# General Snowmobile Rules

**THESE GENERAL RULES APPLY TO ALL SNOWMOBILES THAT ARE ENTERED IN COMPETITION. ALL PARTICIPANTS ARE REQUIRED TO BE FULLY AWARE OF THE FOLLOWING REGULATIONS AND ABIDE BY THEM.**

**PARTICIPANTS ARE SOLELY RESPONSIBLE FOR THE CONDITION OF THEIR SNOWMOBILES AND THEIR COMPETENCE TO OPERATE THEM.**

**WHERE THE RULES PERMIT OR REQUIRE COMPONENTS OR EQUIPMENT TO BE INSTALLED, REPLACED, ALTERED, MODIFIED OR FABRICATED, IT IS THE SOLE RESPONSIBILITY OF THE DRIVER TO SELECT COMPONENTS, MATERIALS AND/OR FABRICATE THE SAME SO THAT THE COMPONENTS WILL PERFORM SAFELY IN COMPETITION.**

## CLASS ELIGIBILITY & SNOWMOBILE ID

1. Unless otherwise specified in specific ISR rules, a snowmobile used in more than one class or division must comply with all rules and safety guidelines for each class or division in which it competes.
2. In stock and stock-based classes, the chassis and engine must have been originally OEM assembled and serial numbered indicating that the snowmobile is a stock qualified unit from the production run of a stock qualified model.

## MATERIAL SUBSTITUTION/UPGRADE

1. Aluminum to magnesium, aluminum to titanium, steel to steel (steel is chromemoly or titanium).
2. Round is round. Square is square.

## ENGINE

1. The International Race Rules Committee will approve the validity of all engine intake systems.
2. In stock and stock based classes, the engine must have originated form a stock qualified, OEM produced snowmobile.
3. OEM carburetor slide valves and replacement jet components without modification will be allowed in all stock classes. No modification will be allowed to the carburetor body.



4. A "T" must be installed on at least one fuel line between the carb and the fuel pump for access to perform fuel tests. This is required in all classes**, except for fuel injected sleds and Open Mods. These sleds will have the fuel samples taken from the tank.**
5. An adequate return spring on the throttle is required.
6. The throttle must be a direct mechanical thumb mechanism, which must be located on the rear side (toward the rear of the machine) of the right hand handlebar. Throttle must be thumb operated. Twist grip throttles not allowed.
7. No pressure charging allowed unless specified.
8. All stock classes - choke control devices may be disconnected; however, they must not be removed from their mounting location.
9. All snowmobiles (including purpose built race sleds) will have a serial numbers permanently affixed to the engine. Duplication of the serial numbers is not allowed.
10. When supercharges are allowed, a supercharger restraint system, including a flexible blanket shield, is required to prevent super chargers from being blown free of the engine.

## DRIVE

1. Brakes shall be operative at all times. Brake lever must remain on the left, front side of the handlebar.
2. The master cylinder, caliper and disk assembly must be commercially available.
3. Additional brake assemblies may be added. If the secondary brake is on the track drive shaft, the disk may be smaller than 7". Brake disk in any other location must be a minimum of seven (7) inches in diameter. Track drive shaft may be lengthened to accommodate additional brakes.
4. In Modified and Open classes, or anytime the brake assembly has been modified or relocated, the brake disk must be covered with a shield capable of retaining an accidental explosion.
5. The disk pad contact surface area may not be reduced more than 15% of the original pad contact surface area.
6. Chains, pulleys and exposed moving parts will be isolated from the driver and other competitors by shields capable of retaining an accidental explosion and component impacts. Integrity of protective shields shall be at the Race and/or Tech Director's discretion. No holes may be drilled in protective shields.
7. Unless otherwise specified, stock class belt guards are accepted in Stock **and Trail Stock** classes only.

## SKI SUSPENION & STEERING

1. All handlebar ends must be plugged.
2. At safety inspection, ski suspension travel will be measured vertically at the front bumper.

## SKIS & SKI RUNNERS

1. Except where otherwise specified, one cutting edge (steering edge) allowed per ski on sleds with independent front suspension. Any ski edge with over ½" turndown constitutes a cutting edge.
2. A maximum of fourteen (14) inches total length of carbide per ski is allowed (unless otherwise specified in specific chapters.
3. All ski loops must be at least one (1) inch wide and 5/8" thick or 1 inch in diameter round material. The arc of the leading edge of the ski loop must have an outside radius of at least 2 1/8" and extend at least 120 degrees upward. Plastic ski loops must be affixed with steel bolts.
4. The ski loop must overlap the end of the ski and secure to the under side or it must cover the leading edge of the ski entirely.
5. Metal ski loops must be affixed with steel bolts and not welded.
6. Metal ski loops must have adequate lateral of vertical support bracing to prevent ski tip loops from dislodging or breaking off.
7. Beam breaker surface for electronic timing must be confined within the ski loop.
8. Ski tip must be turned up 1.5" from the bottom of the ski.
9. No part of the ski may contact the body or suspension through the skis normal range of travel and/or movement.

## TRACK SUSPENSION

1. Any OEM type slide rail hyfax may be used as a replacement.
2. Slide rail hyfax can be drilled in all classes.
3. Where allowed in these rules and by local environmental laws, slide rail lubrication systems may be used. No lubrication medium will be allowed that hampers competitor's visibility. No toxic solutions may be used.
4. Slide rail lubrication systems will be allowed. Slide rail inserts may be added. (not allowed in trail stock)
5. At safety inspection, track suspension travel will be measured vertically at the rear bumper.
6. **The use of Carbon Fiber on Rear Wheels and Slide Rails is strictly prohibited (2013). The use of Carbon Fiber parts for structural components are to be approved by the Race Director. The hood, cowl, seat, and windshield are approved.**



## TRACK & TRACTION

1. Unless otherwise specified, minimum combined or single track width is fourteen (14) inches. A 1/8th inch maximum variance in the minimum track width requirement is allowed. No cutting, notching or trimming of the track is allowed, except as specified in specific sections.
2. The grouser bar/ribs can be no more than six (6) inches apart.
3. Track clips and guide clips may be replaces when worn – guide clips may be removed and replace with track clips – the track must retain the original number of clips which it was produced.
4. Traction devises may not generally protrude no higher than ¾" past the highest part of the track. **(Open Mod 800 and above allowed 1.06 inches max")**
5. Studs may not be placed over part numbers and part number may not be removed.

## FRAME & BODY

1. A rear snow flap of sufficient material must be installed in a permanent manner and shall be held down (restrained from rearward movement) so as to restrain traction components, snow, mud, rocks and other material thrown from the track at all speeds. Recommended materials are 3/16" fiber reinforced rubber belting or 3/16 inch semi – rigid plastic such as HD polyethylene or UHMW polyethylene.
2. The snow flap must overlap the widest part of the rear tunnel opening by at least one inch on each side.
3. The rearward movement of the snow flap must be restrained with steel cable (or similar material) to the frame of the snowmobile. The use of springs and/or elastic material for holding down and restraining snow flaps is not acceptable.
4. The snow flap must be in contact with course surface when the rider is on the sled. Violation of this rule results in mandatory expulsion from the class.
5. Material used in/as wheelie bars will not be considered a snow flap.
6. The maximum overall sled width is 45" except where noted otherwise.
7. Where specifically allowed, foot stirrups/foot pegs may be installed. Must be constructed of rigid materials.
8. All snowmobiles will be equipped with an upholstered, padded seat minimum thickness one (1) inch, minimum length twenty four (24) inches and width of the tunnel, unless otherwise specified.
9. Unless otherwise stated, seats in stock class must be OEM of the model.
10. **Unless otherwise specified, tunnel protective strips may be added to underside of tunnel to protect the tunnel and cooling system from being damaged by traction products.**

11. All snowmobiles (including purpose built race sleds) will have serial numbers permanently affixed to the frame. Duplication of serial numbers is not allowed.
12. If the tunnel or other serial numbered part is replaced, the serial number must be removed from the replaced part and affixed to the new part.
13. All machines required to have a braking parachute must have a parachute produced by a recognized parachute manufacturer. Tech inspectors may observe the proper operation of the parachute and inspect for worn or frayed lines, ripped or dirty canopies and worn or ragged pilot chutes. Parachute cable housings must be mounted solidly to the frame or other suitable member; the use of quick pins for parachute mounting is prohibited. The parachute must be mounted in a manner that does not render it inoperative if the machine should lose a track or part of the machine (specifically, mounted above the snow flap and the rear of the tunnel). The parachute controls will be mounted with controls accessible to the participant in a normal driving position and be tethered to the participant with a 1/8" thick nylon cord may not hang in a manner that allows it to be caught in any rotating component.
14. Snowmobiles used in competition may be painted any color.

## ENCLOSED COCKPIT FRAME & BODY

1. ON enclosed/confined cockpit machines, full firewalls shall separate the driver from the engine and fuel tank. Material must be eighteen (18) gauge steel minimum or its equivalent.
2. A quick release shoulder harness (aircraft type) is mandatory on all enclosed cockpit machines. All safety belts/shoulder harness installations must be manually compatible (originally designed to be used with each other). Installations not allowed where the harness is sewn, fastened, or where the safety belts is fed through the loops in the harness. Only those units that release all four attach points in one motion are allowed. Shoulder harnesses must be securely mounted to the frame, cross member, or suitable reinforced mounting, and installed to limit driver's body travel both upward and forward.
3. Quick release arm restraints are mandatory.
4. Under no circumstances are bolts to be inserted through belt webbing for mounting.
5. It is recommended that all belts and harnesses are covered with fireproof material.
6. An abrasion plate is mandatory on seat belts where they are wrapped around the frame and would be exposed to rubbing on the track or by a rotating component.
7. All enclosed cockpit machines will be equipped with a regulation on board fire extinguisher and be manually controlled. An on-board fire extinguisher system of halon 1301 or 1211 and mounted per manufacturer's specifications with the primary nozzle(s) directed to



protect the participant while in the driving position. Minimum extinguisher size is 5lbs.
8. Fuel tanks must have a pressure cap and be vented to the outside of the body or have built in check valve.
9. All roll cage structure must be designed to protect the participants from any angle, three hundred sixty (360) degrees. All welding must be done by approved heliarc process. Flush grinding welds not permitted. It is recommended that all cage welds be gusseted. Must have a roll bar six (6) inches above drivers head.

## IGNITION & ELECTRICAL

1. All machines must be equipped with a "safety disconnect" and be operable at all times. This will be the responsibility of the driver. Tethers must be used and attached to the operator whenever the engine is running.
2. Maximum tether cord length will be five (5) feet except where noted otherwise. Verification of tether cord length will be determined at tether cord's full extended length.
3. The tether cord will be securely mounted to the driver. No alligator clips are allowed**. Tether cord must be secured to the driver while machine is running. (NO EXCEPTIONS!)**
4. The tether switch will be securely mounted in a location on the snowmobile other than on the handlebars or steering column.
5. Battery operated electric fuel pumps must be connected to the tether switch. This includes electrically controlled fuel injection systems.
6. All snowmobiles must have a handlebar mounted button (on/off) kill switch on the right side with in thumbs reach (this is in addition to your tether switch.)
7. Wet cell must be enclosed in a non-conductive battery box. Positive terminal must be shielded. Battery box must be securely held in place.
8. On snowmobiles with enclosed cockpits it is mandatory to have a functional kill switch that will terminate ignition if the sled rolls over; this is an addition to the tether switch.
9. Unless otherwise specified, electric start parts including motor, solenoid, battery, battery bracket, wiring, and ring gear may be removed. No machining, cutting or grinding allowed for removal.

## FUEL REGULATIONS

NOTICE: IT IS ADVISABLE FOR ALL COMPETITORS TO HAVE THEIR FUEL TESTED AT THE EVENT, BEFORE COMPETING.

1. A contestant appealing a fuel disqualification must bear the expense of the fuel analysis and handling.
2. ALLOWED GASOLINES AND LUBRICANTS

a. Only a commercially available pump gasoline that complies with these rules is allowed. (The term "pump gasoline" includes fuels dispensed from service station pumps and racing fuels that are commercially available in fuel cans and drums.) **Pump fuel with ethanol up to 10% is allowed.** Ethanol cannot be added. The gasoline may be mixed with petroleum, vegetable, or synthetic based lubricants. The use of oils, fuels (including gasohol), and additives that provide power-boosting characteristics are strictly forbidden.
b. Only motor fuel compounded of standard pump gasoline and an acceptable lubricant are allowed. Additives that produce power in excess of that produced by standard pump gasoline and petroleum base oil shall not be permitted. The list of unacceptable additives includes, but is not limited to, alcohol, nitrates, and other oxygen bearing compounds.
c. No competitor or driver's pit personnel shall possess power boosting additives or agents upon the race premises of the sanctioned event. Violations of this rule shall subject the violator to severe disciplinary procedure.
d. Aerosol cans of ether are allowed at the sanctioned races for starting purposes. No driver will be allowed to carry such cans on their person or their machines during the race.
e. Driver statements as to driver's fuel components will be binding and may be verified by various fuel tests. Drivers will allow officials to test their fuel at anytime.
**f. The use of VP Q16, U4, and other similar fuels with these type of oxygenators and power additives is strictly prohibited.**

## FUEL TESTS

WARNING: GASOLINE, LUBRICANTS, ADDITIVES AND FUEL TEST REAGENTS ARE ALL POTENTIALLY HAZARDOUS MATERIALS. ANYONE HANDLING THEM SHOULD BE AWARE OF THE HAZARDS AND ACT ACCORDINGLY. RACE RULES COMMITTEES AND ISR ESTABLISH THESE GUIDELINES AND RECOMMENDED TEST PROCEDURES, BUT DO NOT ASSUME LIABLITY FOR INJURY OR DEATH CAUSED BY THE HANDLING OF THESE MATERIALS.

**The Race Director may exercise the right to test fuel at any time by sending to the ISR Lab, or a Lab of choice, and the driver will be charged a fee of $100 for the test. If the fuel is found to contain illegal substances, the racer will also receive a fine of $250 for the first offense and DQ of the Race results for that day. A second offense is Disbarment from the Race Circuit for One Year, along with the loss of all points and records received.**



Notice: ANY OR ALL OF THE SE TESTS MAY BE EMPLOYED. TEST RESULTS MAY BE CONFIRMED FROM TIME TO TIME USING AN INFRARED SPECTROMETER.

1. ELECTRICAL CONDUCTIVITY
2. CERIC NITRATE REAGENT TESTING
3. REAGENT D TEST FOR DIOXANE
4. WATER SOLUBILITY TESTING
5. ANY OTHER TEST APPROVED BY RACE RULES COMMITTEES.

## Rule Changes Enacted in 2011

1. **Parachutes recommended for all sleds that run 150 mph or above to 160 mph and mandatory for 160 mph or above. All parachutes must be functional at the time of the run.**
2. **All sleds will display the competition number in a contrasting color to the machine and be a minimum of 4 inches in height.**
3. **The fee to protest a competitor will be a minimum of $250 cash and will be forfeited by the person filing the protest if no infraction to the rules is found. The Race Director will make the final decision on this ruling.**
4. **The cost to replace timing equipment hit by a competitor will be charged to the competitor at the actual cost of replacement.**
5. **Random weight checks may be performed at the line by the Tech Director or Race Director. Competitiors will be placed at the head of the line after completion of the random weigh in.**

# SPEED RUN COMPETITION

THE INTENT OF THESE CLASSES IS TO ESTABLISH RACES IN WHICH ALL CAN COMPETE AT THEIR LEVEL OF PERSONAL AND EQUIPMENT ABILITY. THE CLASS STRUCTURE IS ORGANIZED IN SUCH A WAY AS TO ENABLE AS MANY MANUFACTURED SNOWMOBILES AS POSSIBLE A PLACE TO SUCCESSFULLY COMPETE.

BASED ON SAFETY AND COMPETITION, STOCK SNOWMOBILES MANUFACTURED PRIOR TO FIFTEEN (15) YEARS OF THE CURRENT MODEL YEAR WILL BE ABLE TO COMPETE IN SPECIALTY, IMPROVED STOCK, PRO-STOCK, AND OPEN MODIFIED CLASSES ONLY.
IF CLASS RULES ARE NOT FOLLOWED, THE CLASS NAME SHALL NOT BE USED AND THE CLASS SHALL RUN UNER SPECIALTY CLASSES.

## SPEED RUN CLASSES

### JUNIOR STOCK 12-16yrs (150lb driver)

| Class | MAX. cc | CARBS | EXHAUST |
|---|---|---|---|
| 440f | 440fan | 34mm | OEM |
| **Up to 570 Fan** | **570fan** | **36mm** | OEM |
| **440 L** | **440 L** | **36 mm** | **OEM** |

**Trail Stock Classes**
**500cc**
**600cc**
**700cc**
**800cc**
**1000cc**
**Suspension Height to be within 2 inches of stock**
**No Slide Lube systems allowed**
**For Studding, up to 50% of studs allowed to be picks or chisels, and stud height not exceed 0.75 inches over the top of the stock lug.**
**No 0.5 inch lug Speed Tracks allowed**



### STOCK CLASSES

| Class | MAX. cc | CARBS | EXHAUST |
|---|---|---|---|
| 440F | 440fan | 34mm | OEM |
| 440 | 440cc | 34mm | OEM |
| 500 | 500cc | 38mm | OEM |
| 600s<br>600 RSs | 600cc<br>600 cc | OEM | OEM |
| 600m | 600cc | OEM | OEM |
| 700s | 700cc | OEM | OEM |
| 700m | 700cc | OEM | OEM |
| 800s<br>800m | 800cc | OEM | OEM |
| 900 | 900cc | OEM | OEM |
| 1000 | 1000cc | OEM | OEM |

### IMPROVED STOCK CLASSES

| Class | MAX. cc | CARBS |
|---|---|---|
| 440 | 444cc | OEM |
| 500 | 505cc | OEM |
| 600 | 606cc | OEM |
| 700 | 707cc | OEM |
| 800 | 808cc | OEM |
| 1000 | 1020cc | ANY |

### SUPERSTOCK

**700-1000CC** - .80LBS PER cc. sled and driver weight. Any amount of cylinders and induction style. Stock/0.5 inch lug speed tracks and stock suspensions only.

**Super Stock twin** – 700-1000cc - .75lbs per cc. Same as above.

### PROSTOCK CLASSES

| Class | MAX. cc |
|---|---|
| 600<br>700 | 612cc<br>714cc |
| 800 | 816cc |
| 1000 | 1020cc |
| **1500** | **N/A** |

**OPEN MODIFIED CLASSES**

| CLASS | MAX. cc |
|---|---|
| **Jr Mod** | **225cc** |
| 340 | 340cc |
| 440 | 440cc |
| 500 | 500cc |
| 600 | 600cc |
| 700 | 700cc |
| 800 | 800cc |
| 1100 | 1100cc |

**SUPER MOD**
**EXHIBITION**
**UNLIMITED**
**LAKE RACER**
**DIAL IN**
**VINTAGE (1985 or older)**

**REGISTRATION AND ENTRY**

1. Entry fees for the CMSA SPEED RUNS are as follows.
   a. Trail Stock - $40.00
   b. Stock - $40.00
   c. Improved Stock - $40.00
   d. Super Stock - $40.00
   e. Pro Stock - $40.00
   **f. Jr Modified -$40.00**
   **g. Jr Pro Sled - $40.00**
   **h. Mini Mod- $40.00**
   i. Open Modified - $50.00
   j. Super Modified - $50.00
   k. **Pro Max - $50**
   l. Exhibition - $50.00
   **m. Four Stroke Improved Stock and Pro Stock - $50**
   n. Lake Racer - $40.00
   **o. Lake Racer Open - $50**
   p. Dial In - $40.00
   q. Vintage - $40.00

**Daily Insurance Fee**

1. **An insurance fee will be $5 per event per driver upon registration.**



**Protest Fee**

**A racer who is in competition may protest another sled and/or driver by putting up a fee of $250 in cash. The fee is non-refundable if the protest is found to be not valid. Determination of the Race Director is Final. The $250 cash fee will be refunded if found to be valid.**

**Payback**

1. Trail Stock , Mini Mod, JR MOD, JR Pro Sled – trophies only

2. Stock, Improved Stock, Super Stock, Pro Stock, Open Modified, Super Modified, Exhibition, Four Stroke, Lake Racer, Vintage and Dial In will have a **50%** payback of the racer registration fees.

## Specialty Classes

**Junior Pro Sled ( Two classes for 2011)**
**8 to 12 year old competitors – 75 mph limit.**
**13 to 16 year old competitors – up to 100 mph limit**
**Race Director to oversee test run for driver competence.**

**Full Body or Open Mod chassis with up to 500 cc motor.**
**Stock or 0.5 inch Camoplast speed track allowed and any suspension.**
**Will operate as Dial In Class with a maximum speed as above,**
**Exceeding speed limit will DQ run and 2nd DQ will end with a class DQ for that race.**
**No Alcohol Fuel allowed.**
**All Safety rules apply.**

**Mini Sleds**
**Stock appearing 120 or kitty cat sleds that are stock in stock class.**
**Modified stock by having pipes and porting.**
**Maximum Speed limit is 45 mph.**
**No Alcohol Fuel allowed.**
**Sleds will use a stock 120 track for competition.**
**Intended for ages 5 to 8 years, and parent supervision required.**

**Mini Mod**
**Modified Chassis or aftermarket four stroke engine.**
**Up to 250 cc single cylinder sleds with no power adder.**
**No Alcohol fuel allowed.**
**Maximum Speed Limit is 75mph**

**Junior Mod**
**Special Built mini sleds.**
**Up to 250 cc single cylinder with no power adder.**
**Maximum Speed limit is 75 mph unless a three step review of driver is completed by the Race Director.**
**Speed limit may be approved up to 100 mph depending on driver skill and experience.**
**Exceeding speed limit is automatic DQ for that run, 2nd DQ is class forfeiture**

**Super Twin Lake Racer (2 stroke and 4 stroke classes)**
Stock Appearing Chassis
**700 LBS.**
Stock or 0.5 inch Speed Track
Nitrous, Turbo, or Both Allowed
No cc Limit
Air Dam okay
Stock Length Skis
Small Gas Tank Allowed

**Lake Racer**
**See rules in Lake Racer section of this rule book**

**Lake Racer All Motor**
**Stock appearing Chassis with stock length skis**
**Two Stroke 3 cylinder motor at or over 1000 cc's**
**No power adder**
**700 lb minimum weight**
**Stock or 0.5 inch lug speed track allowed.**
**650 lb minimum for 810 cc and smaller(2011 rule).**

**Lake Racer Open:**
Full body stock appearing chassis (Pro Stock chassis rules)
Triple or 4 Cylinder two stroke engines allowed
PWC or Aftermarket snowmobile cases allowed
Twin Cases may be welded together
675 lbs for naturally aspirated and 750 lbs for power adder
Over 1000 cc engines
Air Dam okay
Belted speed tracks allowed with up to 1 inch stud height

**Stock 600 Racer Special – Professional Stock Classes**
Only 2008 **or newer** factory Race Sleds Allowed
Filed Weights to apply
All Stock Rules Apply



**Four Stroke Stock (3 cylinder, 4 cylinder, Stock Turbo) for 3 classes**
Factory filed weights apply
All Factory stock rules apply

**Four Stroke Improved**
825 lb minimum
Stock or 0.5 inch lug speed track allowed (1.0 inch stud height max)
Lightweight parts allowed as long as stock appearing.
**Stock crankcase required as motor basis.**
Turbo allowed

**Pro Stock Four Stroke**
Pro Stock Rules apply
700 lb minimum
Belted Tracks allowed with up to 1 inch stud height
Turbo, nitrous, or combination allowed

**Pro Max**
Custom Chassis Race Sled with Power Adder 2 stroke or 4 stroke
625 lb. minimum weight with driver
Sit up and ride configuration with no lay down chassis allowed.
Brake to be on driveshaft.
Parachute is mandatory after 160 mph.

**Stock Turbo – Improved Stock (New 2013)**
**Four stroke sleds with a stock turbo.**
**Aftermarket exhaust allowed.**
**Stock suspension with minimal revisions allowed.**
**A 775 lb. minimum weight with machine and driver.**
**Minimum of 0.5 inch lug track with 1 inch stud height.**
**Air intake may be changed, but turbo diameter inlet to remain unchanged and fins may not be lightened or modified.**
**Aftermarket controllers for boost and timing allowed.**

**Vintage (New 2012)**
**NSSR will run letter classes from AA to H for Stock Classes**
**Mod Stock will include classes from 300cc F/A and Liquid on up to Open.**
**No class jumping allowed except to run in the Open CC class.**
**After market clutches allowed.**
**No oxygenated fuels allowed, but 10% ethanol pump gas is allowed.**
**Cleated tracks allowed only on sleds 500cc and under and that came factory with cleats. No pop rivets allowed and belts in good condition.**
**175 lbs will be added to stock weights with fuel, oil, and studs.**
**Snell 2005 or higher rating Helmet required.**
**Drivers 12 to 16 years old allowed only in 440 cc and below.**

## GENERAL COMPETITION & SAFETY RULES

1. A fully equipped ambulance shall be in attendance at all events, prior to any runs being made. It shall be staffed with one (1) paramedic.
2. Starter will notify the driver when he/she can proceed on his/her run. Four (4) attempts, 5 minutes per attempt, maximum will be allowed to complete an official record attempt in order to insure the validity of all new records. A back up performance of 2 percent of the new mark will be required at the same event. Any machine traveling one hundred (100) feet or more from the starting line, down the track will be considered as an attempt/run.
3. One Half (1/2) hour notification will be given prior to the close of a race.
4. Full face helmets with a **SNELL 2005 and/or ECE 22.05** or higher safety rating required. This is as specified by ISR in 2009.
5. Safety Jackets (Saf- Jak) required in all classes except trail stock. Jackets can be worn on the outside of the jacket and while a Safety Jacket is rcommended, a Leather or Kevlar jacket may substitute for a Safety jacket.
6. **A full leather suit is required for speeds exceeding 135 mph at the 1000 foot mark. Kevlar that resembles a leather suit will be allowed as a substitute. Safety Jackets may be worn over or under the leather jacket.**

All warm up stands must be enclosed in the rear and sides up to the center of the rear axle. Freeing the track under acceleration without the use of a proper warm up stand is prohibited. Absolutely no holding up the rear of the machine is allowed.

## VIOLATIONS & DISQUALIFICATIONS

1. RUNS WILL BE DISQUALIFIED FOR THE FOLLOWING:
    a. Contact with course barriers, timing equipment, or course markers will automatically disqualify the run. Leaving the confines of the course, runoff area or the return lane.
    b. Participant's feet leaving the running boards of the foot pegs during a run.
    c. Losing control of the machine.
    d. Machine or component failure that jeopardizes the participant or his/her ability to control the machine.
    e. Participant crew member found in restricted area.
    f. **Contact with the snow bank adjacent to the track surface (2011).**



2. Participants will be disqualified from the event for the following reasons.
    a. Failure to abort a run that may result in injury to the participant, other participant, race official, or spectator.
    b. Mandatory teardown and inspection of the snowmobile breaking the record in its respective class, during a qualified official record run. Teardown is at the discretion of the race director or head tech official.
    c. Participant leaves the start line before the Race director has given approval.
    d. Refusal to comply with the mandatory teardown and technical inspection.
    e. Running a machine without warm up stand on the line or in the pits is grounds for disqualification.

## GENERAL SNOWMOBILE REQUIREMENTS

TO BE CONSIDERED A SNOWMOBILE, THE VEHICLE MUST BE PROPELLED BY A TRACK AND STEERED BY SKIS. ANY VEHICLE OF DOUBTFUL NATURE SHALL BE SUBMITTED TO THE ISR SPEED RUN RACE RULES COMMITTEE AND THEIR RULING SHALL BE FINAL.

## ENGINE

1. Participant using external cooling system must use a catch pan to stop any coolant from leaking onto ice/ground when in use or being disconnected.

## DRIVE

1. The machine must be propelled by a variable ratio belt transmission.
2. (Improved stock, Super Stock and Pro stock) The clutch cover must be separate of cowl configuration, and cover clutches down to center of clutch bolt or below. Must be .090 inch 6061 T6 aluminum or equivalent steel material and be covered with six (6) inch belting. Snowmobiles with removable side panels may bolt clutch cover to side panel to meet this requirement.
3. (Open Modified, Super Mod and Exhibition) Clutch cover must have 360 degree elliptical coverage in the direction of the clutch/belt travel. Clutch cover must be .090 inch 6061 T6 aluminum or equivalent steel material and be covered with six (6) inch belting. If the clutch cover is fastened to the existing belly pan, the area below the clutches (from the front of cover to rear of cover and with of cover) must be covered with .090 inch 6061 T6 aluminum or equivalent. Clutch cover .125 inch

(6061 T6 or equivalent) is exempt from the belting cover. Belting highly recommended. Clutch cover and related belting must be securely fastened.

## TRACK SUSPENSION

1. Slide rail lubrication systems are allowed. (not allowed in ) **Absolutely no green antifreeze to be used as slide lube and Environmentally Friendly.**
2. Dual limiter straps required in all classes.

## TRACK & TRACTION

1. In stock class, track width is as produced for the model. In all other classes, there is an 11.25" minimum track width. All tracks must be commercially available. Track width must remain as produced by the molder of the track.
2. No plate on a rubber track can be larger than **3.25"** in width and length.
3. No cleated tracks allowed. All tracks must be commercially available, molded, one piece rubber tracks. **Exception for Vintage Classes.**
4. Plates welded onto track clips must be no longer or wider than track clip. One traction point allowed per weld on plate. Rubber between ends of track clip may be trimmed to allow welding on of stud plate.

## FRAME AND BODY

1. Stock, Improved Stock, and Super Stock are not allowed to use foot pegs, running board foot stops may be used and may not be wider than the running board at the position they are installed and they may not extend higher than the top of the tunnel at the point of installation.
2. Pro Stock and Modified classes - Stirrups/pegs must be along side of the tunnel and may not extend above the tunnel or beyond the rear of the tunnel. All snowmobiles equipped with foot pegs must also have running boards of tunnel like material. Running boards must be four (4) inches wide and start one inch behind the foot pegs and extend forward along the tunnel to the rear of the clutch cove on both sides.
3. The maximum tunnel width will not exceed 20 inches and track must be confined within the width of the tunnel.
4. All tunnel material must maintain its structural integrity and be free of wear from traction devices, tunnel protection devices must be installed to prevent damage or wear to the tunnel by traction devises.
5. All ballast must be bolted to the machine. The weight of the ballast must be clearly marked on the ballast.



# STOCK CLASS RULES
# TRAIL STOCK & STOCK

**IN STOCK CLASSES, NO CHANGE OR MODIFICATION CAN BE DONE TO THE STOCK QUALIFIED SNOWMOBILE UNLESS SPECIFICALLY ALLOWED BY THESE RULES. IF THESE RULES DO NOT SPECIFICALLY ALLOW A CHANGE OR MODIFICATION, THEN IT MUST BE ASSUMED THAT THE CHANGE OR MODIFICATION IS NOT ALLOWED.**

## GENERAL

1. The snowmobile must have original OEM for the model (or factory designated replacement) engine, hood, skis, frame, cowl, gas tank, carburetion, air box, suspension, and variable speed converter supplied by the manufacturer for that particular model. Factory options are not allowed.
2. All snowmobiles must comply with the GENERAL RULES AND REGULATIONS SECTION.

3. Overall width of the snowmobile must remain OEM for the model. When the snowmobile moves into Improved Stock, Super Stock, Pro Stock, or Modified classes, the 45 inch width must be retained. If a stock ski is trimmed to meet the 45" rule the ski can only be trimmed to the 45 inches.

**NOTICE: Weights will be reviewed annually.**

4. Participants in the stock classes must weigh 175lbs including the protective gear. If the participant does not meet the weight requirements, they must add ballast to the sled. The ballast must be securely fastened by means of a grade (5) -5/16" bolt with a self locking nut. (no wing nuts)
    a. Adding fuel to the tank will be allowed as ballast. If fuel does not make up the weight deficiency, additional ballast must be securely fastened to the machine.
    b. Optional marginal snow wheels can be considered as ballast.
5. The snowmobile must meet the weight as filed by the manufacturer.
6. **A total of 200 lbs will be added for driver, studs, fuel, oil, etc.** to the snowmobile weight as filed by the manufacturer.
7. **Weight of sled will be clearly posted on the right side of the sled.**
8. **PORK CHOP RULE** - Racers weighing in excess of 200lbs fully suited with helmet may incorporate a mod fuel tank. Stock fuel tank

must remain in place. Mod tank must be located in the stock tank and be accessible to tech officials at all times for fuel testing.

9. **Stock Sleds in competition are not allowed to be towed back and must be driven to the Tech area after each run unless there is a mechanical failure comfirmed by the Tech Director (2011)**

## ENGINE

1. No component of the engine may be altered, changed reduced or enlarged from the engine manufacturer's original stock specifications, nor may any additional components be added to the engine. Blueprinting of engines is not allowed. No removal of material whatsoever will be allowed. This to include polishing, port matching, deburring, glass or sand blasting surfaces or material removal for the purpose of engine balancing or other reasons.
2. **Stock Airbox must be as factory provided and no altering is allowed**
3. Maximum cylinder overbore for wear cannot exceed .020 inches.
4. Replacement pistons must be stock OEM for the model.
5. There will be no more than 1 cylinder base gasket to a cylinder. No changes in engine dimensions can be made by gasket adjustments.
6. A maximum of one venture per cylinder will be allowed in stock classes. Any exceptions must be approved by ISR.
7. OEM carburetor slide valves and replacement jet components, without modification, will be allowed in all classes. No modification to carb body will be allowed.
8. On snowmobiles equipped with electronic fuel injection, it is legal to replace the non-adjustable fuel pressure regulator with any commercially available, mechanically adjustable fuel pressure regulator. (no electronically controlled pressure regulators allowed) The regulator and mechanical adjustment device must be installed under the hood of the snowmobile and not be accessible to the driver while seated on the machine.
9. No additional fuel pumps may be added to stock carbs.
10. Oil injection pump must remain in place and functional. Lines may be removed and plugged. Oil injector nozzles may be removed and holes plugged. Premix gasoline may be used.
11. Except for quick disconnects and flow directional valves engine must retain original cooling concept. Liquid, fan, or free air cooling must be retained. The cooling circuits cannot be modified or removed. Thermostats may be removed. When the sled is on the course the cooling fluid must flow unobstructed thru out the entire cooling system. (no short circuiting) Trail stock machines are not allowed to alter cooling the system.



12. OEM heat exchangers for the model located under the tunnel may be relocated any place on the top, side, or under the tunnel and remain functional.
13. Harmonic balancer may not be removed.
14. The complete OEM exhaust system must be used and furnished and filed by the manufacturer
15. **Electronic computer module (ECM) may be added to adjust the fuel mixture on EFI Sleds.**
16. **Commercially available pistons (i.e. Wiseco) may be used if OEM are not available. May not increase stock bore size beyond 0.020 inches.**

## DRIVE

1. Any springs, ramps or weights may be used. There is no maximum clutch engagement RPM. (5500rpm max engagement in trail stock)
2. NO machining on clutches to accommodate spring and weights.
3. In the primary clutch, metal may be removed but not added to ramps or flyweights.
4. Secondary clutch cams may be cut to any angle. Billet helixes allowed.
5. No overdrive machining.
6. Drive belts do not necessarily have to be OEM equipment to in stock classes.
7. Any drive chain and sprockets may be used. Same material as OEM
8. **Any track sprocket and driver allowed. Driver or sprocket must be of like material as factory**. Extroverts not allowed unless OEM.

## SKI SUSPENSION & STEERING

1. Any steel or titanium suspension springs allowed. OEM for the model design concept must be retained.
2. Limiter strap allowed to limit travel, but must maintain two (2) inches of travel with driver on the sled. (No sled lowering allowed in trail stock. Sled must be within 1 inch of stock ride height.)
3. Ski widening devices and/or height adjustment devices are not allowed in stock class unless furnished as OEM and filed properly.
4. Shocks must remain OEM for the brand and remain in the OEM location. On rebuildable shocks, spacers may be added internally to limit rebound travel, but not compression travel.
5. Handle bar extensions will be legal. All ends must be plugged.
6. Handle bars with mountain handles may be replaces with handlebars from within the brand.
7. Radius rods may be located anywhere on the trailing arm where the manufacturer has drilled or partially drilled for radius rod mounting holes.

## SKIS & SKI RUNNERS

1. Aftermarket skis allowed. Skis must be commercially available and marketed through normal sales activity. Minimum aftermarket ski length must be 40 inches. Ski width may not be trimmed. Skis may not be interchanged between brands. Replacement ski must be the same material as OEM ski for the model.
2. Skis may be reinforced but must remain in original configuration. This reinforcing must be on the upper surface of the ski only.
3. Ski loop must be designed to prohibit ski interlock with any other components while driver is on the machine.

## TRACK SUSPENSION

1. The complete suspension must be used as furnished and filed by the manufacturer. There will be no suspension options permitted in stock classes. Track suspension may be located anywhere in the tunnel where the manufacturer has drilled or partially drilled for mounting holes. Pre drilled plates may be drilled to facilitate suspension adjustment. Pre drilled backing plate holes may not be enlarged or slotted.
2. Any steel or titanium suspension spring allowed. Torsion springs (not coil springs) may be shortened at the long end to prevent contact with the track. OEM for the model design concept must be maintained.
3. Limiter straps allowed to limit travel, but must maintain two (2) inches of travel with driver on sled. (lowering not allowed in trail class) Idler wheels must remain OEM stock.
4. Marginal snow wheels and related hardware may be added or removed. Structural integrity must be maintained. Rear axle idler wheels must remain OEM for the model. OEM for the model rear idler wheels may be added to the rear axle.
5. Shocks must remain OEM for the model and remain in OEM location. On rebuildable shocks, spacers may be added internally to limit rebound travel, but not compression travel.
6. No device may be added that stops the suspension from going thru its normal bottoming action.
7. SLIDE LUBERS ALLOWED.

## TRACK & TRACTION

1. A track manufacturer (who has three step distribution) may submit one track design with clip configurations to ISR race rules committee for approval. Approval will be based on the track manufacturer's adherence to rib/lug height, track durometer, track weight and other factors.



2. The track must be OEM for the model year **or a commercially available 0.5 inch lug speed track of 13.5 to 15 inches in width.** Original OEM track must be used in TRAIL STOCK.
3. No cutting, trimming or shaving of the track, grouser bars, rubber studs/snow lugs will not be allowed. The track must be used as produced by the molder of the track. Acceptable traction products allowed.
4. Minimum lug height from the flat of the track is .500 inch.
5. Track may not be reversed.
6. On rubber tracks, track clips and guide clips may be replaced when worn. Guild clips may be removed and replaced with track clips. Track clips may be removed and replaced with guide clips. The track must retain the number of clips with which it was produced.
7. **Stud length may not exceed 0.75 inches over the lug height.**

## FRAME & BODY

1. Any chassis alterations, additions or removals which alter stock appearances or dimensions are not allowed.
2. Tunnel can be repaired but must remain OEM for the model length.
3. Windshield and windshield molding may be removed.
4. No additional venting allowed.
5. Protective taping or screening will be restricted to external openings only.
6. **A minimum of 2. 5 inches of clearance under the Bulkhead.**
7. **No seat modifications are allowed in the stock classes.**
8. **Headlight assembly must be intact and functional.**

## IGNITION & ELECTRICAL

1. Ignition must be OEM for the model and year.
2. CDI module may be reprogrammed.
3. Fixed ignitions may be moved (+/-) 4 degrees.
4. Lighting coil must remain in place.
5. **Stock class must have all gauges installed but may be unhooked.** (Trail stock requires all gauges to be functional.)
6. Electrical wiring must remain in place.
7. Headlights may **not** be removed. Must remain functional.
8. **Data Loggers are allowed in the Stock Classes (2011)**

## IMPROVED STOCK RULES

IMPROVED STOCK CLASSES ARE STOCK BASED CLASSES. IN STOCK BASED CLASSES, NO CHANGE OR MODIFICATION CAN BE DONE TO THE STOCK QUALIFIED SNOWMOBILE UNLESS SPECIFICALLY ALLOWED BY THESE RULES. IF THESE RULES DO NOT SPECIFICALLY ALLOW A CHANGE OR MODIFICATION, THEN IT MUST BE ASSUMED THAT THE CHANGE OR MODIFICATION IS NOT ALLOWED.

### GENERAL

1. Machine movement will be from Stock to Improved stock.
2. Any snowmobile may be reclassified and/or minimum combined weight (sled and driver) adjusted in the interest of fair competition.
3. Safe Jackets are required. **They are recommended** to be worn under the drivers clothing (Jacket).
4. Minimum combined weight of snowmobile, driver and driver gear is as follows below:

| CLASS | 3 OR 4CYL. MINIMUM WT. | TWIN CYL. MINIMUM WT. |
|---|---|---|
| 440cc<br>500cc | 650 | 625 |
| 600cc | 700 | **650 (2013)** |
| 700cc | 750 | 675 |
| 800cc | 750 | 660 |
| 1000cc | 750 | 660 |

**NOTICE: Weights will be reviewed annually.**

5. No weight belts or loose objects may be worn by the driver.
6. Ballast weight may be securely fastened to the machine. Securely fastened means a grade 5 – 5/16 inch bolt with self locking nut (no wing nuts allowed)
7. Snowmobile must begin as a qualified stock model. Must comply with GENERAL RULES AND REGULATIONS SECTION.
8. Any alterations allowed in Stock are allowed in Improved Stock.
9. The sled must have original OEM for the model (or factory designated replacement) engine, **stock appearing** hood, cowl, suspension, fuel tank **or tank shroud** and seat. Factory options not allowed.
10. **A small fuel cell may be used and must be clearly visible for inspection. If it is placed in the stock fuel tank, the stock fuel tank will be cut open as to allow the tech official to view the empty tank area and the small fuel cell.**



11. **Towback of Improved Stock machines is allowed (2011).**

### ENGINE

1. Engine components must retain original OEM for the model part numbers, but may be modified, provide the engine retains its complete external stock appearance. Must retain all external dimensions.
2. Engine may be bored up to class limit. A one (1) percent overbore allowed. (Example: 670cc engine may be bored to 707cc and may not be bored up to 800cc to run in the 800cc class.) **1000cc allowed 2%.**
3. No external fastening devised allowed securing or holding the cylinders to stiffen the crankcase.
4. OEM stroke must remain the same.
5. Cylinder must remain with OEM shell dimensions to include crevices, bulges, etc. No visible external changes allowed.
6. Cylinder height may be modified to change port height. If a plate is used to raise cylinder height, the plate, including gaskets, cannot exceed ½ inch.
7. The cylinder head may be modified internally including changing replaceable combustion chambers to use replaceable inserts. The visible, outer portion of the cylinder head or cylinder head cover must remain stock appearing and the spark plug must maintain OEM location.
8. Engine components allowable for internal modifications or replacement (must begin with stock components, must retain original number of cylinders).
    a. Bearings
    b. Rods – Rod center to center must remain the same.
    c. Pistons and rings
    d. Piston pins
    e. Gaskets
    f. Reeds and reed blocks may be changed, (external plate may be thicker) if they do not alter the outside dimensions of the cylinder or crankcase. No external modifications may be made to accommodate reed block change.
9. Carburetors, flanges and intake manifold must be OEM for the model and OEM appearing. Internal modifications are allowed. Intake concept and location must remain OEM for the model. No external modification to the crankcase or cylinders allowed.
10. Any type of additional fuel delivery system or pressure charging is prohibited.
11. Internal and external modifications may be made to the airbox. Airbox may be removed. Air filters may be used.
12. Oil pumps may be removed or disassembled. Oil tank may be used for slide lube. Oil injector nozzles may be removed and plugged. (If oil

tank and overflow tank are joined the oil tank must be disabled or the joined tanks removed.

13. Flywheel harmonic balancer may not be removed.
14. Aftermarket cylinders allowed in Imp 1000 only.
15. Rigid motor mounts will be allowed. Torque arms allowed.
16. Cooling systems must be operational. May contain disconnects for cool down. Any or all heat exchangers may be relocated, modified, or removed.
17. Any functionally silenced exhaust allowed. It is recommended that the dB level (measured seventy five (75) feet down the track, fifty (50) feet from the track at full throttle measured on the exhaust side of the sled) be no greater than 108dB.

## DRIVE

1. Stock OEM primary clutch and secondary clutch may be modified (no RPM limits.)
2. Any primary and secondary clutch may be used.
3. Jackshafts, of like material and weight, may be changed to accommodate a clutch change. No welding allowed on a jackshaft. Steel and chromemoly allowed. Titanium not allowed unless OEM for the model.
4. Track drive axle and chain case must be OEM for the model and remain in the OEM location.
5. Any roller clutch allowed.

## SKI SUSPENSION & STEERING

1. Ski suspension and shocks must be OEM for the Model and remain in OEM location. **Sway bars and associated linkage may be removed.**
2. Suspension must maintain two (2) inches of travel. Measured at the front bumper.

## SKIS & RUNNERS

1. Aftermarket skis allowed. Skis must be commercially available and marketed through normal sales activity. Minimum aftermarket ski length must be 40 inches. Ski width may not be trimmed. Skis may not be interchanged between brands. Replacement ski must be the same material as OEM ski for the model.
2. Skis may be reinforced but must remain in original configuration. This reinforcing must be on the upper surface of the ski only.
3. Ski loop must be designed to prohibit ski interlock with any other components while driver is on the machine.



## TRACK SUSPENSION

1. **Track suspension will remain OEM for the Brand except for the Improved 1000 class and may be moved up** and down in the tunnel (limit 3 inches). OEM location must be maintained and may not protrude beyond tunnel configuration.
2. **Alternate Stock mounting holes may be used as provide by the manufacturer.**
3. Stock suspension must be limited by straps or chains.
4. Shocks must remain OEM for the brand and remain in OEM location.
5. Suspension must maintain two (2) inches of travel. Measured at the rear bumper.
6. Any drive sprocket and idler wheels allowed. Drive sprocket and idler may be any size and made from any material.

## TRACK & TRACTION

1. Any commercially available **0.5 inch lug speed track for 13.5, 14, or 15 inch widths may be used. Stock tracks will** remain the same width as provided for the model by the manufacturer.
2. Track must remain untouched **(no trimming)**
3. Minimum rib height must be .500 inches.
4. Except for under slide rails, all plates will be no greater than 2.25 inches in length and width. Kicker plate must be located under slide rail and be no longer than 3.25 inches and be no wider than 1.25 inches.
5. Machine must maintain twenty inches of track length on the course surface when the machine is under full power.
6. Slide lubers allowed. MUST BE ENVIROMENTALLY SAFE!!

## FRAME & BODY

1. Any chassis alterations, additions or removals, which alter stock appearance or dimensions, are not allowed. Tunnel can be repaired but must maintain OEM length.
2. The OEM fuel tank must be the only tank that can be used for fuel supply. Lubricating tanks cannot be used as a fuel tank.
3. Removal of any insulation, which alters the stock outside appearance, is not allowed.
4. Any hood that maintains stock appearance is allowed.

## IGNITION & ELECTRICAL

1. Ignition must be OEM for the model.
2. Fixed ignitions may move (+/-) four degrees.
3. Lighting coil must remain in place.

4. Yamaha machines may run a 180 degree firing order.
5. Snowmobiles will be allowed to add or remove any or all gauges.
6. Electrical wires and instrument drive cables may be removed.
7. Headlight removal is permitted.

## Improved stock 1000

### GENERAL

1. Ballast weight must be securely fastened to the machine. No weight belts or loose objects may be worn by driver.
2. Safe jackets can be worn under or on top of the drivers clothing (jacket). A leather jacket can serve as a substitute for the safe jacket at the drivers discretion.

### ENGINE

1. Engine may be bored up to class limit. A two (2%) percent class overbore is allowed to 1020cc.
2. Rod center may be changed.
3. OEM stroke may be changed.
4. Crankshaft may be modified or replaced.
5. Crankshaft gears may be changed.
6. Any aftermarket cylinder is allowed. Aftermarket cylinders must be commercially available. The outside of an aftermarket cylinder may not be modified. Welding on a crankcase is not an acceptable method to adapt aftermarket cylinders to crankcase.
7. If an OEM cylinder is modified it must remain with in .020 inch per side and .040 inch of the overall OEM cylinder outer shell dimensions. Modifications must be blended into original casting to retain OEM appearance. Cylinders may not be interchanged between brands.
8. Any commercially available head is allowed.
9. Intake concept and location must remain OEM for the model. No external modifications to crankcase or cylinders.
10. More than one OEM fuel pump may be used.
11. Carburetor may be changed. Bolt on flanges may be changed. Flange can be modified internally. Carburetor boots may be changed.
12. Reed blocks may be changed if they do not change the outside dimensions of the cylinder or crankcase.
13. The reed valve mounting area on the crankcase may be modified to change the reed angle. The upper surface of the intake tract may be reinforced by welding or bonding.
14. Air box may be removed.

### DRIVE & TRACK

1. Any primary or secondary clutch may be used.



2. **Any commercially available 13.5" to 15**" track permitted in IMPROVED 1000 class.
3. **Any OEM suspension may be used for any of the brands newer than 1988.**

### IGNITION & ELECTRICAL

1. Any ignition may be used.

## SUPERSTOCK RULES

### GENERAL

1. Super stock sleds must retain their stock appearance unless otherwise specified. Engine and qualified stock chassis must 1987 or newer. All sleds competing in Super Stock must comply with GENERAL RULES AND REGULATIONS SECTION.
2. There will be no machine movement between these classes during the event. Movement will be allowed from race event to event.
3. There will be two (2) Super Stock classes.
    a. **Super Stock – 700-1000cc** displacement any number of cylinders and induction style. Stock tracks and suspensions only, Machine and participant will weigh .80lbs per cc.
    b. **Super Stock Twin – 700-1000cc** displacement limited to twin cylinder machines. Any induction style allowed. Stock tracks and suspensions only. Machine and participant will weigh .75lbs per cc.
4. Weight rules are subject to change at anytime for the purpose of fair competition in Super Stock classes and will be adjusted during the season if necessary.
5. Ballast – If machine and driver do not meet the minimum weight requirements of the class, additional ballast must be added to the machine.

### ENGINE

1. Engine must be a qualified stock 1988 or newer.
2. Belt centers and offset may be adjusted with modified engine mounts.
3. Engine must be in original OEM location.
4. Engine components allowable for modification or replacement are as follows:
    a. Bearings
    b. Rods
    c. Pistons (any commercially available piston is allowed.)
    d. Pins
    e. Rings
    f. Gaskets

g. Manifolds (intake)
h. Carburetors/Fuel injection
i. Motor mounts
j. Ignition
k. Water pump (may be removed)
l. Fuel pump
m. Exhaust

5. Crankcase, crankshaft, rods, cylinders and heads must match the brand of the chassis. Cylinder Spacers are allowed with stock cylinders.
6. Any OEM for the brand crankcase will be allowed and may be modified provided the induction concept is retained; welding to effect repairs is allowed.
7. Any carburetor is allowed.
8. A maximum of one venture or one throttle body is allowed per cylinder. Any modification is allowed to the original carburetor casting.
9. Cylinders must be 1988 or newer and be OEM for the brand of the machine.
10. No aftermarket cylinders will be allowed in the class.
11. Welding and machining to effect repair is allowed. Welding to change existing porting is allowed provided it does not change the number of cylinders or the original concept of the engine.
12. Any OEM head for the brand will be allowed. Custom made combustion chambers will be allowed. Custom made combustion chambers will be allowed, but must be used in conjunction with the OEM head casting. Custom chambers must not be visible on the assembled engine. Multiple spark plugs not allowed unless OEM.
13. Air box may be modified, replaced, or removed.
14. Aftermarket fuel injection systems will be allowed.
15. A functionally silenced exhaust is required.
16. Exhaust pipe must not protrude more than three (3) inches beyond the chassis or hood configuration.
17. **A small fuel cell may be used in lieu of the OEM tank, but must remain clearly visible for tech inspection.**
18. **The crankshaft stroke may be altered.**

## DRIVE

**1.** Stock OEM primary clutches may be modified (no RPM limit) or may be replaced with any stock qualified primary clutch. **Secondary clutch may be aftermarket and commercially available.**
2. Drive chain may not be replaced with belt.
3. Chaincase must be OEM for the brand and be 1988 or newer.
4. Exact OEM shaft centers and position must be maintained.
5. Jackshaft may be replaced, subject to the metal substitution rule/



6. Welding on jackshaft is not allowed.
7. Drive axle may be replaced subject to metal substitution rule. Must remain in exact OEM location for the model.
8. Chassis must be a qualified 1988 or newer.
9. Chassis reinforcement will be allowed (metal substation is allowed) Metal substation on the entire chassis will be allowed subject to the metal substitution rule.
10. Round is round, square is square, structural integrity must be maintained.

## SKI SUSPENSION & STEERING

1. Ski suspension may be changed or altered but must remain stock appearing.
2. Ski widening devises are limited to three inches per ski leg.

## SKIS & SKI RUNNERS

1. Aluminum OEM appearing skis for the model are allowed, provided the original spring concept remains the same.
2. Ski must maintain OEM length for the model.
3. Skis may be narrowed to within $1/8^{th}$ inch of the structural bracing. The ski tip may be vented, structural integrity must be maintained.

## TRACK SUSPENSION

1. Any 1988 or newer stock **manufactured suspension** be allowed that was on a production sled. Suspensions may be lightened or modified, but must maintain structural integrity.

## TRACK & TRACTION

1. Any commercially available replacement rubber track available through a three tier distribution system is allowed.
2. The machine must be propelled by a single track. A minimum of 20 inches of track must be in contact with course surface when the machine is under a full power run.
3. Any new tracks or track systems must be certified by the ISR technical committee.
4. A minimum track width of 11.25 inches is allowed. (must be OEM)
5. Drive wheels may be replaced by any commercially available drive wheel. Bulkhead may be modified but maintain structural integrity.

## FRAME & BODY

1. Hood must appear to be 1988 or newer.

2. Hood must be completely stock appearing for the brand of the machine.
3. All hood openings may be covered with Plexiglas.
4. Belly pan must be OEM for the model, 1988 or newer.
5. The bottom of the belly pan and bulkhead, the width of the tunnel may be vented, but must retain structural integrity.
6. The bulkhead may be replaced with a commercially available aftermarket bulkhead.
7. Any insulation may be removed.
8. Windshield may be modified or removed.

## IGNITION & ELECTRICAL

1. Any production snowmobile ignition allowed.
2. Gauges may be removed and left open for venting.
3. Headlights may be removed and left open for venting.
4. Taillights may not be removed.

## PROSTOCK RULES

### GENERAL

1. Pro Stock snowmobiles must retain OEM stock appearance for the model (hood, seat, engine and tunnel must retain OEM appearance and dimensions.) Like chassis may be interchanged with in the brand.
2. There will **be four (4)** Pro Stock classes.

| CLASS | MAXIMUM CC. | MINIMUM WT. |
|---|---|---|
| **600**<br>700 | **612cc**<br>714cc | **575 (2013)**<br>575 |
| 800 | 816cc | 600 |
| 1000 | 1020cc | 625 |
| **1500 (3cyl)** | **1530** | **650** |

**Pro Stock 1500 4cyl 2 stroke to be at 675 lbs and 2 stroke twin sleds will be allowed a 75 lb weight break (2011).**
**Pro Stock 1500 competitors using a 1020cc to 1200cc 2 stroke may be at a combined weight of 635 lbs (2012).**

NOTE: MINIMUM COMBINED WT. is the weight of the sled, fuel, driver, and driver gear.

3. Machine movement will be from Stock to Pro Stock. Any snowmobile may be reclassified and assigned in the interest of fair competition.



4. Sled must begin as a qualified stock snowmobile. All sleds must comply with the GENERAL RULES AND REGULATIONS section.

5. Any alterations allowed in Stock classes are also allowed.
6. No weight belts or loose objects may be worn by driver.
7. Ballast weight must be securely fastened to the machine. Securely fastened means a grade 5 5/16 inch bolt with self locking nut.
8. **Class Jumping is allowed within this class and to the Open Mod Classes.**
9. **Leather suits or Kevlar equivalent required in all classes of Pro Stock Competition (2011).**

## ENGINE

1. The engine may be moved from its OEM location and remounted a maximum of one (1) inch in any direction, which is perpendicular to the centerline of the crankshaft. The crankshaft may not be moved within the crankcase.
2. Crankcase, cylinders and crankshaft must be from the same model. These components may be modified internally provided the engine retains its complete external stock appearance and dimensions. Must retain original number of cylinders.
    a. Four cylinder crankshaft gears may be changed with any OEM crankshaft gear.
    b. Cylinder maximum overbore is defined as 2% over the cc displacement for the class.
    c. Cylinder may be bored or sleeved down.
    d. OEM cylinder outer shell dimensions modification must be within .020 inches per side / .040 overall of the OEM cylinder. Modification must be blended into original casting to retain OEM appearance.
    e. Cylinder height may be modified to change port height. If a plate is used to raise cylinder height, the plate, including gaskets, cannot exceed ½ inch.
3. Engine components allowable for modifications or replacement:
    a. Heads
    b. Bearings
    c. Rods
    d. Pistons, pins and rings.
    e. Gaskets
    f. Manifolds (intake)
    g. Carburetors (no super charging, turbo charging or aftermarket fuel injection will be allowed.) Intake concept and location must remain OEM for the model. A maximum of one venture per cylinder will be allowed.
    h. Diad carburetors are allowed as per ISR.

i. Air boxes may be removed.
j. Motor mounts
k. Reeds and reed blocks may be changed if the do not change the outside dimensions of the cylinder or crankcase. External plate may be thicker. Pro Stock 1000 reed cages may be modified. No welding allowed. Reed cage changes must accomplished by bolting only.
l. Fuel pump

4. Dual spark plugs allowed as long as stock appearance is not compromised.
5. Engine must retain original cooling concept. Cooling circuits may be modified or removed.
6. Water pumps may be removed.
7. Radiators and ducting may be used but may not change OEM appearance.
8. Any exhaust modification or replacement is allowed, with the exception on megaphones. The exhaust system emission pipe must not protrude more than three (3) inches beyond the chassis or hood configuration. Exhaust system must be functionally silenced. Any functionally silenced exhaust will be allowed**. Unsilenced** pipes allowed on machines built prior to 2004. Exhaust emission pipe must not protrude more than three (3) inches beyond the chassis or hood configuration at its furthest point.

## DRIVE

1. Any CVT clutches allowed.
2. Clutch jackshaft may be changed or modified (no welding on jackshaft)
3. The jackshaft and track drive axle may be moved from their OEM locations a maximum of one inch in any direction which is perpendicular to the centerline of the shaft.
4. Chain case and cover may be from any stock qualified model within or commercially available for the brand. Chain case may not be modified.
5. Minimum brake disk diameter is 7 inches (if disk is mounted to track drive axle and a dual opposing piston caliper is used, the disk minimum diameter is 6 inches.)
6. Brake caliper may be either dual opposing piston or single piston type.

## SKI SUSPENSION & STEERING

1. Material substitution is allowed. OEM appearance must be maintained.
2. Front suspension components including struts, arms, spindles, rod ends, spherical joints, tie rods, linkages, IFS trailing arms and radius rods must remain OEM design. Must remain in the OEM location on the chassis.



3. Any shock absorber allowed. Must remain OEM location on the chassis.
4. Spindles may be strengthened or replaced with a stronger spindle. Spindle height must remain within 10% of the original OEM dimensions.
5. Minimum ski stance (center to center of the ski runners) is 40 inches.
6. Ski widening devices allowed. Maximum overall width is 45 inches.
7. Handle bars, grips and controls may be modified.

## SKIS & SKI RUNNERS

1. Any OEM or aftermarket ski may be used provided the original spring concept remains the same. Minimum length is 20 inches.
2. It is highly recommended, if a cutting edge is used on a ski, that no more than 5 inches 90% cutting edge be used on a ski.
3. Ski loop must be designed to prohibit ski interlock with any other component while driver is on the machine.

## TRACK SUSPENSION

1. Any track suspension is allowed.
2. Any shocks are allowed. Out board shock do not compromise OEM stock appearance.
3. Dual limiter straps required. One inch of travel required with driver sitting on the machine.

## TRACK & TRACTION

1. Any commercially available replacement rubber track available through a three tier distribution system allowed.
2. Track must remain untouched (no trimming)
3. Belt tracks (speed belts) allowed. Minimum width is 11.25 inch with a $1/8^{th}$ inch variance, **with Studs not to exceed 1 inch above the belt.**
4. Except for under slide rails, all plates will be no greater **than 3.25** inches in width and length. Kicker plate must be located under slide rail and be no longer than **11** inches and no wider than 1.25 inches.
5. **All plates will have nuts placed on studs unless approved otherwise by the Race Director (2011)**
6. **No Steel Cleats allowed.**
7. **Only picks allowed with no chisel studs on flat belted tracks (2011)**
8. Machine must maintain twenty inches of track length on the course surface when machine is under full power.

## FRAME & BODY

1. Chassis including front bulkhead must retain OEM appearance and dimensions for the model. Material substitution is allowed. Steel may be substituted with aluminum. Tubular front end are not allowed. The race director shall have the authority to determine structural integrity.
2. Openings must be closed, Cowling, etc. may not be cut or shaved down (OEM appearance must be maintained.)
3. Access opening s for component accessibility will be allowed, but must be closed with original type materials.
4. Chassis reinforcement will be allowed. No lightening holes can be drilled that alter the outside appearance for the model. Structural integrity must be maintained.
5. Machines will have a sheet of metal the same thickness as the tunnel. The sheet of metal shall be the same width as the tunnel and shall extend from the rear of the tunnel to the bulkhead.
6. Hood to belly pan molding must remain intact. The molding may be lightened as long as it does not alter the outside OEM appearance.
7. Any insulation can be removed.
8. Seat must remain stock appearing. Seat may be lowered but must be at least two inches thick at its minimum dimension.
9. The fuel tank may be modified to accommodate a fuel cell. The outside gas tank shell must remain intact. The fuel cap may be replaced with the fuel cell cap. The use of a fuel cell is used with the above rule will not compromise OEM appearance.
10. Except for front air dam (which requires 2inches clearance.), all other parts and components must maintain a minimum of 1 inch ground clearance with the suspension fully compressed.

## IGNITION & ELECTRICAL

1. Any ignition allowed.
2. Any instrumentation is allowed.
3. Electrical wiring may be removed.

## PRO STOCK PRO 1000

### ENGINE

1. Any aftermarket cylinder is allowed in Pro Stock 1000 and up. Aftermarket cylinders must be commercially available. Cylinders may not be interchanged between brands.



2. The read valve mounting area on the crank case may be modified to change reed angle. The upper surface of the intake tract may be reinforced by welding or bonding.
3. Custom aluminum Cases allowed in PS 1000 class that replicate the stock crank configuration for the brand. Reeds may be modified. Custom or PWC cases are allowed in the PS 1500 class.

### Chassis

1. **Bulkhead and Tunnel may consist of a chrome moly tube frame or Billet Aluminum that is available commercially. See specifications relating to this from National Snowmobile Drag Race Association (NSDRA) www.nsdra.org rules.**
2. **Seat may be of stock configuration, but may be made of fiberglass or carbon fiber materials.**

## OPEN MODIFIED RULES

### GENERAL

1. Competition is open to any snowmobile, either production or one of a kind experimental (which could include rear engine type snowmobiles).
2. Minimum wet weight is 235lbs for 340, 440, and 500cc machines. Minimum wet weight for 600cc and 700cc machines is 275lbs. Minimum weight for 800-1100cc is 300lbs. Minimum weights are combined weights with driver. 500cc and under 150 lbs, 600cc and over is 175 lbs.
3. 800-1000cc machines have a maximum overall length of 144 inches.
4. All sleds competing in Open Modified Class must comply with GENERAL RULES AND REGULATIONS.
5. The Race Director shall have the authority to determine structural integrity.
6. Class jumping permitted in open modified only.

### ENGINE

1. The engine must have been manufactured for snowmobile use (PWC cases allowed) outboard, motorcycle, aircraft or automotive engines not allowed. Any commercially available crank case allowed. The Race Rules committee will approve the validity of all engines.
2. Cylinder maximum overbore is defined as two (2) percent over the cc displacement for the class.
3. Fuel injection allowed.

4. Exhaust not enclosed within the confines of the cowl must point rearward beyond front cross member/spindle centerline. Exhaust systems cannot compromise/exceed overall sled length and width. Exhaust stinger must be directed downward and rearward. Open exhaust system OK, Megaphones not allowed.

## DRIVE

1. Modified 800cc classes and above must have a twin opposed piston caliper braking system with a minimum 3/16 (.015 inch tolerance) inch thick, six (6) inch minimum diameter brake disk, mounted on the drive axle (NO EXCEPTIONS). Any manufactured brake disk may be milled or drilled in the original pad contact area (all pads inclusive). The disc pad contact area may not be reduced more than 15% of the original pad contact area.

## SKI SUSPENSION AND STEERING

1. Dual limiter straps required. A minimum of 1 inches of compression suspension travel must remain with the driver seated on the machine.

## SKIS & RUNNERS

1. Skis must be a minimum of ¾ inch wide with a 3 inch diameter loop, with a 4 inch height and a minimum of 12 inches in length. (Skis confined under the hood are exempt from the height rule.)

## TRACK & TRACTION

1. Minimum track width of 11.25" (10" 600cc & under) required. Track width may not be trimmed or altered as provided by manufacturer. Machine must maintain twenty (20) linear inches of track length on the course surface when the machine is under full power.
2. Traction devices may be full or partial track width. Minimum number of fasteners every 1-1/4 inches (to allow area for slide rails), but total number must be used to fasten thru rubber track material and device, (example: fifteen (15) inch wide device must have a minimum of twelve (12) fasteners thru rubber track and device , seven (7) inch device must have 6 fasteners etc) **Cleated track's not allowed. Cleat appearing traction devices will not be allowed.**

## FRAME AND BODY

1. All Open Modified machines will have a sheet of metal the same thickness as the tunnel material, permanently fastened to the topside of the tunnel material. The sheet of metal shall be the same width as the tunnel to the horizontal centerline of the drive axle. Tunnels 1/8 inch (.125) thick or thicker will meet the above rule and will not have to add the second sheet to the tunnel. The 1/8 inch (.125) tunnel must extend to the horizontal centerline of the drive axel.
2. On open mod 800 and 1100 a braking parachute brake is mandatory. The chute size to be determined by sled size, speed and weight. Chute controls will be mounted with the controls accessible to the driver in a normal driving position and be tethered to the driver.

# SUPER MOD CLASS RULES

## GENERAL

1. There is one (1) SUPER MOD class.
2. Multiple engines are allowed. See engine rules for details. Maximum 1800cc's. per engine. Maximum 4000 total ccs.
3. All sleds competing in super mod must comply with GENERAL RULES AND REGULATIONS section.
4. There will be no movement into this class from a lower class
5. A braking parachute brake is mandatory. The chute size to be determined by sled size, speed and weight. Chute controls will be mounted with the controls accessible to the driver in a normal driving position and be tethered to the driver.
6. On open cockpit snowmobiles, it is mandatory that a regulation parachute be mounted to the driver and tethered to the machine.
7. The maximum machine width is 50 inches. The minimum ski stance (spindle-to spindle is 30 inches).
8. The participants torso must sit forward of the center of the rear axle.
9. Drivers must weigh a minimum of one hundred seventy five (175) lbs., including protective gear. If the participant does not meet the minimum weight requirement, they must add ballast to the machine.
10. The minimum length is seventy two (72) inches, with minimum length of the front spindle center to the center of the rear axle to be sixty seven (67) inches.
11. The minimum wet weight without fuel will be 300 lbs.
12. Drivers must wear a one piece leather suit (or a two piece suit may be securely fastened at the waist), leather gloves, and leather boots that extend six (6) inches above the ankle.
13. Drivers must wear a fire protection sock over their head and neck, inside the helmet.
14. All rear engine machines must be equipped with a regulation roll cage.

## ENGINE

1. The engine (engines) must appear to be a snowmobile engine. (Pwc cases allowed)
2. The engine and engine components shall have been manufactured for snowmobile use, unless otherwise specified by the class rules (Outboard, motorcycle, aircraft, ATV, automotive engines and engine components are not allowed). The Race Rules Committee will approve the validity of all engines.
3. Any snowmobile crankcase, crankshaft, cylinders, and heads will be allowed.
4. Gasoline and/or alcohol may be used as fuel. **VP Import Fuel Allowed.**
5. Any fuel injection will be allowed.
6. A functionally silenced exhaust is required.. Exhaust emission pipe must not protrude more than three (3) inches beyond the chassis or hood configuration.
7. Engine Configuration:
    1. A maximum of 1800cc's (per engine) with a .020 inch (1/2 mm) overbore is allowed.
    2. Pressure charging and nitrous oxide are allowed as follows:

    A. 600cc may use turbochargers, superchargers, and/or nitrous oxide
    B. 800cc may use turbochargers, superchargers, and/or nitrous oxide.
    C. 1000cc and over may use nitrous oxide only. No other pressure charging allowed.

## DRIVE

1. No holes may be drilled in the protective shields.
2. The track(s) must be driven by a single drive axle.
3. All machines will be equipped with an adequate hydraulic brake system on the final drive axel.
4. All sleds 800cc's and above must have twin opposed piston caliper braking system with a minimum 3/16 inch thick, six (6) inch minimum diameter brake disc. Any manufactured brake disc may be milled or drilled in the original pad contact area (all pads inclusive). The disc pad contact surface area must not be reduced more than fifteen percent (15%) of the original pad contact surface area.
5. The maching must be propelled by a variable ration belt transmission.
6. A maximum of two (2) snowmobile clutches are allowed
7. The chain must be completely enclosed with a maximum of 2 lubrication holes located near the gears or sprockets.



## SKIS & SKI RUNNERS

1. Ski must be a minimum of ¾ inch wide, three (3) inch diameter loop, four (4) inch height and a minimum length of twelve (12) inches. Skis confined within the hood are exempt from the height rule.
2. Must maintain a 1 inch minimum travel.

## TRACK & TRACTION

1. The continuous track length is to run parallel to the machine length and maintain twenty (20) inches in length of continuous surface traction on the course surface. Track surface must be in contact with the course surface when the machine is used in full power.
2. The track must be driven by a single axle.
3. Externally activated suspension systems are not allowed.
4. Minimum total track(s) width is 11 ¼ inches. Maximum total track width is 16 inches. A 1/8 inch variance per track in the minimum track width requirements is allowed. **Cleated tracks not allowed.**
5. Any new track or track system must be certified by the ISR Rules Committee.

## FRAME & BODY

1. A 1/8 inch 6061-T6 aluminum sheet of metal shall run the width and length of the tunnel down over the front of the tunnel to the center line of the drive sprocket.
2. Seat must have a minimum of four (4) inches rigid backrest on seat.
3. All fuel tanks must have a pressure cap and be vented to the outside of the body or have a built in check valve. Fuel lines must be free of obstruction by other machine components.

## IGNITION & ELECTRICAL

1. Any ignition will be allowed.
2. An additional shut off shall be located at the rear of the machine to close off all electrical fuel systems and be clearly marked (see GENERAL RULES AND REGULATIONS SECTION).

# EXHIBITION CLASS RULES

## GENERAL

1. There is one (1) EXHIBITION class:
2. Multiple engines are allowed. See engine rules for details. Outboard, **motorcycle, and Automobile engines allowed as approved by the Race Director.**
3. All sleds competing in EXHIBITION must comply with GENERAL RULES AND REGULATIONS section.
4. There will be no movement into this class from a lower class
5. A braking parachute brake is mandatory. The chute size to be determined by sled size, speed and weight. Chute controls will be mounted with the controls accessible to the driver in a normal driving position and be tethered to the driver.
6. On open cockpit snowmobiles, it is mandatory that a regulation parachute be mounted to the driver and tethered to the machine.
7. The maximum machine width is 50 inches. The minimum ski stance (spindle-to spindle is 30 inches).
8. The participants torso must sit forward of the center of the rear axle.
9. Drivers must weigh a minimum of one hundred seventy five (175) lbs., including protective gear. If the participant does not meet the minimum weight requirement, they must add ballast to the machine.
10. The minimum length is seventy two (72) inches, with minimum length of the front spindle center to the center of the rear axle to be sixty seven (67) inches.
11. The minimum wet weight without fuel will be 300 lbs.
12. Drivers must wear a one piece leather suit (or a two piece suit may be securely fastened at the waist), leather gloves, and leather boots that extend six (6) inches above the ankle.

## ENGINE

1. The engine (engines) must appear to be a snowmobile, outboard, or motorcycle engine as mentioned above.
2. The Race Rules Committee will approve the validity of all engines.
3. Any snowmobile crankcase, crankshaft, cylinders, and heads will be allowed.
4. Gasoline and/or alcohol may be used as fuel.
5. Any fuel injection will be allowed.
6. **Any functionally silenced exhaust will be allowed. Unsilenced pipes on existing competitors sleds will be allowed until January 01, 2013.**



7. Exhaust emission pipe must not protrude more than three (3) inches beyond the chassis or hood configuration.
8. Pressure charging and nitrous oxide are allowed.

## DRIVE

1. No holes may be drilled in the protective shields.
2. The track(s) must be driven by a single drive axle.
3. All machines will be equipped with an adequate hydraulic brake system on the final drive axel.
4. All sleds 800cc's and above must have twin opposed piston caliper braking system mounted on drive axle with a minimum 3/16 inch thick, six (6) inch minimum diameter brake disc. Any manufactured brake disc may be milled or drilled in the original pad contact area (all pads inclusive). The disc pad contact surface area must not be reduced more than fifteen percent (15%) of the original pad contact surface area.

## SKIS & SKI RUNNERS

1. Ski suspension must have a minimum of 1 inch of travel.
2. Externally active suspensions are not allowed.
3. The track(s) must be driven by a single axle.
4. Ski must be a minimum of ¾ inch wide, three (3) inch diameter loop, four (4) inch height and a minimum length of twelve (12) inches. Skis confined within the hood are exempt from the height rule.
5. 

## TRACK & TRACTION

1. The continuous track length is to run parallel to the machine length and maintain twenty (20) inches in length of continuous surface traction on the course surface. Track surface must be in contact with the course surface when the machine is used in full power.
2. Minimum total track(s) width is 11 ¼ inches. Maximum total track width is 16 inches. A 1/8 inch variance per track in the minimum track width requirements is allowed.
3. Any new track or track system must be certified by the ISR Rules Committee.
4. No Steel Cleated Tracks allowed. All tracks subject to the ruling of the Race Director and the Tech Officials.

## FRAME & BODY

1. A 1/8 inch 6061-T6 aluminum sheet of metal shall run the width and length of the tunnel down over the front of the tunnel to the center line of the drive sprocket.
2. Seat must have a minimum of four (4) inches rigid backrest on seat.
3. All fuel tanks must have a pressure cap and be vented to the outside of the body or have a built in check valve. Fuel lines must be free of obstruction by other machine components.

## IGNITION & ELECTRICAL

1. Any ignition will be allowed.
2. An additional shut off shall be located a t the rear of the machine to close off all electrical fuel systems and be clearly marked (see GENERAL RULES AND REGULATIONS SECTION).

# Lake Racer Class Rules

## GENERAL

1. There will be one (1) Lake Racer class for stock bodied snowmobiles limited to 1250cc engines.
2. Snowmobile with stock track and suspension will have a minimum weight requirement of .68lbs per cc. Machines with a speed track & suspension will have a minimum weight requirement of .70lbs per cc. Minimum combined weight not to exceed 750 lbs.
3. Gasoline, alcohol, and nitrous will be allowed.
4. All sleds competing in the Lake Racer class must comply with applicable rules in the General Rules & Regulations section.

## ENGINE

1. The engine and engine components must have been manufactured for snowmobile use unless otherwise specified by the class rules. (Outboard, motorcycle, aircraft, ATV, watercraft or automotive engine components will not be allowed). The race rules committee will approve all engines. The engine must appear to be a snowmobile engine.
2. Engine must be 1988 or newer. Engine must retain original cooling concept (liquid, fan, or free air cooling), but cooling circuits can be modified or removed.



3. Any 1988 or newer OEM crankcase and crankshaft for the brand is allowed.
4. Cylinders-Any 1988 or newer OEM cylinders and heads allowed. Aftermarket snowmobile cylinders and heads allowed.
5. Engine components allowable for modifications or replacement:
   A. Cylinders
   B. Heads
   C. Bearings
   D. Rods-OEM stroke must remain the same
   E. Pistons, pins, and rings
   F. Gaskets
   G. Manifolds (intake)
   H. Carburetors-A maximum of one (1) venture or one (1) throttle body per cylinder will be allowed.
   I. Motor mounts
   J. Ignition
   K. Air boxes may be modified, replaced, or removed.
   L. Fuel pump
   M. Water pump
   N. Oil pump
   O. Any fuel injection system is allowed.
   P. Any functionally silenced exhaust is allowed. Open exhaust allowed. Exhaust emission pipe must not protrude more than three (3) inches beyond the chassis or hood configuration.

## DRIVE

1. The machine must be propelled by a variable ratio transmission.
2. Jackshaft may be changed or modified: subject to metal substitution rule (no welding on jackshaft)
3. Chain case must remain OEM or be commercially available for the model.
4. Any steel replacement gears are allowed.
5. The chain must be completely enclosed on the sides and top, (the bottom may be left open), with a minimum of 1/16 inch 6061T6 aluminum. A maximum of two (2) lubrication holes (maximum ¾ diameter each) may be drilled in the approximate location of the sprockets on the out board side of the case.
6. Brakes may be changed or altered, but must be operational at all times. Liquid cooling systems will be allowed. Master cylinder and caliper assembly must be commercially available.
7. All sleds 800cc and above must have twin opposed piston caliper braking system mounted to drive axle with a minimum 3/16 (.015 inch tolerance) inch thick six (6) inch minimum diameter brake disc. Any manufactured brake disc may be milled or drilled in the original pad contact area (all pads inclusive). The disc pad contact surface area

must not be reduced by more than 15% original pad contact surface area.

### SKI SUSPENSION & STEERING

1. Ski suspension must remain OEM appearing for the model. Material substitution is allowed. Ski widening devices limited to 45 inch maximum. Spindles may be strengthened or replaced with stronger spindle.
2. Lake Racers must have two (2) inches travel in usable ski suspension.
3. Snowmobile must have a windshield. Any windshield will be allowed.
4. Snowmobile must have a hood and belly pan.
5. Handlebars, handlebar grips and controls may be modified.

### SKIS AND SKI RUNNERS

1. Any OEM appearing ski may be used provided the original spring concept remains the same (plastic, aluminum, or steel).
2. Ski concept and appearance for the model must be maintained.
3. After market plastic, metal or aluminum skis are allowed.

### TRACK SUSPENSION

1. Track suspension may be moved up and down in the tunnel (limit 3 inches). OEM location must be maintained and may not protrude beyond tunnel configuration.
2. Rails may be bent. Linkages may be changed. OEM suspension wheel diameters may be added or changed. Suspension wheel diameters may be trued. All suspension wheels must be within the confines of the track.
3. Shocks may be changed.
4. Lake Racers must have two (2) inches travel in usable track suspension.
5. Any suspension is allowed with speed tracks.

### TRACK & TRACTION

1. The machine must be propelled by a single track. The continuous track length is to run parallel to the machine length and maintain twenty (20) inches in length of continuous surface traction on the course surface. The track surface must be in contact with the course when the machine is under a full power run.
2. Any commercially available and properly filled OEM track is allowed. The track must be a track issued for the number of cc's of the motor. A 60cc variance is allowed, i.e., a 650cc engine must have a minimum of 600cc or greater rated OEM track.



3. Speed tracks and suspensions will be allowed. **No cleated tracks allowed. No cleat appearing traction devices allowed**.

### FRAME & BODY

1. Chassis must be 1988 model year or newer and appear to be a snowmobile chassis. Lowering is allowed.
2. Chassis reinforcement is allowed. Structural integrity must be maintained. No lightening holes can be drilled that alter the outside of OEM appearance.
3. Access open for component accessibility will be allowed, but must be closed with original type materials, i.e., hinged clutch covers.

### IGNITION & ELECTRICAL

1. Any ignition is allowed.
2. Any instrumentation is allowed.
3. Wiring may be removed.
4. Headlight and taillight **may** be functional **(2012).**

## DIAL-IN CLASS RULES

There will be one Dial In class. There will be safety inspection prior to any runs being made, no tech inspection.

Competition is open to all snowmobiles meeting all safety related rules. There are no restrictions as to the type or age of the snowmobile.
**Participants first official run will become their dial-in speed.**
**New for 2013, Participants may make one pass before competition will start if so desired. A test run card must be used for this purpose!**

Sleds must comply with the GENERAL RULES AND REGULATIONS section.

### ENGINE

1. Any snowmobile engine is allowed.
2. Any functionally silenced exhaust allowed.

### DRIVE

1. Any variable ratio belt driven clutch allowed.
2. If brakes are altered, the must pass technical safety inspection to enter in the event.

## TRACK & TRACTION

1. The machine must be propelled by a single track. The continuous track length is to run parallel to the machine length and maintain 20 inches in length of continuous surface traction on the course surface. Track surface must be in contact with course surface under a full power run.
2. Due to a high failure rate, **cleated tracks will not be allowed**.
3. A minimum track width of 11.25", +/- 1/8" is allowed.
4. The track must be confined to the tunnel and extend to within six (6) inches of the rear of the tunnel.
5. Any new tracks or track system must be certified by the ISR Technical committee.

## FRAME & BODY

1. Chassis, bulkhead and tunnel must remain structural integrity. Tech officials have the final say as to structural integrity of the snowmobile.



# ENFORCEMENT, DISCIPLINE AND VIOLATIONS

**ALL PARTICIPANTS ARE SUBJECT TO DISCIPLINARY ACTION FOR VIOLATIONS OF THESE RULES IN ACCORDANCE WITH THE SANCTIONING ORGANIZATION'S BYLAWS. PENALTIES MAY INCLUDE SUSPENSIONS, FINES, AND LOSS OF POINTS, DISQUALIFICATIONS OR COMBINATION THEREOF. THE NATURE OF THE PENALTY IS DETERMINED BY THE GRAVITY OF THE OFFENSE AND ITS EFFECT ON THE SAFETY AND GOOD REPUTATION SNOWMOBILE RACING. THE VIOLATIONS HEREINAFTER SET FORTH ARE SUBJECT TO THE PENALTIES NOTED.**

## EJECTION FROM RACE SITE

1. The Race Director has the right to eject any person(s) from the pit, paddock (staging area), or racetrack area.

## CONDUCT OF PARTICIPANT (OFFICIALS, DRIVERS, CREWS, ETC.)

1. Participants are solely responsible for the condition of their sleds and their competence to operate them.
2. No driver may at any time ride/drive in a manner as to endanger limb or life of other riders, officials, or the public.
3. **Driver may not change on any machine in a specific class while in competition during the course of an event (2012).**
4. Vulgarity, derogatory or offensive language will result in disciplinary action, ejection from race site and be subject to fines and penalties.
5. Any participant that threatens bodily harm or assaults any official, driver, crew, etc. will be subject to disciplinary action, ejection from race site, and subject to fines and penalties.
6. Clothing displaying vulgar language or other offensive materials is not allowed.

## DRIVER LIABILITY

1. The driver/ pit crew, in signing the entry elects to use the course of the even at driver/ crew's own risk, and thereby releases the sanctioning organization together with their heirs, assigns, officers, representatives, agents, employees, and members, sponsoring organization and owners of properties on which sanctioned events are to be held from all liability from injury to person, property and/or reputation that may be received by said entrant and from all claims of said injuries to the

parties listed above growing out of, or caused by any construction or condition of the course which the event is held.

## DRIVER RESPONSIBILITY

PIT CREW

1. Members of the pit crew, etc., are the responsibility of the driver to whom assigned.

BAD CHECKS OR CREDIT CARDS

2. Any competitor who pays for race entry or organization membership with a check or credit card is responsible for the payment of all charges should the bank or other institution fail to remit for whatever reason. Failure to do so will result in the suspension of the driver from competition. The suspension shall extend for one year after the debt has been made good.

SNOWMOBILE REQUIREMENTS

1. The condition of a machine is the responsibility of the driver. A driver may be disciplined if driver's machine is modified so as to defraud the officials or other competitors.

## FRAUD, BRIBERY & ILLEGAL ASSISTANCE

1. In addition to non-compliance with any of the above regulations or rules, the following offenses shall be considered a breach of regulations subject to disqualification.
    a. Bribing or attempting to bribe anyone connected with the race; accepting or offering to accept a bribe.
    b. Competitor accepting any kind of assistance that aids in the machine operation during the race outside of the rules for that class or competition.
    c. Any fraudulent proceedings or act of prejudicing the interest of the race generally.

## INTOXICATING BEVERAGES & DRUGS

1. Drinking of intoxicating beverages is strictly prohibited. Anyone showing evidence of having used alcohol or other mind/mood altering chemicals must leave the premises (specifically: pit, paddock, warm up area, tear down, and racetrack); immediately and be subject to disciplinary action by the disciplinary committee. This shall be in effect through the final inspection of all machines.
2. Possession or use of illegal drugs or drug substances, as defined below, is prohibited in any form, by any participant, on the race facility, or in any area considered to be in operation such as but not limited to parking lots and other leased properties.



3. Illegal drugs are these substances defined and prohibited by state or federal law.
4. Any person found to be in possession or under the influence of an illegal drug or drug substance on race facility property, as defined above, or any person who is arrested by duly constituted authorities and charged with possession or related charge, or any person who is formally charged by a court of law with illegal drug violations, shall be subject to suspension from competition and eviction the race properties, and a denial of further entry to the circuit for a period to be determined by the disciplinary committee.
5. Any participant who is formally charged by a court of law within an illegal drug violation, upon notification to the ISR advisory board, shall be suspended from all forms of participation at any ISR event until such time as the charges are fully adjudicated through the legal process. Any conviction of a formal drug charge by such will be prohibited from taking part in any ISR or affiliated event for a minimum period of three (3) years from date of said conviction.
6. Any participant suspended for violation of these rules may be granted an appeal hearing by a board of officials appointed by the ISR advisory board, provided the suspended participant requests hearing in writing within fourteen (14) calendar days of the date of suspension. It is the responsibility of the suspended party to make such a request if the hearing is desired.
7. The cost of convening the board of officials will be borne by the participant prior to the convening of the board.
8. A participant suspended for violations of these rules, EXCEPT IN THE CASE OF SELLING DRUGS, may, as the result of a decision reached through the hearing process detailed above, be reinstated, if it is mutually agreed that the participant (at his/her own expense) will produce documentation from a physician licensed within the state or province, certifying that he/she is drug independent, as a result of random or periodical examinations and urinalysis testing made at the request of the ISR advisory board.
9. If a participant is using prescription drugs on the advice of a physician, such use must be reported to the Race Director prior to the participant's entry into any ISR activities. Failure to notify will be subject to penalties as stated above.
10. A participant is any person taking part in any event sanctioned by or affiliated with International Snowmobile Racing, Inc., in any form, including but not limited to, drivers, sled owners, mechanics, crew members, sponsors, track officials, pit area personnel, manufacturers and press representatives. All such persons shall be considered public figures that have by their own choice become involved with the snowmobile racing events, with the full understanding that he or she must abide by the rules and regulations established and published by

the ISR. All participants are considered to be responsible for their personal conduct.

# RACE DIRECTOR AUTHORITY

1. The Race Director and Technical Director will be certified by the sanctioning organization.
2. The Race Director shall be responsible for the conduct of the race. He/she shall have the right to make final determination concerning all aspects of the race and race facility, including design (these rules and regulations notwithstanding).
3. He/she shall have the voice of authority to discipline the participants for violation of the rules. Such discipline will be limited to disqualification and/or exclusion from an event.
4. Official race results shall be approved by the assigned Race Director and signed copy will be returned to the promoter for announcement and distribution.
5. Race Director may not have vested interest in the outcome of an event over which he/she officiates. He/she may not officiate over an event that he/she has vested interest.
6. **Race Directors may compete in events, if so desired. Disputes will be ruled on by a driver mutually agreeable to the Race Director and the protestor, if the need for a ruling is required.**
7. The Race Director may cancel any race or the complete event for reasons of safety regarding competitors or spectators, and in such case shall determine the awards, if applicable. The Race Director may shorten the race for any reasons of safety but must give drivers adequate notice in advance.
8. A Race Director may judge the integrity of all timing equipment
9. Only Drivers (no other participants) will have discussions with the Race Director about protest and driving complaints, etc., and may approach the Director before the day's events and after an event, or at the direction of the Race Director.
10. The Race Director has the authority to judge the racing abilities of competitors and take appropriate action to insure the safety of the event.
11. The Race/Tech Director shall have the authority to determine structural integrity.
12. The Technical Director shall carry and be responsible for the official specifications and certain instruments for measurements concerning verification and control of contestants' machines. The Technical Director may not officiate over a class of which he/she has vested interest.



13. Technical equipment and specifications will not be used for any other purpose than that of the sanctioned event.
14. Decisions of the Race/Tech Director may be reviewed by the board of the sanctioning body.

**NO EXPRESS OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM PUBLICATION OF OR COMPLIANCE WITH THE RULES AND REGULATIONS IN THIS PUBLICATION. THEY ARE INTENDED AS A GUIDE FOR THE CONDUCT OF THE SPORT, AND ARE IN NO WAY A GUARANTEE AGAINST INJURY OR DEATH TO EITHER SPECTATORS OR PARTICIPANTS.**