

# VERIFICATION AND CONTROL

These GENERAL RULES apply to all types of ISR racing sanctions and all classes unless so noted. All participants, racers and crewmembers are required to be fully aware of these regulations and must abide by them.

The rules for competition are intended only as a guide for the conduct of the sport in a uniform manner from region to region.

Safety rules and guidelines contained herein are of utmost importance. All participants must be concerned with safety and be familiar with these rules and guidelines. However, ISR does not warrant, guarantee or insure safety even if the rules are enforced and/or adhered to. More over, each participant in competition has the responsibility to assess the safety aspects of the facilities and conditions and must assume the risk of competition.

## MANDATORY EMERGENCY VEHICLE

1. A properly licensed and equipped emergency vehicle (i.e. rescue vehicle or ambulance) must be at the race site to transport injured persons to an appropriate hospital. Said vehicle will be fully equipped to include items such as oxygen, first aid, burn equipment, splints, backboard and stretcher. This vehicle shall have all emergency equipment.

## RULE SUPPLEMENTS

1. Rule supplements, additions or corrections shall be announced in the official publication, magazines or newsletter. Upon such an announcement the rule changes become effective and enforceable.
2. Telephonic race rules conference calls will be followed up with an information letter to the affected affiliates.
3. After a rules meeting, any request to reconsider a new rule requires a ¾ majority vote of the rules committee to approve a revote. Then, a ¾ majority is also required to change the rule.

## CLASS DIVISIONS

1. All class entries will not discriminate on the basis of sex. Any qualified member may participate in the approved classes offered in any sanctioned event.
2. A snowmobile will be allowed to race in its respective displacement, or designated performance class, and any larger displacement or performance class, except as noted in specific sections.

## REGISTRATION AND ENTRY

1. WAIVER FORMS ARE MANDATORY FOR ALL PERSONNEL IN SECURED AREAS (paddock, staging and track).
2. Driver must have registered at race headquarters and signed a waiver before any runs are made (practice or racing). No one, except officially entered drivers may ride or practice on any racecourse on the day of the event.

3. No refunds of entry or other fees will be made at sanctioned events after registration is closed, unless the event is cancelled or rescheduled by a ruling of the Race Director, after which time fees will be returned.
4. 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.
5. Drivers who fail to complete payment for entry fees are subject to discipline prescribed by the ISR affiliate. Drivers may be suspended for a period of one year from the date on which the debt is paid.
  - a. If the participant stops payment on check or credit card, participant gives up the right to protest or appeal until full payment is made.
  - b. Participants who pass NSF checks must pay entry and prescribed fees in full before the next race or within 30 days, whichever is sooner.
6. Insurance fees are not refundable.
7. Regional service charges or insurance surcharges are not considered part of entry fee maximums.
8. Gate admission fees for driver and crewmembers will be regulated on a regional basis.
9. The order of events will be regulated on a regional basis.
10. The maximum number of classes a driver can enter per day will be regulated on a regional basis.
11. Any class or event can be eliminated when there are less than two (2) official entries at the close of registration.
12. All participants in events must be fully familiar with the rules and regulations, plus such rules by Race Promoters that may be specifically applied to any event.

## DRIVER AND SNOWMOBILE

1. A driver and his snowmobile (chassis and engine) shall be considered a unit and once the class has begun, neither will be substituted. If a driver qualified on a snowmobile, both must be in the same final event of the class and/or event.
2. Engine parts may be replaced during the event, except for the crankcase and crankshaft, which may not be replaced.

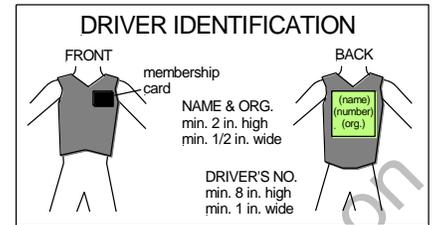
## SPONSOR IDENTIFICATION

1. Anytime the sanctioning organization or sanctioned event has a sponsorship, all members and promoters must meet sponsorship requirements, as long as drivers' number system is not compromised.
2. Recommended size for any sponsor's required emblem should not exceed sixteen (16) square inches on the front and twenty four (24) square inches on the back of the driver's uniform.

## DRIVER IDENTIFICATION

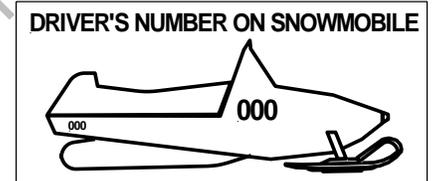
1. There will be an automatic suspension for drivers who race under another driver's number.
2. All drivers will wear their issued bib or a facsimile thereof. Drivers will be required

to keep the snowmobile numbers and bib numbers in a legible condition (see illustration).



## SNOWMOBILE IDENTIFICATION

1. The driver's assigned competitive number must be displayed on both sides of snowmobile hood. The number must be a minimum of six (6) inches high, 3/4 inches wide and be displayed in contrasting colors. Numbers must also be displayed on both sides of tunnel, minimum four (4) inches high. These numbers must be displayed on the snowmobile in a permanent manner before being allowed to race (see illustration). (See Sno-cross section for applicable Sno-cross rules.)



## PRE-RACE SAFETY INSPECTION

1. ANY ENTRY IS SUBJECT TO INSPECTION UPON REQUEST BY THE RACE DIRECTOR OR TECHNICAL DIRECTOR.
2. Pre-race safety inspections are mandatory at all races. Passing a pre-race safety inspection is no guarantee that a snowmobile complies with all rules for the event.
3. Only snowmobiles having passed pre-race inspection will be allowed on the racetrack.
4. All aspects of modification are contingent on safety inspection by the Technical Director. The Technical Director may remove any snowmobile from competition that does not meet safety requirements.
5. Damaged or broken safety equipment (not including tether switch) not detected during a race is not grounds for disqualification after completion of that race unless black-flagged during the race in question.

## MANDATORY TEARDOWN

1. Regardless of snowmobile equipment passing prior inspections, compliance with the rules must be made at the post-race inspection.
2. Once a snowmobile has completed registration to race it may be inspected at any time.
3. Tech Director will select the snowmobiles for mandatory teardown and inspection. Drivers will take their snowmobiles directly to Tech after completing the race. The snowmobile must remain in Tech until released by the Tech Director or a designated member of the Tech staff.
4. Driver and/or driver's mechanic will

- perform teardown to point required by the Technical Director.
- Any driver not reporting to Tech or refusing teardown will be disqualified.
  - Inspected snowmobiles will not be reassembled by the inspection group.
  - Driver and/or driver's mechanic will be the only two (2) people allowed with the snowmobile in the inspection area.
  - The sanctioning organization assumes no responsibility for impounded snowmobiles.

#### SEALS

- Drivers will allow the installation of a seal or seals on the engine and/or body of their racing snowmobiles. To change the seal, mutilate it or try to break it, or re-use it, during the weekend or event where it is installed without the consent of the Race Director, could result in the responsible driver being called before the disciplinary committee for strict discipline. Accidental breakage of the seal must be reported to the Race Director immediately.

#### PROTESTS

- All formal protests must be made in writing, by a driver, in competition at the event, from the class in question, on a formal protest form, accompanied by a cash protest fee (protest fee may vary by region or circuit) two hundred and fifty dollars (\$250.00) recommended.
- When the official protest is made with the fee, the item to be protested must be stated (a general protest will not be accepted), teardown will not be complete until protest is found to be valid or proven unwarranted. If the protest is valid, the fee will be returned to the protester. If the protest is invalid, the fee will be given to the protested snowmobile owner for the inconvenience (to be accomplished before the snowmobiles are released from teardown).
- There is no need for formal protests in the case of driving infractions during an event. Reports of such alleged infractions should be made to the Race Director, who in turn will request a report from the flagman or assigned official on the course.
- Race Director has the authority to determine the validity of a protest.
- No protests will be accepted that refer to a Race/Technical Director's judgement or decision.
- It shall not be possible to protest or appeal technical inspection equipment, manual /electronic scoring or manual/electronic timing equipment.
- Protests must be filed within thirty (30) minutes following the completion of the daily event or within thirty minutes following the official announcement of results for the class in question whichever occurs first.
- Properly filed protests must be addressed by sanctioning body before finalizing class results.

#### APPEALS

- Each ISR affiliated racing organization must, in writing have a specified APPEALS PROCESS set down and available to drivers, promoters or any personnel.

- A racer or other individual may appeal decisions made by race officials, directly affecting them, but only in accordance with the written procedure set down by the racing organization.
- If a racer goes through the entire appeals process as set down by the race sanctioning organization and is not satisfied, he/she may appeal to the Rules Committee for the type of racing.
- All appeals shall be in writing and received by the chairperson of the appropriate appeals committee on or before 15 days after the decision appealed from is rendered.

#### NOTICE

**Driver infractions/ disqualifications in a drag racing, oval racing, enduro racing, cross country racing, water cross racing, and speed run racing events will be forwarded to all ISR affiliates.**

#### NOTICE

**Drivers, promoters or any personnel affiliated with ISR snowmobile events who are banned from racing or subject to other major penalties by one affiliate, having completed the hearing process, the decision shall be honored by all ISR affiliates.**

#### PRIZES AND AWARDS

- All prizes, awards and paybacks shall be presented to the official winners or their appointed representatives at the close of the event, unless specifically advertised otherwise as to the time and place of awards.
- Drivers will not be required to attend award banquets, parties, ceremonies, etc., in order to receive prizes, awards or paybacks, although they are encouraged to cooperate as a courtesy to the promoter.

#### PIT AND PADDOCK/STAGING AREA

- Reasonable speeds will be observed in the pit and paddock area. All pit areas are caution zones where utmost in driver awareness is required.
- Hot pit and staging areas are limited to drivers preparing to race and their pit crewmembers. Minimum age for pit crewmembers in these areas is 14 years old. All persons in these areas must have signed a release and waiver for the event.
- There is no minimum age for people in paddock, pit parking and cold pit areas. It is recommended that people in these areas be required to sign a release and waiver.

#### TESTING, TUNE-UP, WARM-UP & PRACTICE

- It is highly recommended that testing areas (separate from the racetrack) not be used.
- Testing of the engine and/or snowmobile must be done in a designated area only. Driver must consult with Race Director to determine proper testing areas at each event.
- Testing area must be a suitable course or area, completely free of obstructions, which provides adequate and safe run-off areas so competitor may slow down and exit safely.
- Fences or squared off banks shall not be permitted at the end of the testing area.

- Officials must provide proper supervision of the testing areas as well as adequate crowd control to prevent spectators or other persons from moving onto the area.

#### SUPPORT VEHICLES

- No unauthorized motorized vehicles will be allowed in the pit or staging area. Snowmobiles have to return under their own power. Only disabled snowmobiles may be towed from the track.

#### TEMPORARY SHELTERS

- Competitors shall not utilize temporary shelters such as tents, sunshades or other structures made from flammable materials. Such equipment shall have proof of flame resistance testing affixed for inspection by race officials.

#### ANIMALS

- No aggressive animals will be allowed at the race site.

## DRIVER PROTECTIVE EQUIPMENT

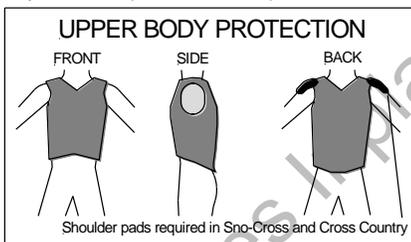
**It is the responsibility of the racer to select protective equipment that will conform to ISR guidelines and provide adequate protection. Even though race rules committees and ISR develop guidelines, ISR does not endorse or guarantee specific products or manufacturers of protective equipment. Racers must rely on their own judgment in the selection of helmets and other apparel for protection and durability.**

- Regardless of driver apparel passing prior inspections, compliance with the rules must be made at post-race inspections. **Full coverage helmets are mandatory. Helmets will be full protective coverage and carry the 2010 Snell Foundation Approval Code. Helmets carrying European Standard ECE 22.05 are also approved. This is also mandatory in the tune-up area. The helmet must be securely fastened at all times.** SnowCross: Any snowmobile operator under the age of 18, must wear a helmet anytime a snowmobile is operated anywhere at the racing facility.
- Enclosed cockpit sled drivers must use a automotive certified helmet meeting Snell SA specifications.
- (Oval, Cross Country, Enduro) It is mandatory that the driver's helmet must be a minimum of seventy five percent (75%) international or blaze orange.
- (Sno-Cross /Watercross): The helmet must be predominantly blaze or international orange in color. More than 50% of its entire outer surface including the visor must be orange. **There is a mandatory 6" x 6" area located lower center in the middle of the back of the helmet that must be solid Orange.** A template measuring 2 inches by 3 inches

placed anywhere on the helmet must contact orange color **except on a 4" X 6" spot on the left and right hand side of the helmet.** [Click here to see a Diagram.](#) On a typical snocross helmet there should be at least 144 square inches (12 X 12 inches) of orange.

**For Enduro, Ice Lemans, Oval Sprint, Vintage oval, and Snow Cross: At least one hundred forty four (144) square inches of visible area on both the driver's front and back (upper body) will be international or blaze orange in color at all events. Jackets / Pullovers / Jerseys will be teched lying flat on the ground front and back. This is strongly recommended in all other types of racing. This does not apply in Enclosed Cockpit classes.**

5. Gloves and clothing, along with at least above ankle leather boots are mandatory (above ankle boot must have a minimum of 6 inches of leather above the ankle).
6. Eye protection mandatory; facemasks may be required at the starting line at the discretion of the Race Director. If corrective lenses are required to drive a motor vehicle, the driver will also be required to wear them when racing.
7. Hearing protection is mandatory in all non-stock classes in all types of competition. Recommended for all stock class competition.
8. The use of upper body protection equipment is mandatory, except for enclosed cockpits. The upper body protection must cover all body areas shown in illustration. It will protect the driver in mid-body and back areas and be capable of resisting penetration and dissipating force of impacts while absorbing the shock of most blows. Typical motocross vests do not meet this rule.
9. (Cross Country / Sno Cross) Shoulder pads must be added to upper body protection (see illustration).



10. Shin and knee guards are mandatory. Shin and knee guards will be worn on both legs. The shin guard must extend from the instep to above the kneecap and be constructed of an impenetrable material.
  11. Upper Arm Pads and Elbow pads are highly recommended in all forms of racing.
  12. Neck bracing recommended in all forms of racing.
- Upper Body Protection That Meets ISR Guidelines [Click Here](#)**  
**Evs [Click Here](#)**  
**Tek Vest [Click Here](#)**  
**Saf-Jak [Click Here](#)**

# GENERAL COMPETITION

## FLAG RULES

1. There shall be a meeting between the flagman and corner flagmen prior to the start of a race so there is a definite understanding concerning the use of the corner flags.
2. Any competitor who does not obey the following rules will be subject to disqualification and/or fine.

## GREEN FLAG

1. Start of race or signifies course is clear and race is in progress.

## YELLOW FLAG

1. (OVAL) Track corners: signifies there is an additional safety hazard on the track.
2. (SNO-CROSS) A yellow flag indicates an accident or other incident, which may include obstruction of the racetrack.
  - a. Yellow flag zone is that portion of the track from the first yellow flag to a point past the entire incident.
  - b. Drivers must slow down and observe caution while in the yellow flag zone.
  - c. No passing allowed in a yellow flag zone.
  - d. Racing may be resumed after leaving the yellow flag zone.
3. (ENDURO) Flag signifies that there is an additional safety hazard on the racetrack. When a yellow flag comes out, the entire track will be put on yellow. Snowmobiles will form a single line. No racing. Starting Line - The yellow flag signifies caution. After the yellow flag is displayed, competitors must slow down, hold positions and do not pass until the green flag is again displayed or the red flag is given automatically stopping the race. All laps under the yellow flag will be scored as part of the race. All snowmobiles entering the track during yellow must blend into traffic at nearest opening. Under no circumstances is passing permitted under the yellow flag. Team violating this rule will be subject to disqualification, fine and/or loss of laps. When the yellow flag is displayed, all snowmobiles will slow down to thirty five (35) mph.

## RED FLAG

1. The red flag means the race will stop immediately regardless of position of snowmobiles on the track. The red flag will be used if, in the opinion of the Race Director or Chief Starter, the track is unsafe to continue the race. Snowmobiles should be brought to the starting line if possible, using extreme caution. Snowmobiles must not leave the track proper unless directed to do so by the Race Director. (Enduro) While the red flag is displayed, no work or refueling allowed on snowmobiles including those in the pits. Drivers are not to receive assistance of any kind. (SnowCross) Upon seeing the red flag drivers are to stop and then proceed with caution to the starting area.
2. Normal pit activity resumes after the field

begins moving in preparation for restart.

## BLACK FLAG

1. On closed course races, should a vital snowmobile component such as clutch guards, hoods, mud flaps, or ski become dislodged or discarded, the starter will display the black flag to the involved driver immediately. A rolled black flag is a warning to a driver that he/she may have an equipment failure or that he/she may have committed a driving infraction.
2. (Oval ) Consultation flag-leave course immediately and report to the Race Director, (Snowcross) report to starter. This does not necessarily mean disqualification; however, failure to obey the black flag could result in disqualification, suspension or fine. The black flag will have a one (1) inch wide white border and a one (1) inch wide white cross through the center of the flag. On closed course races, should a vital snowmobile component such as clutch guards, hoods, mud flaps, or ski become dislodged or discarded, the starter must display the black flag to the involved driver immediately.
3. (Sno-Cross) During a race if a driver is shown a furled black flag the driver must: Stop on the next lap at the start/finish line to consult with the flagman. Driver should stop on the inside of the track in a safe manner, close to the flagman. Driver may be allowed to re-enter the race at the discretion of the flagman.
4. (Enduro) Consultation flag - leave course immediately and report to the Race Director. Failure to obey the black flag after running two (2) laps under the black flag loss of laps will result.

## WHITE FLAG

1. When displayed, drivers have started their last lap.
2. WHITE FLAG- (Oval) White Flag shall have a green two (2) inch border around it.

## CHECKERED FLAG

1. When the checkered flag is displayed, it means the race is complete.

## BLUE FLAG WITH YELLOW DIAGONAL

1. (Oval - Sno-Cross) For passing-flag will be displayed to snowmobiles being lapped.

## SIGNAL LIGHT RULES

1. Sanctioning bodies, which employ signal lights, must inform competitors of their signal light protocol before the start of the event. When light signals are used instead of flags, all competitors must be made aware of signal light procedures prior to the race.
2. Competitors must obey signal lights.
3. The following signals apply to OVAL, ENDURO and other specified closed course races:
  - a. GREEN LIGHT-Start of race.
  - b. YELLOW LIGHT-Caution
  - c. RED LIGHT- Stop snowmobile. At the direction of the Race Director, return cautiously to the starting line.
4. The following signal lights apply to DRAG racing:

- a. PRE-STAGE/STAGE-Flashing or non-flashing means stage snowmobiles, be ready to race.
- b. YELLOW LIGHT-Staged and ready to race.
- c. GREEN LIGHT- Start of race
- d. RED LIGHT-Driver has left the line before green light.

#### TIMING

1. It is the driver's responsibility to see that his snowmobile triggers the scoring system properly.
2. Starting and finishing lights must be of a uniform height.

#### RACE STARTING PROCEDURES

1. All drivers must be assembled on the starting line, ready to race within two (2) minutes of notification of their race (except special events).
2. Another method may be: Pre-entry competitors will draw for start position in respective class first. Race day entries will draw for position behind pre-entry drivers at the time of sign-up.
3. Snowmobiles may be pushed to the starting line.
4. All participants (including crewmembers entering the start line area, are required to wear eye protection or safety glasses.
5. Snowmobiles must be placed on an approved stand for warm-up and/ or for clearing the track. See CLEANOUT/SAFETY STANDS in this chapter.
6. All snowmobiles on the starting line must have the track and both skis flat on the course surface, before starter begins the race.
7. All snowmobiles will be started from a standing position, in a line abreast (unless stated otherwise).
8. The driver's feet must be on the running boards or stirrups. The Race Director may disqualify a driver if the driver's method of start interferes with other contestants.

#### START

1. On a false start a racer will be penalized by the Chief Starter, Race Director or Flagman.
2. There shall be no change of drivers at any time without notification to the Race Director (except special events).
3. Events that take place under natural lighting will be terminated thirty (30) minutes after published sunset. This rule must be strictly enforced. Furthermore, this rule assumes that there are no other visibility issues other than sunset. If visibility is reduced beyond the prescribed limit by other factors, racing must be halted before the prescribed time.
4. Any conditions that reduce visibility (prior to 30 minutes after sunset) must be considered before continuing to race. Other conditions include (but not limited to) snow dust, ice dust, fog, haze, clouds, mist, falling snow, falling rain, and smoke.
5. It is the Race Director's responsibility to discontinue racing if the visibility falls below the prescribed level at any time during the day.

#### INJURED DRIVERS / DAMAGED

#### SNOWMOBILE

1. An injured or otherwise incapacitated driver or damaged snowmobile shall be prohibited from racing with exception that if in the Race Director's judgement the driver or snowmobile is determined not to be a danger to driver's self or any other competitor. The Race Director's decision is final.

#### RACE RESTART PROCEDURE

1. The Race Director may have a restart at his discretion. Race Director's decision is final.
2. In the event of an accident involving one (1) or more snowmobiles, the Tech Director may at his sole discretion rule said snowmobile(s) mechanically unsafe to participate in the restart. These snowmobile(s) must be fully safety inspected and approved by the Race/Tech Director before further competition will be permitted.
3. (Oval - Sno-Cross) All snowmobiles will be stopped under the red flag. The flagman will notify drivers when to move snowmobiles and he will have them proceed slowly to the point of restart. If only one (1) lap, or less, has been raced, the order of snowmobiles for the restart will be the same as the beginning of the race (with the following exceptions):
4. Any snowmobile causing the stop of a race and a subsequent restart will be placed to the rear of the restart sequence.
5. Any snowmobile unable to immediately return to the starting line will be placed to the rear of the restart sequence.
6. After more than one (1) lap has been raced, the restart position of the snowmobiles reverts to the last officially counted lap.
7. Snowmobiles will be restarted in a staggered line.
8. With the Race Director's permission, only one (1) crewmember (per snowmobile) will be allowed on the track in the event the competitor cannot start his/her snowmobile alone. No mechanical work can be performed by the crewmember.
9. Drivers and snowmobiles must be on the starting line within two (2) minutes of restart notification.

#### LEAVING THE COURSE

1. Drivers should stay on the confines of the marked course. At the discretion of the Race Director, a driver may be disqualified for leaving the confines of the course.
2. (Oval - Sno-Cross - Cross Country) Drivers may not stop on the racecourse. If mechanical problems or other factors require stopping, driver will comply with rules for the specific event as prescribed by the officials before the event.

#### CONTROL OF SNOWMOBILE DURING RACE

1. It is expressly forbidden to drive or push a snowmobile in a direction other than that of normal race traffic. A driver who has spun out is permitted to turn snowmobile around to continue the event provided such action is taken only when the course is clear.

2. (WaterCross) Loss of a buoy in oval classes may result in a disqualification for the heat or final being raced if the Flagman or Race Director determines that it has caused an unsafe condition.

#### BLOCKING AND FOOLISH DRIVING

1. The deliberate blocking of a faster snowmobile is cause for disqualification at the discretion of the Race Director.
2. Bumping or cutting of lanes is cause for penalty or disqualification at the discretion of the Race Director. Any dangerous or foolish driving, bumping crowding, chopping, cross jumping or unsportsmanlike conduct on the course, in the pit area, or anywhere else on the race grounds will subject contestant to disqualification at the discretion of the Race Director.

#### OBSTRUCTION

1. (Oval, Sno-Cross, Cross Country, Enduro) If for any reason a driver is forced to stop on or near the course during an event, it would be the driver's first duty to remove the snowmobile from the track so as not to endanger or obstruct other drivers.

#### RACE FINISH

1. The finish line will be clearly marked.
2. (Except for Speed Run) A driver whose snowmobile is disabled before driver reaches the finish line may be pushed or pulled by driver's own unaided muscular energy across the finish line and will be considered to have completed the race. A competitor is said to have finished the race when driver is in contact with the snowmobile and any part of the snowmobile crosses the finish line.
3. (Oval -Sno-Cross) All laps must be completed by first (1st) place snowmobile to declare a finish. All competitors will be given a finish position per number of laps completed. Any drivers that do not complete the checkered flag lap will be scored in order of finish and laps completed. Appropriate points and prize money will be awarded based upon published formulas.

#### SIGNALS

1. A driver who has spun off or stalled must raise both hands over driver's head to indicate that no more movement will be made until the field has passed and to indicate no injury.

#### DRIVERS BRIEFING

1. The mandatory meeting (or meetings) will be held at an announced time and place. It will be conducted by the Race Director and Race Promoter. Descriptions of the course, flags, etc. will be made. An interpreter should be used when needed. Pins, stamps, tags, etc. may be used to check the identity of drivers at the briefing.

#### RADIOS

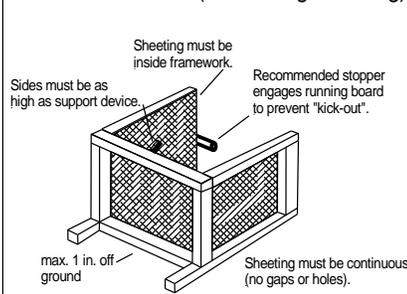
1. There will be no independent radio transmission on sanctioning body's radio frequency.
2. Unless otherwise stated, radio communication between crew and driver

not allowed while driver is on the course.  
See specific sections for details.

### CLEAN OUT / SAFETY STANDS

1. Snowmobile safety stands that catch and retain track, track lugs, traction components and other items that are thrown by a track are mandatory (see illustration).

WARM-UP STAND (not a design drawing)



2. The stand must be no more than six (6) inches from the rear of the tunnel opening and no more than twelve (12) inches from the track. The safety stand will be constructed of metal equivalent to 6061/T6 aluminum, 1/8 inch thick. Side panels are mandatory and they must extend at least to the center of the rear axle. The sides and back must be secured inside the framework. Vertical coverage must be no more than one (1) inch off the ground/ice and as high as the snowmobile support device. Coverage must be continuous (no lightening holes). A plywood liner is recommended to help absorb impact. Safety stand must maintain sufficient height to prevent track coming into contact with ground/ice surface. The stand must be used whenever the rear of a snowmobile is raised to clean out the engine or track.
3. (Drag Racing) Clean out will only be allowed at specified backboards. The snowmobile must be placed on a safety stand and the safety stand must be against the clean-out backboard. Backboard minimum requirements are eight (8) feet tall, four (4) feet horizontal space for each snowmobile. Backboards must be sheeted with 3/4 inch plywood (no chipboard). Additional clean out boards may be placed in the paddock area.
4. No full throttle operation while snowmobile is on warm up stand (recommendation).

### MISUSE OF PIT PASSES

1. Improper usage of pit or paddock passes will be grounds for discipline.

### FIRE EXTINGUISHER

1. Fire extinguishers must be available in pit, paddock/staging and starting line areas. Fire extinguisher minimum size will be five (5) pounds with ABC fire extinguishing capabilities. Fire extinguishers will be in place before the start of the race.

# GENERAL SNOWMOBILE RULES

These **GENERAL RULES** apply to all snowmobiles in competition unless so noted. All participants, racers and crewmembers are required to be fully aware of these regulations and must 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.
3. All snowmobiles in Modified and Open classes must have serial numbers permanently affixed to the engine and the frame. Duplication of serial numbers is not allowed.
4. If the tunnel, engine or other serial numbered part is replaced, the serial number must be removed from the replaced part and affixed to the new part.

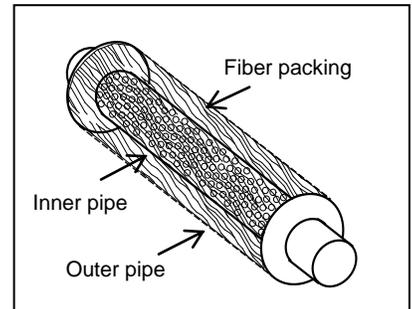
### MATERIAL SUBSTITUTION/UPGRADE

1. (Speed Run / Oval) Aluminum to magnesium, aluminum to titanium, steel to steel (steel includes chromoly steel).
2. (Speed Run / Oval) Round is round. Square is square.

### ENGINE

1. ISR and/or the Race Rules Committees will approve the validity of all engine intake systems.
2. In stock and stock-based classes, the engine must have originated from a stock qualified, OEM produced snowmobile.
3. In Stock classes, the OEM for the model exhaust system must remain as produced by the manufacturer and must be fully functional.
4. In modified drag racing and some other types of racing, the following minimum standards for straight-thru silencers are required:
  - a. Inner pipe must have at least 15 holes per square inch. Minimum hole size 1/16 in. (Minimum 3/8 in. sound

- a. absorbing material around the entire circumference of inner pipe).
- b. Inner pipe (perforated core) must contact sound absorbing material (fiber or steel wool packing).
- c. Outer pipe must be at least 3/4 in. larger than inner pipe.
- d. Minimum silencer length 3 in.



5. OEM carburetor slide valves and replacement jet components without modification will be allowed in all Stock classes. No modification to carburetor body will be allowed.
6. An adequate return spring on the throttle is required.
7. The throttle must be a direct mechanical thumb mechanism, which must be located on the rear side (toward the rear of the snowmobile) of the right-hand handlebar. Throttle must be thumb operated. Twist grip throttles not allowed.
8. No pressure charging allowed unless specified.
9. All Stock classes - Choke control devices may be disconnected; however, they may not be removed from their mounting location.
10. When superchargers 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

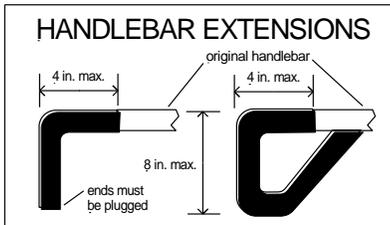
1. Brakes shall be operative at all times. Brake lever must remain on the left, front side of handlebar.
2. The master cylinder, caliper and disk assembly must be commercially available.
3. Additional brake assemblies may be added. If the secondary brake is on the track drive shaft, the disk may be smaller 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, 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 all accidental explosions 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 acceptable in Stock classes only.
8. Secondary clutch windage plates may be removed in all classes. Windage plates may not be added in Stock based classes unless OEM for the model.

**SKI SUSPENSION AND STEERING**

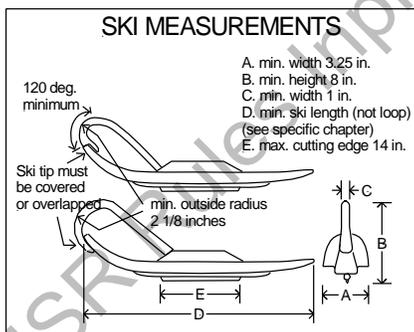
1. Handlebar extensions are allowed in some classes in some forms of racing. They must conform to the illustration below.



2. All handlebar ends must be plugged.
3. Only steel suspension springs allowed unless otherwise specified.
4. At safety inspection, ski suspension travel will be measured vertically at the front bumper.

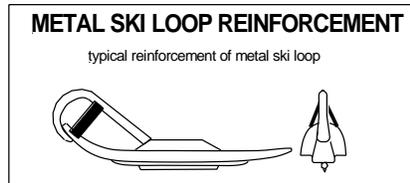
**SKIS & SKI RUNNERS**

1. Except where otherwise specified, one cutting edge (steering edge) allowed per ski on snowmobiles with independent front suspension. Any ski edge with over 1/2 inch 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 inch thick or 1 inch diameter round material. The arc of the leading edge of the ski loop must have an outside radius of at least 2 1/8 inches and extend at least 120 degrees upward (see illustration). 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. **(See Hillclimb specific rules for Hillclimb exemption.)**
5. Metal ski loops must be affixed with steel bolts and not welded (Oval-minimum two fasteners).
6. Metal ski loops must have adequate lateral or 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 (unpolished, flat black).
8. (Oval, Enduro, Ice Lemans, Sno-Cross, Drag) Ski tip (not including the loop) must be turned up 1.5 inch from the bottom of the ski (not including the keel(s) or ski runner).
9. No part of the ski may contact the body or suspension through the ski's normal range of travel and/or movement.

**TRACK SUSPENSION**

1. Any OEM type slide rail hylax may be used as a replacement.
2. Slide rail hylax 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. (Hillclimb Cross Country - Sno-Cross - Drag) Slide rail lubrication systems are not allowed. Slide rail inserts may be added.
5. Only steel suspension springs allowed unless otherwise specified.
6. At safety inspection, track suspension travel will be measured vertically at the rear bumper.

**TRACK & TRACTION**

1. Track dimension rules are specified in each chapter. A 1/8 inch maximum variance in the minimum track width requirement is allowed. No cutting, notching or trimming of the track is allowed, except as noted in specific sections.
2. Unless otherwise indicated, the track must be centered on the centerline of the tunnel in all modified classes. **Modified classes are allowed track offset for installation of brake assembly on front driveshaft. In no case may this offset be more than 2 (two) inches, determined from edge of track to inner edge (side) of tunnel.** In Stock and Stock-based classes, the track location must be as produced unless otherwise specified.
3. In all forms and classes of racing, track clips and guide clips may be replaced when worn - guide clips may be removed and replaced with track clips - track clips may be removed and replaced with guide clips - the track must retain the original number of clips with which it was produced.
4. In all forms of racing, there are traction device limitations, see specific chapters for details (see Appendix for traction device measurement details).
5. Identification numbers affixed or molded into tracks by the molder of the track must remain completely visible and unmodified. No traction device or other item may be installed over the identification numbers on

the track. Identification numbers include model number, serial number and/or any other information applied to the track by the molder.

6. Tracks may not be reversed.
- 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 inch 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. **(Clarification: Exception, Hillclimb discipline sleds need not restrain the snowflap, but must meet all other snowflap dimension requirements.)** 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 the course surface when the rider is on the snowmobile. Violation of this rule results in mandatory expulsion from the class.
5. The snow flap on the twin track snowmobile must be reinforced to keep it in proper placement at racing speeds. Two (2) separate flaps may be used on twin track snowmobiles.
6. Material used in/as wheelie bars will not be considered a snow flap.
7. The maximum overall snowmobile width is 45 inches unless otherwise stated.
8. **Except for Speed Runs and Hillclimb Modified and some Modified classes in drag racing, maximum snowmobile length is 120 inches.**
9. Where specifically allowed, foot stirrups/foot pegs may be installed. Must be constructed of rigid materials.
10. **All modified snowmobiles regardless of class or discipline will be equipped with an upholstered, padded seat minimum thickness one (1) inch, minimum length fifteen (15) inches. OEM seats may be cut down to the design needs of the builder, but must meet these minimum standards.**
11. **Unless otherwise stated, seats in Stock class must be OEM for the model. OEM seats have no requirements for fabric, padding, dimension, or coverage. If the seat meets manufacturers legal design criteria it is legal for any class, stock or modified.**
12. 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.
13. If a braking parachute is required, it must have been produced by a recognized manufacturer. Tech inspectors may observe the 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 snowmobile should lose a track or part of the snowmobile (specifically, mounted above the snow flap and rear of the tunnel). The parachute controls will be mounted so they are accessible to the participant in a normal driving position and be tethered to the participant with a 1/8" thick nylon cord, a maximum of five (5) feet long. The 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 with the following exception: In Sno-cross, Cross Country, Ice Lemans, Enduro and Oval racing, the color orange may not be used.

#### **ENCLOSED COCKPIT FRAME & BODY**



1. A quick release seat belt/ shoulder harness (aircraft-type, automotive race type) is mandatory on all enclosed cockpit snowmobiles. All safety belts/shoulder harness installations must be mutually compatible (originally designed to be used with each other). Installations not allowed where the harness is sewn, fastened or where the safety belt is fed through the loops in the harness. For harness installations see illustration. Only those units that release all four (or five) 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. Belts and shoulder straps must be 3 inch minimum width .
2. Quick release arm restraints are mandatory.
3. Under no circumstances are bolts to be inserted through belt webbing for mounting.
4. It is recommended that all belts and harnesses be covered with fireproof material.
5. 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.
6. All enclosed cockpit snowmobiles must be equipped with a regulation on board fire extinguisher and must be manually controlled. The system must be 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.

**See OVAL OUTLAW rules for variations and exceptions.**

7. Fuel tanks must have a pressure cap and be vented to the outside of the body or have built in check valve.
8. All roll cage structure must be designed to protect the participants from any angle, three hundred sixty (360) degrees. Flush grinding welds not permitted. It is recommended that all cage welds be gusseted. Must have a roll bar four (4) inches above drivers head (see illustration).
9. An approved Fire Retardant Suit, (fire suit) must be used and must be the final layer of clothing on the driver during competition. No other clothing may be worn over the firesuit.

#### **IGNITION & ELECTRICAL**

1. All snowmobiles must be equipped with a tether switch that must be attached to the operator and be operable at all times. The switch must "kill" the engine by disconnecting the ignition system when the operator and the snowmobile become separated. It is the responsibility of the driver to make certain that the tether is attached to everyone who starts the engine or operates the snowmobile.
2. Maximum tether cord length will be 4 feet except where noted otherwise. Verification of tether cord length will be determined at tether cord's fully extended length.
3. The tether cord will be securely fastened to the driver. No alligator clips allowed.
4. The tether switch will be securely mounted in a location on the snowmobile other than on the handlebars or steering column.
5. (Drags, Speed Run, Sno-cross) All snowmobiles must have a handlebar mounted button (on/off) kill switch on the right side within thumb reach (this is in addition to your tether switch).
6. Wet cell must be enclosed in a non-conductive battery box. Positive terminal must be shielded. Battery box must be securely held in place.
7. On snowmobiles with enclosed cockpits it is mandatory to have a functional kill switch that will terminate ignition if the snowmobile rolls over, this is in addition to the tether switch.
8. 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 gasoline 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.) 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 sanctioned races for starting purposes. No driver will be allowed to carry such cans on their person or their snowmobiles during the race.
- e. Driver statements as to their fuel components will be binding and may be verified by various fuel tests. Drivers must allow officials to test their fuel at anytime.
- f. In Stock Drag Racing and all Youth Racing classes, commercially available gasoline that is reformulated with up to 10% ethanol is allowed.

#### **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 liability for injury or death caused by the handling of these materials.

Any or all of these 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

**For enforcement and penalties concerning use of illegal fuel and illegal fuel additives in all forms of snowmobile racing.**

[Click Here](#)

# 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, loss of points, disqualifications or any combination thereof. The nature of the penalty is determined by the gravity of the offense and its effect on the safety and good reputation of 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 snowmobiles and their competence to operate them.
2. No driver may, at any time, ride/drive in such a manner as to endanger life or limb of other riders, officials or the public.
3. Vulgarity, derogatory or offensive language will result in disciplinary action, ejection from race site and be subject to fines and penalties.
4. Any participant that threatens bodily harm or assaults any official, driver, crew, etc. will be subject to disciplinary action, ejection from race site and be subject to fines and penalties.
5. Clothing displaying vulgar language is not allowed.

## DRIVER LIABILITY

1. The driver/pit crew, in signing the entry, elects to use the course of the event at driver's/pit crews 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 over which the event is held.

## DRIVER RESPONSIBILITY

1. The driver has the responsibility for the actions of his crew. It is the driver's responsibility to see that all crewmembers are aware and abide by all rules and guidelines.
2. The condition of a snowmobile is the responsibility of the driver. A driver may be disciplined if driver's snowmobile 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 or accepting or offering to accept a bribe.
  - b. Competitor accepting any kind of assistance that aids in snowmobile operation during the race.
  - c. Any fraudulent proceedings or act of prejudicing the interest of the race generally.

## INTOXICATING BEVERAGES & DRUGS

1. Drinking of intoxicating beverages is strictly forbidden by any participant. Anyone showing evidence of having used an intoxicating beverage must leave the premises (specifically pit, paddock (staging area), warm up area, tear down and race track) immediately and be subject to disciplinary action by the disciplinary committee. This shall be in effect through the final inspection of snowmobiles.
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 used in the operation of the race facility, such as parking lots or leased properties.
3. Illegal drugs are these substances defined and prohibited by state/provincial and/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 and/or use of illegal drugs or drug substance 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 from the race facility, and denial of further entry to the race facility for a period determined by the disciplinary committee.
5. Any participant who is formally charged by a court of law with 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 conviction.
6. Any participant suspended for violation of these rules may be granted an appeal hearing by a board of officials designated by the ISR Advisory Board, provided the suspended participant requests such 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 a 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 violation of these rules, EXCEPT IN THE CASE OF PERSONS CHARGED WITH 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 own expense) will produce documentation from a physician licensed within the state or province, certifying that he or she is drug independent, as a result of random and periodical examinations and urinalysis testing made at the request of the ISR Advisory Board.
9. If a participant is using prescription drugs on 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 subject the participant to penalties as prescribed 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 restricted to drivers, snowmobile 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 in the snowmobile racing events, with the full understanding that he or she must abide by the rules and regulations established and published by 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 shall have the right to make the final determination concerning all aspects of the race and the race facility, including design (these rules and regulations notwithstanding).
3. He shall have the voice of authority to discipline the participants for violation of the rules. Such discipline will be limited to disqualification of a participant and/or exclusion from an event.
4. Official race results shall be approved by the assigned Race Director and a 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 a class in which he/she has a vested interest.
6. Race Directors may compete in events other than those in which they officiate.
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 any. 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 mechanical integrity of all timing equipment.
  9. Only Drivers (no other participants) will have discussions with the Race Director about protests, and driving complaints, etc., and may approach the Director before the day's events, 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' snowmobiles. The Technical Director may not officiate over a class in which he has a vested interest.
  13. Technical equipment and specifications will not be used for any purpose other than the conduct of the sanctioned event.
  14. Decisions of the Race/Tech Director may be reviewed by the board of the sanctioning body.
  15. **Decisions made at an event shall not be overturned without a formal appeal. Notice of the appeal process shall be given and a suitable time period for all parties to prepare must be allowed.**

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 SPECTATORS OR PARTICIPANTS.

ISR Rules Inplace for the 2014 / 2015 Race Season

# CROSS COUNTRY RACING

## CROSS COUNTRY SANCTIONS AND CLASSES

1. A Cross Country sanctioned event is one raced primarily over land following a defined and marked route from one point to another. It may follow a looped course, 3 miles or more in length, with more than one lap around the same course. Total distance must be twenty five (25) miles or more.
2. SPECIAL RULES: The sanctioning body may impose special rules for certain events with the approval of ISR in writing before the event. Any such special rules must be made available to all competitors with sufficient time for competitors to comply.

### LAKE ENDURO SANCTION

1. A Lake Enduro sanctioned event is one raced primarily over a lake ice/snow surface, following a defined and marked course. It may follow a looped course, with more than one lap around the same course. No land running allowed unless absolutely necessary. In such cases, distance raced on land must be as short as possible and sufficient ice/snow base shall be maintained.
2. The course must be three (3) miles or more in length and total distance must be twenty five (25) miles or more.
3. Terrain X by Northwoods Challenge is a specialty Lake Enduro format.

### TEAM CROSS COUNTRY SANCTIONS

1. A team Cross Country event is one in which two or more drivers compete as a team. Team members must enter checkpoints and the finish area together. The time for the team is the time at which the last member crosses the line.
2. Format, entry fees and pay back are at the discretion of the promoter and approved by the region. Prospective entrants must be informed of format, entry fees and pay back before registration.

### SPECIAL SANCTIONS

1. Can be any snowmobile event that does not fall under any of the specific circuits or classes, but meets established safety standards, applicable laws and/or approved insurance coverage.
2. All special sanctions and specialty classes must be approved in writing by ISR before competition.

### CROSS COUNTRY CLASSES

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 snowmobiles as possible a place to successfully compete.

If class rules are not followed, the class name shall not be used and the class shall be run as a specialty class with ISR's prior approval.

#### PRO CLASSES

Pro 600 Stock  
Pro 600 Open  
**Factory 600**

#### SEMI-PRO CLASSES

Semi Pro 600 Stock  
**Semi Pro Improved**  
**Factory 600 Semi Pro**

#### AMATEUR CLASSES

Sport 600 Stock  
**Factory 600 Sport**

#### SPECIALTY CLASSES

Masters  
Veterans  
**Sport Improved**  
Women  
**Expert 85**  
Sport 85  
**Expert 85 Improved**  
**Sport 85 Improved**

#### TEAM CROSS COUNTRY CLASSES

CLASS NAME	DRIVERS	NOTES
PRO 440 STOCK	2	Both on 440cc liquid cooled
	3	2 on liquid 440cc, 1 on 440cc fan (Fan cooled snowmobile starts last.)
VETERANS	2 (combined age of at least 90)	Drivers whose qualifying birthday occurs during the season may race entire season.
AMATEUR	2	1 must be fan cooled

#### CLASSIFICATIONS

1. The sanctioning body reserves the right to classify snowmobiles according to their specific level of performance. Any snowmobile may be reclassified in the interest of fair competition.

#### DESIGNATED MODELS FOR STOCK CLASSES

1. 440cc Stock designated models:
  - a. 440cc maximum displacement.
  - b. Maximum two 34mm fuel delivery devices.
  - c. Single expansion chamber exhaust.
2. 600cc Stock designated snowmobiles must have only 1 expansion chamber.

#### FOUR-STROKE ENGINES

1. In order to be eligible for competition, a four-stroke powered snowmobile must be classified through the ISR four-stroke classification procedure.

#### GENERAL COMPETITION RULES

These rules apply to all events and classes unless so noted. All members and racing personnel including mechanics, pit and staging area personnel and promoters are expected and required to be fully aware of all rules and they are expected to follow and abide by them.

#### GENERAL REQUIREMENTS AND GENERAL REGULATIONS

1. Where visibility is limited, such as on a hill or corner, a flagman shall be placed at a point of driver's vision at least two hundred (200) feet ahead of the potential hazard. He shall display a yellow flag if the course is not clear.
2. Temperature and snowfall shall be taken into account before starting a race. The race may be delayed shortened or cancelled if the weather is deemed too severe.
3. The number of machines in a flight shall be limited to twelve (12).
4. Radio communications shall provide coverage for surveillance, ambulance, and snowmobile recovery. The main base shall be located near the Start/Finish line and the Race Director, or his designate, will remain in contact. Race officials shall visually cover the entire racecourse, if possible.
5. A driver must always be prepared for another snowmobile to pass and must therefore be on the lookout for other snowmobiles approaching from behind. Drivers will not hinder or obstruct an overtaking vehicle. A slower driver is to move over for the passing snowmobile.
6. Driver may carry repair parts during the race as long as they do not protrude hazardously beyond the outside dimensions of the snowmobile. Drivers only (no outside assistance except Team Cross Country) may work on their machines on the course proper, but not in the path of other machines that are racing and must use only parts and tools carried on the course by themselves at the beginning of the event.
7. It is the driver's responsibility to inform the nearest race official of any injured drivers on the racecourse.
8. Teardown is accomplished by impounding the first (1st) ten (10) snowmobiles, mandatory teardown and inspection of the first five (5) place machines.

#### REGISTRATION AND ENTRY

1. Any class event can be eliminated when there are less than two (2) official entries at the close of registration.

- Entry fees are regulated on a regional basis.
- Payback is regulated by the region.
- Drivers may be assessed a late registration fee.

### DRIVER'S RULES

- Senior competitor must be at least eighteen (18) years of age. (Refer to JUNIOR COMPETITION SECTION for more information.)
- Driver and his crew members must abide by all (Rules and Regulations) set forth under the chapters of this manual titled Competition Race Director Authority, Snowmobile Equipment, Verification and Control, Driver Protective Equipment and Enforcement and Discipline.
- Driver Infraction/Disqualifications in any Cross Country or Sno-Cross event must be forwarded to all ISR Cross Country and Sno-Cross affiliates.
- Eye protection mandatory, two (2) pair or types of eye protection are recommended.
- A driver's assigned number must not be used by another driver. The driver assigned number must be displayed on both sides of the snowmobile hood. The number must be six (6) inches high (eight (8) inches is highly recommended), 3/8 inches wide and displayed in contrasting colors; these numbers must be displayed on the machine in a permanent manner before it will be allowed to race. Yearly members are to have their numbers painted on by their second race.
- Drivers will carry their membership cards at all sanctioned races and show them to the Race Director and other designated officials when asked, along with other substantiating evidence that will prove their identity. On all driver membership cards, the driver's blood type must be noted if provided on membership application. It is recommended that the driver's medical record be carried with the membership card.
- It is mandatory that the driver's helmet and at least one hundred forty four (144) square inches of visible area on both the driver's front and back must be of bright (fluorescent) orange color.

### DRIVER MAY BE DISQUALIFIED FOR:

- Running without a hood or shroud in position.
- Running with altered numbers.
- Running with bibs not in position.
- Road running when marked for ditch will result in disqualification.
- Not following the prescribed route (intentional course cutting, missing check points, etc). If lost on prescribed route, no time adjustments will be made for driver error (subject to Race Director).
- Receiving unauthorized assistance.
- The driver or a group of drivers attempt to harass race officials, in any manner.
- Use of radio or CB systems.
- Speeding through check points and gas stops.
- Not complying with checkpoint procedures.
- Dangerous driving tactics.

- Failure to stop for Post Race Technical Inspection.
- Failure to use proper safety equipment.
- Unsafe operation in the pit area.
- Allowing non-registered drivers to operate driver's snowmobile on track during a practice lap or during race.

### DRIVER MAY BE PENALIZED AT START OF RACE FOR THE FOLLOWING:

- Jumping the start.
- Causing a restart.

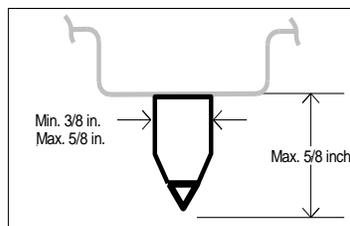
## GENERAL SNOWMOBILE RULES

### DRIVE

- Aluminum and/or carbon brake disks not allowed.

### SKI & SKI RUNNER

- Maximum carbide to carbide ski stance must not exceed forty three and one half inches (43.5 inches) Center to center distance will be measured as follows: on units with centered carbide on skis, carbide to carbide dimensions with skis straight ahead and rider in seated position in natural contour of the seat will determine measurement. Measurement will be taken at the carbide cutting edge. On units with offset carbide, outer carbide cutting edge on right ski to outer carbide cutting edge on the left ski, with skis straight ahead and rider in seated position in the natural contour of the seat will determine the measurement. Measurement will be taken at the carbide cutting edge as noted by location as the unit comes off the racecourse. measurement may be by carbide scratch marks in natural terrain, or by carbide impressions on a soft wood lath when the skis are placed on the measurement device with driver in seated position.**
- Unless otherwise stated here, skis and ski loops must conform to the ski rules in GENERAL RULES AND REGULATIONS section.
- Carbide ski runners (mandatory for lake races) must not exceed 5/8 inch width and 5/8 inch depth from the lowest point of the ski (including carbide insert). Minimum width 3/8 inch.



- Any commercially available skis and ski runner(s) that conform to these rules are allowed including multiple edged runners and multi-keeled skis.

- Skis and ski loops must be intact at the start of each race. Ski loop leading edges not one (1) inch in width or not meeting the minimum radius rule must be padded.

### TRACK SUSPENSION

- Slide rail lubrication not allowed.

### TRACK AND TRACTION

- Plates welded onto track clips must be no longer or wider than track clip. Only one plate allowed per track clip. Only one traction point allowed per weld-on plate. Rubber between ends of track clip may be trimmed to allow welding on stud plate. Trimming limited to width of plate.

### FRAME AND BODY

- Reinforcing by welding and/or bracing is allowed.
- Venting for the purposes of brake cooling is allowed. All venting for brake cooling purposes must contain and direct airflow to the brake caliper and disc assembly only. Any specialized vents that allow outside cooling air beyond the brake system, or derive cooling air from the vent before it travels to the brake system is not allowed.**

### IGNITION AND ELECTRICAL

- A functional secondary safety shut-off (kill switch) that will terminate ignition is mandatory in all classes. The switch must be located on the right side of the handle bar.
- In the event that a driver becomes separated from the snowmobile and the engine continues to run or the safety disconnect switch (tether switch) fails to function or is not properly fastened/attached to the driver while the engine is running, the driver may be disqualified from the heat in which the infraction occurred.
- No aftermarket device allowed which interrupts ignition or controls the brake system for the purpose of launch control or traction control unless OEM for the model.**
- Headlight and taillight must be operational at the start of each race. Glass lenses must be taped over with transparent clear tape. Taillight cannot be battery operated.
- Data acquisition and data acquisition systems allowed.

## STOCK SNOWMOBILE RULES

**In stock and stock based classes, no change or modification is allowed 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 engine, hood, intake, exhaust, frame, suspension, cowl, fuel tank and drive. Named components must be of same model and year, or properly filed OEM replacement parts which supersede original OEM parts.

**ENGINE**

1. Engine must remain in original mounting location.
2. No component of the engine may be altered changed or enlarged from the engine manufacturer's original stock specifications, nor may any additional components be added to the engine. Blueprinting will not be allowed. No removal of material whatsoever is allowed. This is to include polishing, port matching, deburring, abrasive blasting surfaces or material removal for the purposes of engine balancing or other reasons.
3. Maximum cylinder overbore for wear or cylinder repair cannot exceed .020 inch.
4. Stock OEM pistons only are allowed for replacement.
5. There may be no more than one cylinder base gasket to a cylinder. No changes in engine dimensions can be made by gasket adjustments.
6. Spark plugs do not have to be OEM.
7. Rotary valve timing/duration must remain as filed by the manufacturer.
8. No modification to the carburetor body allowed.
9. OEM carburetor slide valves and replacement jet options (without modification) are allowed.
10. An adequate return spring on the throttle is required.
11. Choke mounting location may be moved for driver comfort. Choke system may be disconnected.
12. No pressure charging allowed. The engine air intake system is to include any: cowl vents, air box, noise reducing foam (cowl vents & air box), carb boots, carburetors, clamps, rotary valves, reed valves, carburetor flanges, and oil injection nozzles that are original OEM equipment for that make and model. Deep snow cover/foam must remain in place.
13. No changes or modifications are allowed to any part of the engine air intake system or mounting locations.
14. CDI/ECU module may be reprogrammed.
15. No pressurization of fuel tanks or lines allowed.
16. If oil injection is OEM standard, oil injection system and all associated components must be installed in their OEM configuration, but may be disconnected. Oil injection nozzles may be removed or plugged. Premixed oil and fuel may be used.
17. No additional engine cooling systems allowed.
18. Engines will have OEM tags and/or serial numbers affixed to the engine.
19. The exhaust system is to include any, header flange or pipe, Y pipe, expansion chamber, pulse charger, muffler, and tail pipe that are original OEM equipment for

that make and model. No changes or modifications are allowed to any part of the exhaust system or mounting locations.

**DRIVE**

1. Must have original OEM drive clutch as supplied by the manufacturer for that make and model. Any OEM within the brand secondary may be used.
2. Any springs, weights or ramps may be used. No clutch engagement RPM limit.
3. No machining on clutches to accommodate springs and weights.
4. In the primary clutch, metal may be removed but not added to ramps or flyweights.
5. Secondary clutch cams may be cut to any angle. Billet helixes allowed.
6. No overdrive machining.
7. Drive belts do not have to be OEM.
8. Any drive chain and sprockets may be used.
9. Chain case must be original OEM for the model equipment. Must remain in original mounting location. Chain tensioner may be changed to any OEM equipment.
10. Track drive shaft and/or track drive sprockets may be changed to any that are OEM for the brand. Shaft material may not be changed from OEM for model.
11. Sprocket diameter may be trued round.
12. Brakes may be changed or altered, but must be operational at all times. Brake components must be commercially available. If brake disk system is relocated, the stock brake disk must remain in place. Liquid cooled systems allowed. Brake disk may not be modified in the pad contact area. Brake disk hub may be modified for mounting. OEM diameter and thickness must be maintained. Any brake disk used must be of the same material as OEM for the model disk. No aluminum or carbon disks allowed.
13. Brake control handle must remain in OEM location on the left, front side of the handlebar.
14. Existing vents may be used to direct cooling air to the brake components. Brake disk shall not extend outside of the bodywork.

**SKI SUSPENSION & STEERING**

1. Front suspension must remain in original mounting location, in both bulkhead and spindle housing. No substitution of material allowed.
2. Swaybar must remain in OEM location, but does not have to be functional. Swaybars must be OEM but may be interchanged with other stock models offered by the manufacturer.
3. Suspension travel may be limited. Must maintain two (2) inches of remaining compression travel with driver on snowmobile.
4. Reinforcement of components is allowed by welding or bracing. Structural integrity must be maintained.
5. Spindles may not be shortened.
6. Any shock allowed. Replacement may be shorter than OEM for the model shock, but may not be longer.

7. Handlebars must be intact at the start of each race day. Any commercially available handlebar allowed. May be altered to fit the driver. Open ends must be capped. Handlebars must be padded. Column or post must remain in its OEM position. Grips and controls may be modified. Throttle must be opened with a thumb mechanism located on the handlebar to the rear of the machine (no twist grips).
8. Commercially available handlebar risers, vibration mounts and relocation mounts allowed.
9. Any spring may be used on the suspension. May be shortened or heated. Springs may be removed and replaced with another type of cushion device.

**SKIS & SKI RUNNERS**

1. Aftermarket skis allowed. Skis must be commercially available and marketed thru normal sales activity. Must meet ski diagram in GENERAL RULES AND REGULATIONS section.
2. Skis may not be interchanged between brands.
3. May reinforce skis on the topside only.
4. Ski skins allowed.
5. Snowmobiles must not use more than ten (10) inches of continuous turning material maximum per ski.
6. Turning material may be altered to an angle of not less than sixty (60) degrees inside included angle.

**TRACK SUSPENSION**

1. Suspension must be OEM for the make and model. Must remain in original mounting location or optional locations drilled, pre-drilled or marked in backing plate by the manufacturer. No substitution of material allowed.
2. Rails may not be bent or shortened.
3. Wheels (rear axle idler and marginal snow) may be added or removed along with mounting brackets from an OEM wheel kit. Wheel diameters may be trued round.
4. Any hyfax allowed.
5. Any shock allowed. Replacement may be shorter than OEM for the model shock, but may not be longer.
6. Any spring may be used in the rear suspension. Suspension spring may be shortened or heated.
7. Suspension travel may be limited. Must maintain two (2) inches of remaining compression travel with driver on snowmobile.

**TRACK & TRACTION**

1. Any commercially available, one-piece molded rubber track allowed. Track must have been properly filed by the manufacturer of the snowmobile.
2. In Pro and Semi Pro 600, minimum track lug height is 1.25 inches.
3. Length and width of OEM track shall be as produced by the snowmobile manufacturer.
4. Configuration of track, including length and width, must allow for installation without modification to track, frame, tunnel, suspension or drive components.
5. No cleats or partial cleats may be added.

6. Grouser bars and rubber snow lugs must remain OEM height and width.
7. Any commercially available guide/track clips may be used.
8. Tracks may not be reversed.
9. Studs cannot be more than 3/8 inches above the highest point of the track.
10. Stud backing plate max. size: 2 inches X 2 1/4 inches.

#### **FRAME & BODY**

1. Snowmobile overall width is as produced.
2. All chassis will have OEM tags and/or serial numbers affixed to the frame.
3. Removal of any material from total machine by means of heat, acid, drilling, grinding, abrasive blasting, peening, substitution, or total elimination will not be allowed.
4. Windshields must be OEM or equal to an OEM windshield in dimensions and mounted in OEM location as filed. They may be altered for handlebar movement. Minimum stock windshield height must be maintained. Must have a safety edging. Must be intact at the start of each race day.
5. Seat must remain OEM for the model. Padding may be added or subtracted to improve driver comfort and safety. Minimum cushion thickness is five (5) inches, measured without weight on seat. Seat must remain in OEM for the model location. Must be upholstered.
6. Access openings are allowed for component removal or service but closures must be made of original type materials. Vents/scoops must be OEM for the model. No additional vents or scoops may be added. Crankcase and/or brake cooling ducts must remain within the confines of the snowmobile and only use an existing vent. Vents may be covered or closed.
7. Hood may not be removed.
8. Skid plates may be added for protection of snowmobile bottoms. Skid plates must be securely fastened.
9. Additional plate material may be added to the tunnel at the suspension mounting holes.
10. Tunnel protective wear strips may be added, removed or altered. Liquid spray coating allowed.
11. It is highly recommended that the sides of the rear tunnel opening be enclosed with comparable tunnel material. The tunnel covering is required to keep a ski or driver's extremities from entering the tunnel area.
12. Front and rear bumpers and nose cones may be added but not removed. Added items must not be a safety hazard.
13. Fuel tanks must be OEM for the model or an OEM designated replacement tank for the model.
14. Fuel lines must be free of obstructions by other machine components.

#### **IGNITION & ELECTRICAL**

1. Ignition must be OEM for the year and model.
2. CDI/ECU module may be reprogrammed.
3. Fixed ignitions may be advanced or retarded a maximum of 4°.
4. No aftermarket device allowed which interrupts ignition for the purpose of launch

- control or traction control unless OEM for the model.
5. Wiring may be removed.
6. Instrumentation may be added but must not present a safety hazard. Instruments may be disconnected but not removed.
7. Head and taillights must be original OEM equipment for the model. Must remain in original mounting location.
8. Glass lenses must be taped with transparent tape. No colored tape allowed.

### Factory 600 Class

The snowmobile must have original OEM engine, hood, intake, exhaust, frame, suspension, cowl, fuel tank and drive. Named components must be of same model and year, or properly filed OEM replacement parts which supersede original OEM parts.

#### **CLASS SNOWMOBILE CRITERIA**

1. Any stock production snowmobile of 600 cc or less engine displacement volume, or equivalent 4 stroke model. Snowmobile must be fuel injected and will be required to run on straight gasoline. No oil/gasoline premixed fuels will be provided. Production quantities must be within ISR stock qualified manufacturers guidelines.

#### **ENGINE**

1. Engine must remain in original mounting location.
2. No component of the engine may be altered changed or enlarged from the engine manufacturer's original stock specifications, nor may any additional components be added to the engine.
3. Blueprinting will not be allowed. No removal of material whatsoever is allowed. This is to include polishing, port matching, deburring, abrasive blasting surfaces or material removal for the purposes of engine balancing or other reasons.
4. Maximum cylinder overbore for wear or cylinder repair cannot exceed .020 inch.
5. Stock OEM pistons only are allowed for replacement.
6. There may be no more than one cylinder base gasket to a cylinder. No changes in engine dimensions can be made by gasket adjustments.
7. Spark plugs do not have to be OEM.
8. Rotary valve if used, timing/duration must remain as filed by the manufacturer.
9. On four stroke models all valve train components and timing must remain OEM for the model.
10. No modification to the throttle body allowed.
11. No pressure charging allowed. The engine

air intake system is to include any: cowl vents, air box, noise reducing foam (cowl vents & air box), injector mounts, fuel rails, and cylinder throttle body adapters, clamps, rotary valves, reed valves, intake or exhaust valves, and oil injection nozzles that are original OEM equipment for that make and model. Deep snow cover/foam must remain in place.

12. No changes or modifications are allowed to any part of the engine air intake system or mounting locations.
13. CDI/ECU module may be reprogrammed.
14. Oil injection system and all associated components must be installed in their OEM configuration and in operation at all times.
15. No additional engine cooling systems allowed.
16. Engines will have OEM tags and/or serial numbers affixed to the engine.
17. The exhaust system is to include any, header flange or pipe, Y pipe, expansion chamber, pulse charger, muffler, and tail pipe that are original OEM equipment for that make and model. No changes or modifications are allowed to any part of the exhaust system or mounting locations.
18. Thermostats must remain in place and remain functional.
19. Cooling system must remain in the stock location except tunnel mounted heat exchangers may be relocated for stud clearance but must remain in the confines of the tunnel.

#### **DRIVE**

1. Must have original OEM drive clutch and driven clutch (torque converter) as supplied by the manufacturer for that make and model.
2. Any springs, weights or ramps may be used. No clutch engagement RPM limit.
3. No machining on clutches to accommodate springs and weights.
4. In the primary clutch, any commercially available ramps, weights or springs may be used.
5. Secondary clutch cams may be cut to any angle. Billet helixes allowed.
6. No overdrive machining.
7. Drive belts do not have to be OEM.
8. Any drive chain and sprockets may be used.
9. Chain case must be original OEM for the model equipment. Must remain in original mounting location.
10. Track drive shaft and/or track drive sprockets may be trued.
11. Sprocket diameter may be trued round.
12. Brakes may be changed or altered, but must be operational at all times. Brake components must be commercially available.
13. Liquid cooled systems allowed.
14. Brake disk may not be modified in the pad contact area. Brake disk hub may be modified for mounting. OEM diameter

and thickness must be maintained. Any brake disk used must be of the same material as OEM for the model disk. No aluminum or carbon disks allowed.

15. Brake control handle must remain in OEM location on the left, front side of the handlebar.

#### SKI SUSPENSION & STEERING

1. Ski suspension and steering must be OEM for the model unless otherwise specified.
2. Front suspension must remain in original mounting location, in both bulkhead and spindle housing. No substitution of material allowed.
3. Swaybar must remain in OEM location, but does not have to be functional. If used, swaybars must mount and fit to chassis in the same geometric position as the production sway bar. Sway bars may be interchanged with other stock OEM model swaybars offered by the manufacturer or any aftermarket bars. This allowance for change applies to the sway bar and mounting bolts only. Sway bars must be steel only.
4. Maximum carbide to carbide ski stance must not exceed forty three and one half inches (43.5 inches) Center to center distance will be measured as follows: on units with centered carbide on skis, carbide to carbide dimensions with skis straight ahead and rider in seated position in natural contour of the seat will determine measurement. Measurement will be taken at the carbide cutting edge. On units with offset carbide, outer carbide cutting edge on right ski to outer carbide cutting edge on the left ski, with skis straight ahead and rider in seated position in the natural contour of the seat will determine the measurement. Measurement will be taken at the carbide cutting edge as noted by location as the unit comes off the racecourse. measurement may be by carbide scratch marks in natural terrain, or by carbide impressions on a soft wood lath when the skis are placed on the measurement device with driver in seated position.
5. Reinforcement of components is allowed by welding or bracing. Structural integrity must be maintained.
6. Any shock allowed.
7. Handlebars must be intact at the start of each race day. Any commercially available handlebar allowed. May be altered to fit the driver. Open ends must be capped. Handlebars must be padded. Column or post must remain in its OEM position. Grips and controls may be modified. Throttle must be opened with a thumb mechanism located on the right hand handlebar to the rear of the machine (no twist grips).
8. Commercially available handlebar risers, vibration mounts and relocation mounts allowed.
9. Any spring may be used on the suspension.

10. Titanium springs not allowed unless OEM for the model.

#### SKIS & SKI RUNNERS

1. Aftermarket skis allowed. Skis must be commercially available and marketed thru normal sales activity. Must meet ski diagram in GENERAL RULES AND REGULATIONS section.
2. Skis may not be interchanged between brands.
3. May reinforce skis on the topside only.
4. Snowmobiles must not use more than ten (10) inches of continuous cutting edge maximum per ski. Cutting edge is defined as sharpened carbide or high wear resistant material. flat wear plates on leading and trailing edges of host bar are not considered cutting edge carbide.
5. Cutting edge material may be altered to an angle of not less than sixty (60) degrees inside included angle.

#### TRACK SUSPENSION

1. Suspension must be OEM for the make and model. Must remain in original mounting location or optional locations drilled, pre-drilled or marked in backing plate by the manufacturer. No substitution of material allowed.
2. Rails may not be bent or shortened.
3. Wheels (rear axle idler and marginal snow) may be added or removed along with mounting brackets from an OEM wheel kit. Wheel diameters may be trued round.
4. Any hyfax allowed.
5. Any shock allowed.
6. Any spring may be used in the rear suspension, except titanium springs unless OEM for the model. Suspension springs may be shortened or heated.
7. Rear axles may be replaced and additional rear idler wheels added for safety considerations. Axles, spacers, shims, bushings, and other components may be changed to allow installation of additional wheels. The only wheels allowed to be added will be OEM wheels of the correct part number as the original wheel. Color code suffix or prefix does not apply. Rear axle shafts may be material substituted aluminum for steel, and steel for aluminum only. No titanium shafts unless OEM for the model.

#### TRACK & TRACTION

1. Any commercially available, one-piece molded rubber track allowed. Track must be 1.25 overall height dimension. Cobra tracks allowed a .100 variation.
2. Length and width of replacement track shall be as originally produced by the snowmobile manufacturer.
3. Track clips/guide may be added.

#### FRAME & BODY

1. Snowmobile over all width is as produced and measured at the spindle centerline. For this specific class sled width at the outside dimension of the skis is not considered the measurement point for overall width.
2. All chassis will have OEM tags and/or serial

numbers affixed to the frame.

3. Removal of any material from total machine by means of heat, acid, drilling, grinding, abrasive blasting, peening, substitution, or total elimination will not be allowed.
4. Windshields must be commercially available and mounted in OEM location. They may be altered for handlebar movement. Must have a safety edging. Must be intact at the start of each race day.
5. Seat must remain OEM for the model. Padding may be added or subtracted to improve driver comfort and safety. Minimum cushion thickness is five (5) inches, measured without weight on seat. Seat must remain in OEM for the model location.
6. Access openings are allowed for component removal or service but closures must be made of original type materials. Vents/scoops must be OEM for the model. No additional vents or scoops may be added unless specified for safety or durability. Crankcase cooling ducts must remain within the confines of the snowmobile body/hood. Vents may be covered or closed.
7. Venting for the purposes of brake cooling is allowed. Ducts/ Scoops maybe added for purposes of brake venting. All venting for brake cooling purposes must contain and direct airflow to the brake caliper and disc assembly only. Any specialized vents that allow outside cooling air beyond the brake system, or derive cooling air from the vent before it travels to the brake system is not allowed.
8. Skid plates may be added for protection of snowmobile chassis. Skid plates must be securely fastened.
9. Additional plate material may be added to the tunnel at the suspension mounting holes.
10. Tunnel protective wear strips may be added, removed or altered.
11. It is highly recommended that the sides of the rear tunnel opening be enclosed with comparable tunnel material. The tunnel covering is required to keep a ski or driver's extremities from entering the tunnel area.
12. Only OEM designated replacement front and rear bumpers may be added . Added items must not be a safety hazard.
13. Fuel tanks must be OEM for the model.

#### IGNITION & ELECTRICAL

1. Ignition must be OEM for the year and model.
2. CDI/ECU module may be reprogrammed.
3. No aftermarket device allowed which interrupts ignition for the purpose of launch control or traction control unless OEM for the model.
4. Instrumentation may be added but must not present a safety hazard. Instruments may be disconnected but not removed.
5. Head and taillights must be original OEM equipment for the model. Must remain in original mounting location.

**600 PRO OPEN RULES****GENERAL**

1. Competition is open to any snowmobile either production or one-of-a-kind experimental.

**ENGINE**

1. Engine must conform to OPEN SNO-CROSS engine rules.
2. Must be normally aspirated (no super/turbo charged systems allowed).
3. All engine components may be modified.
4. Fuel injection systems are allowed.
5. No nitrous oxide systems allowed.
6. Must be silenced by use of muffler or snuffer. Must exit the bottom side of machine. Noise level cannot exceed one hundred decibels (100 dB) measured seventy five (75) feet down the track, fifty (50) feet from the track at full throttle measured on the exhaust side of the snowmobile.

**DRIVE**

1. The clutch cover must be separate from cowl configuration, and cover clutches to center of bolt or below. Clutch cover must be .090 inch 6061T6 aluminum or equivalent steel material (other materials not allowed) and be covered with six (6) inch belting. If clutch cover is constructed of .125 inch aluminum or equivalent steel material, belting is recommended, not required. Snowmobiles with removable side panels may bolt clutch cover guard to side panel to meet this requirement.
2. On snowmobiles that comply, in all respects, with the Stock class rules, the stock belt guard may be used when moving up to Open class.

**SKI SUSPENSION & STEERING**

1. Any type of suspension may be used, factory or hand built.
2. Must have a minimum of two (2) inches of travel.
3. Handlebars must be commercially available. Ends must be capped. Handlebars must be padded. Throttle control must be operated with a thumb mechanism located on the handlebar to the rear of the machine (no twist grips).

**TRACK SUSPENSION**

1. Any type of suspension may be used, factory or hand built.
2. Must have a minimum of two (2) inches of travel.

**TRACK & TRACTION**

1. Must be one-piece molded rubber track.
2. No cleated tracks allowed.
3. No cleats or partial cleats may be added.
4. Stud backing plate max. size: 2 in. X 2 1/4 in.
5. Track clips and guide clips may be replaced when worn. Guide clips may be removed and replaced with track clips. Track clips may be removed and replaced with guide clips. The track must retain the

original number of clips with which it was produced.

**FRAME & BODY**

1. Any factory or hand built chassis and/or tunnel may be used. Structural integrity must be maintained. Any machine deemed unsafe or proved to be a safety hazard to any personnel will not be allowed to compete.
2. It is highly recommended that the sides of the rear tunnel opening be enclosed to keep a ski or driver's extremities from entering the tunnel area.
4. Snowmobile must have an OEM appearing hood and belly pan. Must enclose the same components as they do on a stock qualified snowmobile. Must be securely fastened during competition.
3. Vent openings are allowed but cannot exceed twelve (12) square inches each. No "swiss cheese" belly pans allowed.
4. All machines must have a windshield at the start of each race day. Must extend a minimum of five (5) inches above the highest part of the cowl, hood, or console. Must have safety edging.
5. Seat must be a minimum of six (6) inches thick. Height is measured from the top of the tunnel to the top of seat in rider less state. Must be upholstered. Must be the same width as the tunnel, minimum, measured at the lowest part of the seat. Must be long enough to cover any exposed top tunnel material.
6. Gas tank may be located anywhere on the chassis. Must be securely fastened and shielded from heat and/or rotating components. Cannot be pressurized.

**IGNITION & ELECTRICAL**

1. Ignition systems may be modified.
2. Any OEM headlight and taillight may be used. Cannot be battery operated.
3. Glass lenses must be taped with transparent tape. No colored tape allowed.

**TEAM CROSS COUNTRY RULES****GENERAL**

1. Within the team, the partners may switch machines, but an outside snowmobile cannot be used under any circumstances.
2. Teams are allowed to have alternate drivers substitute for regular drivers. Alternates racing on a team earn points for that team and not any other team that they may be associated with.
3. The single lane "trench" does not have to be followed exactly, but must be paralleled within thirty (30) feet.
4. First (1st), second (2nd) and third (3rd) place must keep their snowmobiles in the finishing area until the Race Director releases them.

**PIT PERSONNEL**

1. Two (2)-person teams may have two (2) pit persons (must have two (2) fire extinguishers).
2. Three (3)-person teams may have three (3) pit persons (must have three (3) fire extinguishers).

**STARTING**

1. Shotgun start or Le Mans start.
  - a. Drivers are set off in flights with time given between flights.
  - b. All drivers will run to their snowmobiles, starting from the rear of the snowmobile. Snowmobiles are shut off or 'dead' prior to the starting and the driver must run to the dead snowmobile and attempt to start it before he can take off.
  - c. Flights or Waves -All two person classes are started in two waves, one team member in each wave. The three (3) person class is started in three (3) waves with the fan snowmobile starting in the last wave. Generally, a total of nine (9) waves are started.
2. A short amount of time is allowed between the start of each wave. SUGGESTION- Time between classes can be minimum of five (5) minutes. Time between flights within a class is a minimum of thirty (30) seconds.

**TIMED STARTS**

1. Teams are set off at thirty second or one minute intervals. Best corrected time wins.
2. Three stopwatches of good value are recommended.
3. Each team is started together, by themselves, not with any other teams. Starting positions are determined by drawing numbered cards at the recommended drivers meeting. The team with the number one (1) card is sent off first; the team with number two (2) card is sent off second, and so on. Teams line up in their starting positions before the first team is launched. At the finish, the times are corrected for each team. If the separation time is one minute, then team number one (1) will have no adjusted time; the second team set off will have a minute subtracted from their finish time; number three (3) will have two (2) minutes subtracted from their finish time, etc.
4. Corrected times are calculated after all racers have finished.

**ASSISTANCE**

1. No team will accept any help or assistance from any person outside the pit area or those teams presently racing in the event unless the assisting team is in the same class. Teams can accept assistance in the form of towing to finish the race as long as the helping team is registered in the same class.

**FINISH**

1. Race is officially completed 1 1/2 hours from the time each class crosses the finish line.

**SNOWMOBILE AND EQUIPMENT RULES**

1. Additional plating may be installed on the snowmobile for reinforcement and extra strength.
2. Bumper that extends three (3) inches beyond the factory specified over all snowmobile dimensions will not be allowed, unless the bumper is an OEM bumper.
3. Parts intended for use must be carried on the race snowmobile or placed in the pit area prior to the beginning of the race.

These are the only parts allowed for replacement during the race.

4. Entire, assembled snowmobiles used for spare parts will not be allowed in team's pit areas.
5. Parts from check points, passersby, and locals or from any outside source are not allowed. Violating team may be disqualified.
6. Parts may be received from other teams registered in the same class.
7. Racer's extra gear (goggles, helmets, change of clothes, etc.) must be placed in the pit area before the race is started.

### FUELING

AT THE OPTION OF THE REGION, GASOLINE MAY BE DISPENSED AS FOLLOWS:

1. Some specific events may require refueling from a common fuel supply that may or may not be premixed with 2-stroke oil.
2. A fully charged (minimum 2 1/2 pound) dry chemical fire extinguisher shall be in close proximity.
3. All individual gasoline containers will have only spill-proof spouts. Gasoline containers shall be of the approved safety type, having an automatic shut-off valve. No alterations or exceptions.
4. The gasoline shall be dispensed by an official fuel crew, utilizing manifold hoses.
5. Overhead fuel tanks may be used, but must adhere to the following rules:
  - a. Containers shall be a maximum of twenty (20) gallons capacity and constructed of at least eighteen (18) gauge metal. There shall be steel supports of adequate strength to support both tank and contents.
  - b. Gas shall not be dispensed by any method requiring pressure on the container.
  - c. Container shall be painted RED and marked with three (3) inch letters FLAMMABLE LIQUIDS KEEP FIRE AWAY.
  - d. Container shall be placed in remote area at least fifteen (15) feet from an open flame.
  - e. Container shall have a minimum of 3/4 inch free opening vent.
  - f. Container will have a shut-off valve at tank and spring-loaded shut-off valve at end of dispensing hose.
  - g. Container setup is subject to inspection and approval of Director or Fire Inspector.
6. When entering any pit area where fueling may take place, all drivers must come to a complete stop and proceed with caution thru the fueling area. Failure to do so may result in a penalty. Speed limits will be posted and must be obeyed.
7. Drivers must fuel in designated fuel stops only.
8. Only two (2) people are allowed (driver and one other person) per machine in fuel stop area.
9. Snowmobiles may be refueled while the engine is running.
10. Driver must set parking brake on snowmobile prior to removing fuel cap. Once fueling is completed, fuel cap must be replaced prior to parking brake being released.
11. Driver must step off machine and stand to one side of the machine while fueling takes place.
12. Approved jack stands must be used in fuel stop area to aid a machine whose motor has stalled or bogged.
13. Competitors entering, exiting or stopped in fueling area shall not interfere with the progress of other competitors.
14. The driver is responsible for his crew and equipment in the fuel stop areas and must not be a safety hazard or interfere with the progress of other competitors.
15. Drivers may not pack extra gas with them or on the snowmobile.
16. Drivers needing extra gas must make arrangements for additional gas stops. Driver will provide the gas and gas containers for these extra gas stops.
17. Races run under heavy snow conditions will require additional gas stops. The local Race Director is responsible for meeting those needs. Racers will provide their own gas and gas containers.
18. In the event that a driver has the misfortune to run out of fuel between designated fuel stops, the driver is allowed to proceed to the nearest official fueling stop, obtain his fuel in a suitable container, proceed back to his machine, and continue the race.

### TEAM CROSS COUNTRY FUELING

1. Drivers may carry gasoline containers to a snowmobile that has run out of gas. Must be an approved fuel container. Must be securely fastened to snowmobile.

### COURSE REQUIREMENTS

#### GENERAL

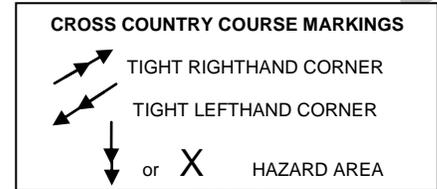
1. The course shall be checked before the race can be started and any discrepancies found shall be correct
2. The finish line banner must have a minimum ground clearance of ten (10) feet to the bottom of the finish line banner, and twenty five (25) feet between supports.

#### COURSE MARKING

1. The course shall be marked adequately and safely.
2. Course markers must be clearly visible above the snow line. Pole or stake material should not endanger the driver when snowmobile hits a marker.
3. The distance between markers will vary with terrain, vegetation, visibility and other obstacles. (In case of fog or blowing snow, markers should be closer together.)
4. When marking trees, limbs and other objects, the marker must be clearly visible (surveyors tape, paper, etc).
5. Hazard signs (minimum 100 square inches) must be used to warn drivers of an abrupt change in course (see illustration). Directional arrows should be placed so as

to give the driver ample time to safely negotiate the hazard.

6. The signs must be orange or red with black directional arrows.
7. Hazard areas are those areas that present potential danger to drivers traveling within the range of 30 or more miles per hour.
8. Time to transfer away from X sign will contain a black "X" or double down.



### COURSE CONTROL

1. Very dangerous hazard areas must have a supervising official present at the danger point or be removed from the course.
2. Trail and road crossings and/or use must be conducted in compliance with state/provincial and/or local laws.
  - a. All sections of a course that include a road or trail used by the public require two or more road officials to control both public and racing traffic. Their purpose is to help insure the safety of the public and the competitors.
  - b. Road officials may be either law enforcement personnel or race officials.
3. It is strongly recommended that the sanctioning body seek the assistance of the local and state/province law enforcement officials for the use of public roads and/or trails.
4. The start/finish line area and serpentine must be secured with snow fence or other appropriate barrier to keep all spectators out. Officials must control entrances to this area. (See Recommended Course Layout in APPENDIX.)
5. At no time will departing snowmobiles be let out so that one flight will overlap another flight and cause intermingling. Faster and higher performance level snowmobiles will be required to start first in the flights.
6. The impound area shall be located a safe distance from the finish line behind the snow fence.

### CHECK POINTS

1. Check point OFFICIALS have unquestionable disqualification authority.
2. Check points serve to verify that racers are following the racecourse.
3. Check points should be placed in strategic positions that will provide maximum visual coverage of the course.
4. Drivers are not to be informed as to the number or location of checkpoints.
5. All racers are expected to have their snowmobile under control when they enter a checkpoint. They are also expected to courteously assist the checkpoint in getting validated.
6. Any driver/team that does not properly comply with check point validation procedure will be disqualified unless extenuating circumstances are verified by the check point officials and the Race

Director. Extenuating circumstances may include:

- a. Racers who miss check points unintentionally.
  - b. Team or driver gets lost because of damaged or missing course markers.
7. Penalties for check point and course cutting violations will vary with particular circumstances. The Race Director has the authority to determine such penalties. The Race Director shall confer with other race officials, observers and others in the process of making penalty determinations.

#### **CHECK POINT PROCEDURE**

1. Each checkpoint will have two flags at the checkpoint.
  - a. Yellow Flag (prepare to stop) placed ahead of the checkpoint to warn drivers to slow down.
  - b. Red Flag (stop) placed at the point where the checkpoint official will be standing.
2. Alternate procedure shall be the use a stop sign at the checkpoint, controlled by a race official.
3. Each driver or team member must be clearly marked with their number for identification by checkpoint officials.
4. A driver or team will not be validated if a checkpoint official observes the entrant committing a rules infraction.
5. If a driver passes the checkpoint official before stopping, it is the driver's responsibility to return to the official. The official will not move to validate the driver.
6. Once the driver/team has been properly validated, the entrant(s) may proceed to the next checkpoint.
7. In addition to the normal validation procedure, it is suggested that driver and team numbers be written down to further verify that they have gone through the checkpoint.

#### **SUGGESTED VALIDATION PROCEDURES**

##### **MANNED CHECK POINT**

(MARKING OF HELMETS)

- a. A patch of masking tape or surgical tape which will be applied to each racer's helmet before or during the drivers meeting. All taped helmets are to be checked before the start of the race to insure that no premature marks have been applied.
- b. At each checkpoint, each racer will receive a mark on his/her helmet. Each checkpoint will have there own color. (Felt tipped markers or crayons may be used.)
- c. Drivers must tilt their helmet towards the checkpoint official to facilitate marking.
- d. (Team) - Check point officials will mark all team members after the entire team has stopped and lined up in single file at the check point.
- e. After the driver or the team has been marked, the official must yell, "GO" or slap the driver on the back or helmet to let the driver know that he has been successfully marked.

##### **UNMANNED CHECKPOINT**

(DRIVER/TEAM TOKEN IN A CAN)

- a. Drivers/teams will be issued a specific number of tokens at the drivers meeting. Tokens will have the driver's/team's numbers on them.
- b. Entrants are responsible for dropping one of their tokens into official containers (cans) at each checkpoint. More than one can should be used at a checkpoint to avoid traffic jams. Four or more may be required.
- c. (Team) - Only one team member has to stop and drop a token into the can.
- d. If a drivers/teams token is not in the can, that team or driver may be disqualified.
- e. Drivers/teams that allow other drivers/teams to drop their chips into cans will be disqualified.