Part C

Drag Racing

"Our Racers Rocket Down the Racetrack!"

.Classes

.Procedures

Section 1 CLASSES

E.T. Bracket Racing

Bracket Racing Guidelines

Bracket racing, or handicap racing, works as follows: Practice runs are made in order to get a feel for how fast the vehicle will run. For example: suppose you make three runs that average 15.50 seconds elapsed time (ET). You may choose that as your dial in time and shoe polish that time on your window. You will be paired against another vehicle which may be faster or slower. The slower vehicle gets a head start determined by the dial in time. For example, if the other vehicle dials in a 15.00 ET, you'll get a 1/2 second head start. The object is to beat your competitor to the finish line without going quicker than your dial in time. If you break out (go quicker than your dial in time), you're done, unless your opponent's break out time is greater than yours or red lights or crosses the centerline. Bracket racing pits driver against driver, with little regard for how fast the vehicle is or how much money's been spent. Delay boxes, crossovers, trans-brakes, air-shifters and other electronic aids are prohibited. All normal DHRA technical and safety requirements apply, based on ET. As the driver, it is your responsibility to make sure the dial in time on your window is correct. If you stage with the wrong time on your window and you lose, you're done. If your dial in is wrong, alert the starting line official ***before*** you pre-stage (light the top bulb on the tree). Bracket classes work off a full sportsman tree (1/2 second countdown). If the smoke from your exhaust is so thick that it blacks-out (interferes with the normal, proper operation of) the staging beams in either lane, you will be disqualified.

OVERVIEW

Any type of configuration is legal in E.T. Bracket Racing. Racing slicks are permitted. The vehicle must use a compression ignition engine. The vehicle's height may not exceed 36 inches from the ground to the crankshaft centerline for vehicles with elapsed times of 12.00 and slower, 31 inches for vehicles with elapsed times of 10.00 to 11.99, or 24 inches for vehicles with elapsed times of 9.99 or quicker.

REGULATIONS

Apparel:

Each member of a participant crew must be fully attired when present in the staging, starting, and competition areas of the racetrack. Shoes are mandatory. Shorts, bare legs, tank tops, or bare torsos are prohibited when driving in any class. Apparel

constructed of 100% natural fibers is recommended. Apparel constructed of 100% man-made fibers (polyester and nylon, for example) is prohibited.

Arm Restraints:

Arm restraints are mandatory for all open-bodied vehicles running 11.99 or quicker. Arm restraints must be worn and adjusted in such a manner that driver's hands and/or arms cannot be extended outside of the roll cage and/or frame rails. Arm restraints shall be combined with the driver-restraint system such that the arm restraints are released with the driver restraints. Refer to the manufacturer for instructions.

Brakes:

Four-wheel brakes are mandatory on all bodied vehicles. Two-wheel brakes are mandatory on dragsters.

Clothing, Protective:

Drivers must wear protective clothing as follows:

11.99 to 10.00 seconds *without* alcohol injection: a jacket meeting SFI specification 3.2A/1.

9.99 to 7.50 seconds *without* alcohol injection: jacket and pants, or suit, meeting SFI specification 3.2A/5, gloves meeting SFI specification 3.3/5, and shoes or boots meeting SFI specification 3.3.

11.99 to 10.00 seconds *with* alcohol injection: jacket and pants, or suit, meeting SFI specification 3.2A/5, gloves meeting SFI specification 3.3/5, and shoes or boots meeting SFI specification 3.3.

9.99 to 7.50 seconds *with* alcohol injection: jacket and pants, or suit, meeting SFI specification 3.2A/15, gloves meeting SFI specification 3.3/15, and shoes or boots meeting SFI specification 3.3. Protective clothing that exceeds these specifications is permitted. The protective clothing must be labeled with the proper SFI specification. The DHRA patch must be located on the upper right shoulder in the front of the fire suit or jacket. The DHRA Patch must be the upper-most patch or logo on the uniform.

Credentials:

Drivers of vehicles running 9.99 or quicker must have a valid NHRA/IHRA competition license. All other drivers must have a valid state driver's license and a valid DHRA membership.

Delay Boxes:

Prohibited.

Driveline:

In place of a cross member, in the vicinity of the front universal joint, all vehicles running 11.99 or quicker must have a retainer loop with 360 degrees of enclosure, 1/4 inch minimum thickness and two inches wide, or 7/8 inch by 0.065 inch welded steel tubing, securely mounted and located within six inches of the front universal joint to support the drive shaft in the event of U-joint failure. 4WD vehicles must have a retainer loop matching above description installed for the front drive shaft. Long-bed trucks with a carrier bearing must have loops as described above on **both** rear drive shafts. Open drivelines passing any part of the driver's body must be completely enclosed in 1/8 inch minimum thickness steel plate, securely mounted to the frame or frame structure.

Driver Restraint:

A quick-release, three-inch shoulder harness meeting SFI Spec 16.1 is mandatory in all vehicles in competition required by the rules to have a roll bar or a roll cage. (It is

permitted in all other vehicles.) The driver-restraint system must be clearly labeled as meeting SFI Spec 16.1 and be dated by the manufacturer. The system must be updated at two-year intervals from date of manufacture. All seat belt and shoulder harness hardware must be originally designed to be used with each other and be produced by the same manufacturer. Vehicles using an OEM or OEM-type seat may have the crotch strap routed in front of the seat instead of through the seat. Only units that release all five-attachment points in one motion are permitted. When arm restraints are worn with a restraint system that utilizes a "latch lever," a protective cover must be installed to prevent an arm restraint from accidentally releasing the latch lever. A protective cover is not required if system utilizes "duck-bill" latch hardware. All harness sections must be mounted to the frame, cross member, or reinforced mounting and be installed to limit the driver's upward and forward body travel. Seat belts may not be wrapped around lower frame rails. Bolts inserted through belt webbing for mounting are prohibited. Check manufacturer's instructions.

Emergency/Master Shut-off:

A master air cut-off is mandatory on all vehicles running 10.99 or faster. It is recommended that fuel cut-off systems also de-energize electronic fuel system components on vehicles running 10.99 or faster. All fuel/air cutoff controls must be clearly marked and located within the driver's reach and be accessible by reaching into the driver's compartment. Air shutoff devices must be demonstrated during technical inspection.

Floors:

All vehicles without floors must be equipped with floor pans made of steel (minimum 0.024 inch thick) or aluminum (minimum 0.032 inch thick) that must extend the full length and width of the driver compartment to the rear of the driver's seat. Vehicles equipped with floors or belly pans made of fiberglass or other breakable material must have metal sub floors. In all vehicles with OEM fiberglass floors, a cross member (minimum two inches by two inches, 0.083 inch wall thickness square tubing) must be installed between frame rails for proper driver's seat, seat belt, shoulder harness, and crotch strap installation. Belly pans and sub floors enclosing the engine or driver compartment must contain suitable drain holes so that liquids and foreign matter cannot collect, thus creating a fire hazard.

Helmet:

Drivers of all vehicles running 13.99 or quicker must wear a helmet meeting the Snell 2000, 2005, SFI 31.1.

Drivers of vehicles running 7.49 or quicker must wear a helmet meeting the Snell SA2000, 2005, or SFI 31.1 specification. Snell K-98 is acceptable in place of any Snell M-rated helmet. SFI Spec 31.1 = Snell SA, open-face helmet and full-face helmet. The helmet must have the appropriate certification sticker affixed inside it.

Jacks/Jackstands:

No work may be done under any vehicle in the pit area while the vehicle is supported by only one vehicle jack. Additional safety devices such as jack stands are mandatory to provide additional protection in the event of jack failure. Failure to observe this rule is grounds for immediate disqualification. Tube-chassis, Pro Stock-style vehicles must have cradles/jack stand devices that attach to the frame (conventional jack stands are prohibited) when being worked on and/or when engine is running in the pits with the

vehicle in a raised position. Jack stand devices must be constructed as to provide a minimum ground clearance of seven inches as measured from the ground to the outer diameter limit of the rear tires.

Neck Collar/HANS:

A neck collar must be a commercially produced unit designed for racing. Two types of collars are commercially available: a full 360-degree “donut” type and a pull-together “horseshoe” type. Modification according to manufacturer’s recommendations to fit helmet and driver’s neck/shoulder spacing is permitted. It must be worn as per manufacturer’s recommendations. It must meet SFI specification 3.3 as per class rules. A HANS (Head And Neck Support) device can be used with or without a neck collar. Modification of the HANS device is prohibited.

Pressurized Bottles:

All pressurized bottles (containing air, Nitrous Oxide, CO_2, etc.) must meet and be engraved as meeting DOT-1800-pound minimum specification. All bottles must be securely mounted. Hose clamps and/or tie wraps are prohibited.

Roll Bar:

Roll bars are mandatory in all vehicles running 11.49 or quicker. All roll bars must be within six inches of the rear or side of the driver’s head, extend in height at least three inches above the driver’s helmet with driver in normal driving position, and be at least as wide as the driver’s shoulders or within one inch of the driver’s door. The roll bar must be adequately supported or cross-braced to prevent forward or lateral collapse. Rear braces must be of the same diameter and wall thickness as the roll bar and intersect with the roll bar at a point not more than five inches from the top of the roll bar. A sidebar must be included on the driver’s side and must pass the driver at a point midway between the shoulder and elbow. Swing-out sidebars are permitted. All roll bars must have in their construction a cross bar for seat bracing and as the shoulder-harness attachment point; the cross bar must be installed no more than four inches below, and not above, the driver’s shoulders or be welded to the side bar. All vehicles with OEM frame (i.e., pickup truck where body bolts to frame rails) must have the roll bar welded or bolted to the frame. Installation of frame connectors on unibody vehicles does not constitute a frame; therefore, it is not necessary to have the roll bar attached to the frame. Unibody vehicles with stock floor and firewall (wheel tubs are permitted) may have the roll bar attached with six inch by six inch by 1/8 inch steel plates on the top and bottom of the floor bolted together with at least four 3/8 inch bolts and nuts, or may have the main hoop welded to the rocker sill area with 1/8 inch reinforcing plates, with plates welded completely. All 4130 chrome moly tube welding must be done by the approved TIG heliarc process; mild steel welding must be done by approved MIG wire feed or approved TIG heliarc process. Welding must be free of slag and porosity. Any grinding of welds is prohibited. The roll bar must be padded anywhere the driver’s helmet can contact it while in driving position. Adequate padding must have at least 1/4 inch compression or meet SFI Spec 45.1.

Roll Cage:

A roll cage is mandatory in all vehicles running quicker than 10.99 seconds, or faster than 135 mph. For vehicles with unaltered firewall, floor, and body from firewall rearward (wheel tubs are permitted) running between 10.00 and 10.99, a roll bar is permitted in place of a roll cage. All cage structures must be designed in an attempt to

protect the driver from any angle, 360 degrees. All 4130 chrome moly (CM) tube welding must be done by approved TIG heliarc process; mild steel (MS) tube welding must be approved MIG wire feed or TIG heliarc process. Welding must be free of slag and porosity. Any grinding of welds is prohibited. In addition, the roll cage must be padded anywhere the driver's helmet may contact it while in the driving position. With driver in driving position, the helmet must be in front of the main hoop. If the helmet is behind or under the main hoop, additional tubing, same size and thickness as the roll cage, must be added to protect the driver. The main hoop may be laid backward or forward, but the driver must be encapsulated within the required roll-cage components. On unibody vehicles with stock floor and firewall (wheel tubs permitted), the roll cage may be bolted or welded to the floor/rocker box via six inch by six inch by 1/8 inch steel plates similar to the roll bar attachment requirements above. Unless attaching to the OEM floor or frame, the minimum requirements for a frame member to which a roll-cage member is attached are 1-5/8 inch by 0.118 inch MS or 0.083 inch CM round tube and/or two inch by two inch by 0.058 MS or CM rectangular tube.
All cage structures must have in their construction a cross bar for seat bracing and as the shoulder harness attachment point. The cross bar must be installed no more than four inches below, and not above, the driver's shoulders, or be welded to the side bar. All required rear braces must be installed at a minimum angle of 30 degrees from vertical and must be welded in. The side bar must pass the driver at a point midway between the shoulder and elbow. Unless an OEM frame rail is located below and outside of the driver's legs, a rocker or sill bar, minimum 1-5/8 inch by 0.083 CM or 0.118 MS round tube or two inch by two inch by 0.058 inch CM or MS rectangular tube, is mandatory in any vehicle with a modified floor or rocker bar within the roll-cage uprights (excluding six square feet of transmission maintenance opening). The rocker bar must be installed below and outside of driver's legs and must tie into the main hoop, the forward hoop, frame, frame extension, or side diagonal. The rocker bar may not tie into a swing-out side bar support. If the rocker bar ties into side diagonal more than five inches (edge to edge) from forward roll-cage support or main hoop, a 1-5/8 inch OD by 0.083 CM or 0.118 MS round tube brace/gusset is mandatory between the diagonal and forward roll-cage support or main hoop. A swing-out side bar is permitted on OEM full-bodied vehicles, 7.50 E.T. and slower. The following requirements (a through d) apply: a) 15/8 inch OD by 0.083 inch CM or 0.118 inch MS minimum. Bolts/pins must be 3/8 inch diameter steel, minimum, and in double shear at both ends. b) Male or female clevis(es) are permitted. Male clevises must use two minimum 1/8 inch thick brackets (CM or MS) welded to each roll cage upright; female clevises must use minimum ¼ inch thick bracket (CM or MS) welded to each roll cage upright. Pins must be within eight inches of the vertical portion of both the forward and main hoops. A half-cup backing device must be welded to the vertical portion of the main hoop (inward side) or the upper end of the swing out bar (outward side), minimum 0.118 inch wall (CM or MS) extending at least 1-5/8 inches past the center of the pins. A clevis assembly using a minimum 0.350 inch thick male component and two minimum 0.175 inch thick female components may use a 1/2 inch diameter Grade 5 bolt and does not require a half-cup backing device. c) Sliding sleeves of 1-3/8 inch by 0.083 CM or 0.118 MS, with minimum two-inch engagement, are permitted in lieu of the upper pin/cup.

d) All bolt/pin holes in the swing-out bar must have at least one hole diameter of material around the outside of the hole. On all vehicles requiring a roll cage, if the OEM firewall has been modified (in excess of one square foot for transmission removal, not including bolted-in components), a lower windshield or dash bar of 1-1/4 inch by 0.058 inch 4130 chrome-moly or 1-1/4 inch by 0.118-inch mild steel is mandatory for connecting the forward cage supports.

Tailgates:

Tailgates must be up or off. Lowered tailgates are prohibited in all classes.

Taillights:

All vehicles must have a minimum of one working taillight for night operations. Strobe, flashing, high-intensity, laser, infrared, photo sensitive, or other light-emitting/receiving devices are prohibited.

Transmission:

All vehicles in competition must be equipped with a reverse gear. On all vehicles utilizing a clutch, the clutch must be actuated with a foot pedal. All pedals must be covered with non-skid material. Hand controls for the physically challenged are permitted. Clutches in vehicles with the engine operating above 4500 RPM or more must be labeled as meeting SFI Spec 1.1, 1.2, or 1.4. Any non-OEM floor-mounted automatic-transmission shifter must be equipped with a spring-loaded positive reverse lockout device to prevent the shifter from accidentally being put into reverse gear. A functional neutral safety switch is mandatory. All transmission lines must be made of metallic or high-pressure-type hose. All vehicles with the engine running 4500 RPM or more and using an automatic transmission must be equipped with a transmission shield or blanket-type shield meeting SFI Spec 4.1 and be labeled accordingly. All non-blanket type shields must incorporate two (or one, per manufacturer's instructions) 3/4" x 1/8" straps that bolt to the shield on each side; these straps must pass under the transmission pan unless the pan is labeled as meeting SFI Spec 4.1. An automatic transmission is permitted in all classes where an automatic transmission is used. All vehicles with the engine running 4500 RPM or more and using an automatic transmission must be equipped with a flex plate meeting SFI Spec 29.1, or 29.3.

Windows/Windshield:

Windshields and/or windows on all vehicles must be of safety glass, Plexiglas®, Lexan®, or other shatterproof material, minimum 1/8 inch thick. Windshields and/or windows must be clear, without tinting or coloring, except factory-tinted safety glass. Competition number decals are permitted on any window, windshield, or backlight. Tape of any kind is prohibited on any windshield or window.

Index Sportsman Classes

Index Racing

Index racing, as far as DHRA is concerned, works like this: vehicles will leave the starting line at the same time. The first one to the finish line that doesn't go quicker than the designated elapsed time wins. If a vehicle goes quicker than the designated elapsed time, the driver is automatically disqualified.

Quick Diesel Racing Guidelines

The Quick Diesel class is structured to ensure that competitors are racing with true street-driven or street-drivable vehicles. Vehicles must appear stock outside and inside with very little equipment removed; headlights, taillights, horn and wipers must be retained in operating condition. DHRA reserves the right to make adjustments or allocations as deemed appropriate in the interests of fairness and in the spirit of competition. It is the driver's responsibility to know the rules in advance and comply. The DHRA, however, reserves the right to re-examine rules and implement changes at any time. *All vehicles in the Quick Diesel class must drive back to the pits under their own power.*

Quick Diesel

OVERVIEW

- 12.00 Index
- Full countdown sportsman tree

Designations:

QD followed by the competition number. The designation must be applied legibly on both side windows and the front window in three inch tall letters.

REGULATIONS

Apparel:

Each member of a participant crew must be fully attired when present in the staging, starting, and competition areas of the racetrack. Points may be deducted for team members who are out of uniform. Shoes are mandatory. Shorts, bare legs, tank tops, or bare torsos are prohibited when driving in any class. Apparel constructed of 100% natural fibers is recommended. Apparel constructed of 100% man-made fibers (polyester and nylon, for example) is prohibited.

Body:

The stock car or truck body must be retained. Lightweight parts are limited to hood, fenders and ground effects only.

Delay Boxes:

Delay boxes are prohibited.

Driveline:

Drive shaft loops are mandatory. See E.T. Bracket class for details.

Engine:

Any compression ignition engine is permitted.

Engine Fueling:

Engine fueling must be manually controlled by the driver's foot, or via the accessibility hand accelerator control. Electronic, pneumatic, hydraulic and other devices may in no way affect the initial throttle operation or throttle operation after launch.

Helmet:

Drivers of all vehicles running 13.99 or quicker must wear a helmet meeting the Snell 95, K98, 2000, 2005, SFI 31.1 specification. The helmet must have the appropriate certification sticker affixed inside it.

Nitrous Oxide:

Commercially-available nitrous oxide controllers and programmers are permitted. All bottles must be securely mounted, stamped with a minimum DOT-1800-pound rating,

and be identified as nitrous oxide. Nitrous oxide bottle(s) located in driver compartment must be equipped with a relief valve and must be vented outside of the compartment. The system must be commercially available and installed per manufacturer's recommendations. Commercially available, thermostatically controlled blanket-type warmers are acceptable. Any other external heating of bottle(s) is prohibited.

Qualifying:

Competitors may qualify as fast as their safety equipment allows. One qualifying pass must remain at or below the maximum E.T. and at or above the index.

Tailgates:

Tailgates must be up or off. Lowered tailgates are prohibited in all classes.

Timing Devices:

Timing devices are prohibited. The vehicle's acceleration, velocity and E.T. must be controlled solely by the driver via the accelerator pedal or accessibility hand accelerator control, shifting the transmission and applying the brakes.

Head-to-Head Sportsman Classes

Pro Street Racing Guidelines

The Pro Street class is designed for the quickest sportsman diesels in the country. Vehicles must appear stock outside and inside with very little equipment removed; headlights and taillights must be retained in operating condition. DHRA reserves the right to make adjustments or allocations as deemed appropriate in the interests of fairness and in the spirit of competition. It is the driver's responsibility to know the rules in advance and comply. The DHRA, however, reserves the right to re-examine rules and implement changes at any time. Pro Street is divided into two classes; Two-wheel drive (2wd) and Four-wheel drive (4wd). Each class will compete separately for points and championship. At the conclusion of each race, the winners from each Pro Street class will compete in a one round race against each other for purse and points. PS/4 will utilize a staggered pro tree during the round against PS/2.

ET and MPH records will be individually recorded per class designation.

Pro Street 2wd

OVERVIEW

- Heads-up 0.400 pro tree; auto-start will be enabled when it is available
- Minimum weight of 4300 lbs. Weight is with driver.
- Maximum 11.49 E.T.

Designations:

PS/2 followed by the competition number. The designation must be permanently applied on both side windows and the front window in bold, contrasting three inch tall letters.

Pro Street 4wd

OVERVIEW

- Heads-up 0.400 pro tree; auto-start will be enabled when it is available
- Minimum weight of 5500 lbs. Weight is with driver.
- Maximum 11.49 E.T.

Designations:
PS/4 followed by the competition number. The designation must be permanently applied on both side windows and the front window in bold, contrasting three inch tall letters.

REGULATIONS

Apparel:

Each member of a participant crew must be fully attired when present in the staging, starting, and competition areas of the racetrack. Points may be deducted for team members who are out of uniform. Shoes are mandatory. Shorts, bare legs, tank tops, or bare torsos are prohibited when driving in any class. Apparel constructed of 100% natural fibers is recommended. Apparel constructed of 100% man-made fibers (polyester and nylon, for example) is prohibited.

Ballast:

Any material used for the purpose of adding to a vehicle's total weight must be permanently attached to the vehicle's structure and must not extend in front of or behind the vehicle's body or above the rear tires. No liquid or loose ballast is permitted (i.e., water, sandbags, rocks, shot bags, metal weights, etc.). Discovery of loose ballast will result in disqualification from the event, regardless of whether infraction occurs during qualifications or eliminations. Additional penalties may be imposed at the sole and absolute discretion of DHRA. The ballast box must be securely fastened to the frame or cross member with at least two 1/2 inch diameter steel bolts. Any liquid other than engine fuel being used that is located behind the front firewall (on a front-engine vehicle), is considered ballast and is prohibited, except for intercooler tanks that contain water and/or ice only. The tank must be securely mounted to frame, frame member, or OEM floor pan. Removable weight must be securely mounted to the frame or frame structure by a minimum of two 1/2 inch diameter steel bolts per 100 pounds or one 3/8 inch bolt per five pounds. Temporary methods (hose clamps, wire, strapping, tape, tie wraps, et al) of securing weight or ballast are prohibited.

Body:

The body must be an OEM truck body. The full-bodied appearance must be retained with a minimum of two functional doors. The doors must open and close from inside and outside. Fiberglass and other lightweight components are permitted, but they must exactly duplicate the appearance of the original components. Complete factory-appearing headlight, parking light and taillight assemblies must be retained and be fully functional. Aftermarket cosmetic lenses and housings are permitted. One headlight may be removed for air induction purposes. Side mirrors are optional.

Brakes:

Four-wheel hydraulic brakes are mandatory.

Chassis:

The stock forward frame/support assembly must be retained; the complete OEM floor pan and firewall is mandatory. The engine must be in the original location for the body used.

Clothing, Protective:

Drivers must wear protective clothing as follows:
11.99 to 10.00 seconds: a jacket meeting SFI specification 3.2A/1.

9.99 to 7.50 seconds: jacket and pants, or suit, meeting SFI specification 3.2A/5, gloves meeting SFI specification 3.3/5, and shoes or boots meeting SFI specification 3.3. Protective clothing that exceeds these specifications is permitted. The protective clothing must be labeled with the proper SFI specification. The DHRA patch must be located on the upper left shoulder in the front of the fire suit or jacket. The DHRA Patch must be the upper-most patch or logo on the uniform.

Credentials:

Drivers of vehicles running 9.99 or quicker must have a valid NHRA competition license. All other drivers must have a valid state driver's license. All drivers must have a valid DHRA competitor's membership.

Data Recorder:

Data recording devices are permitted.

Driveline:

Drive shaft loops are mandatory. In place of a cross member, in the vicinity of the front universal joint, all vehicles must have a retainer loop with 360 degrees of enclosure, 1/4 inch minimum thickness and two inches wide, or 7/8 inch by 0.065 inch welded steel tubing, securely mounted and located within six inches of the front universal joint to support the drive shaft in the event of U-joint failure. 4WD vehicles must have a retainer loop matching above description installed for the front drive shaft. Long-bed trucks with a carrier bearing must have loops as described above on **both** rear drive shafts. Open drivelines passing any part of the driver's body must be completely enclosed in 1/8 inch minimum thickness steel plate, securely mounted to the frame or frame structure.

Driver Restraint System:

A quick-release, three-inch shoulder harness meeting SFI Spec 16.1 is mandatory in all vehicles in competition required by the rules to have a roll bar or a roll cage. (It is permitted in all other vehicles.) The driver-restraint system must be clearly labeled as meeting SFI Spec 16.1 and be dated by the manufacturer. The system must be updated at two-year intervals from date of manufacture. All seat belt and shoulder harness hardware must be originally designed to be used with each other and be produced by the same manufacturer. Vehicles using an OEM or OEM-type seat may have the crotch strap routed in front of the seat instead of through the seat. Only units that release all five-attachment points in one motion are permitted. When arm restraints are worn with a restraint system that utilizes a "latch lever," a protective cover must be installed to prevent an arm restraint from accidentally releasing the latch lever. A protective cover is not required if system utilizes "duck-bill" latch hardware. All harness sections must be mounted to the frame, cross member, or reinforced mounting and be installed to limit the driver's upward and forward body travel. Seat belts may not be wrapped around lower frame rails. Bolts inserted through belt webbing for mounting are prohibited. Check manufacturer's instructions.

Engine:

The engine must be a factory option diesel built for automotive use. Re-powers are permitted and must be in the factory location. A harmonic balancer meeting SFI Spec 18.1 is mandatory.

Floor:

The factory floor pan, front to rear, is mandatory.

Fuel:

Racing diesel fuel is permitted. Alcohol, nitro methane and propane are prohibited.

Ground Clearance:

A minimum of three inches of clearance is required from the front of vehicle to 12 inches behind the centerline of the front axle; a minimum of two inches clearance is required for the remainder of vehicle except for the oil pan and exhaust.

Helmet:

Drivers must wear a helmet meeting the Snell 2000, 2005, SFI 31.1 specification. The helmet must have the appropriate certification sticker affixed inside it.

Interior:

The complete interior, including dashboard, door panels, headliner, is mandatory. After-market seats are permitted, but must be fully upholstered. All factory controls (lights, signals, windows, and wipers, etc.) must be retained.

Liquid Overflow:

All vehicles in competition with any type of water overflow capable of spilling water must have a catch can to accumulate the excess liquids and prevent leaking onto the track. Catch cans must have a minimum capacity of one pint. The catch can must be securely fastened (bolted or clamped) to the vehicle.

Master Cutoff:

An electrical power and air shutoff switch (single switch) must be installed on the rearmost part of each vehicle and be easily accessible from outside the vehicle body. Another switch must be located inside the driver's compartment and be easily and readily accessible by the driver. This shutoff switch: 1. must be connected to the positive (non-ground) side of the electrical system, 2. must stop all electrical functions, and 3. must terminate charge air flow into the engine (air shutoff).

Nitrous Oxide:

Commercially-available nitrous oxide controllers and programmers are permitted. All bottles must be securely mounted, stamped with a minimum DOT-1800-pound rating, and be identified as nitrous oxide. Nitrous oxide bottle(s) located in driver compartment must be equipped with a relief valve and must be vented outside of the compartment. The system must be commercially available and installed per manufacturer’s recommendations. Commercially available, thermostatically controlled blanket-type warmers are acceptable. Any other external heating of bottle(s) is prohibited.

Parachute:

A functional parachute system is mandatory on any vehicle that exceeds 140 MPH.

Propylene Oxide:

Propylene oxide is prohibited.

Roll Bar:

Roll bars are mandatory in all vehicles running 11.49 or quicker. All roll bars must be within six inches of the rear or side of the driver’s head, extend in height at least three inches above the driver’s helmet with driver in normal driving position, and be at least as wide as the driver’s shoulders or within one inch of the driver’s door. The roll bar must be adequately supported or cross-braced to prevent forward or lateral collapse. Rear braces must be of the same diameter and wall thickness as the roll bar and intersect with the roll bar at a point not more than five inches from the top of the roll bar. A sidebar must be included on the driver’s side and must pass the driver at a point midway between the shoulder and elbow. Swing-out sidebars are permitted. All roll bars

must have in their construction a cross bar for seat bracing and as the shoulder-harness attachment point; the cross bar must be installed no more than four inches below, and not above, the driver's shoulders or be welded to the side bar. All vehicles with OEM frame (i.e., pickup truck where body bolts to frame rails) must have the roll bar welded or bolted to the frame. Installation of frame connectors on unibody vehicles does not constitute a frame; therefore, it is not necessary to have the roll bar attached to the frame. Unibody vehicles with stock floor and firewall (wheel tubs are permitted) may have the roll bar attached with six inch by six inch by 1/8 inch steel plates on the top and bottom of the floor bolted together with at least four 3/8 inch bolts and nuts, or may have the main hoop welded to the rocker sill area with 1/8 inch reinforcing plates, with plates welded completely. All 4130 chrome moly tube welding must be done by the approved TIG heliarc process; mild steel welding must be done by approved MIG wire feed or approved TIG heliarc process. Welding must be free of slag and porosity. Any grinding of welds is prohibited. The roll bar must be padded anywhere the driver's helmet can contact it while in driving position. Adequate padding must have at least 1/4 inch compression or meet SFI Spec 45.1.

Roll Cage:

A roll cage is mandatory in all vehicles running quicker than 10.99 seconds, or faster than 135 mph. For vehicles with unaltered firewall, floor, and body from firewall rearward (wheel tubs are permitted) running between 10.00 and 10.99, a roll bar is permitted in place of a roll cage. All cage structures must be designed in an attempt to protect the driver from any angle, 360 degrees. All 4130 chrome moly (CM) tube welding must be done by approved TIG heliarc process; mild steel (MS) tube welding must be approved MIG wire feed or TIG heliarc process. Welding must be free of slag and porosity. Any grinding of welds is prohibited. In addition, the roll cage must be padded anywhere the driver's helmet may contact it while in the driving position. With driver in driving position, the helmet must be in front of the main hoop. If the helmet is behind or under the main hoop, additional tubing, same size and thickness as the roll cage, must be added to protect the driver. The main hoop may be laid backward or forward, but the driver must be encapsulated within the required roll-cage components. On unibody vehicles with stock floor and firewall (wheel tubs permitted), the roll cage may be bolted or welded to the floor/rocker box via six inch by six inch by 1/8 inch steel plates similar to the roll bar attachment requirements above. Unless attaching to the OEM floor or frame, the minimum requirements for a frame member to which a roll-cage member is attached are 1-5/8 inch by 0.118 inch MS or 0.083 inch CM round tube and/or two inch by two inch by 0.058 MS or CM rectangular tube.

All cage structures must have in their construction a cross bar for seat bracing and as the shoulder harness attachment point. The cross bar must be installed no more than four inches below, and not above, the driver's shoulders, or be welded to the side bar. All required rear braces must be installed at a minimum angle of 30 degrees from vertical and must be welded in. The side bar must pass the driver at a point midway between the shoulder and elbow. Unless an OEM frame rail is located below and outside of the driver's legs, a rocker or sill bar, minimum 1-5/8 inch by 0.083 CM or 0.118 MS round tube or two inch by two inch by 0.058 inch CM or MS rectangular tube, is mandatory in any vehicle with a modified floor or rocker bar within the roll-cage uprights (excluding six square feet of transmission maintenance opening). The rocker

bar must be installed below and outside of driver's legs and must tie into the main hoop, the forward hoop, frame, frame extension, or side diagonal. The rocker bar may not tie into a swing-out side bar support. If the rocker bar ties into side diagonal more than five inches (edge to edge) from forward roll-cage support or main hoop, a 1-5/8 inch OD by 0.083 CM or 0.118 MS round tube brace/gusset is mandatory between the diagonal and forward roll-cage support or main hoop. A swing-out side bar is permitted on OEM full-bodied vehicles, 7.50 E.T. and slower. The following requirements (a through d) apply: a) 15/8 inch OD by 0.083 inch CM or 0.118 inch MS minimum. Bolts/pins must be 3/8 inch diameter steel, minimum, and in double shear at both ends. b) Male or female clevis(es) are permitted. Male clevises must use two minimum 1/8 inch thick brackets (CM or MS) welded to each roll cage upright; female clevises must use minimum ¼ inch thick bracket (CM or MS) welded to each roll cage upright. Pins must be within eight inches of the vertical portion of both the forward and main hoops. A half-cup backing device must be welded to the vertical portion of the main hoop (inward side) or the upper end of the swing out bar (outward side), minimum 0.118 inch wall (CM or MS) extending at least 1-5/8 inches past the center of the pins. A clevis assembly using a minimum 0.350 inch thick male component and two minimum 0.175 inch thick female components may use a 1/2 inch diameter Grade 5 bolt and does not require a half-cup backing device. c) Sliding sleeves of 1-3/8 inch by 0.083 CM or 0.118 MS, with minimum two-inch engagement, are permitted in lieu of the upper pin/cup. d) All bolt/pin holes in the swing-out bar must have at least one hole diameter of material around the outside of the hole. On all vehicles requiring a roll cage, if the OEM firewall has been modified (in excess of one square foot for transmission removal, not including bolted-in components), a lower windshield or dash bar of 1-1/4 inch by 0.058 inch 4130 chrome-moly or 1-1/4 inch by 0.118-inch mild steel is mandatory for connecting the forward cage supports.

Steering:

Full automotive-type steering system is mandatory. Either an OEM steering gear or an after-market rack-and-pinion steering gear is permitted. Must use factory control arm mounts.

Suspension:

Full automotive type suspension is mandatory, front and rear. At least one working shock absorber/air bag per wheel is required. Four-link systems are permitted.

Tailgates:

Tailgates must be up or off. Lowered tailgates are prohibited in all classes.

Timing Devices:

Timing devices are prohibited. The vehicle's acceleration, velocity and E.T. must be controlled solely by the driver via the accelerator pedal or accessibility hand accelerator control, shifting the transmission and applying the brakes.

Transmission:

All vehicles in competition must be equipped with a reverse gear. On all vehicles utilizing a clutch, the clutch must be actuated with a foot pedal. All pedals must be covered with non-skid material.

Hand controls for the physically challenged are permitted. Clutches must be labeled as meeting SFI Spec 1.1, 1.2, or 1.4. Any non-OEM floor-mounted automatic-transmission shifter must be equipped with a spring loaded positive reverse lockout device to prevent

the shifter from accidentally being put into reverse gear. A functional neutral safety switch is mandatory. All transmission lines must be made of metallic or high-pressure-type hose. All vehicles using an automatic transmission must be equipped with a transmission shield or blanket-type shield meeting SFI Spec 4.1 and be labeled accordingly. All non-blanket type shields must incorporate two (or one, per manufacturer's instructions) 3/4" x 1/8" straps that bolt to the shield on each side; these straps must pass under the transmission pan unless the pan is labeled as meeting SFI Spec 4.1. An automatic transmission is permitted in all classes where an automatic transmission is used. All vehicles must be equipped with a flex plate meeting SFI Spec 29.1, or 29.3.

Windshield/Windows:

The complete OEM windshield and windows are mandatory. When a roll cage is installed, clear shatterproof acrylic or polycarbonate material that is at least 1/8 inch thick may be used for the rear window. The windows must be operative per factory specifications: they must open and close via OEM electrical or mechanical means.

Heads-up Racing Guidelines

The heads-up classes are designed for the quickest diesels in the country. This gives drivers an opportunity to race in a class where there are very few limiting factors. DHRA reserves the right to make adjustments or allocations as deemed appropriate in the interests of fairness and in the spirit of competition. It is the driver's responsibility to know the rules in advance and comply. The DHRA, however, reserves the right to re-examine rules and implement changes at any time.

Pro Stock

OVERVIEW

- Heads-up 0.400 pro tree
- Maximum 8.99 E.T.
- Diesel-powered tube-chassis door cars or trucks

Designations:

PRO followed by the competition number. The designation must be permanently applied on both side windows and the front window in bold, contrasting four inch tall letters.

REGULATIONS

Apparel:

Each member of a participant crew must be fully attired when present in the staging, starting, and competition areas of the racetrack.

Body:

The body and cowl must be metal, fiberglass, or carbon fiber and must extend forward to the firewall. The driver compartment, frame structure, roll bars, and body must be designed to prevent the driver's body and limbs from coming into contact with the wheels, tires, exhaust system, and the track surface. If the driver's body is in contact with the belly pan, a cross member and sub-floor are mandatory. The driver's legs must be retained inside the frame by sub-flooring or other retaining device that is independent of vehicle's body.

Brakes:

Four-wheel hydraulic brakes are mandatory. Hand brakes must be located inside the roll cage.

Chassis:

See regulation *Roll Cage*.

Clothing, Protective:

Drivers must wear jacket and pants, or suit, meeting SFI specification 3.2A/15, gloves meeting SFI specification 3.3/5, and shoes or boots meeting SFI specification 3.3. Protective clothing that exceeds these specifications is permitted. The protective clothing must be labeled with the proper SFI specification. The DHRA patch must be located on the upper left shoulder in the front of the fire suit or jacket. The DHRA Patch must be the upper-most patch or logo on the uniform.

Clutch, Flywheel, Flywheel Shield:

A flywheel and clutch meeting SFI Spec 1.1; 1.3; 1.4 and 1.5 are mandatory. A flywheel shield meeting SFI Spec 6.2 is mandatory. The clutch must be manually operated by driver's foot. Hand controls for the physically challenged are permitted.

Credentials:

Drivers must carry a current NHRA license for the ET they run. A current DHRA competition membership is mandatory.

Data Recorder:

Data recorders are permitted.

Driveline:

Drive shaft loops are mandatory. In place of a cross member, in the vicinity of the front universal joint, all vehicles must have a retainer loop with 360 degrees of enclosure, 1/4 inch minimum thickness and two inches wide, or 7/8 inch by 0.065 inch welded steel tubing, securely mounted and located within six inches of the front universal joint to support the drive shaft in the event of U-joint failure. 4WD vehicles must have a retainer loop matching above description installed for the front drive shaft. Long-bed trucks with a carrier bearing must have loops as described above on **both** rear drive shafts. Open drivelines passing any part of the driver's body must be completely enclosed in 1/8 inch minimum thickness steel plate, securely mounted to the frame or frame structure

Driver Restraint System:

A quick-release, three-inch shoulder harness meeting SFI Spec 16.1 is mandatory in all vehicles in competition required by the rules to have a roll bar or a roll cage. (It is permitted in all other vehicles.) The driver-restraint system must be clearly labeled as meeting SFI Spec 16.1 and be dated by the manufacturer. The system must be updated at two-year intervals from date of manufacture. All seat belt and shoulder harness hardware must be originally designed to be used with each other and be produced by the same manufacturer. Vehicles using an OEM or OEM-type seat may have the crotch strap routed in front of the seat instead of through the seat. Only units that release all five-attachment points in one motion are permitted. When arm restraints are worn with a restraint system that utilizes a "latch lever," a protective cover must be installed to prevent an arm restraint from accidentally releasing the latch lever. A protective cover is not required if system utilizes "duck-bill" latch hardware. All harness sections must be mounted to the frame, cross member, or reinforced mounting and be installed to limit the driver's upward and forward body travel. Seat belts may not be wrapped around

lower frame rails. Bolts inserted through belt webbing for mounting are prohibited. Check manufacturer's instructions.

Engine:

Engine must be compression ignition. Engine may not exceed 460 cubic inches. A harmonic balancer meeting SFI Spec 18.1 is mandatory.

Exhaust:

Exhaust emitting visible amounts of soot must be directed upward and all exhaust must be directed away from the fuel tank and driver.

Fuel:

Racing diesel fuel is permitted. Alcohol, nitro methane and propane are prohibited.

Ground Clearance:

A minimum of three inches of clearance is required from the front of vehicle to 12 inches behind the centerline of the front axle; a minimum of two inches clearance is required for the remainder of vehicle except for the oil pan and exhaust.

Helmet:

Drivers must wear a helmet meeting the Snell 2000, 2005, SFI 31.1 specification. The helmet must have the appropriate certification sticker affixed inside it.

Liquid Overflow:

All vehicles in competition with any type of water overflow capable of spilling water must have a catch can to accumulate the excess liquids and prevent leaking onto the track. Catch cans must have a minimum capacity of one pint. The catch can must be securely fastened (bolted or clamped) to the vehicle.

Master Cutoff:

An electrical power and air shutoff switch (single switch) must be installed on the rearmost part of each vehicle and be easily accessible from outside the vehicle body. Another switch must be located inside the driver's compartment and be easily and readily accessible by the driver. This shutoff switch: 1. must be connected to the positive (non-ground) side of the electrical system, 2. must stop all electrical functions, and 3. must terminate air flow into the engine (air shutoff).

Neck Collar:

A neck collar meeting SFI Spec 3.3 is mandatory. Vehicles running 200 mph or more a head and neck restraint system meeting SFI Spec 38.1 is mandatory.

Nitrous Oxide:

All bottles must be securely mounted, stamped with minimum DOT-1800-pound rating, and be identified as nitrous oxide. Nitrous oxide bottle(s) located in driver compartment must be equipped with a relief valve and must be vented outside of the compartment. The system must be commercially available and installed per manufacturer's recommendations. Commercially available, thermostatically controlled blanket-type warmers are acceptable. Any other external heating of bottle(s) is prohibited.

Parachute:

A functional parachute system is mandatory.

Propylene Oxide:

Propylene oxide is prohibited.

Roll Cage:

The chassis must meet SFI Spec 25.4. The chassis must be inspected every two-years by NHRA and must have a serialized sticker affixed to is before participation. Roll-cage padding meeting SFI Spec 45.1 is mandatory anywhere the driver's helmet may come in contact with roll cage.

Taillight:

The vehicle must have one functional taillight for night operation. Flashing, blinking or strobe lights are prohibited.

Tow Vehicle:

The tow vehicle must have the competition number visible on the front of the vehicle.

Transmission:

All vehicles in competition must be equipped with a reverse gear. Air shifter bottles must be stamped with DOT-1800 pound rating (minimum) and be securely mounted. An electric transbrake release system is permitted.

Transmission, Automatic, Aftermarket Planetary:

Transmission shield meeting SFI Spec 4.1 mandatory. Transmissions that are converter assisted must have a flex plate meeting SFI Spec 29.1 or 29.3 and a flex plate shield meeting SFI Spec 30.1.

Wheelbase & Front Tread Width:

The minimum permitted wheelbase is 100 inches; the maximum is 115 inches. For full-size trucks, the maximum is 140 inches; for smaller trucks (S-10/Colorado; Dakota, Ranger), the maximum is 125 inches.

Top Diesel

OVERVIEW

- Heads-up 0.400 pro tree
- Maximum 8.99 E.T.
- Diesel-powered tube-chassis rear-engine dragsters, front-engine dragsters, or altereds

Designations:

TD followed by the competition number. The designation must be permanently applied on both sides of the vehicle in bold, contrasting four-inch tall letters.

REGULATIONS

Apparel:

Each member of a participant crew must be fully attired when present in the staging, starting, and competition areas of the racetrack.

Arm Restraints:

Arm restraints are mandatory.

Body:

The body and cowl must be metal, fiberglass, or carbon fiber and must extend forward to the firewall. The driver compartment, frame structure, roll bars, and body must be designed to prevent the driver's body and limbs from coming into contact with the wheels, tires, exhaust system, and the track surface. If the driver's body is in contact with the belly pan, a cross member and sub-floor are mandatory. The driver's legs must be retained inside the frame by sub-flooring or other retaining device that is independent of vehicle's body.

Brakes:

Two-wheel hydraulic brakes are mandatory. Hand brakes must be located inside the roll cage.

Chassis:

See regulation *Roll Cage*.

Clothing, Protective:

Drivers must wear jacket and pants, or suit, meeting SFI specification 3.2A/15, gloves meeting SFI specification 3.3/5, and shoes or boots meeting SFI specification 3.3. Protective clothing that exceeds these specifications is permitted. The protective clothing must be labeled with the proper SFI specification. The DHRA patch must be located on the upper left shoulder in the front of the fire suit or jacket. The DHRA Patch must be the upper-most patch or logo on the uniform.

Clutch, Flywheel, Flywheel Shield:

A flywheel and clutch meeting SFI Spec 1.1; 1.3; 1.4 and 1.5 are mandatory. A flywheel shield meeting SFI Spec 6.2 is mandatory. The clutch must be manually operated by driver's foot. Hand controls for the physically challenged are permitted.

Credentials:

Drivers must carry a current NHRA license for the ET they run. A current DHRA competition membership is mandatory.

Data Recorder:

Data recorders are permitted.

Deflector Plate:

A deflector plate must be installed between the roll cage and the engine on all rear-engine vehicles. The minimum allowed material thicknesses are 0.125 inch for aluminum and 0.060 inch for steel.

Driveline:

When a driveshaft is used, drive shaft loops are mandatory. See E.T. Bracket class for details.

Driver Restraint System:

A three-inch wide driver restraint system labeled as meeting SFI Spec 16.1 is mandatory.

Engine:

Engine must be compression ignition. Engine may not exceed 460 cubic inches. A harmonic balancer meeting SFI Spec 18.1 is mandatory.

Exhaust:

Exhaust emitting visible amounts of soot must be directed upward and all exhaust must be directed away from the fuel tank and driver.

Fuel:

Racing diesel fuel is permitted. Alcohol, nitro methane and propane are prohibited.

Ground Clearance:

A minimum of three inches of clearance is required from the front of vehicle to 12 inches behind the centerline of the front axle; a minimum of two inches clearance is required for the remainder of vehicle except for the oil pan and exhaust.

Helmet:

Drivers must wear a helmet meeting the Snell 2000, 2005, SFI 31.1 specification. The helmet must have the appropriate certification sticker affixed inside it.

Liquid Overflow:
All vehicles in competition with any type of water overflow capable of spilling water must have a catch can to accumulate the excess liquids and prevent leaking onto the track. Catch cans must have a minimum capacity of one pint. The catch can must be securely fastened (bolted or clamped) to the vehicle.

Master Cutoff:
An electrical power and air shutoff switch (single switch) must be installed on the rearmost part of each vehicle and be easily accessible from outside the vehicle body. Another switch must be located inside the driver's compartment and be easily and readily accessible by the driver. This shutoff switch:
1. must be connected to the positive (non-ground) side of the electrical system,
2. must stop all electrical functions, and
3. must terminate air flow into the engine (air shutoff).

Neck Collar:
A neck collar meeting SFI Spec 3.3 is mandatory. For vehicles running 200 mph or more, a head and neck restraint system meeting SFI Spec 38.1 is mandatory.

Nitrous Oxide:
All bottles must be securely mounted, stamped with minimum DOT-1800-pound rating, and be identified as nitrous oxide. Nitrous oxide bottle(s) located in driver compartment must be equipped with a relief valve and must be vented outside of the compartment. The system must be commercially available and installed per manufacturer’s recommendations. Commercially available, thermostatically controlled blanket-type warmers are acceptable. Any other external heating of the bottle(s) is prohibited.

Parachute:
A functional parachute system is mandatory.

Propylene Oxide:
Propylene oxide is prohibited.

Roll Cage:
The chassis must meet SFI specifications for the specific make and elapsed time. The chassis must be inspected every two-years by NHRA and must have a serialized sticker affixed to is before participation. Roll-cage padding meeting SFI Spec 45.1 is mandatory anywhere the driver’s helmet may come in contact with roll cage.

Taillight:
The vehicle must have one functional taillight for night operation. Flashing, blinking or strobe lights are prohibited.

Tow Vehicle:
The tow vehicle must have the competition number visible on the front of the vehicle.

Transmission:
All vehicles in competition must be equipped with a reverse gear. Air shifter bottles must be stamped with DOT-1800 pound rating (minimum) and be securely mounted. An electric transbrake release system is permitted.

Transmission, Automatic, Aftermarket Planetary:
A transmission shield meeting SFI Spec 4.1 is mandatory. Transmissions that are converter assisted must have a flex plate meeting SFI Spec 29.1 or 29.3 and a flex plate shield meeting SFI Spec 30.1.

Wheelbase & Front Tread Width:

The minimum permitted wheelbase is 100 inches, maximum 300 inches. The maximum allowed wheelbase variation from left to right is two inches. All vehicles must have at least 26 inches of front tread width.