

Asphalt Racing Rules - NSDRA

Pro Stock Snowmobile Asphalt Drag Racing

NHRA 2008 Rules (2008 updates are in red for identification purposes)

NOTE: A rider cannot compete in both categories. NHRA will run the Super Stock Class first and immediately following will be Pro Stock.

PRO STOCK SNOWMOBILE

DESIGNATION

PRO, preceded by the sled number

Please remember in reading these rules - if it does not say you can do it, you cannot. **All parts or components must be commercially available.**

All snowmobiles must begin as a stock qualified production snowmobile and retain OEM stock appearing profile. Snowmobile has to be of body style 1998 or newer. Any motor/chassis may be interchanged within brand. All components that are allowable for modification must retain structural and mechanical integrity. Minimum weight at conclusion of run: 650 lbs including rider and gear. Any ballast needed will be bolted to the machine.

REQUIREMENTS & SPECIFICATIONS

ENGINE: 1

ENGINE

Any OEM snowmobile crankcase within brand is permitted. A two (2)-stroke engine has a limit of 1000cc and is limited to three (3) cylinders. Any commercially available aftermarket cylinder and cylinder head is allowed. Any bore/stroke is permitted, 2% tolerance for maximum cc size. All internal engine components may be changed and/or modified with like material. (If stock part was aluminum, then aluminum must be used as replacement. If stock part was steel, then steel must be used as replacement.) Crankcase may be modified to change or relocate reeds. All reeds must be commercially available. Reed cage change must be accomplished without sacrificing the mechanical integrity of the crankcase. To modify the outside of any stock or aftermarket cylinder is allowed as long as the structural and mechanical integrity is intact. Dual spark plugs permitted as long as the stock appearance of the sled is not compromised. Nitrous oxide, super charging, turbo charging or fuel injection is NOT permitted. A maximum of one (1) venturi per cylinder will be allowed. Any commercially available aftermarket carburetor is permitted. Fuel pump may be modified and/or changed from original. If an electric pump is used, it must have its own separate shutoff. Airbox may be removed, modified or built.

EXHAUST

Any functionally silenced exhaust modification or replacement is allowed. (silencers are optional)
Exhaust must exit from the side of the machine and not the bottom.

FUEL

NSDRA-specified Torco Racing gasoline only. Dielectric Constant, as per NHRA and or NSDRA DC meter, must match baseline reading of specified gasoline. The use of additives prohibited. NSDRA will also specify the oil to be used.

DRIVETRAIN: 2

CLUTCH

Any commercially available clutch and drive belt are allowed. Clutches must be covered down to the center of the clutch bolt using 0.125" aluminum. If 0.09" aluminum is used for clutch cover, six-inch (6") wide industrial-type rubber belting must be secured to the inside of cover. Six-inch (6") wide industrial-type rubber belting over the perimeters of cover is also recommended.

TRACK

Camoplast challenger asphalt tracks are the only tracks permitted for competition. Any track at or below wear bar marks will not be permitted. Tracks must be installed with direction arrows correct. No traction type compounds may be applied to tracks.

SKIS AND WHEELS

Any aftermarket ski is allowed. Structural integrity must be maintained. The minimum length is fifteen (15) inches and the maximum length is twenty-one (21) inches. Both skies must be identical and not staggered on the snowmobile. Ski distance (center to center of the wheels) is to be a minimum of forty (40) inches and a maximum of forty-five (45) inches. The area under the snowmobile, measured from behind one ski to the other ski, must be a minimum of two (2) inches above the ground and a minimum of two (2) inches wide behind the ski. Ski loops may be taped or filled with plate.

BRAKES AND SUSPENSION: 3

BRAKES

Lower drive shaft brake permitted. Structural integrity of tunnel and brake system must be maintained. Integral chaincase to bulkhead allowed providing brake assembly is relocated to the driveshaft. Drive shaft brake system is strongly recommended for 2009 season.

REAR SUSPENSION

Any aftermarket or OEM track suspension is permitted. If modifications to OEM or any commercially available aftermarket suspensions are made, structural integrity must be maintained.

FRONT SUSPENSION

If any modifications to suspension are made structural integrity must be maintained. Front suspension and shocks must be in a position that maintains stock appearance and factory type body parts of type snowmobile are attached so that stock appearance of type snowmobile is maintained.

Spindles may be strengthened or replaced with a stronger spindle. The minimum wall thickness is 0.12 inch and the minimum outside diameter is 0.75 inch. An inspection hole is required if the wall thickness is not visible.

CHASSIS: 4

CHASSIS

Commercially available aftermarket frames permitted, design and integrity are subject to tech inspection. All frame components except braces, brackets, and gussets must be manufactured from 4130 chromoly tubing and plate or 6061-T6 aluminum plate. Stock OEM bulkhead allowed and reinforcement allowed.

All welding must be done by approved heliarc process.

All components must maintain structural integrity.

Stock tunnels must be used with any commercially available aftermarket front end. Motor mounts and jack shaft may be changed from original location. Any engine location is allowed as long as stock snowmobile profile is not compromised. Any chain case modification allowed. Integral chaincase to bulkhead allowed providing brake assembly is relocated to the driveshaft. Snow flap must be within 2" of contact with racing surface when the rider is sitting on the machine.

FUEL TANK

The fuel tank may be modified to accommodate a fuel cell. The OEM style outside shell must remain intact. A fuel cell cap may replace the original fuel cap.

FOOT STOPS

Running board foot stops are permitted, but may not be wider than the running board at the position they are installed. They may not extend higher than the top of the tunnel at the point of installation.

CONTROLS

Handlebars, handlebar grips and controls may be modified. Controls must maintain stock configuration. No twist type throttles or rotating throttle from stock position.

AIR DAMS

Front air dams are permitted. If air dam is mounted perpendicular to the skis, it must maintain a minimum of one-inch (1") ground clearance. If air dam is mounted in front of or behind the skis, it must maintain a minimum of two inches (2") ground clearance from ski to ski. The area under the snowmobile, measured from behind one ski to the other ski, must be a minimum of two (2) inches above the ground and a minimum of two (2) inches wide behind the ski. Air dam is not permitted to extend past the front OEM bumper or three (3) inches past belly pan, whichever distance is greater.

BODY WORK

No additional bodywork that changes stock appearance allowed (other than suspension side skirt and/or air dam.) Aerodynamic devices prohibited unless originally incorporated into same OEM of that brand. Openings for component accessibility will be allowed. The hood and belly pan may be removable as long as the OEM appearance for the said model is maintained and structural integrity is intact. **One piece after market body panels are permitted but they must retain OEM dimensions.**

SEAT

May be cut down for lower profile, but needs to resemble stock configuration. No seat pads allowed. Rider must sit in upright position.

ELECTRICAL: 8

IGNITION

Any snowmobile OEM ignition, and MSD # 00-00-2530 (designed for snowmobiles) or MSD **7530T / 75301**. The MSD **7530T / 75301** must have the three (3) retard wires (pink, tan and violet) and the points wire (white) clearly disconnected. No additional electronics/devices to aid in down-track RPM limiting will be permitted. Subject to random technical inspection and must be able to access if not completely visible within a time period of one (1) minute.

IGNITION SHUTOFF

Must be equipped with a positive ignition-cutoff switch attached to the rider with a lanyard. Machine must also have handlebar mounted ignition-cutoff switch.

TAILLIGHT

A functional taillight is mandatory for night operations

SUPPORT GROUP: 9

DATA RECORDERS

Permitted for information gathering only. Throttle operation, clutch engagement, etc. are to be solely under the control of the rider. Traction control devices not permitted.

WARM UP STANDS

Must be used when warming up the engine. Lanyard cord (tether cord) must be attached to someone anytime engine is running.

RIDER: 10

CREDENTIALS

A valid NHRA competition license is mandatory.

HELMET

Full-faced helmet meeting Snell K98, M2000, M2005, K2005, SA2000, SA2005, SFI 41.2A, or SFI 31.2A.

PROTECTIVE CLOTHING

Full all-leathers, boots above the ankle and leather gloves are mandatory. Suits may be one-piece design or joined by a zipper at the waist.

SAFETY

All general safety requirements apply as specified in NHRA rule book.

SUPER STOCK

DESIGNATION

SUPER STOCK, preceded by the sled number

Please remember in reading these rules - if it does not say you can do it, you cannot.

All snowmobiles must begin as a stock qualified production snowmobile and retain OEM stock appearing profile. Snowmobile has to be of body style 1993 or newer. Any motor/chassis may be interchanged within brand. All components that are allowable for modification must retain structural and mechanical integrity. Minimum weight at conclusion of run: 675 lbs including rider and gear for triple (3) cylinder and four (4) cylinder engine or 600 lbs if a two (2) cylinder engine is used. Any ballast needed will be bolted to the machine. Minimum weight must be clearly marked on the windshield.

REQUIREMENTS & SPECIFICATIONS

ENGINE: 1

ENGINE

Any OEM snowmobile crankcase within brand is permitted. A two (2)-stroke engine has a limit of 800cc. Stock cylinders must be used and any commercially available cylinder head is allowed. Any bore/stroke is permitted, 2% tolerance for maximum cc size. All internal engine components may be changed and/or modified with like material. (If stock part was aluminum, then aluminum must be used as replacement. If stock part was steel, then steel must be used as replacement.) Crankcase may **not** be modified to change or relocate reeds. All reeds must be commercially available. To modify the outside of any stock cylinder is allowed as long as the structural and mechanical integrity is intact. Nitrous oxide, super charging, turbo charging or fuel injection is **not** permitted. A maximum of one (1) venturi per cylinder will be allowed. Any commercially available aftermarket carburetor is permitted. Fuel pump may be modified and/or changed from original. If an electric pump is used, it must have its own separate shutoff. Airbox may be removed, modified or built.

EXHAUST

Any functionally silenced exhaust modification or replacement is allowed. (silencers are optional) Exhaust must exit from the side of the machine and not the bottom.

FUEL

NSDRA-specified Torco Racing gasoline only. Dielectric Constant, as per NHRA and or NSDRA DC meter, must match baseline reading of specified gasoline. The use of additives prohibited. NSDRA will also specify the oil to be used.

DRIVETRAIN: 2

CLUTCH

Any commercially available clutch and drive belt are allowed. Clutches must be covered down to the center of the clutch bolt using 0.125" aluminum. If 0.09" aluminum is used for clutch cover, six-inch (6") wide industrial-type rubber belting must be secured to the inside of cover. Six-inch (6") wide industrial-type rubber belting over the perimeters of cover is also recommended.

TRACK

Camoplast challenger asphalt tracks are the only tracks permitted for competition. Any track at or below wear bar marks will not be permitted. Tracks must be installed with direction arrows correct. No traction type compounds may be applied to tracks.

SKIS AND WHEELS

Any aftermarket ski is allowed. Structural integrity must be maintained. The minimum length is fifteen (15) inches and the maximum length is twenty-one (21) inches. Both skies must be identical and not staggered on the snowmobile. Ski distance (center to center of the wheels) is to be a minimum of forty (40) inches and a maximum of forty-five (45) inches. The area under the snowmobile, measured from behind one ski to the other ski, must be a minimum of two (2) inches above the ground and a minimum of two (2) inches wide behind the ski. Ski loops may be taped or filled with plate.

BRAKES AND SUSPENSION: 3

BRAKES

Lower drive shaft brake permitted.

SUSPENSION

Any aftermarket or OEM track suspension is permitted. If modifications to OEM suspension are made, structural integrity must be maintained. Front suspension and shocks must be in original location.

CHASSIS: 4

CHASSIS

Chassis including the front bulkhead must remain OEM appearance for the said model. Material substitution is allowed. Reinforcement for strength is allowed. Tubular front ends are not permitted. Front suspension components may be modified or changed as long as stock location is maintained. Spindles may be strengthened or replaced with a stronger spindle. The minimum wall thickness is 0.12 inch and the minimum outside diameter is 0.75 inch. An inspection hole is required if the wall thickness is not visible. All components must maintain structural integrity. Motor mounts may be changed from original location. Any engine location is allowed as long as stock snowmobile profile is not compromised. Any chain case modification allowed. Snowflap must be within 2" of contact with racing surface when the rider is sitting on the machine.

FUEL TANK

The fuel tank may be modified to accommodate a fuel cell. The OEM style outside shell must remain intact. A fuel cell cap may replace the original fuel cap.

FOOT STOPS

Running board foot stops are permitted, but may not be wider than the running board at the position they are installed. They may not extend higher than the top of the tunnel at the point of installation.

CONTROLS

Handlebars, handlebar grips and controls may be modified. Controls must maintain stock configuration. No twist type throttles or rotating throttle from stock position.

BODY: 7

AIR DAMS

Front air dams are permitted. If air dam is mounted perpendicular to the skis, it must maintain a minimum of one-inch (1") ground clearance. If air dam is mounted in front of or behind the skis, it must maintain a minimum of two inches (2") ground clearance from ski to ski. The area under the snowmobile, measured from behind one ski to the other ski, must be a minimum of two (2) inches above the ground and a minimum of two (2) inches wide behind the ski. Air dam is not permitted to extend past the front OEM bumper or three (3) inches past belly pan, whichever distance is greater.

BODY WORK

No additional bodywork that changes stock appearance allowed (other than suspension side skirt and/or air dam.) Aerodynamic devices prohibited unless originally incorporated into same OEM of that brand. Openings for component accessibility will be allowed. The hood and belly pan may be removable as long as the OEM appearance for the said model is maintained and structural integrity is intact.

ELECTRICAL: 8

IGNITION

Any snowmobile OEM ignition, MSD # 00-00-2530 (designed for snowmobiles). No additional electronics/devices to aid in down-track RPM limiting will be permitted. Subject to random technical inspection.

IGNITION SHUTOFF

Must be equipped with a positive ignition-cutoff switch attached to the rider with a lanyard. Machine must also have handlebar mounted ignition-cutoff switch.

TAILLIGHT

A functional taillight is mandatory for night operations.

SUPPORT GROUP: 9

DATA RECORDERS

Permitted for information gathering only. Throttle operation, clutch engagement, etc. are to be solely under the control of the rider. Traction control devices not permitted.

WARM UP STANDS

Must be used when warming up the engine. Lanyard cord (tether cord) must be attached to someone anytime engine is running.

RIDER: 10

CREDENTIALS

A valid NHRA competition license is mandatory.

HELMET

Full-faced helmet meeting Snell K98, 2000, 2005, SFI 41.1A, or SFI 41.2A, 41.1/2005 specs mandatory.

PROTECTIVE CLOTHING

Full all-leathers, boots above the ankle and leather gloves are mandatory. Suits may be one-piece design or joined by a zipper at the waist.

SAFETY

All general safety requirements apply as specified in NHRA rule book.