing front axle to centerline of existing rear axle. Fender flares or lips not on original factory produced bodies will not be considered in any width measurement. One inch lip around car body allowed. Duplications of production bodies made of fiberglass or carbon fiber allowed. Body may be lengthened or shortened. Tops may be chopped, maximum 2". Front fender bubbles may not exceed 2.5" as measured from flat portion of fenderline to top of bubble. Holes in top of fenders prohibited. Complete removal of top prohibited. A working escape hatch must be installed in top of body to permit easy driver exit. No see-through types permitted. Minimum size, 18" x 17". Roof hatches must be permanently attached, i.e., hinged at front. Must have single release mechanism operable from inside and outside. Front overhang not to exceed 40". Enclosing the wheel wells or the use of wheel fairings is prohibited. Drilling or cutting the rear window for air passage is not allowed. Bodies 1990 or newer must meet IHRA body specifications.

BODY COATING
Must be covered with IHRA accepted flame retardant material.

BURST PANEL
Body (hood) burst panel, minimum 288 square inches, mandatory. Body burst panel must be secured with plastic screws and two 1/8" stainless steel wires, with body pad bolted with plate on both sides of panel.

SPOILERS
Permitted front and rear. Rear spoiler may not be molded into body. Maximum rear spoiler width, including spill plates and attachment points, 56". Rear spoiler spill plates cannot be located forward of the centerline of the rear axle. The trailing edge of rear spoiler may not extend more than 60" past the centerline of the rear axle, may not be over 4" above the roof line and the forward edge may not be mounted so as to simulate a "wing" configuration. The installation of vortex generators is permitted on the spoiler assembly only, not allowed on car body.

WINDOWS
Windshield mandatory. Windows optional. If windows are used they must be clear. If fully covered, side windows must have one 6" hole per side.

CHASSIS
Chassis required to meet SFI 10.1E. Use of non-ferrous materials for certain component parts such as front axle, bellhousing, frame and headers prohibited except IHRA accepted products.

BRAKES
Four wheel brakes mandatory with dual master cylinder mounted above frame rails on all entries. Steel brake lines mandatory. See General Regulations.

FUEL SYSTEM
Fuel tank must be equipped with positive-locking cap. Fuel cells recommended. Fuel tanks must be vented outside of body lines.

GROUND CLEARANCE
Minimum 3" front of car to 12" behind center line of front axle, 2" inches on remainder of car, except oil pan and exhaust headers.

TIRES
Tires specifically built for racing required. All tires must have manufacturer, model and size information clearly designated if used in competition.

WHEELS
All drivers' wheels must meet SFI 15.1 with liners or beadlocks. Maximum width 16". Wheels and tires must be completely isolated from driver's compartment. Wire wheels not permitted. Rear wheel discs or covers prohibited.

WHEELBASE
Minimum 100", maximum 125". Rear tread width cannot be outside of body line or more than 3" inside body line. Front tread width must be so that tire is located no more than 6" inside body line. Measurements will be taken from outside edge of tire to inside edge of body. Maximum wheel base variation from left to right: 2" with long side 125" maximum.

WHEELIE BARS
Permitted. Wheels must be IHRA accepted.

WEIGHT
Minimum weight 2,100 lbs.

ENGINE
Automobile-type engine required; one only, any location. Electronic or electronically controlled fuel injection prohibited. All combinations must employ a device that will retain the spark plug tubes in case of a failure. Any new engine design must be approved by IHRA competition department prior to competition.

EXHAUST
Double pipe insulated exhaust headers mandatory. Double tube must extend to start of tube at bottom of body. Exhaust must be directed upward minimum 3 degrees.

FUEL
Alcohol/Methanol only. The use of upper cylinder lubricants is prohibited. See General Regulations.

IGNITION
All systems and related components must be IHRA approved and must not be modified from factory specifications. MSD 8971 and 8973 permitted. Maximum of two 8 pole magnetos and two standard automotive spark plugs per cylinder with output of 44 amps or less. The use of micro processor or battery dependent ignition systems is prohibited. All functions related to the ignition, its components and the transmission and its components must be approved, prior to competition. See General Regulations.

INJECTOR SCOOP
All scoops must be IHRA approved. The top of scoop may not be higher than the top of windshield.

NITROUS OXIDE
Prohibited.

OIL LINES
All oil pressure lines must pass a minimum pressure test and be clearly labeled as passing the testing process. If the filter or dry sump tank are not mounted directly to the engine, 1 inch of free travel is mandatory on all lines.

OIL RETENTION DEVICE
Aluminum catch can mandatory on all entries. The units must incorporate a minimum of 4" high bulkheads for oil retention. All units must extend up the outside of the frame to the top frame rail on the sides and both in front and behind the motorplate. If the rear portion is multi-piece, the side panels must affix inside the lower unit to direct oil back into the catch pan.

OVERDRIVE LIMITATION
Roots type - 70 percent maximum Screw type (PSI) -1.92 percent maximum. Supercharger: The maximum length from the front of the supercharger drive pulley to the leading edge of the rotor is 15 inches. Offset drive pulleys may not be used to add to the number listed above. All manifold configurations and supercharger locations must be accepted prior use of spacers, modified cases or attaching methods to move the supercharger rearward in excess of the specified amount is prohibited. A belt guard shielding both fuel and oil lines is mandatory. Electronic fuel injection, nitrous oxide, intercoolers and variable speed devices are prohibited. All screw superchargers (PSI) may not be modified in any way except by the manufacturer. See General Regulations. The maximum height of the injection system may not exceed the height of the roof. The injector scoop may not be more than 16 inches forward of the center of the front cylinder or 10 inches behind center of rear cylinder. All scoops must be IHRA accepted.

VALVE COVERS
Cast or billet metal valve covers using all attachment points mandatory. Steel reinforced valve cover gaskets mandatory.

VENT TUBES
Two positive locking vent tubes mandatory connected to frame and an IHRA accepted overflow tank. Minimum capacity is 4 quarts if routed through the framerail prior to tank. An 8 quart minimum tank is mandatory on all other entries. All hose connections must be double clamped. All entries must utilize a secondary attachment method for the hardware that connects the valve covers to the vent tubes. All tubing material must be flame resistant and be IHRA accepted prior to use.

CLUTCH
SFI 1.3 or 1.4 mandatory. Clutch management systems prohibited. See General Regulations.

DRIVELINE COVER
Each end of drive shaft must have cover of minimum 1/16" steel or 1/8" aluminum. Rear cover must surround the coupler. Front cover must surround the drive shaft from the back of the reverser to the end of the splicer sleeve in the area of the driver's legs. All covers must be securely mounted to frame, suitable cross member, reverser or third-member.

FLYWHEEL SHIELD
Flywheel shield must meet SFI Spec.6.2 with current certification. Four 3/4" bolts (2 above and 2 below crankshaft centerline) must be used to attach bellhousing to motorplate. (Blow back tubes may not be used in place of the four bolts.) See SFI 6.2 spec for motorplate requirements. See General Regulations.

REAR END
Full-floating or live axle rear-end assembly mandatory. Stud bolt minimum 5/8". See General Regulations.

TRANSMISSION AND TRANSMISSION SHIELD
Aftermarket planetary transmissions with reverse mandatory. Automated or electronic shifters prohibited. Automatic transmissions prohibited. Multi-functional single button shifters are prohibited. If a pneumatic shifter is used, each shift must be activated by its own individual control button. Routing of lines must be IHRA approved. Transmission shield must meet SFI Spec. 4.1. See General Regulations. Aftermarket planetary converter drive units accepted. Billet torque converters mandatory. SFI 6.2 bellhousing mandatory. Lock up converters or overdrive units prohibited. All components and their proposed use must be IHRA accepted prior to competition. Transmission brake release must be a function of the drivers left foot.

DRIVER RESTRAINT SYSTEM
Must be equipped with a driver restraint system meeting SFI 16.1 within 2 year expiration from date of manufacture. Flame retardant covering mandatory. See General Regulations.

ENGINE CONTAINMENT SYSTEM
Engine must be equipped with IHRA accepted engine containment system. All systems must include the oil pump and related components. Oil pump covers are mandatory. All non-AN lines must utilize 2 band clamps per connection.

FIRE EXTINGUISHER SYSTEM
Mandatory. All systems must contain a minimum of 20 lbs. of Halon or equivalent (if a different chemical is used), with system divided so that a minimum of 15 lbs. is directed into engine compartment by means of nozzled outlets placed in front of each bank of exhaust headers. Remaining 5 lbs. or more should be dispersed in driver compartment by means of an atomizing nozzle placed at driver's feet. Must be installed per manufacturer's specifications. Must be equipped with "fire windows" measuring no greater than 25 square inches on either side of firewall in vicinity of valve covers to warn driver of fire. Best results are obtained from laminated safety glass or fire-resistant plastics such as Lexan MR 4000. Safety pins must be red flagged.

HELMET
SA-2000 or newer or SFI 31.2A mandatory.

HEAD AND NECK RESTRAINT
SFI 38.1 mandatory.

MASTER CUTOFF
Master electrical cutoff switch required marked "push-off".

PARACHUTE
Dual parachutes required with two separate shroud-line mounting points using sleeved 1/2" Grade 8 bolts required. Safety pins must be red flagged.

PROTECTIVE CLOTHING
Drivers suit meeting SFI Spec. 3-2A/20 with boots and gloves meeting SFI Spec. 3-2A/15 mandatory. Arm restraints and neck collar meeting SFI Spec. 3.3 mandatory.

ROLL BAR PADDING
Additional roll bar padding mandatory anywhere the drivers head my contact the cage. SFI 45.1 may be used in the others areas as well.

SUPERCHARGER RESTRAINT
SFI 14.2 or 14.21 minimum.

UPHOLSTERY
Flame retardant seat cover mandatory.

COMPUTER
See General Regulations.

CREDENTIALS
Valid Competition License required.

ELECTRONICS / DATA ACQUISITION
No sensors may be used to monitor track position, track or tire temperature or ride height other than shock travel. Sensors are prohibited from use on wheels or wheelie bars or on any other moving part other than the drive shaft.

Pro Modified

This class is limited to full-bodied vehicles. It is mandatory to submit a scaled complete body design to IHRA Tech Dept. prior to construction. A complete scaled body design must be approved prior to competition. All body, front end and wing designs must be accepted prior to competition.

REQUIREMENTS & SPECIFICATIONS

WEIGHT MINIMUM
Nitrous entries 2,375 lbs. Supercharged entries 2,650 lbs. Small Block Turbo" 2,300 lbs. Accepted Nostalgia body styles may deduct 25 lbs from minimum weight. (Example. 53 Studebaker 55, 57 Chevy and Buick, 38 Chevy and 41 Willys.) Turbo charged entries use respective Supercharged weight.

BELLY PAN
Permitted. Must extend beyond leading edge of engine and accessories and incorporate a 1 inch lip on the front edge of all units.

BODY
One piece or funny car bodies prohibited. Front overhang not to exceed 45" forward of front spindle. If front end overhang for the selected body is less than the maximum of 45 inches, an IHRA accepted extension may be added to reach the maximum length. All models must be accepted prior to competition and must be within all ground clearance parameters. Light weight aftermarket replica body components permitted as long as same appearance is retained for body being used. No holes permitted in back of body. Two hinged openings with total maximum of 120 sq. in. accepted. Rocker panel extensions and fender flares (lips) may not be in excess of 1 inch. They must not extend beyond the forward half of the wheel opening. New car plans must be submitted to IHRA Technical Director for design approval prior to body construction, along with three photos of body prior to painting. If a particular body style is creating conditions that are detrimental to the variety of the eliminator, adjustments may be made at any time, at the discretion of the IHRA competition department.

DOORS
Must be functional from inside and outside. Exact duplicates in fiberglass or carbon fiber permitted. All entries must incorporate a metal deflector between the fenders and the leading edge of the doors,

FIREWALL
Magnesium prohibited. Must be steel or titanium (.024 minimum thickness)

FLOOR
Replacing stock floors with .024" steel or .032" aluminum allowed. Replaced floors must be stock in appearance and location. Driver's-side floor pan must be .024" steel and must be welded in place extending from firewall to back of driver's seat. Magnesium interior panels prohibited. Carbon fiber or composite materials are prohibited from being utilized in any portion of the flooring in the driver's compartment. (exceptions are: wheel tubs, suspension covers, or any panel behind the driver).

HOOD & HOOD SCOOP
Permitted, one opening only. May not extend more than 14" above height of hood surface measured from base of hood scoop. Must be finished and painted to follow body paint scheme. A minimum of four fasteners must be used on the leading edge of all removable hoods. Burst panel on top of hood scoop permitted.

TAIL LIGHT
Functional tail light mandatory.

WINDSHIELD AND WINDOWS
Must be retained but may be replaced with 1/8 inch thick plexiglass- lexan or other shatterproof material permitted. The side windows on all entries must have a minimum 4" diameter opening adjacent to the driver.

SPOILER/WING
Rear wing or spoiler may not be higher than the roof unless OEM was higher. All designs must be IHRA accepted prior to competition.

BALLAST
250 lbs maximum. Shot bags must be contained in a weight box. Any car found with unsecured or illegal ballast following a run will be disqualified from the event at discretion of IHRA Technical Department.

BATTERY
Maximum two batteries. Must be securely fastened. See General Regulations.

BRAKES
Four wheel brakes mandatory with dual master cylinder mounted above frame rails on all entries. Steel brake lines mandatory. See General Regulations.

CHASSIS
All cars must meet SFI 25.1E or 25.2 with current IHRA certification prior to competition.

FUEL SYSTEM
No part of the fuel system may be mounted on firewall. After market fuel cell recommended. Fuel cells must be vented to the outside of the body and equipped with a flash shield to isolate drivers compartment. All fuel cells must have positive-locking caps. Front mounted fuel systems must be mounted between frame rails and protected by 1 1/4" x .065 CM tubing to protect from front impact. Maximum two cells or tanks. On-board cooling or recirculating systems prohibited. All fuel systems must have ground wire connected to chassis.

GROUND CLEARANCE
Minimum 3" required from the front of the car to 12" behind front axle centerline. 2 inches for remainder of the car.

SUSPENSION
Full automobile aftermarket systems required. Minimum, one hydraulic shock absorber per wheel. Fabricated units permitted with approval of Technical Director. Rigid mounted suspensions prohibited. Minimum travel 1" per wheel. Lockup shocks prohibited.

TIRES
Automotive type specifically designed for racing. Location cannot be outside of body line. All tires must have manufacturer, model and size information clearly designated if used in competition.

WHEELIE BARS
Maximum 104" as measured from centerline of rear-end housing to center of wheelie bar wheel.

WHEELS
SFI 15.1 or 15.3 bead locks mandatory on all entries. Maximum width 16".

WHEEL BASE
Minimum 100"-Maximum 115". Trucks (full size): 140"; S-10, Dakota, Ranger: 125". Maximum variation is 2 inches.

ENGINE
All engine combinations must be IHRA approved and have manufacturer part numbers present. Any internal combustion engine allowed with any modifications, except as noted. Cubic inches limited to 527 for super charged entries (No tolerance). Nitrous Oxide assisted entries are limited to 870 cubic inches with a maximum bore center of 5.300. Engine set back no more than 10 percent of wheel base as measured from front spark plug to front spindle. All engines and cylinder head combinations must be IHRA approved prior to competition. Maximum of 1 spark plug per cylinder on supercharged and turbocharged combinations. Crankshaft centerline must intersect cylinder bore centerlines and be symmetrical. Specifications may be adjusted if an unfair advantage exists. Maximum bore center on billet hemi combinations is 4.900 and 5.00 on all other combinations. Turbo Combinations are limited to 650 cubic inches with a maximum bore center of 5.00 inches. Supercharged Wedge engines-billet heads allowed. Supercharged Hemi engines-billet heads allowed. Maximum supercharged valve size intake: 2.400, exhaust: 1.900. Engine specifications may be adjusted if an unfair advantage exists.

EXHAUST SYSTEM
Competition type exhaust systems required. Exhaust gases must be directed out of the car body, rearward, away from driver and fuel system.

FUEL
Nitromethane prohibited.

INTAKE MANIFOLD
An IHRA accepted burst panel is mandatory on all entries.

IGNITION
All systems and related components must be IHRA approved and must not be modified from factory specifications. Magneto systems are limited to a single 44 amp maximum output, single plug system. The use of microprocessor or battery dependent ignition systems is prohibited on Supercharged entries. All functions related to the ignition, its components and the transmission and its components must be approved, prior to competition. The use of MSD #7531 unit is permitted on Nitrous Assisted entries.

INDUCTION
Any number and type of carburetors may be used. Injectors acceptable on any car.

NITROUS OXIDE
Maximum of two bottles. 15 Ibs. maximum per bottle. No bottle may be turned on until after burnout is complete. No in-line valves accepted as bottle shut off in staging lanes. Push systems accepted. Nitrous system must be activated by a wide open throttle switch. All nitrous bottles must be within a 5 year expiration date and have the pressure rating clearly stamped on the bottle. See general Regulations.

OIL LINES
All oil pressure lines must pass a minimum pressure test and be clearly labeled as passing the testing process.

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

SUPERCHARGER
14-71 high helix mandatory if roots type is selected. Screw type (PS)I units may be utilized by certain organizations, however they must be operated within the maufacturers specifications and may not be modified in any way. The maximum length from the front of the supercharger drive pulley to the leading edge of the rotor is 15 inches. Offset drive pulleys may not be used to add to the number listed above. All manifold configurations and supercharger locations must be accepted prior to competition. The use of spacers, modified cases or attaching methods to move the supercharger rearward in excess of the specified amount is prohibited. A belt guard shielding both fuel and oil lines is mandatory. Electronic fuel injection, nitrous oxide, intercoolers and variable speed devices are prohibited. See General Regulations. The maximum height of the injection system may not exceed the height of the roof. The injector scoop may not be more than 16 inches forward of the center of the front cylinder or 10 inches behind center of rear cylinder. All scoops must be IHRA accepted.

SUPERCHARGER CASE
OEM or accepted aftermarket manufacturer's case mandatory. The top opening may not exceed 11 inches in length and 5 inches in width or beyond manufacturers specifications.

TURBO CHARGER
91 mm twin turbos maximum.

OVERDRIVE LIMITATIONS
Roots type - 70 percent maximum. Screw type (PSI) -1.92 percent maximum.

VENT TUBES
All tubing material must be flame resistant and be IHRA accepted prior to use.

CLUTCH
SFI Spec. 1.5 Clutch release and bearing engagement / disengagement must be manually operated by driver's foot. The use of electronics, pneumatics, hydraulics or any other device is prohibited from affecting clutch operation. Lock up units prohibited. All levers in the clutch assembly must be attached to the pressure ring. 3 Disc maximum on all entries.

DRIVELINE
Full 360 degree drive shaft tube required over yoke, extended from transmission tail shaft a minimum length of 9 inches, minimum thickness of tube housing is .050 cm. Two piece accepted with minimum 6 3/8" grade 8 bolts.

FLYWHEEL SHIELD
SFI 6.3 with current certification. Four 1/2" bolts (2 above and 2 below crankshaft centerline) must be used to attach bellhousing to motorplate. (Blow back tubes can not be used in place of the four bolts.) See SFI 6.3 spec for motorplate requirements. See General Regulations.

REAR END
Automotive type required. Aftermarket axles required with 5/8 inch stud bolts and axle retention device. Full floating or live axle assembly is mandatory on all entries.

TRANSMISSION
All transmissions must have neutral position and be covered by a one piece SFI 4.1 shield. Automated shifters, electronic timed shifters, automatic transmissions are accepted. Routing of pneumatic shifter lines must be IHRA approved prior to competition. Aftermarket planetary converter drive units accepted. Billet torque converters mandatory. SFI 6.3 bellhousing mandatory. Lock up converters or overdrive units prohibited. All components and their proposed use must be IHRA accepted prior to competition. Transmission brake release must be a function of the drivers left foot.

SUPERCHARGED ENTRIES
Overdrive or underdrive units are prohibited in any part of drivetrain. Two forward shifts maximum (split-shifting prohibited). 3 speed transmission with two planetaries maximum. A 1 to 1 relationship mandatory in 3rd gear.

DRIVER RESTRAINT SYSTEM
Must be equipped with a driver restraint system meeting SFI 16.1 at a minium within 2 year expiration from date of manufacture. See General Regulations.

ENGINE CONTAINMENT SYSTEM
Engine must be equipped with IHRA approved engine containment system. The system must include the oil pump and related components. If restraint is not 2" minimum above ground, a shield firmly attached to frame rails must be used.

FIRE SYSTEM
Mandatory. Must contain a minimum of 20 lbs of Halon or equivalent (if a different suppressive chemical is used), with one nozzle inside driver's compartment directed on driver's feet and two or more nozzles on front of engine and fuel cell.

HELMET
SN-2000 or newer of SFI 31.2A or 41.2A mandatory.

HEAD AND NECK RESTRAINT
SFI 38.1 mandatory.

MASTER CUTOFF
Master electrical cutoff switch required, marked "push-off".

PARACHUTES
Dual Parachutes required. Separate shroud-line mounting points required with 1/2" sleeved grade 8 bolts.

PROTECTIVE CLOTHING
A driver's suit meeting SFI 3.2A/15, gloves meeting SFI 3.3/15, shoes meeting SFI 3.3/5 and neck collar meeting 3.3 mandatory on nitrous assist vehicles. A driver's suit meeting 3.2A/20, gloves and boots meeting SFI 3.3/20 and neck collar meeting SFI 3.3 mandatory on supercharged entries.

ROLL BAR PADDING
SFI Spec. 45.1 mandatory.

SUPERCHARGER RESTRAINT
SFI 14.2 or 14.21 minimum mandatory.

UPHOLSTERY
Flame retardant seat pad mandatory if metallic seat is used.

WINDOW NET
SFI 27.1 window net mandatory. See General Regulations.

CREDENTIALS
A valid Competition License required.

ELECTRONICS / DATA ACQUISITION
No sensors may be used to monitor track position, track or tire temperature or ride height other than shock travel. Sensors are prohibited from use on wheels or wheelie bars or on any other moving part other than the drive shaft.

STARTING LINE ENGINE CONTROL DEVICES
Electronic, mechanical or pneumatic limiters is permitted on all entries. All functions must be accepted prior to competition.

Jet-Powered Dragster and Funny Car

REQUIREMENTS AND SPECIFICATIONS

AFTERBURNER-TAILPIPE
For butts, seams must be on bottom; overlap seam placement will be at the discretion of the technical inspector. Dump valve on afterburner manifold mandatory; valve to be actuated with primary chute lever (to prevent shutoff smoke).

AIR INTAKE
All air intakes must be totally and securely screened (1/8-inch minimum, 3/8-inch maximum or equivalent). Such screening must be securely attached to the engine.

CATCH CAN
Fuel-overflow catch tanks of sufficient capacity to accommodate excess fuel on shutdown and adequate tank venting (approximately 1 quart) required on all vehicles. Use of hose clamps or tie wraps prohibited.

CONTROL CABLES
Manual afterburner control valve cable, minimum 3/16-inch. Electronic control accepted. Fuel control cable must be minimum 3/16-inch. Must have secondary shutoff on main fuel line. Emergency shutoff on burner shutoff line mandatory.
Emergency shutoff on manually controlled afterburner system mandatory. See PARACHUTES for additional details.

ENGINE
Maximum of one thrust-driven engine permitted. Engine attitude must have down thrust; minimum -1 degree angle. No internal modifications permitted. All engines must be run within manufacturer's maximum allowable limits. Engine make, type, and model must be IHRA-accepted. Current engines are J-33, J-34, J-60 (JT-12), J85-5 (CJ-610), and Rolls Royce Viper 522 and 622. Any other engines must be accepted prior to running.

FILTER
Filter on hot streak inlet mandatory.

FUEL
Approved jet-type fuel only (Jet A, Jet-1, kerosene, diesel). Only diesel fuel additives permitted. Separate water and methanol injection systems permitted. Racing gasoline permitted for starting purposes only.

FUEL TANK
Maximum 30 gallons. Must be securely mounted to frame, with appropriate baffling (welding or equivalent). If pressurized, tank must be round. Mechanism to release fuel-tank pressure mandatory. If electrical device, switch must be "normally open" type.

INSTRUMENTS
All instruments, gauges, and metering devices must be fully functional. The following instruments must be visible from the cockpit of each vehicle: tachometer (percent of rpm); exhaust-gas-temperature gauge (EGT); oil-pressure gauge/light (taken off pump outlet housing).

BRAKES
Caliper-type disc brakes required on all four wheels. Two separate hydraulic systems required; may be front/rear or double system.

SUSPENSION
Functional front and rear suspension optional. Rear shocks, if used, must be installed in such a manner as to retain integrity of suspension in case of failure.

GROUND CLEARANCE
Minimum 3 inches from front of car to 12 inches behind centerline of front axle, 4 inches for remainder of car.

PARACHUTES
Dual parachutes mandatory. Primary parachute must be on a control system that will shut off engine when parachute is released. Secondary parachute must be used as an independent backup system with engine-shutdown capabilities (secondary fuel shutoff bypass valve on main fuel line to work with secondary parachute). Must have at least two ways to positively shut off jet engine. Parachute mount must be substantially bolted and/or welded in place. Minimum parachute connection spool diameter: 1 inch. Funny Cars required to have a minimum 10-foot bridle cord to attach pilot parachute. Chutes and shroud lines must be mounted in such a position as to be protected from tailpipe heat. All unpacked shroud lines must be covered with 1/16-inch leather or IHRA-accepted material (silver tape prohibited). Steel, aluminum, or carbon-fiber parachute tubes only. Parachute packs prohibited.

ROLL CAGE
Dragster chassis must meet SFI Spec 2.3K; Funny Car chassis must meet SFI Spec 2.2B, 2.3K, or 10.1D. Plating of chassis prohibited; painting permitted. Chassis must be inspected every two years by IHRA and have serialized sticker affixed to frame before participation. Roll-cage padding meeting SFI Spec 45.1 mandatory anywhere driver's helmet may come in contact with roll-cage components.

WEIGHT
Minimum 1,250 pounds; maximum 2,500 pounds, All weights include driver and fuel.

WHEELBASE, DRAGSTER
Minimum 180 inches; maximum 300 inches.

WHEELBASE, FUNNY CAR
Minimum 125 inches; maximum 135 inches.

TIRES
Tires to be automotive type represented by manufacturer for racing use. Minimum front-wheel diameter on jet Funny Cars, 14 inches.

SHEET METAL
All sheet metal within driver compartment must be aluminum or steel; magnesium prohibited.

BODY, FUNNY CAR
Driver must be isolated from engine compartment and fuel system with minimum 3/16-inch Lexan. Firewall must provide a bulkhead between the engine or fuel tank and driver compartment. All openings must be sealed with metal. Minimum .032-inch 6061 T6 aluminum or .024-inch steel; use of magnesium prohibited. Must have at least one way to easily and quickly exit the car with the body down (roof hatch or removable windshield), with release operable from inside and outside of vehicle. Exit from car with body down must be demonstrated during the inspection process.

FIRE-EXTINGUISHER SYSTEM
Funny Cars: minimum 10-pound, IHRA-accepted fire-extinguisher system. Enclosed cockpit dragsters: minimum 5-pound, IHRA-accepted fire-extinguisher system. See General Regulations 9:3 for IHRA-accepted fire-extinguishing agents.

ARM RESTRAINTS
Mandatory.

CREDENTIALS
Valid IHRA jet license mandatory.

DRIVER LOCATION
Driver must be sealed off from intake by firewall of at least shoulder height. If located next to compressor section, driver must be totally isolated from compressor by 3/8- inch 7075-T6 aluminum shield. J-85 Funny Cars must be additionally equipped with a minimum 360-degree .050-inch stainless-steel shield encompassing combustion can. Driver insulation must be used to protect driver from engine heat.

DRIVER RESTRAINT SYSTEM
Three-inch driver restraint system meeting SFI Spec 16.1, including crotch strap, mandatory. Restraint system must be updated at two-year intervals from date of manufacture.

HELMET
Full Face Helmet meeting Snell SA 2000 or newer mandatory.

NECK COLLAR
Full 360-degree neck collar meeting SFI Spec 3.3 mandatory.

PROTECTIVE CLOTHING
Drivers of dragsters must wear a suit meeting SFI Spec 3.2A/15; drivers of Funny Cars must wear a suit meeting SFI Spec 3.2A/20. All drivers must wear SFI 3.3/5 gloves and SFI 3.3/5 boots/shoes.

Jet Truck

THIS SUPPLEMENT ACCOMMODATES SPECIALIZED JET-POWERED TRUCKS AND IS A SUPPLEMENT TO THE CURRENT IHRA EXHIBITION JET PROGRAM. PARTICIPANTS IN THIS PROGRAM MUST CONSULT THE CURRENT IHRA JET RULES AND GENERAL REGULATIONS AS LISTED IN THE CURRENT IHRA RULEBOOK FOR ANY ADDITIONAL APPLICABLE INFORMATION.
IF ANY COMBINATION OF JET OR MONSTER TRUCKS ARE USED FOR A SIDE BY SIDE EXHIBITION THEY ARE RESTRICTED TO A DISTANCE OF 1/8 MILE.

REQUIREMENTS & SPECIFICATIONS

AFTERBURNER-TAILPIPE
For butts, seams must be on bottom; overlap seam placement will be at the discretion of the technical inspector. Dump valve on afterburner manifold mandatory; valve to be actuated with primary chute lever (to prevent shutoff smoke).

AIR INTAKE
All air intakes must be securely screened (1/8-inch minimum, 1/4-inch maximum or equivalent). Such screening must be securely attached to the engine.

CATCH CAN
Fuel-overflow catch tanks of sufficient capacity to accommodate excess fuel on shutdown and adequate tank venting (approximately 1 quart) required on all vehicles. Use of hose clamps and/or tie wraps prohibited.

CONTROL CABLES
Manual afterburner control valve cable, minimum 1/4-inch. Fuel control cable must be minimum 3/16-inch. Must have secondary shutoff on main fuel line. Emergency shutoff on afterburner mandatory. See PARACHUTES for additional details.

ENGINE(S)
Engine(s) attitude must have down thrust; minimum -1 degree angle required. Front engine mounts must be expandable (TRUNION) type, allowing at least 3/16-inch, 360-degree lateral expansion. Permitted engines are J-34, J-46, J-60 (JT-12), J85-5 (CJ-610), J-79, Rolls Royce Viper 522. Maximum 3 engines allowed, except J-79, restricted to one engine only.

FUEL FILTER
A suitable fuel filter must be installed on the inlet side of the hot streak valve.

FUEL
Approved jet-type fuel only (Jet A, Jet A-1, kerosene, diesel). Only diesel fuel additives permitted. Separate water and methanol injection systems allowed. Racing gasoline permitted for starting purposes only.

FUEL TANK
Must be securely mounted to frame with appropriate baffling (welded or equivalent). If pressurized, tank must be round. Mechanism to release fuel-tank pressure mandatory. If electrical device, switch must be “normally open” type.

INSTRUMENTS
All instruments, gauges, and metering devices must be fully functional. The following instruments must be visible from the cockpit of each vehicle: tachometer (percent of rpm); exhaust-gas-temperature gauge (EGT); oil-pressure gauge/light (taken from pump-outlet housing.

BRAKES
Caliper-type disc brakes required on all four wheels. Two separate hydraulic systems required; may be front/rear or double system. All brake systems must be steel-vented rotor type.

SUSPENSION
Functional suspension optional. Rear upper-shock eyes must be pinned or otherwise secured. Rear shocks must be installed in such a manner as to retain integrity of suspension in case of failure.

GROUND CLEARANCE
Minimum 3 inches from front of vehicle to 12 inches behind front axle centerline, which must be maintained at all times.

BUMPERS
Vehicle must be equipped with a satisfactory bumper/nerf bar device so designed to prevent front tire from becoming first point of impact with guardwall at a 45-degree angle.

PARACHUTES
Minimum of two (2) braking parachutes required. Primary parachute must be on a control system that will shut off engine when parachute is released. Secondary parachute must be used as an independent backup system with engine-shutdown capabilities (secondary fuel-shutoff bypass valve on main fuel line to work with secondary parachute). Must have at least two ways to positively shut off jet engine. Parachute mount must be substantially bolted and/or welded in place. Minimum chute connection spool diameter: 1.50 inches. Parachutes and shroud lines must be mounted in such a position as to offer protection from tailpipe heat. Parachute attachment lines must be covered with 1/16-inch leather or IHRA-accepted material (silver tape prohibited). Steel, aluminum, or carbon-fiber parachute tubes only. Parachute packs prohibited.

ROLL CAGE
Cage structure must be designed to protect driver from any angle, 360 degrees . Material used in construction must be a minimum of 1 5/8-inch x .095-inch chromoly tubing welded to frame. All vehicles must successfully pass IHRA inspection every two (2) years and have a serialized chassis sticker affixed to frame before participation. Vehicle may be re-inspected at any IHRA divisional event, National Open, national event, or by individual appointment with IHRA. Prior arrangements must be made with the national technical director, division tech director. Drivers are instructed to bring all required safety apparel and have vehicle in ready-to-run condition.

WEIGHT
Maximum 7,500 pounds. All weights excluding driver and fuel. Certified weight certificate required.

WHEELBASE
Minimum 120 inches; maximum 300 inches.

TIRES
Tires specifically built or modified for racing only must be used front and rear.Maximum height of any tire is 45 inches. *RECAPS NOT PERMITTED.* Visible cord damage in sidewall requires tire change. All casings must be of new manufacture.

WHEELS
Full floating hubs required on rear wheels.

SHEET METAL
All sheet metal within driver compartment must be aluminum or steel; magnesium prohibited.

BODY
Must be a replica of a commercial truck or emergency vehicle to qualify for this program.

FIRE EXTINGUISHING SYSTEM
Must be equipped with an onboard fire extinguishing system of at least 10-pound capacity installed to provide protection for the driver. Extinguishing agents must be IHRA-accepted.

CREDENTIALS
Valid IHRA jet truck license mandatory. Licensing is on an individual basis through the IHRA Technical Services Department.

DRIVER LOCATION
Driver must be located in front of engine and sealed off from intake and fuel system by firewall of at least shoulder height. One seat for driver permitted. Secondary seat not permitted. Passengers not permitted at any time. Must have at least one method to exit from vehicle (door, roof hatch, or removable windshield) with release operable from inside and outside of the vehicle.

DRIVER RESTRAINT SYSTEM
Three-inch driver restraint system meeting SFI 16.1, including crotch strap, mandatory. Restraint system must be updated at two-year intervals from date of manufacture.

HELMET
Full Face Helmet meeting Snell SA2000 or newer mandatory.

NECK COLLAR
Full 360-degree collar meeting SFI Spec 3.3 mandatory.

PROTECTIVE CLOTHING
Drivers must wear a suit meeting SFI Spec 3.2A/15. All drivers must wear SFI 3.3/5 gloves and SFI 3.3/5 boots/shoes.

Monster Trucks

THIS PROGRAM UTILIZES THE MIMIMUM SAFETY SPECIFICATIONS PROVIDED BY THE UNITES STATES HOT ROD ASSOCIATION (USHRA). PARTICIPANTS IN THIS PROGRAM MUST CONSULT THE CURRENT USHRA RULBOOK AVAILABLE FROM THE FOLLOWING LINK ON MONSTERJAMONLINE.COM. http://www.feldmotorsportsonline.com/images/USHRARulebook.pdf

IF ANY COMBINATION OF MONSTER OR JET TRUCKS ARE USED FOR A SIDE BY SIDE EXHIBITION THEY ARE RESTRICTED TO A DISTANCE OF 1/8 MILE.

Jet Powered Motorcycle and Quad

REQUIREMENTS AND SPECIFICATIONS

AFTERBURNER-TAILPIPE
For butts, seams must be on bottom; overlap seam placement will be at the discretion of the technical inspector. Dump valve on afterburner manifold mandatory; valve to be actuated with primary chute lever (to prevent shutoff smoke).

AIR INTAKE
All air intakes must be totally and securely screened (1/8-inch minimum, 3/8-inch maximum or equivalent). Such screening must be securely attached to the engine.

CATCH CAN
Fuel-overflow catch tanks of sufficient capacity to accommodate excess fuel on shutdown and adequate tank venting (approximately 1 quart) required on all vehicles. Use of hose clamps or tie wraps prohibited.

CONTROL CABLES
Manual afterburner control valve cable, minimum 3/16-inch. Electronic control accepted. Fuel control cable must be minimum 3/16-inch. Must have secondary shutoff on main fuel line. Emergency shutoff on burner shutoff line mandatory. Emergency shutoff on manually controlled afterburner system mandatory. ALL riders must incorporate the use of a tether shutoff Switch.

ENGINE
Maximum of one thrust-driven engine permitted. Engine attitude must have down thrust; minimum -1 degree angle. No internal modifications permitted. All engines must be run within manufacturer's maximum allowable limits. Engine make, type, and model must be IHRA-accepted. Current engines are GE T-58-3 and Teledyne (Drone) J402-CA-702 Any other engines must be accepted prior to running.

FILTER
Filter on hot streak inlet mandatory.

FUEL
Approved jet-type fuel only (Jet A, Jet-1, kerosene, diesel). Only diesel fuel additives permitted. Separate water and methanol injection systems permitted. Racing gasoline permitted for starting purposes only.

FUEL TANK
Maximum 10 gallons. Must be securely mounted to frame, with appropriate baffling (welding or equivalent). If pressurized, tank must be round. Mechanism to release fuel-tank pressure mandatory. If electrical device, switch must be "normally open" type.

INSTRUMENTS
All instruments, gauges, and metering devices must be fully functional. The following instruments must be visible from the riding position of each vehicle: tachometer (percent of rpm); exhaust-gas-temperature gauge (EGT); oil-pressure gauge/light (taken off pump outlet housing).

BRAKES
Caliper-type disc brakes required on all wheels. Two separate hydraulic systems required; may be front/rear or double system.

SUSPENSION
Optional. Rear shocks, if used, must be installed in such a manner as to retain integrity of suspension in case of failure.

GROUND CLEARANCE
Minimum 3 inches from front of vehicle to rear.

TIRES
Tires to be automotive type represented by manufacturer for racing use. Minimum front-wheel diameter on jet Funny Cars, 14 inches.

CREDENTIALS
Valid IHRA jet license mandatory. Licensing is on an individual basis through the IHRA Technical Services Department.

HELMET
Helmet meeting Snell SA2000 or newer, mandatory.

NECK COLLAR
Full 360-degree neck collar meeting SFI Spec 3.3 mandatory.

PROTECTIVE CLOTHING
Full all-leathers or SFI Spec 40.1/2 suit, leather boots that completely cover the ankle with toe-area reinforcement, and full-finger leather gloves are mandatory. Gloves must be Kevlar-lined or equipped with slide buttons and have knuckle armor and palm reinforcement. Suits may be one-piece design or joined with a zipper at the waist. Reinforcement and/or armor in the knee, elbow, shoulder, and knuckle areas required.

WEIGHT
Motorcycle – 1,200 lbs., Quad - 1,200 lbs Maximum All weights include rider and fuel.

Exhibition Wheelstander

REQUIREMENTS AND SPECIFICATIONS

COOLANT SYSTEM/OVERFLOW
Operational coolant system containing a maximum of 15 gallons of water permitted. Tank or vent must be behind rear axle. Vent must terminate in a minimum 1-quart catch can. Vent into exhaust permitted.

ENGINE(S)
Internal-combustion engine(s) required. Harmonic balancer meeting SFI Spec 18.1 required.

EXHAUST SYSTEM
Exhaust must be directed to rear of vehicle away from driver and fuel tank.

FIRE SHOW
Driver/owner must submit to IHRA a complete work schematic diagram and description with photos of any onboard fire show, pyrotechnic display, or olfactory display. All such shows must be IHRA-accepted. Upon acceptance, any change or alterations to the as-submitted diagrams or operation of show must be accepted by IHRA before implementation. All liquids used in such displays must be located outside of driver's compartment and installed in accepted vessels. All propellants or other fluids under pressure must be in DOT-approved vessels. Flame show igniters must be installed in a protected manner and accepted by IHRA. Steel or steelbraided line is required throughout the system. Any substance/fluid must be clearly defined and stated along with Material Substance Data Sheet (MSDS) on file with IHRA. *Prohibited Items:* Explosives, fireworks, rockets, dynamite, flares, solid fuel, hydrazine, nitroglycerin, blasting caps, gun powder, poisonous or carcinogenic substances, propane, or any compound used to create smoke.

FUEL
Gasoline, racing gasoline, alcohol, gasohol, diesel, ethanol, natural gas, and propane permitted. Nitromethane permitted on unblown engines only.

FUEL SYSTEM
Fuel tank must be isolated from driver by a firewall constructed of a minimum of .024- inch steel or .032-inch aluminum. Steel-braided fuel lines required. Fuel lines must be located outside driver compartment. Fuel tanks/cells must be within confines of the body. A quick-action fuel-shutoff valve within easy reach of driver and located in the main fuel line between tank and induction system required.

MOTORPLATE
Mandatory (unless equipped with block side mounts). Must be constructed of 1/4-inch aluminum or 1/8-inch steel. A 1/4-inch steel plate required for manual-transmission vehicles.

NITROUS OXIDE
Permitted on blown and unblown engines. Nitrous bottle(s) in driver compartment must be equipped with a relief valve and vented to the outside of vehicle. Bottle(s) must be stamped with a DOT-1800 pound rating and permanently mounted (no hose clamps or tie wraps). Hoses from bottle(s) to solenoid must be high-pressure steelbraided or IHRA-accepted hoses. Any external heating of bottles prohibited.

SUPERCHARGER, TURBOCHARGER
Permitted on gasoline-, racing gasoline- and alcohol-burning vehicles. Supercharger restraint system meeting SFI Spec 14.1 mandatory on Roots-type supercharger when alcohol is used as a fuel.

VALVE COVERS
Cast or fabricated valve covers using all attachment bolt holes, mandatory on supercharged, methanol-burning vehicles.

CLUTCH, FLYWHEEL, FLYWHEEL SHIELD
Flywheel and clutch meeting SFI Spec 1.1, 1.2, 1.3, or 1.4 mandatory. Flywheel shield meeting SFI Spec 6.1 required on vehicles using 1.1 clutch. SFI Spec 6.2 or 6.3 mandatory on all vehicles using SFI Spec 1.2 clutch with more than 2 discs or SFI Spec 1.3 or 1.4 clutches with 2 discs maximum. Supercharged or turbocharged cars and all cars using nitrous oxide require an SFI Spec 6.2 or 6.3 shield.

REAR END
Aftermarket or full floating axles mandatory.

TRANSMISSION, AUTOMATIC
Transmission shield meeting SFI Spec 4.1 mandatory. Automatic-transmission flexplate meeting SFI Spec 29.1 and flexplate shield meeting SFI Spec 30.1 mandatory. Shifter must be equipped with a spring-loaded reverse lockout device. Functional neutral safety switch mandatory.

TRANSMISSION, AFTERMARKET PLANETARY
Transmission shield meeting SFI Spec 4.1 mandatory.

V-DRIVE
Homemade cast-iron V-drives must be covered with 1/8-inch steel or 1/4-inch aluminum shield securely mounted. Must be full width of V-drive.

BRAKES
Two (2) separate brake systems must be employed, one for stopping and one for guidance. Vented-disc type only. Front brakes optional. Master cylinder must have 1.5 times the stopping and steering volume of wheel cylinders. Vented discs from or intended for a full-size vehicle required.

STEERING
Quick-disconnect adapter for removable steering wheel must meet SFI Spec 42.1.

SUSPENSION, FRONT
Optional. Minimum specification for tube axle is 1 5/8 inches diameter.

SUSPENSION, REAR
Optional.

BALLAST
Permitted. Maximum 500 pounds. No liquid or loose ballast allowed. Removable weight must be secured to chassis by two (2) 1/2-inch bolts per 100 pounds.

PARACHUTES
Mandatory.

ROLL CAGE
Mandatory. All cage structures must be designed to protect driver from any angle 360 degrees. Minimum requirements are 1 5/8-inch x .118-inch wall mild steel or 1 5/8- inch x .083-inch chromoly tubing. Framerails must be minimum 2-inch x 3-inch x .120-inch wall thickness rectangular tubing or .083-inch chromoly round tubing. Any vehicle that was originally constructed with front and rear subframes must have connector to tie subframe material. Cab forward vehicles must have additional tubes across front of cage. Minimum two (2), in addition to front crossmember in this area. All cages must be inspected by IHRA and have a serialized chassis sticker affixed before vehicle may be operated at any IHRA member track.

SKID PLATES
Optional. If wheels are used, minimum requirement, 3,500 pounds, FAA-rated 6-inch diameter.

WEIGHT
Maximum: 4,000 pounds.

WHEELBASE
Minimum: 90 inches.

TIRES
Front tires must be automotive type listed by manufacturer for racing purposes or have a minimum four-ply rating.

WHEELS
Must be automotive-type OEM or aftermarket wheels.

SEAT
Aftermarket race-type seat required. Must be properly braced, framed, and supported. Aluminum, fiberglass, carbon fiber, or double-layer poly type permitted.

SHEET METAL
Driver compartment must be aluminum, steel, or fiberglass. Magnesium prohibited.

UPHOLSTERY
Optional.

VISIBILITY
Forward visibility is mandatory during all operations of vehicle. Both lanes visible to driver during a wheels-up operation. All vehicles must provide a minimum of one opening for a driver unassisted exit and entry from vehicle. Center steering permitted. Lift-up bodies must have clearly marked outside actuated latches on front of body. Tinted windows permitted; must not inhibit driver's view. All bodies must be accepted by IHRA. Body change or transfer requires reinspection by an IHRA-authorized representative.

FIREWALL
Mandatory. Minimum requirement: .024-inch steel or .032-inch aluminum. Must fully isolate the driver from engine. Firewall must extend from top of driver's compartment to bottom of frame or bellypan and side to side in driver's compartment. If no windshield is used, firewall must be a minimum 28 inches wide.

BATTERIES
Must be located outside of driver's compartment and securely mounted.

MASTER CUTOFF
Mandatory. Must disconnect all electrical functions.

FIRE EXTINGUISHER
All vehicles must be equipped with a 10-pound onboard fire extinguishing system installed to provide protection for driver and a second nozzle in engine compartment.

DRIVING LIMITS
All wheels-up runs of two vehicles must be made in one lane only for each vehicle. Crossing centerline permitted on single run only. Maximum downtrack distance wheels up is 200 feet past finish line. Wheels-up runs toward starting line permitted; must not go past eighth-mile mark.

COMPETITION
Wheelstanders permitted to run side by side with other wheelstanders. Competition with any other type vehicle is prohibited.

VEHICLE CHANGES
Any changes in the as-originally-inspected condition of the vehicle may require a reinspection. Contact IHRA Technical Services Department.

WARM-UPS
An IHRA-licensed wheelstand driver must be in the driver position anytime vehicle is running.

CREDENTIALS
IHRA Exhibition Wheelstander license mandatory.

DRIVER
Driver and vehicle are licensed as a unit. Each driver must have all licensed vehicles listed on license in order to operate any vehicle.

DRIVER RESTRAINT SYSTEM
Three-inch driver restraint system meeting SFI Spec 16.1 mandatory. Restraint system must be updated at two-year intervals from date of manufacture.

HELMET
Helmet meeting Snell 2000 or newer mandatory.

PROTECTIVE CLOTHING
Driver's suit meeting SFI Spec 3.2A/15, gloves meeting SFI Spec 3.3/1, and SFI shoes optional. Drivers of front-engine blown or any car using nitromethane must wear SFI Spec 3.3/5 gloves and shoes.

LICENSING
Contact IHRA Technical Services Department for all forms and rules.

SPECIAL VEHICLES
Any vehicle that fails to comply with parameters of these regulations but falls within the general outline and intent of this program may be considered on an individual basis. Applicants are urged to contact the IHRA Technical Services Department before construction of any vehicle.

Nitro Harley-Davidson

REQUIREMENTS & SPECIFICATIONS

ENGINE
Must keep design feature of Harley-Davidson engines (pushrod, 45-degree to 90- degree V-Twin). Carbureted, fuel-injected, or supercharged engines with a maximum displacement of 200 cid. An SFI-accepted engine restraint system mandatory.

CYLINDER HEAD
Aftermarket pushrod heads (including 4-valve) permitted.

FUEL
All fuels other than nitromethane and methanol prohibited.

SUPERCHARGER
Superchargers must have rubber manifold connections or some form of pressure release valve. Supercharger blankets mandatory.

VENT TUBES
Crankcase and all tanks containing fluids must have vent tubes routed to catch can or have a non-spill breather system on motorcycle.

CHAIN GUARD
Mandatory on all motorcycles. Chain guard must be .060-inch steel or 1/8-inch aluminum and must be securely mounted in three places. Chain guard must cover the width and at least the top run of the chain, from centerline to centerline of sprockets.

CLUTCH
Any type clutch, including multi-stage setup, permitted. Clutch must have a protective guard made of .060-inch steel or 1/8-inch aluminum.

TRANSMISSION
Any transmission or high-gear-only system may be used.

BRAKES
Hydraulic type, front and rear, mandatory. Steel-braided brake lines mandatory. Brake lines must be routed and mounted to ensure no contact with moving parts. Two-rotor front brakes permitted. Minimum size: 11-inch diameter, 3/16-inch thickness for single rotor; 9-inch diameter, 1/8-inch thick with dual rotor brakes.

CONTROLS
Handlebar controls must be located in safe, workable position. Foot pegs and foot controls must be located in safe, workable position and must be mounted in an accepted manner. Rider must be able to shut off fuel without removing hands from handlebars. A secondary shut off device must be attached to rider in the event of a premature exit from motorcycle. This device must control the fuel valve. Dual cable push-pull throttle assembly is mandatory. Lanyard for secondary shut off must be run through eyelet, allowing the lanyard to be pulled in any direction to force shut off.

SUSPENSION
Front suspension minimum size: 32mm. Minimum travel: 2 inches. Steering dampener mandatory. Rear suspension permitted. Fork stops required; must limit the turning arc to 28 degrees.

WHEELIE BARS
Wheelie bars mandatory. Minimum length, from centerline of rear axle to centerline of wheelie-bar axle: 84 inches; maximum, 120 inches. Must be securely cross-braced.

FRAME
Aftermarket frames permitted. All frame components, except braces, brackets, and gussets, must be manufactured from minimum 1 1/8-inch x .065-inch 4130 chromoly tubing. All welding must be done by approved heliarc process. Rake angle must be at least 40 degrees. All butt welds must have visible reinforcement. Plating of frame prohibited. Painting permitted. Frames constructed before 1999 and approved for competition may use 1-inch x .58-inch tubing.

GROUND CLEARANCE
Minimum of 2 inches with rider of bike with 10psi in rear tire (includes exhaust and kickstand).

WHEELBASE
Minimum 85 inches.

TIRES
Must be specified for racing use by manufacturer. Any rear-tire size permitted.

WHEELS
Rear-wheel minimum: 15-inch diameter; maximum, 18-inch diameter. Front-wheel minimum: 16-inch diameter; maximum, 19-inch diameter.

SEAT
Seat, tail section, and rear fender may be incorporated as one unit and must include a step to prevent rider sliding backward.

BODY
No body parts are necessary, except rear fender that must cover the width of the tire and extend past the rear axle.

FAIRINGS
Permitted. Must be solidly mounted to frame tubes.

CHARGING SYSTEM
Permitted.

CONTROL SWITCHES
Must be mounted and constructed in an accepted manner. Must have an emergency fuel and ignition kill switch.

IGNITION
Any ignition system permitted.

STARTING SYSTEM
Must be electric external starter. Battery top covers required. No rollers. No push starts. Jackstands mandatory for starting.

COMPUTERS/DATA RECORDERS
Can be used for information gathering only. Throttle operation, shifting, clutch actuation, etc. are to be solely under the control of the rider.

CREDENTIALS
Valid IHRA competition license mandatory.

HELMET
Full-face helmet meeting SN 2000 or newer mandatory.

PROTECTIVE CLOTHING
Full all-leathers or SFI Spec 40.1/2 suit, leather boots that completely cover the ankle with toe-area reinforcement, and full-finger leather gloves are mandatory. Gloves must be Kevlar-lined or equipped with slide buttons and have knuckle armor and palm reinforcement. Suits may be one-piece design or joined with a zipper at the waist. Reinforcement and/or armor in the knee, elbow, shoulder, and knuckle areas required. Spine/back protector and ballistic chest protector mandatory.

Exhibition Fuel Motorcycle

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REQUIREMENTS & SPECIFICATIONS

ENGINE
Must be of a type specifically designed and manufactured for motorcycle use. Maximum two engines, size unlimited, with any internal modifications permitted. Engines must be self-starting. Push, tow, or roller starts prohibited. An SFI Spec 46.1
engine restraint system mandatory.

FUEL
Nitromethane, alcohol, racing gasoline, gasohol, diesel, natural gas, or propane permitted. Nitrous oxide permitted on normally aspirated, alcohol, or gasoline burning engines only.

FUEL SYSTEM
Steel-braided fuel lines mandatory. Dual cable positive-return throttle mandatory. All motorcycles must be equipped with a preloaded fuel shutoff connected by a lanyard between the rider and the trigger.

SUPERCHARGER
Supercharger must be equipped with a supercharger restraint system. Manifold burst panel or rubber manifold connection mandatory on all supercharger installations. Nitrous oxide prohibited with any supercharger.

TURBOCHARGER
Permitted. Nitrous oxide permitted with turbocharger only when gasoline is used as a fuel.

CHAIN GUARDS
Mandatory on all motorcycles. Chain guard must be .060-inch steel or 1/8-inch aluminum and must be securely mounted in three places. Chain guard must cover the width and at least the top run of chain/belt, from centerline to centerline of the sprockets.

CLUTCH
Any type clutch permitted. Cast material prohibited in stress bearing areas. Clutch must have a protective guard made of .060-inch steel or 1/8-inch aluminum that covers the unit 360 degrees.

BRAKES
Hydraulic type, front and rear, mandatory. Steel-braided brake lines mandatory. Brake lines must be routed and mounted to ensure no contact with moving parts. Minimum size: front, dual discs, 9-inch diameter by 1/8-inch thickness (single caliper permitted if 11-inch diameter by 1/4-inch thickness; rear, 9-inch diameter by 1/4-inch thickness). Piston diameter must meet OEM minimums for brand of bike.

FRONT SUSPENSION
Hydraulic-tube-type only; minimum tube diameter is 34mm. Minimum travel: 2 inches. Steering dampener mandatory.

WHEELIE BARS
Wheelie bars mandatory. Length may not exceed the wheelbase of the motorcycle. Wheels must be nonmetallic.

FRAME
Minimum tubing dimension: 1 inch by .058-inch; 4130 chromoly mandatory. All butt welds must have visible reinforcement. All welding on chromoly must be by approved heliarc (TIG) process.

GROUND CLEARANCE
Minimum of 2 inches with rider on bike.

TIRES
Must be specified for racing use by manufacturer. Any rear tire size permitted, as long as does not exceed rim width by more than two inches. Minimum front tire width: 3 inches.

WHEELS
Bead-lock rear wheel mandatory. Rear-wheel minimum: 15-inch minimum diameter; maximum: 18-inch diameter. Front-wheel minimum: 16-inch diameter; maximum: 19- inch diameter.

FAIRINGS/FENDERS
Front fairings must be solidly mounted to frame tubes. Rear fenders must cover width of tire extended past rear axle.

CREDENTIALS
Valid IHRA Exhibition license mandatory.

HELMET
Full-face helmet meeting Snell 2000 or newer mandatory.

PROTECTIVE CLOTHING
Full all-leathers of SFI Spec 40.1/2 suit, leather boots that completely cover the ankle with toe-area reinforcement, and full-finger leather gloves mandatory. Gloves must be Kevlar-lined or equipped with slide buttons. Suits may be one-piece design or joined with a zipper at the waist. Reinforcement and/or armor in the knee, elbow, shoulder, and knuckle areas recommended. Spine/back protector and ballistic chest protector mandatory on nitrous motorcycles.

Pro Stock

This class is a qualified 16 car field. 2,425 lbs. minimum weight, including driver; limited to a maximum of 827 cubic inches on hemi combinations and 840 on wedge entries,

REQUIREMENTS & SPECIFICATIONS

BELLY PAN
Permitted. Must extend beyond leading edge of engine and accessories and incorporate a 1 inch lip on the front edge of all units.

BODY
Must be 2006 or later model year factory produced 2 door coupes and sedans. Sports cars, sedan deliveries and trucks prohibited. Original OEM body shell or IHRA accepted composite replacement mandatory. Chopping, channeling, sectioning, or other alterations to contour, length or width are prohibited. All composite replacement parts must be IHRA accepted and exact duplicates of OEM components and may not be modified. The front end may be lengthened in the cowl area to facilitate body relocation and wheelbase modifications. All entries must pass the IHRA body template test prior to competition. The maximum front-end overhang on all entries is 45 inches.

BUMPERS
Stock or composite duplicates required front and rear, may be molded into body. Must be original size and shape.
DOORS: Must be functional from inside and outside. Exact duplicates in fiberglass or carbon fiber permitted. All entries must incorporate a metal deflector between the fenders and the leading edge of the doors.

FIREWALL
Moving stock firewall rearward for engine installation permitted. Replacing stock unit with one of .024" steel or .032" aluminum allowed; Magnesium prohibited.

FLOOR
Replacing stock floors with .024" steel or .032" aluminum allowed. Replaced floors must be stock in appearance and location. Driver's side floor pan must be steel and must extend from firewall to rear of driver's seat and must be welded in place. Chassis, frame and driveline must be below floor. Rear floor may not be higher than 8" above door sill. Belly pan permitted between the center frame rails extending from the rear to the front cross member or to the bellhousing. All pans must be designed to facilitate fluid retention. If belly pan is utilized, the drip pan or secondary oil retention blanket is not required.

GRILLE
Must be full stock production for body used and visible from front. May have covering over back of grille to prevent air passage. Any factory accessory package must be accepted by IHRA, i.e., spoilers, air dams, etc.

HOOD & HOOD SCOOP
One opening only. The highest point of the hood scoop may not exceed 15" in overall height above the original hood surface, measured from the leading edge of the scoop. Must be finished and painted to follow body paint scheme. Hood must be stock size with no bubbles. Cowl section may be molded to hood. A minimum of four fasteners must be used on the leading edge of all lift-off hoods. Sensors, lines, or wires, etc. are prohibited from being in hood scoop.

STREET EQUIPMENT
Complete stock seal beam head light lenses or accepted replica and stock tail light lenses in original factory location required. Any other street equipment which does not affect external appearance may be removed. Side marker lights optional. Operational tail light required.
SPOILERS: Rear spoilers must measure between 14" to 17", measured from the body line at spoiler transition point to the tip and may have no less than 0 degrees from horizontal. May not be molded into deck lid. All spoilers to be painted to match paint scheme. Rear of chute pack cannot be forward of rear tip of spoiler. Roof-mounted spoilers prohibited. Air foils prohibited. Any front spoiler used must have been factory available for body used. Spoiler outside of deck lid opening may not exceed 8" wide. Spill plates may be no more than 6" high and 26" long. Spill plate may not be molded to the quarter panel. A straight edge will be placed on the spoiler, perpendicular to the centerline of the car and level to the ground. Distance between level and lowest part of spoiler can be no more than 2". A wickerbill must be attached across the entire trailing edge of the spoiler. It must be constructed and attached in a way that will prevent air from passing under or through the unit. It must be 90 degrees from top of horizontal plane and a minimum of 1/4" high and a maximum of 1/2" high.

WHEEL WELLS
Rear, must be separate for each tire.

WINDSHIELD, WINDOWS
Full windows required, .125 polycarbonate materials, such as Lexan MR 4000, allowed. Must match original contour and shape, and mount in stock location. No bubbles in side windows for tire clearance. Windows must be closed, need not be operative. Cutting and/or notching windshield permitted if covered by hood scoop. See General Regulations.

BATTERY
Maximum 2 batteries. Must be securely fastened. See General Regulations - Battery. Must have external master electrical shutoff marked "push-off".

BALLAST
250 lbs. maximum. Shot bags must be contained in weight box. Ballast attached on or in front of the forward cross member is limited to 40 lbs. maximum, including bracket. The bracket may not exceed 12" in length, measured from the cross member, attached with a minimum of (4) 1/2" bolts. The maximum distance from the front of the bracket to the front of the motorplate is 36". Any car found with unsecured or illegal ballast following a run will be disqualified from the event at discretion of Technical Department.

BRAKES
Four wheel brakes mandatory with dual master cylinder mounted above frame rails on all entries. Steel brake lines mandatory.
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CHASSIS
Must be SFI 25.1E Spec. with current IHRA certification tag prior to competition.

DRIVER
Must be in stock location. Drivers seat to be no less than 24” from center of rear axle to set back (where shoulder harness passes through).

ENGINE SETBACK
Maximum setback is 80.125 as measured from the center of the rear axle to the back of the engine block. Modifications to the block that would permit additional setback are prohibited.

FUEL SYSTEM
One SFI 28.1 front-mounted fuel cell mandatory, with pressure cap be vented outside of body. Trunk mounted fuel system prohibited. Fuel circulating systems that are not part of the fuel system are prohibited. All fuel cells must be mounted between frame rails and protected by 1-1/4” x .065 chrome-moly tubing.

GROUND CLEARANCE
Minimum 3” from front of car to 12” behind centerline of front axle, 2” for remainder of car.

RADIATOR
Full size automotive radiator in front location with one water pump mandatory. Remote mounted water pump permitted.

STEERING
Stock-type steering in conventional location required. Minimum steering wheel outside diameter is 12”. SFI 42.1 disconnect is mandatory.

SUSPENSION
Full automobile production systems required. Minimum, one hydraulic shock absorber per wheel. Fabricated units permitted. Lightening of stock components prohibited. Rigid mounted suspensions or straight front axles prohibited.

WHEELS/TIRES
Slicks permitted. Must be automotive type designed for racing. All tires must have manufacturer, model and size information clearly designated if used in competition. Clearance from outside of front tire to inside of fender at widest point not to exceed 4”. Rear clearance 3” from outside of tire to inset of fender at widest point.Inner liners accepted. SFI 15.1 bead-lock rear wheels mandatory. Maximum width 16”.

WHEELBASE
Front wheels may be moved a maximum of 5” forward to accommodate the extended front end body. All entries must be 105” maximum with 1” offset if desired.

WHEELIE BARS
Permitted. Wheels on Wheelie bars must be non-metallic. Maximum length of wheelie bar 80” from center of housing to center of wheelie bar wheel.

CARBURETION
Limited to any two 4-bbl. American automotive carburetors available to the general public with any internal modifications. Carburetors may be split. EFI systems prohibited. Billet carburetors prohibited.
CYLINDER HEADS: Cylinder heads must be configured after OEM or IHRA approved pattern, contain OEM or aftermarket factory casting number & logo, and must be available to the general public. Heads must be aluminum or cast iron. No billet materials, magnesium or other materials allowed. Maximum 2 valves, and one spark plug per cylinder. ALL HEADS MUST BE IHRA APPROVED PRIOR TO COMPETITION.

ENGINE
Internal combustion, reciprocating, naturally aspirated, single camshaft, 90 degree V-8 automotive-type mandatory. IHRA approval mandatory. Crankshaft centerline must intersect cylinder bore centerlines and be symmetrical. Limited to 827ci hemi and 840 ci on wedge entries no tolerance. Block must be IHRA accepted and must be available to the general public. Blocks may be aluminum or cast iron. No magnesium or other materials allowed. One distributor maximum. Maximum 5” bore spacing. Every engine must have an individual Serial No. given by engine builder. The Serial No. must be located in a clearly visible place on the cylinder heads and block. All moving engine components must be accepted prior to utilization. It is the responsibility of the engine builder to provide the IHRA Technical Department with a materials list for all moving engine components as part of the inspection process. Additionally, the use of beryllium, carbon fiber/kevlar, ceramic, or composites are prohibited from use on these components. The rod and main bearing assemblies must be of conventional sleeve design.

ENGINE (QUALIFYING)
All qualifying engines must remain with the respective car for the duration of the event. When a car enters competition with a given engine, that engine cannot be placed in another car to qualify for that event. A replacement engine may be used, only if the engine has not been used by another competitor at the same event.

EXHAUST SYSTEM
Open exhaust with headers mandatory.

FUEL
All entries must utilize VP C-23 on all qualifying attempts as well as in eliminations. The use of propylene oxide, nitrous oxide, nitromethane, or other additives is prohibited.

IGNITION
Aftermarket electronic ignition boxes may not be modified from factory specifications. See General Regulations. If digital ignition system has internal programmable retard functions, all of the external wires that have the ability to activate similar functions must be clearly disconnected and removed from the wiring harness. (Ex. MSD 7530, 7530T and 75301 (pink, tan, violet and white wires).

OIL LINES
All oil pressure lines must pass a minimum pressure test and be clearly labeled as passing the testing process.

CLUTCH
SFI Spec. 1.1 or 1.2.Clutch release and bearing engagement / disengagement must be manually operated by driver's foot. The use of electronics, pneumatics, hydraulics or any other device is prohibited from affecting clutch operation. Lock up units prohibited. All levers in the clutch assembly must be attached to the pressure ring. A 7.5 minimum or 8 inch maximum 3 disc clutch is permitted in a 6.1 bellhousing. Measurement is obtained from clutch disc diameter. If larger diameter is utilized, a 6.3 bellhousing is mandatory.

DRIVELINE
Full 360 degree drive shaft tube required over yoke, extended from transmission tail shaft a minimum length of 9 inches, minimum thickness of tube housing is .050 cm. Two piece accepted with minimum 6 3/8" grade 8 bolts.
FLYWHEEL SHIELD: SFI 6.1 or 6.3 with current certification. See SFI 6.1 or 6.3 for motorplate requirements.
REAR END: Automotive type required. After market axles required with 5/8" stud bolts and axle retention device. Welded spider gears prohibited. Full floating or live axle assembly is optional.

TRANSMISSION
Planetary type transmission mandatory. All entries must utilize a one-piece transmission shield (blanket). Automated shifters, electronic timed shifters, automatic transmissions and converters are prohibited. Multi-functional single button shifters prohibited. If a pneumatic shifter is used, each shift must be activated by its own individual control button. Routing of pneumatic shifter lines must be IHRA approved prior to competition. All pneumatic shifter lines act independently and not a result of or activate other air or electric systems on the entry.

DRIVER RESTRAINT SYSTEM
Must be equipped with a driver restraint system meeting SFI Spec. 16.1 with two year expiration from date of manufacture.

ENGINE CONTAINMENT SYSTEM (diaper)
Engine must be equipped with IHRA accepted engine containment system. All systems must cover the oil pump and related components.

FIRE EXTINGUISHER SYSTEM
Five pound fire extinguisher system mandatory. Minimum 1 nozzle on driver's side in front of driver's feet, 1 nozzle in front of engine. Safety pins must be red flagged.

HELMET
SN-2000 or newer or 31.2A or 41.2A mandatory. Use of open face helmet prohibited. Eject Helmet Removal Systems part # SDR 890-01-30 mandatory and must be installed as per manufacturers instructions.

HEAD AND NECK RESTRAINT
SFI 38.1 mandatory.

MASTER CUTOFF
Master electrical cutoff switch required marked "push-off'.

PARACHUTES
Two required with separate mounting points using 1/2" sleeved bolts. Safety pins must be red flagged.

PROTECTIVE CLOTHING
(Minimum requirements) A driver's suit meeting SFI Spec. 3.2A/5, gloves meeting SFI 3.3/5, shoes meeting SFI 3.3/5 and neck collar meeting SFI 3.3 mandatory.

ROLL CAGE PADDING
Mandatory, meeting SFI 45.1.

UPHOLSTERY
All seats must have minimum 24 inch high seat backs. Seat frame of chromoly tubing must be installed as a permanent part of the chassis. "Wrap around" type seat or fiberglass one-piece bucket accepted. Dash board exterior appearance must be retained: replicas of original allowed. Gauges may be painted in or simulated. Head liner optional; area must be painted if headliner is not used.

WINDOW NET
SFI 27.1 mandatory. See General Regulations.

CREDENTIALS
Valid IHRA competition license required.

ELECTRONICS/DATA ACQUISITION
No sensors may be used to monitor track position, track or tire temperature or ride height other than shock travel. Sensors are prohibited from use on wheels or wheelie bars or on any other moving part other than the drive shaft.

ELECTRIC-POWERED VEHICLE

7.50 1/4 (4.50 1/8) seconds & slower

Requirements and specifications for Electric-Powered Vehicle are the same as those for E.T. bracket vehicles with the following exceptions.

MOTOR
Electric motor(s) only permitted. Maximum height of electric-motor output-shaft centerline: 36 inches on OEM trucks, 24 inches on all others. Vehicles with exposed motors must have a shield of .024-inch steel, 032-inch aluminum, or .120-inch Lexan.

FUEL SYSTEM
All conversion vehicles must remove fuel tanks and fuel system, including vapor storage equipment, from vehicle.

CLUTCH, FLYWHEEL, FLYWHEEL SHIELD
Flywheel and clutch meeting SFI Spec 1.1 or 1.2 (two-disc maximum) mandatory on any car running 11.49 (*7.35) or quicker. Flywheel shield meeting SFI Spec 6.1, 6.2, 6.3, or 9.1 mandatory on all cars running 11.49 (*7.35) or quicker. Exposed-motor electric-powered vehicles with open-frame, vented, or brush replacement window motors must install a motor shield, minimum .024-inch steel or .032- inch aluminum, 360 degrees to provide protection from flying commutator bars, molten copper, plasma, etc. in event of motor overload. A motor plate, minimum 1/4-inch steel or 1/2-inch aluminum, may be used to adapt traction motor to conventional transmission.

DRIVELINE
Driveline loop mandatory on any non-OEM vehicle running 16.00 seconds or quicker.

REAR END
Chain-drive vehicles must be equipped with a chain guard constructed with minimum .125-inch steel or .250-inch aluminum covering width and top run of chain to centerline of sprockets.

SUSPENSION, STOCK-BODIED VEHICLES
OEM three-wheeled vehicles permitted.

DEFLECTOR PLATE, OPEN-BODIED VEHICLES
Each vehicle must have protection for driver from traction motor overload. Must protect driver from motor plasma, flying commutator bars, molten copper, bursting batteries, and spraying electrolyte.

WHEELBASE
Minimum 90 inches, unless car has original motor or is a conversion electric-powered vehicle with motor in original (internal combustion) location. For vehicles with a wheelbase shorter than 90 inches but greater than 40 inches, vehicle cannot exceed 50 mph at any point on the racetrack.

BATTERIES
Must be securely mounted and outside driver compartment. Batteries must be installed so as to withstand a force four times (vertical) and eight times (horizontal) the weight of the battery pack, and each battery or battery pack must be secured with bolts and straps commensurate with the size and weight of the battery. Battery may not be located above the top of rear or drive tires in open-wheeled cars, nor outside body lines in bodied car, except for OEM-production-line electric-powered vehicles. Battery(s) must be completely sealed from driver compartment. All open-bodied vehicles must use ABSORBED GLASS MAT, STARVED ELECTROLYTE, or SEALED VENTED NICAD batteries for power source. Traction-motor and/or high-current wiring may not be located in driver's compartment. Instrumentation wiring permitted. All traction motor wiring must be isolated from vehicle chassis.

FUSING OF BATTERIES
All battery packs must have over-current protection. Circuit breaker(s) or fuse(s) permitted. Such protection devices must have a DC voltage rating equal to or greater than the nominal pack voltage. Current rating must be lower than a short-circuit current that pack can produce without damage. Battery sub-packs must be individually fused.

RECHARGING
Batteries may be recharged in pits or other designated areas only. All vehicles must be connected to AC power-supply (earth) ground when charging. All battery chargers must be equipped with an output fuse rated for 600 volts and a current capacity at least 125 percent of maximum charger DC output.

IGNITION
All vehicles must have a visible indication of a "live" car, except OEM. An externally activated switch or switch control must be installed on the outside of the vehicle and clearly marked to indicate OFF position. A RED triangle must be clearly visible whenever power system is turned ON. This may be a light or a mechanical indicator. Traction battery pack must be physically disconnected when switch is in the OFF position.

MASTER CUTOFF
All vehicles except OEM must incorporate a master electrical disconnect switch that must disable all electrical functions. Switch must disconnect traction-motor battery-pack section of the circuit, and if the switch is a push-pull design, push motion must be "off" function.

Battery in rack/box or with cleats		Battery on flat plate with strap only	
Bolt size	**Battery weight**	**Bolt size**	**Battery weight**
#8	15	#8	6
#10	19	#10	7.5
1/4	36	1/4	14
5/16	57	5/16	23
3/8	83	3/8	34
7/16	114	7/16	46
1/2	152	1/2	61
9/16	195	9/16	78
5/8	243	5/8	96

WIRING
All high-voltage wiring must be located and secured to prevent contact by driver and/or spectators. Any wiring with voltage higher than 24 volts must be completely covered.

ELECTRIC-POWERED MOTORCYCLE

7.50 1/4 (4.50 1/8) seconds & slower

Requirements and specifications for Electric-Powered Motorcycle are the same as those for E.T. Motorcycle - and Electric-Powered Vehicle - with the following exceptions:

MOTOR
Electric motor(s) only permitted.

BATTERIES
Wet (free-liquid) battery prohibited.

MASTER CUTOFF
All electric motorcycles must be equipped with a switch, attached to rider with a lanyard, capable of shutting off all power to electric traction motor.

Turbine Powered Dragster

REQUIREMENTS AND SPECIFICATIONS

TAILPIPE

AIR INTAKE
All air intakes must be totally and securely screened (1/8-inch minimum, 3/8-inch maximum or equivalent). Such screening must be securely attached to the engine.

CATCH CAN
Fuel-overflow catch tanks of sufficient capacity to accommodate excess fuel on shutdown and adequate tank venting (approximately 1 quart) required on all vehicles. Use of hose clamps or tie wraps prohibited.

CONTROL CABLES
Electronic control accepted. Fuel control cable must be minimum 3/16-inch. Must have secondary shutoff on main fuel line

ENGINE
General Electric T-58 Helicopter turbine.

DRIVELINE
Direct drive to SCS 1.75-1 reduction box, SCS reverser with neutral.

FIREWALL/ MOTORPLATE
½ inch aluminum minimum.

FUEL TANK
Maximum 20 gallons. Must be securely mounted to frame, with appropriate baffling (welding or equivalent). If pressurized, tank must be round. Mechanism to release fuel-tank pressure mandatory. If electrical device, switch must be “normally open” type.

INSTRUMENTS
All instruments, gauges, and metering devices must be fully functional.

BRAKES
Caliper-type disc brakes required on rear wheels minimum..

SUSPENSION
Optional. if used, must be installed in such a manner as to retain integrity of suspension in case of failure.

REAREND
9 inch Ford type 40 axle spline miniumum.

GROUND CLEARANCE
Minimum 3 inches from front of car to 12 inches behind centerline of front axle, 4 inches for remainder of car.

PARACHUTES
Dual parachutes mandatory.

ROLL CAGE
Dragster chassis must meet SFI Spec 2.3 or 2.2. Funny Plating of chassis prohibited; painting permitted. Chassis must be inspected every two years by IHRA and have serialized sticker affixed to frame before participation. Roll-cage padding meeting SFI Spec 45.1 mandatory anywhere driver's helmet may come in contact with roll-cage components.

WEIGHT
Minimum 1,100 pounds; maximum 2,000 pounds, All weights include driver and fuel.

WHEELBASE
Minimum 180 inches; maximum 300 inches.
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TIRES
Tires to be automotive type represented by manufacturer for racing use. Minimum front-wheel diameter 14 inches.

SHEET METAL
All sheet metal within driver compartment must be aluminum or steel; magnesium prohibited.

FIRE-EXTINGUISHER SYSTEM
Minimum 5-pound, IHRA-accepted fire-extinguisher system..

ARM RESTRAINTS
Mandatory.

CREDENTIALS
Valid IHRA Turbine Dragster license mandatory.

DRIVER RESTRAINT SYSTEM
Three-inch driver restraint system meeting SFI Spec 16.1, including crotch strap, mandatory. Restraint system must be updated at two-year intervals from date of manufacture.

HELMET
Full Face Helmet meeting Snell SA 2000 or newer mandatory.

NECK COLLAR
Full 360-degree neck collar meeting SFI Spec 3.3 mandatory.

PROTECTIVE CLOTHING
Drivers of dragsters must wear a suit meeting a minimum SFI Spec 3.2A/15; All drivers must wear SFI 3.3/5 gloves and SFI 3.3/5 boots/shoes.