



## **E.T. HANDICAP RACING**

**Stock-Body Vehicles, Altered-Body Vehicles,  
Dragsters, Motorcycles, Snowmobiles,  
All-Terrain Vehicles, and Electric Vehicles**

Each racetrack has the option of substituting its own selection of class titles and e.t. breaks.

Since quarter-mile elapsed times would not apply for eighth-mile racing, a style of competition common to E.T. handicap racing, some pertinent quarter-mile elapsed times are converted to eighth-mile figures: 9.90 = 6.30, 10.00 = 6.40, 11.00 = 7.00, 12.00 = 7.50, and 14.00 = 8.60.

The legality of certain devices (i.e., throttle stops, delay devices, etc.) may vary between divisions. Racers are advised to contact the respective division office for regulations within that geographic area.

Timed vehicle-control devices (counters, time displays, etc.), except as outlined under Class Requirements, are prohibited. Display or transmission of track location, time/distance data, etc. prohibited.

Data recorders are permitted in Advanced E.T. and Super Pro only. Data recorders (except for "playback"-type tachometers) are prohibited in all other E.T. classes.

Computers (except for OEM) are prohibited in all E.T. classes.

# SECTION 4A

## SUPER PRO, PRO, SPORTSMAN

### 7.50 (\*4.50) seconds & slower

#### DESIGNATIONS

NHRA SUMMIT RACING SERIES NATIONAL CHAMPIONSHIP

SUPER PRO: 7.00 to 11.99

PRO: 9.00 to 13.99

SPORTSMAN: 12.00 to 19.99

References in this section identify performance limits for various equipment and safety applications.

Any vehicle except E.T. Motorcycle running faster than 135 mph must meet minimum requirements for 9.99-second vehicles including driver credentials and protective clothing. The 135-mph rule does not apply to E.T. Motorcycle. E.T. Motorcycle must comply with 9.99-second e.t. restrictions.

## REQUIREMENTS & SPECIFICATIONS

### ENGINE: 1

#### ENGINE

One internal-combustion automotive-type, motorcycle, or snowmobile engine permitted. Motorcycle or snowmobile-powered vehicles without reverse may not burn out across starting line. Harmonic balancer meeting SFI Spec 18.1 mandatory in any car running 10.99 (\*6.99) or quicker. Maximum height of crankshaft centerline 36 inches for trucks running 12.00 and slower; 31 inches for trucks running 11.99 to 10.00; and 24 inches for trucks running 9.99 seconds and quicker. See General Regulations 1:1.

#### EXHAUST SYSTEM

Competition exhaust permitted. Exhaust must be directed out of car to rear, away from driver and fuel tank. For cars running quicker than 7.50 (\*4.50), see Advanced E.T. Requirements. See General Regulations 1:3.

#### FUEL

Racing gasoline, gasoline, alcohol, gasohol, diesel, ethanol, natural gas, and propane permitted. Nitromethane prohibited.

#### FUEL SYSTEM

All fuel-tank filler necks located inside trunk must have filler neck vented to outside of body. Vented caps prohibited. All batteries, fuel lines, fuel pumps, or filler necks located inside trunk require complete bulkhead of at least .024-inch steel or .032-inch aluminum to isolate driver compartment from trunk. Fuel lines must be located outside driver compartment. Fuel tanks must be within confines of the body. See General Regulations 1:5.

#### INDUCTION

Electronic fuel injection permitted. Any induction permitted. Open-loop systems permitted on production vehicles as equipped with OEM electronic fuel injection. See General Regulations 9:1, 9.11.

Aftermarket water-methanol injection systems permitted. Must be installed and used per manufacturer's instructions. Tank, pump, lines, etc. may not be mounted inside the driver compartment. When located inside trunk, a complete bulkhead of at least .024-inch steel or .032-inch aluminum is required to isolate driver compartment from trunk.

**LIQUID OVERFLOW**

Catch-can mandatory for coolant overflow; one-pint (16-ounce) minimum capacity. See General Regulations 1:7.

**NITROUS OXIDE**

Commercially available nitrous oxide permitted, including supercharged and turbocharged engines. Nitrous bottle(s) in driver compartment must be equipped with a relief valve and vented outside of driver's compartment. Bottle(s) must be 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 steel-braided or NHRA-accepted hoses. Commercially available, thermostatically controlled, blanket-type warmer accepted. The use of a torch or any other external heating of bottle prohibited.

**OIL-RETENTION DEVICE**

All vehicles permitted to utilize an NHRA-accepted lower engine oil- retention device. See General Regulations 1:8.

**SUPERCHARGER, TURBOCHARGER**

Permitted on gasoline, racing-gasoline, and alcohol-burning cars. Supercharger restraint system meeting SFI Spec 14.1 mandatory on Roots-type supercharger when alcohol is used as fuel. High-helix, centrifugal and screw-type supercharger permitted. Screw-type supercharger, manifold burst panel meeting SFI Spec 23.1 (in addition to panel in supercharger) plus restraint system meeting SFI Spec 14.21 mandatory. OEM-type screw superchargers do not require a supercharger burst panel or restraint. "OEM-type" in this case means that it must have originally come with the production engine being used. Supercharger drive must be belt, NHRA-accepted chain driver or NHRA-accepted gear drive. Supercharger restraint straps must be covered with a fire-resistant material. The blower restraint straps and fuel lines must be installed such that when the restraint straps are fully extended, no load is placed on any of the fuel lines. Air-to-air or water-to-air intercoolers permitted on turbocharged and centrifugal supercharged vehicles. See General Regulations 1:10.

**VALVE COVERS**

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

**DRIVETRAIN: 2****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 or cars powered by rotary engines running 13.49 (\*8.25) or quicker. Flywheel shield meeting SFI Spec 6.1, 6.2, or 6.3 mandatory on all cars running 11.49 (\*7.35) or quicker. Cars with rotary engines running 11.49 (\*7.35) or quicker must be equipped with a flywheel shield made of 1/4-inch-minimum-thickness steel plate completely surrounding the bellhousing 360 degrees, extending 1 inch forward and 1 inch rearward of the rotating clutch assembly; shield may not be notched or cut in any way. Shield must be securely attached to frame or frame structure, may be multi-piece. All rotary engine vehicles equipped with nitrous-oxide injection and/or turbo/supercharger running 9.99 or quicker or 135 mph must use a flywheel shield labeled as meeting SFI Spec 6.1 minimum. Cars for which an SFI Spec 6.1, 6.2, or 6.3 flywheel shield is not available may use an SFI flywheel shield from another application bolted to a motor plate that is bolted to the engine at all available bolt holes. See General Regulations 2:3, 2:5, 2:6, 2:10.

**DRIVELINE**

OEM production line all-wheel-drive vehicles permitted. Driveshaft loop required on all cars running 13.99 (\*8.59) or quicker and utilizing slicks, except vehicles running 11.49 (\*7.35) seconds or slower equipped with street tires. See General Regulations 2:4.

**REAR END**

Aftermarket axles and axle-retention device mandatory on any car running 10.99 (\*6.99) or quicker or any car with locked differential. Cars running 10.99 (\*6.99) or quicker that weigh more than 2,000 pounds with independent rear suspension without upper and lower (both) control arms must replace swing axle differential with conventional differential housing assembly. (Example: 1963-1982 Corvette). Cars with independent rear suspension using upper and lower (both) control arms may retain swing axle assembly regardless of weight or e.t. Must have 360-degree, minimum 1-inch-wide by 1/4-inch-thick axle retention loop on each axle. See General Regulations 2:11.

**TRANSMISSION, AFTERMARKET PLANETARY**

Transmission shield meeting SFI Spec 4.1 mandatory on any supercharged or turbocharged vehicle, or any vehicle burning methanol or nitrous oxide, running 9.99 seconds or quicker and equipped with aftermarket planetary transmission. See General Regulations 2:12, 2:13.

**TRANSMISSION, AUTOMATIC**

Spring-loaded, positive reverse lockout device and functional neutral safety switch mandatory. Transmission shield meeting SFI Spec 4.1 mandatory on any car running 10.99 (\*6.99) or quicker or any car exceeding 135 mph. Automatic transmission flexplate meeting SFI Spec 29.1 and flexplate shield meeting SFI Spec 30.1 mandatory on cars running 9.99 (\*6.39) or quicker or any car exceeding 135 mph. See General Regulations 2:12, 2:14.

**BRAKES & SUSPENSION: 3****BRAKES**

Four-wheel hydraulic brakes mandatory on any bodied car running 7.99 (\*4.99) or quicker. Minimum two rear-wheel (one caliper per wheel) hydraulic brakes mandatory on dragsters, Funny Cars, and any car running slower than 8.00 (\*5.00) seconds. Dragsters running slower than 10.99 (\*6.99) with a total car weight of 1,000 pounds or less and a one-piece rear axle may use a single brake rotor with dual calipers. See General Regulations 3:1.

**STEERING**

See General Regulations 3:3, 4:1.

**SUSPENSION, ALTEREDS, DRAGSTERS**

Full automotive-type front suspension mandatory. Rigid mounted rear axles permitted. Minimum one hydraulic shock absorber per sprung wheel. Suspension optional on cars weighing 2,350 pounds or less with 100-inch or longer wheelbase. See General Regulations 3:2, 3:4, 3:5.

**SUSPENSION, STOCK-BODIED CARS**

Full automotive-type suspension mandatory. Minimum one operating hydraulic shock absorber per wheel. Lightening of stock components prohibited. Rigid mounted suspensions prohibited. See General Regulations 3:2, 3:4, 3:5.

**WHEELIE BARS**

Permitted. Wheels must be nonmetallic. See General Regulations 3:6.

**FRAME: 4****BALLAST**

Permitted. See General Regulations 4:2.

**DEFLECTOR PLATE**

Mandatory on rear-engine dragsters. See General Regulations 4:3.

**GROUND CLEARANCE**

Minimum 3 inches from front of car to 12 inches behind centerline of front axle, 2 inches for remainder of car, except oil pan and headers. See General Regulations 4:5.

**PARACHUTE**

Mandatory on any car that runs 150 mph or faster. See General Regulations 4:8.

**ROLL BAR**

Roll bar mandatory in all cars (including T-tops) running 11.00 (\*7.00) to 11.49 (\*7.35), in convertibles running 11.00 (\*7.00) to 13.49 (\*8.25), and in all dune-buggy-type vehicles running 12.00 (\*7.50) seconds and slower. Permitted in all cars. See General Regulations 4:10, 10:6.

**ROLL CAGE**

A roll cage is mandatory in cars running 10.99 (\*6.99) or quicker or any car exceeding 135 mph. In full-bodied cars, with unaltered firewall, floor, and body (from firewall rearward, wheel tubs permitted), running between 10.00 (\*6.40) and 10.99 (\*6.99), roll bar permitted in place of roll cage. In convertibles running 10.99 or quicker or exceeding 135 mph, roll cage mandatory. See General Regulations 4:4, 4:11, 10:6.

**ROLL-CAGE PADDING**

Roll-cage padding meeting SFI Spec 45.1 mandatory on any vehicle running 9.99 (\*6.39) and quicker. Padding must be used anywhere driver's helmet may come in contact with roll-cage components. See General Regulations 4:11, 10:6.

**WHEELBASE**

Minimum 85 inches, unless OEM was less and vehicle is equipped with OEM engine and drivetrain. Maximum wheelbase variation from left to right: 1 inch. Dragsters: 2 inches. Minimum front tread width: 26 inches on any dragster.

**TIRES & WHEELS: 5****TIRES**

Racing slicks permitted. Minimum diameter of 13 inches on front tires of any dragster. See General Regulations 5:1.

**WHEELS**

Must be automotive-type wheels suitable for street use. Minimum wheel size: 13 inches (unless originally equipped with smaller wheels and vehicle is equipped with original engine). The thread engagement on all wheel studs to the lug nut, or lug bolt to wheel hubs, must be equivalent to or greater than the diameter of the stud. Length of the stud/bolt does not determine permissibility; length of the engagement between the stud and lug determines permissibility. Automotive-type wire wheels or motorcycle wheels permitted on front axle only of dragsters weighing 1,800 pounds or less. See General Regulations 5:2.

**INTERIOR: 6****SEATS**

Properly braced, framed, and supported seats constructed of aluminum, fiberglass, carbon fiber, or double-layer poly (automotive accessory seats) permitted. See General Regulations 6:2.

**SHEET METAL**

Driver-compartment interior must be aluminum, steel, NHRA-accepted carbon fiber, or fiberglass. Magnesium prohibited.

**UPHOLSTERY**

Optional. See General Regulations 6:2.

**WINDOW NET**

A ribbon-type or SFI 27.1 mesh-type window net is mandatory for any full-bodied car running 7.50 (\*4.50) to 9.99 (\*6.39) or if vehicle runs 135 mph or faster. See General Regulations 6:3.

**BODY: 7****AIRFOIL**

**Altered, dragsters:** A positive-locking device mandatory on all airfoils. Side-mount canard-type wings permitted. No part of wing may be within 6 inches of a tire. Front overhang may not project more than 30 inches forward of front spindle.

**Bodied vehicles:** Non-OEM airfoils permitted, must be permanently attached to frame or roll cage, non-adjustable during run.

**BODY**

**Altered-body vehicles:** May be chopped, channeled, sectioned, streamlined, etc. Sedan delivery, pickup trucks (maximum, one ton), or sedan pickups (Ranchero, El Camino) permitted. Fiberglass bodies permitted. Door hinges on any lift-off door must have safety pins or locks.

**Dragsters:** Body and cowl must be constructed of metal, fiberglass, or carbon fiber and extend forward to firewall. Driver compartment must be designed to prevent driver's body or limbs from making contact with wheels, tires, exhaust system, or track surface should an incident occur. Subflooring independent of car body is mandatory in dragster that allows driver's legs to rest on belly pan or chassis. On front-engine cars, intake scoop may not extend more than 11 inches above height of carburetor top. Front wheel fairings prohibited.

**Full-bodied vehicles:** Must have full top and windshield. All full-bodied cars must have two driver exits. Four stock production fenders mandatory, fiberglass duplicates permitted. Fenders may be trimmed for tire clearance; altered fenders must have edges re-rolled or beaded.

**FIREWALL**

Mandatory. See General Regulations 6:1, 7:4.

**FLOOR**

Mandatory. See General Regulations 6:1, 7:5.

**HOOD**

Optional. Carburetors must be covered by flash shield or scoop. Hood scoop permitted. See General Regulations 1:4, 7:6.

**WINDSHIELD, WINDOWS**

Altered, dragsters: Optional. Windscreen mandatory. See General Regulations 7:7, 7:8.

**Stock-bodied vehicles:** Mandatory, must be in good condition and free from cracks. May be replaced with shatterproof material, 1/8-inch-minimum thickness. OEM windshield may not be cut for scoops, carb, etc. Windshield/window tint must meet the applicable state requirements. Windows must be closed during races, need not be operable. Decals permitted on rear quarter and rear window only. See General Regulations 7:8.

**ELECTRICAL: 8****BATTERIES**

Batteries must be securely mounted, may not be located in driver compartment. See General Regulations 8:1.

**DELAY BOX/DEVICE**

Permitted in Advanced E.T. and Super Pro only. See General Regulations 8:2.

**IGNITION**

Timed ignition-interruption devices (stutter boxes) prohibited. Starting-line and/or "high-side" rev limiters permitted. Two-steps, rev limiters, or any other rpm-limiting devices, legal unto themselves but altered or installed so as to function as a down-track rpm controller, prohibited.

All wiring associated with the ignition system must be fully visible, labeled, and traceable. See General Regulations 8:3.

**INSTRUMENTS**

One tachometer allowed. Driveshaft sensor may be connected to either the tachometer OR the data recorder, but not both. Must be one single wire, with no splices, and easily traceable.

**MASTER CUTOFF**

Mandatory on any car with a battery running 9.99 (\*6.39) or quicker, any car exceeding 135 mph, or on any car where the battery is relocated into the trunk area. See General Regulations 8:4.

**STARTING LINE CONTROLLERS**

Only pneumatic starting line controllers permitted in Advance E.T. and Super Pro only. Only mechanical starting line controllers permitted in Pro and Sportsman only. Use of mechanical device must be completely in driver's control. Release of mechanical device must be spring activated only (released on full throttle activation). All other forms of starting line controllers prohibited in all E.T. classes.

**TAILLIGHTS**

One functional taillight mandatory. Flashing, blinking, or strobe lights prohibited. See General Regulations 8:6.

**SUPPORT GROUP: 9****COMPUTER**

Prohibited. See General Regulations 9:1.

**DATA RECORDER**

Data recorders are permitted in Advanced E.T., Super Pro, and Pro only. Data recorders (except for "playback"-type tachometers) are prohibited in all other E.T. classes. See General Regulations 9:2.

**FIRE-EXTINGUISHER SYSTEM**

Permitted; must be securely mounted. See General Regulations 9:3.

**PUSH BAR**

Push bar must be designed to prevent push car from riding up on rear wheel of open-wheeled race cars. See General Regulations 9:9.

**TOW VEHICLES**

Permitted in Super Pro only. See General Regulations 9:12.

**WARM-UPS**

See General Regulations 9:5, 9:14.

**DRIVER: 10****ARM RESTRAINTS**

Mandatory in open-bodied cars running 11.99 (\*7.49) or quicker. See General Regulations 6:3, 10:3.

**CREDENTIALS**

Valid NHRA competition license mandatory for cars running 9.99 (\*6.39) or quicker. Valid state- or government-issued driver's license beyond a learner's-permit level mandatory for cars running 10.00 (\*6.40) or slower. See General Regulations 10:4.

**DRIVER RESTRAINT SYSTEM**

Seat belt mandatory in all cars. Driver restraint system meeting SFI Spec 16.1 mandatory in any car running 11.49 (\*7.35) or quicker, in convertibles running 13.49 (\*8.25) or quicker, and all dune-buggy-type vehicles running 12.00 (\*7.50) or slower. SFI 16.1 restraint system, when required, includes crotch strap and must be updated at two-year intervals from date of manufacture. See General Regulations 10:5, 10:11.

**HEAD PROTECTOR**

Mandatory on any car with a roll bar or roll cage. See General Regulations 10:6.

**HELMET**

For all 10.00 to 13.99 closed-bodied cars, either an open-face or a full-face Snell M2010, M2015, SA2010, SA2015, SFI 31.1/2010 or 31.1/2015 helmet with or without a shield is mandatory.

For all 10.00 and slower dune-buggy-type vehicles and all 10.00 to 13.99 open-bodied front-engine or rear-engine supercharged, turbocharged, nitrous, or naturally aspirated cars, a full-face Snell M2010, M2015, SA2010, or SA2015 helmet and shield mandatory (goggles prohibited).

For all 9.99 and quicker closed-bodied cars, a full-face Snell M2010, M2015, SA2010 or SA2015 helmet mandatory; shield permitted (goggles prohibited).

For all 9.99 and quicker open-bodied front-engine or rear-engine supercharged, turbocharged, or nitrous cars, a full-face Snell SA2010, or SA2015 helmet and shield mandatory (goggles prohibited).

For all 9.99 or quicker open-bodied front-engine or rear-engine naturally aspirated cars, a full-face Snell M2010, M2015, SA2010, or SA2015 helmet and shield mandatory (goggles prohibited). See General Regulations 10:7.

**NECK COLLAR**

Neck collar meeting SFI Spec 3.3 mandatory in all cars running 9.99 (\*6.39) or quicker or cars exceeding 135 mph. A head and neck restraint device/system may be used in lieu of a neck collar. See General Regulations 10:8.

If SFI Spec 3.3 neck collar is required and driver opts to use head and neck restraint system instead, then SFI Spec 3.3 head sock or SFI Spec 3.3 skirted helmet mandatory.

**PROTECTIVE CLOTHING**

Full-length pants; short- or long-sleeved shirt; closed shoes; and socks. No shorts. No tank tops. No open-toe or open-heel shoes or sandals. Synthetic clothing not recommended.

**10.00 (\*6.40) to 13.99 (\*8.59); all E.T. non-OEM supercharged, non-OEM turbocharged, or nitrous-equipped cars with an OEM or .024-inch steel firewall:** Jacket meeting SFI Spec 3.2A/1 mandatory.



**10.00 (\*6.40) to 13.99 (\*8.59); all E.T. supercharged, turbocharged, or nitrous-equipped cars without a full OEM or .024-inch steel firewall:** Jacket meeting SFI Spec 3.2A/5 and gloves meeting SFI Spec 3.3/1 mandatory.

**9.99 (\*6.39) to 7.50 (\*4.50) front-engine open-bodied vehicles with nitrous oxide, supercharger, or turbocharger(s):** Jacket and pants meeting SFI Spec 3.2A/15, gloves, and shoes or boots meeting SFI Spec 3.3/5 mandatory.

**9.99 (\*6.39) to 7.50 (\*4.50) closed-bodied vehicles without an OEM or full .024-inch steel firewall with nitrous oxide, supercharger, or turbocharger(s):** Jacket and pants meeting SFI Spec 3.2A/15, gloves meeting SFI Spec 3.3/5, and shoes or boots meeting SFI Spec 3.3/5 mandatory.

**10.00 (\*6.40) to 11.49 (\*7.35); all E.T. naturally aspirated, OEM supercharged, or OEM turbocharged with a full OEM or .024-inch steel firewall:** Jacket meeting SFI Spec 3.2A/1 mandatory.

**9.99 (\*6.39) to 7.50 (\*4.50) or any vehicle exceeding 135 mph:** Jacket and pants meeting SFI Spec 3.2A/5 and gloves meeting SFI Spec 3.3/1 mandatory, except as noted above.

**All open-body vehicles running 11.99 or quicker:** Gloves meeting SFI Spec 3.3/1 and arm restraints mandatory.

**Dune-buggy or dune-buggy-type vehicles, 12.00 (\*7.50) or slower:** Jacket meeting SFI Spec 3.2A/1, gloves meeting SFI Spec 3.3/1, and arm restraints mandatory.

**Any vehicle with an automatic transmission in driver compartment (no floor covering transmission):** Jacket and pants or suit meeting SFI Spec 3.2A/15, gloves meeting SFI Spec 3.3/5, and boots or shoes meeting SFI Spec 3.3/5 mandatory.

**9.99 and faster, any vehicle, supercharged or turbocharged with alcohol:** Suit meeting SFI Spec 3.2A/15, gloves and boots meeting SFI Spec 3.3/5 mandatory, except as noted above.

## SECTION 4B ADVANCED E.T.

**6.00 (\*3.66) to 7.49 (\*4.49) seconds**

*Requirements and specifications for Advanced E.T. are the same as those for E.T. handicap racing - Section 4A - with the following exceptions:*

For cars running between 7.49 (\*4.49) and 6.00 (\*3.66) seconds.

Computers (except OEM) are prohibited in all E.T. brackets.

### REQUIREMENTS & SPECIFICATIONS

#### ENGINE: 1

#### ENGINE

Harmonic balancer meeting SFI Spec 18.1 mandatory.

**EXHAUST**

Double-pipe or thermal-wrapped insulated headers mandatory on supercharged, methanol-burning bodied cars. Insulation must extend to start of bend in headers at bottom of body.

**NITROUS OXIDE**

Nitrous oxide prohibited on supercharged or turbocharged engines, except when diesel fuel used.

**OIL-RETENTION DEVICE**

All vehicles running 7.49 or quicker must utilize an NHRA-accepted lower engine oil-retention device; may use a belly pan in lieu of a device attached to the engine. The belly pan must extend from framerrail to framerrail and extend forward of the harmonic balancer and rearward to rear engine plate and must incorporate a minimum 2-inch-high lip on all sides. A nonflammable, oil-absorbent liner mandatory inside of retention device. See General Regulations 1:8.

**SUPERCHARGER**

Use of high-helix supercharger permitted. Screw-type superchargers permitted. Screw-type supercharger must meet SFI Spec 34.1 and be reinspected by the manufacturer every three years. Manifold burst panel meeting SFI Spec 23.1 (in addition to panel in supercharger) plus restraint system meeting SFI Spec 14.21 mandatory on all screw-type superchargers. All other superchargers, restraint system meeting SFI Spec 14.1 mandatory. Supercharger restraint straps must be covered with a fire-resistant material. The blower restraint straps and fuel lines must be installed such that when the restraint straps are fully extended no load is placed on any of the fuel lines. See General Regulations 1:10.

**DRIVETRAIN: 2****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 6.2 or 6.3 mandatory on all supercharged or turbocharged cars and all cars using nitrous oxide. Flywheel shield meeting SFI Spec 6.2 or 6.3 mandatory on all cars using SFI Spec 1.2 clutch with more than two discs or SFI Spec 1.3 or 1.4 clutches with two discs maximum. Flywheel shield meeting SFI Spec 6.2 mandatory on all cars using SFI 1.3 or 1.4 clutches with more than two discs. Cars for which an SFI Spec 6.2 or 6.3 flywheel shield is not available may use an SFI flywheel shield from another application bolted to a motor plate that is bolted to the engine at all available bolt holes, or use a fabricated shield made of 1/4-inch-thick steel, surrounding the bellhousing 360 degrees, extending 1 inch forward and 1 inch rearward of the rotating clutch assembly. Shield must be securely attached to frame or frame structure; may be multi-piece. All rotary engine vehicles must be equipped with a flywheel shield meeting SFI Spec 6.2 or 6.3 minimum. Multi-disc clutch assembly for supercharged, nitrous-oxide injected, and turbocharged vehicles must meet SFI Spec 1.5. See General Regulations 2:3, 2:5, 2:6, 2:10.

**DRIVELINE**

All full-bodied vehicles, where the OEM floor has been removed, each end of driveshaft must have round 360-degree driveshaft loops within 6 inches of U-joints. Additionally, driveshaft must be covered by 360-degree tube, covering the front U-joint and extending rearward a minimum 12 inches. Minimum thickness of tube is .050-inch chromoly or titanium. Driveshaft tube must utilize a minimum of four attachment points to the chassis, either bolted with minimum 5/16 SAE bolts or welded or 1/4-inch push/pull pins. See General Regulations 2:4.

**REAR END**

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

**TRANSMISSION, AFTERMARKET PLANETARY**

Transmission shield meeting SFI Spec 4.1 mandatory. See General Regulations 2:12, 2:13.

**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. See General Regulations 2:12, 2:14.

**BRAKES & SUSPENSION: 3****BRAKES**

Four-wheel hydraulic brakes mandatory on any bodied car. Minimum two rear-wheel (one caliper per wheel) hydraulic brakes mandatory on dragsters and Funny Cars. See General Regulations 3:1.

**STEERING**

If removable steering wheel is used, commercially available quick-disconnect steering-wheel adapter meeting SFI Spec 42.1 mandatory. See General Regulations 3:3.

**FRAME: 4****PARACHUTE**

Mandatory. See General Regulations 4:8.

**ROLL CAGE**

Full-bodied cars must meet SFI Spec 25.1, 25.2, or 25.3; Funny Cars and open-bodied altered cars must meet SFI Spec 10.1 or 10.2. All front-engine dragsters must meet SFI Spec 2.2 or 2.4. All rear-engine dragsters must meet SFI Spec 2.1 or 2.5. See General Regulations 4:4, 4:11, 10:6.

**ROLL-CAGE PADDING**

Roll-cage padding meeting SFI Spec 45.1 mandatory anywhere driver's helmet may come in contact with roll-cage components. See General Regulations 4:11.

**INTERIOR: 6****UPHOLSTERY**

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

**WINDOW NET**

An SFI 27.1 ribbon-type or mesh-type window net is mandatory on any full-bodied car running 6.00 (\*3.66) to 7.49 (\*4.49). SFI 27.1 window net, when required, must be updated at two-year intervals from the date of manufacture. See General Regulations 6:3.

**BODY: 7****AIRFOILS**

Non-OEM airfoils or wings permitted on stock bodied vehicles; must be permanently attached to frame or roll cage, non-adjustable during run.

**SUPPORT GROUP: 9****DATA RECORDERS**

Data recorders are permitted in Advanced E.T. and Super Pro only. Data recorders (except for "playback"-type tachometers) are prohibited in all other E.T. classes.

**FIRE EXTINGUISHER SYSTEM**

Minimum 5-pound NHRA-accepted system mandatory on all cars, except rear-engine cars WITHOUT an enclosed cockpit. Minimum 20-pound NHRA-accepted system mandatory on all front-engine open-bodied vehicles with supercharger or turbocharger(s) and all supercharged methanol-burning cars (full-bodied or Funny Car). System must be divided with a minimum one nozzle directed into the driver compartment and minimum one nozzle directed into the engine compartment. See General Regulations 9:3 for NHRA-accepted fire extinguishing agents.

**TOW VEHICLES**

Permitted. See General Regulations 9:12.

**DRIVER: 10****ARM RESTRAINTS**

Mandatory in open-bodied cars and Funny Cars. See General Regulations 6:3, 10:3.

**CREDENTIALS**

Valid NHRA competition license mandatory. See General Regulations 10:4.

**DRIVER RESTRAINT SYSTEM**

Driver restraint system meeting SFI Spec 16.1 mandatory. All belts used in open-bodied front-engine supercharged methanol-burning vehicles must be covered with a fire-resistant covering. Restraint system must be updated at two-year intervals from date of manufacture. See General Regulations 10:5.

**HELMET**

For all closed-bodied cars, a full-face Snell M2010, M2015, SA2010, or SA2015 helmet mandatory; shield mandatory (goggles prohibited).

For all open-bodied front-engine or rear-engine supercharged, turbocharged, or nitrous cars, a full-face Snell SA2010, or SA2015 helmet and shield mandatory (goggles prohibited).

For all open-bodied naturally aspirated gasoline- or methanol-burning cars, a full-face Snell M2010, M2015, SA2010, or SA2015 helmet and shield mandatory (goggles prohibited). See General Regulations 10:7.

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

A head and neck restraint device/system meeting SFI 38.1 is mandatory and must display a valid SFI label. At all times that the driver is in the race vehicle, from the ready line until the vehicle is on the return road, driver must properly utilize an SFI 38.1 head and neck restraint device/system, including connecting the helmet as required for full functionality of the device. The SFI 38.1 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. See General Regulations 10:8.

**PROTECTIVE CLOTHING**

Jacket and pants or suit meeting SFI Spec 3.2A/15, gloves meeting SFI Spec 3.3/5, and boots or shoes meeting SFI Spec 3.3/5 mandatory, except front-engine open-bodied vehicles with supercharger or turbocharger(s): Jacket and pants or suit meeting SFI Spec 3.2A/20, gloves meeting SFI Spec 3.3/15, and boots or shoes meeting SFI Spec 3.3/15 mandatory. An SFI 3.3 head sock or SFI 3.3 skirted helmet is required on all open-bodied cars or all cars 7.49 and quicker, where a neck collar is not used. See General Regulations 10:10.

# SECTION 4C

## E.T. MOTORCYCLE

### 7.50 (\*4.50) seconds & slower

#### DESIGNATION

ET/MC, preceded by rider number. For motorcycles running 7.50 (\*4.50) seconds or slower. Unaltered OEM production Can-Am Spyder three-wheel motorcycle permitted. All other three-wheel vehicles prohibited.

Competition structure will be conducted in an e.t. dial-your-own format. Competition with snowmobiles and other types of vehicles permitted.

Data recorders are permitted in Advanced E.T. and Super Pro only. Data recorders (except for "playback"-type tachometers) are prohibited in all other E.T. classes.

Computers (except for OEM) are prohibited in all E.T. brackets.

## REQUIREMENTS & SPECIFICATIONS

### ENGINE: 1

#### ENGINE

Must be stock-type engine specifically designed and manufactured for production motorcycle use. Snowmobile engines, single cylinder Jr. Dragster engines permitted. Automobile, aircraft, or marine engines prohibited. All engines must be self-starting; push or roller starts prohibited.

#### EXHAUST

Exhaust must be directed away from rider when in riding position.

#### FUEL

Racing gasoline, gasoline, gasohol, methanol, propane, natural gas, and ethanol permitted. Nitromethane prohibited.

#### FUEL SYSTEM

Fuel-shutoff valve mandatory.

#### INDUCTION

Electronic fuel injection permitted. Any induction permitted. Open-loop systems permitted on production motorcycles as equipped with OEM electronic fuel injection. See General Regulations 9:1, 9:11.

#### NITROUS OXIDE

Commercially available nitrous oxide permitted. Bottles 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 steel-braided or NHRA-accepted hoses. Commercially available, thermostatically controlled, blanket-type warmer accepted. The use of torch or any other external heating of bottle(s) prohibited.

#### SUPERCHARGER/TURBOCHARGER

Permitted.

### DRIVETRAIN: 2

#### CHAIN AND/OR BELT GUARDS

Mandatory. Must have front and rear chain guards to cover the width and at least the top run to the centerline of the sprocket of any chains or belts. The clutch assembly must have at least

half of the side surface covered. The guards should be .060-inch steel or 1/8-inch aluminum unless otherwise stock equipped and be securely mounted.

## BRAKES & SUSPENSION: 3

### BRAKES

Operational front and rear brakes mandatory. Drilled disc brakes may be used if commercially manufactured or they meet the following requirements:

- A. The original diameter must be maintained.
- B. Minimum thickness: 3/16-inch.
- C. Maximum hole size: 1/2-inch with all holes countersunk.
- D. No two holes closer than 1 1/4 inches, center to center.
- E. Mechanical front disc brakes permitted in all classes.

### CONTROLS

Handlebars must measure at least 22 inches overall with the grips removed. Snap-back throttle mandatory. Brake pedals must remain stock. Any shifter that can be operated from the foot-peg location with the foot on the peg will be permitted. Hand operation of the foot shifter prohibited; both hands must remain on the handlebars at all times. After leaving starting line the rider's feet must remain on the pegs. Electronic throttle stops and/or shifters permitted.

### SUSPENSION

Front suspension must have a minimum of 1 1/2 inches of travel. Bolt on tie-down permitted on street legal motorcycle, without wheelie bars, only. Steering dampener permitted.

### WHEELIE BARS

Optional. Maximum length may be equal to, but may not exceed, the wheelbase of the motorcycle. Wheelie-bar length is measured from center of rear axle to center of wheelie-bar wheel.

## FRAME: 4

### FRAME

Must be motorcycle type. Scooters, mopeds, bicycle parts prohibited.

### GROUND CLEARANCE

Minimum 2 inches.

## TIRES & WHEELS: 5

### TIRES

Automotive tires permitted. See General Regulations 5:1.

### WHEELS

Automotive wheels permitted. Wheel studs on automotive-type wheels must project into hex part of lug nut by at least one diameter of the stud. See General Regulations 5:2.

## BODY: 7

### REAR FENDER

Rear fender must cover the full width of the rear tire and extend behind the rear axle and forward below seat position.

## ELECTRICAL: 8

### IGNITION

Timed ignition-interruption devices (stutter boxes) prohibited. Starting-line and/or "high-side" rev limiters permitted. Two-steps, rev limiters, or any other rpm-limiting devices, legal unto themselves but altered or installed so as to function as a down-track rpm controller, prohibited. See General Regulations 8:1, 8:3, 8:4, 8:5.

**IGNITION SHUTOFF**

Motorcycles 10.99 (\*6.99) seconds or quicker must be equipped with a positive ignition cutoff switch attached to the rider with a lanyard. OEM cutoff permitted in place of lanyard. Switch must be on low-voltage side of the ignition circuit. Many stock machines are equipped with a handlebar-mounted thumb switch that can have a lanyard easily attached for the above purpose.

**STARTER**

All engines must be self-starting; plug-in electric starters permitted. Push or roller starts prohibited.

**TAILLIGHT**

One functional taillight mandatory. See General Regulations 8:6.

**SUPPORT GROUP: 9****COMPUTER/DATA RECORDER**

NHRA-accepted data loggers permitted, where allowed by class rules. See General Regulations 9:1, 9:2.

**PRESSURIZED BOTTLES**

Any pressurized container must be stamped with DOT-1800 pound rating and be securely mounted. Swing arm may be pressurized, maximum pressure 150psi. Gauge must be installed to monitor pressure. See General Regulations 9:8.

**RIDER: 10****CREDENTIALS**

Valid NHRA competition license mandatory for riders of all motorcycles running 9.99 (\*6.39) or quicker. Valid state- or government-issued driver's license beyond a learner's-permit level mandatory for riders of motorcycles 10.00 (\*6.40) or slower. See General Regulations 10:4.

**HELMET**

Full-face Snell M2010, M2015, SA2010, or SA2015 helmet mandatory; shield mandatory (goggles prohibited). See General Regulations 10:7.

**PROTECTIVE CLOTHING**

Full all-leathers or SFI Spec 40.1/2 suit mandatory on motorcycles running 120 mph or faster. Two-piece suits must be joined together with a metal 360-degree zipper at the waist. SFI Spec 40.1/1 or 40.1/2 suit or leather jacket, leather boots/shoes above the ankle, and leather gloves are mandatory on ALL motorcycles. Gloves must be Kevlar-lined or equipped with slide buttons. See General Regulations 10:10.

## **SECTION 4D**

### **ADVANCED E.T. MOTORCYCLE**

**6.00 (\*3.66) to 7.49 (\*4.49) seconds**

*Requirements and specifications for Advanced E.T. Motorcycle are the same as those for E.T. Motorcycle - Section 4C - with the following exceptions:*

#### **DESIGNATION**

AD/MC, preceded by competition number.

For motorcycles running between 7.49 (\*4.49) and 6.00 (\*3.66) seconds. Handicapped start utilizing full Tree or Pro start.

### **REQUIREMENTS & SPECIFICATIONS**

#### **BRAKES & SUSPENSION: 3**

##### **BRAKES**

Hydraulic brakes, front and rear, mandatory. Minimum sizes: front, 9-inch diameter x 1/8-inch width for dual rotors, 11-inch diameter x 3/16-inch width for single rotor. Rear, 10-inch diameter x 3/16-inch width. Steel-braided brake lines mandatory.

#### **RIDER: 10**

##### **CREDENTIALS**

Valid NHRA competition license mandatory: Class 2, Type D.

## **SECTION 4E**

### **E.T. SNOWMOBILE**

**7.50 (\*4.50) seconds & slower**

#### **DESIGNATION**

SM, preceded by competition number.

For snowmobiles running 7.50 (\*4.50) and slower. All snowmobiles must be factory-production assembled, showroom available, and in the hands of the general public.

Competition structure will be conducted in an e.t. dial-your-own format. Competition with motorcycles and other types of vehicles permitted.

Data recorders are permitted in Advanced E.T. and Super Pro only. Data recorders (except for "playback"-type tachometers) are prohibited in all other E.T. classes.

Computers (except for OEM) are prohibited in all E.T. brackets.

### **REQUIREMENTS & SPECIFICATIONS**

#### **ENGINE: 1**

##### **ENGINE**

Must be specifically designed and manufactured for production



snowmobile or personal watercraft use. Engine modifications permitted. Automobile, motorcycle, or aircraft engines prohibited.

### **COOLING SYSTEM**

Quick-disconnect system permitted.

### **EXHAUST**

Any functionally silenced exhaust permitted. Exhaust-system emission pipe must not protrude more than 3 inches beyond the chassis or hood. Exhaust-gas-temperature gauge permitted; may connect to exhaust system only.

### **FUEL**

Racing gasoline, gasoline, and methanol permitted. Nitromethane prohibited.

### **NITROUS OXIDE**

Commercially available nitrous oxide permitted. Bottles 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 steel-braided or NHRA-accepted hoses. Commercially available, thermostatically controlled, blanket-type warmer accepted. The use of a torch or any other external heating of bottle(s) prohibited.

### **SUPERCHARGER/TURBOCHARGER**

OEM permitted. Aftermarket prohibited except in eighth-mile.

### **THROTTLE**

Throttle must be located in OEM location and must operate in OEM configuration.

## **DRIVETRAIN: 2**

### **CLUTCH**

Must be specifically designed and manufactured for snowmobile use.

Chains, pulleys, belts, and exposed moving parts must be isolated from the driver and other competitors by securely mounted shield(s) capable of retaining all accidental explosions and component impacts. No holes may be drilled in protective shields.

OEM clutch covers/guards are permitted only when the unmodified OEM engine (or unmodified factory designated replacement) is used.

Modified engines require a clutch cover/guard that provides 360-degree elliptical coverage in the direction of clutch/belt travel. The clutch cover/guard must be minimum .090-inch 2024T3, 6061T6, or 7075T6 aluminum or .060-inch steel and be covered with securely fastened, 6-inch-wide, industrial-type belt. Belting material must be minimum 1/8-inch thick and minimum two-ply construction, with at least one side rubber-coated. Clutch cover/guard constructed of minimum .125-inch 2024T3, 6061T6, or 7075T6 aluminum or minimum .090-inch steel are exempt from the belting-cover requirement. Snowmobiles with bolted/removable side panels may have clutch cover/guard bolted to side panels. Clutch cover/guard must be separate from the cowl.

### **DRIVE TRACK**

Track must be of a flat-type configuration. Paddles, studs, and/or spikes prohibited. Track must be OEM, OEM replacement, or NHRA-accepted aftermarket specifically designed for asphalt competition. All snowmobiles 9.99 seconds or quicker must use aftermarket asphalt competition track. Track lubrication systems

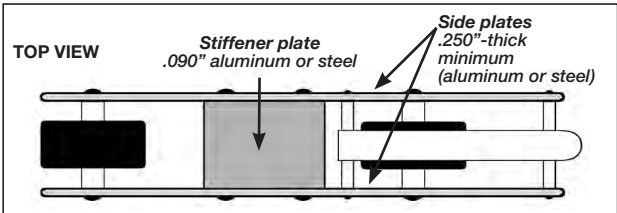
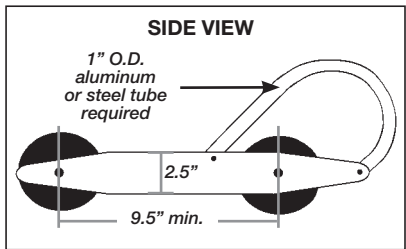
prohibited. Track must be free of visible signs of excessive wear. Manufacturer's logo and serial number must be retained and appear on left side of aftermarket competition tracks.

### SKID FRAME

Skid frame must maintain OEM width. Wheels may be removed.

### SKIS AND WHEELS

All drive and steering wheels must be of a rubber specifically designed for snowmobile use on a dry surface and installed so as to keep skis from coming in contact with racing surface. Maximum four wheels per ski permitted. Carbides prohibited. All skis must be OEM steel or aftermarket aluminum or steel. Aftermarket skis must be constructed according to the following minimum standards. Square angles on the side plate at the front of the ski are prohibited; must have beveled edge. See illustration.



## BRAKES & SUSPENSION: 3

### BRAKES

Must be OEM type. Any additional assembly must be added onto the drive axle shaft. Axle shaft may be lengthened to accommodate the additional brake.

### SUSPENSION

All snowmobiles must have a minimum 1 inch of travel in the track suspension. Only steel springs will be permitted. Externally activated suspension systems prohibited. Hyfax must be removed. Bogie wheels must be used on each side of the rear suspension to prohibit the slide rails from coming in contact with the rubber track surface. Use of any external slide-rail lubrication system prohibited. Steel coilover or leaf spring permitted.

## CHASSIS: 4

### CHASSIS

Chassis must be OEM stock qualified. Any modifications that alter the stock appearance of the tunnel are prohibited.

### FUEL TANK

Aftermarket fuel tank may replace OEM fuel tank. Oil injection tank may be used as fuel tank. OEM appearance of snowmobile must be retained. Pressurized fuel tank prohibited.

### SNOW FLAP

All snowmobiles must be equipped with an OEM rear snow flap for the specific model, fastened to the tunnel in a manner that prohibits the snow flap from being drawn into the rear tunnel enclosure (a simple W-shaped bracket fixed to the upper portion of the rear tunnel stops this).

**BODY: 7****AIR DAMS, AIR FOILS, WINGS**

Frontal air dam permitted, vertical or rounded. Air dams or air foils may not extend forward of or outside of OEM body or engine cover. Must maintain 3 inches ground clearance. Fins or other forward protrusions prohibited.

**WINDSHIELD**

OEM-style windshield required.

**WINGS**

Prohibited.

**ELECTRICAL: 8****IGNITION**

Timed ignition-interruption devices (stutter boxes) prohibited. Starting-line and/or "high-side" rev limiters permitted. Two-steps, rev limiters, or any other rpm-limiting devices, legal unto themselves but altered or installed so as to function as a downtrack rpm controller, prohibited. See General Regulations 8:2, 8:3, 8:5.

**IGNITION SHUTOFF**

Must be equipped with a positive ignition-cutoff switch, capable of de-energizing entire ignition system, attached to rider with a lanyard.

**TAILLIGHT**

One functional taillight mandatory. See General Regulations 8:6.

**SUPPORT GROUP: 9****PARACHUTE**

Prohibited.

**PRESSURIZED CONTAINERS**

Prohibited.

**BACKSTANDS**

A clean-out procedure may be performed only on an accepted backstand. Backstand may not have any brushing or cleaning attachment that is used to brush or clean a rotating track. Track may be cleaned only by manual rotation. Cutoff lanyard must be attached to rider and machine anytime snowmobile is started and/or running.

**RIDER: 10****CREDENTIALS**

Valid NHRA competition license mandatory for riders running 9.99 (\*6.39) or quicker. Valid state- or government-issued driver's license beyond a learner's-permit level mandatory for riders 10.00 (\*6.40) or slower. See General Regulations 10:4.

**HELMET**

Full-face Snell M2010, M2015, SA2010, or SA2015 helmet mandatory; shield mandatory (goggles prohibited). See General Regulations 10:7.

**PROTECTIVE CLOTHING**

Full all-leathers or SFI Spec 40.1/2 suit mandatory for snowmobiles running 120 mph or faster. Two-piece suits must be joined at the waist with a metal 360-degree zipper. Jacket and pants or suit meeting SFI Spec 40.1/1 or 40.1/2 (or leather jacket), leather boots/shoes above the ankle, and leather gloves mandatory. Gloves must be Kevlar-lined or equipped with slide buttons. See General Regulations 10:10.

# SECTION 4F

## ALL-TERRAIN VEHICLE

### 7.50 (\*4.50) seconds & slower

#### DESIGNATION

ATV, preceded by competition number.

For All-Terrain Vehicles (ATVs) running directly on the track surface. All ATVs must be of the four-wheel variety, factory-production assembled, showroom available, and in the hands of the general public. No three-wheel vehicles allowed.

Competition structure will be conducted on an E.T. dial-your-own format. Competition with motorcycles and snowmobiles permitted. Competition with any other type of vehicle prohibited.

Data recorders are permitted in Advanced E.T. and Super Pro only. Data recorders (except for "playback"-type tachometers) are prohibited in all other E.T. classes.

Computers (except for OEM) are prohibited in all E.T. brackets.

## REQUIREMENTS & SPECIFICATIONS

### ENGINE: 1

#### ENGINE

Must be OEM produced and built for ATV use. Automotive or aircraft engines prohibited.

#### EXHAUST

Any functionally silenced exhaust permitted. Exhaust must be directed away from rider when in riding position.

#### FUEL

Gasoline, methanol, or racing gasoline only. Nitromethane and/or nitrous oxide prohibited.

#### THROTTLE

Throttle must be located in OEM location and must operate in OEM configuration.

### DRIVETRAIN: 2

#### CHAIN AND/OR BELT GUARDS

Modified engines require a clutch guard that provides coverage in the direction of chain travel. Must have front and rear chain guards to cover the width and at least the top run to the centerline of the sprocket of any chains or belts. The clutch assembly must have at least half of the side surface covered. The guards should be .060-inch steel or 1/8-inch aluminum unless otherwise stock equipped and be securely mounted.

### BRAKES & SUSPENSION: 3

#### BRAKES

Must be OEM type. Any additional assembly must be added onto the drive axle shaft. Axle shaft may be lengthened to accommodate the additional brake.

#### SUSPENSION

Shocks and spring may be changed, must maintain OEM configuration.

#### WHEELIE BARS

Optional. Maximum length may be equal to, but may not exceed, the wheelbase of the All-Terrain Vehicle. Wheelie-bar

length is measured from center of rear axle to center of wheelie-bar wheel.

## CHASSIS: 4

### CHASSIS

Chassis/frame must be OEM stock qualified. Maximum wheelbase 60 inches, measured from centerline of front hub to centerline of rear hub. Any modifications that alter the stock appearance of the tunnel are prohibited.

### FUEL TANK

Aftermarket fuel tank may replace OEM fuel tank. OEM appearance of All-Terrain Vehicle must be retained. Pressurized fuel tank prohibited.

## TIRES & WHEELS: 5

### TIRES

Stock off-road tires permitted for eighth-mile competition only. Stiff sidewall street tires must be installed for quarter-mile application.

### WHEELS

Automotive wheels permitted.

## BODY: 7

### AIR DAMS, AIR FOILS

Air dams, streamlining equipment, spoilers, fairings, or frontal projections prohibited.

### WINGS

Prohibited.

## ELECTRICAL: 8

### IGNITION

Timed ignition-interruption devices (stutter boxes) prohibited. Starting-line and/or "high-side" rev limiters permitted. Two-steps, rev limiters, or any other rpm-limiting devices, legal unto themselves but altered or installed so as to function as a down-track rpm controller, prohibited. See General Regulations 8:2, 8:3, 8:5.

### IGNITION SHUTOFF

Must be equipped with a positive ignition-cutoff switch, capable of de-energizing entire ignition system, attached to rider with a lanyard.

### TAILLIGHT

One functional taillight mandatory. See General Regulations 8:6.

## SUPPORT GROUP: 9

### PARACHUTE

Prohibited.

## RIDER: 10

### CREDENTIALS

Valid NHRA competition license mandatory for riders running 9.99 (\*6.39) or quicker. Valid state- or government-issued driver's license beyond a learner's-permit level mandatory for riders 10.00 (\*6.40) or slower. See General Regulations 10:4.

### HELMET

Full-face Snell M2010, M2015, SA2010, or SA2015 helmet mandatory; shield mandatory (goggles prohibited). See General Regulations 10:7.

**PROTECTIVE CLOTHING**

Full all-leather or SFI Spec 40.1/2 suit mandatory for All-Terrain Vehicles running 120 mph or faster. Two-piece suits must be joined at the waist with a metal 360-degree zipper. Jacket and pants or suit meeting SFI Spec 40.1/1 or 40.1/2 (or leather jacket), leather boots/shoes above the ankle, and leather gloves mandatory. Gloves must be Kevlar-lined or equipped with slide buttons. See General Regulations 10:10.

## **SECTION 4G**

### **ELECTRIC-POWERED VEHICLE**

#### **7.50 (\*4.50) seconds & slower**

*Requirements and specifications for Electric-Powered Vehicle are the same as those for E.T. bracket vehicles - Section 4A - with the following exceptions:*

### **REQUIREMENTS & SPECIFICATIONS**

#### **MOTOR: 1**

**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.

#### **DRIVETRAIN: 2**

**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, or 6.3 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. See General Regulations 2:4, 2:11.

**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.

#### **BRAKES & SUSPENSION: 3**

**SUSPENSION, STOCK-BODIED VEHICLES**

OEM three-wheeled vehicles permitted.

**FRAME: 4****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.

**ELECTRICAL: 8****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. (Contact NHRA for requirements.) 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.

<b>Battery on flat plate with strap only</b>		<b>Battery in rack/box or with cleats</b>	
<b>Bolt size</b>	<b>Battery weight</b>	<b>Bolt size</b>	<b>Battery weight</b>
#8	6	#8	15
#10	7.5	#10	19
1/4	14	1/4	35
5/16	23	5/16	57
3/8	34	3/8	83
7/16	46	7/16	114
1/2	61	1/2	152
9/16	78	9/16	195
5/8	96	5/8	243

**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.

**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.

## **SECTION 4H ELECTRIC-POWERED MOTORCYCLE**

**7.50 (\*4.50) seconds & slower**

*Requirements and specifications for Electric-Powered Motorcycle are the same as those for E.T. Motorcycle - Section 4C - and Electric-Powered Vehicle - Section 4G - with the following exceptions:*

### **REQUIREMENTS & SPECIFICATIONS**

#### **MOTOR: 1**

**MOTOR**

Electric motor(s) only permitted.

#### **ELECTRICAL: 8**

**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.

## **SECTION 4I LEGEND CARS**

See NHRA Exhibition Rulebook for rules.