



# INTERNATIONAL SNOWMOBILE RACING

1527 North Railroad Street Eagle River, WI 54521

262-335-2401

## OVAL SPRINT 2025-2026

### 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 ensure safety even if the rules are enforced and/or adhered to. Moreover, 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. This vehicle shall have all emergency equipment. Contract arrangements must be made to have a transport situation ambulance on site if a transport is made. Many tracks are now using a track owned ambulance for on-site work. Many times, these vehicles are not certified for transport of patients on the highway. Arrangements must be made for a certified transport ambulance to make the actual patient transport. Racing must not be allowed without an ambulance on the grounds.
2. If an event is located at a ski hill facility and it has qualified ski patrol personnel (Paramedics - ALS ) and an onsite room fully equipped as an ambulance would be it can be substituted for the actual vehicle. When The terrain and driving distance by ambulance makes it advantages to use a prearranged air ambulance this method can be used to transport injured persons to an appropriate hospital after stabilization by Ski Patrol personnel. (Paramedics - ALS ) **CLARIFICATION:** This applies to events with extended travel distances for transport, or possible difficult travel by ambulance. The facility must be manned during racing hours, with ALS -Paramedic grade personnel. Trained staff and appropriate transport equipment must be at the ready to transport victims from the racecourse, hill, mountain, or natural ice racetrack.

### RULE SUPPLEMENTS

1. Rule supplements, additions or corrections shall be announced on the official website. 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 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 based on 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.

### JUNIOR CLASS RACING

## NOTICE

Parents or guardians who knowingly enter a Transition class, Junior Class, Junior I, Junior II, Junior I Sprint, Junior II Sprint, F-500 Junior I, F-500 Junior II driver who is not of the legal age to compete in the specific class, will be subject to a \$500.00 fine and one year suspension.

The driver also may be given a one-year suspension.

**Affiliates** who through negligence or not having an approved advancement system allow drivers under the age of 18 years of age to enter adult classes without being certified through the advancement process may be fined \$500 and possible loss of affiliation rights.

### **Advancement Procedure.**

1. No minors may enter adult classes until the age of 18, or if approved by the Advancement Procedure which is available starting at 14 years of age. You must be 16 years of to compete in a Pro class.
2. Each involved affiliate of the same discipline (example Oval Sprint) must either provide a qualification process, or declare to ISR they will observe other affiliates of the same discipline's advanced rider list. Affiliates with a qualified advancement program have the right to determine advancement of candidates as they see fit. Qualifying with one affiliate does not qualify the youth driver for all affiliates.
3. Affiliates may honor another affiliates advancement. Driver must present copies of the advancement prior to registration.
4. **ISR will not dictate an affiliates right to allow, or not allow the young riders to compete at both levels. (Junior and Advanced class) However, we advise that you put a policy on your website or newsletter, so the affiliates participants know what is expected.**

### **AFFILIATE RESPONSIBILITIES**

1. Before an affiliated sanctioning body may advance Junior drivers, it must have a bona fide junior program. The affiliate's Junior Competition committee /Representative is responsible for verifying a Junior's driving ability.
2. Junior competitors shall be required to perform practice laps/runs from time to time to allow race officials to observe their progress in learning the handling skills required to advance.
3. Junior advancement is at the discretion of the driver's classification committee and can be reviewed at any time. The committee has the authority to advance, demote or deny advancement to any driver. The decisions of the classification committee are final.
4. The affiliate board/driver classification committee will not advance drivers until all DRIVER/PARENTAL RESPONSIBILITIES have been fulfilled and all completed and signed documents are on file.

### **DRIVER / PARENTAL RESPONSIBILITIES**

WHEN AN ISR COMPETITOR REACHES THE AGE OF 14 YEARS AND QUALIFIES FOR JUNIOR COMPETITION, HE/SHE MAY BE ADVANCED UP TO THE NEXT LEVEL, BUT ONLY AFTER FULLFILLING ALL REQUIREMENTS BELOW:

(SEE ADVANCEMENT FLOW CHART FOR SPECIFIC CLASSES IN JUNIOR COMPETITION SECTION).

1. A Junior competitor must compete in at least one entire event in a given class before becoming eligible for advancement.
2. Before a Junior may advance to a senior class, he/she must meet the Junior advancement requirements established by the affiliate's board/driver advancement committee.
3. He/she must petition the affiliate's board, in writing, requesting that he/she be allowed to advance.
4. The request for advancement must be accompanied by all new consent and release forms (as specified above).
5. The request must be approved in writing by the affiliate board to advance.
6. Before advancing to a Pro Division class, the Junior must be at least 16 years of age.
7. Parents may request for their child to stay in a lower class if they feel the driver needs more experience to develop track and driving skills. For Advancement application [Click here](#).

### **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 or advanced to the next event in the series.
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 (3) 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, if 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.

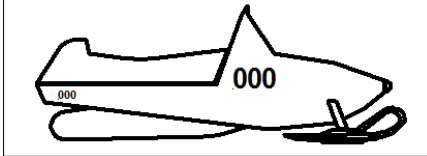
#### DRIVER IDENTIFICATION

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 drivers' body back numbers in a legible condition. Drivers must either wear a bib with their name and number for the event or their number built into the upper body outer garment worn during competition. Numbers are to be 8 inches high with a one- inch width. Name letters are to be 2 inches high with a 3/8" width.

#### 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.
2. These numbers must be displayed on the snowmobile in a permanent manner before being allowed to race (see illustration).

**DRIVER'S NUMBER ON SNOWMOBILE**



#### PRE-RACE SAFETY INSPECTION

1. ANY ENTRY IS SUBJECT TO INSPECTION AT ANY TIME 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. Affiliates may allow prerace safety inspections to be conducted at the first race of a series and allow the sled to compete in subsequent events in the series without reinspection if on track records indicate no evidence of crashes during competition.
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.
5. Any driver not reporting to Tech or refusing teardown will be disqualified.
6. Inspected snowmobiles will not be reassembled by the inspection group.
7. Driver and/or driver's mechanics will be the only two (2) people allowed with the snowmobile in the inspection area.
8. The sanctioning organization assumes no responsibility for impounded snowmobiles.

#### SEALS

1. 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. Drivers/sled owners will provide and preform the required drilling of fasteners, or engine block tabs for the Tech inspector to seal the unit with a uniform wire/lead seal or other device. Sleds within a series may be sealed by other methods, acrylic torque paint, specialty seals, or digital photos of specific items. Affiliates do not have to honor other affiliates seals.

### PROTESTS

1. 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.
2. 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).
3. 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.
4. Race Director has the authority to determine the validity of a protest.
5. No protests/appeals will be accepted that refer to a Race/Technical Director's judgement or decision.
6. It shall not be possible to protest or appeal technical inspection equipment, manual /electronic scoring, or manual/electronic timing equipment.
7. 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. Race directors have the authority to increase the time to file a protest for a competitor but may not shorten the time allowed.
8. Properly filed protests must be addressed by sanctioning body before finalizing class results. ISR must be informed of the protest in writing immediately after the protest is filed. Electronic method of communication preferred.

### APPEALS PROCESS

The following appeals process shall be applicable for all ISR affiliates and will be the binding operational guide and procedure statement for all affiliates. For any Affiliate that has an internal Appeals Process, the process will only apply to operations inside the association or company and will not have any bearing on race rule interpretation, infractions, misconduct, or other situations that may arise from race activity.

### TECHNICAL INFRACTIONS

Driver or team are found in non-compliance with the rules concerning fuel, sled construction, specific dimensions, materials used, or components used not conforming to the rules for each specific class, the following will be the procedure.

Tech Director or Race Director determines infraction and makes the appropriate decision considering the gravity of the offence. The Director may:

- a. Verbally warn driver or team.
- b. Disqualify driver from event for the class specified.
- c. Disqualify driver from all events entered in days competition.
- d. Fine driver, if affiliate has a fine process in place in the affiliates bylaws or published operational guide, and the fine system is published in their membership documents.
- e. Suspend driver or team for season.

### ON TRACK INFRACTIONS

Race Director determines infraction and makes the appropriate decision considering the gravity of the offence. The Director may:

- a. Verbally warn driver or team.
- b. Disqualify driver from event for the class specified.
- c. Disqualify driver from all events entered in days competition.
- d. Fine driver, if affiliate has a fine process in place in the affiliates bylaws or published operational guide, and the fine system is published in their membership documents.
- e. Suspend driver or team for season.

If the affected driver feels the decision is not correct, he/she may appeal the decision in the following manner.

1. The Appeal must be presented to the affiliate Race Director in writing using the ISR approved form available from the ISR web site. This form must be presented within 30 minutes of the announcement of the disqualification or penalty. Race directors have the authority to increase the time to file a protest for a competitor but may not shorten the time allowed. The Appeal must be accepted by the affiliate.
2. The affiliate must within 24 hours convene a meeting of the owner/ management/ officials of the affiliate and review the offense/ infraction. If the offense is upheld, the driver/team can request a further appeal to ISR and ask for a review by the rules group for the discipline. ISR has 5 days to conduct such review with the rules committee of the specific discipline.  
If the Appeal is found valid, all points, money, prizes, etc. are returned/ awarded to the driver/team.
3. If the offense is upheld, the Affiliate and the Driver/team must inform ISR of the situation within 24 hours of the alleged infraction. ISR will then, within 5 working days conduct a review of the situation, convene the appropriate rule review group from the proper discipline/aspect and render a decision. The decision of this session is binding and has no further appeal.

Affiliates and Drivers must review the Chain of Custody and submission of components/ fuels/ design concepts presented for the Appeal. If the driver/team does not submit samples, exhibits, photos, etc. of the offending component or fuel, the appeal is considered void, and the penalty stands. If the Affiliate does not accept and submit samples, exhibits, photos, etc. of the offending component or fuel, the appeal is considered void, and the penalty is rescinded, and all prize money, awards and points are returned to the driver/team. There is no appeal of any type to this operational chain of evidence and procedure. The Operational Guideline and Appeals Forms are found here:

**[Download Appeal Forms Here](#)**

**Race Operation Infractions [Click here](#) Rules Interpretation Issues [Click here](#) Business Operation Misconduct [Click here](#)**

#### NOTICE

Driver infractions/ disqualifications in 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 in that discipline.

#### PRIZES AND AWARDS

1. 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.
2. Drivers will not be required to attend award banquets, parties, ceremonies, etc., to receive prizes, awards, or pay-backs, although they are encouraged to cooperate as a courtesy to the promoter.

#### PIT AND PADDOCK/STAGING AREA

1. Reasonable speeds will be observed in the pit and paddock area. All pit areas are caution zones where utmost in driver awareness is required.
2. 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.
3. 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

1. 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

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

## 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.**

1. Regardless of driver apparel passing prior inspections, compliance with the rules must be made at post-race inspections.
2. No cameras or digital acquisition devices can be attached to any driver's helmet. This will be in effect anytime a race vehicle is on the track, whether it be a test, practice session, or in competition.
3. ISR strongly encourages all drivers in all disciplines / divisions to source helmets that continue to display High Vis Colors/International Orange that cover 75% for Oval Racing (Late Model and Vintage) and 50% for Snow Cross to prevent driver injuries during competitive events.

**All helmets must provide full protective coverage and meet the Snell Foundation's 2025 certification standards. Helmets with the 2020 Snell certification will be permitted for this season to accommodate availability during the transition period. Helmets certified under the European ECE 22.06 standard are also approved.** These are also mandatory in the tune-up area. The helmet must be securely fastened at all times. Helmet must display original ECE, or Snell decal as provided by the manufacturer. Decals that are covered or eliminated will be cause for rejection of the helmet. Enclosed cockpit sled drivers must use a current automotive certified helmet meeting Snell SA specification. Competing with a helmet that is not the same as presented at safety inspection will result in disqualification

4. For Oval Sprint, and Vintage Oval racing: At least one hundred forty-four (144) square inches of visible area on both the driver's front and back (upper body) will be blaze orange in color at all events. Jackets / Pullovers / Jerseys will be teched lying flat on the ground front and back. 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).
5. 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.
6. Hearing protection is mandatory in all non-stock classes in all types of competition. Recommended for all stock class competition.
7. 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. Competing with upper body protection that is not the same as presented at safety inspection will result in disqualification.



### ISR requirements

#### Must have these 4 things

**Chest Protection**  
**Back Protection**  
**Shoulder pads**  
**Kidney protection**

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.

**Optional**  
**Arm Pads**



8. 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. Competing with shin and knee guards that are not the same as presented at safety inspection will result in disqualification.
9. Upper Arm Pads and Elbow pads are highly recommended in all forms of racing.
10. Neck bracing is driver preference and is not required.
11. Drivers, crew members, team owners, staff, and support people may not be physically on the race surface at any time once an event has started. This includes walking the track to inspect for changing track conditions and other concerns. Anyone doing so will be penalized at the race director's discretion. Penalties may range from a verbal warning to ejection from the facility.
12. Leather suits or ballistic nylon suits: See specific requirements in various disciplines. Strongly suggested in all oval competition
13. **Starting in the 2026 season an orange LED light affixed to the rear of a driver's helmet is mandatory. The light shall be a constant display, no flashing or strobe effect. Recommended fastening will be attaching to the goggle strap, or a separate elastic strap of similar dimensions. Helmets manufactured with a rear facing light will also be allowed. (Only displaying an orange solid LED display). Methods of installation that compromise the helmets structural integrity are not recommended.**

#### Suggested lights links

A. BITEHARDER Products: ISR Approved Orange LED Helmet Lights. See them at [www.biteharder.com/racing](http://www.biteharder.com/racing).

B.

C.

# GENERAL COMPETITION

## FLAG RULES

1. There shall be a meeting between the flagman or his representative 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. Displayed in track corners or along straightaway: signifies there is an additional safety hazard on the track.

### **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 or pre-designated holding area if possible, using extreme caution. Snowmobiles must not leave the track proper unless directed to do so by the Race Director.

### **BLACK FLAG**

1. On closed course races, should a vital snowmobile component such as clutch guards, ski or ski loop become dislodged or discarded, the starter upon his own recognition or being informed by track officials will display the black flag to the involved driver immediately infraction. **This to include hood, seat, seat pad, side panel, windshield or any other body parts.**
2. 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. Consultation flag-leave course immediately and report to the Race Director, this does not necessarily mean disqualification; however, failure to obey the rolled black flag could result in disqualification, suspension or fine. On closed course races, should a vital snowmobile component such as clutch guards, mud flaps, ski loops or ski become dislodged or discarded, the starter must display the black flag to the involved driver immediately.

### **WHITE FLAG**

1. When displayed, drivers have started their last lap.

### **CHECKERED FLAG**

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

### **BLUE FLAG WITH YELLOW DIAGONAL**

1. This Flag is for passing / this flag may be displayed to snowmobiles being lapped or operating in a manner that prevents faster snowmobiles from passing. (Hold Your Line)

## 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 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 or designated holding area.

## TIMING

1. It is the driver's responsibility to see that his snowmobile triggers the scoring system properly.

## 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). This is defined as when the sleds were summoned to leave the pits. The two-minute clock starts when the first sled of the group leaves the pit and enters the racecourse. All the other sleds in the event/heat/final are required to be on the line within the two- minute window.
2. Snowmobiles may be pushed to the entrance of the racecourse, once on the racecourse the snowmobile must operate under its own power.
3. All participants (including crewmembers entering the start line area, are required to wear eye protection or safety glasses.
4. Snowmobiles must be placed on an approved stand for warm-up and/ or for clearing the track. See CLEANOUT/SAFETY STANDS in this chapter.
5. All snowmobiles on the starting line must have the track and both skis flat on the course surface before starter begins the race.
6. All snowmobiles will be started from a standing position, in a line abreast (unless stated otherwise).
7. 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, and a penalty if designated will apply.
2. There shall be no change of drivers at any time without notification to the Race Director.
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.
6. 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.
3. 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:
  - a. Any snowmobile causing the stop of a race and a subsequent restart will be placed to the rear of the restart sequence.
  - b. Any snowmobile unable to immediately return to the starting line will be placed to the rear of the restart sequence.
  - c. After more than one (1) lap has been raced, the restart position of the snowmobiles reverts to the last officially counted lap.
  - d. Snowmobiles will be restarted in a staggered line.
4. Drivers and snowmobiles must be on the starting line within two (2) minutes of restart notification.
5. In the event of red flag conditions that cause time spent for track safety work, sled retrieval, barrier reconstruction, sleds may be instructed to go to the marshalling area.
6. Under the following guidelines: The amount of crew allowed on the track will vary depending on affiliate Race Director instructions. Traveling series events can revert to series rules as published and contracted with the individual affiliate. Under Red Flag conditions the permitted crew members allowed by the race director in the drivers meeting, will be able to do the following to the snowmobile.
7. Under Red Flag conditions up to 3 pit crew members per sled are allowed on track to perform engine and radiator cooling functions to the sled. Pit crew member/members can carry and provide to the driver the following: drive belt spark plugs, plug wrench, screw driver, strap for starting engine, rope for starting engine, tether switch lanyard, battery powered taillight, and quick attach system if used, taillight battery, starting fluid, nylon tie straps, and tape. Any actual work on the sled must be done by the driver, but the crew can supply the listed items. This is done to prevent the driver from carrying equipment on the sled that can fall on the track, or on his person that could injure him/her in case of a on track incident. Crewmembers are also allowed to make available for driver safety and comfort, replacement goggles, pit coat, replacement face shield, replacement race-ceiver, race ceiver batteries, race ceiver headset/ individual ear molds. FUEL and LUBE NOT ALLOWED ON A RED FLAG. NO PARTS OR TOOLS TO BE CARRIED ON THER DRIVER OR SLED.
8. When the Pit Marshal calls the sleds to the starting line, all work must stop, the crew person or persons must immediately leave the track surface and the sled and driver immediately go to the indicated starting area. If at this point the driver has difficulty starting the sled one crew member can return to the track surface to assist the driver in starting the sled under the following conditions: No mechanical work can be performed by the crew member. He may assist the driver in starting the sled, by pulling the recoil device/rope, controlling throttle, applying choke/enricher, or alternate fuel delivery squirt bottle, removing the hood, securing hood, and tether switch, handing safety and personal equipment to driver.

### 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. 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.

**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, chopping, 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.
3. Any driver causing two red flags in any heat, ¼ final/semi-final/final or consolation race, will not be permitted to restart after the second red flag. (This includes race red flagged for jumping the start.)

**OBSTRUCTION**

1. 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. 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. 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, roll call, random call, etc. may be used to check the identity of drivers at the briefing.

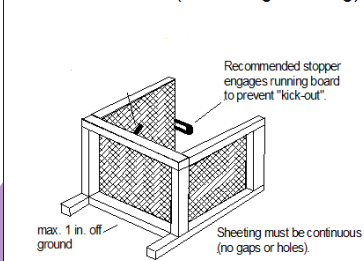
**RADIOS**

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. Drivers will always use an operational race-ceiver during competition. Race Ceiver communication from the race control official has the same authority as the race director and shall not be challenged.
3. A spare race-ceiver and race-ceiver components are the only items that are allowed to be carried on the driver's person. NO TOOLS OR PARTS TO BE CARRIED ON SLED OR DRIVER AT ANY TIME.

**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).
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. 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 enough height to prevent track encountering ground/ice surface. The stand must be used whenever the rear of a snowmobile is raised to clean out the engine or track.

WARM-UP STAND (not a design drawing)



3. No full throttle operation while snowmobile is on warm up stand.

**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. All trailers, haulers, enclosed truck bodies, etc. used for transport of racing sleds and their support equipment must have 2 (two)-5-pound ABC extinguishers on board, accessible and serviceable always.

# 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 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.
5. **All serial numbers and model numbers on chassis or engines must be readily visible, and not covered by paint, wrap, decals, etc. The ability for tech to verify the proper identification of engines and chassis easily is paramount. If this requirement is not met, the sled will not be considered to have passed pre-race safety inspection, and will not be allowed to race.**

## STOCK CLASS RULES

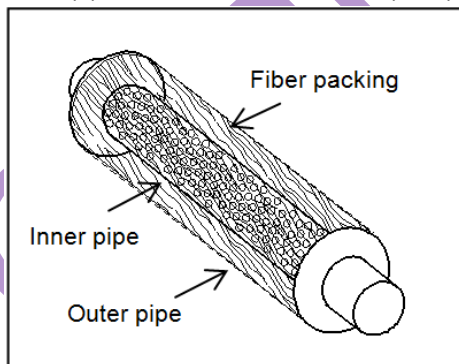
The snowmobile must have original OEM engine, hood, intake, exhaust, frame, suspension, cowl, fuel tank and drive. Named components must be of same model and year, or properly filed OEM replacement parts which supersede original OEM parts.

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.

## 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 and stock-based classes, coolant thermostats, regardless of location in the cooling system, may be ran as produced, changed to alternate temperature settings, or completely removed. If removed a control plate/washer to control volume of flow may be installed in its place. This plate shall serve no other function than restricting the flow of coolant.
4. In Stock classes, the OEM for the model exhaust system must remain as produced by the manufacturer and must be fully functional. In Mod classes it will be specifically noted as to which exhaust components may be changed or modified.
5. In all two cycle engine classes with individual chamber exhaust for each cylinder, 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 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.

6. 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.

7. An adequate return spring on the throttle is required.

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.

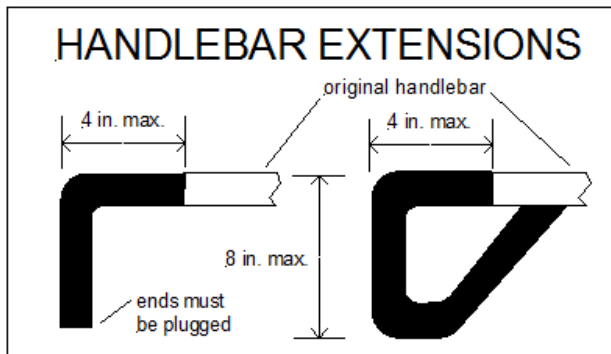
8. All Stock classes - Choke control devices may be disconnected; however, they may not be removed from their mounting location.

**BRAKES-SHIELDS-CUSTOM BUILT GUARDS**

1. Brakes shall always be operative. Brake lever must remain on the left, front side of handlebar.
2. The master cylinder, caliper and disk assembly must be commercially available.
3. In Modified 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.
4. The disk pad contact surface area may not be reduced more than 15% of the original pad contact surface area.
5. Chains, pulleys, **belts**, 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.
6. Unless otherwise specified, stock class belt guards are acceptable in Stock classes only.
7. Secondary clutch windage plates may be removed in all classes.
8. Custom clutch guards, clutch guards on purpose-built chassis, and specialty chassis may use Carbon fiber, Kevlar, and other materials as reinforcement of standard clutch guard material and design. Newly designed clutch guards must exceed the specifications and limits established in standard clutch guard requirements. See specific disciplines for details. Each specific clutch guard must be submitted to ISR with digital pictures (both installed and uninstalled, at least four views) and a detailed explanation of design, design limitations, and method and type of fasteners used to affix the guard to the chassis. ISR may request an appointment to inspect on site.

**SKI SUSPENSION AND STEERING**

1. Handlebar extensions are allowed. 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. In any oval class minimum suspension travel is 2 (two) inches usable functional travel with 150 pounds applied force measured at the 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 classes).
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.

The ski loop must overlap the end of the ski and secure to the underside or it must cover the leading edge of the ski entirely. Exceptions may be noted in class specifics.

4. Metal ski loops must be affixed with steel bolts and not welded (Oval-minimum two fasteners).
5. Metal ski loops must have adequate lateral or vertical support bracing to prevent ski tip loops from dislodging or breaking off.
6. 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).
7. No part of the ski may contact the body or suspension through the ski's normal range of travel and/or movement.
8. Ski loop failure of any type is grounds for disqualification.

**TRACK SUSPENSION-TRAVEL- SLIDE LUBE**

1. Any OEM type slide rail hyfax may be used as a replacement.
2. Slide rail hyfax can be drilled in all classes.
3. Only steel suspension springs allowed unless otherwise specified.
4. At safety inspection, track suspension travel will be measured vertically at the rear bumper, two inches of travel must be noted with a max 150 pounds of weight displacement.
5. 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.

**TRACK AND 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, this is class and discipline specific, and is not allowed unless preceded by an ISR Competition bulletin.
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.

**SNOWFLAP-OVERALL WIDTH-SEATS-CLUTCH GUARDS**

1. A rear snow flap of sufficient material must be installed in a permanent manner and shall be held down (restrained from rearward movement) 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.
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 maximum overall snowmobile width is 45 inches unless otherwise stated.
6. 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.
7. 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.
8. 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.
9. Snowmobiles used in competition may be painted any color with the following exception, in ovals orange or international orange may not be used.
10. Custom clutch guards, clutch guards on purpose-built chassis, and specialty chassis may use Carbon fiber, Kevlar, and other materials as reinforcement of standard clutch guard material and design. Newly designed clutch guards must exceed the specifications and limits established in standard clutch guard requirements, See specific disciplines for details. Each specific clutch guard must be submitted to the affiliate and ISR for determination. ISR with digital pictures (both installed and uninstalled, at least four views) and a detailed explanation of design, design limitations, and method and type of fasteners used to affix the guard to the chassis. ISR may request an appointment to inspect on site.

**OUTLAW 600**

1. OUTLAW 600 is not considered an enclosed cockpit class vehicle.
2. All specific design and safety rules for Outlaw 600 are found in the class rule structure.
3. 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 fire suit while in competition.

**TETHER SWITCH-BATTERIES-ADDITIONAL LIGHTING**

1. All snowmobiles must be equipped with a tether switch that must always be securely attached to the operator and be operable. 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. D rings/tabs on gloves and jackets are not designed for the abuse encountered during competition and accidents. It is required have your tether cord mounting location on your jacket or upper body protection in a reinforced area. A race or tech director may disapprove of the attachment method at any time. Drivers will not be allowed to compete until the attachment situation is rectified.
4. The tether switch will be securely mounted in a location on the snowmobile other than on the handlebars or steering column.

5. Wet cell if used must be enclosed in a non-conductive battery box. Positive terminal must be shielded. Battery box must be securely held in place. Solid core or gel cell batteries need not be cased.
6. 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.
7. Running lights or number illumination boards may be used. Running lights must conform to all electrical safety rules and must be "switched" so that they can be turned off if required.

#### **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 forbidden.
  - b. Only motor fuel compounded of standard pump gasoline and an acceptable lubricant are allowed. Additives that produce power more than 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 any time.
  - f. Youth Oval Racing classes, commercially available gasoline that is reformulated with up to 10% ethanol is allowed, the exception being "Big Track" competition for 120, 206 and 200 base class sleds. 120/206/200 and all oval junior classes must use legal fuels containing no ethanol.

#### **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 these tests may be employed. Test results may be confirmed from time to time using an infrared spectrometer.

***IF ANY OF THESE FIELD TEST ARE FAILED BY A PARTICIPANT HE WILL BE DQ'ED FROM ALL CLASSES THAT HE PARTICIPATED IN FOR THAT DAY.***

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

# 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 RELEASE COVENANT NOT TO SUE

1. *The driver/pit crew, in filing an application to enter the event, 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, tech personal, 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 from tech decisions 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 and or piece of equipment that participant entered into competition.*
2. *Drivers/pit crew and other participants further acknowledge and fully understand that there may also be other risks that are not known or foreseeable at this time, and the above and released persons cannot control these risks, nor have the released persons judged the participants' skill level or ability prior to allowing the participants to participate and consequently is not in a position to guarantee the participants' personal health or safety during the programs, events or activities. DRIVER/PIT CREW KNOWINGLY AND VOLUNTARILY ASSUMES ALL SUCH RISKS, BOTH KNOWN AND UNKNOWN, ANTICIPATED AND UNANTICIPATED, EVEN IF ARISING FROM THE NEGLIGENCE OF THE RELEASED PERSONS OR OTHERS, AND THE PARTICIPANTS ASSUME FULL RESPONSIBILITY AND LIABILITY FOR THE PARTICIPANTS' PARTICIPATION.*
3. *In consideration of permission and as a requirement of participation in sanctioned events, drivers, pit crew and other participants hereby covenant and agree not to sue the sanctioning organization, or its heirs, assigns, officers, representatives, agents, employees, and members, sponsoring organization and owners of properties on which sanctioned events are to be held, and further agree to fully release, indemnify and hold harmless those persons from any and all causes of action, demands, claims, and loss of injury to person or property or damages, of any nature whatsoever, whether the participation is supervised, unsupervised, however the injury is caused, including, but not limited to the negligence of any released persons.*

## 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 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.

## 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 racetrack) 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 responsible for their personal conduct.

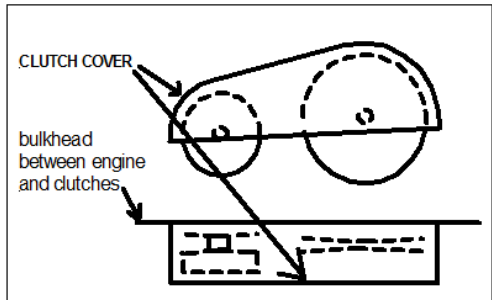
## RACE DIRECTOR AUTHORITY

4. The Race Director and Technical Director will be certified by the sanctioning organization.
5. 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). The Race Director is defined as the overseer/controller of the actual track operations during an event. He has prevue over all aspects of the race and interpreting rules that are applied. He may be a track owner/ or contract manager of a facility, however, "Race Directors" that are of administrative or business side of the event, although they may be referred to as race directors are not the on-track event director. In any case ISR certification is required.
6. 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.
7. 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.
8. 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.
9. Race Directors may compete in events other than those in which they officiate.
10. 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.
11. A Race Director may judge the mechanical integrity of all timing equipment.
12. 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.
13. The Race Director has the authority to judge the racing abilities of competitors and take appropriate action to ensure the safety of the event.
14. The Race/Tech director shall have the authority to determine structural integrity.
15. 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.
16. Technical equipment and specifications will not be used for any purpose other than the conduct of the sanctioned event.
17. Decisions of the Race/Tech Director may be reviewed by the board of the sanctioning body.
18. Decisions made at an event shall not be overturned without a formal appeal. Notice of the appeal process shall be given and a suitable 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.

## GENERAL SNOWMOBILE REQUIREMENTS

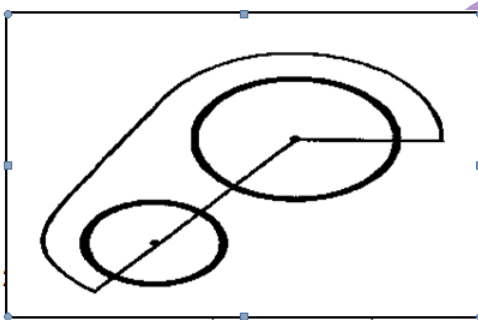
These following rules apply to all sleds in OVAL SPRINT COMPETITION. Certain portions of these rules do not apply to Outlaw 600 class. See Outlaw 600 for exceptions.



**CLUTCH GUARD**

1. (Mandatory in all classes except Stock where it is recommended.) The clutch cover must be separate of cowl configuration and cover clutches down to center of clutch bolt or below. Must be .060 inch, 6061T6 aluminum or equivalent steel material and be covered with 6-inch-wide belting. Snowmobile with removable side panels may bolt clutch cover to side panel to meet this requirement. See illustration.

The above illustration provides the criteria for proper clutch cover design for modern style chassis with driven clutches mounted in higher centerlines than previous designs. Modern style chassis are required to comply to this format of coverage. (Side view shown)



**BELT GUARD WITH TOE PROTECTION DEVICE**

It is advisable that in construction of this guard, considerations are made to protect the driver's foot in the case of belt failure. A method of belt containment and preventing it from entering the foot-well area must be made. Determination by technical inspector is final and not subject to appeal. (Example of toe protection, other designs and methods may be used at discretion of the builder.)

### **BRAKES**

1. Brake control handle must remain in OEM location (left, front side). Double brake system allowed if it remains on the left side.
2. Brake components must be commercially available.

### **SKI SUSPENSION AND STEERING**

1. All snowmobiles must have a minimum of two (2) inches of compression travel with the rider on the snowmobile. Travel measured at bumper.
2. Titanium suspension springs allowed in all modified classes.

### **SKIS AND SKI RUNNERS**

1. Carbide (one (1) cutting edge) plus one (1) additional edge may extend no more than 5/8 inch from the lowest surface of the ski. Only one (1) cutting edge ski is permitted on independent front suspension snowmobiles. Any ski edge with over 1/2-inch turndown constitutes a legal keel cutting edge. The ski runner, carbide edge or wear bar may be altered to a single plane angle of not less than sixty (60) degrees inside included angle. The carbide insert must be centered in the host bar.
2. Skis that do not have the carbide centered on the ski blank can be used on the left ski position only. The right ski blank/extrusion must be symmetrical and have the carbide centered on the ski blank/extrusion. The right-hand ski must be mounted centered on the spindle.
3. Any commercially available skis and ski runner(s) that conform to these rules are allowed including multiple edged runners and multi-keeled skis.

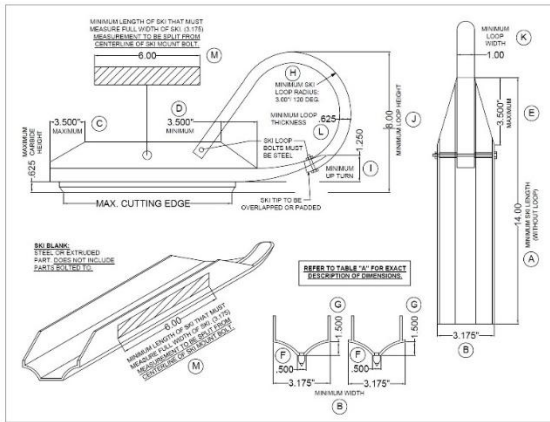


TABLE A	
A.) MINIMUM OVERALL LENGTH (WITHOUT LOOP):	14.000"
B.) OVERALL WIDTH OF MAIN BODY OF SKI:	3.175"
C.) MAXIMUM ALLOWABLE TAPER CUT ON REAR OF SKI (END TO TOP OF SKI RAIL):	3.500"
D.) MINIMUM ALLOWABLE TAPER CUT ON FRONT OF SKI (END TO TOP OF SKI RAIL):	3.500"
E.) ALLOWABLE LENGTH REDUCED AREA FOR LOOP MOUNTING:	3.500"
F.) MINIMUM KEEL WIDTH (CARBIDE MOUNTING SURFACE):	0.500"
G.) MAXIMUM HEIGHT FROM CARBIDE MOUNT SURFACE TO LOWER FLAT OF SKI:	1.500"
H.) MINIMUM SKI LOOP RADIUS:	3.000"
I.) MINIMUM TURN UP OF SKI (WHERE IT MOUNTS TO LOOP):	1.250"
J.) MINIMUM HEIGHT OF SKI LOOP:	8.000"
K.) MINIMUM WIDTH OF SKI LOOP:	1.000"
L.) MINIMUM THICKNESS OF SKI LOOP:	0.825"
M.) MINIMUM LENGTH OF SKI AREA THAT MUST MEASURE FULL WIDTH OF SKI (3.175"):	6.000"
[MEASUREMENT TO BE SPLIT FROM CENTERLINE OF SKI MOUNTING BOLT]	

### SKI LOOP

Ski loop failure during an event is an automatic mechanical black flag. The disqualification for the race will take place whether the driver is notified while on the track or not. This includes notification by Black Flag, notification by radio transmission, or verbal notification after the event either by the race director, flagman, or technical inspector. Ski loop failure in a heat, round, or final event results in a DQ (disqualification) from that event. In the case of rounds, drivers may repair and return to the next round of competition. In the case of race events that pay points or money for positions in rounds, drivers will be given the scoring position earned by the normal scoring procedure order of finish. In the case of race events that pay money for all positions in a final, the driver will be given position earned in normal scoring procedure order of finish. In the case of events with heats, DQ'd drivers will be allowed to repair and enter the final, only if positions are open on the line after normal scoring procedures for all other competitors is completed. Notice: This rule does not apply to Outlaw Class; in Outlaw Class, the vehicle may finish the heat or final. However, the loop must be repaired or replaced before the vehicle enters its next competition.

### TRACK SUSPENSION

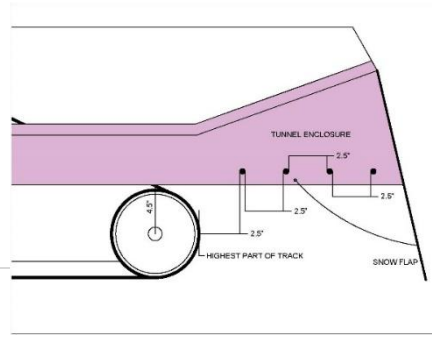
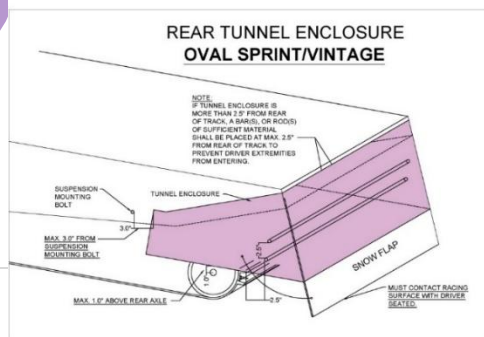
1. All snowmobiles must have a minimum of two (2) inches of compression travel with the rider on the snowmobile. Travel measured at bumper.
2. Titanium suspension springs allowed in all modified classes. Titanium springs not allowed in Stock classes unless OEM for the model.
3. Slide rail lubrication systems allowed if not in violation of local environmental laws.

### TRACK AND TRACTION

1. The track studs may be no more than 3/8 inches above the track lug.
2. On one-piece, molded rubber tracks: Plates welded onto track clips must be no longer or wider than track clip. Only one plate allowed per track clip. Rubber between ends of track clip may be trimmed to allow welding on stud plate.
3. Specific track modifications are allowed as noted in class rule sections
4. No titanium studs allowed. No carbon fiber stud backing plates allowed
5. On race vehicles with 137" or longer chassis that use 129' or shorter tracks and suspension, rods or other material of sufficient size must be placed in the tunnel horizontally every 2.5 inches from rear of track to rear of tunnel enclosure. Clarification to above rule: Having only one bar at 2.5" still allows extremities to get in the track.

### FRAME AND BODY

1. Composite materials may be used only when specified.
2. (All snowmobiles in all classes) The rear of the tunnel must be enclosed with steel or aluminum comparable in strength to the tunnel material. The tunnel enclosure is required to reduce the possibility of skis and driver's extremities entering the tunnel area. The shaded area (see illustration) must be enclosed. The enclosure shall cover the rear and both sides and extend forward to the rear suspension mounting bolt. The bottom of the enclosure shall be no higher than one (1) inch above the center of the rear axle (with the driver in place). The rear of the enclosure shall be no further than 2.5 inches from the rear of the track. The tunnel enclosure must be securely welded, bolted, or riveted to the tunnel.



3. All casting numbers, model numbers must be left intact and affixed to the corresponding components of the engine and chassis.
4. Orange paint, wrap, or decals are not allowed on any snowmobile in oval track racing.
5. Ballast may be used to equalize weight. Ballast must be securely contained.
6. No advertising or aerodynamic device will be allowed to be installed higher than 5 inches above the height of the top of the tunnel. This aero or advertising device must continue along the full length of the tunnel from the rear of the hood to the end of the tunnel close off panel/snow flap area.
7. Right hand foot stirrups/footrests/ may not extend past the centerline of the righthand Carbide. The maximum height of any footrest, stirrup, or hoop is 17 inches from the upper surface of the running board to the top, (vertical max height) of the footrest assembly.

#### IGNITION AND ELECTRICAL

1. In all classes RED LED Taillights must be illuminated whenever the snowmobile is on the racing surface, whether the engine is running or not. Taillight must be a minimum of 8 sq in. of continuous illuminated LED surface, or a production LED taillight. **In addition, the sled must have an illuminated LED strip running across the left side of the tunnel, from the rear corner of the tunnel towards the front of the sled a minimum of 8" (inches) in length. Tail-light -side light failure during the race is not subject to disqualification.**
2. For stock competition, a current OEM production stock qualified snowmobile tail is required. Light must remain illuminated always when sled is in the field of competition, whether the engine is running or not.
3. Tail-light failure during the race is not subject to disqualification.
4. Data acquisition and data acquisition systems allowed. See specific classes for restrictions to data acquisition.

## OVAL SPRINT COMPETITION

The intent of these classes is to establish races in which all can compete at their level of personal and equipment ability. The class structure is organized in such a way as to enable as many 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.

Core classes must be offered in any ISR sanctioned oval sprint snowmobile event.

#### OVAL SPRINT CORE CLASSES

##### STOCK DIVISION

Sport F-500

F-500

Formula III

In Stock based classes (except F-500) the ten-year production rule applies. Sleds older than 10 years may not be raced.

##### MODIFIED DIVISION

Outlaw

Pro Champ

Pro Lite/AM

( Above notes in bold font are clarifications of Core classes)

#### SPECIALTY CLASSES

1. All special sanctions and specialty classes must be approved in writing by ISR and the rules committee before competition.
2. Specialty classes can be any Oval Sprint event or class that does not fall under oval sprint class structure but meets established safety standards, applicable laws and complies with approved insurance coverage.
3. The following Specialty Classes are recognized:

Sportsman 500

Sportsman 600

F-440 Fan

#### FOUR STROKE ENGINES

1. To be eligible for competition, a four-stroke powered snowmobile must be classified through the ISR four-stroke classification procedure to compete in two stroke classes.

**FOUR STROKE CLASSES**

Class	CC MAX	Carb/ EFI	Exh.
Stock	1200 cc	OEM	OEM

Four stroke sleds must be on the four-stroke classification list as submitted by the manufactures committee.

**ENTRY FEES, PAYBACK, AWARDS AND POINTS SYSTEMS****RECOMMENDED ENTRY FEES:**

Stock	\$35.00
Modified	\$75.00.
Champ	\$100.00
F-III	\$125.00

The entry fees for all events or special sanctions will be regulated by the sanctioning body.

**RECOMMENDED PAYBACK:**

FOR CLASSES WITH 15 OR FEWER ENTRIES:

First place	50%
Second place	30%
Third place	20%

FOR CLASSES WITH 16 TO 24 ENTRIES:

First place	45%
Second place	25%
Third place	15%
Fourth place	10%
Fifth place	5%

FOR CLASSES WITH 25 OR MORE ENTRIES:

Sixth and lower in final	Entry fee
Fifth place	5% of remainder
Fourth place	10% of remainder
Third place	15% of remainder
Second place	25% of remainder
First place	45% of remainder

1. In Stock, when entry fees are \$5.00 or less, the sponsors shall have the option of providing trophies, money, or both.
2. Payback for all events will be regulated by the SANCTIONING ORGANIZATION.

**LATE REGISTRATION FEES**

Late registration fees may be charged. Fee's will be handled at affiliates discretion. Suggested are added to payback, operational funds, charity donation.

**DRIVER POINT SYSTEM**

- Points for all events will be regulated by the regional competition or sanction committee.
- Recommended point system:
- Points will be awarded in any class that has sufficient drivers entered.
- Points will be totaled separately in each class. In case of a tie, the driver with the most 1st place wins will be declared region class champion.
- Points will be tabulated in the region that they are awarded. Points are non-transferable between regions. Driver must be a member of the region to receive high point awards.
- A driver may accumulate points in each class entered at each event. A driver may enter as many classes as allowed by the sanctioning organization. The sanctioning organization may choose to run a full race schedule on each of two consecutive days. For awarding points, these two days will be considered two separate events.
- Recommended point system for Round Robin Format:

FINISH PLACE	POINTS AWARDED BASED UPON NUMBER OF ENTRIES IN CLASS
1 <sup>ST</sup>	5 points per entry in class
2 <sup>nd</sup>	4 points per entry in class
3 <sup>rd</sup>	3 points per entry in class
4 <sup>th</sup>	2 points per entry in class
5 <sup>th</sup>	1 point per entry in class

1 <sup>ST</sup> PLACE	5 points
2 <sup>ND</sup> PLACE	4 points
3 <sup>RD</sup> PLACE	3 points
4 <sup>TH</sup> PLACE	2 points
5 <sup>TH</sup> PLACE	1 point

Points awarded to each competitor for each heat - TOTAL 25 Heats. Weekend total points are accumulated towards annual awards.

- A driver that comes to the line and takes a green flag will qualify for points if available to that driver.

**GENERAL COMPETITION RULES****DRIVER AND SNOWMOBILE RULES**

- Radio communication is not allowed between crew and driver.
- A driver and his snowmobile shall be considered a unit and once the class qualification and racing has begun, neither will be substituted until after the final race in the class.
- The maximum number of snowmobiles allowed on the starting line for a race depends upon the width of the track at the narrowest point. There must be 5 feet of track width for each snowmobile at the narrowest point. If there are two rows of snowmobiles on the starting line, neither row may have more than the maximum number of snowmobiles allowed.
- All Sprint races will be a minimum distance of at least three (3) complete laps.
- A driver must always be prepared for another snowmobile to pass and must therefore be on the lookout for other snowmobiles approaching from behind.
- Restart: If two (2) or more snowmobiles do not travel fifty feet from the starting line, the race will be restarted.
- Fully functioning Race-ceiver or similar communication device required in all ISR oval sprint practice and competition. Drivers must provide their own race-ceivers during the event.
- Hearing protection is not required when drivers are using Race-ceiver or other track to driver communication equipment. Driver to crew or crew to driver communication is not allowed.
- Race-ceiver or other brand track to driver communication device failure during an event is cause for disqualification. The Driver and crew are responsible for the care, maintenance, and condition of the communication device always.
- Drivers, crew members, team owners, staff, and support people may not be physically on the race surface at any time once an event has started. This includes walking the track to inspect for changing track conditions and other concerns. Anyone doing so will be penalized at the race director's discretion. Penalties may range from a verbal warning to ejection from the facility.

# OUTLAW 600

Outlaw 600 is a stock-based engine class with a spec concept chassis.

The Outlaw 600 concept sleds are not considered enclosed cockpit sleds. Enclosed cockpit sleds are determined to be snowmobiles where the driver is fully enclosed in a capsule, or cockpit and not exposed to the open atmospheric conditions surrounding the vehicle.

## OUTLAW 600 GENERAL REQUIREMENTS

1. All Outlaw 600 sleds must have a single 121X15 rubber track and 3 skis, or a third support device under the cage area. The sled must have a full roll cage located to the left of the tunnel and a 600-cc engine reverse mounted with clutches to the right-hand side of the machine. The engine must be in front of the tunnel/track.
2. All snowmobiles must comply with general rules section unless otherwise noted.
3. Outlaw 600 sleds must weigh 875 pounds' minimum with the driver in place after a race event. Ballast may be added to the sled to meet weight rules. The ballast must be securely mounted with two fasteners of 5/16-inch diameter minimum. The ballast must be securely fastened to the chassis. All ballast must be painted black and carry the sleds number.
4. Maximum width of the chassis is 57 inches measured at the outside of the skis. Minimum width at the same measurement point is 51 inches.
5. Maximum length is 82 inches, minimum length 78 inches, determined by measurement from ski mounting bolt centerline, to centerline of rear idler axle wheel.
6. No titanium, magnesium, or carbon fiber is allowed anywhere in the construction of the sled.
7. No remote adjusters are allowed on front or rear shocks.
8. The sled seat must be constructed of a minimum 1/8-inch-thick aluminum commercially available seat with head rest.
9. A five-point safety harness must be installed per requirements in General Rules Enclosed Cockpit Sleds.
10. Hahn's devices, or other commercially available neck and head restraint devices are recommended.
11. The driver must use approved Sprint car style arm restraints. See General Rules Section under Enclosed Cockpit.
12. Window nets may also be used, but are not intended to replace an arm restraint.
13. Driver is required to wear an approved automotive style fire suit while driving the unit. The fire suit must be the final layer of clothing the driver is wearing, and no other clothing can be worn over the fire suit.

## ENGINE

### OUTLAW 600

1. Any single or twin exhaust can be used and is open in design. If a single pipe design, the wye pipe is also open.
2. **Allowable engines are any legal production 2 cylinder 600 cc two stroke engines, or 1056 cc four stroke equivalent engine.** (per manufacturers rules formula, for four stroke equivalents).
3. No overbore is allowed.
4. Oil injection pump mechanism and thermostats may be removed.
5. No modifications to the crankshaft or crankcase except for as follows: Four (4) 1/8 diameter holes may be drilled into the crankcase to aid in lubrication of crank bearings. An additional vacuum port may be drilled into the crankcase to utilize and additional pump for slide lube delivery.
6. **Crankcase stuffing allowed.**
7. Allowable cylinder modifications are as follows.
  - a. Exhaust valves may be modified, removed, or replaced.
  - b. **No changes to OEM cylinder mounting deck heights allowed. (Spacers, shims, etc)**
8. Pistons must be OEM stock or exact OEM replacement pistons. Lightweight pistons are not allowed. Piston weight will be verified against stock piston specifications.
9. No modification to OEM or OEM replacement pistons is allowed.
10. **Cylinder head may be modified.**
11. **Carburetors must be stock OEM 40mm carburetors matching OEM specifications.**
12. No airbox allowed. Any filter, screen, or plenum may be used, but no method of pressurizing air inlet to the carbs will be allowed. This is at the discretion of the technical inspector.
13. Original water pump must be used without modification.
14. Any engine mount, or engine mount torque limiter or retainer may be used.
15. On non-fuel injected engines, no electric fuel pumps can supply fuel to the engine. Fuel pump must be conventional vacuum operated snowmobile type. Fuel injected engines may use an electrical or mechanical fuel pump. All fuel delivery lines must be designed for EFI use.
16. **Effectively silenced Open Exhaust single pipe/twin pipe two stroke engines. Effectively silenced Open Exhaust 4 stroke engines.**

### DRIVE

1. Any commercially available drive and driven clutches and internal components may be used. Clutches and components may be modified.
2. Both drive and driven clutch must be located on right side of tunnel.
3. No machining, grinding, cutting, or welding allowed on clutches unless otherwise specified.
4. Clutch guard must fully enclose both clutches and may be vented from the backside or bottom only.
5. Minimum thickness of clutch guard shall be .095 steel or 3/16 aluminum. No additional guard or nerf bar is allowed around or near the clutches. Clutch guard must be mounted to chassis with four (4) 5/16 bolts. The bolts must be located in chassis structure that will support the clutch guard in case of accident or explosion. These fasteners will not be allowed to be attached to the tunnel material only. Additional material to reinforce the pinch point of the bolt must be used.
6. Any fully enclosed chain case/gearbox allowed. The case must be mounted on the left side of the tunnel and be driven by a solid steel jackshaft from the driven clutch.
7. Center distance from jackshaft to track shaft shall be 6.250 inches minimum and 7.500 inches' maximum.
8. No belt drive chain cases allowed.
9. Final drive must be accomplished with a set of gears with an internal 6 spline drive, one inch wide. Any gear set may be used.
10. The track drive shaft must be solid steel and use any OEM plastic 9 tooth drive sprocket. No aftermarket track drive sprockets allowed.
11. The clutch may be cooled with an auxiliary electric fan and appropriate ducting. Fan discharge cannot enter the engine area.

### BRAKES AND THROTTLE CONTROLS

1. Brake rotor must be steel material, 7.5-inch minimum diameter and minimum 3/16 inch thick. The rotor must be mounted on the right side of the track drive shaft inside the tunnel.
2. Any commercially available hydraulic brake caliper allowed.
3. Any commercially available master cylinder allowed. The master must be of a design intended for foot operation. No stock or modified hand actuated master cylinders allowed.
4. Brakes must be foot operated.
5. An auxiliary electric fan may be used to cool the brake disc, caliper, and caliper housing. Ducting must discharge under/inside the tunnel.
6. The throttle must be foot operated and have a solid stop under the pedal. A second or redundant spring must be added to aid in throttle return.

### SKI SUSPENSION & STEERING

1. All sleds in this class must use a four (4) bar trailing arm design front suspension with minimum 24-inch-long trailing arms measured from rear mount bolt center to center of spindle weldment. The maximum caster angle allowed on the trailing arm shall be 30 degrees.
2. Maximum width shall be 54 inches measured outside of skis in a straight-ahead position.
3. Minimum width shall be 51 inches measured at the outside of skis in a straight-ahead position.
4. Any Ski suspension shock allowed.
5. Only two skis are allowed on the front of the sled.
6. The optional third ski/support must be mounted behind the roll cage. The optional left rear support suspension must be a single trailing A-frame design with a coil over shock or solid adjuster link. The maximum distance between the track and the left rear ski/support is 20 inches. The rear of the trailing ski if used cannot extend past the center line of the rear idler wheel in the track suspension. No cutting edge or wear bar is allowed on this trailing ski, if used.
7. The optional trailing ski/support must be fixed in lateral location and cannot be steered in any manner.
8. All skis must be Wahl wide or narrow configuration Champ ski 's with no modifications to bottom surface. Front skis must be a minimum of 14 inches long excluding the ski loop. Rear optional (trailing) ski must be a minimum of 12 inches long and loop may be removed.
9. **Only one, up to 6 inches long, carbide per front steering ski allowed. No other cutting edges allowed.**
10. Any sway bar may be used.
11. Steering must be controlled using rods, heim joints, and bell cranks. Rack systems, gearbox systems allowed.
12. The steering shaft must have either a collapsible U-bend, splined sliding sleeve allowing for a minimum of 4 inches of movement, or sleeve with a lightweight shear mechanism that allows for 4 inches of travel in event of collision.
13. Steering wheel must be used but may only rotate 175 degrees maximum from steering stop to steering stop.
14. Full circle, partial circle or butterfly wheels allowed.
15. Steering wheels can be mounted to a quick release hub, for removal for ease of entry or egress to the cockpit. Quick release hub must be a commercially available product, no homemade or one-off components allowed.
16. Right ski must be offset from track 11 to 17 inches. This is measured from right edge of track to right edge of ski in straight ahead position. The outside of the left ski to the right-hand side of the track can be no more than 42" with the skis in a straight-ahead position.
17. The front bulkhead to which the front suspension components are attached must be a minimum of 9 inches high above the floor pan (from floor pan to upper member) and must have a minimum width dimension of 30 inches to allow for safe location of the driver's feet, foot box construction, and ability to operate controls.

**TRACK SUSPENSION**

1. Track and suspension must be contained inside the tunnel. No outboard shocks or linkages allowed.
2. Only one shock may be used in rear suspension. Any brand or material shock may be used.
3. Devices which link front and rear skid frame movement are not allowed. (No coupled suspension) The rear of the skid frame must travel and react independently of the front torque arm of the rear suspension.
4. A maximum 8-inch rear idler wheel is allowed.
5. Slide Lube systems allowed. Tank (reservoir) must be securely mounted.

**TRACK & TRACTION**

1. Only a Camoplast #9997R track will be allowed.
2. The track must be used as produced by the molder of the track. No cutting or other modifications allowed.
3. One hole (to be specified) may be cut in the track to aid in adjustment of front rail limiter.
4. No weld on hooker plates allowed.

**FRAME & BODY**

1. Left bottom frame rail must be a minimum 1 ¼ x .083 square steel tube and must extend from front of driver's foot box to behind rear main roll cage arch.
2. Rear roll cage arch must be welded to top of frame rails and must be located and securely attached to the left side of the tunnel 17 to 20 inches ahead of the center of the rear idler wheel.
3. Upper half of rear roll cage arch must be supported by at least one diagonal brace on each side. This must be located beside the driver's shoulders. One additional brace is required behind the seat.
4. Roll cage must be made of minimum 1 ¼ x .083 DOM or EW steel tubing.
5. All roll cages must have 2 arch shaped structures extending at least 4 inches above the driver connected by 2 horizontal 1 ¼ x .083 tubes forming an opening large enough and, in a shape, conducive to the driver using as an exit if needed.
6. Minimum inside width of roll cage is 20". Minimum length inside roll cage is 24" measured 18 inches up from floor pan.
7. Side bars of roll cage must bow outward minimum 5 inches each side and top side bar must be minimum 17 inches vertical from the floor of the cage.
8. Left side of roll cage must have either 3 bowed sidebars with connectors welded between all three and the main frame rail, or 2 horizontal side bars and 3 vertical bars connecting from second side bar to frame rail. All horizontal and vertical bars on left hand side of roll cage must be plated in the driver's area. Steel minimum .074 in thickness must be used. Plating shall extend from front vertical corner post of cage to rear vertical post of cage. Plating may be on top of cross bars in roll cage or may be fitted between cross bars of cage. In either method, the plating must be securely welded as to become a structural component of the cage. An additional 8 inches of plating must be located on the rear of the cage from the left rear vertical corner post inward behind the driver, to prevent intrusion into cage area from the rear.
9. All roll cage tubes that may encounter driver's helmet, elbows, knees, or lower leg must be covered with approved high-density roll cage protection foam material.
10. Tunnel must be a minimum .080 material. Maximum width is 18 inches wide outside dimension and must fully enclose track to within 5 inches of the ground with rider in sled.
11. Sled must have a minimum 22-gauge steel or 1/8-inch aluminum panel between driver and engine.
12. No front bumpers will be allowed. Rear and side bumpers allowable, all bumper ends must be capped or plugged. A radiator protection hoop may be added to protect radiator. This hoop can be no larger than .083 x 1" round tubing and cannot be braced to the chassis to be used as a bumper.
13. Minimum ground clearance (ride height) is 3 inches, and the sled must have 2.5 inches of usable vertical suspension travel front and rear.
14. No body panels may extend more than 28 inches above the ground or 1 inch in front of the ski loops.
15. On the right-hand side of the roll cage body panels may extend rearward to the rear of the tunnel. the covering/ panel may not be any higher than the drivers compartment dimensions. No body panels may cover the skis or trailing arms.
16. No body panels may cover clutches or right side of tunnel. Entire right side of tunnel must be exposed except for the clutch guard.
17. The nose (front body structure) of the sled must be a minimum of 20 inches wide and a maximum of 32 inches wide and the front leading surface must be within 25 degrees of vertical. No pointed or wedge-shaped cones allowed.

**Additional Information/recommendation:**

The builder should try to provide protection for driver's legs and feet in case of on track incident. The body panel alone may or may not be enough to protect from injuries, please monitor your specific design to reinforce this area if necessary.

18. Floor pan under driver must be minimum .060 aluminum or 22-gauge steel. Floor pan must not extend rearward under the fuel cell. Fuel cell to be so positioned and mounted that any lost fuel is directly deposited on the ground and cannot migrate into driver's compartment.
19. A up to 5-gallon maximum fuel cell with steel protective box may be used. The cell container must be securely fastened behind the roll cage within two inches of the tunnel. The container must be strapped down with two metal straps.  
A rear bumper/crash bar shall be installed to protect the fuel cell and must remain in the periphery of the chassis. Minimum ¾ inch DOM or EW .065 wall steel tube is required for this function.

20. All fuel line from fuel cell to fuel pump must be braided steel protected. Fuel line may not run through driver's compartment.
21. The cell must have a minimum 22-gauge steel panel over the top of the cell and a minimum 22-gauge steel panel across the entire width of the roll cage extending up a minimum of 17 inches from the floor pan.
22. A 2.5-pound minimum dry chemical hand operated fire extinguisher must be mounted in the cockpit area, accessible by driver or safety crew.
23. No mirrors are allowed anywhere on sled.
24. A windshield/windscreen, if used must only be placed in front of the driver. Windshield must be of a design that protects driver from elements and debris only. No aero effect windshields allowed.
25. Six (6) inch minimum numbers must be displayed on each side of the sled and a four (4) inch minimum number must be displayed on the rear tunnel enclosure.

#### IGNITION & ELECTRICAL

1. **Must have stock OEM ignition.**
2. No lightening of flywheel is allowed.
3. **Data acquisition allowed.**
4. A RED LED taillight of a minimum of 8 square inches is required. **Any snowmobile OEM taillight used in production within the last 5 years, or aftermarket automotive or trailer LED RED lights are allowed.** Light must be illuminated always while on the racing surface, whether the engine is running or not. Light must be placed at a minimum height to be not lower than the top of the highest rear body panel and no higher than the top of the roll cage. **(Eight-inch side marker light strip not required, but is allowed.) (Helmet light not required, but is allowed.)**
5. Engine data acquisition systems allowed. No chassis data acquisition permitted.
6. Spark plugs, spark plug wires and connector do not have to be OEM.
7. No radio communication between driver and crew or "spotter" allowed.
8. The tether switch must be mounted to the right of the driver and high enough in the chassis so that it is in full view always.
9. All sleds in the class must use a sealed 12-volt battery capable of running the taillight continuously for 15 minutes' minimum.

# F-500

**NOTICE: For the updated list of legal F-500 aftermarket parts for this class.**

[Click Here](#)

## GENERAL RULES

1. Snowmobile must comply with the GENERAL RULES AND REGULATIONS.
2. The snowmobile must originate from 1989-1992 Polaris Indy 500 or 1989-1992 Polaris Indy 400 carbureted models. All model variations of Deluxe, SKS, SP and Standard models allowed. No Indy Trail models of any type allowed. Indy 500 chassis number end in 64. Example 0890764 is a 1989 model, 0900764 is 90 model, 0910764 is a 91 model, 0920764 is a 92 model. (Information)
3. The brand of hood, engine and logo need not match.
4. Removal of any material from total snowmobile by means of heat, acid, drilling, grinding, sand blasting, peening, substitution, or total elimination will not be allowed unless otherwise specified here.
5. Minimum weight is 400 pounds.
6. Maximum overall width of sled is 45 inches.

## ENGINE

1. 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. No engine kits allowed. OEM Engines are as follows: EC50PL-01, EC50PL-02 Please contact ISR for verification on later series models, as some will not be legal. (Information)
2. Blueprinting is not allowed. No removal of material whatsoever allowed. This is to include polishing, port matching, deburring, glass or sand blasting surfaces or material removal for the purposes of engine balancing or air flow/ turbulence reasons. **Exterior of engines may be glass bead blasted only, any evidence of blasting that enters the cylinder beyond the gasket mounting surface of the intake or exhaust port will be disqualified.**
3. No changes in engine dimensions can be made by gasket adjustments. Gaskets may be trimmed but must remain OEM and OEM thickness.
4. Maximum cylinder overbore for wear or cylinder repair cannot exceed .020 inch.
5. OEM for the model and Kimpex or SPI for the model pistons, rings and engine gaskets are allowed for replacement. (Gasket sets must retain original compressed spec dimension. Gasket sets that are designed to cover several model years and may have unapproved dimensions are not allowed.) It is the racers responsibility to obtain the correct gaskets and engine components.) Nominal head gasket is 1.85MM plus/minus .2mm. Nominal base gasket is .45mm plus/minus .1mm. Cometic head/base gasket kit C1086 (Wahl#17-836) is also allowed. (Clarification-Information)
6. Replacing OEM carburetor slide valve and replacement jet components without modification is allowed in FORMULA 500. No modification to carburetor body allowed. OEM Carb for the model was VM38SS-50LOIA.
7. No additional fuel pumps for fuel delivery may be added. Additional fuel pumps may be used for slide lube distribution. (Clarification)
8. Air box and oil injection system may be removed.
9. Thermostat may be removed.
10. Cooling system must remain completely stock and in the OEM location.
11. Spark plugs, spark plug wires and connectors do not have to be OEM.
12. The exhaust system must be OEM for the model and be mounted in the OEM location for the model. Welded-on after muffler and internal stinger pipe may be removed and replaced with any size stinger. The exhaust system must be functionally silenced. The ball socket on exhaust chamber may be repaired or replaced but MUST maintain original tuned length and inside diameter. NO OTHER CHANGES ALLOWED. Pipe wrap for hood paint protection may be used but must not fully encompass the pipe. Any pipe wrap or shield can be requested to be removed for inspection by the technical inspector at any time. (Clarification)
13. No changes or repairs allowed to "Y" pipe.
14. Engine must remain in stock location and must use stock engine plate and mounts. Torque limiters allowed.

## DRIVE

1. Drive clutch must be P-85 Polaris.
2. Any commercially available driven clutch and internal components allowed.
3. Clutches and components may be modified. (Clarification: Micro-Belmont or other "Quick change" clutches allowed but must be based off a P-85 Polaris clutch.) (Carbon fiber primary clutch covers are allowed.)
4. Chain case and track shaft must remain stock and in stock location; no modifications or lightening allowed. Chain and sprocket ratio may be changed. Belt drive system is not allowed.
5. Jackshaft with a key may be replaced with a jackshaft of the same model and material with splines.
6. Any OEM appearing, solid, and of like material, (steel) replacement jackshaft may be used.
7. Any 8" (inch) OEM steel brake disc and hub may be used. The disc may not be modified in the pad contact area. No wave disc allowed. No aluminum or titanium hubs allowed.
8. Any commercially available brake master cylinder will be allowed.
9. Any OEM direct fit (Clarification)Polaris brake caliper will be allowed. Caliper must attach to the existing chain case without modification to the chain case. Caliper may be modified to fit chain case.
10. Brake cooling duct, inside the hood, is allowed.

## SKI SUSPENSION & STEERING

1. Ski suspension and steering must be OEM for the model unless otherwise specified.
2. Radius rods and tie rods may be replaced or modified.
3. Maximum total offset allowed is 1 inch, measured from the center of bulkhead. EXAMPLE: 23 inches from the center of bulkhead to the outside right ski and 22 inches from center of bulkhead to the outside left ski = 45 inches outside ski stance with 1- inch total offset.
4. Must use all original suspension mounting points on chassis and struts.
5. Shock absorbers must be OEM for the model or ISR designated replacements.
6. May use any spring or spring adjusters. Titanium springs are not allowed.

7. Sway bars may be replaced but must fit in stock location thru bulkhead.
8. Limiter strap allowed but must maintain two and a half (2.5) inches of usable downward travel with the driver seated. Travel measured at the front bumper.
9. Suspension components may be reinforced but no geometry changes are allowed except camber.
10. The steering column and handlebars may be relocated and/or replaced. Extensions may be added to suit the driver. The lower end of the steering column must be secured with a minimum of 4 bolts. One of the 4 bolts must be in one of the OEM mounting holes. The handlebar and column material must be of same as the OEM material with the same wall thickness (or greater) and tubing outside diameter as the OEM components. The use of a universal joint is not allowed.
11. Throttle lever may be replaced but must be thumb operated with a direct mechanical operated mechanism on rear side of right handlebar.

#### **SKIS & SKI RUNNER**

1. OEM (for the brand) or aftermarket skis allowed. Must conform to General Competition Rules. Ski mount on spindle may be narrowed to allow ski mounting.
2. Minimum flat length of ski bottom is 14 inches. Minimum ski width is 3 1/4 inches.
3. Reinforcement is allowed on the top of the ski board only.
4. Maximum carbide cutting edge length is 6 inches per ski. Must be one continuous cutting edge with no other sharp edges on the ski. (CLARIFICATION) Measurement includes production gaps to prevent carbide damage from mounting procedures or ski rocker. The leading or trailing carbide may be altered to conform to measurement specs.

#### **TRACK SUSPENSION**

1. Complete track suspension and components MUST be OEM stock for the model unless otherwise specified.
2. Track suspension must maintain a minimum of 2 inches of useable, vertical travel with the driver seated.
3. May drill new holes in tunnel or rail to change mounting locations. May not drill excessive number of holes for lightening.
4. May modify or replace springs. Titanium springs are not allowed.
5. Shock absorbers must be OEM for the model or ISR designated replacements.
6. May remove front shock.
7. May relocate rear shock.
8. May change or add limiters to front and rear of track suspension. No remote limiter adjusters allowed.
9. May add or subtract marginal snow wheels and their mounts.
10. May add slide lubrication system.

#### **TRACK & TRACTION**

1. Any commercially available 121-inch by 15 inch is allowed. Minimum track lug height is 0.50 inch.
2. The track must be used as produced by the molder of the track. No cutting or other modifications allowed.
3. No weld on hooker's plates.
4. No studs allowed directly under rails.
5. Traction products must conform to Oval Sprint requirements.
6. No titanium studs allowed.
7. Stud backing plates must be steel, aluminum, or plastic only. No other materials allowed.

#### **FRAME & BODY**

1. Serial Number must be visible. (if it's a replacement tunnel you have to cut out the original number and riveted it on new tunnel.)
2. Must use 1989-1992 Polaris Indy 500 chassis.
3. Chassis may be reinforced.
4. May alter or replace hood, windshield, belly pan, seat, fuel tank and foot stirrups. Clarification: (Carbon fiber hood and carbon fiber hand guards are allowed. No other body parts are allowed)
5. May remove bumpers, dash panels, oil tank, lights, and wiring.

#### **IGNITION & ELECTRICAL**

1. Ignition system MUST be OEM stock for this engine, no modification allowed. May not lighten flywheel.
2. Lighting coils may not be removed. (Clarification) Lighting coils must be functional and generate current. (Information)
3. Instruments, gauges, and headlight may be removed.
4. Data acquisition and data acquisition systems allowed for engine management only. No methods of chassis data acquisition allowed. Go-Pro or equivalent camera may be mounted in any position on sled but not on driver. (clarification) Playback tachometers will be allowed to record engine rpm only. No additional data acquisition instrumentation is allowed on the sled during a race event. Clarification: Tachometers with the ability to record multiple functions may only be used in the tachometer mode. No additional sensors or pickups allowed. GPS mode allowed. Absolutely no functions that require pick-ups and adapters allowed.

# SPORTSMAN 600

1983 to 2000 production Arctic Cat, Ski Doo, Yamaha, or Polaris snowmobile, of 600 cc engine volume or less.

Sportsman 600 Piston kits

Models that may be used for this class are as follows:

Arctic Cat – ZR-ZRT, Etc. Polaris XLT-XCR Etc. Ski Doo MX, Formula, Etc. Yamaha, Exciter 570, Vmax 600, SRX 600 (there may be additional models, please call ISR for verification.) Engines may be interchanged, by model year, but only can be placed in chassis that offered that engine package. (Example a 98 ZR could use a 99ZR engine since a like 600 was offered in 98. Alternately a 97 ZR chassis could not use a 2000 engine since that engine configuration was not used in 1997). Clarification/Information.

## GENERAL

**THE RULES FOR THIS CLASS ARE FROZE UNTIL 2028, WITH EARLIEST REVIEW BEING SPRING RULES MEETING 2027**

**Sled must retain the following components/concepts:**

1. Original tunnel and bulkhead for the model
2. Original type engine for the model. (See above clarification)
3. Front suspension concept must remain as produced, (i.e., trail arm, strut, a-arm, etc.) but may be altered in the following manner:
4. Steering column may be relocated for driver comfort. Handlebars may be replaced.
5. Original springs may be altered or replaced.
6. Original shocks may be replaced, or altered, aftermarket shocks are allowed.
7. A-arms, trailing arms, struts, may be changed / modified but must originate as OEM for the brand. Mounting points and design may not be changed. Heim ends may be used to replace flex joints or rubber bushings. (Clarification) Radius rods may be reinforced/ modified/ or replaced in the interest of safety and chassis integrity. (Clarification) [Click Here for Bulletin](#)
8. Any OEM style torsion bar can be used on any chassis.
9. Limiters and other methods of travel restriction are legal, but the snowmobile must have 2 (two) inches of useable front travel minimum.
10. No carbon fiber or titanium materials allowed anywhere in the sled construction.

## REAR SUSPENSION

1. Only the OEM rear suspension for the brand in model years 1983 to 2000 as produced may be used. (Clarification) Example: A 98 ZR Arctic Cat may use any Arctic Cat suspension produced in any Arctic model from 1983 to 2000.
2. No titanium components may be used in the rear suspension.
3. Track suspension must maintain a minimum of 2 inches of useable, vertical travel with the driver seated.
4. May drill new holes in tunnel or rail to change mounting locations. May not drill excessive number of holes for lightening.
5. May modify or replace springs. Titanium springs are not allowed.
6. Shock absorbers must be OEM for the model or ISR designated replacements.
7. May remove front shock.
8. May relocate rear shock.
9. May change or add limiters to front and rear of track suspension. No remote limiter adjusters allowed.
10. May add or subtract marginal snow wheels and their mounts.
11. May add slide lubrication system.

## TRACK

1. Track may be OEM for the brand, or any R rated track that is no higher in lug height than the original production tracks available for the model, as filed.
2. Tracks may be no shorter 121 inches.
3. Tracks must be 15" wide production tracks or designated replacements. They may not be narrowed from production specs.
4. Tracks narrower than 15" may not be used even if available from the original equipment manufacturer.
5. Aluminum or steel backers only.
6. No Titanium studs allowed.

## BULKHEAD AND TUNNEL

1. Bulkhead must remain in original orientation to the tunnel.
2. Chain case, jackshaft and front drive axle placement must all remain OEM for the model.
3. Front suspension mounting points within the bulkhead may be reinforced but not relocated.

**ENGINE**

1. Engine must remain OEM for the Brand and Model. One, two, or three cylinder, 2 cycle only.
2. The following engine components may not be modified:  
**Exterior of engines may be glass bead blasted only, any evidence of blasting that enters the cylinder beyond the gasket mounting surface of the intake or exhaust port will be disqualified.**
  - a. Cylinders, no porting allowed, overbore of .040 allowed
  - b. Heads
  - c. Crankshaft must retain original stroke.
  - d. Crankcase may not be modified. (Clarification)
3. The following items are allowed for builder efficiency and affordability considering the age of the equipment utilized.
  - a. Crankshafts may be welded for repair.
  - b. Aftermarket rods and bearings may be used.
  - c. Aftermarket wristpins and wristpin bearings may be used.
  - d. *Aftermarket pistons/piston pins may be used but must be of stock OEM dimension and direct replacement. No modification to aftermarket component allowed. Pistons may not be lightened, pin location cannot be changed, ring type and location cannot be changed. Direct replacement terminology refers to pistons and rings of like dimension, except for allowable overbore. Performance enhancements to piston dimension or design is not allowed. Specific brands may not be permitted to be used. (Clarification)*
4. Ignition must be OEM for the model.
5. Exhaust must be effectively silenced but may be modified or changed.
6. Carburetors and intake system must be OEM for the engine and model.
  - a. The only allowable tuning components for the carburetors shall be OEM type jets, slides, needles, etc. No aftermarket enhancements allowed.
  - b. Any commercially available aftermarket reed cage and reed assembly may be used.
7. Air boxes may be modified or removed.
8. Engine mounting plates must remain OEM, but the isolation devices (mounts) may be replaced.
9. All belts, hoses, wire looms, cables, controls, and gaskets may be replaced.
10. Brake caliper must be oem for the brand.
11. If a model has mechanical brakes, hydraulic replacement components are allowed but must be used in the original location at all points. (Master, Caliper, and Disc)

**CLUTCHES**

1. Clutches both drive and driven may be OEM for any snowmobile brand.
2. Aftermarket, springs, helixes, cams, arms, weights, bushings, etc. may be used.
3. Clutches may be trued. No additional machining to the clutch surfaces will be allowed. (Drive and driven)
4. Quick change clutches allowed.

**SKI SUSPENSION & STEERING**

1. Any legal ski may be used.
2. Sled must not be wider than 45" at the outside of the skis. **Clarification, this includes fasteners that retain the ski to the spindle, if a portion of the fastener causes the measurement to be wider than 45 inches, the sled will be declared illegal.**

**TRACTION**

1. All traction and steering aids/components shall conform to general rules.

**HOOD, BELLY PAN, AND SEAT**

The competitor is encouraged to retain the original appearance of the OEM model, color notwithstanding.

1. Replacements for hoods must be original type materials and not lightweight versions, even if original type material.
2. Belly pans may be aftermarket replacements.
3. Seats may be reupholstered but must be OEM for model. They may be contoured for comfort and safety. Side bolster pads may be added.
4. Bumpers may be removed, added, modified, or replaced.
5. Fuel tanks must be in original position and must be inspected for safety concerns. No leaks, improper line routing, or damaged tanks or caps will be allowed.

## F-III (FORMULA- III)

Any stock qualified Super Stock snowmobile of 600 cc or less engine displacement volume, or equivalent 4 stroke models. 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. In the production of this F-III sled, exotic material such as, but not limited to Magnesium, Titanium and Carbon Fiber is not permitted in the construction of this sled anywhere unless specifically spelled out and or if it was stock OEM for the Make and Model. If it does not say you can use it, it means you cannot. This includes traction products and any other "Add On's " or accessories.

The snowmobile must have original OEM engine, hood, intake, exhaust, frame, and drive. Named components must be OEM for the model and year, or properly filed OEM replacement parts that supersede the original OEM parts. No alterations to the engine, fuel management, ignition management or design parameters is allowed unless specified in this ruleset.

Legal model years allowed for competition will be 2017 to 2026. When 2026 is reached the 2017 cutoff date will become 2018 and will continue thereafter removing the oldest year of production and extending the newest year of production by one year. IE. Future example (2018 to 2027)

**Current models legal for use are 2018 to 2026. Engine and chassis combinations may not be changed.**

### ENGINE

1. Engine must be *OEM for the Make and Model* and remain in original mounting location.
2. Engine must remain stock in all dimensions and components unless specified. Engine must use OEM fuel management system in its entirety, except for remote mounted fuel pumps and the fuel tank.
3. 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. No addition of material is allowed.
5. Stock OEM pistons only are allowed for replacement.
6. There may be no more than one-cylinder base gasket to a cylinder unless specified by the engine manufacturer.
7. Spark plugs do not have to be OEM.
8. Control cables and linkage do not have to be OEM.
9. On Four Stroke Engines oil reservoir may be relocated for ease of design, but no enhancements that increase performance will be allowed.
10. Engines will have OEM tags and/or serial numbers affixed to the engine.
11. The after muffler (can) may be changed or altered, except for material used in construction. The main exhaust system must remain stock and unaltered. This includes Y pipe, expansion chamber, pulse charger. Tabs or brackets may be welded to the external body of the original exhaust system to facilitate the installation of an aftermarket can/silencer. Bungs may be welded anywhere in the system for data acquisition. Original bungs, and mounting surfaces for any OEM data collection/O2 sensors must be maintained in original location.
12. Thermostats may be removed.
13. Bulkhead mounted cooling system components must remain in the stock location. Tunnel mounted heat exchangers may be relocated/replaced for stud clearance. Additional cooling mediums, (extrusions, radiators, reservoirs) may be added.
14. Radiators may be added, openings for radiators must conform to criteria defined in VENTING, below. Clarification.

### DRIVE-BRAKES

1. Must have original OEM variable speed converters supplied by the manufacturer for that make and model. Named components must be OEM for the model and year, or properly filed OEM replacement parts that supersede the original OEM parts.
2. No machining or grinding of any kind allowed on clutches unless specifically stated.
3. Any springs, weights or ramps may be used. No clutch engagement RPM limit.
4. No machining on clutches to accommodate springs and weights.
5. In the primary clutch, metal may be removed but not added to ramps or flyweights.
6. Secondary clutch cams may be cut to any angle. Billet helixes allowed.
7. No overdrive machining.
8. Drive belts do not have to be OEM.
9. Any drive chain and sprockets may be used.
10. Chain case must be original OEM for the model equipment. Must remain in original mounting location.
11. Track drive shaft and/or track drive sprockets may be trued. Track drive shaft and sprockets may be changed.
8. Brakes may be changed or altered but must be operational always. Brake components must be commercially available. Brake may be located on driveshaft or jackshaft.
9. Liquid cooled brake systems allowed.
10. 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. (Clarification) {Larger / thicker are acceptable, but not smaller / thinner}. Any brake disk used must be of the same material as OEM for the model disk.
11. Brake control handle must remain in OEM location on the left, front side of the handlebar.
12. Brake ducts may be used, must contain and direct airflow to the brake caliper and disc assembly only.
13. Brake systems that serve as or are components of traction control methods are not allowed.

**SKI SUSPENSION & STEERING**

1. Front suspension mounting locations (both upper and lower) on the chassis bulkhead/weldment/casting must remain in OEM location. Upper shock mount must remain in OEM location.
2. Front suspension control arms, spindles and tie rods are open. Front suspension structural materials must be steel or aluminum, including fasteners.
3. Sway bars (anti -sway) may be added. Sway bars must be steel only.
4. Maximum width of ski suspension and skis at normal ride height with rider is 45 inches center to center at the carbide cutting edge. Carbide must be centered on the ski. Suspension must be centered in chassis. No offset in excess of ½ " (.500 inch) adjustment allowance.
5. Reinforcement of components is allowed per the guidelines specified in the Gusseting section of the General Rules. Structural integrity must be maintained.
6. Any air/hydraulic or gas over hydraulic shock allowed that does not have electronic control methods allowed. Shock travel and data recording allowed.
7. The lower Steering column mounting point must be used. The upper mounting point may be relocated or changed. Any additional non steering related components fastened to, or a part of the steering column may be removed. The integrity of the steering system must be maintained.
8. Handlebars must be intact at the start of each race day. Any steel handlebar allowed. Steering column may be altered but must remain in lower original mounting location. Upper mounting location may be changed. Open ends must be capped. Grips and controls may be modified. Throttle must be operated with a thumb operated mechanism located on the right-hand handlebar to the rear of the bar itself (no twist grips).
9. Any handlebar risers, vibration mounts and relocation mounts allowed.
10. Any steel spring may be used on the suspension. Titanium springs not allowed.
11. A ride height dimension may be instated at any time to control the performance level of the vehicle.

**SKIS & SKI RUNNERS**

1. Any commercially available ski that meets ISR standards for design and material is allowed.
2. Skis must have an ISR approved ski loop design for safety.
3. Snowmobiles must not use more than eight (8) inches of continuous cutting-edge maximum per ski. (Subject to change at any time.)  
(CLARIFICATION) Measurement includes production gaps to prevent carbide damage from mounting procedures or ski rocker. The leading or trailing carbide may be altered to conform to measurement specs.  
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.
4. Cutting edge material may be altered to an angle of not less than sixty (60) degrees inside included angle.

**TRACK SUSPENSION**

1. Rear suspension is open as to design and type. Suspension must be centered in the tunnel. (CLARIFICATION) Non-Remote adjusters allowed.
2. Rear suspension structural materials must be steel or aluminum.
3. Any hyfax allowed.
4. Shock absorbers, any air/hydraulic, or gas over hydraulic, are allowed. No electronically controlled shocks.
5. Any steel spring may be used in the rear suspension.
6. Methods of slide lubrication may be added. Lube tanks may be located at the discretion of the builder.
7. No hole shot devices allowed. (Mechanical or electronic.)

**TRACK & TRACTION**

1. The only tracks that may be used is the Camso 9997R track. (15X121X.725), the Camso 9812R (15X121X.525). and the 9239R (14x121x1).
2. The number of traction control devices (studs) is open. (Subject to change at any time.) No hooker plates allowed.
3. All traction devices must adhere to specifications in general rules section.
4. No softening, chemical treatment, cutting, or altering of the track is allowed.
5. Stud backers must be steel, aluminum, or plastic. No titanium studs allowed.
6. T-nut fasteners for traction products must be steel.

**FRAME & BODY**

1. 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, unless specified.
2. Seat design and fitment is open.
3. Access openings are allowed for component removal or service. Vents may be covered or closed.
4. Additional plate material may be added to the tunnel at the suspension mounting holes.
5. Tunnel protective wear strips may be added, removed, or altered.
6. The tunnel may be cut off no less than of 8 inches behind (to the rear of) the rear mount point of the rear torque arm of the track suspension used. This can facilitate construction of the tunnel enclosure and provide proper clearances of the enclosure to the track. See #8. ( For additional requirements.) Clarification
7. The tunnel may be altered to facilitate a straight tunnel design to the rear of the sled. The side panels of the tunnel must remain to a point 8 inches beyond the rear suspension torque arm mounting point used.

8. The rear of the tunnel must be enclosed with steel or aluminum comparable in strength to the tunnel material. The tunnel enclosure is required to reduce the possibility of skis and driver's extremities entering the tunnel area. The shaded area (see illustration) must be enclosed. The enclosure shall cover the rear and both sides and extend forward to the rear suspension mounting bolt. The bottom of the enclosure shall be no higher than one (1) inch above the center of the rear axle (with the driver in place). (Clarification) The rear of the enclosure shall be no further than 2.5 inches from the rear of the track. The tunnel enclosure must be securely welded, bolted, or riveted to the tunnel.
9. Fuel tanks are open in design and location. No pressurized fuel tanks allowed. Aluminum, plastic, or steel tanks only.
10. OEM body panels must be used. Sound deadening foam may be removed.
11. Hand guards allowed.
12. Required minimum sled weight is 450 pounds. Weight may be changed at any time.
13. Any windshield may be used. Windshield must have safety edging, and be installed in stock location. **(Skidoo must use front light mount)**
14. Rear bumpers may be added, removed, or relocated. Must have a functioning rear bumper attached to the rear of tunnel. Bumpers must not be a safety hazard.
15. Running board boot grippers may be removed or defeated. Design holes in running board can be plated.
16. Sleds designed with "spar" "pyramid" or similar steering column support and gas tank mounting structure, may have the spar altered to accommodate rider position, but must retain original mounting points.
17. Vehicles with external footrest reinforcement for snow cross application may remove the reinforcement to facilitate fuel and lube tank mounting. Internal tunnel reinforcement must be retained. (Corner braces, angle supports) Internal suspension OEM mounting buck plates (Suspension mount reinforcement) may be removed if not used in original locations, however, equivalent size and thickness buck plates must used in the actual mounting location.

### VENTING

Venting in F-III class.

Applies to all classes that use SS race sleds approved by ISR.

Manufacturers will be permitted to devise vent kits for Super Stock sleds to aid in controlling under cab/hood heat, air movement and improve safety in the areas affected by the beyond design limits operating temperatures encountered in competition.

## **ALLOWABLE ADDITIONAL VENTING FOR ALL SUPER STOCK (F-III) SLEDS.**

1. An additional 36 square inches (area) of venting will be allowed/permitted.
2. Venting may be located anywhere in the cab/hood/ belly pan structure, including dashboard panel.
3. Venting may be utilized for air in or air out.
4. Venting shall not be directed, channeled, or ducted to specific areas. All venting must use natural airflow to cool or move air through the area attempting to cool or assist in airflow.
5. Size of venting in each situation is not dictated, but total vent locations must not exceed 36 Square inches in area, more than production venting.
6. Venting may be covered with "Frog Skin" or other like materials to prohibit snow ingestion.
7. These vents shall not be connected to airbox/plenum, or any other part of the intake system, regardless of design of the engine. (Carb or EFI)
8. All users must follow the manufacturer's approved layout of the venting and must adhere to size and location specified. No additional changes by the installer will be allowed. Manufacturers must provide instructions, template if necessary, and other info when venting is required. The manufacture can inform of this process by electronic communication.  
Manufacturers to file only one update per model year/season

### IGNITION & ELECTRICAL

1. Ignition must be OEM for the year and model.
2. CDI/ECU/ECM module may be reprogrammed.
3. No aftermarket device allowed which interrupts ignition for launch control or traction control unless OEM for the model.
4. Instrumentation may be added but must not present a safety hazard.
5. Headlights must be original OEM equipment. Must remain in Headlights location. Headlight must be covered and obscured. No light shall emit from the periphery of the lens during competition.

## Pro-Lite/AM

## PRO-LITE/AM & PRO CHAMP

Clarification Pro Lite and Pro Champ use the same technical rules for the class. The difference in the classes is the level of competition. Pro Champ qualified drivers may not enter Pro Lite.

Driver status is controlled by the affiliates.

### GENERAL RULES

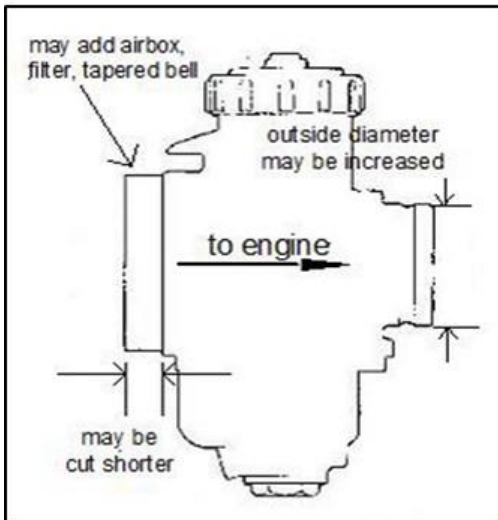
1. Only single-track snowmobiles allowed.
2. Any changes or alterations allowed in the Stock classes are allowed.
3. The brand of engine, hood and logo need not match.
4. All snowmobiles must comply with GENERAL RULES AND REGULATIONS section.
5. Snowmobile weight will be 400 pounds minimum, without driver.
6. Maximum overall width is 45 inches.

### ENGINE

#### Special notification.

**Due to availability issues with Rotax 440 pistons, work is being done to have OEM Rotax pistons produced by the original manufacturer. Due to the uncertain nature of the project, timelines, shipping, etc. ISR has agreed to the following caveat concerning these pistons. If the correct OEM type piston is commercially available by Nov 1, 2025, they will be the designated replacement piston for 440 Rotax engines. If the availability date of Nov.1 is not met, all engine brands will be allowed to use remaining OEM or any aftermarket piston that is built to the OEM specs for that engine.**

1. The designated engine must originate from a stock qualified 1995 or newer two-cylinder snowmobile. The displacement of the stock qualified engine must be no more than 440cc (as produced and filed by the manufacturer). Clarification: The engine must be ran/used in a totally stock configuration. No changes to the cylinders, crankcase, or crankshaft are allowed. Ignition mapping is allowed. The only change to the engine itself will be modifications to the cylinder head insert cups, to control compression ratio. Refer to General rules for Stock class for further information.
2. The cylinders must be located on the engine, with the intake and exhaust ports in OEM/stock orientation to the crankcase.
3. Engine stroke may not be changed or altered.
4. Engine oil injection pump may be removed.
5. If engine is of reed valve design, reeds used must either be OEM or V-Force brand reeds for the engine only. V-Force reeds designed for other brands of engines may not be used. Reed application must be brand specific. (New) Reed blocks and reed mounting components may not be changed from as produced. No methods of increasing the allowable opening of the reed itself, modification of the block in any way, or any methods of enhancing reed action, will be prohibited. Reed stop position will be dictated by the maximum amount of clearance in the reed block or engine casting as produced. No grinding of components, cutting of components, enlarging of components will be allowed. No improvements to airflow will be allowed. (Clarification)
6. Heads may be machined to allow insertion of combustion chamber cups.
7. Maximum cylinder base gasket thickness shall be .5mm (.020) and only one base gasket per cylinder may be used.
8. Engine mounting plates and brackets may be altered, removed, or replaced. Rubber isolation mounts may be changed or removed.
9. Mikuni VM 34 round slide carburetor only (34.1mm maximum bore size, 35.4 maximum slide diameter) Only one carburetor per cylinder.



a. Any 34 MM or 34 MM TMX Mikuni Carburetor supplied in original stock trim with the engine is legal. If the 440-cc. engine was supplied as stock with a larger than 34 mm carb, it may not be used. (Clarification)

b. No smooth bore, flat slide or taper bore carburetors allowed.

c. No internal changes to carburetor body allowed.

d. No modification of a carburetor bore (venturi) is allowed.

e. Outside diameter of outlet spigot may be increased. (See illustration)

f. Cut off straight portion at inlet.

g. Airbox, filter, tapered bell may be added to inlet end of carburetor.

h. Power jet carburetors and power jet carburetor kits are not allowed unless OEM for the model of engine.

i. Butterfly throttle valve carburetors are not allowed.

j. Larger than specified carburetors may not be downsized to meet these rules.

k. Unless otherwise specified, the only carburetor changes allowed will be replacement of tuning parts. Modifications not allowed to tuning parts unless specifically mentioned in this ruleset.

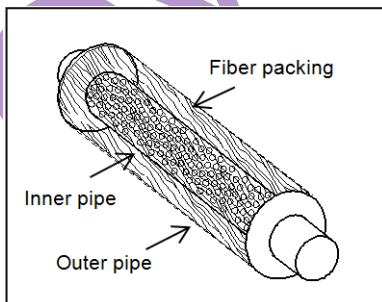
#### APPROVED FLOAT MODIFICATION

- A modified phenolic float may be used that controls the inlet needle and seat in both the opening and closing functions. Example of this product is the Wahl Bros Part # 06-619 float. The floats may be modified to perform only the above stated function. Any changes beyond that function control are not allowed.

Example of legal float with approved modification.



- No fuel injection or pressure charging is allowed.
- Any devices added to exhaust ports, no matter where located in the exhaust port passage, altering the path of the port and changing/infringing on the overall volume of the exhaust port are illegal. (Clarification)
- No "Boost Bottles" or methods of share air will be allowed. Engines that come stock with a shared air/boost bottle system will be required to remove the system completely from the engine. Carb adapters allowing fitment of shared air must be replaced
- Air box may be removed or replaced.
- OEM cooling concept must be maintained.
- Engine torque arms, limiters, snubbers, and suppressors may be used.
- Specific engine parts that may be replaced are listed in the available matrix. [Click here.](#)
- All snowmobiles are required to have a functionally silenced exhaust system. Exhaust system must not protrude more than three (3) inches outside the hood/chassis.



- The following minimum standards for straight-thru silencers are required:
  - Inner pipe must have at least 15 holes per square inch. Minimum hole size 1/16 in. (Minimum 3/8 in. sound absorbing material around the entire circumference of inner pipe).
  - Inner pipe (perforated core) must contact sound absorbing material (fiber or steel wool packing).
  - Outer pipe must be at least 3/4 in. larger than inner pipe.
  - Minimum silencer length 3 in.

See illustration. NOTICE: Effective 1 Jun 2020, above sound rules are in effect. Additional sound level restrictions may be adopted at any time.

#### DRIVE

1. Any commercially available drive and driven clutches and internal components may be used. Clutches and components may be modified.
2. Chain case and internal components may be altered, removed, or replaced. Chains and sprockets may be altered, removed, or replaced.
3. Jackshaft/track shaft may be altered, removed, or replaced.

### **SKI SUSPENSION & STEERING**

1. Front suspension components (arms, spindles, rod ends, spherical joints, the rods linkages, IFS trailing arms and radius rods) may be altered or replaced. Maximum overall width is 45 inches.
2. Front suspension springs may be altered or replaced.
3. Sway bars and links may be altered, removed, or replaced.
4. Shocks and TSS struts may be altered, removed, or replaced.
5. Snowmobile must maintain two (2) inches of useable vertical suspension travel.
6. Handlebars, column and controls may be altered or replaced. Aluminum handlebars allowed if produced by the OEM manufacturer.
1. Any ski conforming to ISR safety and design rules will be legal to use, in any orientation. Special attention must be paid to ski loop and ski loop attachment-
2. The left ski may not have more than 8 inches of carbide cutting edge.

### **SUSPENSION**

1. Track suspension may be altered or replaced.
2. Rear suspension to tunnel mounting locations is not restricted; safety and structural integrity must be maintained.
3. Snowmobile must maintain two (2) inches of useable vertical suspension travel.
4. The use of any (electric or mechanical) suspension limiters is not allowed.

### **TRACK & TRACTION**

1. No cleated tracks allowed. Track must be commercially available, one-piece, molded rubber track. Track must be used as produced by the molder of the track. No modification allowed unless specified.
2. Minimum width is 13.5 inches. Minimum length of track is 103 inches. Minimum lug height is ½ inch.
3. Track must be "R" rated from the molder. It is recommended that the track be no more than 3 years old.
4. No titanium studs allowed.
5. No titanium backers (backing plates) allowed.
6. No carbon fiber (CF) backers (backing plates) allowed.

### **FRAME & BODY**

1. Chassis/frame origination and modification are not limited or restricted. Maximum width is 45 inches.
2. Any hood allowed. May be cut out behind the windshield for additional venting.
3. Windshield not required.
4. Fuel tanks may be altered or replaced.
5. Seat may be altered or replaced.
6. No radiator may protrude from or thru the hood or chassis.
7. Heat exchangers may be mounted on the front and bottom surfaces of the belly pan if mounted flush to the pan.

### **IGNITION & ELECTRICAL**

1. Ignition system must be a 440 OEM for the brand and be available through normal dealer channels. Ignitions may be reprogrammed. (Clarification.)
2. Ignition components may not be modified for fitment to the engine. If an alternate ignition is used it must be of the same brand as the engine and must install on the engine in the standard mounting location and holes. (Clarification)
3. The only allowable ignition control boxes/ECU's besides OEM are the INGI TECH Part number-DC-CDI-P2 and must attach with OEM style direct hook up wiring or wire looms, and the Zeeltronic Part number PDCI-11.
4. Stock OEM stators only.
5. Aftermarket ignition trigger pickups are not allowed.
6. Instruments, gauges, and headlights may be altered, removed, or replaced.

### **REGIONAL SPECIALTY CLASSES**

ISR allows regional specialty classes if they are offered at a ISR rules meeting and meet not only approval from the seated voting members of the

discipline, but also ISR. Acceptance of a Specialty Class can be overruled by ISR if it is felt the specialty class is not in the best interest of the sport. Specialty Classes may not displace an ISR core class. Core classes must be offered at each sanctioned event.

### USSA PRO STAR SERIES

The USSA Pro Star Series events will use all rules established in Pro Lite and Pro Champ above listed.

## Specialty Classes

### F-440 FAN CLASS RULES

#### STOCK SLED GENERAL REQUIREMENTS

1. All sleds must comply with the GENERAL SECTION SLED/EQUIPMENT REQUIREMENTS & REGULATIONS.
2. The sled must have original OEM engine, frame, cowl, suspension, and variable speed converters supplied by the manufacture for that model.
3. Sleds competing in this class must be 1996 or older 440 CC maximum engine volume. (Fan Cooled only)
4. Only hydraulic welded body, non-revalvable, non-repairable shocks will be used in the front suspension and chassis. If a legal chassis and engine stock production sled originally came with a gas charged, re-valvable shock, the shocks must be replaced with a hydraulic, welded body shock. Shock may not be altered in any way. This is a method of cost control for this class.

#### ENGINE

1. 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.
2. Blueprinting will not be allowed. No removal of material whatsoever will be allowed. This is to include polishing, port matching, deburring, glass or sand blasting surfaces or material removal for the purposes of engine balancing or other reasons.
3. Must retain stock bore and stroke.
4. OEM or OEM style replacement pistons are allowed for replacement. Pistons may be up to .020 (.5mm) overbore. Pistons must be OEM or SPI replacements only. No Wiseco pistons allowed.
5. Aftermarket engine gaskets may be used, but original factory spec thickness is required. No changes in engine dimensions can be made by gasket adjustments.
6. Only original type gasket materials are allowed for engine assembly.
7. No engine update or performance kits/options allowed.
8. Oil injection pumps may be removed.
9. Only OEM carburetors allowed. Must be OEM for year, make and model.

#### WINDSHIELD

1. Windshields may be removed or shortened, if used, must be mounted in the OEM mounting location.

#### SEAT/FUEL TANK

2. Seat/fuel tank must remain OEM for the model. Seat may be recovered.

3. Seat must maintain original profile as produced. No alterations to stock seat except for mounting fasteners and location allowed.

#### **BRAKES**

1. Brakes may be changed or altered but must remain in the stock location.

#### **FRONT SUSPENSION SPRINGS**

1. Any snowmobile suspension spring allowed.
2. Limiter strap allowed but must maintain two inches of travel.
3. Front suspension shocks must be welded body hydraulic shocks.

#### **TORSION BARS**

1. Must be OEM for the model.
2. OEM diameter and linkage must be maintained.

#### **TRACK SUSPENSION**

1. The complete suspension must be used as furnished and filed by the manufacture. There will be no suspension options permitted in Stock classes. Travel may be limited with straps or chains but must maintain two inches of usable travel.
2. No gas shocks allowed. Must use hydraulic welded body shocks.
3. Front rail/skid frame shock may be defeated but must be in place.

#### **SUSPENSION WHEELS**

1. OEM for the model suspension wheels, marginal snow wheels may be added or removed.
2. OEM for the model rear idler wheels may be added. Aftermarket replacements allowed. OEM style bearings only. No exotic metal or ceramic bearings allowed.

#### **SLIDE LUBRICATORS**

1. Slide rail lubrication systems allowed.

#### **TRACK**

1. No "R" rated tracks allowed.
2. Any OEM track of original dimensions may be used. Dimensions are defined as track length, width, and drive specified dimension. Example wide X121" Long with 2.52 Drive Pitch. No pitch changes allowed. Track height must be no greater than 1" (one inch) lug height. \*\*
3. Re-clipping/repair is allowed.
4. No hooker studs.

#### **FRAME and BODY**

1. Must have stock hood and belly pan.
2. Headlight may be removed but the hole must be covered if removed. Headlight retention is encouraged as it is a stock-based class.
3. Frame must not be altered, or bracing added. No drilling of holes in chassis or frame to move suspension.
4. No chassis or suspension component reinforcement allowed.

#### **CLUTCH**

1. Primary and secondary clutch must match year, make and model of snowmobile.

#### **SKIS**

1. Any ski conforming to ISR safety and design rules will be legal to use, in any orientation. Special attention must be paid to ski loop and ski loop attachment.
2. Maximum of 6-inch carbides.

**EXHAUST**

1. Must retain OEM exhaust system. No altering allowed. This includes removal of sound deadening material.

**HANDLEBAR**

1. Handlebar may be replaced, including extensions, to fit the driver. Handlebar column must remain in its original position and centered to the chassis.

**WEIGHT**

1. Sled weight must be within 20 pounds of original filed weight for the model. The 20-pound max variance is allowed due to the allowed removal of the air box and sound deadening foam inside the engine compartment. Filed weights for the models competing in this class are on record.

**CLASS SPECIFIC RULES**

1. No use of titanium or carbon fiber components.
2. No use of F500 suspension components in either the front or rear suspensions.
3. No use of F-500 specialized suspension components in either front or rear suspensions. No Hooper/Wahl or other aftermarket F-500 legal kits allowed.
4. Offset of any chassis is limited ½ " (.500 inch) center to center.

**INTENT AND SPIRIT OF THE CLASS.**

This class is designed to be an affordable, fun, class of competition. It can be a starting point for a young driver or a level of competition for older drivers who no longer wish to compete in hi-level classes.

If it is not listed, it does not mean you can alter it. If you desire a class with more liberal rules, or the ability to be creative in construction, please participate in any of the other USSA oval classes available.

## Sportsman 500 Rules

**GENERAL REQUIREMENTS**

All sleds must comply with the GENERAL SECTION SLED/EQUIPMENT REQUIREMENTS & REGULATIONS.

Sleds competing in this class must be 2002 or older 500 CC maximum engine volume. Limited Production Race Models will not be allowed (1998-2002 Arctic Cat 440 Sno-Pro, 1998-2002 Polaris XCR 440, 1998-2002 Ski-Doo MXZx 440)

1. Original tunnel and bulkhead for the model
2. Original type engine for the model.
3. Front suspension concept must remain as produced, (i.e., trailing arm, strut, a-arm, etc.) but may be altered in the following manner:
  - a. The steering column may be relocated for driver comfort. Handlebars may be replaced.
  - b. Original springs may be altered or replaced.
  - c. Original shocks may be replaced, or altered, aftermarket shocks are allowed.
  - d. A-arms, trailing arms, struts, may be changed / modified but must originate as OEM for the brand. Mounting points and design may not be changed. Heim ends may be used to replace flex joints or rubber bushings. (Clarification) Radius rods may be reinforced/ modified/ or replaced in the interest of safety and chassis integrity.
  - e. Any OEM style torsion bar can be used on any chassis.
  - f. Limiters and other methods of travel restriction are legal, but the snowmobile must have 2 (two) inches of useable front travel minimum.
4. No carbon fiber or titanium materials allowed anywhere in the sled construction.

**WINDSHIELD**

1. Windshields may be removed or shortened, if used, must be mounted in the OEM mounting location.

**HOOD/SEAT/FUEL TANK**

\* The competitor is encouraged to retain the original appearance of the OEM model, color notwithstanding.

1. Replacements for hoods must be original type materials and not lightweight versions, even if original type material.
2. Belly pans may be aftermarket replacements.

3. Seats may be reupholstered but must be OEM for model. They may be contoured for comfort and safety. Side bolster pads may be added.
4. Bumpers may be removed, added, modified, or replaced.
5. Fuel tanks must be in original position and must be inspected for safety concerns. No leaks, improper line routing, or damaged tanks or caps will be allowed.

### **ENGINE**

1. Engine must remain OEM for the Year, Brand, and Model. One, two, or three cylinder, 2 cycle only.
2. The following engine components may not be modified:
  - a. Cylinders, no porting allowed, overbore of .040 allowed.
  - b. Heads
  - c. Crankshaft must retain original stroke.
  - d. Crankcase may not be modified.
3. The following items are allowed for builder efficiency and affordability considering the age of the equipment utilized.
  - a. Crankshafts may be welded for repair.
  - b. Aftermarket rods and bearings may be used.
  - c. Aftermarket wristpins and wristpin bearings may be used.
  - d. Aftermarket pistons/piston pins may be used but must be of stock OEM dimension and direct replacement. No modification to aftermarket component allowed. Pistons may not be lightened, pin location cannot be changed, ring type and location cannot be changed. Direct replacement terminology refers to pistons and rings of like dimension, except for allowable overbore. Performance enhancements to piston dimension or design is not allowed. Specific brands may not be permitted to be used.
4. Ignition must be OEM for the model.
5. Exhaust must be effectively silenced but may be modified or changed.
6. Carburetors and intake system must be OEM for the engine and model.
  - a. The only allowable tuning components for the carburetors shall be OEM type jets, slides, needles, etc. No aftermarket enhancements allowed.
  - b. Any commercially available aftermarket reed cage and reed assembly may be used.
7. Air boxes may be modified or removed.
8. Engine mounting plates must remain OEM, but the isolation devices (mounts) may be replaced.
9. All belts, hoses, wire looms, cables, controls, and gaskets may be replaced.

### **BRAKES**

1. Brakes may be changed or altered but must remain in the stock location.

### **TRACK SUSPENSION**

1. Only the OEM rear suspension for the brand in model years 1983 to 2002 as produced may be used. (Clarification) Example: A 98 ZR Arctic Cat may use any Arctic Cat suspension produced in any Arctic model from 1983 to 2002.
2. No titanium components may be used in the rear suspension.
3. Track suspension must maintain a minimum of 2 inches of useable, vertical travel with the driver seated.
4. May drill new holes in tunnel or rail to change mounting locations. May not drill excessive number of holes for lightening.
5. May modify or replace springs. Titanium springs are not allowed.
6. Shock absorbers may be changed or replaced.
7. May remove front shock.
8. May relocate rear shock.
9. May change or add limiters to front and rear of track suspension. No remote limiter adjusters allowed.
10. May add or subtract marginal snow wheels and their mounts.
11. May add slide lubrication system.

### **TRACK**

1. Track may be OEM for the brand, or any R rated track that is no higher in lug height than the original production tracks available for the model, as filed.
2. Tracks may be no shorter 121 inches.
3. Tracks must be 15" wide production tracks or designated replacements. They may not be narrowed from production specs.
4. Tracks narrower than 15" may not be used even if available from the original equipment manufacturer.
5. Aluminum or steel backers only.

6. No Titanium studs allowed.

#### CLUTCHES

1. Clutches, both drive and driven, may be OEM for any snowmobile brand.
2. Aftermarket, springs, helixes, cams, arms, weights, bushings, etc. may be used.
3. Clutches may be trued. No additional machining to the clutch surfaces will be allowed. (Drive and driven)
4. Quick change clutches allowed.

#### BULKHEAD AND TUNNEL

1. Bulkhead must remain in original orientation to the tunnel.
2. Chain case, jackshaft and front drive axle placement must all remain OEM for the model.
3. Front suspension mounting points within the bulkhead may be reinforced but not relocated.

#### SKIS

1. OEM (for the brand) or aftermarket skis allowed. Must conform to General Competition Rules. Ski mount on spindle may be narrowed to allow ski mounting.
2. Minimum flat length of ski bottom is 14 inches. Minimum ski width is 3 1/4 inches.
3. Reinforcement is allowed on the top of the ski board only.
4. Maximum carbide cutting edge length is 10 inches per ski. Must be one continuous cutting edge with no other sharp edges on the ski. (CLARIFICATION) Measurement includes production gaps to prevent carbide damage from mounting procedures or ski rocker. The leading or trailing carbide may be altered to conform to measurement specs.

## **PVR SPECIALTY CLASS**

Factory Mod 500 IFS

[Link to rules here.](#)

## **ADULT CLASS STRUCTURE ENDS HERE.**

OVAL JUNIOR CLASSES FOLLOW FROM THIS POINT.

### **NOTICE**

Parents or guardians who knowingly enter a Transition class, Junior Class, Junior I, Junior II, F-500 Junior I, F-500 Junior II driver who is not of the legal age to compete, will be subject to a \$500.00 fine and one year suspension.

The driver also may be given a one-year suspension.

Affiliates who through negligence or not having an approved advancement system allow under the age of 18 years of age drivers to enter adult classes without being certified through the advancement process may be fined \$500 and possible loss of affiliation rights.

### **Advancement Procedure.**

1. No minors may enter adult classes until the age of 18, or 16 if approved by the Advancement Procedure which is available starting at 14 years of age.
2. Each involved affiliate of the same discipline (example Oval Sprint) must either provide a qualification process, or declare to ISR they will observe other affiliates of the same discipline's advanced rider list. Affiliates with a qualified advancement program have the right to determine advancement of candidates as they see fit. Qualifying with one affiliate does not qualify the youth driver for all affiliates.

3. No minors may enter adult classes until the age of 18, or 16 if approved and qualified by going through a prescribed advancement procedure. Each involved affiliate of the same discipline must either provide a qualification process, or declare to ISR they will observe other affiliates of the same discipline's advanced rider list.
4. WHEN AN ISR COMPETITOR REACHES THE AGE OF 14 YEARS AND QUALIFIES FOR JUNIOR COMPETITION, HE/SHE MAY BE ADVANCED UP TO THE NEXT LEVEL, BUT ONLY AFTER FULLFILLING ALL REQUIREMENTS BELOW:

#### **AFFILIATE RESPONSIBILITIES**

1. Before an affiliated sanctioning body may advance Junior drivers, it must have a bona fide junior program. The affiliate's Junior Competition committee/ Representative is responsible for verifying a Junior's driving ability.
2. Junior competitors shall be required to perform practice laps/runs from time to time to allow race officials to observe their progress in learning the handling skills required to advance.
3. Junior advancement is at the discretion of the driver's classification committee and can be reviewed at any time. The committee has the authority to advance, demote or deny advancement to any driver. The decisions of the classification committee are final.
4. The affiliate board/driver classification committee will not advance drivers until all DRIVER/PARENTAL RESPONSIBILITIES have been fulfilled and all completed and signed documents are on file.
5. Affiliates may accept or deny other affiliates approval of a competitor.
6. Affiliates must provide ISR with a current list of approved or denied applicants.

#### **DRIVER / PARENTAL RESPONSIBILITIES**

1. A Junior competitor must compete in at least one entire event in a class before becoming eligible for advancement.
2. Before a Junior may advance to a senior class, he/she must meet the Junior advancement requirements established by the affiliate's board/driver advancement committee.
3. He/she must petition the affiliate's board, in writing, requesting that he/she be allowed to advance.
4. The request for advancement must be accompanied by all new consent and release forms (as specified above).
5. The request must be approved in writing by the affiliate board to advance.
6. Before advancing to a Pro Division class, the Junior must be at least 16 years of age.
7. Parents may request for their child to stay in a lower class if they feel the driver needs more experience to develop track and driving skills.

#### **AGE CRITERIA**

Class	Age Min.	Age max.
Transition	8	11
Junior, I Stock	10	12
Junior II Stock	13	17
Junior, I Sprint	12	14
Junior II Sprint	14	17
Junior F-440 FAN	14	17
Junior I F-500	10	13
Junior II F-500	14	17
Junior Formula III	14	17
Jr Vintage 300	10	15
120/4 Stroke	4	14
200 STOCK	6	16
200 IMP	7	16

Kitty Cat	4	14
Kitty Cat F-I	7	14

Specific classes may have rules determining qualification ages or exit ages from the class. See Specific classes for details if class has specialized criteria.

## JUNIOR ADVANCEMENT

WHEN AN ISR COMPETITOR REACHES THE AGE OF 14 YEARS AND QUALIFIES FOR JUNIOR COMPETITION, HE/SHE MAY BE ADVANCED UP TO THE NEXT LEVEL, BUT ONLY AFTER FULLFILLING ALL REQUIREMENTS BELOW:

### AFFILIATE RESPONSIBILITIES

1. Before an affiliated sanctioning body may advance Junior drivers, it must have a bona fide junior program.
2. The affiliate's board/driver classification committee is responsible for verifying a Junior's driving ability.
3. Junior competitors shall be required to perform practice laps/runs from time to time to allow race officials to observe their progress in learning the handling skills required to advance.
4. Junior advancement is at the discretion of the driver's classification committee and can be reviewed at any time. The committee has the authority to advance, demote or deny advancement to any driver. The decisions of the classification committee are final.
5. The affiliate board/driver classification committee will not advance drivers until all DRIVER/PARENTAL RESPONSIBILITIES have been fulfilled and all completed and signed documents are on file.
6. **Affiliate policy on allowing a Junior that is advanced into any class, to still run his/her original Junior class is under control of the affiliate, and will be declared on their ( the affiliates) web-site or official publication.**

Drivers must attain 14 years of age to request advancement.

#### Allowable Advancement

Junior II Stock TO	Junior II F-500
Junior II Sprint TO	Sport F-500
Junior II F-500 TO	Sport F-500
Junior II F-500 TO	Women's F-500
Junior II F-500 TO	Sportsman 600
Junior II F-500 TO	F500/Sportsman
Junior F-440 FAN TO	Junior II F-500
Junior II F-500 TO	Pro-Lite/AM
	Junior F-III (FORMULA- III)

## TRANSITION CLASS

**The following classes may be offered by affiliates who wish to provide a safe racetrack for competition in these events. No regional alterations allowed.**

The following parameters must be adhered to:

1. This class is to be run as the only class on the racetrack. Designated sleds may be ran together.
2. The class is for drivers that are 8 years old and not yet 11 years old. (It is not open to younger or older drivers.)
3. The snowmobile models eligible must be designated by ISR and the Rules Committee.

#### Limited Division Criteria

The snowmobiles will be raced as produced with only the following changes.

1. Any commercially available handlebar risers may be used.
2. Clutch tuning that is allowed in Stock Class (as filed) is allowed.
3. Chain case sprockets and chain may be changed. (As filed)
4. A restricted throttle kit not to allow more than 50% throttle opening must be installed. Designated throttle kit Part Number #0708-088 (Arctic) 486 900 017 (Ski Doo) 486 010 017 (Ski Doo adjustment tool)
5. The electronic control unit (ECU) will be reprogrammed with the rev limit restrictions as approved by ISR and the rules committee. The ECU (rev limited version) will carry a distinctive ID number.
6. Track maximum lug height will be 1.25 inches including Cobra tracks.
7. Only OEM for the model optional suspension (ski and rear suspension) springs may be used.
8. No other changes allowed.
9. Arctic Cat Limited sleds and Ski-Doo Limited sleds will run together at all events.
10. The rules committee may at any time during the racing season, review the restrictions of the designated models if a brand is dominating the class.

Affiliates may offer Transition classes and other regional specialty classes with ISR pre-approval.

## JUNIOR COMPETITION

### GENERAL RULES

1. The Junior Division various classes are available to drivers 10 years of age through 17 years of age. Age limitations are defined in the class and age matrix found in the age criteria section. These will be the age limitations offered at all ISR Junior, Transition, Junior Novice, and junior classes and events.
2. If a Junior racer turns 18 during the racing season, he/she may not remain in the Junior Division until the end of the season.
3. In some classes only designated models are eligible for competition. See chart at end of specific rules section. Some classes require restrictions to performance for the safety of the youth rider.
4. While driver is on the course, radio communication between driver and crew is not allowed.

### CLASSES

JUNIOR I STOCK

JUNIOR II STOCK

JUNIOR I SPRINT

JUNIOR II SPRINT

F-500 JUNIOR I

F-500 JUNIOR II

Junior F-440 Fan

Junior F-III (FORMULA- III)

200 STOCK

200 IMPROVED

120 IMPROVED AND CHAMP

These classes are designed for competition on the same tracks adult's race on. See Matrix for specific ages for competition.

## JUNIOR STOCK 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.

1. All snowmobiles must comply with the GENERAL RULES AND REGULATIONS section and with rules for specific forms of racing. Unless specified in this section, changes allowed in stock class (for the specific form of racing) are allowed in Junior Stock.
2. Unless otherwise specified, the snowmobile must have original OEM (or factory designated replacement) engine, hood, track, skis, frame, cowl, gas tank, carburetion, air box, suspension and variable speed converter supplied by the manufacturer for that model. Factory supplied options are not allowed. No engine kits allowed.
3. Removal of any material from total machine by means of heat, acid, drilling, grinding, sand blasting, peening, substitution, or total elimination is not allowed unless otherwise specified in this section.

### ENGINE

1. No component of the engine may be altered, changed, reduced, or enlarged from the engine manufacturer's original stock specifications, nor may any additional components be added to the engine.
2. Blueprinting of engines is not allowed. No removal of material whatsoever will be allowed. This is to include polishing, port matching, deburring, glass or sand blasting surfaces or material removal for engine balancing or other reasons.
3. Maximum cylinder overbore for wear cannot exceed .020 inches (0.5 mm).
4. Replacement pistons must be stock OEM for the model.
5. There will be no more than one-cylinder base gasket to a cylinder. No changes in engine dimensions can be made by gasket adjustments.
6. A maximum of one venturi per cylinder will be allowed. Any exceptions must be approved in writing by ISR.

7. OEM carburetor slide valve and replacement jet components, without modification, will be allowed in all Stock classes. No modification to carb body will be allowed.
8. Engine must retain original cooling concept (fan or free air-cooling circuits cannot be modified or removed). Cooling system must remain in the OEM location.
9. Oil injection pump must remain in place and functional. Lines may be removed and plugged. Premix gasoline may be used.
10. The OEM exhaust system for the model must be used in its entirety. Muffler components and/or silencing material must be intact always.
11. Spark plugs do not necessarily have to be OEM equipment in the Stock classes.
12. No additional fuel pumps may be added to the stock carburetors.
13. Throttle may be changed. The throttle must be a direct mechanical thumb mechanism, which must be located on the rear side (toward the rear of the machine) of the right-hand handlebar. Throttle must be thumb operated. Twist grip throttles not allowed.

#### **DRIVE**

1. Primary clutch - any combination of springs, weights, ramps may be used. Clutch weights and springs may be interchangeable between any brand, providing there is no modification to the clutch required to make these components fit. Metal may be removed but not added to ramps or flyweights in the primary clutch.
2. Secondary clutch - helixes may be machined for angle change. No material may be added. No welding will be allowed. Any helix, including billet helixes, allowed. Roller secondary not allowed unless OEM for the model.
3. No machining on the clutches to accommodate springs, weights, helixes.
4. Drive belts do not have to be OEM.
5. Drive chain sprockets may be changed if they are options filed by the manufacturer.
6. Mechanical brake system may be replaced with commercially available hydraulic brake components. Structural integrity must be maintained.
7. Brake lever may be modified or changed to accommodate the driver but must remain on front side of left handlebar and hand operated with a direct mechanical and/or hydraulic operated mechanism. The function of the brake system may not be compromised. The brake lever must not extend beyond the end of the handlebar.

#### **SKI SUSPENSION & STEERING**

1. Any properly filed OEM spring allowed. Heating of suspension springs allowed. No cutting of suspension springs allowed.
2. Limiter devices allowed to limit travel but must maintain two (2) inches of travel. No device may be added that stops the suspension from functioning. (No locked suspension.)
3. Any commercially available handlebar allowed. Handlebar extensions allowed. All ends must be plugged (see diagram in GENERAL RULES AND REGULATIONS section).
4. Production based OEM or designated aftermarket replacement hydraulic shocks only. See parts matrix for approved shocks.
5. No external adjusters except "clicker" adjusters allowed.
6. No remote reservoirs shocks allowed.
7. No air spring/ "float" shocks allowed.
8. No electronically monitored or controlled shocks allowed.
9. Any shock determined to not be in "the spirit of the rule" must be removed and replaced with a conforming shock absorber. The technical inspector's determination is final.
10. Any steel springs allowed. Must maintain OEM suspension concept for the model.
11. Sway (torsion) bars allowed. Must be OEM for the model and year or OEM designated for the model and year that is available from the OEM snowmobile manufacturer as a dealer installed option.

#### **SKIS & SKI RUNNERS**

1. Aftermarket skis allowed. Skis must be commercially available. Ski, ski hoop and ski runner must conform to GENERAL RULES AND REGULATIONS and to Stock Class rules for the type of racing.
2. Skis may be reinforced but must remain in the original configuration. This reinforcing must be on the upper surface of the ski only.
3. Ski widening devices and/or height adjustment devices are not allowed in Stock unless furnished as OEM and filed properly.

#### **TRACK SUSPENSION**

1. The complete suspension must be used as furnished and filed by the manufacturer. No suspension options allowed.
2. Any properly filed OEM spring allowed. Heating of suspension springs allowed. No cutting of suspension springs allowed.
3. Limiter devices allowed to limit travel but must maintain two (2) inches of travel. No device may be added that stops the suspension from functioning (no locked suspensions allowed).
4. Shocks must be OEM for the model.

5. Gas valving/oil may be removed from the front shocks on track suspension.
6. OEM for the model marginal snow wheels may be added or removed from the slide rails.
7. OEM for the model rear idler wheels may be added to the rear axle.
8. Slide rail lubrication systems may be allowed based upon sanctioning body rules and state and local laws and regulations.
9. Impulse fitting may be added to crankcase for slide lube system.

#### TRACK & TRACTION

1. Track may not be reversed.
2. OEM track guide clips may be added.

#### FRAME & BODY

1. OEM windshields for the model or factory options allowed. The windshield may be altered for driver safety and comfort, but must extend five (5) inches above the highest point of the hood. If the original OEM windshield for the model is lower than five (5) inches, it may be used. Windshield must have safety edging.
2. Windshields must be intact at the start of the race.
3. Windshield must remain in OEM mounting location.
4. Removal of stock air vent grills including intake or exhaust is not allowed.  
No additional venting allowed.
5. Protective taping or screening will be restricted to the external opening only.
6. Seat and fuel tank must remain OEM for the model (seat color optional except that orange is not allowed anywhere on snowmobile).
7. The OEM fuel tank must be the only tank that can be used for fuel. The lubrication tank cannot be used as a fuel tank.

#### IGNITION & ELECTRICAL

1. Taillights must be operable any time the sled is on the racing surface.
2. Glass lenses must be taped and remain in place.
3. Stock snowmobiles will be allowed to add or remove tachometers, speedometers, or heat gauges, openings must be closed. Wiring must remain in place.
4. Spark plugs, spark plug wires and connectors do not have to be OEM.
5. Electric start parts including motor, solenoid, battery, battery bracket, wiring, and ring gear may be removed. No machining, cutting, or grinding allowed for removal.
6. Data acquisition and data acquisition systems allowed.
7. In all classes RED LED Taillights must be illuminated whenever the snowmobile is on the racing surface, whether the engine is running or not. Taillight must be a minimum of 8 sq in. of continuous illuminated LED surface, or a production LED taillight. In addition, the sled must have an illuminated LED strip running across the left side of the tunnel, from the rear corner of the tunnel towards the front of the sled a minimum of 8" (inches) in length. [on left side, near top of tunnel, RED in color]

[CLICK Here](#) for PISTON KITS The following piston kits are legal replacements for OEM stock pistons in Junior Stock, Junior I and Junior II Sprint.

#### DESIGNATED MODELS

Arctic Cat	Puma/Jag 340 and Z370
Polaris	Indy Lite 340, Indy 340, Indy 340 Deluxe, 340 Edge
Ski Doo	Formula S368, MXZ 380, Freestyle 300 and Tundra 300
Yamaha	Ovation 340

## JUNIOR MOD CLASSES

See Matrix for specific ages for competition.

### GENERAL REGULATIONS

1. The Junior Mod Division is available to drivers 12 years of age through 17 years of age. Ages are separated depending on class. See Matrix.
2. If a Junior racer turns 17 during the racing season, he/she may remain in the Junior division until the end of the season.
3. When a Junior competitor reaches the age of 18, he may no longer participate in the class.
4. These Junior classes are recognized as official ISR categories for Junior competition.
5. Junior competitors must obtain a junior membership.
6. Junior competitors must present a notarized birth certificate.
7. Any competitor under the age of majority in driver's state or province of residence must provide notarized, written consent from parent or guardian.
8. Junior competitors must sign appropriate waivers including:
  - a. Parental Consent, Release and Waiver of Liability, Assumption of Risk, and Indemnity Agreement.
  - b. Minor's Acknowledgement form.
9. A MINOR COMPETITOR ELIGIBILITY NOTIFICATION (loss of amateur status) form must be signed before Juniors can compete.
10. Parent or designated guardian must accompany the junior competitor to all events in which he/she is entered.
11. At the discretion of the sanctioning body, Juniors may be allowed to compete in more than one age group/class for which they are qualified and approved by the sanctioning body to gain more experience.
12. In all classes RED LED Taillights must be illuminated whenever the snowmobile is on the racing surface, whether the engine is running or not. Taillight must be a minimum of 8 sq in. of continuous illuminated LED surface, or a production LED taillight. In addition, the sled must have an illuminated LED strip running across the left side of the tunnel, from the rear corner of the tunnel towards the front of the sled a minimum of 8" (inches) in length. [on left side, near top of tunnel, RED in color]

[CLICK Here](#) for PISTON KITS

The following piston kits are legal replacements for OEM stock pistons in Junior Stock, Junior I and Junior II Sprint.

See Matrix for specific ages for competition.

## JUNIOR I SPRINT OVAL MOD CLASSES

### GENERAL RULES

1. This is a Mod Chassis class for Junior I drivers ages listed in the matrix. Engines, however, are stock based. Junior I drivers may not advance out of the class until reaching 14 years of age.
2. Only single-track snowmobiles allowed.
3. Any changes or alterations allowed in the Stock classes are allowed.
4. The brand of engine, hood and logo need not match.
5. All snowmobiles must comply with GENERAL RULES AND REGULATIONS section.
6. Snowmobile must weigh a minimum of 325 pounds. No minimum combined weight of snowmobile and driver.

7. Maximum overall width is 45 inches.

### **ENGINE**

1. The engine must be a fan cooled engine from an ISR Stock Qualified snowmobile and may not exceed the following volume limits as indicated per manufacturer. Arctic Cat 370 CC, Polaris 340 CC, Ski Doo 380 CC, and Yamaha 340CC. These engines must also be from models inclusive of production in 1995 or newer.
2. Air Box/Plenum may be removed.
3. 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. No engine kits allowed.
4. Blueprinting is not allowed. No removal of material whatsoever will be allowed. This is to include polishing, port matching, deburring, glass or sand blasting surfaces or material removal for the purposes of engine balancing or other reasons.
5. No changes in engine dimensions can be made by gasket adjustments. Gaskets may be trimmed but must remain OEM and OEM thickness.
6. Maximum cylinder overbore for wear or cylinder repair cannot exceed .020 inches (1/2mm).
7. Stock OEM pistons only are allowed for replacement.
8. No additional fuel pumps may be added.
9. Oil injection system may be removed.
10. The exhaust system "wye pipe" must be OEM for the model and be mounted in the OEM location for the model.
11. Any expansion chamber may be used in conjunction with the stock "wye" pipe but must be effectively silenced.
12. Throttle lever may be replaced but must be thumb operated with a direct mechanical operated mechanism on rear side of right handlebar.

### **CARBURATION**

1. The carburetors must be the originally specified size and configuration for the engine.
2. Carburetors may not be changed, altered, modified, in any manner.
3. OEM carburetor slide valve and replacement jet components without modification will be allowed in all Stock classes. No modification to carburetor body will be allowed.
4. The only allowable tuning components shall be the Main Jet, Pilot Jet, Jet Needle, Needle Jet, and throttle Slide. No Power Jets or aftermarket systems allowed. No UFO's.
5. Any method of filtering air to the carburetor may be used. Airbox, baffle plenum, K&N or comparable filter, or no filtration at all are legal for the class.

### **DRIVE**

1. Any commercially available drive and driven clutches and internal components may be used. Clutches and components may be modified.
2. Chain case and internal components may be altered, removed, or replaced. Chains and sprockets may be altered, removed, or replaced.
3. Jackshaft/track shaft may be altered, removed, or replaced.

### **SKI SUSPENSION & STEERING**

1. Front suspension components (arms, spindles, rod ends, spherical joints, the rods linkages, IFS trailing arms and radius rods) may be altered or replaced. Maximum overall width is 45 inches.
2. Front suspension springs may be altered or replaced.
3. Sway bars and links may be altered, removed, or replaced.
4. Shocks and TSS struts may be altered, removed, or replaced.

5. Snowmobile must maintain two (2) inches of useable vertical suspension travel.
6. Handlebars, column, and controls may be altered or replaced. Aluminum handlebars allowed if produced by the OEM manufacturer.

#### **SKI & SKI RUNNERS**

1. Skis may be altered or replaced.

#### **TRACK SUSPENSION**

1. Track suspension may be altered or replaced.
2. Rear suspension to tunnel mounting locations is not restricted; safety and structural integrity must be maintained.
3. Snowmobile must maintain two (2) inches of useable vertical suspension travel.

#### **TRACK & TRACTION**

1. No cleated tracks allowed. Track must be commercially available, one-piece, molded rubber track. Track must be used as produced by the molder of the track. No modification allowed unless specified.
2. Minimum width is 13.5 inches. Minimum length of track is 103 inches. Minimum lug height is ½ inch.
3. Track must be "R" rated from the molder. It is recommended that the track be no more than 3 years old.

#### **FRAME & BODY**

1. Chassis/frame origination and modification are not limited or restricted. Maximum width is 45 inches.
2. Any hood allowed. May be cut out behind the windshield for additional venting. Headlight fairing or cowling may be removed. Dash and/or console may be altered, removed, or replaced.
3. Windshield not required.
4. Fuel tanks may be altered or replaced.
5. Seat may be altered or replaced.

#### **IGNITION & ELECTRICAL**

1. Ignition system (CDI box, flywheel, and stator) must be OEM for the model engine. No modification allowed.
2. CDI module may be reprogrammed.
3. Fixed ignitions may be moved (+or -) 4 degrees.
4. Instruments, gauges, and headlights may be altered, removed, or replaced.

[CLICK Here](#) for PISTON KITS

The following piston kits are legal replacements for OEM stock pistons in Junior Stock, Junior I and Junior II Sprint.

See Matrix for specific ages for competition.

## **JUNIOR II SPRINT OVAL**

#### **GENERAL RULES**

1. This is a Mod Chassis class for Junior II drivers aged 14-17. Engines, however, are stock based.
2. Only single-track snowmobiles allowed.
3. Any changes or alterations allowed in the Stock classes are allowed.
4. The brand of engine, hood and logo need not match.

5. All snowmobiles must comply with GENERAL RULES AND REGULATIONS section.
6. Snowmobile must weigh a minimum of 325 pounds.
7. Maximum overall width is 45 inches.

#### **ENGINE**

1. The engine must be a fan cooled engine from an ISR Stock Qualified snowmobile and may not exceed 600 cc in total volume. These engines must also be from models inclusive of production in 1995 or newer.
2. Air Box/Plenum may be removed.
3. 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. No engine kits allowed.
4. Blueprinting is not allowed. No removal of material whatsoever will be allowed. This is to include polishing, port matching, deburring, glass or sand blasting surfaces or material removal for the purposes of engine balancing or other reasons.
5. No changes in engine dimensions can be made by gasket adjustments. Gaskets may be trimmed but must remain OEM and OEM thickness.
6. Maximum cylinder overbore for wear or cylinder repair cannot exceed .020 inches (1/2mm).
7. Stock OEM pistons only are allowed for replacement.
8. No additional fuel pumps may be added.
9. Oil injection system may be removed.
10. The exhaust system must be OEM for the model and be mounted in the OEM location for the model.
11. Any expansion chamber may be used in conjunction with the stock "wye" pipe but must be effectively silenced.
12. Throttle lever may be replaced but must be thumb operated with a direct mechanical operated mechanism on rear side of right handlebar.

#### **CARBURATION**

1. The carburetors must be the originally specified size and configuration for the engine.
2. Carburetors may not be changed, altered, modified, in any manner.
3. OEM carburetor slide valve and replacement jet components without modification will be allowed in all Stock classes. No modification to carburetor body will be allowed.
4. The only allowable tuning components shall be the Main Jet, Pilot Jet, Jet Needle, Needle Jet, and throttle Slide. Nonpower Jets or aftermarket systems allowed. No UFO's.
5. Any method of filtering air to the carburetor may be used. Airbox, baffle plenum, K&N or comparable filter, or no filtration at all are legal for the class.

#### **DRIVE**

1. Any commercially available drive and driven clutches and internal components may be used. Clutches and components may be modified.
2. Chain case and internal components may be altered, removed, or replaced. Chains and sprockets may be altered, removed, or replaced.
3. Jackshaft/track shaft may be altered, removed, or replaced.

#### **SKI SUSPENSION & STEERING**

1. Front suspension components (arms, spindles, rod ends, spherical joints, the rods linkages, IFS trailing arms and radius rods) may be altered or replaced. Maximum overall width is 45 inches.
2. Front suspension springs may be altered or replaced.
3. Sway bars and links may be altered, removed, or replaced.
4. Shocks and TSS struts may be altered, removed, or replaced.

5. Snowmobile must maintain two (2) inches of useable vertical suspension travel.
6. Handlebars, column and controls may be altered or replaced. Aluminum handlebars allowed if produced by the OEM manufacturer.

#### **SKI & SKI RUNNERS**

1. Skis may be altered or replaced.

#### **TRACK SUSPENSION**

1. Track suspension may be altered or replaced.
2. Rear suspension to tunnel mounting locations is not restricted; safety and structural integrity must be maintained.
3. Snowmobile must maintain two (2) inches of useable vertical suspension travel.

#### **TRACK & TRACTION**

1. No cleated tracks allowed. Track must be commercially available, one-piece, molded rubber track. Track must be used as produced by the molder of the track. No modification allowed unless specified.
2. Minimum width is 13.5 inches. Minimum length of track is 103 inches. Minimum lug height is ½ inch.
3. Track must be "R" rated from the molder. It is recommended that the track be no more than 3 years old.

#### **FRAME & BODY**

1. Chassis/frame origination and modification are not limited or restricted. Maximum width is 45 inches.
2. Any hood allowed. May be cut out behind the windshield for additional venting. Headlight fairing or cowling may be removed. Dash and/or console may be altered, removed, or replaced.
3. Windshield not required.
4. Fuel tanks may be altered or replaced.
5. Seat may be altered or replaced.

#### **IGNITION & ELECTRICAL**

1. Ignition system (CDI box, flywheel, and stator) must be OEM for the model engine. No modification allowed.
2. CDI module may be reprogrammed.
3. Fixed ignitions may be moved (+or -) 4 degrees.

[CLICK Here](#) for PISTON KITS The following piston kits are legal replacements for OEM stock pistons in Junior Stock, Junior I and Junior II Sprint.

## **JUNIOR FORMULA 500**

**There will be two classes offered for Junior Formula 500.**

## **JUNIOR I FORMULA 500**

**See Matrix for specific ages for competition.**

1. The race sled used must comply with all Formula 500 class rules and run a restrictor plate between the carburetor mounting boot and the cylinder.
2. When a competitor reaches the age to be allowed to run Junior II F-500, he/she may advance to that class. However, he/she will not be allowed to compete in Junior I F-500 also.

**Restrictor plates are available through ISR 262 -335-2401 or Jerold Korinek, 920-732-3563.**

## JUNIOR II FORMULA 500

See Matrix for specific ages for competition.

1. A 16-year-old competitor if advanced to Sport may no longer run this class.
2. The race sled used must comply with all Formula 500 class rules.

## Junior F-440 Fan USSA

1. Ages for this class will be 14-17 years of age.
2. The class will use F-440 Fan rules with as presented in the F-440 Fan rules posted in the adult class.
3. Junior F440 -Fan class drivers may request advancement out of the class per the Advancement Procedure and Matrix.
4. A 16-year-old competitor if advanced out of this class into Sport F-500 may no longer run this class.

## Junior F-III (FORMULA- III)

### SPECIAL NOTICE

#### 14-17 years

Sleds Must Follow all FIII Rules and Adhere to the JR. rules below.

**ALL SLEDS UTILIZED IN THIS CLASS MUST BE NON-CURRENT, OR A MINIMUM OF (1) ONE MODEL YEAR OLD.**

The rules committee may at any time during the racing season, review the restrictions of the designated models if a brand is dominating the class.

The following parameters must be adhered to:

1. This class is to be run as the only class on the racetrack. Designated sleds may be run together.
2. The class is for drivers that are 14 years old to 17 years old. (It is not open to younger or older drivers.)
3. The snowmobile models eligible must be designated by ISR and the Rules Committee.

Stock legal production 600 cc Super Stock race snowmobiles will be the format for FIII classes. These sleds will be developed with specific manufacturer-based modifications and restrictions. The snowmobiles will be raced as produced with only the following changes.

1. This class will follow all the rules for the Reg FIII class.
2. Electronic control unit ECU will be reprogrammed with rev limit restrictions (**rev limited to maximum TBD RPM**)
3. Restricted throttle kit not to allow more than 50% throttle opening must be installed designated throttle kit part numbers will be supplied by brand.
4. The exhaust valves will be blocked in the shut position.
5. Primary clutch engagement will be **TBD** Max RPM. (measured with secondary sheave movement)
6. Rider, running board blocks can be used. Sx USE 1 THRU 6

**7. Programmable Tethers:** No competitor or mechanics in the FIII class that are using sleds with programable tethers are allowed to possess a tether that is not programmed for the FIII Junior class when they are between their trailer-staging-racetrack-podium during any events or practice. If you are found with a non FIII programmed tether it is grounds for a DQ.

**"BIG TRACK" VERSIONS OF 120 AND 200 CLASS SLEDS ARE AVAILABLE IN SOME AFFILIATIONS. PLEASE SEE "BIG TRACK" EXCEPTIONS IN THE 120/ 200 RULES.**

## SMALL TRACK CLASSES

CLASSES LISTED BELOW ARE DESIGNED TO BE RAN AT YOUTH "SMALL TRACK" EVENTS.

### Notice

Junior I Stock may be allowed to run on the "small" track, but care must be taken to control the number of sleds coming to the line to avoid overcrowding and unsafe conditions.

## VINTAGE JUNIOR 300

In any stock or 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.

### CHASSIS

1. Any stock qualified, LEAF SPRING MODEL, 1985 or older is eligible. No limited production or race only models allowed. (I.E., 76-77 Yamaha SRX, Mercury Snow Twister, Ski Doo Blizzard, Arctic Cat Z or EXT)

All snowmobiles must be of stock free-air engine style. All engines are limited to 300cc (317 cc max) and twin cylinder, single carb.

### ENGINE

1. The engine must be OEM for the model.
2. Engine, engine mounts, and exhaust must remain in original OEM for the model chassis and chassis location.
3. No internal modifications allowed to the engine.
4. No external modifications allowed. Engine must maintain OEM for the model appearance.
5. Maximum cylinder overbore for wear or cylinder repair cannot exceed .020 inches (1/2 mm).
6. Aftermarket pistons are allowed.
7. Intake concept for the engine must be maintained.
8. Stock carburetor must be used, no alterations.
9. Must be naturally aspirated.
10. OEM for the model exhaust system must be used.
11. Oil injection pump may be removed or disabled or be nonfunctional. Lines may be removed and plugged. Pre-Mix gasoline may be used. Standalone oil injection tanks may be removed.
12. Air intake silencers (air boxes) may be modified or removed.

### DRIVE

1. Any snowmobile brand OEM primary clutch may be used.
2. Secondary clutch must be OEM for the model and chassis.
3. Chain case must be OEM.
4. Chain case may be moved up to two (2) inches.
5. Any track drive shaft and track drive sprockets may be used.
6. Track drive shaft may be relocated a maximum of two (2) inches.
7. For chassis models without a jackshaft, a jackshaft may not be added.
8. Jackshaft models must use OEM for the model jackshaft.
9. Brake components may be replaced but must be commercially available and not modified.

### SKI SUSPENSION AND STEERING

1. Skis must be OEM for the model and chassis.
2. Leaf springs must be steel and functional.

3. Ski spreaders allowed. Maximum increase in width is three (3) inches per ski.
4. Oil filled hydraulic shocks only. No gas shocks.
5. Spindles must be enclosed.
6. No Cobra skis allowed.
7. Ski spring stabilizers may be used. Ski stabilizers must not restrict vertical movement.
8. Steering column must be OEM for the model and chassis. The handlebars and or handlebar mounting bracket may be changed or replaced.
9. Any commercial handlebar allowed.

#### **TRACK SUSPENSION**

1. Any track suspension from a stock qualified 1985 or older model is allowed.
2. Remote adjusters are allowed.

#### **TRACK AND TRACTION**

1. Any commercially available one-piece molded rubber track allowed. Track must fit within the confines of the tunnel without modification to the track.
2. The track must be used as produced by the molder of the track. No cutting or other modifications allowed.
3. No cleated tracks allowed.
4. Slide rail lubrication systems may be allowed, depending upon local, state, and/or federal laws and must be non-toxic and biodegradable.

#### **FRAME AND BODY**

1. Frame must be OEM for the brand.
2. No modifications allowed to the frame.
3. Hoods must be OEM for the model.
4. Windshield may be modified, replaced, or removed.
5. Headlight must be taped or removed and opening blocked with like material.
6. Fuel tank must be OEM for the model or a designated for the model aftermarket replacement.
7. Seat must maintain OEM contour and stock appearance for the model. Minimum seat thickness is three (3) inches.

## **120 FOUR STROKE DIVISION**

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.

Once rules are abridged, the sanction is no longer in effect.

All 120/4 Stroke classes are 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.

#### **ELIGIBLE DRIVERS**

##### **OVALS**

See Matrix for specific ages for competition.

#### **ELIGIBLE SNOWMOBILES**

Arctic Cat Z 120, Z 120 Sno Pro  
Bombardier Mini Z  
Polaris XCR 120  
Yamaha SRX 120

## 120/4 STROKE CLASSES

## OVAL DIVISIONS

- **Box/Beginner/Governor Oval Stock**

(Governor must be intact and functioning, rev limiter not required.)

- **Oval Stock**
- **Oval Super Stock**
- **Oval Improved Stock**
- **Briggs and Stratton 206**
- **Oval Pro Stock**
- **Oval Champ 120**
- **Ice Lemans**
- **200 stock**
- **200 Improved**

## NOTICE

"BIG TRACK" VERSIONS OF 120 AND 200 CLASS SLEDS ARE AVAILABLE IN SOME AFFILIATIONS. PLEASE SEE "BIG TRACK" EXCEPTIONS IN THE 120/ 200 RULES

## BIG TRACK FUEL

**APPLIES TO STOCK AND IMPROVED/MODIFIED 120/206 AND 200 CLASS SLEDS.**

Any 120/206/200 Stock or Improved/Modified sled entering "Big Track" competition is required to run "non ethanol" based gasoline. Ethanol formulated gasoline is not allowed in any OVAL Sprint format.

REGIONAL SPECIALTY CLASSES

**Open 206**

**Champ 206**

1. The 206 Local Option OPEN 206 class combines the rules for Champ Chassis and Drive with a spec engine rule. All chassis rules are the same as Champ 120.

## **SPECIALTY CLASSES**

1. Can be any 120/4 racing event that does not fall under any of the specific circuits or classes but meets established ISR safety standards and qualifies for ISR insurance coverage.
2. All specialty classes must be approved by ISR and the Race Rules Committee.

## **GENERAL COMPETITION AND SAFETY**

**It is recommended that 120/4 sleds and Kitty Cats not compete against each other.**

1. If a driver is off his/her sled after an accident involving two or more sleds, the race will be red flagged.
2. Driver entry into an event is open to any qualified individual. The sanctioning body has the authority to evaluate all drivers to determine their qualifications.
3. A driver must compete for a full year in Stock 120/4 Class or in Kitty Cat racing and be six years of age before competing in any of the other 120/4 classes. (Except for Champ, Sprint, and Pro Stock classes drivers must be at least 7 years of age.) In addition, in Super Stock class a driver must be at least five years of age and have one-year driving experience.
4. In Champ, Sprint and Pro Stock classes, drivers must have at least one-year experience in 120/4 classes and be at least 7 years old through 14 years old. Drivers who attain the age of 15 during the scheduled season may complete the season.
5. Drivers must not reach the age of 15 prior to published scheduled race season for the affiliate.
6. Both the owner and driver are responsible to ensure that their snowmobile and driver safety equipment conform to all the rules for the class in which they have entered. The applicable rules are published in the chapter, in the GENERAL RULES AND REGULATIONS section and from time to

time, in ISR bulletins. Any driver that does not meet the requirements listed will be subject to disqualification and forfeiture of any prizes or awards, plus eligibility for the next two (2) races.

7. Two (2) laps are recommended in heats and five (5) laps in the final heats. Regional variations to lap counts allowed.
8. For restarts, the Snowmobiles will be arranged in a staggered line at a 45° angle to the track starting from left and going to the right.
9. Mandatory tech inspection of first place sleds.
10. The Race Director and/or Tech Director have the authority to determine structural integrity.
11. While driver is on course no radio communication between driver and crew is allowed.

#### **MANDATORY DRIVER SAFETY EQUIPMENT**

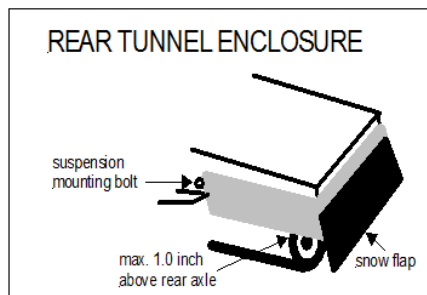
1. Helmets, upper body protection, shin guards, and above the ankle boots are required in all classes.
2. See GENERAL RULES AND REGULATIONS, DRIVER SAFETY EQUIPMENT for details.
3. At least 6 x 6 (36) square inches of visible area on both the driver's front and back (upper body) will be blaze orange in color at all events. Jackets / Pullovers / Jerseys will be teched lying flat on the ground front and back.

#### **ENTRY FEES, PRIZES AND AWARDS**

1. Recommended entry fees in 120/4 Racing - \$15.00 in all classes.
2. Recommended awards – Trophies only (no prize money.)

## **GENERAL SNOWMOBILE RULES**

1. (All classes in Grass, Oval) No traction products allowed.
2. Guide clips and/or track clips may be added to the track.
3. Carbide ski runners allowed.
4. Left side of handlebar may be straightened. Structural integrity must be maintained.
5. An extension may be added to the left handlebar (see illustration.) Maximum 3 inches wider, maximum 4 inches down. End must be capped.
6. Any separate front bumpers that extend away from the body must be padded.
7. In all oval and Ice Lemans classes, the rear of the tunnel must be enclosed with material comparable in strength to 0.063 aluminum sheet. The tunnel enclosure is required to reduce the possibility of skis and driver's extremities entering the tunnel area. The shaded area (see illustration) must be enclosed. The enclosure shall cover the rear and both sides and extend forward. The bottom of the enclosure shall be no higher than one (1) inch above the center of the rear axle (with the driver in place.) The rear of the enclosure shall be no further than 2.5 inches from the rear of the track. (Not required in Sno-cross.)
8. Slide rail lubrication systems may be allowed, depending upon local, state, and/or federal laws and must utilize non-toxic and biodegradable lubricants.
9. In Stock and Improved Stock, snowmobile performance will be monitored and ISR Rules Committee may adopt rules changes to insure fair competition among the various models.



10. Use of Heli-Coils are allowed in OEM location only.
11. All metal ski hoops must be padded.
12. On board slide rail lubrication systems allowed in all classes, depending upon local, state, and/or federal laws, lubrication must be non-toxic and biodegradable.
13. A tachometer may be installed.
14. Pulse line may be added to engine for slide lube pump purposes.
15. Data acquisition and data acquisition systems allowed.
16. Functioning taillight required

## **STOCK CLASS**

#### **GENERAL**

1. The snowmobile must have original OEM for the model engine, hood, track, frame, seat, cowl, gas tank, carburetion, air-box, suspension, and clutch supplied by the manufacturer for the model. Named components must be OEM for the model and year. Or properly filed OEM replacement parts that supersede the original OEM parts. Factory options are not allowed. Any Yamaha 120 motor can be replaced with a Suzuki 120 motor 2009 and older. OEM Suzuki engine used must retain original specifications.
2. Engine RPM and vehicle speed may be monitored at the discretion of the Race Director.

**ENGINE**

1. Unless otherwise stipulated in this section, all governor linkage must be intact, in place and functional. Any governor spring may be used. Governor gear may be removed.
2. Replacing chain tensioner with commercially available aftermarket tensioner is allowed.
3. No component of the engine (included head, valves, and cam) may be altered, changed, or enlarged from the engine manufacturer's original stock specifications nor may any additional components be added to the engine.
4. Maximum cylinder bore for wear or cylinder repair cannot exceed .020 inches (.50MM)
5. Stock OEM Pistons up .020 (.50MM) Only are allowed for replacement.
6. Blueprinting of engines is not allowed. No removal material whatsoever will be allowed. This is to include polishing, port matching, deburring, glass or sand blasting surfaces or material removal for engine balancing or other reasons.
7. No changes in engine dimensions can be made by gasket adjustments.
8. Spark plugs do not necessarily have to be OEM stock. Sparkplugs may not be machined to seat deeper in the head, plug gaskets may not be altered, and plug indexing is not allowed.
9. No carburetor/air silencer changes allowed. Filter material may be added or removed.
10. Jetting changes are allowed.
11. Remote adjustable main jet system allowed.
12. Exhaust must be OEM as produced for the model. The OEM exhaust system must be used in its entirety. No internal or external modifications allowed. No welding allowed, even for repair. Muffler components and/or silencing material must always be intact .
13. To equalize performance between the manufacturer's' models the following changes are allowed.

Ski-Doo racers can change valve springs to Honda P/N 14751-ZE1-000. Ski doo racers can use Polaris Valve Springs meeting ISR Valve Spring Criteria.

- a. Arctic Cat 120 racers can upgrade to the 120 SnoPro kit consisting of valve springs and cam. (Spring number 129-21-90700). The kit must be used in its entirety.

2010 to current Arctic cat with Yamaha engines and Yamaha SRX 120 models can upgrade to the Yamaha/Arctic Cat performance kit consisting of camshaft, and valve springs.

**Valve Spring Criteria****A.**

Valve Spring Dimensions		
	Wire Dia.	Max. Free Light
Ski Doo	.078+-.002	35.00 MM
A C 2009<	.090+-.002	35.50 MM
AC/2010	.078+-.002	26.60 MM
Polaris	.090+-.002	30.50 MM

**B.**

	Seated hgt	Open hgt	Seated press.	Open press.
Ski Doo	0.875	0.613	20 lb.	25 lb.
Arctic Cat	0.955	0.735	26 lb.	35 lb.
AC 2009<	0.574	0.574	20 lb.	24 lb.
AC 2010	0.678	0.678	15 lb.	21 lb.
Polaris	0.850	0.625	27 lb.	38 lb.

Accuracy of this test will be based on the tester used and the measuring tool used for checking heights.

14. Polaris part # 0681-545 valve guide may be used on Arctic Cat 120 models. Valve guide may be shortened to the valve guide specifications for the Suzuki engine only.

### **NOTICE**

ENGINE REV LIMITERS will be imposed on all Stock and IMPROVED STOCK 120 class snowmobiles for the 2019-2020 Season to equalize performance levels between all brands.

To enhance the durability of the Honda GX120 engine used in production Ski Doo Mini 120 and Mini-Rev Snowmobile, a valve "rotator" Ski Doo part number H14781-ZE1-000 may be fitted on the intake valve.

### **DRIVE**

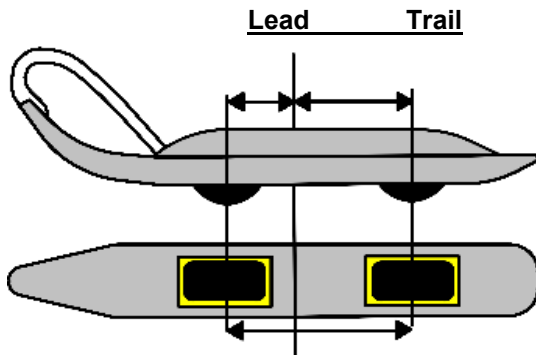
1. Brake must be always functional and operational.
2. Clutch may be replaced with aftermarket clutch of the same basic centrifugal design.
3. Stock drive clutch engagement must be maintained.
4. No belt drives allowed.
5. Chain guard must be in place. Sprocket ratio changes may be required by circuits to equalize performance between the various models.
6. 10-42 gear rational must be maintained.
7. Number 40 or 420 chain may be used.
8. Chain tensioner may be replaced with aftermarket tensioner.

### **SKI SUSPENSION & STEERING**

1. Front suspension must be OEM for the model.
2. Front suspension must remain in its stock location.
3. Ski widening devices are not allowed in Stock classes unless.  
Furnished as OEM and properly filed.
4. Suspension travel may be limited by means of tie down only. Suspension travel must be maintained. No rigid suspensions allowed.
5. Ski-Doo Mini z can modify the rubber front suspension pucks.
6. Suspension travel may be limited by means of chain, cable, limiter strap only. Suspension travel must be maintained. No rigid suspensions allowed.

### **SKIS & SKI RUNNERS**

1. Ski must be OEM for the model and year or a commercially available aftermarket ski with a minimum overall length of 20 inches.
2. Ski suspension components must be OEM.
3. Ski loops must be added. Minimum 1-inch wide, minimum 5/16-inch-thick material must be used. Loop must have minimum diameter of 3 inches. (Nonmetallic loops only) Non-Metallic is defined as: UHMW, Nylon, Acetyl / Delrin type polymer materials only. If metallic loops are used refer to General Snowmobile rules sections for description and clarification.



Minimum 9.5 inches

4. (Grass and dirt oval) Wheel wells may be cut in stock ski to accommodate wheels. "Trail" must be greater than "lead." Structural integrity must be maintained.

#### TRACK SUSPENSION

1. The complete suspension must be used as furnished and filed by the manufacturer. No options allowed. Shocks must be OEM for the model. OEM for the model suspension mounting points must be used.
2. Seals may be removed from bearings in bogie wheels, rear idler wheels and/or rear idler sprockets.
3. Commercially available marginal snow wheels may be added to the slide rails. (Rear axle idler wheels must remain OEM for the model.)
4. Suspension travel may be limited by means of chain, cable, limiter strap only. Suspension travel must be maintained. No rigid suspensions allowed.

#### TRACK & TRACTION

1. Any commercially available molded rubber track may be used. Track must fit within frame and suspension without modification to frame, or suspension. Track matching the pitch of the track may be used. Track must be used as produced by the molder. Any hyfax allowed.
2. The OEM fixed upper carrier idlers may be reduced in dimension by  $\frac{3}{8}$  (.375) from the original for the model filed spec.
3. Track studs must not extend more than  $\frac{3}{8}$  inch above the highest point of the track.
4. Track clips (guide clips) may added.

#### FRAME & BODY

1. OEM hood must be maintained without modification. Hood may be painted any color except in Oval and Sno-cross, where orange on the snowmobile is not allowed.
2. Windshield may be removed, modified, or replaced. Windshield must have safety trim.
3. All sharp edges must be padded.

#### IGNITION & ELECTRICAL

1. An ignition tether switch must be installed and functional.
2. Headlight must be OEM for the model.
3. Taillight must always be operational/illuminated.
4. Taillight used must be as bright or brighter than OEM. This visual check shall be taken at engine idle.
5. Ignition and generating systems must be OEM for the model. No modifications allowed.
4. Welding for repair will be allowed on the chassis. The repair must not alter the general design concept of the component or chassis.

## 120 SUPER STOCK CLASSES

#### GENERAL

1. Snowmobile must conform to Stock class rules unless stated otherwise in this section.
2. Slide rail lubrication systems allowed.

#### DRIVE

1. Brake must be always functional and operational.
2. OEM drive clutch must be used with no modifications.
3. Stock drive clutch engagement must be maintained.

4. No belt drives allowed.
5. Chain guard must be in place.
6. OEM gear ration must be maintained.
7. Sprocket ratio changes may be required by circuits to equalize performance between the various models.
8. Chain tensioner may be replaced with commercially available aftermarket tensioner.
9. Number 40/420 Drive chains allowed.

## 120 IMPROVED STOCK RULES

### GENERAL

1. Snowmobile must conform to Stock class rules unless stated otherwise in this section.

### DRIVE

1. Gear ratio may be changed.
2. #35 Chain may be used (All Brands in competition)
3. Clutch may be replaced with aftermarket clutch of the same basic centrifugal design. (No variable ratio systems allowed.) Brake band may be changed to fit clutch.

### SKIS & SKI RUNNERS

5. Ski must be OEM for the model and year or a commercially available aftermarket ski with a minimum overall length of 20 inches.
6. Ski suspension components must be OEM.
7. Ski loops must be added. Minimum 1-inch wide, minimum 5/16-inch-thick material must be used. Loop must have minimum diameter of 3 inches. (Nonmetallic loops only) Non-Metallic is defined as: UHMW, Nylon, Acetyl / Delrin type polymer materials only. If metallic loops are used refer to General Snowmobile rules sections for description and clarification.
8. Suspension travel may be limited by means of chain, cable, limiter strap only. Suspension travel must be maintained. No rigid suspensions allowed.

### TRACK SUSPENSION

1. The complete suspension must be used as furnished and filed by the manufacturer. No options allowed. Shocks must be OEM for the model. OEM for the model suspension mounting points must be used.
2. Seals may be removed from bearings in bogie wheels, rear idler wheels and/or rear idler sprockets.
3. Commercially available marginal snow wheels may be added to the slide rails. (Rear axle idler wheels must remain OEM for the model.)
4. Suspension travel may be limited by means of chain, cable, limiter strap only. Suspension travel must be maintained. No rigid suspensions allowed.

### TRACK & TRACTION

1. Any commercially available molded rubber track may be used.
2. Track must fit within frame and suspension without modification to frame, or suspension. Track matching the pitch of the track may be used. Track must be used as produced by the molder. Any hyfax allowed.
3. The OEM fixed upper carrier idlers may be reduced in dimension by 3/8 (.375) from the original for the model filed spec.
5. Track studs must not extend more than 3/8 inch above the highest point of the track.
6. Track clips (guide clips) may added.

### FRAME & BODY

1. OEM hood must be maintained without modification. Hood may be painted any color except in Oval and Sno-cross, where orange on the snowmobile is not allowed.
2. Windshield may be removed, modified, or replaced. Windshield must have safety trim.
3. All sharp edges must be padded.

### IGNITION & ELECTRICAL

9. An ignition tether switch must be installed and functional.
10. Headlight must be OEM for the model.
11. Taillight must always be operational/illuminated .
12. Taillight used must be as bright or brighter than OEM. This visual check shall be taken at engine idle.
13. Ignition and generating systems must be OEM for the model. No modifications allowed.
14. Welding for repair will be allowed on the chassis. The repair must not alter the general design concept of the component or chassis.

## 120 SPRINT CLASS

### GENERAL

1. The 120 Sprint Class combines the rules for Stock Chassis and Drive with the Champ 120 engine rule.
2. Snowmobile must be an ISR designated 120/4 –stroke model that complies with the GENERAL RULES AND REGULATIONS section. Unless otherwise specified, 120/4 Stroke Stock rules apply.

### ENGINE

1. All 120/4-stroke Champ Class engine rules apply.
2. Removal of recoil mechanism and starter cup to use 12-volt remote electric starter is allowed. The recoil cover must be maintained. A 1.5 hole may be drilled in recoil cover to insert starter drive.
3. Rocker arm pivot studs and pivots.

### DRIVE

1. Clutch may be replaced with aftermarket clutch. (No variable ratio systems allowed.) (Disc style drive clutches are legal) ONLY if the outer surface of the clutch drum will (SAFELY) support a brake band.
2. Drive axle track drive sprockets may be replaced. The OEM number of teeth and diameter must be maintained.

## PROSTOCK

This class is steppingstone to the Champ class. These rules do not allow as many modifications as Champ Class. All 120 Sprint Class rules apply with the addition of CVT Clutch.

### GENERAL

1. The 120 Pro Stock Class combines the rules for Stock Chassis with the Champ 120 engine and drive rules.
2. Snowmobile must be an ISR designated 120/4-stroke model that complies with the GENERAL RULES AND REGULATIONS section.
3. Engine and tunnel must be OEM for the model.
4. OEM for the model belly pan is required.

### ENGINE

1. Must be OEM for the model. Modification and/or replacement of parts are limited to items listed in this section.
2. Engine components allowed for modification or change from OEM.
  - a. Cam shaft – maximum .290-inch valve lift
  - b. Valves, seats, and guides
  - c. Maximum intake valve diameter 25.2mm
  - d. Maximum exhaust valve diameter 24.2mm
  - e. Minimum valve stem diameter 5.5mm +/- .15mm
  - f. Valve springs and retainers.
  - g. Tappets and push rods
  - h. Governors may be removed.
  - i. Connecting rods
  - j. Carburetor insulator block may be modified but must maintain stock thickness dimension.
  - k. Rocker Arm Pivot Studs and pivots.
3. Engine over bore may not exceed, .020 (0.50mm) of standard bore size for the model.
4. Engine stroke must be stock as manufacturers filed specifications.
5. Engine components allowed to be modified but must begin as OEM for engine model.

- a. Bearings
  - b. Crankshaft
  - c. Piston and rings
  - d. Gaskets
  - e. Cylinder head and intake manifold.
  - f. Cylinder
  - g. Crankcase
  - h. Rocker arms
  - i. Intake manifold
  - j. Fan shroud.
6. Carburetor may be bored and modified but must begin as OEM supplied for the engine's model. A velocity stack may be added to the intake side of carburetor.
  7. A snowmobile type diaphragm fuel pump.
  8. The exhaust system may be modified or replaced. The exhaust system must be functionally silenced. 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 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. Minim silencer length 3 in. See general rules for dimensions and drawing.
  9. Outlet pipe must point downward and cannot protrude beyond machine width.
  10. Removal of recoil mechanism and starter cup to use 12-volt remote electric starter is allowed. The recoil cover must be maintained. A 1.5-inch hole may be drilled in recoil cover to insert starter drive.
  11. Valve cover may be modified to stabilize rocker arm stud. Rocker arm stud girls may be added. Breather fitting may also be added.

#### DRIVE

1. Clutching is open, CVT type transmission allowed. Drive components must be commercially available.
2. A metal clutch/chain cover must be in place always during operation. It must cover clutches, gears, belts, chains, starter cups, and any other rotating components.
3. Brakes must always be properly operable .
4. Track drive sprockets may be modified or changed.
5. Final driveshaft axle centerline may be moved.
6. Jackshafts allowed.

#### SKI SUSPENSION AND STEERING

1. Oval – stock 120/4 stroke rules apply.
2. Materials and components must meet or exceed OEM strength and structural integrity. Must maintain suspension travel with driver seated. No rigid suspensions.
3. The structural integrity of the steering and suspension systems must be.
4. Maximum ski stance is 34 inches (measured between ski runner cutting edges).

#### SKI AND SKI RUNNER

1. Skis may be changed to commercially available aftermarket skis.
  - a. Minimum length for Oval is 12 in.
  - b. Minim width and turn-up for Oval is as shown in illustration.
  - c. Ski loop must conform to GENERAL RULES AND REGULATIONS.
2. Ski runners must meet competition and safety requirements for oval racing.

#### TRACK SUSPENSION

1. The complete suspension must be used as furnished and filed by manufacturer. No options allowed. Shocks must be OEM for the model. OEM for the model suspension mounting points must be used.
2. Seals may be removed from bearings in bogie wheels, rear idler wheels and/or rear idler sprockets.

3. Commercially available marginal snow wheels may be added to the slide rails. (Rear axle idler wheels must remain OEM for the model.)
4. Suspension travel may be limited by means of limit straps only. Suspension travel must be maintained. No rigid suspensions allowed.

#### **TRACK & TRACTION**

1. Any commercially available molded rubber track may be used. Track must fit within frame and suspension without modification to frame, suspension, or drive. Track must be used as produced by the molder. Hyfax allowed.
2. Track studs must not extend more than 3/8 inch above the highest point of the track.

#### **FRAME & BODY**

1. OEM hood must be maintained without modification. Hood may be painted any color except orange on the snowmobile is not allowed.
2. Windshield may be removed, modified, or replaced. Windshield must have safety trim.
3. All sharp edges must be padded.
4. On Arctic Cats, inside liner of belly pan may be removed. An opening may be cut to clear CVT clutch. Opening must be closed off with suitable material and fasteners to protect by-standers.

#### **IGNITION & ELECTRICAL**

1. An ignition tether switch must be installed and functional.
2. Headlight and taillight must be OEM for the model.
3. Ignition coil must be OEM for model. Flywheel must be replaced with an aftermarket billet aluminum flywheel designed for the application. Lighting coil may be removed.
4. Taillight must be illuminated always while on the racing surface, whether the engine is running or not.

## **120 CHAMP**

#### **GENERAL**

1. Modifications allowed in other 120/4-stroke classes are allowed in Champ.

#### **ENGINE**

1. Any OEM 120 engine allowed. Modification and/or replacement of parts is limited to items listed in this section.
2. Engine components allowed for modification or change from OEM.
  - a. Cam shaft – maximum .290 Inch Valve lift
  - b. Valves and seats, and guides.
- Maximum intake valve diameter 25.2mm
- Maximum exhaust valve diameter 24.2mm
- Minim valve stem diameter 5.5mm (+-.15mm)
  - c. Valve springs and retainers.
  - d. Tappets and push rods
  - e. Governors may be removed.
  - f. Connecting rod.
  - g. Carburetor insulator block may be modified but must maintain stock thickness dimension.
  - h. Rocker Arm Pivot Studs and pivots. (Rocker must be non-roller with stock style pivot)

Engine overbore may not exceed .020" (0.50mm) of standard bore size for the model.

3. Engine stroke must be stock as manufacturers filed specifications.
4. Engine components allowed to be modified but must begin as OEM for engine model.
  - a. Bearings
  - b. Crankshaft
  - c. Piston and rings
  - d. Gaskets
  - e. Cylinder head and intake manifold.
  - f. Cylinder
  - g. Crankcase

- h. Rocker arms
  - i. Intake Manifold
  - j. Fan Shroud
  - k. Carburetor insulator block may be modified but must maintain stock thickness dimension.
5. Carburetor may be bored and modified, but must begin as OEM supplied for the engine's model. A velocity Stack may be added to the intake side of carburetor.
  6. A snowmobile type diaphragm fuel pump may be added. A pulse fitting may be added to the intake tract to be used to operate the diaphragm fuel pump.
  7. The exhaust system may be modified or replaced. The exhaust system must be functionally silenced. 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 1/6 in. (Minimum 3/8 in. sound 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 inch larger than inner pipe.
    - d. Minimum silencer length 3 inches.
  8. Outlet pipe must point downward and cannot protrude beyond machine width.
  9. Removal of recoil mechanism and starter cup to use 12-volt remote electric starter is allowed. The recoil cover must be maintained. A 1.5-inch hole may be drilled in recoil cover to insert starter drive.
  10. Valve cover may be modified to stabilize rocker arm stud. Stud girdles may be added. Breather fitting may also be added.

#### **DRIVE**

1. Clutching in open. CVT type transmission allowed. Drive components must be commercially available.
2. A metal clutch/chain cover must always be in place during operation. It must cover clutches, gears, belts, chains, starter cups, and any other rotating components.
3. Brakes must always be properly operable.
4. Track drive sprockets may be modified or changed.
5. Jackshaft allowed.

#### **SKI SUSPENSION AND STEERING**

1. Ski suspension and steering may be changed or modified. Materials and components must meet or exceed OEM strength and structural integrity. Must maintain suspension travel with driver seated. No rigid suspensions.
2. The structural integrity of the steering and suspension systems must be maintained.
3. Maximum ski stance is 34 inches (measured between ski runner cutting edges)

#### **SKI AND SKI RUNNER**

1. Skis may be changed to commercially available aftermarket skis.
  - a. Minimum length for Oval is 12 inches.
  - b. Minimum width and turn-up for Oval is as shown in illustration.
2. Ski loop must conform to GENERAL RULES AND REGULATIONS.
3. Ski runners must meet competition and safety requirements for the type of racing (i.e., Oval or Sno-cross).

#### **TRACK SUSPENSION**

1. Track suspension may be altered, relocated, or replaced. Structural integrity must be maintained.
2. Suspension must maintain a minimum of 2 inches of useable, vertical travel with the driver seated.
3. Track and track suspension must fit and be mounted within the confines of the tunnel.
4. Slide rail lubrication systems may be allowed, depending upon local, state, and/or federal laws and must utilize non-toxic and biodegradable lubricants.

#### **TRACK AND TRACTION**

1. Track must conform to Stock class rules.
2. Track may not be reversed.
3. Traction control devices must conform to rules in Stock class.

#### **FRAME AND BODY**

1. Snowmobile length must not exceed OEM for the model length by more than 2 inches (ski loop to rear of tunnel).
2. Overall body width must be within 2 inches of OEM for the model body width.
3. Bumpers must be padded (no sharp edges exposed).
4. Snow flap must be touching ice with driver aboard.
5. Belly pan and hood may be replaced. Belly pan and hood are required components.
6. Bulkhead may be modified or replaced: it must remain within 1 inch of the length and 1 inch of the width of the OEM bulkhead.
7. Tunnel may be modified or replaced using aluminum material only. Material must be a minimum of .062" thick.

#### **IGNITION & ELECTRICAL**

1. Ignition coil must be OEM for model. Flywheel must be replaced with an aftermarket billet aluminum flywheel designed for the application. Lighting coil may be removed.
2. Taillight must be illuminated always while on the racing surface, whether the engine is running or not.

## **SEMI PRO 206**

#### **GENERAL**

1. The 206 Local Option Semi Pro class combines the rules for Stock Chassis and Drive with a spec engine rule. All chassis rules are the same as 120 STOCK CLASS.
2. Snowmobile must be an ISR designated 120/4-stroke model that complies with the GENERAL RULES AND REGULATIONS section.
3. Unless otherwise specified, 120/4 Stroke Stock rules apply.
4. Externally adjustable main jet allowed.
5. Final drive track drivers can be replaced. OEM number of teeth must be maintained.

#### **AGE LIMITS**

1. Competitors must be 7 years of age. Drivers reaching 14 years of age during the season may finish the season in that class.

#### **ENGINE**

[Refer to LO 206 ENGINE SECTION](#)

#### **DRIVE**

1. 10/32 gear sets will be allowed.
2. Final drive shaft may be changed but must be same material type (steel to steel) and bearing dimension as OEM.
3. OEM drive clutch must be used with no modifications.

#### **SKI SUSPENSION AND STEERING**

1. Oval – stock 120/4 stroke rules apply.
2. If the unit did not come with a rear shock, you are allowed a shock upgrade kit for the rear suspension.

#### **FOOTREST-STIRRUP**

1. Right hand footrests/stirrups are legal for use.

## **PRO 206**

#### **GENERAL**

1. The 206 Local Option Pro class combines the rules for 120 racing with a spec engine rule. All chassis rules are the same as 120 STOCK CLASS.
2. Snowmobile must be an ISR designated 120/4-stroke model that complies with the GENERAL RULES AND REGULATIONS section.
3. Unless otherwise specified, 120/4 Stroke Stock rules apply.
4. Externally adjustable main jets allowed.
5. Final drive track drivers can be replaced. OEM number of teeth and diameter must be maintained.

#### AGE LIMITS

1. Competitors must be 7 years of age. Drivers reaching 14 years of age during the season may finish the season in that class.

#### ENGINE

[Refer to LO 206 ENGINE SECTION](#)

#### DRIVE

1. Clutch may be replaced with aftermarket clutch. (No variable ratio systems allowed.) (Disc style drive clutches are legal) ONLY if the outer surface of the clutch drum will (SAFELY) support a brake band.
2. 10/32 gear sets will be allowed.
3. Final drive shaft may be changed but must be same material type (steel to steel) and bearing dimension as OEM.

#### SKI SUSPENSION AND STEERING

1. Oval – Sprint 120/4 stroke rules apply.
1. If the unit did not come with a rear shock, you are allowed a shock upgrade kit for the rear suspension.

#### FOOTREST-STIRRUP

2. Right hand footrests/stirrups are legal for use.

## **SPEED LIMITED CLASSES**

#### GENERAL

1. This is an alternative means of conducting 120/4 stroke races that required that all competitors govern the speed of their snowmobiles according to the class rules.
2. A test course should be provided which will allow competitors to check the maximum speed of their sled before the event. (It is recommended that the speed be displayed on a large visual display.)
3. A radar gun or other device will be used at the fastest portion of the track during the races. (It is recommended that the speed be displayed on a large visual display.)
4. Recommended classes:  
Class One - 15 mph, Drivers aged 4 through 5.  
Class Two - 18 mph, Drivers aged 6 through 12.
5. There must be no class speed limit more than 18 mph.
6. To ensure safe competition, the Race Director must evaluate the course and the class speed limits and make changes, as necessary.
7. Violators of the class speed limit will be reclassified to last place finishing position.
8. Driver safety equipment, sled equipment and course requirements from the 120/4 STROKE RACING section apply.
9. A snowmobile and driver safety inspection will be conducted before racing. Post-race technical inspection may be at the discretion of the technical director and will be conducted in the event of a protest.

#### **SNOWMOBILE REQUIREMENTS**

Snowmobiles must conform to the rules of the Improved Stock Class for 120/4 Stroke Racing.

## COURSE REQUIREMENTS

### OVAL

1. Sanctioned Oval races shall be held on a flat course of Ice or hard packed snow or grass.
2. These events can be held on tracks having a maximum straightaway length of one hundred fifty (150) feet.
3. Course width on straightaway should be a minimum of fifteen (15) feet in width.
4. Course width on turns should be a minimum of twenty-five (25) feet.
5. See 120/4 Stroke track diagram in Appendix.

### ICE LEMANS

1. Refer to Ice Lemans track layout in the Appendix.
2. Course width and length may be adjusted to suit the size and performance of the 120/4 sleds.
3. The track must have a 25-foot (minimum) spectator safety buffer zone and barrier.

## SPECIALTY CLASSES

Certain Specialty classes can be created from time to time that enhance the sport, serve as a test bed, or fulfill local requirements. These classes must be ISR approved before being run. They do not have to be printed in the annual rulebook, to be raced, but must have approval before an event is conducted.

## 200 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.

Once rules are abridged, the sanction is no longer in effect.

All 200 DIVISION classes are 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.

### ELIGIBLE DRIVERS

#### OVALS

See Matrix for specific ages for competition.

## ELIGIBLE SNOWMOBILES

Arctic Cat ZR 200

Ski Doo MXZ 200

Yamaha Sno-Scoot

## 200 CLASSES

## OVAL DIVISIONS

Oval Stock

Oval Improved Stock

Any 200 Stock or Improved sled entering "Big Track" competition is required to run "non-ethanol" based gasoline. Ethanol formulated gasoline is not allowed in any OVAL Sprint format. APPLIES TO STOCK AND IMPROVED 200 CLASS SLEDS.

## 200 STOCK

1. The snowmobile must have original OEM for the model engine, hood, track, frame, seat, cowl, gas tank, carburetion, air-box, suspension, and clutch supplied by the manufacturer for the model. Named components must be OEM for the model and year. Or properly filed OEM replacement parts that supersede the original OEM parts. Factory options are not allowed.
2. Engine RPM and vehicle speed may be monitored at the discretion of the Race Director.

### ENGINE

1. Unless otherwise stipulated in this section, all governor linkage must be intact, in place and functional. Factory 6000 rpm rev limiter must be intact and functional.
2. No component of the engine (included head, valves, and cam) 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. Maximum cylinder bore for wear or cylinder repair cannot exceed .020 inches (.50MM)
4. Stock OEM Pistons up .020 (.50MM) Only are allowed for replacement.
5. Blueprinting of engines is not allowed. No removal material whatsoever will be allowed. This is to include polishing, port matching, deburring, glass or sand blasting surfaces or material removal for engine balancing or other reasons.
6. No changes in engine dimensions can be made by gasket adjustments.
7. Spark plugs do not necessarily have to be OEM stock. Sparkplugs may not be machined to seat deeper in the head, plug gaskets may not be altered, and plug indexing is not allowed.
8. No carburetor/air silencer changes allowed. Filter material may be added or removed.
9. Jetting changes are allowed.
10. Remote adjustable main jet system allowed.
11. Exhaust must be OEM as produced for the model. The OEM exhaust system must be used in its entirety. No internal or external modifications allowed. No welding allowed, even for repair. Muffler components and/or silencing material must be intact always.

**CLARIFICATION: THE FOLLOWING PHOTO SHOWS THE LEGAL HEADGASKETS AVAILABLE. DIMENSIONS AND THICKNESS ARE THE SAME, HOWEVER CONSTRUCTION METHODS VARY.**



### DRIVE

1. Brake must always be functional and operational .
2. Stock drive clutch engagement must be maintained. OEM drive clutch rollers and spring must be stock, with no modifications. Driven clutch spring and helix must be OEM. Stock drive clutch engagement must be maintained. OEM drive clutch rollers must be stock, with no modifications. Driven clutch spring and rollers must be OEM. Aftermarket primary rollers of exact same size and weight may be used. (23X18) 18 gm weight. Only exception would be the OEM hi Alt kit 14 GM wt. No Shimming of primary cover or spring allowed.
3. Clutch cover design change offered on 2020 production will retrofit to 2019/2018 production units.
4. All guards and shields must be in place.

5. Final drive system must remain as produced. OEM 2.95:1 gear ratio must be maintained, no gear ratio changes allowed.

### **SKI SUSPENSION & STEERING**

1. Front suspension must be OEM for the model.
2. Front suspension must remain in its stock location.
3. Ski widening devices are not allowed in Stock classes unless furnished as OEM and properly filed.
4. Suspension travel may not be altered.
5. 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 may be modified or replaced.
6. Handlebar (itself) may be removed and replaced. Method of affixing handlebar to the steering column must be approved by the technical inspector during safety inspection. ISR has no responsibility or gives no advisement in the method or materials selected to replace the handlebars in this class. Balance of steering column must remain in place and mounting locations must remain unchanged.

### **SKIS & SKI RUNNERS**

1. The only skis that may be used will be Arctic Part #\_3603-614 ski, and handle (Ski Loop), 1603-594 and Yamaha part #\_8ML-F3730-XX ski and handle (Ski Loop). Ski only part # 8ML-F3710-XX
2. Ski suspension components must be OEM.
3. All Ski loops must be at least 1 inch wide and 5/8-inch-thick or one -inch diameter round material. Foam may be added to achieve the 1- inch dimension. Refer to General Snowmobile rules sections for description and clarification.
4. Carbide wear bars may be added.

### **TRACK SUSPENSION**

1. The complete suspension must be used as furnished and filed by the manufacturer. Shocks must be OEM for the model. OEM for the model suspension mounting points must be used.
2. OEM available marginal snow wheels may be added to the slide rails. (Rear axle idler wheels must remain OEM for the model.)
3. Suspension travel may not be altered.

### **TRACK & TRACTION**

1. OEM track must be used as produced.
2. No carbon fiber backers or titanium traction products allowed.
3. Tunnel protectors may be added.
4. In oval applications slide lubers may be added.
5. Track clips may be added.

### **FOR OVAL, TERRAIN, CROSS COUNTRY, AND LEMANS RACING ONLY:**

1. Specialized traction.
  - a. Maximum of two points per track segment.
  - b. No studs on outside belts.
  - c. Studs must be unsharpened steel or insert carbide only. Studs may be sharpened in oval.
  - d. Screw traction components may be used in lieu of studs.
  - e. Refer to Snow Cross traction rules for placement and type of stud.

### **IGNITION & ELECTRICAL**

1. An ignition tether switch must be installed and functional.
2. Headlight and taillights must be OEM for the model.
3. OEM taillight must be operational /illuminated in its stock configuration.
4. An additional taillight must be illuminated as all times while on the racing surface.
5. Ignition and lighting systems must be OEM for the model. No modifications allowed.

### **FRAME & BODY**

1. OEM hood must be maintained without modification. Hood may be painted any color except in Oval and Sno-cross, where orange on the snowmobile is not allowed.
2. Windshield may be removed, modified, or replaced. Windshield must have safety trim.

3. All sharp edges must be padded.
4. Welding for repair will be allowed on the chassis. The repair must not alter the general design concept of the component or chassis.
5. Rear tunnel enclosures will be required in oval. (See general rules for detail)
6. Running board reinforcement kit or complete running board kit is legal. Kit must be commercially available. No one off repairs allowed.

## 200 IMPROVED

### GENERAL

1. Snowmobile must conform to Stock class rules unless stated otherwise in this section.

### ENGINE

1. OEM 6000 rpm rev limiter must be used. Yamaha OEM engine upgrade kit (head and carb) will be allowed. ENGINE UPDATE KIT PART#
2. Performance Kit is the same for both Arctic and Yamaha models. All components supplied must be used.

### SKIS AND SKI RUNNERS

1. Ski must be OEM for the model and year or a commercially available aftermarket ski with a minimum overall length of 20 inches.

### SKI SUSPENSION & STEERING

1. OEM Front suspension shocks may be replaced with commercially available aftermarket.
2. Front suspension must remain in its stock location.
3. In 200 improved, caster angle changes are allowed by modification of the upper A Arm, however no widening of the front ski stance is allowed.
5. Suspension travel may be altered. Suspension travel may be limited by means of tie down only. 1 inch of suspension travel must be maintained. No rigid suspensions allowed (suspension linkage or chassis flex is not considered travel)
5. Steering column location may be altered but must retain lower OEM mounting point.
6. Steering column may be shortened no more than 4 inches. Steering column if shortened must be slugged and capture welded.
7. Existing steering column may be bent forward or rearward up to 3 inches from stock location, above the upper pivot mount.

### TRACK SUSPENSION

1. The complete suspension must be used as furnished and filed by the manufacturer. OEM suspension shocks may be replaced with commercially available aftermarket. Spring spacers may be used to increase pressure on torsion springs OEM for the model suspension mounting points must be used.
  2. Seals may be removed from bearings in bogie wheels, rear idler wheels and/or rear idler sprockets.
  3. Commercially available marginal snow wheels may be added to the slide rails. (Rear axle idler wheels must remain OEM for the model.)
  4. Suspension travel may be altered. may be limited by means of limit straps only. Suspension travel must maintain 1 inch of travel. (Suspension linkage or chassis flex is not considered travel.
- No rigid suspensions allowed.

### DRIVE

1. Gear ratio may be changed, by using any commercially available chain sprocket kit or commercially available OEM belt style pulleys.
2. OEM primary and secondary clutch and belt must be used. Primary rollers and spring along with secondary spring may be changed using commercially available parts only. Secondary helix must remain stock from OEM with no modifications.
3. Chain case/ gear/ pulley case must use a protective cover to keep drivers' extremities from contacting drive system.

## SPECIALTY CLASSES

### ***F-200, BRIGGS IMPROVED 200, 206 BASE MOD***

NOTICE THIS RULE SET IS IN DEVELOPMENT STAGE AND MAY HAVE CHANGES IMPLEMENTED DURING THE SEASON, TO EQUALIZE, LOWER, OR IMPROVE THE PERFORMANCE LEVEL.

**The engine package for this rule set is a 206 derived base Briggs engine with certain allowable modifications.**

**Due to the nature of this class, the engine is a completely tech-able item. Thorough engine examination is recommended to all affiliate's tech staff.**

**Competitors/Builders if you do not wish to perform engine teardowns after an event do not enter this class.**

1. Snowmobile must conform to Stock class rules unless stated otherwise in this section.

#### ENGINE

1. Only allowable engine package shall be the Briggs approved 206 variants.

#### Clarification:

This is a spec engine class and must only utilize the engine internal components specified in the build sheet. **A World Formula Briggs engine is not allowed.** The engine is derived from a 206 Briggs engine.

2. The engine components are required to be the designated components supplied by Briggs and may not be altered except as directed in the supplied engine rules.

[LINK HERE FOR Briggs rules for this engine package.](#)

#### SKIS AND SKI RUNNERS

1. Ski must be OEM for the model and year or a commercially available aftermarket ski with a minimum overall length of 20 inches.

#### SKI SUSPENSION & STEERING

1. OEM Front suspension shocks may be replaced with commercially available aftermarket.
2. Front suspension must remain in its stock location.
3. Commercially available ski widening devices will be allowed. (no one off setups not allowed)  
(Clarification) 10-25-18
  - A. Spindle angle changes are allowed in oval competition only.
  - B. Spindle angle changes may be part of the widening kit.
4. Front suspension widening achieved when using the approved performance kits is allowed.
5. Suspension travel may be altered. Suspension travel may be limited by means of tie down only. 1 inch of suspension travel must be maintained. No rigid suspensions allowed (suspension linkage or chassis flex is not considered travel)
5. Steering column location may be altered but must retain lower OEM mounting point.
6. Steering column may be shortened no more than 4 inches. Steering column if shortened must be slugged and capture welded.

- Existing steering column may be bent forward or rearward up to 3 inches from stock location, above the upper pivot mount.

### **TRACK SUSPENSION**

- The complete suspension must be used as furnished and filed by the manufacturer. OEM suspension shocks may be replaced with commercially available aftermarket. Spring spacers may be used to increase pressure on torsion springs OEM for the model suspension mounting points must be used.
- Seals may be removed from bearings in bogie wheels, rear idler wheels and/or rear idler sprockets.
- Commercially available marginal snow wheels may be added to the slide rails. (Rear axle idler wheels must remain OEM for the model.)
- Suspension travel may be altered. may be limited by means of limit straps only. Suspension travel must maintain 1 inch of travel. (Suspension linkage or chassis flex is not considered travel.

No rigid suspensions allowed.

### **DRIVE**

- Gear ratio may be changed, by using any commercially available chain sprocket kit or commercially available OEM belt style pulleys.
- OEM primary and secondary clutch and belt must be used. Primary rollers and spring along with secondary spring may be changed using commercially available parts only. Secondary helix must remain stock from OEM with no modifications.
- Chain case/ gear/ pulley case must use a protective cover to keep drivers' extremities from contacting drive system.

## **K C PRO SPECIALTY CLASS FORMULA CHAMP**

Sleds eligible for class are 120-200 sized Chassis.

### **NOTICE**

Due to the experimental nature of this class and its initial years of competition, restrictions may be imposed at any time if safety standards are compromised.

### **Age of Competition**

- Competitors must be 7 years of age with one year of driving experience. Drivers reaching 14 years of age during the season may finish the season in that class.

### **ENGINE**

The engine package for this rule set is a 206 derived base Briggs engine with certain allowable modifications.

Due to the nature of this class, the engine is a completely tech-able item. Thorough engine examination is recommended to all affiliate's tech staff.

Competitors/Builders if you do not wish to perform engine teardowns after an event do not enter this class.

**Clarification:**

This is a spec engine class and must only utilize the engine internal components specified in the build sheet. A World Formula Briggs engine is not allowed. The engine is derived from a 206 Briggs engine.

1. Only allowable engine package shall be the Briggs approved 206 variants.
2. The engine components are required to be the designated components supplied by Briggs and may not be altered except as directed in the supplied engine rules. [LINK HERE FOR Briggs rules for this engine package.](#)

**DRIVE**

1. Clutching in open. CVT type transmission allowed. Drive components must be commercially available.
2. A metal clutch/chain cover must always be in place during operation. It must cover clutches, gears, belts, chains, starter cups, and any other rotating components.
3. Brakes must always be properly operable.
4. Track drive sprockets may be modified or changed.
5. Jackshaft allowed.

**SKI SUSPENSION AND STEERING**

1. Ski suspension and steering may be changed or modified. Materials and components must meet or exceed OEM strength and structural integrity. Must maintain suspension travel with driver seated. No rigid suspensions.
2. The structural integrity of the steering and suspension systems must be maintained.
3. Maximum ski stance is 36 inches (measured between ski runner cutting edges)

**SKI AND SKI RUNNER**

1. Skis may be changed to commercially available aftermarket skis.
  - a. Minimum length for Sno-cross is 20 inches.
2. Ski loop must conform to GENERAL RULES AND REGULATIONS.
3. Ski runners must meet competition and safety requirements for the type of racing (i.e., Oval /Sno-cross/ Cross Country).

**TRACK SUSPENSION**

1. Track suspension may be altered, relocated, or replaced. Structural integrity must be maintained.
2. Suspension must maintain a minimum of 2 inches of useable, vertical travel with the driver seated.
3. Track and track suspension must fit and be mounted within the confines of the tunnel.
4. Slide rail lubrication systems may be allowed, depending upon local, state, and/or federal laws and must utilize non-toxic and biodegradable lubricants.

1. Track must conform to Stock class rules.
2. Track may not be reversed.
3. Traction control devices must conform to rules in Stock class of the discipline.

**FRAME AND BODY**

1. Snowmobile length must not exceed OEM for the model length by more than 2 inches (ski loop to rear of tunnel).
2. Overall body width must be within 2 inches of OEM for the model body width.
3. Bumpers must be padded (no sharp edges exposed).
4. Snow flap must be touching ice with driver aboard.
5. Belly pan, and hood may be replaced. Belly pan and hood are required components.
6. Bulkhead may be modified or replaced: it must remain within 1 inch of the length and 1 inch of the width of the OEM bulkhead.
7. Tunnel may be modified or replaced using aluminum material only. Material must be a minimum of .062" thick.

**IGNITION & ELECTRICAL**

1. Ignition coil must be OEM for model and not exceed ISR specified RPM. Flywheel may be replaced with an aftermarket billet aluminum flywheel designed for the application. Lighting coil may be removed.
2. Taillight must always be illuminated while on the racing surface, whether the engine is running or not.

### **CLASSES AND SANCTIONS**

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.

Once rules are abridged, the sanction is no longer in effect.

All Kitty Cat classes are 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.

#### **KITTY CAT RACE CIRCUIT CLASSES**

**Stock (including Governor, Amateur, and Improved)**

**Vintage (Kawasaki Only)**

**F III**

**F I-**

#### **SPECIALTY CLASS/SANCTIONS**

1. Can be any Kitty Cat event that does not fall under any of the specific classes but meets established safety standards.
2. All special sanctions and specialty classes must be approved in writing by ISR and the rules committee before competition.

#### **GENERAL COMPETITION AND SAFETY**

1. Race will be red flagged if a driver is off a machine and was involved in a two, or more sled accident.
2. Events are open to all qualified sleds and drivers. The sanctioning body has the authority to evaluate all drivers to determine their qualifications.
3. The owner and driver are responsible to ensure that their sled meets all the rules herein and in GENERAL RULES AND REGULATIONS. Any sled that does not meet the requirements will be subject to disqualification and forfeiture of any prizes or awards, plus eligibility for the next two (2) races.
4. Two laps are recommended in heats and five laps in finals.
5. Eligible drivers must attain the age of 4 before being allowed to enter competition. A driver must compete for a full year in Stock class and be five years of age before competing in any other class.

Drivers must not reach the age of 15 prior to published scheduled race season for the affiliate.

6. Drivers in F1 Kitty Cat must be at least 7 and no more than 14 years of age and have a minimum of 1- year experience in Stock class.
7. Mandatory teardown and inspection of first place sleds.
8. The Race Director and/or Tech Director have the authority to determine structural integrity.
9. Driver must wear all required safety apparel as described in DRIVER PROTECTIVE EQUIPMENT SECTION of the GENERAL RULES. This includes approved helmet, upper body protection, shin and knee guards, gloves, boots, and outer clothing with the required amount of high visibility orange color.
10. While driver is on the course, radio communication between driver and crew is not allowed.

#### **ENTRY FEES, PRIZES AND AWARDS**

1. Recommended entry fees in Kitty Cat Racing are \$15.00 in all classes.
2. No payback, awards limited to trophies only.

# GENERAL SNOWMOBILE RULES

## ENGINE

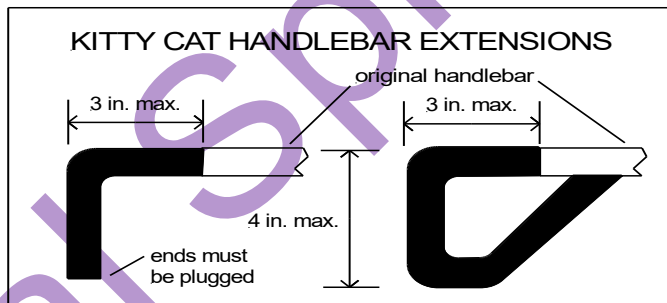
1. **(FIII and F1)** Any exhaust modification or replacement allowed. The exhaust system must be functionally silenced.
2. The following minimum standards for straight-thru silencers are required:
  - a. Inner pipe must have at least 15 holes per square inch. Minimum hole size 1/16 in. (Minimum 3/8 in. sound 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. See general rules for drawing and dimensions.
3. The exhaust emission pipe must not protrude more than 3 inches beyond the chassis or hood configuration. The exhaust pipe must exit downward and extend below the plane of the top of the tunnel.

## DRIVE

1. Brake must always be functional and operational .

## SKI SUSPENSION & STEERING

1. Rod ends (heim joints) may be used.
2. Spindle bushings may be replaced. Front-end geometry may not be changed.
3. An extension may be added to the left handlebar (see illustration). Maximum 3 inches wider, maximum 4 inches down. End must be capped.
4. Left side of handlebar may be straightened. Structural integrity must be maintained.



## SKIS & SKI RUNNERS

1. Ski loops must be added. Minimum 1-inch diameter material. Loop must have minimum diameter of 3 inches. If metal, ski loop must be padded.

## TRACK SUSPENSION

1. Seals may be removed from bearings in bogie wheels, rear idler wheels and/or rear idler sprockets.
2. Slide rail lubrication systems may be allowed in some classes depending upon local, state, and/or federal laws.
3. If slide rail lubrication is used, it must be non-toxic and biodegradable.

## TRACK & TRACTION

1. The track studs may be no more than 3/8 inch above the highest point of the track.  
(Grass Oval) No traction products allowed.

FRAME & BODY

1. Orange is not allowed on the snowmobile in oval racing.
2. Windshield and its molding may be removed.
3. Any separate front bumpers that extend away from the body must be padded.
4. Tunnel may be replaced with commercially available aluminum tunnel of OEM thickness (or greater) and dimensions or OEM steel tunnel.

IGNITION & ELECTRICAL

1. A tachometer may be installed.
2. Data acquisition and data acquisition systems allowed.
3. A taillight must always be illuminated while on the racing surface.

STOCK CLASS RULESGENERAL

1. This section covers the following classes:
  - **Governor Stock**
  - **Amateur Stock**
  - **Stock**
  - **Improved Stock**
2. The snowmobile must have original OEM engine, hood, track, skis frame, cowl, gas tank, carburetion, suspension, and clutch supplied by the manufacturer for the model. Named components must be OEM for the model and year, or properly filed OEM replacement parts that supersede the original OEM parts. Factory options are not allowed.
3. In the event of obsolescence of OEM crankshafts, aftermarket replacement crankshafts must be approved and filed with ISR before allowed to be used.
4. In the event of obsolescence of recoil components or assemblies, Arctic Cat recoil #3002-493 may be used in its entirety.
5. In the event of obsolescence of Brake Band assembly, a vendor provided aftermarket assembly may be used. This component must be submitted to and reviewed by ISR prior to use.
6. Due to discontinuation of part number 3002-469 Arctic Cat cylinder head, replacement billet heads will be allowed. Any SMDG group vendor offering a cylinder head for use must submit a sample head to ISR for verification and this head will be held at ISR for verification and comparison.

ENGINE

1. 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. **A billet stator plate mount that accommodates a third crankshaft bearing will be allowed to assist in preventing crankshaft failures. The stator plate/bearing mount must not allow additional timing specifications to be used. Original timing specs must be maintained.**
2. Blueprinting of engines is not allowed. No removal of material whatsoever will be allowed. This is to include polishing, port matching, deburring, glass or sand blasting surfaces or material removal for the purpose of engine balancing or other reasons.
3. Governor assembly must be installed on the engine.
  - a. (Governor Stock) Governor must be fully operational.
  - b. (Amateur Stock, Stock, Improved Stock) Governor must be intact but does not have to be functional.
4. Replacement pistons Can be SPI SM-09009N or Northern Crank shaft 3005701. Piston must be installed in its OEM orientation.
5. Lower end crank pin may be welded to the counterweight to maintain crankshaft integrity.
6. .020/.5 mm oversize pistons and overbore allowed.
7. There will be no more than one, cylinder base gasket to a cylinder. No changes in engine dimensions can be made by gasket adjustments. Gaskets (including the carb mounting gaskets) may be trimmed but must remain OEM.
8. Spark plugs do not necessarily have to be OEM stock but must be 1/2-inch reach.

9. A 808656 Briggs spec fuel pump may be used. The crankcase area tapped to provide vacuum for the pump is at the constructors discretion. Gas tank mounting location must be returned to OEM location if this modification is done.
10. No carburetor changes allowed. No changes allowed to throat of carburetor or any other orifices.
11. Carburetor splash plate may be removed.
12. Jetting changes are allowed.
13. Filter material may be added to or removed from OEM air box. Air box (silencer) and/or its mounting gasket may be removed.
14. A 2.0 inlet valve may be used in the carb.
15. The carburetor insulator block may not be modified or trimmed except for elongating the stud mounting holes.
16. Exhaust must be OEM as produced for the model. The OEM exhaust system must be used in its entirety. No internal or external modifications allowed. No welding allowed, even for repair. Muffler components and/or silencing material must always be intact.

#### DRIVE

1. (Governor Stock) Stock drive clutch engagement must be maintained (2,000 RPM maximum clutch engagement).
2. OEM drive clutch with no modifications.
3. No belt drives allowed.
4. Chain guard must be in place.
5. Required sprockets for Stock classes:
  - a. Drive sprocket-11 tooth.
  - b. Driven sprocket-42 tooth.
6. Improved Stock sprockets
  - a. Gearing changes to the driven sprocket are allowed but the drive sprocket must remain OEM stock (11 teeth).

#### SKI SUSPENSION & STEERING

1. Front suspension must be OEM for the model unless otherwise noted.
2. Front suspension must remain in its stock location.
3. Ski widening devices and/or height adjustment devices are not allowed in Stock unless furnished as OEM and properly filed.
4. OEM, for the model, handlebar height must be maintained.

#### SKIS & SKI RUNNERS

1. Skis must remain OEM for the model and year.
2. Ski suspension components must be OEM.

#### TRACK SUSPENSION

1. The complete suspension must be used as furnished and filed by the manufacturer.
2. There will be no suspension options.
3. Slide rail lubrication systems not allowed.

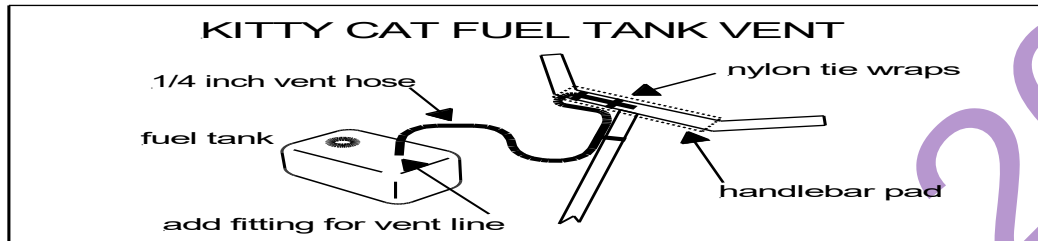
#### TRACK & TRACTION

1. Any traction products allowed but must meet Kitty Cat General Track and Traction rules.

#### FRAME & BODY

1. OEM hoods only.

- a. Optional colored OEM hoods may be substituted for black hoods.
- b. OEM hood may be painted any color except orange (in Oval and Snocross).
- 2. May open OEM designated (molded in) vent slots on the hood.
- 3. Windshield may be trimmed.
- 4. Fuel tank may be raised within the confines of the OEM hood and frame configuration.
- 5. Air vent may be added to the fuel tank. Vent must be routed to prevent siphoning when snowmobile is tipped to either side. See illustration.



#### IGNITION & ELECTRICAL

- 1. Headlight may be removed, but lighting coil must remain in place.
- 2. Spark plug cap does not have to be OEM.

#### F-III CASS RULES

##### GENERAL

- 1. The snowmobile must have original OEM (or factory designated replacement) engine, track, skis, chassis, cowl, gas tank, carburetion and suspension supplied by the manufacturer for that model.
- 2. Factory options not allowed.

##### ENGINE

- 1. Engine components must retain original OEM part numbers, but components may be modified, provided engine retains its complete external stock appearance.
- 2. Engine displacement may not exceed manufacturer's filed specifications for Stock.
- 3. Engine components allowable for modification (must begin with stock components, must retain original number of cylinders).
  - a. Cylinder
  - b. Cylinder head.
  - c. Crankshaft
  - d. Bearings
  - e. Rods (Rod center to center must not change.)
  - f. Pistons, piston pins and rings
  - g. Gaskets
- 4. Additional main bearing may be added to magneto side of crankshaft. Additional support for added bearing allowed.
- 5. No liquid cooling may be added.

6. No reed valves may be added.
7. No external crankcase modifications except to add fuel pump pulse fitting.
8. OEM stroke must remain the same.
9. No external fastening devices allowed to secure or hold cylinders in place.
10. Cylinder may be bored to a maximum of .020 inch (0.5 mm) or .040 inch (1 mm).
11. Carburetors, flanges, and intake manifold must remain OEM for Kitty Cat. Carburetor internal modifications allowed but must remain OEM appearing.
12. No velocity stacks allowed.
13. An additional fuel pump may be added.
14. Removal of recoil mechanism and starter cup to use 12-volt remote electric starter is allowed. A 1.5-inch hole may be drilled in recoil cover to insert starter drive.

#### DRIVE

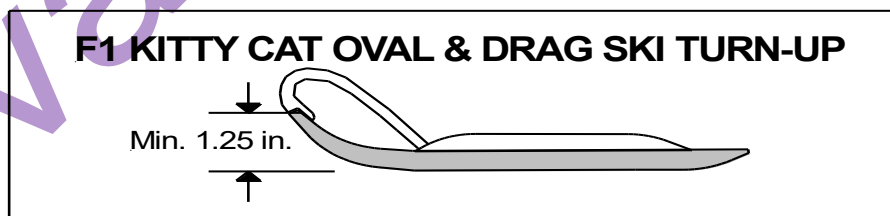
1. Clutch and drive system are open. (No CVT belt drive systems allowed).
2. Chain guard is mandatory.
3. Gearing must be 11-tooth drive and 32-tooth driven or equivalent. The equivalent gear combination of 12/35 may be used.
4. OEM for the model track drive sprockets must be used. They may be modified. OEM diameter must be maintained.

#### SKI SUSPENSION & STEERING

1. Front suspension must be OEM stock.
2. Suspension must remain in its stock location.
3. OEM width and length must be maintained.
4. One 2-inch ski widener allowed per side.
5. Handlebar height may be raised a maximum of 2 inches. Structural integrity must be maintained.

#### SKI & SKI RUNNERS

1. Skis must remain OEM for the model and year.



#### TRACK SUSPENSION

1. The complete suspension must be used as furnished and filed by the manufacturer.
2. No suspension options allowed.

#### TRACK & TRACTION

1. Any traction products allowed but must meet Kitty Cat General Track and Traction rules.

**FRAME & BODY**

1. Dash may be removed.
2. Gas tank may be moved; must not be located near the exhaust system. May be in the dash area.

**IGNITION & ELECTRICAL**

1. Ignition system must be OEM for the model unless otherwise specified.
2. Flywheel may be lightened and/or balanced.
3. Lighting coil may be removed.
4. Stator plate may be slotted to change timing.
- 5.

**F-I CLASS RULES**

Any changes or alterations allowed in Stock classes and FIII are permitted in F I.

Any Kitty Cat is eligible.

**ENGINE**

1. Any OEM Kitty Cat engine may be used if original cylinder, crankshaft, and crankcase are used.
2. Engine components must retain original OEM part numbers.
3. Engine displacement may not exceed manufacturer's filed specifications for stock. Cylinder may be bored to a maximum of .020 inch (0.5mm) or .040 inch (1mm).
4. Engine components allowable for modifications must begin with stock components, must retain original number of cylinders.
  - a. Cylinder
  - b. Cylinder head.
  - c. Crankshaft
  - d. Bearings
  - e. Rods
  - f. Pistons, piston pins and rings
  - g. Gaskets
5. Rods center to center must remain the same.
6. OEM stroke must be maintained.
7. Additional main bearing may be added to magneto side of crankshaft. Additional support for added bearing allowed.
8. No liquid cooling may be added.
9. No reed valves may be added.
10. No external crankcase modifications allowed except to add fuel pump pulse fitting.
11. Fan shroud and mounting flanges may be removed.
12. Carburetor may be modified or replaced.
13. Fuel injection or turbo chargers not allowed.
14. Additional fuel pumps may be added.

15. Removal of recoil mechanism and starter cup to use 12-volt remote electric starter is allowed. A 1.5-inch hole may be drilled in recoil cover to insert starter drive.

#### **DRIVE**

1. Chain guard is required.
2. Chain guard must cover all rotating components.
3. Clutch and drive system may be modified or replaced. CVT system allowed. Components must be commercially available.
4. Jackshafts allowed.
5. Track drive sprockets may be modified or changed.
6. Brake system may be replaced. Brake system must always be functional.

#### **SKI SUSPENSION & STEERING**

1. May be altered.
2. Handlebars may be changed and/or modified. Material strength must meet or exceed OEM handlebar material. Must maintain structural integrity and safe configuration. Structural integrity and safe configuration are at the discretion of the Race Director.

#### **SKIS & SKI RUNNERS**

1. Skis may be changed to commercially available aftermarket skis.
  - a. Sno-cross minimum length 20 in.
  - b. Oval minimum length (not including ski loop) 12 in., minimum width 2.75 in.
  - c. Minimum turn-up for Oval is 1.25 inches as shown in illustration.
2. Ski loop must conform to GENERAL RULES AND REGULATIONS.
3. Ski runners must meet competition and safety requirements for the type of racing.

#### **TRACK SUSPENSION**

1. May be altered.

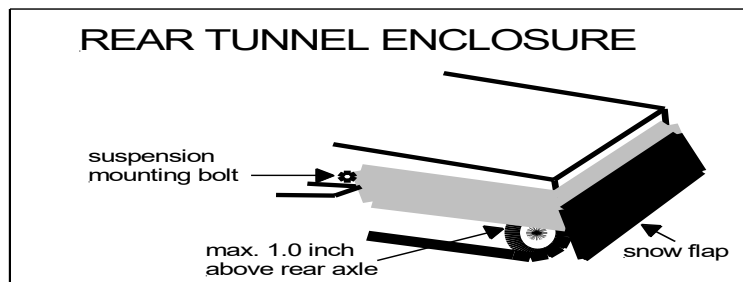
#### **TRACK & TRACTION**

1. Twin tracks are not allowed.
2. Conventional style tracks and drives are required.
3. Any traction products allowed but must meet Kitty Cat General Track and Traction rules.

#### **FRAME & BODY**

1. Tunnel may be replaced. Material used must be .063 or greater.
2. Chassis may be modified if it does not jeopardize the safety of the operator or other drivers.
3. Snowmobile may not exceed thirty (30) inches in width.
4. Snow flap must touch ground with rider seated.
5. Any hood allowed.
6. (All snowmobiles in all classes) The rear of the tunnel must be enclosed with steel or aluminum comparable in strength to the tunnel material. The tunnel enclosure is required to reduce the possibility of skis and driver's extremities entering the tunnel area. The shaded area (see illustration) must be enclosed. The enclosure shall cover the rear and both sides and extend forward to the rear suspension mounting bolt. The

bottom of the enclosure shall be no higher than one (1) inch above the center of the rear axle (with the driver in place). The rear of the enclosure shall be no further than 2.5 inches from the rear of the track. The tunnel enclosure must be securely welded, bolted, or riveted to the tunnel.



#### IGNITION & ELECTRICAL

1. Ignition may be modified or replaced. (The ignition system includes the flywheel.)
2. Gel cell and dry cell, etc. batteries will be allowed. Conventional lead/acid, wet cell batteries are not allowed.

#### COURSE REQUIREMENTS

##### OVAL

1. Sanctioned Oval races shall be held on a flat course of ice or hard packed snow or grass.
2. See Kitty Cat track diagram in Appendix.
3. Course width on straightaway should be a minimum of 15 feet in width.
4. Course width on turns should be a minimum of 25 feet.