

# COMPETITION WATERCROSS

## CLASSES

SEE AFFILIATE SECTIONS BELOW FOR CLASS STRUCTURE.

Individual circuits will have additional rules and regulations for registration, conduct of races, violations, discipline and appeals. Refer to the sanctioning body for such information.

All ISR affiliated Water cross events must be conducted according to the GENERAL RULES in this chapter and in the GENERAL RULES AND REGULATIONS section.

### SPECIALTY CLASSES/SANCTIONS

1. A specialty class can be any snowmobile Water cross racing class or event that does not fall under any of the specific circuits on classes, but meets established safety standards, applicable laws and approved insurance coverage.
2. All special sanctions and specialty classes must be approved in writing by ISR and the rules committee before competition.

## GENERAL COMPETITION AND SAFETY RULES

### TESTING / PRACTICE

1. No testing allowed on racecourse or facility unless authorized by sanctioning body.

### DRIVER RULES

1. Drivers must be at least 14 years old to compete in regular senior classes.
2. USCG (or Canadian Equivalent) approved Personal Floatation Device required. Must be a bright color to contrast with water.
3. IWA - Personal Floatation Device must be approved for use at 100 mph or have four (4) one and one half (1 ½) inch straps.
4. Shoes, socks, long pants (no exposed skin below waist) and shirts, with sleeves that cover the elbows.
5. IWA - Motocross style pants are required in both Oval classes and in both Modified Drag classes.
6. **The helmet must be predominantly blaze or international orange in color. More than 50% of the rear portion of the helmet defined as from vertical centerline of helmet including the visor must be orange. A template measuring 2 inches by 3 inches placed anywhere on the helmet must contact orange color.**
7. Eye protection is required for all participants in the staging and starting line areas. It is recommended that all people in the pits wear eye protection at all times.
8. IWA - Race Director has the authority to disqualify any "sinker".
9. **A driver that refuses or forfeits technical inspection will be disqualified from the race, incur an additional one race**

suspension, and receive a \$100.00 fine. The driver must fulfill the race suspension, pay the fine, and pass a full machine tech before they will be allowed to compete again.

10. **Drivers are required to attend drivers meeting. (See regional rules for specific penalties and details)**

### FIRE EXTINGUISHER

1. **All entrants must have a working fire extinguisher in their pit area.**

### WARM UP SAFETY STANDS

1. Warm up stands that retain items that are thrown from a track will be mandatory. These stands will be securely placed at the rear of the tunnel opening within eighteen (18) inches of the track, and must be a minimum of two inches wider than the tunnel. These stands must be used whenever the rear of the machine is raised to clean out the track. The safety stand will be constructed of materials sufficient to retain items that may be discharged from the track. The shield must protect to within one inch from the ground, and must have side shields to prevent discharge to the side of the machine. The snowmobile should be on the stand whenever practical. When suspended on the stand the track must have two inches minimum ground clearance.

### STARTING LINE STANDS

1. There will be four stands constructed of material sufficient to retain items thrown from a track in the start/warm up area.
2. Driver has the responsibility to have starting line stand behind snowmobile prior to the race start.
3. Failure to comply with this rule will result in disciplinary action.

### RETRIEVAL ROPE AND BUOY

1. A marker buoy and tether rope are required. A minimum 20-foot length of 1/2-inch minimum diameter nylon rope must be attached to the buoy and the steering column. Required rope length may vary due to water depth.
2. Buoy must be "velcroed" to the snowmobile tunnel. No duct tape, etc.
3. IWA - Loss of buoy in Oval races may result in disqualification.

### FLOATATION

1. No floatation devices allowed except for boat cushion used as a seat and required marker buoy.

### ENGINE

1. Nitrous oxide, turbochargers, superchargers and pressurized fuel tanks are not allowed.
2. All snowmobiles must have silenced exhaust or exhaust canister that may not exceed six (6) inches from hood maximum and no more than the lowest point on the belly pan or ten (10) inches from running boards.

3. 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 handle bar. Throttle must be thumb operated. Twist grips not allowed. Water Cross exception: Any hand operated throttle positioned on the right-hand side handle bar allowed. No twist grips allowed.

### DRIVE

1. OEM or commercially available brake system. Brake must be functional.

### SKI SUSPENSION & STEERING

1. IWA - No rudders or any type of device that attaches to the snowmobile and rides in the water at any time will be allowed.
2. Handlebars must have handgrips that **cover and plug the ends.**

### SKIS & SKI RUNNERS

1. Ski loops must conform to ski rules in GENERAL COMPETITION RULES. No unpadded metal ski loops allowed.
2. IWA - Ski runners may be removed if ski design allows. If ski runners are used, they must be standard round bar type. Carbide runners allowed at the discretion of the technical director.

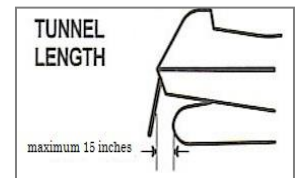
### TRACK & TRACTION

1. Track may be any commercially available, one piece molded rubber track.
2. No studs or traction devices allowed on the track.

### FRAME & BODY

1. The rear most part of the tunnel (excluding the rear lift bar) can extend no more than fifteen (15) inches from the back of the track. Measurement will be taken from a line perpendicular to the top of the tunnel (see illustration).

2. Tunnel extensions may not protrude lower than the running board.



3. No air foils - any type of device that attaches to the snowmobile with the primary function of altering the flow of air around the snowmobile.
4. No steering rudders allowed.
5. Any required additional weight must be permanently attached to the snowmobile in a secure manner.
6. A rear snow flap of sufficient material to retain items thrown from the track will be installed a permanent manner, and shall be retained in such a manner, as to contain all mud, rocks, water, etc. at all speeds.
7. The snow flap cannot be more than 15" from the rear of the track, and the rear bumper cannot be more than 4" from the snow flap.

## IWA CLASSES AND RULES

### REGIONAL RULES

#### GENERAL

1. A particular snowmobile can be entered only once in a particular class.
2. In the event of a sled breakdown or failure, drivers are NOT allowed to use a substitute snowmobile.

#### SAFETY INSPECTION

1. Snowmobiles must be safety inspected before entering competition or practice.
2. Snowmobiles will be checked for properly operating tether switch, brake, sharp edges, belt guard, ski tips, retrieval rope, and buoy. Personal safety equipment required for each driver, including but not limited to helmet and flotation device will also be inspected at this time.
3. Each snowmobile will be issued a verification sticker/decals before it is permitted to race.

#### FIRE EXTINGUISHER

1. Every pit must have a working fire extinguisher in the pit area in case of fire.

#### POINT SYSTEM

1. Regional groups may create points systems and methods of point calculation for their respective organizations.

#### DRIVERS MEETING

1. Roll call will be taken each race day. If a driver is not present during the drivers meeting he/she will be penalized with a delayed light in their first heat of the day.

### STOCK DRAG RACING RULES

In stock and stock based classes, no change or modification is allowed unless specifically allowed by these rules. If these rules do not specifically allow a change or modification, then it must be assumed that the change or modification is not allowed.

#### GENERAL

1. **Stock 0-600 cc**  
Stock exhaust, -aftermarket silencer allowed.
2. **Stock 601-800 cc**  
Stock exhaust-aftermarket silencer allowed.

**0-600 cc full mod snowmobile are allowed and must follow mod drag rules for snowmobile.**

#### Four Stroke 0-1200cc, Motor can be modified.

3. Belly pan style will follow 10 model year allowing any hood and belly pan allowed to compete in the 2015 race season.
4. Must be a full-bodied snowmobile.
5. The snowmobile must have original OEM for the model (or factory designated replacement) engine, frame and hood. Hood foam may be removed
6. The seat, gauges, fuel tank and air box may be removed. A new airbox may be fabricated but cannot pressurize the fuel system or force air in.
7. Any other chassis alterations, additions or removals that alter stock appearance are not allowed unless otherwise noted within these rules.
8. From Suspension needs to be stock mounting and stock spindle. (2013)

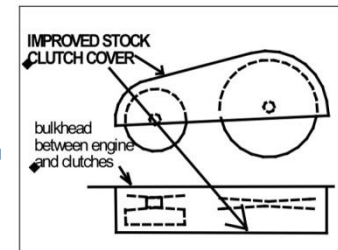
#### ENGINE

1. Engine components must remain OEM stock for the model.
2. Maximum cylinder overbore for wear cannot exceed .020" (1/2mm)
3. Aftermarket pistons, gaskets, and bearings are allowed. No lightweight pistons are allowed. No ceramic bearings unless OEM for the model.
4. Modifications to the oil injection system that are allowed include drilling of extra holes/passages in the crankcase for lubrication. Crankcase may also be drilled and tapped for adding drain valves
5. No blueprinting or machining allowed, all engine components must remain un-altered
6. Carburetors must be OEM for the model
7. Intake flanges and manifold must be OEM for the model.
8. Aftermarket reed valves, reed blocks, and rotary valves allowed.
9. Cooling systems must be operational and may contain disconnects for cool down. Additional coolers may be added.
10. All snowmobiles must have functionally silenced exhaust. Exhaust canister may not extend more than six inches from the hood or belly pan. Noise levels will be enforced. Repacking of exhaust canisters may be required on occasion.
11. Nitrous oxide, turbochargers, superchargers and pressurized fuel tanks are not allowed.
12. Aftermarket Piggyback or "Plug and Play" style ECM controllers are allowed for stock EFI models. (2012)
13. Allow change from electrical Power Valve Function to Mechanical Power Valve Function. (2013)

#### DRIVE

1. Any optional internal clutch tuning parts allowed including springs, weights and helix. Clutches may be trued and balanced.
2. Metal may be removed, but not added by welding to fly weights or ramps.
3. Drive belt does not have to be OEM.
4. After market Track drive sprockets/drivers are allowed.
5. Chain case must be OEM for the model and in OEM location. Any chains or sprockets allowed in the chain case.

6. Aftermarket steel replacement jackshafts and driveshafts are allowed. No titanium jackshafts or driveshafts allowed.
7. Aftermarket clutches and components are allowed.
8. The clutch cover must be separate of cowl configuration and cover clutch perimeter and faces down to center of clutch bolt or below. (see illustration) Must be .090 inch 6061T6 aluminum or equivalent steel material and the outer perimeter be covered with 6 inch belting Other clutching cover materials not allowed. If 0.125 aluminum or equivalent steel material is used, belting is recommended but not required. Snowmobile with removable side panels may bolt clutch cover to side panel to meet this requirement. (2013)



#### SKI SUSPENSION & STEERING

1. Ski suspension must be OEM type for the model unless otherwise noted.
2. Any shock absorbers and springs allowed.
3. Suspension travel may be limited with straps or chains, but must maintain two inches of travel. No locked suspensions allowed.
4. Sway bars may be removed or disconnected.
5. Handlebars may be modified. Any commercially available handlebars allowed. Ends must be plugged.
6. No rudders are allowed. A "rudder" is defined as: Any type of device that is attached to the snowmobile and rides in the water, to enhance steering of the snowmobile.
7. Ski suspension may be modified to narrow the suspension. No Titanium parts allowed

#### SKIS & SKI RUNNERS

1. Aftermarket skis allowed. Skis may be modified.
2. Two (2) standard round wear bars or none at all are allowed. Carbides may be allowed at the discretion of the technical inspector.

#### TRACK SUSPENSION

1. Track suspension must be OEM for the brand. Track suspension may be any length. May be located anywhere in the tunnel.
2. Additional bars, springs, straps, shocks, etc. may be added to alter suspension height or stiffness.
3. Any shock absorbers and springs allowed.
4. Suspension travel may be limited with straps or chains, but must maintain two inches of useable travel. No locked suspensions allowed.
5. Long track kits allowed. (Tunnel extensions allowed.)

6. Marginal snow wheels may be removed or moved.
7. Torque arms may be altered. No Titanium parts allowed.
8. Rear Suspension to maintain stock skid but can change rear rails to any aftermarket aluminum rail and can remove any stock component.

#### TRACK & TRACTION

1. Track may be any commercially available one-piece molded rubber track.
2. No traction devices are allowed in the track.

#### FRAME & BODY

1. Any chassis alterations, additions or removals that alter stock appearance or dimensions are not allowed unless otherwise noted. Tunnel can be repaired or extended.
2. Seat and fuel tank may be removed; lubrication tanks may be used as a fuel tank.
3. Tunnel extensions may not protrude lower than the running board.
4. No air foils allowed. An "air foil" is defined as any attachment to the snowmobile body or frame that affects air flow over or around the snowmobile.

#### IGNITION & ELECTRICAL

1. Gauges may be removed.
2. CDI or ECU may be re-programmed.
3. Lights and housings can be removed.

### MODIFIED DRAG RACING RULES

#### ENGINE

1. Engine must be from an ISR stock qualified model snowmobile.
2. Maximum displacement is 800cc. 2 stroke and 1200 cc 4 stroke.
3. Must be naturally aspirated. No nitrous oxide systems allowed.
4. Exhaust system must be functionally silenced. Must not extend more than 6 inches from hood or belly pan.
5. Aftermarket cylinders are allowed
6. Cylinder maximum over-bore is two (2) percent over the cc displacement for the class.

#### DRIVE

1. Any snowmobile type CVT clutches allowed.
2. Follows Stock Drag Racing Rules under Drive #8. (2013).

#### SKI SUSPENSION AND STEERING

1. PRO class snowmobiles must have IFS appearing front suspension (may or may not be functional).

#### FRAME AND BODY

1. Snowmobile frame and tunnel may be hand manufactured, but must retain stock appearance and retain safety features.
2. **Belly pan style will follow 10 model year allowing any hood and belly pan allowed to compete in the 2015 race season.**

### OVAL CLASS RULES

#### STOCK RULES

1. Rules for the snowmobile are the same as STOCK DRAG RULES. Except Pro division.
2. **Pro Division must follow 10 model year hood and belly pan rule.**

#### MODIFIED RULES

1. **Rules for the snowmobile are the same as MODIFIED DRAG RULES. Except Pro division.**
2. **Pro Division must follow 10 model year hood and belly pan rule.**
3. For Pro class, a belly pan style must be from within 10 model years and from a snowmobile 600 cc or larger.
4. **Women's Open oval 0-800cc must be 14 years of age or older.**

#### BUOYS (Oval Racing)

1. Buoys must be driven around. Going over the top of a buoy will be considered not going around and can be called a violation.
2. Touching or bumping a buoy is allowed.
3. Drivers who damage buoys intentionally shall bear the cost of replacing the buoy. Drivers will be able to complete racing for the day but will not be able to race again until the buoy has been paid for. No Exceptions!
4. Loss of a recovery buoy in oval classes may result in a disqualification for that heat if the flagman or race director determines that it is an unsafe condition. This may include risking injury to a downed rider or the buoy causing interference with another rider still on the course.
5. It is not the responsibility of the sanctioning body to retrieve a downed snowmobile that the recovery buoy did not release from.

#### DRIVER CLASSES

1. ALL Pro class drivers must be 18 years of age.
2. Drivers of less than 18 years of age may request advancement through the affiliate advancement procedure. Advancement may or may not be granted without appeal.

#### REQUIRED ADVANCEMENT

1. Advancement will be controlled by regional discretion.

NO EXPRESS OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM PUBLICATION OF OR COMPLIANCE WITH THESE RULES AND REGULATIONS. 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.

#### SPECIALTY CLASSES

IWA REGIONAL SPECIALTY

#### Lemans Class

Water X is an experimental class to increase brand image of the IWA and create a new buzz in water cross racing in the United States.

Water X will be a leman style race with left and right turns on closed course featuring 2 snowmobiles racing in a head to head style that will be a single elimination format. This specialty class will only be run on approval at lake races and will be a Saturday evening show. The race course will consist of at least 1 left hand turn, 2 right hand turns, and an equalizer section.

Water X will be limited to 8 competitors, in the case of more than 10 competitors, preference will be given to the top 8 finishers in the previous year's Pro Open season points, followed by Pro Stock, Semi-pro open and lastly Semi-pro stock. Seeding will be done randomly and only heat winners will move ahead, a loss and you are eliminated. There will be a total 7 races in this format.

Water X will follow Pro Open engine and chassis rules with one exception. Snowmobiles must be the following, a current 800cc model and utilize current front suspension design. (no trailing arms).

Water X will have a predetermined payout schedule with a winner take all format. The entry fee for the class will be \$50, the entry fees will total \$400 and that \$400 will be designated for staff, for there added time in helping run the class. The purse money for Water X will be provided f by the title sponsor of Water X with a minimum purse of \$550. No purse will come from entry fees.

Water X course design will differ from race site to race site, assorted color buoys will determine whether it will be a right hand or left hand corner. Red buoys will signify a right-hand turn and Yellow buoys will be for left hand corners. An equalizer will be marked by a white buoy. An equalizer will have to be used in one lap of any choice. There will be a total of 6 laps per heat. The first heat of Water X will start promptly at 7pm Saturday night. Course design will be available on the IWA website one week prior to the event, course design will be laid out on google maps with an approximat location of buoys.

This class is designed to bring a new interest in the sport of water cross and move the IWA into the future, this class is estimated take 1 to 1 ½ hours to run from start to finish.