2010 Hot Rod Heritage Racing Series Rule Amendments

Effective August 1, 2010

Last Updated July 1, 2010

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ORANGE TEXT INDICATES RECENTLY AMENDED SECTIONS

Note:
Additions are Blue underline
Deletions are ~~Red strikethrough~~

SECTION 1 – HOT ROD ELIMINATOR

DRIVER: 10
HELMET
Full-face helmet mandatory on all cars 9.99 or quicker. Shield mandatory 7.49 and quicker. Helmet meeting Snell M2000, M2005, M2010, SA2000, SA2005 or SFI 31.1A, 31.2A, 31.1/2005, 41.1A, 41.2A, or 41.1/2005 Specs mandatory. Drivers in supercharged vehicles and Funny Cars must wear a helmet meeting Snell SA2000, SA2005 or SFI 31.1A, 31.2A, or 31.1/2005 Specs. See General Regulations 10:7.

SECTION 2 – GAS ELIMINATOR

ENGINE: 1
OIL RETENTION DEVICE
~~Effective January 1, 2008,~~ a properly fitting, SFI Spec 7.1, 7.2, or NHRA accepted Lower Engine Oil Retention Device is mandatory, may use a belly pan in lieu of a device attached to the engine. The belly pan must extend from framerail to framerail 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.

BODY: 7
BODY
Full-bodied vehicles: Must have full top and windshield. Convertibles permitted with full 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.

DRIVER: 10
HELMET
Full-face helmet mandatory on all cars 9.99 or quicker. Shield mandatory 7.49 and quicker. Helmet meeting Snell M2000, M2005, M2010, SA2000, SA2005 or SFI 31.1A, 31.2A, 31.1/2005, 41.1A, 41.2A, or 41.1/2005 Specs. Drivers in supercharged vehicles must wear a helmet meeting Snell SA2000, SA2005 or SFI 31.1A, 31.2A, or 31.1/2005 Specs. See General Regulations 10:7.

SECTION 3 – NOSTALGIA ELMINATOR

ENGINE: 1
OIL RETENTION DEVICE
~~Effective January 1, 2008,~~ a properly fitting, SFI Spec 7.1, 7.2, or NHRA accepted Lower Engine Oil Retention Device is mandatory. Dragsters may utilize a belly pan in lieu of a device attached to the engine. Belly pan must extend from frame rail to frame rail, and extend forward of the harmonic balancer and rearward of the flywheel, and must incorporate minimum 2-inch high lips on all sides. See General Regulations 1:8.

DRIVER: 10

HELMET
Full-face helmet mandatory on all cars 9.99 or quicker. Shield mandatory 7.49 and quicker. Helmet meeting Snell M2000, M2005, M2010, SA2000, SA2005 or SFI 31.2A, 31.1/2005, 41.2A, or 41.1/2005 Specs. Drivers in supercharged vehicles must wear a helmet meeting Snell SA2000, SA2005 or SFI 31.2A, or 31.1/2005 Specs. See General Regulations 10:7.

SECTION 4 – 7.0 ELIMINATOR

ENGINE: 1
OIL RETENTION DEVICE
A properly fitting ~~All vehicles running 7.49 or quicker must utilize an~~ SFI Spec 7.1, 7.2 or 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 framerail to framerail 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.

VENT-TUBE BREATHERS
~~Effective July 1, 2007,~~ NHRA-accepted catch-can/vent-tube system mandatory for all supercharged engines. Twist on/quick-disconnect fittings between the vent-tube hoses and the valve-cover vent-tube adapters must incorporate a secondary locking device such as a hasp pin, ball lock pin, etc. Tape is not a satisfactory primary or secondary locking device. Double clamps are required on each end of all hoses used in the vent system, including the dry-sump vents. Minimum 1-inch-inside-diameter hoses are required from each valve cover to the catch-can inlets and/or framerails and from each framerail outlet to both catch-can inlets. Minimum catch-can(s) capacity is a one gallon sump. Catch cans must have adequate internal baffling. Minimum catch-can inlet configuration is one 1-inch-inside-diameter (or equivalent area) tubes. Minimum catch-can outlet/discharge configuration is one 1-inch-inside-diameter openings (or equivalent area). Vent tubes must be unobstructed from the interior of the valve cover to the interior of the catch can; i.e., no orifices, reduced areas, filler materials, etc.

FRAME: 4
ROLL CAGE
Chassis must meet SFI Spec 10.1E (front-engine, driver in front of rear end) or SFI Spec 10.2 (altered) or SFI Spec 2.2B or 2.4B (front-engine, driver behind rear end). Plating of chassis prohibited; painting permitted. Chassis must be inspected every three years ~~yearly~~ by NHRA and have serialized sticker affixed to frame before participation. Roll-cage padding meeting SFI Spec 45.1 mandatory where driver's helmet may come in contact with roll-cage components. Additional padding, mounted on flat stock and fastened to the roll cage on both sides of the driver's helmet, mandatory. Additional padding must be NHRA accepted (with manufacturer's name displayed), securely mounted using bolts or locking fasteners, and must include a flame-retardant covering. A current list of NHRA-accepted lateral head supports is available on NHRA.com. All wiring must be external of the framerails; routing of cables, hydraulic, or pneumatic lines inside the chassis is permitted. Pressurization of framerails in lieu of air bottles is prohibited.

SUPPORT GROUP: 9

FIRE EXTINGUISHER SYSTEM
Fire extinguisher system meeting SFI Spec 17.1 mandatory. Minimum 2010-pound ~~(minimum 20-pound system starting July 1, 2009)~~ or more NHRA-accepted fire extinguishing system mandatory on all front-engine open-bodied alcohol-burning supercharged/turbocharged cars. Activation cables must be protected in bellhousing and engine area. Activation cables and distribution tubing must be steel. Must be installed per manufacturer's specifications. Carbon-fiber bottles prohibited. See General Regulations 9:3.

DRIVER: 10
HELMET
~~**Full-face helmet mandatory on all cars 9.99 or quicker. Shield mandatory 7.49 and quicker.**~~ A full-face helmet with shield meeting Snell spec SA2000, SA2005 or SFI 31.2A, or 31.1/2005 mandatory ~~required~~. See General Regulations 10:7.

SECTION 5 – JUNIOR FUEL

DRIVER: 10
HELMET
~~**Full-face helmet mandatory on all cars 9.99 or quicker. Shield mandatory 7.49 and quicker.**~~ Full face helmet with shield meeting Snell SA2000, SA2005 or SFI 31.2A, 31.1/2005, 41.2A, or 41.1/2005 Specs mandatory. See General Regulations 10:7.

SECTION 6 – AA/GAS SUPERCHARGED ELIMINATOR

CLASS
AA/Gas Supercharged Eliminator: 5.5 pounds per cubic inch; 2,200-pound minimum.

Competition is based on using a four-tenths heads-up Pro Tree.

Reserved for pre-1973 coupe or sedan that must readily resemble the intended body style. Customizing allowed. Bodies may be fiberglass, carbon fiber, aluminum, or steel. Full trunk line must exist above the rear fenders. Front-end overhang limited to 43 inches ~~(subject to change for 2010)~~, as measured from the centerline of the front spindle to the farthest forward part of the car. Windshield angle must appear stock. Grille, headlights, and taillights may be painted to resemble stock. Grille surface and hood droop should resemble stock dimensions. Final body approval granted by NHRA.

ENGINE: 1
ENGINE
One internal-combustion, reciprocating, automobile-type engine permitted. Aluminum blocks permitted. ~~Harmonic balancer meeting SFI Spec 18.1 mandatory.~~ Cubic-inch displacement limited to 500 cubic inches maximum.

OIL RETENTION DEVICE
~~Effective January 1, 2008,~~ a properly fitting, SFI Spec 7.1, 7.2, or NHRA accepted Lower Engine Oil Retention Device is mandatory, may use a belly pan in lieu of a device attached to the engine. The belly pan must extend from framerail to framerail 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.

BRAKES & SUSPENSION: 3
SUSPENSION
Full automotive ~~automatic~~-type suspension required on all four wheels. Minimum one hydraulic shock per rear wheel. No electronic-controlled shocks. Cars with independent A arm or strut-type front suspension must have a minimum of one hydraulic shock per front wheel. Cars with torsion bar front suspension do not require front shocks. No rigid mounted rear ends allowed. See General Regulations 3:4.

DRIVER: 10
~~NECK COLLAR/~~HEAD AND NECK RESTRAINT DEVICE/SYSTEM
At all times that the driver is in the race vehicle, from the ready line until the vehicle is on the return road, driver must properly utilize an SFI-approved head and neck restraint device/system, including connecting the helmet as required for full functionality of the device. The device/system must meet SFI Spec 38.1 and must display a valid SFI label. The head and neck restraint device/system, when connected, must conform to the manufacturer's mounting instructions, and it must be configured, maintained, and used in accordance with the manufacturer's instructions. ~~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.

HELMET
~~Full-face helmet mandatory on all cars 9.99 or quicker. Shield mandatory 7.49 and quicker.~~ ~~Helmet meeting Snell 2000, 2005 or SFI 31.2A, 31.1/2005, 41.2A, or 41.1/2005 Specs mandatory.~~ Full face ~~Drivers in supercharged vehicles must wear a~~ helmet with shield meeting Snell SA2000, SA2005 or SFI 31.2A, or 31.1/2005 Specs mandatory. See General Regulations 10:7.

PROTECTIVE CLOTHING
Jacket and pants or suit meeting SFI Spec 3.2A/15, 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 mandatory on all cars, where a neck collar is not used.

SECTION 7 – A/FUEL ELIMINATOR

ENGINE: 1
FUEL SYSTEM (June 9, 2010)
Fuel lines not permitted in driver's compartment. Fuel shutoff operable from the driver's seat mandatory. Fuel tank must be mounted above lower framerail and must be equipped with a positive locking screw-on cap. Minimum temperature of fuel in the staging lanes to the completion of the run and subsequent NHRA fuel check is 50 degrees F. Maximum of one fuel pump, no overdrive. Fuel pump for blown alcohol limited to DSR-1, Hilborn PG150-1, Enderle #80-1, or Waterman Sprint. Injected nitro limited to Enderle 760 or Waterman A/F Injected. Electric/electronic control of fuel system prohibited.

VENT-TUBE BREATHERS
~~Effective July 1, 2007,~~ NHRA-accepted catch-can/vent-tube system mandatory. Twiston/ quick-disconnect fittings between the vent-tube hoses and the valve-cover

vent-tube adapters must incorporate a secondary locking device such as a hasp pin, ball lock pin, etc. Tape is not a satisfactory primary or secondary locking device. Double clamps are required on each end of all hoses used in the vent system, including the dry-sump vents. Minimum 1-inch-inside-diameter hoses are required from each valve cover to the catchcan inlets and/or framerails and from each framerail outlet to both catch-can inlets. Minimum catch-can(s) capacity is an eight-quart sump. Catch cans must have adequate internal baffling. Minimum catch-can inlet configuration is one 1-inch-inside-diameter (or equivalent area) tubes. Minimum catch-can outlet/discharge configuration is one 1-inch inside-diameter openings (or equivalent area). Vent tubes must be unobstructed from the interior of the valve cover to the interior of the catch can; i.e., no orifices, reduced areas, filler materials, etc. Pan/crankcase vacuum systems, of any description, are prohibited. See General Regulations 1:13.

DRIVETRAIN: 2
TRANSMISSION
Maximum forward gears limited to two. Reverser mandatory. OEM Powerglide prohibited, aftermarket Powerglide permitted. Entries utilizing a Powerglide transmission deduct 50 pounds from minimum weight. Planetary transmission permitted. Clutch hold-down device recommended. Automated shifters and/or timers-type shifting devices prohibited; each individual shift must be a function of the driver.

SUPPORT GROUP: 9
FIRE EXTINGUISHER SYSTEM
Fire extinguisher system meeting SFI Spec 17.1 mandatory. A minimum 2010-pound system ~~(minimum 20-pound system starting July 1, 2009)~~ required with a minimum one nozzle aimed at the driver and one at the front of the engine.

DRIVER: 10
HELMET
~~**Full-face helmet mandatory on all cars 9.99 or quicker. Shield mandatory 7.49 and quicker.**~~ Full face helmet with shield meeting Snell SA2000, SA2005 or SFI 31.2A, or 31.1/2005 Specs mandatory. See General Regulations 10:7.

SECTION 8 – NOSTALGIA FUNNY CAR

ENGINE: 1
LOWER CONTAINMENT
Engine must be equipped with an SFI Spec 7.1 lower-engine-ballistic/restraint device. In addition, an engine oil-retention pan mandatory; minimum material .050 inch aluminum or .040 inch carbon fiber/Kevlar. Pan must extend from framerail to framerail and extend from the rear motorplate to minimum 1 inch forward of the front face of the lower pulley and must incorporate minimum 4 inch high vertical folded up walls on the sides and minimum 2 inches on front and rear. Front and rear walls must be “coved” toward oil pan to assist oil in staying within the confines of the oil-retention pan. Pan must be either a one-piece design or constructed as to be sealed as a retention device to retain oil. Minimum number of slots or holes in the walls to clear frame, steering, or lines permitted. A nonflammable, oil-absorbent liner mandatory inside of retention device.

FUEL SYSTEM (June 9, 2010)

Single fuel pump mandatory ~~only~~. Fuel pump must be NHRA accepted. NHRA accepted fuel pumps: Enderle 1200, 1270, and 1380, Settles Nitro Gerotor, Waterman 320950N or 320950, and Rage Racing 1400N-FC. All new fuel pumps must be submitted to NHRA for acceptance. Fuel pumps must retain as manufactured gear or rotor outside diameter, depth, and tooth/lobe count. Fuel pump restricted to a single outlet. Fuel pumps with a second outlet must be capped or routed back to the fuel tank or return system. Fuel pump ~~must be~~ restricted to a total fuel delivery limited to 21.0 gpm at 4,000 rpm pump speed measured through a 0.300-inch orifice. All competitors must submit their fuel pump(s) to a NHRA accepted testing facility for certification prior to competition. NHRA accepted testing facility: K.J. Crawford Fuel Injection 707-542-9551. Pump must be driven 1/2 crankshaft speed. NHRA reserves the right to confiscate fuel pumps or uphold competitor(s) protest request regarding fuel pumps at any time during or after the event for further inspection. ~~Fuel pump limited to 1.1 inches of vane length – Enderle; Hilborn; Waterman 8.50 gear or 9.50 gear; or Settles nostalgia-style pump with certification permitted.~~

Fuel tank and fuel lines must be within the confines of the frame and be protected from coming in contact with the track surface. Fuel lines in the driver's compartment prohibited except for a fuel-pressure gauge; lines must be steel or steel-braided with steel fittings. All flexible fuel-pressure lines, with the exception of the hat nozzle lines, must be pressure tested and labeled. All testing must be hydrostatic for minimum 30 seconds at 750psi. Label must indicate date, PSI, and tester I.D. Labeling must be impervious to nitromethane and brake clean. Must have fuel shutoff operable from the driver's seat. Fuel tank must be equipped with a positive locking screw-on cap.

Maximum number of nozzles 24 (maximum 8 in injector hat, 16 in manifold). Y nozzles may be used in lieu of individual nozzles in the manifold; limited to 16 nozzle jets. Down nozzles prohibited. Maximum fuel injector air inlet opening: 45 square inches measured at butterfly or throttle bodies, excluding cross shaft in fully open position. Fuel injector hat/scoops must be NHRA accepted prior to competition. ~~Air intake limited to 65 square inches.~~ No composite materials (i.e., carbon fiber/Kevlar, graphite, etc.) can be used in injector hat and/or scoop. Hat/scoop must be nostalgic in appearance, internal modifications allowed. Scoops limited to 12 1/2 inches above throttle body as measured from centerline of throttle shaft to top of scoop. The use of electric, pneumatic, or any other automatic way of switching or sequencing of fuel system is prohibited. Fuel system must operate on its own pressure as far as adding or subtracting fuel volume. Manual high-speed fuel system allowed. See General Regulations 1:6.

OIL LINES

All flexible-pressure oil lines, excluding return lines and any line 30psi or lower in pressure, must be pressure-tested and labeled. All testing must be hydrostatic for minimum 30 seconds at 750psi. Label must indicate date, PSI, and tester I.D. Labeling must be impervious to nitromethane and brake clean. Otherwise hard line mandatory.

SUPERCHARGER (July 1, 2010)

Restricted to Roots-type supercharger; rotor helix angle not to exceed that of standard 71-series GM-type rotor. High-helix prohibited. OEM manufacturer's cast or extruded billet blower case mandatory. Limited to a single, Roots-type 6-71 blower. Specification limits: 15-inch rotor length, 18.250-inch case length, and 5.840-inch rotor cavity diameter. Rotors must be driven from the front; both external drive and internal gearing.

Rotor helix angle limited to standard 712 series GM-type rotor (60 degrees). Maximum overdrive: 18.99 percent. Blower setback may not allow any portion of blower to extend behind bellhousing mounting surface on cylinder block. Spacer or components between top of supercharger case and bottom of fuel injector hat restricted to 2-inch maximum. Supercharger restraint system meeting SFI Spec 14.3 mandatory. Aluminum studs required. Manifold burst panel meeting SFI Spec 23.1 mandatory. Manifolds are limited to a maximum manifold height of 8 inches as measured from valley gasket surface to blower mounting surface. Supercharger belt guard mandatory. Fuel and/or oil lines must be shielded wherever they pass the supercharger drive belt. Either a belt guard or fuel/oil line guard permitted. Turbochargers, screw-type superchargers, and centrifugal-type superchargers prohibited. See General Regulations 1:10, 1:11.

VENT-TUBE BREATHERS
Vent tubes must be double clamped at each connection. Minimum diameter, 1 ¼ inches for all breather tubes. All quick connections in the system must have a secondary locking system (tape, wire ties, etc. not allowed). Minimum catch can(s) capacity is an 8-quart sump. Catch can(s) must have adequate internal baffling to prevent oil from being deposited on racing surface. NHRA-accepted vent tubes/hoses are mandatory for all connections; see NHRA.com for a list of accepted vent tubes/hoses. See General Regulations 1:13.

BRAKES & SUSPENSION: 3
BRAKES
Four-wheel hydraulic brakes mandatory. Application and release of brakes must be a function of the driver; electronics, pneumatics, or any other device may in no way affect or assist brake operation. Hand brake, if used, must be located inside body or driver compartment. Steel brake lines mandatory. NHRA-accepted fireproof brake-line covering mandatory on all (front and rear) flexible connection lines; see NHRA.com from a list of accepted manufacturers. See General Regulations 3:11.

INTERIOR: 6
UPHOLSTERY
Seats must be foamed with energy-absorbing material and formed to the driver's body. Minimum one-layer, flame-retardant-material mandatory as seat upholstery. ~~Minimum one-layer, Nomex-type material mandatory as seat upholstery, with manufacturer's name displayed.~~

BODY: 7
BODY (June 9, 2010)
Limited to 1965 to 1979 American-made bodies. Bodies must resemble the original mass-produced make and model. Corvette roadster and Jeep bodies permitted ~~accepted~~. Bodies may be made of fiberglass or composite material. Body must lift off as a one-piece unit. Minimum body width is 60 inches, measured at the centerline of the front and rear axle. Maximum lowering of roof height: 2 inches. Front fender bubbles allowed, maximum 2 1/2 inches. The body may be shortened or lengthened a maximum of 15 percent of original dimensions. Opening for blower hat must have a minimum 2.500- inch clearance between body and throttle linkage. Injector box in windshield cannot exceed 50 percent of windshield height. Any modifications to body not described are prohibited. Side windows prohibited. Exception: vent windows permitted, may not extend 2-inches rearward where the A-pillar meets the roof line. Window must be

perpendicular to the bottom of the side window frame. Body (hood) burst panel, minimum 288 square inches, mandatory. Body burst panel must be secured with plastic screws and two 1/8 inch stainless-steel wires, with body pad bolted with plate on both sides of panel. Fireproof body undercoat required, with manufacturer's sticker required on the body.

SPOILER (June 9, 2010)
~~Allowed front and rear.~~ Rear spoiler limited to roof height and body width (~~no~~ modern-type spoilers or spill plates prohibited ~~permitted~~). Spills plates may not extend forward of the bottom of the rear window or extend past the trailing edge of the rear deck lid. Spill plates cannot be above the roof line. Front spoiler limited to overall overhang measurement of 40 inches, measured from the centerline of the forward most front spindle. The front and rear spoilers are the only aerodynamic devices permitted, any other wings, spoilers or canards prohibited.

SUPPORT GROUP: 9
SHUTOFF DEVICE (June 9, 2010)
Properly installed and operational NHRA accepted safety shutoff device mandatory. The safety shutoff device must be installed per manufacturer's instructions. Modification of or tampering with the device is prohibited. Effective January 1, 2011.

DRIVER: 10
DRIVER RESTRAINT SYSTEM
Minimum 6-point, 3-inch driver restraint system meeting SFI Spec 16.1 mandatory. All belts and mounting points must be covered with a fire-resistant material. Restraint system must be updated at two-year intervals from date of manufacture. See General Regulations 10:5.

HELMET
~~**Full-face helmet mandatory on all cars 9.99 or quicker. Shield mandatory 7.49 and quicker.**~~ Full face helmet with shield meeting Snell SA2000, SA2005 or SFI 31.2A, or 31.1/2005 Spec mandatory. Helmet must meet applicable SFI and/or Snell specs with fresh air system installed. Compressed air only. Air can be supplied on demand or by constant pressure. See General Regulations 10:7.

SECTION 9 – NOSTALGIA TOP FUEL

DESIGNATION
N/TF, preceded by number.
Reserved for front-engine supercharged, nitro-burning dragsters built specifically for all-out drag racing competition. ~~Minimum weight at conclusion of run: 1,700 pounds small-block, and 1,850 Hemi, both including driver.~~

ENGINE: 1
LOWER CONTAINMENT
Engine must be equipped with an SFI Spec 7.1 lower-engine-ballistic/restraint device. In addition, an engine oil-retention pan mandatory; minimum material .050 inch aluminum or .040 inch carbon fiber/Kevlar. Pan must extend from framerail to framerail and extend from the rear motorplate to minimum 1 inch forward of the front face of the lower pulley and must incorporate minimum 4 inch high vertical folded up walls on sides and

minimum 2 inches on front and rear. Front and rear walls must be “coved” toward oil pan to assist oil in staying within the confines of the oil-retention pan. Pan must be either a one-piece design or constructed as to be sealed as a retention device to retain oil. Minimum number of slots or holes in the walls to clear frame, steering, or lines permitted. A nonflammable, oil-absorbent liner mandatory inside of retention device. ~~a fabricated metal oil containment device, designed to hold oil within the framerails without spilling oil on the racing surface. The device should run from the rear motorplate to 3 inches forward of the lower blower pulley.~~

FUEL SYSTEM (June 9, 2010)

Single fuel pump mandatory. Fuel pump must be NHRA accepted. NHRA accepted fuel pumps: Enderle 1100, Hilborn -4, Settles Nostalgia Gerotor, Waterman 320950N, and Rage Racing 1400N. All new fuel pumps must be submitted to NHRA for acceptance. Fuel pumps must retain as manufactured gear or rotor outside diameter, depth, and tooth/lobe count. Fuel pump restricted to a single outlet. Fuel pumps with a second outlet must be capped or routed back to the fuel tank or return system. Fuel pump restricted to a total fuel delivery limited to 20.0 gpm at 4,000 rpm pump speed measured through a 0.300-inch orifice. All competitors must submit their fuel pump(s) to a NHRA accepted testing facility for certification prior to competition. NHRA accepted testing facility: K.J. Crawford Fuel Injection 707-542-9551. Pump must be driven at 1/2 crankshaft speed. NHRA reserves the right to confiscate fuel pumps or uphold competitor protest request regarding fuel pumps at any time during or after the event for further inspection.

~~Engine must be equipped with a single spec fuel pump. Rage 1400N, Enderle 1100, Hilborn -4, Settles Nostalgia Gerotor, and Waterman 320850-N accepted. All others must be presented to NHRA for acceptance. Modifications to inlet or outlet openings of pumps are permissible, but gears or rotors must retain stock outside diameter, depth, and tooth/lobe count as manufactured (Enderle 1100, 7-tooth idle gear, 1.350-inch OD, 1.100-inch depth; Hilborn -4, 7-tooth idle gear, 1.350-inch OD, 1.100-inch depth; Settles Nostalgia Gerotor, 3.000-inch OD, 0.750-inch depth; Waterman 320850-N, 10-tooth idle gear, 1.712-inch OD, 0.850-inch depth; and Rage 1400N).~~

~~Pump must be driven at 1/2 crankshaft speed. No overdrive or underdrive mechanism allowed.~~ No electronic, pneumatic, or hydraulic controls of fuel system. Fuel-system changes must be a function of the driver by mechanical means only. One action by the driver can only result in one function, one time, other than fuel pressure operated check valves (i.e., you may not incorporate a system through a driver-activated switch or lever, or a wide-open throttle switch, that starts a series of events). Fuel shutoff must be operable from the driver’s seat. No pressurized fuel tanks. Fuel tanks must be mounted above the lower framerail. Fuel tank and fuel lines must be within the confines of the frame and be protected from coming in contact with the track surface. Fuel tank must have a positive locking screw-on cap. Fuel line must be isolated from driver’s compartment. Fuel-gauge lines in the driver’s compartment must be steel-braided with steel fittings. All flexible fuel-pressure lines, with the exception of the hat nozzle lines, must be pressure tested and labeled. All testing must be hydrostatic for minimum 30 seconds at 750psi. Label must indicate date, PSI, and tester I.D. Labeling must be impervious to nitromethane and brake clean.

Maximum number of nozzles 16 (8 in injector hat, 8 in manifold). Y-style nozzles are allowed (i.e., two lines coming together before one nozzle enters the manifold). No down nozzles allowed. Maximum fuel injector air inlet opening: 65 square inches measured at butterfly or throttle bodies, excluding cross shaft in fully open position. Fuel injector hat/scoops must be NHRA accepted prior to competition. ~~Air intake limited to 65 square inches.~~ No composite materials (i.e., carbon fiber/Kevlar, graphite, etc.) can be used in injector hat and/or scoop. Internal modifications to scoop or hat allowed. Maximum height from the crankshaft centerline to the top of the fuel injector hat/scoop (TBD) inches. ~~Scoops limited to 12.5 inches above throttle body as measured from centerline of throttle shaft to top of scoop.~~ See General Regulations 1:6.

OIL LINES
All flexible-pressure oil lines, excluding return lines and any line 30psi or lower in pressure, must be pressure-tested and labeled. All testing must be hydrostatic for minimum 30 seconds at 750psi. Label must indicate date, PSI, and tester I.D. Labeling must be impervious to nitromethane and brake clean. Otherwise hard line mandatory.

SUPERCHARGER (July 1, 2010)
Restricted to Roots-type supercharger; rotor helix angle not to exceed that of standard 71-series GM-type rotor. High-helix prohibited. OEM manufacturer's cast or extruded billet blower case mandatory. Maximum size: 6-71, 18.250 case length. Maximum rotor length: 15 inches. Maximum rotor cavity diameter: 5.840 inches. Maximum overdrive: 14 percent. Rotors must be driven from the front; both external drive and internal gearing. Blower setback may not allow any portion of blower to extend behind bellhousing mounting surface on cylinder block. Spacer or components between top of supercharger case and bottom of fuel injector hat restricted to 2-inch maximum. Supercharger restraint system meeting SFI Spec 14.3 mandatory. Aluminum studs required. Manifold burst panel meeting SFI Spec 23.1 mandatory. Manifolds are limited to a maximum manifold height of 8 inches as measured from valley gasket surface to blower mounting surface. Supercharger belt guard mandatory. Fuel and/or oil lines must be shielded wherever they pass the supercharger drive belt. Either a belt guard or fuel/oil line guard permitted. Turbochargers, screw-type superchargers, and centrifugal-type superchargers prohibited. See General Regulations 1:11.

VENT-TUBE BREATHERS
Vent tubes must be double clamped at each connection. Minimum diameter, 1 ¼ inches for all breather tubes. All quick connections in the system must have a secondary locking system (tape, wire ties, etc. not allowed). Minimum catch-can(s) capacity is an 8-quart sump. Catch can(s) must have adequate internal baffling to prevent oil from being deposited on racing surface. NHRA-accepted vent tubes/hoses are mandatory for all connections; see NHRA.com for a list of accepted vent tubes/hoses. See General Regulations 1:13.

BRAKES & SUSPENSION: 3
BRAKES
Dual piston hydraulic rear wheel brakes mandatory. Application and release of brakes must be a function of the driver; electronics, pneumatics, or any other device may in no way affect or assist brake operation. Hand brake, if used, must be located inside body or driver compartment. Steel brake lines mandatory. NHRA-accepted fireproof brake-

line covering mandatory on all flexible connection lines; see NHRA.com from a list of accepted manufacturers. See General Regulations 3:11.

FRAME: 4
ROLL CAGE
Chassis must have manufacturer's name, serial number, and date of manufacture. Chassis must meet SFI Spec 2.2B (front-engine cars). Effective January 1, 2011 chassis must meet SFI Spec 2.2C. Plating of chassis prohibited; painting permitted. Chassis must be inspected yearly by NHRA and have serialized sticker affixed to frame before participation. Roll-cage padding meeting SFI Spec 45.1 mandatory where driver's helmet may come in contact with roll-cage components. Additional padding, mounted on flat stock and fastened to the roll cage on both sides of the driver's helmet, mandatory. Additional padding must be NHRA-accepted, securely mounted using bolts or locking fasteners, and must include a flame-retardant covering. A current list of NHRA-accepted lateral head supports is available on NHRA.com. Pressurization of framerails in lieu of air bottles is prohibited.

INTERIOR: 6
UPHOLSTERY
Seats must be foamed with energy-absorbing material and formed to the driver's body Minimum one-layer, flame-retardant-material mandatory as seat upholstery. ~~Optional.~~

ELECTRICAL: 8
IGNITION
Limited to a single magneto with one coil and one spark box. Magneto limit: MSD 44 amp. ~~The 426-style engine is restricted to use of a single points-style magneto.~~ No chips or computer-type ignition allowed. Timing retard or advance changes must be a function of the driver by mechanical means only. No electronic, pneumatic, or hydraulic timing change devices allowed. One action by the driver can only result in one function, one time (i.e., you may not incorporate a system through which a driver-activated switch or lever, or a wide-open throttle switch, starts a series of events).

SUPPORT GROUP: 9
FIRE EXTINGUISHER SYSTEM
Fire extinguisher system meeting SFI Spec 17.1 mandatory. Minimum 2010-pound ~~(minimum 20-pound system starting July 1, 2009)~~ or more NHRA-accepted fire extinguishing system mandatory. Activation cables must be protected in bellhousing and engine area. Activation cables and distribution tubing must be steel. Must be installed per manufacturer's specifications. Carbon-fiber bottles prohibited. See General Regulations 9:3.

SHUTOFF DEVICE (June 9, 2010)
Properly installed and operational NHRA accepted safety shutoff device mandatory. The safety shutoff device must be installed per manufacturer's instructions. Modification of or tampering with the device is prohibited. Effective January 1, 2011.

DRIVER: 10
DRIVER RESTRAINT SYSTEM

Minimum 6-point, 3-inch driver restraint system meeting SFI Spec 16.1 mandatory. All belts and mounting points must be covered with a fire-resistant material. Restraint system must be updated at two-year intervals from date of manufacture.

HELMET
~~**Full-face helmet mandatory on all cars 9.99 or quicker. Shield mandatory 7.49 and quicker.**~~ Full face helmet meeting Snell SA2000, SA2005 or 31.2A mandatory with shield. See General Regulations 10:7.

SECTION 10 – GENERAL REGULATIONS

ENGINE: 1
1:5 FUEL SYSTEMS
Lines: All non-OEM fuel lines (including gauge and/or data recorder lines) must be metallic, steel braided, or NHRA-accepted "woven or woven-pushlock." A maximum of 12 inches total (front to rear) of non-metallic or non-steel braided hose is permitted for connection purposes only; individual injector nozzle and motorcycle fuel lines are excluded. Fuel lines (except steel braided lines) in the flywheel/bellhousing area must be enclosed in a 16-inch length of steel tubing, 1/8-inch-minimum wall thickness, securely mounted as a protection against fuel-line rupture. Fuel lines may not be routed in the driveshaft tunnel. It is mandatory that fuel lines passing supercharger drive belts be steel braided, NHRA-accepted woven or woven-pushlock, or be enclosed in protective steel tubing. A current list of NHRA-accepted woven or woven-pushlock fuel lines is available on NHRA.com. All NHRA-accepted fuel lines must use ends that are specifically designed for the type of fuel line being used. No hose clamps allowed on NHRAaccepted fuel lines. ~~NHRA-accepted woven or woven-pushlock fuel lines: Aeroquip FC300, FC332; Aeroquip Star Lite 200; AQP Socketless; Earl's Prolite; Fragola Performance System Series 8000 Push-Lite Race Hose; Gates LOL Plus; Goodridge 536; Goodridge 710; Russell Twist-Loc 836 and XRP HS-79; Dayco Imperial Nylo-seal tubing. Contact NHRA for updates.~~

DRIVETRAIN: 2
2:6 FLYWHEEL SHIELD & MOTOR PLATE: General
The use of aluminum bellhousing is permitted in all categories and applications. The aluminum bellhousing must meet applicable SFI Specifications. Absolutely no modifications to as manufactured design are permitted on SFI Spec 6.1, 6.2, 6.3, or 9.1 flywheel shields and/or liners. An SFI Spec 6.1W bellhousing is also acceptable wherever an SFI Spec 6.1 bellhousing is mandatory or permitted. All 6.2 and 6.3 titanium bellhousings must be reinspected and recertified yearly. SFI 6.1 titanium and aluminum bellhousings and SFI 6.2 or 6.3 steel bellhousings must be reinspected and recertified every two years (or as specified by the manufacturer). SFI 6.1 or 9.1 bellhousings must be reinspected and recertified every five years (6.1) or every two years (9.1). Where SFI Spec bellhousings are mandatory, all applicable liners, large mounting fasteners, motor plates, etc., as required by SFI Specs or the manufacturer, must be properly installed.

2:13 TRANSMISSION, Aftermarket Planetary
A transmission shield covering transmission and reverser that meets SFI Spec 4.1 is mandatory if engine burns nitromethane; or engine burns methanol or nitrous oxide and runs 9.99 seconds or quicker; or vehicle runs 7.49 seconds or quicker; or engine is

supercharged or turbocharged; or on any overdrive unit. Air shifter bottles must be stamped with DOT-1800 pound rating (minimum) and be securely mounted (i.e., no tie-wraps or hose clamps).

2:14 TRANSMISSION, Automatic/NHRA-Accepted
ADD: (new paragraph)
All cars running 10.99 (*6.99) seconds and quicker must have a NHRA accepted locking type dipstick on the transmission.

FRAME: 4
4:2 BALLAST
As permitted in Class Requirements. Any material used for the purpose of adding to a car's total weight must be permanently attached to the car's structure and must not extend in front of or behind the rear of the car's body or above the rear tires. No liquid or loose ballast permitted (i.e., water, sandbags, rocks, shot bags, metal weights, etc.). Discovery of loose or disguised ballast will result in disqualification from the event, regardless of whether infraction occurs during qualifying or eliminations. Additional penalties may be imposed in the sole and absolute discretion of NHRA. Weight boxes (two maximum) made of 1/8-inch material may be constructed to hold small items such as shot bags, lead bars, etc., as long as box and contents do not weigh more than 100 pounds or as outlined in Class Requirements. The box must be securely fastened to the frame or crossmember with at least two 1/2-inch-diameter steel bolts. Any liquid other than engine fuel being used, located behind the front firewall (on a front-engine car), is considered ballast and is prohibited, except for intercooler tanks that contain water and/or ice only. ~~Tank must be SFI Spec 28.1 fuel cell of maximum 3 gallons capacity.~~ Tank must be securely mounted to frame, frame member, or OEM floorpan. To permit "making a class" due to a difference in scale calibration, a maximum removable weight of 100 pounds (or as outlined in Class Requirements) is permitted. Removable weight must be securely mounted to the frame or frame structure by a minimum of two 1/2-inchdiameter steel bolts per 100 pounds, or one 3/8-inch steel bolt per 5 pounds; all other weight bars, pucks, etc. must use minimum 1/2-inch-diameter SAE grade 8 bolts for attachment. Hose clamps, wire, strapping, tape, tie wraps, etc. for securing weight or ballast prohibited. Acceptable forms of ballast are 1) Heavier gauge steel floors (i.e., 16- or 18-gauge, heavier gauge and/or plate steel prohibited); 2) Frame reinforcing cross members; or 3) the addition of protective equipment such as roll bars, flywheel shield, etc. If additional ballast is needed and is permitted by Class Requirements, it must be permanently attached to frame, bolted with two 1/2-inch-diameter bolts per 100 pounds, with nuts welded to bolts. Maximum amount of removable and/or permanent ballast, unless otherwise stated under Class Requirements, is 500 pounds.

4:8 PARACHUTES
If outlined in Class Requirements, it is mandatory to have a braking parachute produced by a recognized drag racing parachute manufacturer. Tech inspectors may observe the proper operation of the parachute and inspect for worn or frayed shroud lines, ripped or dirty canopies, and worn or ragged pilot chutes. Parachute cable housings should be mounted solidly to frame tube or other suitable member no farther back than 1 inch. The release housing must be attached within 12 inches of the parachute pack and in a manner that will allow the inner cable to release the parachute. When supercharged or using nitromethane as a fuel, it is mandatory that the parachute pack and unpacked shroud lines be protected with fireresistant material from the mounting point to the pack.

Parachutes must have their own independent mounting with sleeved 3/8 inch minimum steel bolts or steel pins required for all applications. Shroud line(s) mounting brackets must be constructed of minimum .090-inch steel. Safety pins must be red flagged and removed prior to burnout. The use of ball-lock pins for parachute mounting prohibited. See Class Requirements regarding use of two parachutes. Such applications require separate shroud-line mounting points for each parachute system.

4:12 WHEELBASE
Minimum 85 ~~90~~ inches, unless car has original engine in original location and is shorter than original, or noted in class requirements. Maximum wheelbase variation from left to right is 1 inch, unless otherwise noted in Class Requirements.

SUPPORT GROUP: 9
9:3 FIRE EXTINGUISHER
For all other vehicles, onboard fire extinguisher systems must be manually controlled Cold Fire 302, Fire X plus, Halon FE1211 or 1301 or FM200, or F500, and mounted per Manufacturer's specifications with the primary nozzle(s) directed in an attempt to protect the driver. Other agents, classified on the EPA SNAP list as Acceptable Total Flooding Agents (Feasible for Use in Occupied Areas) and NHRA accepted, may be used. Bottles and lines must be mounted above the bottom of the adjacent framerails. ~~Bottles and lines must be mounted within the framerails.~~ Fire bottle activation cables must be installed inside framerail where cables pass engine/bellhousing area. Bottles must be DOT approved and permanently mounted (no hose clamps or tie wraps). In the case of more than one bottle, each bottle must have its own distribution tubing and nozzles. The use of bottles, nozzles, or tubing other than that recommended by the manufacturer is prohibited. Upon activation of the system, the contents of the bottle(s) must be totally discharged; partial- discharge systems prohibited. The bottles must be mounted in such a manner that should an explosion or failure of any mechanical component of the vehicle occur, the bottles will be protected from flying parts. ~~Also, the bottles must be mounted completely above the lower framerails of the car.~~ When installed in/on a race car, must be mounted in a secure manner; use of flip-open-type clamps, hose clamps, tie wraps, snaps, etc. prohibited. They should be protected from excessive temperature and mounted rigidly to the vehicle. Remote cables must be metallic (plastic or plastic-wrapped cables prohibited) and installed so they are protected in the event of an upset or collision. Follow the manufacturer's recommendations regarding installation, especially on bend radius, and protection from crimping or kinking. All fire systems must use steel lines, steel or aluminum distribution nozzles, and must be equipped with a pressure gauge. **All bottles must be identified with a gross loaded weight figure.** It is the responsibility of the competitor to weigh the bottle prior to each event.

9:14 WARM-UPS
It is mandatory that a driver be seated in the car in the normal driving position anytime the engine is running, unless coupler or driveline is removed from vehicle. **The practice of transbrake testing, converter stalls, line-loc testing, and/or transmission warming is prohibited in all classes, in all areas of the event except in starting-line approach areas beyond staging, or unless vehicle is on jackstands. Non-compliance is grounds for disqualification or such other and/or action as deemed appropriate by NHRA.**

DRIVER: 10

10:5 DRIVER RESTRAINT SYSTEMS

A quick-release, 3-inch shoulder harness meeting SFI Spec 16.1 is mandatory in all cars in competition required by the rules to have a roll bar or a roll cage. (Permitted in all other classes.) A 3-inch SFI Spec 16.5 driver restraint system is also acceptable wherever a SFI Spec 16.1 is mandatory or permitted. Driver restraint system must be clearly labeled as meeting SFI Spec 16.1 and be dated by manufacturer. SFI Spec 16.1 Y-type belts prohibited. 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 produced by the same manufacturer. For harness installation, see illustration. Cars using OEM or OEM-type seat may route crotch strap in front of seat instead of through 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 arm restraint from accidentally releasing the latch lever. Protective cover not required if system utilizes "duck-bill" latch hardware. All harness sections must be mounted to the frame, crossmember, or reinforced mounting, and installed to limit driver's body travel both upward and forward. Seat belts may not be wrapped around lower framerails. Under no circumstances are bolts inserted through belt webbing permitted for mounting. Check manufacturer's instructions.

10:7 HELMETS & GOGGLES

Drivers of ~~NHRA Lucas Oil Drag Racing Series and E.T.~~ cars (13.99 or quicker) must use a helmet meeting Snell M2000, M2005, M2010, SA200, SA2005, or SFI 31.1A, 31.2A, 31.1/2005, 41.1A, 41.2A, or 41.1/2005 Specs. Drivers in supercharged, front-engine, open-bodied cars and Funny Cars must wear a helmet meeting Snell SA2000, SA2005 or SFI 31.2A, or 31.1/2005 Specs. See Class Requirements.

NHRA Helmet Expiration Dates

Label Expires

Snell 2000 1/1/2012
Snell 2005 1/1/2017
Snell 2010~~2007~~ 1/1/2022~~2019~~
SFI 31.1A 1/1/2014
SFI 31.2A 1/1/2014
SFI 41.1A 1/1/2014

Label Expires

SFI 41.2A 1/1/2014
SFI 31.1/2005 1/1/2017
SFI 41.1/2005 1/1/2017
SFI 24.1 1/1/2015
SFI 24.1/2005 1/1/2017

10:8 NECK COLLAR/HEAD AND NECK RESTRAINT DEVICE/SYSTEM

A head and neck restraint device/system is mandatory in Nostalgia Top Fuel, Nostalgia Funny Car, A/Fuel, AA/Supercharged, and 7.0 Eliminator and in any vehicle running 200mph or faster. When using a head and neck restraint device/system, at all times that the driver is in the race vehicle, from the ready line until the vehicle is on the return road, driver must properly utilize the SFI approved head and neck restraint device/system, including connecting the helmet as required for full functionality of the

device. The device/system must meet SFI Spec 38.1 and must display a valid SFI label. The head and neck restraint device/system, when connected, must conform to the manufacturer's mounting instructions, and it must be configured, maintained, and used in accordance with the manufacturer's instructions.

A head and neck restraint device/system may be used with or without a neck collar.

SFI SPECIFICATIONS
SFI SPEC DESCRIPTION EXPIRATION PERIOD
ADD:
16.5 3-Inch Driver Restraint System. . . . . 2 years
25.3 Full-Bodied Car, Tube Chassis Roll Cage
6.50-7.49, 3,600-Pound Maximum. . . . . 3 years

2010 NHRA E.T. QUICK REFERENCE CHART
ADD:
Auto Trans Locking Type Dipstick (Y 10.00 to 10.99 Y 9.99 to 7.50 Y 7.49 to 6.00)