

## MACHINE REQUIREMENTS (ALL CLASSES):

1. All machines must be suitable for competition. Each machine must be designed for high performance use with safety in mind. Although we will not be actively inspecting, any machine deemed by Two Eighty Six Sno Series, LLC as unsafe for competition will not be allowed to race.
2. Brakes must be in good working order, properly adjusted, and capable of locking up the track.
3. Throttles must be spring return and in proper working order.
4. No part shall protrude from the machine in such a way as to present a safety hazard to riders.
5. Control Levers must have “Ball Ends” where applicable.
6. All machines must have a working tether / kill switch. A functional and working secondary safety shut off (kill switch) that terminates ignition is mandatory for all classes. Tether Switch - tether must be attached to the rider and functioning properly at all times when the rider is on the machine. Track officials will be spot-checking riders to prove, before hot laps/practice begins, that they have a properly working tether / kill switch
7. All riders must have the ability to control the machine using all features/functions of the machine.
8. NUMBER PLATES - All numbers must be easy to read. It is the racer's responsibility that racer numbers are legible from the scoring officials view/view point. Standard, block style lettering (NO OUTLINES) – Solid white with black numbers on a number plate. Absolutely no scroll type or wide illegible numbers. No overlapping numbers or numbers that are outlines only. Numbers/Letters must be all one size and placed straight across the number plates. NUMBERS ONLY ON THE NUMBER PLATES – do not add stickers, decals, etc. to the number plates, unless instructed by race officials. Any number plates, which the officials find to be non-readable, must be corrected before that machine is allowed to race. All clothing / chest protectors bearing the rider’s number must have the same number as the machine being ridden.
  - a. Numbers belong on a number plate on the back side of the machine. We prefer a white background and black lettering. Make your numbers LARGE AND BOLD. All the other colors of the rainbow can go anywhere else on your machine EXCEPT FOR YOUR NUMBER PLATE.
  - b. The numbers must be a minimum of 5 3/4 inches high and a minimum of 1-inch wide.
  - c. YOU ARE ONLY ALLOWED 1 NUMBER - Make sure all of your machines have the same number on them to match your rider.
  - d. If you are sharing machines with another rider, you must CHANGE OUT NUMBERS to match the rider on the machine.
  - e. If you have a combination of LETTERS and NUMBERS on your machine. YOU MUST HAVE ALL LETTER AND NUMBERS DISPLAYED OF EQUAL SIZE.
  - f. By not following these rules, you risk placement mistakes and scoring mistakes which could lead to disqualification.
9. Age Classifications are determined as of December 13 2024. Whatever age you are on December 13 2024 is the age group you can compete in through the final race of the season. Racers may advance to the next age group upon turning of the appropriate age (Season Championship Points do not carry over to next class.)

## **ZOOMIE – AMATEUR STOCK – STOCK 120**

### **Zoomie**

3-5 Year old

Stock 120 or Kitty Kat Sled

Beginners and brand new to racing entries only

NON POINT CLASS

A smaller track is built for this class

## **Amateur Stock**

Beginners

Stock 120 Sled

## **Stock 120**

Ages 4-8

### **SLED SET UP RULES**

Rev Limiter

Arctic Cat Gearing 4:10

Polaris/Ski Doo Gearing 4:20

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. The named items must be OEM for the model and year. Or properly filed OEM replacement parts that supersede the original OEM parts. Factory options are not granted.
2. Engine RPM and speed can be monitored at the discretion of the Race Director.
3. A windshield can be removed, modified or replaced. A windshield must have safety trim and sharp edges must be covered.
4. Chassis welding for repair is allowed. The repair can not alter the general design concept of the component of the chassis.

### **ENGINE**

1. Unless otherwise stipulated in this section, all governor linkage must remain intact, in place and functional. Any governor spring may be used. Governor gear may be removed.
2. Renewal of a chain tensioner with a 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 elements can be added to the engine.
4. Highest 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. No blueprinting of engines, removal of material whatsoever will be allowed. This means no polishing, port matching, deburring, glass or sand blasting surfaces or material removal for engine balancing or other basis.
7. No changes in engine dimensions can be made by gasket adjustments.
8. Spark plugs do not have to be OEM stock. Adjusting Sparkplugs to seat deeper in the head, plug gaskets may not be altered, and plug indexing is not allowed.
9. No changes to carburetor/air silencer. Filter material may be added or taken off.
10. Jetting alterations and remote adjustable main jet system is allowed.
11. Exhaust must be OEM as produced by the model. The OEM exhaust system must entirely be used. No internal or external modifications, welding or repairs are allowed. The Muffler components and/or silencing material must always be intact.
12. To keep performance fair between the manufacturer's models the following changes are allowed:
  - a. Ski-Doo racers can change valve springs to Honda P/N 14751-ZE1-000 Ski Doo racers can use Polaris valve spring.

- b. Arctic Cat 120 racers can upgrade to the 120 SnoPro kit consisting of valve springs and cam The kit must be used in its entirety.
- c. 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.
13. Polaris part #0681-545 valve guide can be used on the Arctic Cat 120. Valve guide may be shortened to the valve guide specifics of a Suzuki engine only. A Honda GX120 engine used in production of 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.
14. Must have a working tether.
15. OEM headlight for the model.
16. Must have a taillight that is bright or brighter than OEM. A visual check can be taken at engine idle.
17. No modifications are allowed to the ignition and generating systems.

#### DRIVE

1. Brake must be in working condition.
2. An aftermarket clutch of the same basic centrifugal design is allowed however Disc style drive clutches are not legal because they are not the same centrifugal design. (No variable ratio systems allowed.)
3. Stock drive clutch engagement must be workable condition. The Brake band may be changed to fit clutch.
4. No belt drives allowed.
5. Chain guard must be in correct location.
6. Sprocket ratio changes may be required by circuits to equalize performance between the various models.
7. 120 Sno X class Polaris gearing 420 ratio which is Stock for the sled. All Cat, Yam and Ski doo allowed to run 410 gear ratios. This can be achieved with #35 chain or #40/420 chain, tooth count on sprockets must equal ratio required.
8. Chain tensioner may be replaced with commercially available aftermarket tensioner.
9. Number 40/420 Drive chains allowed. Gearing Info for #35 chain and Sprockets 4.10 ratio for Arctic Cat, Yamaha, and Skidoo 120 and 4.20 ratio on Polaris 120 cannot be achieved with #35 chain sprocket combinations. Listed are the only legal #35 chain sprockets combinations. (All Brands in competition) 4.10 ratio will be 12- 50, 13-54, 14-58 4.20 ratio will be 12-51, 13-55 Or go to OEM chain)

#### SKI SUSPENSION & STEERING

1. Front suspension must be OEM for the model and remain in the stock location of that exact race sled.
2. Ski widening devices is not allowed in Stock classes unless if it is provided as OEM and properly filed.
3. Suspension travel may be limited by means of tie down only and must be maintained. No rigid suspensions allowed.
4. The rubber front suspension pucks can be modified on a Ski-Doo Mini Z .
5. The handlebars need to be intact. A commercially available handlebar is allowed. Handlebars perhaps can be altered to fit the driver. Open ends must be capped with rubber. Handlebars must be padded. Column or post must remain in its OEM position. Grips are allowed to be modified or replaced.

#### SKIS & SKI RUNNERS

1. Ski must be OEM or that of commercially available.

#### TRACK SUSPENSION

1. The complete suspension and model suspension mounting points must be used as furnished and filed by the manufacturer OEM for the model.

2. Seals may be removed from bearings in bogie wheels, rear idler wheels and/or rear idler sprockets.
3. Commercially usable 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.
5. Sno-cross and other rough terrain races – Stock 120/4 stroke rules apply with the exception that commercially available OEM or aftermarket shocks and springs allowed in the rear only.
6. A shock upgrade kit for the rear suspension is allowed.

#### TRACK & TRACTION

1. Any commercially available molded rubber track, Track clips (guide clips) and hyfax is allowed. The track must fit within frame and suspension without modification to the frame, or suspension. Track drivers matching the pitch of the track may be used. Track must be used as produced by the molder.
2. The OEM fixed upper carrier idlers can be reduced in dimension by 3/8 (.375) from the prototype for the model filed spec.

#### Improved Stock 120

Ages 6-12

1. Same rules as Stock 120 except for stated below:
  - a. Gear Ratio changing is allowed
  - b. The clutch can be replaced with an aftermarket clutch of the same basic centrifugal design. Disc Style Drive Clutches are not allowed (they are not of the same centrifugal design)
  - c. Brake band can be changed to fit on the clutch.
  - d. Variable ratio systems are not allowed
  - e. A 35# chain can be used to all of the models.

#### SEMI PRO 206 AND PRO 206

##### SEMI PRO 206

Ages 6-10

Must Run a green Slide  
Carb Lock required  
Open Gearing  
Stock 120 Drive Rules apply  
10/32 Gear Sets are allowed  
Drive Shaft has to be the same material and the bearing dimensions as OEM

##### PRO 206

Ages 7-12

After market clutch is allowed with the same centrifugal design. Disc style drive clutches are not allowed.  
Brake band can be changed to fit clutch  
Gearing Ratio can be changed  
A 35# chain can be used

## SLED SET UP RULES

Stock Chassis Sled – all Chassis rules are the same at the Stock 120 Class

Externally adjustable main jets allowed.

Must have the stock number of driver teeth.

Commercial Available Running Boards allowed.

## ENGINE

[Briggs-2023-206-Rules\\_US\\_Final.pdf \(briggsracing.com\)](#)

## SKI SUSPENSION AND STEERING

Aftermarket Shocks and Skis are allowed.

### **Champ**

Ages 7-12

Champ 120 and 206

## ENGINE

1. Any OEM 120 engine allowed. Modification and/or replacement of parts is limited to items listed in this section.

2. Modification or change from OEM of Engine components is allowed.

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.

i. 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 can be modified but must maintain stock thickness dimension.

l. Rocker Arm Stud

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 be always in place during operation. It must cover clutches, gears, belts, chains, starter cups, and any other rotating components.
3. Brakes must be always 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)

#### SKIS & SKI RUNNERS

1. Ski must be OEM or that of commercially available.

#### TRACK SUSPENSION

1. Track suspension can be altered, relocated, or replaced. Structural integrity of the suspension 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 attached within the restrictions of the tunnel.
4. Slide rail lubrication systems may be allowed.
5. Track must conform to the Stock Class Rules.

#### FRAME AND BODY

1. Snowmobile length must not be greater than the 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 the ground with driver sitting on the sled.
5. Belly pan and hood are required parts and can be replaced.
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 changed using aluminum material and 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. The lighting coil may be removed.
2. Taillight must be on while on the race track, whether the engine is running or not.

#### **Outlaw**

Ages 7-14

206 Briggs Open Chassis or any 212 cc 4 Stroke  
120s or 200s  
Fully Modified  
2 Strokes are not allowed  
No NOS

#### **200 STOCK 5-7, 200 STOCK 8-10, 200 STOCK A, B, C, 200 Girls**

##### **200 Girls**

Any Girl Rider

##### **200 Stock 5-7**

5-7 Year Old

##### **200 Stock 8-10**

8-10 Year Old

##### **200 Stock A**

Advanced Riders

##### **200 Stock B**

Moderate Riders

If a Rider Dominates this class they will be asked to move up

If after two years the rider has been in the top 3 points in B class, the rider must advance to A class. If a rider gets first place 3 times and 5 podiums combined (including first place) they will have to move up into the next class - half of their points will follow them into the next class. Riders will NOT get moved up on the last 2 races of the year.

## 200 Stock C

### Beginners

If a Rider Dominates this class – they will be asked to move up

If after two years the rider has been in the top 3 points in C class, the rider must advance to B class. If a rider gets first place 3 times and 5 podiums combined (including first place) they will have to move up into the next class - half of their points will follow them into the next class. Riders will NOT get moved up on the last 2 races of the year.

### SLED SET UP

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.

### 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, tampered with or enlarged from the engine manufacturer's original stock specifications or can additional components be inserted to the engine
3. Maximum cylinder bore for wear or cylinder repair cannot go beyond .020 inches (.50MM)
4. Stock OEM Pistons up .020 (.50MM) Only are granted for replacement.
5. Blueprinting of engines or removal of material is not 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 have to be OEM stock. Sparkplugs may not be machined to sit 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. Wrapping of the pipe is not allowed.

### DRIVE

1. Brake must be always functional and operating.
2. Stock drive clutch engagement must be maintained. OEM drive clutch rollers and spring must be stock, with no alterations. Driven clutch spring and helix must be OEM. Stock drive clutch engagement must be maintained. OEM drive clutch rollers must be stock, with no alterations. 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. All guards and shields must be in place.
4. 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. Not allowed to widen skis unless furnished as OEM and properly filed.
4. Not allowed to alter suspension travel.
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. The 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 # 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.
4. Carbide wear bars may be added.

#### TRACK SUSPENSION

1. The complete suspension must be used as provided and filed by the manufacturer. Shocks and 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 modified.

#### TRACK & TRACTION

1. OEM track must be used as manufactured.
2. No carbon fiber backers or titanium traction products allowed.
3. Tunnel protectors, oval applications slide lubers and track clips may be added.

#### IGNITION & ELECTRICAL

1. Must have a working tether.
2. OEM headlight for the model.
3. Must have a taillight that is bright or brighter than OEM. A visual check can be taken at engine idle.
4. No modifications are allowed to the ignition and generating systems.

#### FRAME & BODY

1. The hood must be OEM and no modifications can be made.
2. Windshield may be removed, modified, or replaced. Windshield must have safety trim.
3. All sharp edges must be cushioned.
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. Running board reinforcement kit or complete running board kit is allowed. The kit must be commercially available. No one off repairs allowed.

# SNOCROSS BIG SLED RULES

**(DO NOT NEED A DATA LOGGER)**

## **14-17 Juniors, Junior A, Womens, Sport, PRO 30**

### **14-17 Juniors**

14-17 Year Olds

### **Junior A**

Experienced Riders

For minors – must have advanced into this class from B+ OR have experience in riding the Sport Lite Class at the National ISOC circuit

### **Sport**

For riders 18 and older or those of the same level as Junior A or advanced.

### **Womens**

14 years and older

### **Pro 30**

Any Rider 30 or older

### **SLED SET UP**

1. No change or modification is allowed unless specially allowed under the rules. If the rules don't specifically allow a change or modification, it will be assumed that the change or modification isn't allowed.
2. Snowmobiles must have original OEM engine, hood, intake, exhaust, frame, suspension and drive. These must be OEM for the model and year or OEM replacement parts that could supersede the original OEM part.
3. 600 engine limitations for 2 stoke models:
  - a. 600 CC Maximum displacement
  - b. 2 Cylinders
  - c. 6.8:1+.02 Maximum effective compression ratio
  - d. 40 mm Maximum Carb size
  - e. Maximum carburetor bore is 44mm and Maximum EFI throttle body bore is 48mm

### **ENGINE**

1. The engine must have originated from a stock qualified, OEM produced snowmobile.
2. In stock and stock-based classes, coolant thermostats, notwithstanding of site in the cooling system, may be ran as produced, amended to alternate temperature settings, or completely eliminated. If eliminated 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. OEM for the model exhaust system must remain as produced by the manufacturer and must be fully functional.
6. OEM carburetor slide valves and replacement jet components without modification will be allowed. Modifications to carburetor body will not be allowed.
7. The throttle must have an adequate return spring. The throttle must be a right mechanical thumb mechanism, which must be located on the rear side (toward the rear of the snowmobile) of the right-hand handlebar. Twist grip throttles not allowed.
8. No component of the engine (included head, valves, and cam) may be altered, changed, tampered with or enlarged from the engine manufacturer's original stock specifications or can additional components be inserted to the engine. Blueprinting of engines or removal of material is not allowed. This is to include polishing, port matching, deburring, glass or sand blasting surfaces or material removal for engine balancing or other reasons.
9. Maximum cylinder overbore for wear or cylinder repair cannot exceed .20 inches.
10. Stock OEM model pistons are only available for replacement.
11. The throttle lever and throttle lever assembly may be modified. The OEM position on the right hand handlebar needs to be maintained and the throttle lever must be thumb operated with a direct mechanical mechanism to the engine.
12. Pressure charging is not allowed.
13. The engine air intake system is to include any: cowl vents, airbox, noise reducing foam (cowl vents & airbox), carb boots, carburetors, clamps, rotary valves, reed valves, carburetor flanges, and oil injection nozzles that are original OEM equipment for that make and model. No changes or modifications can be made to any part of the engine air intake system or mounting locations.
14. Deep snow cover/foam must remain in place.
15. Engine must remain in OEM for the model mounting location and engine mounts must be OEM for the model. Additional engine torque limiters (including torque stops, torque bumpers) is not allowed.
16. Pressurization of fuel tanks or lines are not allowed.
17. Additional engine cooling systems are not allowed.
18. Spark plugs do not have to be OEM.
19. The exhaust system is to include any header flange or pipe, Y pipe, expansion chamber, pulse charger, muffler, and tail pipe that are original OEM equipment for that make and model. No alterations to these components are allowed.
21. 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.

#### DRIVE

1. Brakes shall always be working. Brake lever must remain on the left and on the front side of handlebar.
2. The master cylinder, caliper and disk assembly must be commercially available.
3. Belt guards are mandatory.
4. Clutch cover must be in tack.
- 5.. Must have OEM clutches. No machining or grinding of clutches are allowed.
6. Any springs, weights or ramps may be used.
7. Secondary clutch cams maybe cut to any angle. Billet helixes allowed.
8. Drive belts don't have to be OEM.
9. Chain case must be OEM for the model and be in the original location.
10. Brake handle must be in OEM location on the left side of the handlebar.
11. Existing vents may be used to direct cooling to brake components. The brake disc shall not extend past the body work.
12. An auxiliary brake cooling fan of up to 4 inches diameter is allowed.

13. Must have properly constructed ducting, hose routing and wiring.
14. All venting is for brake cooling purposes only.

#### SKI SUSPENSION AND STEERING

1. All handlebar ends must be capped.
2. Maximum ski stance is 43.5 inches measured under the spindle.
3. Carbide runner must be centered on the ski board.
4. No replacement of material allowed on front suspension. Must remain in original mounting location in both bulkhead and spindle housing.
5. Reinforcement of components is allowed by welding or bracing. Structural integrity must be maintained.
6. Spindles may not be shortened.
7. Any spring may be used on the suspension. May be shortened or heated. Springs may be removed and replaced with another type of cushion device.
8. Any shock allowed. Replacement may be shorter than OEM for the model shock but may not be longer.
9. 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.
10. Commercially available handlebar risers, vibration mounts and relocation mounts allowed. Handguards allowed.

#### SKIS & SKI RUNNERS

1. Except where otherwise specified, one cutting edge (steering edge) permitted 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.
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. Plastic ski loops must be affixed with steel bolts.
4. 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.
5. No Metal Ski Loops
7. 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).
8. No part of the ski may contact the body or suspension through the ski's normal range of travel and/or movement.
9. Ski Loop must be in working condition.
10. Aftermarket skis are allowed.
11. May have ski reinforcement on the topside.
12. Ski runner must be commercially available.
13. Minimum cutting angle is 60 degrees and only one cutting edge is allowed. Gridding or modification of host bar or cutting edge not allowed.
14. Host bar may be any shape that conforms to rules aside from cutting edge and groove for affixing cutting material, all edges must have a minimum radius of 45 degrees chamfer of 1/16 inch. Shape of host bar and cutting edge must limit penetration to 3/16 inch. Shoulder required adjacent to cutting

edge if host bar is not round or oval. The minimum radius of round or oval host bar adjacent to cutting edge is 7/32 (0.219) inch.

15. Maximum height and width is 5/8 inch. The minimum width adjacent to cutting edge is 3/8 inch for host bar, which is not oval or round. Ski runners must fit within 5/8-inch square.

16. Ski Turning Plates may be used but must fit inside the guidelines:

- a. Plate can be no longer than 18”.
- b. Plate can be no higher than 4”.
- c. Plate may not extend past side of ski.
- d. Only UHMW material may be used.
- e. Must be commercially available.

#### TRACK SUSPENSION

1. A replacement of any OEM tyle slide rail hyfax may be used.
2. Slide rail hyfax can be drilled.
3. Suspension must be OEM for make and model.
4. Reinforcement components are allowed.
5. Bending rails or shortening isn't allowed.
6. Any Shock allowed; replacement may be shorter but not longer.
7. Any springs are allowed; springs may be shortened or heated.

#### TRACK AND TRACTION

1. A 1/8-inch maximum variance in the minimum track width requirement is allowed. Not allowed to cut, notch or trim the track.
2. Track clips and guide clips may be exchanged 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 keep the original number of clips with which it was made.
3. Tracks may not be reversed.
4. The maximum track dimensions are 138 inches long and 15 inches wide. 1.75 inches lug height.
5. Track is limited to 108 60-degree unsharpened, unmodified, single point studs. Every stud must have a backer plate. The maximum of 3/8 inch above the nearest leading lug. Minimum angle 60 degree. NO sharpening, modification or machining allowed for studs- studs must be commercially available.
6. All studs must be in the center of the track, inside the edges of the two side runners/hyfax. Minimum of 3.75 inches from the edge of the track.
7. Stud backing plates max side is 2 inches wide by 2.75 inches long by 1.25 high. This cannot exceed the height of the lug. The backing plates must be commercially available.
8. All the studs must be aligned with the leading lug in front. Not more than 1.25 inches behind the leading lug. The 3/8-inch maximum penetration will be measured off the top of the leading lug.
9. Track must be OEM to the model.
10. No cleats or partial cleats may be added.

#### FRAME AND BODY

1. A rear snow flap of sufficient material must be installed in a permanent manner and be held down (restrained from rearward movement) to restrain traction components from being thrown from the track. 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 1 inch on each side.
3. The rearward movement of the snow flap must be confined 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.
5. Seats 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.
6. Unless otherwise specified, tunnel protective strips may be added to the underside of tunnel to protect the tunnel and cooling system from being damaged by traction products.
7. Snow flaps cannot be painted orange.
8. Dolled foot traction are allowed on the running boards, on the flat of the running board the traction devises must be no longer than a ½ inch tall. On the top of the rolled edge, the traction device must be no longer than ¼ inch tall, traction device cannot be taller than ¼ inch by the side of the board.
9. Foot stirrups and tunnel traction devices are allowed.
10. All chassis must have OEM tags and/or serial numbers on the frame.
11. Allowed to reinforce by welding and/or bracing.
12. Taking away of any material from total snowmobile by means of heat, acid, drilling, grinding, sandblasting, peening, substitution, or total removal is not allowed.
13. External vents/scoops must be OEM for the model. Vents need to be covered or closed. No additional vents or scoops may be added for the purpose of engine cooling, air induction to engine carb or throttle body. Any additional scoop or vent that is deemed by the technical inspector to be performance enhancing will be required to be removed or defeated.
14. Seat must remain OEM for the model. Padding can be added or subtracted to improve driver comfort and safety. The Seat must remain in OEM for the model location. The seat must be upholstered.
15. Not allowed to remove Insulation.
16. Skid plates may be added for protection of snowmobile bottoms. Skid plates must be securely fastened.
17. Additional plate material may be added to the tunnel at the suspension mounting holes
- 18 Tunnel protective wear strips may be added, removed, or altered. Liquid spray coating allowed.
19. Front and rear bumpers may be added, removed, or relocated. Bumpers must not be a safety hazard.
20. Fuel tank must be OEM as supplied with the snowmobile or opaque (translucent) as supplied by the OEM manufacturer. The translucent tank must be of equal dimensions and capacity to that supplied by the original OEM manufacturer. OEM fuel tank is the only tank that can be used to supply fuel to the engine.
21. Reinforcement of chassis, skid frame, (slide rail) tunnel, front suspension, rear suspension, must only be done with like material to original component. Only exception is aluminum can be reinforced with steel. No carbon fiber or titanium reinforcement allowed.

#### IGNITION & ELECTRICAL

1. All machines must have a working tether / kill switch. The tether must be attached to the rider during all operations of the snowmobile. Track officials will be spot-checking riders to prove that they have a properly working tether / kill switch.
2. The tether cord must be securely fastened to the driver. It is required that the tether cord mounting placement is to be on the jacket or upper body protection in a reinforced area. A race or tech director may disapprove of the attachment method at any time.
3. Maximum tether cord length will be 4 feet. Tether cord verification will be determined at tether cord's fully extended length.
4. The tether cord will be strongly fastened to the driver. Alligator clips are not allowed.
5. The tether switch will be securely mounted in a location on the snowmobile except for the handlebars or steering column.
6. All snowmobiles must have a handlebar mounted button (on/off) kill switch on the right side within thumb reach (this is in addition to your tether switch).



7. Wet Cell batteries are not allowed.
8. Taillight must always be functioning.
9. Data acquisition systems and data acquisition are allowed.
10. Ignition must be OEM for the year and model. CDI/ECU module may be reprogrammed.
11. No aftermarket device allowed which interrupts ignition or controls the brake system for the purpose of launch control or traction control unless OEM for the model.
12. Gauges/Instruments may not be removed. Instrumentation may be added but must not provide a safety hazard. Gauges may be disconnected but not removed.
13. Head, tail, and brake lights must be original OEM equipment. Must remain in original location.

#### VENTING

1. Manufacturers will be permitted to devise vent kits to aid in controlling under cab heat, air movement and improve safety in the areas affected by the beyond design limits operating temperatures encountered in competition.
  1. You are allowed to have an additional 36 square inches (area) of venting.
  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 regulated, 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 the 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 manufacturer can inform of this process by electronic communication.

#### **Junior B +**

Riders with a couple years of racing big sleds in their background.

Same Rules as Above EXCEPT FOR state below:

- a. Half Throttle Block

#### **8-10 Juniors, 11-13 Juniors, Junior B, Junior C, Girls**

Same Rules as Above EXCEPT FOR state below:

- a. Half Throttle Block
- b. RPM limited 6500
- c. 4000 Engagement
- d. Exhaust Valves to be blocked in the shut position.
- e. Running board risers can be used.

#### **8-10 Juniors**

8-10 Year Old

**11-13 Juniors**

11-13 Year Old

**Junior B**

RIDERS WITH A COUPLE YEARS OF RACING BIG SLEDS IN THEIR BACKGROUND

If after two years the rider has been in the top 3 points in B class, the rider must advance to B+ class.

If a rider gets first place 3 times and 5 podiums combined (including first place) they will have to move up into the next class - half of their points will follow them into the next class. Riders will NOT get moved up on the last 2 races of the year.

**JUNIOR C**

BEGINNER RIDERS ON A BIG SLED ONLY

If after two years the rider has been in the top 3 points in C class, the rider must advance to B class.

If a rider gets first place 3 times and 5 podiums combined (including first place) they will have to move up into the next class - half of their points will follow them into the next class. Riders will NOT get moved up on the last 2 races of the year.

**Girls**

8-13 Year Old

Young girls who are starting out on a Big Sled

