

2024 Mountain Man Hillclimb Race Rulebook



Introduction

The Valdez Snowmachine Club (VSC) racing rulebook was developed for both Racers and Race Directors as a reference tool. This document should be used as a supplement to the International Snowmobile Racing (ISR) Rules in determining specific racing rules and regulations. The VSC and volunteers are in no way liable or accountable for the safety or serviceability of drivers gear or equipment.

All VSC events are intended to benefit the community, members, and sport. The racing events are structured to encourage and foster safe competitive racing. It is expected that any competitor and/or crew member will engage themselves in good sportsmanship behavior. Any competitor and/or crew member found to be not in compliance with the rules herein, or not promoting good sportsmanship, are subject to disqualification or other disciplinary action as determined by a VSC race director.

General

Club

Club refers to the Valdez Snowmachine Club (VCS). The VSC is a non-profit corporation composed of a body of paying members that is managed by the Board of Directors. The Board of Directors are unpaid volunteers elected by VSC members.

1. The club may compensate any service provider (announcer, heavy equipment operator, vendor, photographer, etc.) as determined appropriate by the VSC Board of Directors.

Race Director

The Club shall appoint a Race Director for the event. The Race Director is ultimately responsible for the events timeliness, safety, and field interpretations of the rules.

1. The Race Director should be familiar with the VSC and the ISR rulebook.
2. The Race Director is responsible for coordinating a pre-race inspection of driver's safety equipment and machine, prior to the start of the event, to verify that they are in compliance with the applicable standards and classes.
3. The Race Director shall host a racers meeting prior to the start of the event. During the racers meeting the following should be discussed.
 - a. Daily Weather Conditions
 - b. Pit Areas
 - c. Race Times and Event Flow
 - d. Course Hazards both Unmarked and Marked
 - e. Driver and Crew Expectations and Deliverables

Driver

Driver refers to the individual that operates the snowmachine. The Driver is responsible for the actions of themselves and their Crew. It is the driver's responsibility to comply with the rules and regulations herein. A Driver found not to be following the rules is subject to disqualification or other disciplinary actions at the discretion of the Race Director.

1. To participate in a VSC sanctioned event the Driver does not need to be a VSC member.
2. Minimum age for Pro/Trophy Classes is 18 years old without Race Director approval.
3. If the Driver is under the age of 18, the Driver shall have a consent wavier signed by a legal guardian prior to the start of the event.

4. Minimum age for is 18 years old without Race Director Approval.
5. It is expected that Driver will conduct themselves in a professional and sportsman like manner.
6. The Driver may not be in possession or under the influence of alcohol or drugs before or during a race.
7. Helmet shall be worn any time a snowmachine is in motion.

Flags

1. Black – The rider is disqualified and the rider is to report to the race director, or closest race official for additional instructions.
2. Checkered – Indicates that the race has completed and the driver is to return to the pits.
3. Green – Signifies that the course is clear and the race may start.
4. Yellow Flag – Identifies that a hazard is ahead
5. Red Flag – Signifies that the race will stop immediately.
6. Red Gate – Gate to passed with Right shoulder.
7. Blue Gate – Gate to passed with Left shoulder.

Required Safety Equipment & Apparel

The driver is responsible for donning the safety equipment and apparel listed below prior to the start of the event. The equipment shall be inspected prior to use and be fit for purpose.

1. Please refer to the ISR racing handbook for more specific guidance on safety gear.

Driver

1. Full face helmet
2. Goggles or Face Shield
3. Chest protector
4. Knee & Shin guards
5. Gloves
6. Boots
7. Avalanche Beacon

Equipment

1. A working tether
 - a. The tether shall be fastened to the driver any time the engine is running.
2. A working brake system and brake light
3. Throttle must have adequate spring return

Registration

All drivers are required to complete and submit the appropriate event registration worksheet and payment prior to the start of the event.

Awards

The Valdez Snowmachine Club will host an award ceremony where the winnings / purse will be disbursed. Drivers are not required to attend the award ceremony, but are highly encouraged to attend.

Time

Racers will be scored based on the total elapsed duration from the start line to the finish line, plus any penalties.

1. The score will be expressed in units of time; Hours, Minutes, and Seconds. (##:##:##.##)
2. Time will be measured by transit system and/or visual observations.
3. The rider with the shortest elapsed time in the division and class will win the class and automatically be entered into the King of the Hill Class.
 - a. In the event of a tie, the riders total time from each run shall be combined and the rider with the shortest combined total elapsed time shall win the class.
4. In the event that the Rider is disconnected from the sled or that the Rider does not travel through the finish gate, the Rider will be given a, "High Mark" location.
 - a. If all Riders in a class do not complete the course, the Rider with the furthest, "High Mark" shall be the winner of the class.

Divisions

The classes below require a minimum of three entrants to be deemed a complete class. Only complete classes are eligible for purse monies and Juniors & Trophy Classes are award only.

The classes below are the standard classes that will be ran. With three or more sleds, additional classes can be created at the discretion of the race director.

Mountian Drag

Mountain Drag is a head-to-head race, double elimination style, and will not be timed.

1. Mountian Drag class requirements shall mirror the requirements listed below.

Hillcross

Hillcross is a head-to-head race, double elimination style, and will not be timed. This event is co-hosted with AMMC.

1. AMMC will coordinate / direct the Hillcross.
2. The VCS will collect / distribute purse monies and awards.
3. The driver is responsible for displaying their race numbers on the riders back and on both sides of the snowmachine.
 - a) The number shall be a minimum of 6-inches in height and it is recommended that the numbers be as large as possible.
 - b) These race numbers shall be displayed on contrasting colors.
 - c) If a driver does not have a race number they can be assigned one by the Club or a Race Director.
 - d) In the event that two riders register with the same race number the less tenured rider shall change their number.
4. Hillcross class requirements shall mirror the requirements listed below with the following exceptions:
 - a) Any commercially available rear suspension rail may be used in all classes.
 - b) Any commercially available exhaust can may be used in all classes.
 - c) A full length snow flap is required whenever the racer has studs or screws in the track.

Trophy / Jrs

1. Drivers will not be eligible to race the Trophy Class if they have previously placed 1st or 2nd in the Trophy Class.

Masters

1. Drivers must be a minimum of 40 years old to complete in the Master Class.

Over the Hill

1. Drivers must be a minimum of 50 years old to complete in the Over the Hill Class.

King Runs

All Class winners will perform an additional run on the course to determine the class (Stock, Improved, Masters, or Modified) King. The shortest elapsed time will determine the King of the Hill.

Classes

The snowmachine shall be, "As provided by the manufacture" (Engine, Chassis, Suspension, Skis, etc.) unless described below. Ergonomic type modifications are allowed in all classes (any handlebar, grips, riser, etc.). The hood and plastics may be painted or wrapped any color. Traction screws are allowed in all classes.

1. If your snowmachine does not fit the descriptions below, please contact the VSC or race director for additional guidance prior to the event.
2. Field determinations will be determined by the VSC and the guidance provided in the most recent revision of the ISR.
3. Each participant in their respective class shall receive two runs.
 1. The VSC does reserve the right to reduce the number of runs during poor weather or classes with more than 30 entrants.
4. The top finishers in each class will undergo a mandatory tech inspection after the completion of the class.

Marty Mobley Classic (Vintage)

1. The snowmachine chassis shall have been manufactured prior to 2003.
2. This class is "Open - Run What You Brung." Any and all modifications allowed.

Tired Iron

1. The snowmachine chassis shall have been manufactured 2009 and older
2. This class is "Open - Run What You Brung." Any and all modifications allowed.

Stock Class (0-600cc, 0-700cc, 0-900cc, & Factory Turbo)

1. The snowmachine shall be as provided by the manufacture with the following exceptions:
 - a) Material may be added to OEM chassis components preserve structural integrity.
 - b) No OEM component may be removed from the sled. (ie exhaust valve actuator, oil tank, etc.)
 - c) Any gear ratio may be used in a chaincase equipped snowmachine. Any chain, any gear, and the parts shall be commercially available.
 - d) Any commercially available weights, ramps, and springs may be used. No modifications to the clutches to make these components fit.
 - e) Any ECU tune may be used.
 - f) Any shock absorbers filed by the same manufacturer for the model may be used.
 - g) The rear suspension may be relocated to any location designated by the manufacture.
 - a) Designation is determined by a predrilled mounting location on the backer plate.
 - h) Additional low snow wheels may be added. Wheels shall be the same sized as OEM.
 - i) The rear axle may be removed and replaced. Additional rear wheels may be added. Wheels shall be the same sized as OEM.

Improved Class (0-600cc, 0-700cc, 0-900cc, & 1000cc)

1. The snowmachine shall be as described in the Stock Class with the following exceptions:
 - a) The engine shall appear to be stock but the internal components maybe modified. This includes, but is not limited, material removal from the crankshaft, crankcase, cylinders, and cylinder head.
 1. The engine displacement may be changed and shall not exceed the maximum displacement of the class.
 2. The airbox maybe modified, removed, or replaced with any commercially available airbox or filter. No forced induction.
 - b) Any commercially available cylinder head maybe used.
 - c) Any commercially available exhaust system may be used.
 - d) Any commercially available intake reed may be used.
 - e) Venting / exhausting of under hood temperatures allowed.
 - f) Any commercially available fuel controller may be used.
 - g) Any commercially available a-arms, shock absorbers, springs, or rails may be used.
 - h) Any commercially available running boards may be used.
 - i) Any commercially available ski may be used.

Modified Class (0-600cc, 0-700cc, 0-900cc, & Open)

1. Any snowmachine with any engine may be used. The snowmachine shall have a minimum weight of 250lbs and the displacement of the engine shall not exceed the maximum displacement for the class. Forced induction systems allowed. Traction cleats allowed.
 - a) The snowmachine chassis shall be verified as structurally sound by the race director or designee.
 - b) Snowmachines in the modified class are not required to have a functioning taillight.
 - c) The clutches and drive belt shall have a cover over them.
 - d) Any drive system allowed.
 - e) Functioning exhaust system with silencers is required.

Snowbike Class

The Snowbike Stock Class shall be naturally aspirated (No Nitrous). All other modifications allowed.

Snowbike Modified Class

The snowbike class is, "Run what you brung." Any and all modifications are allowed.

Womens Class

The Womens Throphy and Womens Pro classes are, "Run what you brung." Any and all modifications are allowed.

1. Womens Pro will run the entire race course.

120 Stock Class

1. Engine shall be as provided by the manufacture and is limited to a maximum displacement of 120cc with the following exceptions:
 - a. Any governor spring allowed. The governing linkage shall remain in place and be functional.
 - b. Ski-doo and Arctic Cat racers may change the valve springs to equalize performance of the other manufactures.
2. The gear ratio and chain shall be as provided by the manufacture with the following exceptions:
 - a. Any commercially available chain tensioner may be used.

3. Any commercially available ski may be used. Maximum ski length 20”.

120 Improved Stock Class

1. Engine shall be as provided by the manufacture and is limited to a maximum displacement of 120cc with the following exceptions:
 - a. Any governor spring allowed. The governing linkage may be removed.
 - b. Any commercially available clutch may be used.
2. The snowmachine drive system shall be as provided by the manufacture with the following exceptions:
 - a. Any commercially available chain tensioner may be used.
 - b. Any gear ratio may be used. Chain may be changed to #35.
3. Any commercially available shocks may be used. Rear suspension shock kit allowed.

120 Mod Class

1. Any commercially available engine with a displacement of 120cc or less may be used.
2. Any exhaust system may be used. Outlet pipe shall point downward and may not protrude beyond machine width.
3. Any commercially available clutch or CVT system may be used.
4. Any commercially available suspension may be used. Maximum ski stance is limited to 34”.
5. Any commercially available ski may be used. Maximum ski length 20”.
6. Traction screws may be used in the track. No studs.

200 Stock Class

1. Engine shall be as provided by the manufacture, is limited to a maximum displacement of 200cc, and shall not rev greater than 6000rpm.
 - a. Models that feature electric start, may have the starter and on-board battery removed.
2. Any commercially available ski may be used. Maximum ski length 20”.

200 Improved Class

1. Engine shall be as provided by the manufacture, is limited to a maximum displacement of 200cc, and shall not rev greater than 6000rpm.

Models that feature electric start, may have the starter and on-board battery removed.
2. Any gear ratio may be used in a chaincase equipped snowmachine. Any chain, any gear, and the parts shall be commercially available.
3. Any commercially available clutch weights and springs may be used. No modifications to the clutches to make these components fit. Secondary Helix shall remain stock.

200/206 Mod Class

1. Any commercially available engine with a displacement of 206cc or less may be used.
2. Any exhaust system may be used. Outlet pipe shall point downward and may not protrude beyond machine width.
3. Any commercially available clutch or CVT system may be used.
4. Any commercially available suspension may be used. Maximum ski stance is limited to 34”.
5. Traction screws may be used in the track. No studs.

Jr Fan Class

1. Fan-cooled engines only with a displacement of 600cc or less.
 - a. Arctic Cat Blast 400cc to race in Jr Fan Class.
2. Any commercially available ski may be used.

Transition Liquid Class

1. Sleds shall have a maximum displacement of 600cc.
2. Sleds shall have a maximum engagement of 4500rpm and maximum rpm of 6500.
3. A 50% throttle limiting device shall be installed on the right side of the handle bar controls.
4. Exhaust valves shall be blocked or secured in the closed position.
5. Any commercially available ski may be used.

50% Throttle Class (*Super Stock ISR without studs*)

1. Sleds shall have a maximum displacement of 600cc for two stokes and 1050cc for four stokes.
2. A 50% throttle limiting device shall be installed on the right side of the handle bar controls.
3. Any commercially available ski may be used.
4. Any commercially available shock may be used.

Junior Liquid Class

1. Sleds shall have a maximum displacement of 900cc. No forced Induction.

	Item	Stock	Improved	Mod
Engine	Cylinders & Crankcase	OEM	Stock Appearance – Port / Polish okay May be raised (≤0.5")	Any- may not exceed displacement for class
	Head	OEM	CA	Any
	Piston / Crank	OEM	CA	Any
	Exhaust	OEM	CA	Any
	Carburetor / Throttle Bodies	OEM	OEM	Any
	Air Box	OEM	Any or Removed	Any, Removed, or Forced induction
	Exhaust	OEM	CA	Any
Skis & Runners	Skis	OEM	CA	Any
	Runner	0.375" x 10", ≥60°	0.375" x 10", ≥60°	0.375" x 10", ≥60°
	Shocks	OEM	CA	Any
Drive	Primary Clutch	OEM	CA	Any – Must be Enclosed
	Secondary Clutch	OEM	CA	
	Gears / Chain	Any	Any	Any
	Belt	CA	Any	Any
	Drive Shaft / Jackshaft	OEM	CA	Any
	Brake	OEM	Any Metallic CA	Any Metallic or Carbon Fiber Disc
Track & Traction	Track	OEM	CA	Any
	Rail Extensions	NO	CA	Any
	Rails	OEM	CA	Any
	Screws	YES	YES	YES
	Cleats	NO	NO	YES
	Studs	NO	NO	NO
Frame & Body	Tunnel	OEM	CA	Must be Structurally Sound
	Hood	OEM	OEM	Any or None
	Side Panels	OEM	OEM	Any or None
	Venting	OEM	CA	Any

*it is acceptable to structurally reinforce OEM components on a stock snowmachine

OEM – Original Equipment Manufacture

CA – Commercially Available