



**2024 TO 2025 NHRA RULE AMENDMENTS**  
(THESE RULE AMENDMENTS COVER RULE CHANGES MADE TO THE LAST  
DIGITAL RELEASE OF THE 2024 NHRA RULEBOOK)

***2025 RULE CHANGES BECOME EFFECTIVE  
JANUARY 1, 2025***

INITIAL RELEASE: 11/22/2024

# TABLE OF CONTENTS

## NHRA RULE AMENDMENTS

**Note:**

Rulebook Additions are [Blue underline](#)

Deletions are ~~Red strikethrough~~

**Yellow highlights** indicate the most recent updates. If a section has been updated, the date of the revision is indicated in the section title.

|  |   |
|--|---|
| HAVE A TECH QUESTION (PAGE III) <b>(11/22/2024)</b> .....  | 4 |
| DIVISION FIELD OFFICES (PAGE IV) <b>(11/22/2024)</b> .....   | 5 |
| SECTION 4: JR. DRAG RACING LEAGUE, ENGINE: 1, ENGINE (PAGE 6)<br><b>(11/22/2024)</b> .....           | 7 |
| SECTION 5B: ADVANCED ET, DRIVER: 10, DRIVER RESTRAINT SYSTEM<br>(PAGE 12) <b>(11/22/2024)</b> .....  | 7 |
| SECTION 6: PRO MOD, ENGINE: 1, CYLINDER HEADS (PAGE 2)<br><b>(11/22/2024)</b> .....                  | 8 |
| SECTION 7A: TOP SPORTSMAN, DRIVER: 10, DRIVER RESTRAINT<br>SYSTEM (PAGE 6) <b>(11/22/2024)</b> ..... | 8 |
| SECTION 7B: TOP DRAGSTER, DRIVER: 10, DRIVER RESTRAINT SYSTEM<br>(PAGE 9) <b>(11/22/2024)</b> .....  | 8 |
| SECTION 11B: FACTORY STOCK SHOWDOWN, ENGINE: 1, <b>FUEL</b> (PAGE<br>17) <b>(11/22/2024)</b> .....   | 8 |
| SECTION 13K: FACTORY X, ENGINE: 1, FUEL (PAGE 48) <b>(11/22/2024)</b> .....                          | 8 |
| SECTION 14: TOP ALCOHOL DRAGSTER, ENGINE: 1, CLYINDER HEADS<br>(PAGE 1) <b>(11/22/2024)</b> .....    | 9 |

**SECTION 14: TOP ALCOHOL DRAGSTER, ENGINE: 1, ENGINE (PAGE 1) (11/22/2024) .....9**

**SECTION 14: TOP ALCOHOL DRAGSTER, DRIVETRAIN: 2, TRANSMISSION (PAGE 5) (11/22/2024) ..... 10**

**SECTION 14: TOP ALCOHOL DRAGSTER, BODY: 7, BODY (PAGE 9) (11/22/2024) ..... 11**

**SECTION 14: TOP ALCOHOL DRAGSTER, BODY: 7, CANOPY (PAGE 9) (11/22/2024) ..... 11**

**SECTION 14: TOP ALCOHOL DRAGSTER, DRIVER: 10, FRESH AIR SYSTEM (PAGE 9) (11/22/2024) ..... 12**

**SECTION 15: TOP ALCOHOL FUNNY CAR, ENGINE: 1, CLYINDER HEADS (PAGE 1) (11/22/2024) ..... 12**

**SECTION 15: TOP ALCOHOL FUNNY CAR, ENGINE: 1, ENGINE (PAGE 1) (11/22/2024) ..... 12**

**SECTION 15: TOP ALCOHOL FUNNY CAR, DRIVETRAIN: 2, TRANSMISSION (PAGE 5) (11/22/2024) ..... 13**

**SECTION 16: PRO STOCK MOTORCYCLE, DESIGNATION (PAGE 1) (11/22/2024) ..... 14**

**SECTION 16: PRO STOCK MOTORCYCLE, ENGINE: 1, FUEL (PAGE 2) (11/22/2024) ..... 15**

**SECTION 16: PRO STOCK, ENGINE: 1, FUEL (PAGE 2) (11/22/2024)..... 15**

**SECTION 18: FUNNY CAR, DRIVETRAIN: 2, CLUTCH, FLYWHEEL, FLYWHEEL SHIELD (PAGE 6) (11/22/2024) ..... 15**

**SECTION 19: TOP FUEL DRAGSTER, DRIVETRAIN: 2, CLUTCH, FLYWHEEL, FLYWHEEL SHIELD (PAGE 6) (11/22/2024)..... 16**

**SECTION 19: TOP FUEL DRAGSTER, BODY: 7, FRONT WINGS (PAGE 12) (11/22/2024) ..... 16**

**HAVE A TECH QUESTION (Page iii) (11/22/2024)**

**HAVE A TECH QUESTION?**

**The NHRA's staff of technical personnel is available at all Mission Foods and Lucas Oil Drag Racing Series events around the country. Additionally, the NHRA has resources in Indianapolis and all seven NHRA divisions to answer your questions about safety, rules, and compliance.**

**NHRA Divisional Technical Services Representatives**

**Division 1**

(Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, Virginia, and West Virginia; Maritime Provinces, Eastern Ontario, and Quebec, Canada)

**Contact**

Joe Lease, [Regional](#) Technical Specialist, [jlease@nhra.com](mailto:jlease@nhra.com), 626.253.3294  
Rick Dodge, [Regional](#) Technical Specialist, [rdodge@nhra.com](mailto:rdodge@nhra.com), 909.288.2244

**Division 2**

(Alabama, Florida, Georgia, Mississippi, North Carolina, South Carolina, Tennessee, and Virginia; Puerto Rico and the Caribbean)

**Contact**

Joe Lease, [Regional](#) Technical Specialist, [jlease@nhra.com](mailto:jlease@nhra.com), 626.253.3294  
[Rick Dodge, Regional Technical Specialist, rdodge@nhra.com, 909.288.2244](#)  
[Jake Petrusky, Technical Specialist, jpetrusky@nhra.com, 626.496.4098](#)

**Division 3**

(Illinois, Indiana, Kentucky, Michigan, Ohio, and Wisconsin; Western Ontario, Canada)

**Contact**

Joe Lease, [Regional](#) Technical Specialist, [jlease@nhra.com](mailto:jlease@nhra.com), 626.253.3294  
[Rick Dodge, Regional Technical Specialist, rdodge@nhra.com, 909.288.2244](#)

**Division 4**

(Arkansas, Louisiana, Mississippi, New Mexico, Oklahoma, Tennessee, and Texas; Mexico)

**Contact**

[Rob Silvy, Regional Technical Specialist, rsilvy@nhra.com, 816.795.6127](#)  
~~[Rick Dodge, Technical Specialist, rdodge@nhra.com, 909.288.2244](#)~~

**Division 5**

(Colorado, Illinois, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota, Wisconsin, and Wyoming; Manitoba, Canada)

**Contact**

Rob Silvy, [Regional](#) Technical Specialist, [rsilvy@nhra.com](mailto:rsilvy@nhra.com), 816.795.6127

**Division 6**

(Alaska, Idaho, Montana, Oregon, and Washington; Alberta, British Columbia, and Saskatchewan, Canada)

**Contact**

Russ Smith, Regional Technical Specialist,  
rsmith@nhra.com, 626.650.4483

**Division 7**

(Arizona, California, Colorado, Hawaii, Nevada, New Mexico, and Utah; Mexico)

**Contact**

Pat Cvengros, Regional Technical Specialist,  
pcvengros@nhra.com, 626.250.2295

**NHRA National Technical Services Representatives**

Call 844.468.7631

(Monday-Thursday, 8 a.m.- 8 p.m. ET; Friday, 8 a.m.- 3 p.m. ET)

or TechDL@NHRA.com

**DIVISION FIELD OFFICES (Page iv) (11/22/2024)**

**NORTHEAST DIVISION (1) OFFICE**

Mark Dawson, Division Director, [mdawson@nhra.com](mailto:mdawson@nhra.com), 717.584.1200;  
fax, 717.390.3052

**Steven Rhoads**, Division Services Coordinator, [srhoads@nhra.com](mailto:srhoads@nhra.com),  
626.250.2222

**Joe Lease**, Regional Technical Specialist, [jlease@nhra.com](mailto:jlease@nhra.com),  
626.253.3294

[Rick Dodge, Regional Technical Specialist, rdodge@nhra.com,](mailto:rdodge@nhra.com)  
909.288.2244

~~[Jake Petrusky, Technical Specialist, jpetrusky@nhra.com,](mailto:jpetrusky@nhra.com)~~  
~~626.496.4098~~

2420 Gehman Lane, Suite 200, Lancaster, PA 17602

Monday and Thursday, 8 a.m.-4 p.m. ET, Friday, 8 a.m.-noon ET

**Northeast Division:** Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, Virginia, and West Virginia; Maritime Provinces, Eastern Ontario, and Quebec, Canada

**SOUTHEAST DIVISION (2) OFFICE**

**Cody Savage**, Division Director, [csavage@nhra.com](mailto:csavage@nhra.com), 626.250.2249

**Dennis Thayer**, Division Services Coordinator, [dthayer@nhra.com](mailto:dthayer@nhra.com),  
909.901.9370

**Joe Lease**, Regional Technical Specialist, [jlease@nhra.com](mailto:jlease@nhra.com),  
626.253.3294

[Rick Dodge, Regional Technical Specialist, rdodge@nhra.com,](mailto:rdodge@nhra.com)  
909.288.2244

~~[Jake Petrusky, Technical Specialist, jpetrusky@nhra.com,](mailto:jpetrusky@nhra.com)~~  
~~626.496.4098~~

2470 Windy Hill Rd: Suite 434, Marietta, GA 30067;

626.250.2249

**Southeast Division:** Alabama, Florida, Georgia, Mississippi, North Carolina, South Carolina, Tennessee, and Virginia; Puerto Rico and the Caribbean

**NORTH CENTRAL DIVISION (3) OFFICE**

**William Tharpe**, Division Director, wtharpe@nhra.com, 317.406.7740

**Kista Fritts**, Division Services Coordinator, kfritts@nhra.com, 626-437-8755

**Joe Lease**, **Regional** Technical Specialist, jlease@nhra.com, 626.253.3294

**Rick Dodge**, **Regional Technical Specialist**, rdodge@nhra.com, 909.288.2244

**Jake Petrusky**, **Technical Specialist**, jpetrusky@nhra.com

**Deanna Williamson**, Division Administrative Assistant  
dwilliamson@nhra.com, 317-992-1651

PO Box 34300, Indianapolis, IN 46234; 317.969.8890; fax, 317.291.4220

Monday-Thursday, 9 a.m.-5 p.m. ET, Friday, 9 a.m.-12 p.m. ET

**North Central Division:** Illinois, Indiana, Kentucky, Michigan, Ohio, and Wisconsin; Western Ontario, Canada

**SOUTH CENTRAL DIVISION (4) OFFICE**

**Jonathan Johnson**, Division Director, jjohnson@nhra.com @nhra.com, 626.505.4339; fax, 469.248.0024

**Rob Silvy**, **Division Services Coordinator/Regional Technical Specialist**, rsilvy@nhra.com, 816.795.6127

1121 Dallas Drive Suite 2, Denton, TX 76205

Monday-Thursday, 9 a.m.-5 p.m. CT, Friday, 9 a.m.-noon CT

**South Central Division:** Arkansas, Louisiana, Mississippi, New Mexico, Oklahoma, Tennessee, and Texas; Mexico

**WEST CENTRAL DIVISION (5) OFFICE**

**Nick Duty**, Division Director, nduty@nhra.com, 816.795.8055; fax, 816.795.0515

**Rob Silvy**, Division Services Coordinator/Regional Technical Specialist, rsilvy@nhra.com, 816.795.6127

3720 Arrowhead Ave., Suite 103, Independence, MO 64057

Monday-Thursday, 9 a.m.-5 p.m. CT, Friday, 9 a.m.-noon CT

**West Central Division:** Colorado, Illinois, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota, Wisconsin, and Wyoming; Manitoba, Canada

**NORTHWEST DIVISION (6) OFFICE**

**Mike Eames**, Division Director, meames@nhra.com, 253.446.6594; fax, 253.446.6683

**Russ Smith**, Regional Technical Specialist, rsmith@nhra.com, 626.650.4483 140 Via Verde, Suite 100, San Dimas, CA 91773

Monday-Friday, 9 a.m.-5 p.m. PT

**Northwest Division:** Alaska, Idaho, Montana, Oregon, and Washington; Alberta, British Columbia, and Saskatchewan, Canada

**PACIFIC DIVISION (7) OFFICE**

**Matt DeYoung**, Division Director, mdeyoung@nhra.com,  
626.914.4761, ext. 498  
**Pat Cvengros**, Regional Technical Specialist, pcvengros@nhra.com,  
626.250.2295  
140 Via Verde, Suite 100, San Dimas, CA 91773  
Monday-Thursday, 8 a.m.-5 p.m. PT, Friday, 8 a.m.-noon PT  
**Pacific Division:** Arizona, California, Colorado, Hawaii, Nevada, New  
Mexico, and Utah; Mexico

**SECTION 4: JR. DRAG RACING LEAGUE, ENGINE: 1, ENGINE (Page 6)**  
**(11/22/2024)**

Novice, Intermediate, Advance, and Master classes restricted to a maximum of one rear-mounted — based on a five horsepower, single-cylinder, single-spark-plug, flathead-configured, four cycle engine or any OHV engine 212CC or smaller single cylinder— engine from a recognized OEM or NHRA-accepted aftermarket supplier. Must be NHRA accepted. NHRA accepted aftermarket block permitted. Must retain original five- horsepower engine block configuration. Porting, polishing, and relieving of block; boring of cylinder; machining of deck surface permitted. Aftermarket head permitted. Adding material to deck surface, installing a spacer between the block and cylinder head, or any other modification designed to increase the effective deck height of the cylinder prohibited.

JR ROADSTER: maximum engine height measured from the ground to top of cylinder head not to exceed 36"

Accepted aftermarket engines for Novice, Intermediate, Advanced and Master classes: Metro Racing flathead, McGee Racing flathead, Tecumseh flathead, LPW Racing Products monster racing block, JR Race Car flathead, Pure Power Racing flathead, M-1 Machine racing block, SR71 Racing Block by Soltz Racing, [Huddelston Performance Billet Magnum OHV engine](#), Huddleston Performance Sniper, R&S Machine Terminator, TRS block, , Kondor Technologies TAZ-351 and any OHV engine 212CC or smaller single cylinder or an electric powered motor meeting the rules found in the Electric-Powered Jr. Dragster section of this rulebook. All accepted aftermarket flathead engines must not exceed 10 11/16 inches from base to deck. Any measurement that exceeds that limit is prohibited. See Trainee and Youth Class Designations for their engine requirements.

**SECTION 5B: ADVANCED ET, DRIVER: 10, DRIVER RESTRAINT SYSTEM**  
**(Page 12) (11/22/2024)**

~~Driver restraint system meeting SFI Spec 16.1 mandatory.~~ [Beginning January 1, 2026, a minimum six-point driver restraint system meeting SFI Spec 16.1 or seven-point driver restraint system meeting SFI Spec 16.5 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.

**SECTION 6: PRO MOD, ENGINE: 1, CYLINDER HEADS (Page 2) (11/22/2024)**

Hemi, canted-valve, or wedge heads permitted. Billet heads permitted. Maximum one spark plug per cylinder. Maximum two valves per cylinder. Intake valve sizes 2.401" to 2.520" and/or exhaust valve sizes 1.901" to 2.050" add 25 lbs. Intake valve sizes greater than 2.521" and/or exhaust valve sizes greater than 2.051" add 40 lbs. ~~Turbocharged intake valve sizes 2.450 to 2.521 add 25 lbs. Valve sizes greater than 2.521 add 40 lbs.~~

**SECTION 7A: TOP SPORTSMAN, DRIVER: 10, DRIVER RESTRAINT SYSTEM (Page 6) (11/22/2024)**

~~Driver restraint system meeting SFI Spec. 16.1 or 16.5 mandatory. Beginning July 1, 2025, a minimum six-point driver restraint system meeting SFI Spec 16.1 or seven-point driver restraint system meeting SFI Spec 16.5 mandatory.~~

Restraint system must be updated at two-year intervals from date of manufacture.

**SECTION 7B: TOP DRAGSTER, DRIVER: 10, DRIVER RESTRAINT SYSTEM (Page 9) (11/22/2024)**

~~Driver restraint system meeting SFI Spec. 16.1 or 16.5 mandatory. Beginning July 1, 2025, a minimum six-point driver restraint system meeting SFI Spec 16.1 or seven-point driver restraint system meeting SFI Spec 16.5 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.

**SECTION 11B: FACTORY STOCK SHOWDOWN, ENGINE: 1, FUEL (Page 17) (11/22/2024)**

NHRA-specified VP racing gasoline only. Dielectric Constant, as per NHRA DC meter, must match reading from baseline of specified gasoline. The use of additives is prohibited. See General Regulations 1:6.

**SECTION 13K: FACTORY X, ENGINE: 1, FUEL (Page 48) (11/22/2024)**

NHRA-specified VP racing gasoline only. Dielectric Constant, as per NHRA DC meter, must match reading from baseline of specified gasoline. The use of additives is prohibited. See General Regulations 1:6.



## **SECTION 14: TOP ALCOHOL DRAGSTER, ENGINE: 1, CLYINDER HEADS (Page 1) (11/22/2024)**

Aftermarket billet heads permitted. Maximum two valves per cylinder; maximum two spark plugs per cylinder. [See NHRA allowed cylinder head specification chart on NHRAracer.com.](#)

## **SECTION 14: TOP ALCOHOL DRAGSTER, ENGINE: 1, ENGINE (Page 1) (11/22/2024)**

Any internal-combustion reciprocating, single-camshaft, automotive-type engine permitted. [Hemi/Chevrolet M](#)maximum bore center spacing 4.840 inches. [Ford Boss maximum bore space 4.900 inches](#). Dry-sump oil system permitted. OEM production line overhead cam engines permitted. Engine must be equipped with a lower-engine-ballistic/restraint device meeting SFI Spec 7.1. The lower-engine-ballistic/restraint device must be specific for the oil pan and pump configuration being used and must fit according to the requirements of SFI Spec 7.1 and be used as appropriately designed for the specific application. A positive method (flange, lip, etc.) must be attached to the intake manifold or engine block to retain both the front and rear manifold to block gaskets in the event the engine crankcase/lifter valley becomes over-pressurized. The flange/lip must extend past the surface of the gasket and be contoured to closely fit the block and manifold surfaces to prevent the gasket(s) from extruding. All large (valve covers, intake manifolds, superchargers, headers, heads, blocks, etc.) and all moving engine components are restricted to aluminum, steel, iron, titanium, magnesium, or other conventional alloys; carbon fiber, Kevlar, ceramics, composites, beryllium, or other extraordinary materials prohibited. Metal, fiberglass, or carbon fiber injector hats and/or injector scoops are permitted.

Any modifications or alterations to engine blocks, cylinder heads, and engine components are deemed to be a change in design and therefore prohibited. This includes any redesign, reconfiguration, and/or modification to existing components. Refer any development, redesign, reconfiguration, and/or modification questions to the NHRA Technical Department to determine whether permitted or prohibited.

1. All permitted engine combinations must adhere to the following criteria:
2. Maintain interchangeability of existing parts (i.e., cranks, cams, manifolds, valve covers, rocker assemblies, etc.)
3. Maintain general combustion-chamber configuration (e.g., Hemi, canted valve). Fuel injection directly into cylinder prohibited
4. Maintain original cylinder orientation in reference to centerline of crankshaft
5. Retain cylinder head, timing cover, intake manifold, exhaust manifold, valve-cover bolt pattern; additional bolts/studs/ dowels may be used
6. Retain as cast/forged minimum block wall and web/rib thickness

A current list of alcohol head specifications can be found on NHRARacer.com.

## **SECTION 14: TOP ALCOHOL DRAGSTER, DRIVETRAIN: 2, TRANSMISSION (Page 5) (11/22/2024)**

Transmission prohibited in non-supercharged, nitromethane burning class. ~~OEM or OEM-modified transmissions prohibited in all classes.~~ Aftermarket planetary or automatic transmission permitted in supercharged classes, limited to two units (three speeds). Lockup converters prohibited. Overdrive transmission prohibited. Final drive ratio must be 1:1. Clutch hold-down device recommended on all cars. Reverser mandatory. Automated shifters and/or timer-type shifting devices prohibited; each individual shift must be a function of the driver. Air shifter bottles must be stamped as meeting DOT-1800 pound rating and permanently mounted (hose clamps or tie wraps prohibited).

For the supercharged-methanol combinations only, the use of a transmission consisting of an aftermarket torque converter and an aftermarket planetary transmission or automatic transmission (three-speed maximum) with an electric-only transbrake is permitted. The unit must be NHRA-accepted. Contact NHRA Technical Services for accepted list. Lockup converters are prohibited. Friction material of any kind inside the torque converter is prohibited. All torque converters must be bolted together with grade 8 bolts and must be able to be disassembled for inspection.

~~Manipulation of transmission or converter pressure or volume other than at the starting line is prohibited. Pressure manipulation control must be disarmed upon the release of the transbrake or any other device used when launching the vehicle.~~

All pressure manipulation devices must be external. Internal pressure manipulation devices prohibited. All pressure manipulation (electronic or hydraulic) must end upon the release of the transbrake or any other device used when launching the vehicle. If pressure manipulation devices is electrical it must be wired directly to the transbrake and cannot be connected to the ECU. Pressure regulating devices are permitted but must be at a fixed pressure from engine start up to engine shut off. Converter pressure and line pressure must be recorded each pass and visible in the data logger. See NHRA Accepted Products on NHRA Racer for transbrake button wiring diagrams. See General Regulations 2:12, 2:13, 2:14.

The use of a delay box/device is prohibited. Automated control of the converter or transmission from acquired or recorded data is strictly prohibited. All wires and lines going to and from the transmission or converter must be clearly identified and labeled for tech inspection purposes. An aftermarket SFI 29.1 flexplate (with no starter ring gear) or a solid-steel converter driveplate, an SFI 6.1, 6.2, or 6.3 flywheel shield, and an aftermarket SFI 4.1 one-piece transmission shield

(covering the transmission units and the reverser) are required. Automatic transmissions must utilize a SFI 4.1 case. Iterative transmission staging devices prohibited.

**SECTION 14: TOP ALCOHOL DRAGSTER, BODY: 7, BODY (Page 9)  
(11/22/2024)**

Body and cowl must be metal, carbon fiber, or fiberglass. Driver compartment, frame structure, roll bars, and body must be designed to prevent driver's body or limbs from contact with track surface. Subflooring, inside but independent of body, mandatory where driver's legs rest on belly pan or chassis. Front overhang not to exceed 30 inches, measured from centerline of front spindle to forwardmost point of car.

~~Enclosed driver's compartment (canopy) prohibited.~~ Ground effects of any description prohibited. Ground effects include but are not limited to rocker skirts, belly pans, sheet metal work under the body that produces a "tunnel" for the passage of air, etc. Air deflector plates located behind cockpit restricted to maximum 17 inches by 17 inches. Leading edges, fairing in or rounding off corners, etc. prohibited. Maximum 1.25-inch lip for stiffening permitted. Deflector plate may be located in front of or behind exhaust headers.

**SECTION 14: TOP ALCOHOL DRAGSTER, BODY: 7, CANOPY (Page 9)  
(11/22/2024)**

Permitted. When utilizing ACG12A132 canopy, only ACG12A133 Top Fuel Canopy Mechanical/Mounting Kit permitted. When utilizing ACG20A1119 canopy, only the John Force American Made Mechanical/Mounting Kit permitted. Canopy must be installed per manufacturer's instructions.

Any car with a canopy must have an NHRA-accepted 5-pound fire extinguishing system meeting SFI Spec 17.1. Must be installed per manufacturer's specifications with all gauges clearly visible. Fire-bottle activation cables must be installed inside framerail where cables pass engine/ bellhousing area. Fire-bottle mounting brackets must be constructed of aluminum or steel. Carbon-fiber bottles prohibited. See General Regulations 9:3. Punch-out fire window score lines may not be covered by vinyl covering. Punch-out panels must be wellmarked and visible at night.

**SECTION 14: TOP ALCOHOL DRAGSTER, DRIVER: 10, FRESH AIR SYSTEM (Page 9) (11/22/2024)**

Cars with Canopies require a fresh air breathing system of at least 3000PSI, 112 cubic inch capacity required. System must be manufactured and installed by the original helmet manufacturer or with written authorization of the original helmet manufacturer. Helmet must meet applicable FIA, SFI and/or Snell specs with fresh air system installed. Compressed air only. Air must be supplied by constant pressure. Bottle must meet and be engraved as meeting, DOT-1800 pound minimum Spec. Bottle must be securely mounted (hose clamps and/or tie wraps prohibited). See General Regulations 9:8.

**SECTION 15: TOP ALCOHOL FUNNY CAR, ENGINE: 1, CLYINDER HEADS (Page 1) (11/22/2024)**

Aftermarket billet heads permitted. Maximum two valves per cylinder; maximum two spark plugs per cylinder. See NHRA allowed cylinder head specification chart on NHRAracer.com.

**SECTION 15: TOP ALCOHOL FUNNY CAR, ENGINE: 1, ENGINE (Page 1) (11/22/2024)**

~~Maximum 528-cid for Screw-type supercharger-equipped cars. Maximum 565-cid for Roots-type supercharger-equipped cars. Maximum 456 cid for non-supercharged, nitromethane cars.~~ Any internal-combustion reciprocating, single-camshaft, automotive-type engine permitted. Hemi/Chevrolet Mm maximum bore center spacing 4.840 inches. Ford Boss maximum bore space 4.900 inches. Dry-sump oil system permitted. OEM production line overhead cam engines permitted. Engine must be equipped with a lower-engine-ballistic/restraint device meeting SFI Spec 7.1. The lower-engine-ballistic/restraint device must be specific for the oil pan and pump configuration being used and must fit according to the requirements of SFI Spec 7.1 and be used as appropriately designed for the specific application. A positive method (flange, lip, etc.) must be attached to the intake manifold or engine block to retain both the front and rear manifold to block gaskets in the event the engine crankcase/lifter valley becomes over-pressurized. The flange/lip must extend past the surface of the gasket and be contoured to closely fit the block and manifold surfaces to prevent the gasket(s) from extruding. All large (valve covers, intake manifolds, superchargers, headers, heads, blocks, etc.) and all moving engine components are restricted to aluminum, steel, iron, titanium, magnesium, or other conventional alloys; carbon fiber, Kevlar, ceramics, composites, beryllium, or other extraordinary materials prohibited. Metal, fiberglass, or carbon fiber injector hats and/or injector scoops are permitted.

Any modifications or alterations to engine blocks, cylinder heads, and engine components are deemed to be a change in design and therefore prohibited. This includes any redesign, reconfiguration, and/or

modification to existing components. Refer any development, redesign, reconfiguration, and/or modification questions to the NHRA Technical Department to determine whether permitted or prohibited.

1. All permitted engine combinations must adhere to the following criteria:
2. Maintain interchangeability of existing parts (i.e., cranks, cams, manifolds, valve covers, rocker assemblies, etc.)
3. Maintain general combustion-chamber configuration (e.g., Hemi, canted valve). Fuel injection directly into cylinder prohibited
4. Maintain original cylinder orientation in reference to centerline of crankshaft
5. Retain cylinder head, timing cover, intake manifold, exhaust manifold, valve-cover bolt pattern; additional bolts/studs/ dowels may be used
6. Retain as cast/forged minimum block wall and web/rib thickness

A current list of alcohol head specifications can be found on NHRARacer.com.

## **SECTION 15: TOP ALCOHOL FUNNY CAR, DRIVETRAIN: 2, TRANSMISSION (Page 5) (11/22/2024)**

Transmission prohibited in non-supercharged, nitromethane burning class. ~~OEM or OEM-modified transmissions prohibited in all classes.~~ Aftermarket planetary or automatic transmission permitted in supercharged classes, limited to two units (three speeds). Lockup converters prohibited. Overdrive transmission prohibited. Final drive ratio must be 1:1. Clutch hold-down device recommended on all cars. Reverser mandatory. Automated shifters and/or timer-type shifting devices prohibited; each individual shift must be a function of the driver. Air shifter bottles must be stamped as meeting DOT-1800 pound rating and permanently mounted (hose clamps or tie wraps prohibited).

For the supercharged-methanol combinations only, the use of a transmission consisting of an aftermarket torque converter and an aftermarket planetary transmission or automatic transmission (three-speed maximum) with an electric-only transbrake is permitted. The unit must be NHRA-accepted. Contact NHRA Technical Services for accepted list. Lockup converters are prohibited. Friction material of any kind inside the torque converter is prohibited. All torque converters must be bolted together with grade 8 bolts and must be able to be disassembled for inspection.

~~Manipulation of transmission or converter pressure or volume other than at the starting line is prohibited. Pressure manipulation control must be disarmed upon the release of the transbrake or any other device used when launching the vehicle.~~

All pressure manipulation devices must be external. Internal pressure manipulation devices prohibited. All pressure manipulation (electronic or

hydraulic) must end upon the release of the transbrake or any other device used when launching the vehicle. If pressure manipulation devices is electrical it must be wired directly to the transbrake and cannot be connected to the ECU. Pressure regulating devices are permitted but must be at a fixed pressure from engine start up to engine shut off. Converter pressure and line pressure must be recorded each pass and visible in the data logger. See NHRA Accepted Products on NHRA Racer for transbrake button wiring diagrams. See General Regulations 2:12, 2:13, 2:14.

The use of a delay box/device is prohibited. Automated control of the converter or transmission from acquired or recorded data is strictly prohibited. All wires and lines going to and from the transmission or converter must be clearly identified and labeled for tech inspection purposes. An aftermarket SFI 29.1 flexplate (with no starter ring gear) or a solid-steel converter driveplate, an SFI 6.1, 6.2, or 6.3 flywheel shield, and an aftermarket SFI 4.1 one-piece transmission shield (covering the transmission units and the reverser) are required. Automatic transmissions must utilize a SFI 4.1 case. Iterative transmission staging devices prohibited.

## **SECTION 16: PRO STOCK MOTORCYCLE, DESIGNATION (Page 1)** **(11/22/2024)**

PRO, preceded by motorcycle number.

Reserved for 1998 or later production stock-appearing, gas- burning, naturally aspirated motorcycles. Minimum weight at conclusion of run, including rider:

S and S (must be NHRA-accepted)

Gen 1 (up to 160 cid; 60-degree angle, 2-valve, pushrod) – 625 pounds

Gen 2 (up to 160 cid; 60-degree angle, 2-valve, pushrod) – 640 pounds

VTwin: VH160VT

(up to 160 cid; 60-degree angle, 2-valve, pushrod) – 625 pounds

Kawasaki (must be NHRA-accepted)

(up to 107 cid, 2- or 4-valve) – 575 pounds

Suzuki (must be NHRA-accepted) (up to 107 cid, 2-valve) –

~~580~~ 560 pounds (up to 107 cid, 4-valve) – 610 pounds

Suzuki (must be NHRA-accepted) (up to 113 cid, 2-valve) – 570 pounds

(up to 113 cid, 4-valve V&H head) – 660 pounds

(up to 113 cid, 4-valve Monster head) – 625 pounds

NHRA reserves the right to adjust weights as performance dictates.

Once an engine is used in a motorcycle at an event, that engine cannot be used in another motorcycle for the duration of the event. Engine shall consist of engine cases, crankshaft, block, and cylinder heads. Cases and heads will be serialized or otherwise identified at each event.

Serial number or identification mark on cases must be visible with body removed.

Any competitor who causes an oildown while participating at an NHRA Mission Foods event will be subject to fines and penalties as outlined in Section 2 - Oildown Penalties.

Electronic fuel injection permitted. **Beginning April 26th, 2024** EFI entries must have an NHRA-accepted ECU, software, and firmware. Only one fuel injector allowed per each cylinder. All inputs/outputs, sensors, transducers, and wiring related to the fuel-injection system and ignition system must be NHRA-accepted and used in an unaltered manner. Contact the NHRA Technical Department for an approved list of sensors, inputs/outputs, and wiring. A current list of NHRA-accepted electronic-fuel-injection systems, firmware, and additional system clarification is available on NHRARacer.com.

**SECTION 16: PRO STOCK MOTORCYCLE, ENGINE: 1, FUEL (Page 2) (11/22/2024)**

NHRA-specified **Sunoco VP** racing gasoline only. Dielectric Constant, as per NHRA DC meter, must match reading from baseline of specified gasoline. The use of additives is prohibited. See General Regulations 1:6.

**SECTION 16: PRO STOCK, ENGINE: 1, FUEL (Page 2) (11/22/2024)**

NHRA-specified **Sunoco VP** racing gasoline only. Dielectric Constant, as per NHRA DC meter, must match reading from baseline of specified gasoline. The use of additives is prohibited. See General Regulations 1:6.

**SECTION 18: FUNNY CAR, DRIVETRAIN: 2, CLUTCH, FLYWHEEL, FLYWHEEL SHIELD (Page 6) (11/22/2024)**

Flywheel and clutch meeting SFI Spec 1.3 and flywheel shield meeting SFI Spec 6.2 mandatory. Maximum depth of flywheel shield: 9.4 inches (inside). **Flywheel shield spacer between the motor plate and flywheel shield is permitted. Maximum spacer thickness: .250". Spacer must be made of steel or titanium.** Maximum six clutch discs permitted. Aluminum flywheels prohibited. Clutch exhaust filter mandatory. Refer to General Regulations 2:3, 2:5, 2:6, 2:7 and SFI Spec 10.5 for complete motor plate and bellhousing guidelines.

**SECTION 19: TOP FUEL DRAGSTER, DRIVETRAIN: 2, CLUTCH, FLYWHEEL, FLYWHEEL SHIELD (Page 6) (11/22/2024)**

Flywheel and clutch meeting SFI Spec 1.3 and flywheel shield meeting SFI Spec 6.2 mandatory. Flywheel shield spacer between the motor plate and flywheel shield is permitted. Maximum spacer thickness: .250". Spacer must be made of steel or titanium. Maximum depth of flywheel shield: 9.4 inches (inside). Maximum six clutch discs permitted. The use of aluminum flywheels is prohibited. Clutch exhaust filter mandatory. Refer to General Regulations 2:3, 2:5, 2:6, 2:7, and SFI Spec 2.3 for complete motor plate and bellhousing guidelines.

**SECTION 19: TOP FUEL DRAGSTER, BODY: 7, FRONT WINGS (Page 12) (11/22/2024)**

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 including trailing edge of wicker 0.550-inch. Wicker permitted on trailing edge only. Lower edge of spill plates may not be more than 5.00" from the ground.