



2011 NHRA Rule Amendments

Last Amended December 6, 2010

Table of Contents

2011 NHRA Rule Amendments

SECTION 5 – PRO MOD	4
ENGINE: 1	4
SUPERCHARGER (December 6, 2010)	4
INDUCTION (December 6, 2010)	4
INJECTOR SCOOP (December 6, 2010)	4
TURBOCHARGER (December 6, 2010).....	4
DRIVETRAIN: 2	5
TRANSMISSION, MANUAL (December 6, 2010)	5
BODY: 7	5
BELLYPAN (December 6, 2010).....	5
SECTION 9 – SUPER COMP	5
BRAKES & SUSPENSION: 3.....	5
BRAKES (December 6, 2010)	5
SECTION 11 – SUPER STOCK	5
SECTION 11G – SUPER STOCK/MX	5
ENGINE: 1	6
CYLINDER HEADS (December 6, 2010).....	6
ENGINE (December 6, 2010).....	6
TURBOCHARGERS (December 6, 2010)	6
DRIVETRAIN: 2	6
TRANSMISSION, Manual (December 6, 2010).....	6
INTERIOR: 6	6
UPHOLSTERY (December 6, 2010).....	6
SECTION 12 – COMP	6
ENGINE: 1	7
ENGINE (December 6, 2010).....	7
SECTION 12E – ALTERED TRUCK	7
ENGINE: 1	7
ENGINE (December 6, 2010).....	7
SECTION 13 – TOP ALCOHOL DRAGSTER	7
PAGE 13	7
BRAKES & SUSPENSION: 3.....	7
BRAKES (December 6, 2010)	7
PAGE 7	7
FRAME: 4	7
PARACHUTE (December 6, 2010)	7

2011 NHRA Rule Amendments
As of December 6, 2010

SECTION 14 – TOP ALCOHOL FUNNY CAR	8
PAGE 14	8
BRAKES & SUSPENSION: 3	8
BRAKES (December 6, 2010)	8
FRAME: 4	8
PARACHUTE (December 6, 2010)	8
SECTION 15 – PRO STOCK MOTORCYCLE	8
BRAKES & SUSPENSION: 3	8
SUSPENSION (December 6, 2010)	8
FRAME: 4	9
GROUND CLEARANCE (December 6, 2010)	9
SEAT: 6	9
SEAT (December 6, 2010)	9
SECTION 16 – PRO STOCK	9
BRAKES & SUSPENSION: 3	9
BRAKES (December 6, 2010)	9
SECTION 17 – FUNNY CAR	9
BRAKES & SUSPENSION: 3	9
BRAKES (December 6, 2010)	9
FRAME: 4	10
PARACHUTE (December 6, 2010)	10
SECTION 18 – TOP FUEL	10
BRAKES & SUSPENSION: 3	10
BRAKES (December 6, 2010)	10
FRAME: 4	10
PARACHUTE (December 6, 2010)	10
BODY: 7	11
REAR WINGS & SUPPORTS (December 6, 2010)	11

Note:

Additions are Blue underline

Deletions are ~~Red strikethrough~~

SECTION 5 – PRO MOD

Page 3

ENGINE: 1

SUPERCHARGER (December 6, 2010)

Screw-type supercharger prohibited. Hi-helix or standard helix Roots type supercharger only. Manifold burst panel meeting SFI Spec 23.1 plus restraint system meeting SFI Spec 14.2, including injector restraint straps mandatory. Cast or billet cases permitted and must be NHRA-accepted prior to competition. Maximum supercharger overdrive limit is 14.5 ~~20.0~~ percent on all combinations. Intercoolers, variable multi-speed supercharger devices prohibited. The top opening may not exceed 12 inches in length or 5 inches in width. The entire inlet opening must be on/in the upper surface only. The maximum length from the front of the supercharger drive pulley to the leading edge of the rotor is 15 inches. Offset drive pulleys, spacers, modified cases, or attaching methods may not be used to add to the 15-inch maximum. All manifold configurations, supercharger modifications and locations must be accepted prior to competition. The rotors must be driven from the front (both the external drive and the internal gearing). Any inlet/outlet cavity in front of the rotors is restricted to a maximum of 3.000 inches measuring from the face of the bearing plate to the front of the cavity. See General Regulations 1:10, 1:11.

INDUCTION (December 6, 2010)

Any induction system permitted on nitrous-assisted, supercharged and turbocharged entries. Electronic fuel injection must be closed, OEM-type system; i.e., may monitor only engine functions. Monitoring of vehicle performance criteria, wheel speed, driveshaft speed, vehicle acceleration, etc. by fuel-injection system prohibited. All aftermarket OEM-type electronic fuel injection must be NHRA-accepted. A current list of NHRA-accepted electronic-fuel-injection systems is available on NHRA.com. See General Regulations 9:1.

INJECTOR SCOOP (December 6, 2010)

Injector scoop may not extend more than 16 inches forward of the center of the forward engine cylinder, may not extend more than 10 inches behind the center of the rear engine cylinder, ~~may not be higher than the roof line.~~

TURBOCHARGER (December 6, 2010)

Single turbocharger limited to 120mm maximum; twin turbocharger limited to 88 ~~94~~mm maximum. Air-to-air or water-to-air intercoolers permitted on turbocharged entries ~~vehicles~~. Turbocharger size will be verified by measuring the housing bore at the leading edge of the impeller wheel. The maximum diameter of the housing bore at the leading edge of the wheel may not exceed 2mm more than the maximum allowable turbocharger size permitted.

Page 4

DRIVETRAIN: 2

TRANSMISSION, ~~MANUAL~~ (December 6, 2010)

Aftermarket planetary, ~~or~~ clutchless, or NHRA-accepted aftermarket automatic transmission permitted. All transmissions must be equipped with an SFI Spec 4.1 transmission shield. Supercharged entries limited to maximum of three forward speeds and reverse; all other entries limited to maximum of five forward speeds and reverse. When an NHRA-accepted aftermarket automatic transmission is utilized, an SFI Spec 30.1 flexplate shield and an SFI Spec 29.1 flexplate are mandatory. Aftermarket converter drive units permitted. When an aftermarket converter drive is utilized, an SFI Spec 6.1 or 6.3 flywheel shield and an SFI Spec 29.1 flexplate are mandatory. All entries utilizing a converter must be equipped with a neutral safety switch and a reverse lock out. Transmission brake permitted on all converter equipped entries. All entries using a converter may deduct 75 pounds from the minimum weight. All entries using an NHRA-accepted aftermarket automatic transmission see BODY: 7, BELLYPAN. Lockup converters and overdrive units are prohibited. A 1-to-1 relationship is mandatory in high gear for all transmission types. Automated, electric, or pneumatic shifter and/or timer/rpm-type shifting devices permitted on all transmission types prohibited; must be controlled by preset engine rpm and/or time functions only. each individual shift must be a function of the driver. Shifting must be controlled by manual or pneumatic means only (driver pulls the lever or pushes the button); electric or electronics may in no way affect the shifting mechanism. See General Regulations 2:12, 2:13, 2:14.

Page 6

BODY: 7

BELLYPAN (December 6, 2010)

Permitted on all cars; mandatory on all entries using an NHRA-accepted aftermarket automatic transmission. Pan must extend from framerrail to framerrail and extend from the bellhousing/engine mounting surface to the end of the transmission tail shaft. Non-flammable, oil absorbent liner is mandatory inside of bellypan.

SECTION 9 – SUPER COMP

Page 2

BRAKES & SUSPENSION: 3

BRAKES (December 6, 2010)

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.

SECTION 11 – SUPER STOCK

SECTION 11G – SUPER STOCK/MX

Page 27

ENGINE: 1

CYLINDER HEADS (December 6, 2010)

2nd paragraph

VX class: Stock intake flange Volkswagen-type cylinder heads mandatory. Stud pattern must be in OEM location with OEM dimensions. Studs must be used to mount the manifold to the cylinder head. Welding to increase, or originally filled, manifold flange area permitted. Maximum intake valve head diameter 44.1mm (1.736 inches), [maximum exhaust valve head diameter 37.5mm \(1.476 inches\)](#). Minimum valve stem diameter 5/16-inch. Titanium valves, retainers, and keepers permitted. Steel pushrods mandatory.

ENGINE (December 6, 2010)

3rd paragraph

VX class: Naturally aspirated, air-cooled, OEM Volkswagen. Maximum engine size 2,444 cc (149 cid). Maximum bore diameter 94.1 mm (3.7059 inches). Cast iron [or steel](#) cylinders and steel connecting rods mandatory. [Vacuum pump prohibited. Oil retention device mandatory; device must extend from mid-plate rearward past crankshaft pulley and must incorporate a minimum 2-inch high lip on all sides. Nonflammable, oil absorbent liner is mandatory inside of device.](#)

TURBOCHARGERS (December 6, 2010)

Permitted in DX only. Must be no larger than the T04-b or the 300 Series Rotomaster/Garrett, [twin](#) 62mm [or single 80mm](#) maximum size.

Page 28

DRIVETRAIN: 2

TRANSMISSION, Manual (December 6, 2010)

3rd paragraph

VX class: Manual transmission mandatory [with a maximum of 4 forward speeds](#). Single-disc, nonadjustable lever-type clutch permitted. Clutchless or sequential transmissions prohibited. Pneumatic or electronically controlled shifting prohibited. Clutch must be manually operated by the driver's foot. Washington anti-shocker hydraulic clutch management system permitted. The cylinder must be preset and remain in a fixed position during the run. Any adjustment during the run prohibited.

Page 30

INTERIOR: 6

UPHOLSTERY (December 6, 2010)

2nd paragraph

EX [and VX](#) class: Upholstery, headliners, carpets, dashboard, etc. optional. Must be equipped with one seat minimum for driver, properly installed. Holes, slots, or other openings in floor and/or firewall prohibited.

SECTION 12 – COMP

Page 1

ENGINE: 1

ENGINE (December 6, 2010)

For Econo Dragster, Altered Truck, Econo Altered, and Super Modified classes: OEM aftermarket small-block Chevrolet (SBC) engines with bore centers greater than 4.400 inches, maximum 4.500 inches, are permitted only in A/ED, P/ST, P/STA, A/EA, A/SM, A/SMA, B/SM, B/SMA, C/SM, and C/SMA. SBC engines with bore centers greater than 4.400 inches are permitted in all V-8 Dragster and V-8 Altered classes; not permitted in any Nostalgia Dragster classes. ~~Except as noted in Pro-Modified, All other~~ classes except A/A, A/AA, A/AP, and A/PM are restricted to an absolute maximum bore center of 5.000 inches. Classes A/A, A/AA, A/AP, and A/PM are restricted to an absolute maximum bore center of 5.300 inches.

SECTION 12E – ALTERED TRUCK

Page 25

ENGINE: 1

ENGINE (December 6, 2010)

Internal-combustion, reciprocating, naturally aspirated, single-camshaft, small-block, 90-degree V-8 automotive-type engine; ~~must be same corporate make as body used.~~ OEM bore center spacing mandatory. Block must be cast iron, OEM generally available, and NHRA-accepted, with OEM part/casting number cast into block. Maximum one distributor. PST and PS/TA may use engines up to 369 cubic inches maximum but must add 7 pounds per cubic inch to the minimum weight for each cubic inch over 358. See General Regulations 1:2.

SECTION 13 – TOP ALCOHOL DRAGSTER

Page 13

BRAKES & SUSPENSION: 3

BRAKES (December 6, 2010)

Automated brakes prohibited: Application and release of brakes must be a function of the driver. Dual spots or equivalent oval pucks mandatory; minimum two rear-wheel hydraulic disc brakes. Carbon-fiber brake rotors used in conjunction with carbon-fiber specific brake pads mandatory; all other materials prohibited. 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. A current list of NHRA-accepted fireproof brake line coverings is available on NHRA.com. Brake lines passing engine or blower drive must be shielded. Hand-brake handle must be constructed of minimum 5/16-inch-thick by 1-inch-wide aluminum. Lightening of hand-brake handle (i.e. holes, machining, etc.) prohibited. See General Regulations 3:1.

Page 7

FRAME: 4

PARACHUTE (December 6, 2010)

Dual parachutes mandatory. Two separate shroud line mounting points mandatory with sleeved 1/2-inch-minimum grade 8 steel bolts with self-locking nuts [or with nuts welded onto parachute brackets](#). Shroud line mounting brackets must be constructed of minimum 3/16-inch 4130 steel. An NHRA-accepted parachute tether(s) must be routed through each shroud line end loop and be attached using the rear end mounting bolts on each side. NHRA-accepted parachute tether(s): Amick Race Car Restraints part number PARA-101REV1. See REAR WINGS & SUPPORTS. See General Regulations 4:8.

SECTION 14 – TOP ALCOHOL FUNNY CAR

Page 14

BRAKES & SUSPENSION: 3

BRAKES (December 6, 2010)

Four-wheel disc brakes with dual master cylinder mandatory. Carbon-fiber brake rotors used in conjunction with carbon-fiber specific brake pads (front and rear) mandatory; all other materials prohibited. NHRA-accepted fireproof brake line covering mandatory on all (front and rear) flexible connection lines. A current list of NHRA-accepted fireproof brake line coverings is available on NHRA.com. Hand-brake handle must be constructed of minimum 5/16-inch-thick [by 1-inch-wide](#) aluminum. [Lightening of hand-brake handle \(i.e. holes, machining, etc.\) prohibited.](#)

Page 14

FRAME: 4

PARACHUTE (December 6, 2010)

Dual parachutes mandatory. Two separate shroud line mounting points mandatory with sleeved 1/2-inch-minimum grade 8 steel bolts with self-locking nuts [or with nuts welded onto parachute brackets](#). Shroud line mounting brackets must be constructed of minimum 3/16-inch 4130 steel. An NHRA-accepted parachute tether(s) must be routed through each shroud line end loop and be attached using the rear end mounting bolts on each side. NHRA-accepted parachute tether(s): Amick Race Car Restraints part number PARA-101REV1. The parachute floor must be flat and may not extend more than 6 inches rearward or beyond the parachute pack, whichever is less. The measurement will be taken from the mounting point on the rear of the body. The use of a wicker prohibited. See General Regulations 4:8.

SECTION 15 – PRO STOCK MOTORCYCLE

Page 4

BRAKES & SUSPENSION: 3

SUSPENSION (December 6, 2010)

Front suspension minimum size: 35mm for OEM-type, 34mm for accepted aftermarket items. Minimum travel: 1 1/2 inches with rider sitting on motorcycle in normal riding position. Steering dampener mandatory. [Electronics or pneumatics](#)

may in no way affect the front suspension. Any adjustment to front suspension during run prohibited. Rear suspension prohibited ~~permitted~~.

Page 4

FRAME: 4

GROUND CLEARANCE (December 6, 2010)

Minimum 2 inches with rider sitting on motorcycle with 64psi in rear tire.

Page 4

SEAT: 6

SEAT (December 6, 2010)

Custom seats with a step to prevent the rider from sliding backward permitted. Seat, tail section, and rear fender may be incorporated in one unit. Minimum seat height (with no rider in position and 64psi in rear tire) measured from lowest point of seating position to ground, 20 inches.

SECTION 16 – PRO STOCK

Page 4

BRAKES & SUSPENSION: 3

BRAKES (December 6, 2010)

Automated brakes prohibited; application and release of brakes must be a function of the driver. Four-wheel hydraulic disc brakes mandatory. Carbon-fiber brake rotors used in conjunction with carbon-fiber specific brake pads (front and rear) mandatory; all other materials prohibited ~~on-rear wheels~~. Brake lines must be out of flywheel and driveline area. Line-loc permitted on front wheels only, must be driver activated. Any other electrical, pneumatic, hydraulic, etc. switch prohibited in brake system. See General Regulations 3:1.

SECTION 17 – FUNNY CAR

Page 4

BRAKES & SUSPENSION: 3

BRAKES (December 6, 2010)

Automated and/or secondary braking systems prohibited: 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. Four-wheel hydraulic disc brakes with dual master cylinder mandatory. Carbon-fiber brake rotors used in conjunction with carbon-fiber specific brake pads (front and rear) mandatory; all other materials prohibited. Steel brake lines mandatory. NHRA-accepted fireproof brake-line covering mandatory on all (front and rear) flexible connection lines. A current list of NHRA-accepted fireproof brake line coverings is available on NHRA.com. Brake lines passing engine or blower drive must be shielded. Hand-brake handle must be constructed of minimum 5/16-inch-thick by 1-inch-wide aluminum. Lightening of hand-brake handle (i.e. holes, machining, etc.) prohibited. See General Regulations 3:14.

Page 5

FRAME: 4

PARACHUTE (December 6, 2010)

Dual parachutes mandatory. Two separate shroud line mounting points mandatory with sleeved 1/2-inch-minimum grade 8 steel bolts with self-locking nuts [or with nuts welded onto parachute brackets](#). Shroud line mounting brackets must be constructed of minimum 3/16-inch 4130 steel or titanium. Shroud lines must be covered with 1/16-inch-thick leather or NHRA-accepted material from mounting point into the pack. An NHRA-accepted parachute tether(s) must be routed through each shroud line end loop and be attached using the rear end mounting bolt(s) on each side. NHRA-accepted parachute tether(s): Amick Race Car Restraints part number PARA-101REV1. Two separate release cables mandatory. Parachute mounting box must be NHRA-accepted prior to competition. The parachute floor must be flat and may not extend more than 6 inches rearward or beyond the parachute pack, whichever is less. The measurement will be taken from the mounting point on the rear of the body. The use of a wicker prohibited. See General Regulations 4:8.

SECTION 18 – TOP FUEL

Page 4

BRAKES & SUSPENSION: 3

BRAKES (December 6, 2010)

Automated and/or secondary braking systems prohibited: 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. Dual spots or equivalent oval pucks mandatory; minimum two rear-wheel hydraulic disc brakes. Carbon-fiber brake rotors used in conjunction with carbon-fiber specific brake pads mandatory; all other materials prohibited. 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. A current list of NHRA-accepted fireproof brake line coverings is available on NHRA.com. Brake lines passing engine or blower drive must be shielded. Hand-brake handle must be constructed of minimum 5/16-inch-thick [by 1-inch-wide](#) aluminum. [Lightening of hand-brake handle \(i.e. holes, machining, etc.\) prohibited](#). See General Regulations 3:14.

Page 6

FRAME: 4

PARACHUTE (December 6, 2010)

Dual parachutes mandatory. Two separate shroud line mounting points mandatory with sleeved 1/2-inch-minimum grade 8 steel bolts with self-locking nuts [or with nuts welded onto parachute brackets](#). Shroud line mounting brackets must be constructed of minimum 3/16-inch 4130 steel or titanium. Shroud lines must be covered with 1/16-inch-thick leather or NHRA-accepted material from mounting point into the pack. An NHRA accepted parachute tether(s) must be routed through each shroud line end loop and be attached using the rear end mounting bolts on each side. NHRA-accepted parachute tether(s): Amick Race

Car Restraints part number PARA-101REV1. Two separate release cables mandatory. See WINGS & SUPPORTS. See General Regulations 4:8.

Page 8

BODY: 7

REAR WINGS & SUPPORTS (December 6, 2010)

5th paragraph

Beginning Jan. 1, 2012, front wing must meet SFI Spec 49.2. Front wing design must be NHRA-accepted prior to competition. Front-wing element(s) maximum width 63 inches total. Spill plates must be flat, vertical, and inner and outer surfaces must be parallel. Maximum thickness of spill plates 3/8-inch. Maximum 1/4-inch wicker permitted on trailing edge only. ~~Total width of front wing, including spill plates, maximum 66.5 inches. Maximum 1-inch offset from vehicle centerline.~~