

Rule Book



www.teamisrl.com

**MUST BE AN I.S.R.L. MEMBER
TO RACE AT ANY TRACK.
WE RESERVE THE RIGHT TO
REFUSE MEMBERSHIP TO ANY PERSONS.**

Thank you for your interest in the Idaho Six Cylinder Racing League. Our goal is to have close open wheel racing and keep the cost as low as possible.

The rules and/or regulations set forth herein are designed to provide for the orderly conduct of auto racing events and to establish minimum acceptance for such events.

These rules shall govern the conditions of all events and by participating in these events, all participants are deemed to have complied with these rules.

No express or implied warranty of safety shall result from publication of, or compliance with these rules and regulations.

These rules are intended as a guide for the conduct of the sport and are in no way a guarantee against injury or death of a participant, spectator, official or other.

No express or implied warranty of safety shall result from such alteration of specifications.

Memberships: \$25.00

Car Number: \$50.00

SAFETY EQUIPMENT

1. Three (3) inch minimum lap and shoulder harness with one quick release is required. The safety belts must be securely mounted to the frame. The shoulder harness must come together no more than 10 inches behind the driver's head. No heating, bonding or welding may be done to the safety belt mounting hardware. Submarine belts are mandatory. ***All of the above are subject to tech approval. Major manufacturer's recommend (Simpson, RCI, Autopro, etc.) belts to be replaced every three (3) years.***

2. Aluminum or steel seats are mandatory. The seating system should provide a lateral support on both the left and right sides. High back seats recommended. NO DZUS BUTTON mounting. Seat should be bolted in at least four (4) places to the chassis, with at least two (2) on the back near shoulder level. Each mounting hole in the seat must have a minimum 2" diameter/0.060" thick reinforcement plate/washer. All seats and mounting are subject tech approval.

3. Helmets must be of Bell type design and be federally approved of 2000 or newer Snell foundation or any other reputable testing firm with equal or better standards. No open face helmets.

4. All drivers will wear single layer Nomex uniforms with Nomex underwear or double layer Nomex uniform or equivalent (one-piece suit suggested). Nomex gloves are required. Arm restraints are required. Helmet restraint or neck collar is mandatory.

5. Window net required on right side, both sides recommended. Net release mechanism should be readily accessible by safety crews from outside the car. Quick release buckle highly recommended.

6. Steering wheel center pad recommended. High density roll bar padding recommended on tubing in close proximity of the helmet area. Drag link safety strap recommended.

7. A fire extinguisher of at least 2-1/2 pound dry chemical type must be in each cars pit at all times. A fine of \$10.00 will be assessed for not having one.

CHASSIS AND BODY

Changes in yellow.

1. All main roll cage and main frame rails must be constructed of chromoly steel tubing of at least 1 3/8" O.D. with a minimum wall thickness of 0.095", any other sizes must be equivalent in strength. Cage must extend at least 2" above drivers head. A halo bar may be required to meet dimension. Diagonal braces in the balance of the cage must be of the same type of material but not the same O.D. The safety inspector reserves the right to drill a 1/8 inch hold for inspection if a question arises to the thickness of the tubing used. The technical inspector must approve general construction of all roll bars. The frame must be constructed so that the main frame rails are inside the wheels. The engine block must be inside the frame rails.

2. All cars must have floor boards and/or belly pans extending from front fire wall to rear fire wall and from frame rail to frame rail. No floor boards under the fuel tank. The fire wall must be made of metal at least 0.032 inches thick.

3. Tires must be on all four points of the car. Four tires maximum, no dual wheels. The minimum wheel base is 85 inches. The minimum tread width is 48 inches to center of tire. The maximum width is 85 inches outside to outside of wheels. **Right front wheel must use all available lug nuts to fasten wheel.**

4. Nose pieces, hoods, tail pieces, and side panels are mandatory. The bodies must not extend more than two inches outside the frame rail. No side foils, rudders or panels are to extend beyond the rollcage on any side. No wedges or foils underneath the racecar. No pieces may be added to the frame so as to resemble, imitate or be specifically designed to deflect, trap or form a windbreak of any nature, except those to cool/protect the motor and braking system. No wings except for special events. Nose pieces may be removed for cooling reasons.

5. Side nerfs must be within one inch of normal width of tires. Any nerf with added weight (fuel cell, battery, or approved weight ballast) must bolt to the frame with 5/16" minimum bolts. NO LEAD/WEIGHT FILLED NERF TUBING. The front and rear bumpers must have a contact point of 18-20 inches above the ground. The contact point of the rear bumper must be 6 inches in height. The bumpers must not extend more than 4 inches past the frame width. No part or attachment on the car can be wider than the outside nerf irons, or extend past either bumper. No large gussets on bumpers.

6. Any torsion bar, coil over, leaf spring suspension or combination is acceptable. Quick change type center sections are allowed. Independent suspensions are not allowed. The center line of the engine block cannot be behind the center of the wheel base. A maximum of 8 1/2 inches of offset measured from the crank shaft centerline to the center of each rear wheel is permitted.

7. The numbers must be displayed on the nose and tail piece. They must be large and positioned to aid in scoring.

8. No rear-view mirrors are allowed.

9. Knee guards required on cars with conventional sprint car steering boxes. Must meet tech requirements. A quick-remove steering wheel is required on all cars.

10. One way radio may be required depending on the event location. No two way radio communication.

11. No cockpit adjustable suspension of any kind allowed.

12. Steel wheels only.

CARBURETOR

1. Must be stock 2 barrel **Holley #4412** (500cfm). Gas Comp 500cfm 4412 replacement is also allowed. Removal of choke plate ok. Tuning of carburetor allowed. Must retain stock body, throttle plate, metering block. Fuel bowl and float type optional. No alterations whatsoever to venturi, boosters, or throttle butterflies/screws. Throttle butterfly size and venturi size subject to tech at any time.

2. Spacer plate/adaptor plate allowed. 1 ¼" maximum including gaskets measured from carburetor mounting surface to intake mounting surface.

3. Gasoline only. No nitromethane or exotic fuels permitted. No nitrous oxide, supercharging, or turbocharging allowed.

FUEL CELL/FUEL SYSTEM

1. The fuel line must have a ¼ turn shut off valve within easy reach of the driver. No plastic or glass fuel filters. Fuel filters and fuel lines must be securely mounted. No ridged metal fuel lines.

2. Fuel cell or bladder required. Metal can/housing for fuel cell optional. No aluminum fuel tanks. 10 gallon or less recommended. Locking type or threaded caps only. No stock type caps. Cell tank must be strapped or securely fastened to chassis. Fuel cell mounting allowed in left side nerf. Special requirements for left side nerf mounting include steel braided fuel line to chassis, locking aircraft type fuel cap, minimum 1" O.D. 0.095" tubing specially designed to protect top and side impacts, metal can/housing for fuel cell. A one-way vent or check valve must be installed on all fuel cells. All fuel cells must meet tech approval.

3. Fuel pump may be mechanical or electric. If an electric fuel pump is used, a power cut-off switch operated by engine oil pressure **must** be used.

GENERAL RULES

Changes in yellow.

1. Engines must be in upright position, no tilting of engines whatsoever.

2. All ignition switches shall be of toggle design and mounted in plain sight on the dash on either side of the steering wheel. Ignition, fuel pump, and fuel shut off valve must be labeled and marked in red. No switches under the steering wheel.

3. All cars must start under their own power. Starters must operate from the driver cockpit.

4. **Dry cell, spiral cell, other non-liquid type battery only.** Battery must be very securely mounted. Mounting/installation subject to tech approval.

5. Aluminum or steel flywheel with stock appearing clutch cover/pressure plate must be used. Disc type/material optional. No multiple disc, or RAM coupler.

6. Aluminum bell housing used must be in front of the torque plate, if not, a scatter shield of at least 3/16" must be installed to cover 270 degrees of the clutch assembly from the end of the crankshaft to the main input shaft bearing. It must be securely mounted to a frame member. An approved steel bell housing adaptor may be used.

7. A manual transmission or big bell in-out box must be used. A non-shifting custom design may be

used. If second gear is used as the main drive gear, a minimum 3/16" thick scatter shield must cover the transmission in a manner to protect the driver. No automatic transmissions or fluid couplings allowed. The revolving part of the drive shaft must be completely enclosed by steel tubing with a minimum wall thickness of 0.125". The tubing may move up and down with the rear end. Torque tube hoop or safety strap recommended.

8. All cars must have a leak proof burp tank of one-gallon capacity or an overflow tube may be run into the exhaust collector pipe one foot or more from the exhaust outlet. No antifreeze allowed, water only.

9. Foot operated hydraulic brakes controlling all four wheels in good working order are required.

10. All throttle pedals must have toe return straps and double return springs. Subject to tech approval.

11. Mufflers required as individual track specifications warrant.

12. Any stationary parts to improve the life of the engine are allowed.

1966 AND OLDER OEM SPEC ENGINE RULES

1. Any 6-cylinder Canadian or American car or truck production engine built up to and including 1966 OEM specifications. Cubic inch limit is 270 C.I.D.

2. Blocks: Block over bore is limited to 0.060 inches, over stock bore, plus 0.010 inches wear. Painting and polishing, deburring of the block is allowed. No other modifications.

3. Cylinder Head: Head may be ported and polished.

4. Valve: Must meet 1966 or older OEM specifications for diameter. One piece aftermarket valves allowed. Steel valve spring retainer only.

5. Piston: Piston type is optional.

6. Crankshaft: Must be 1966 or older OEM spec. Polishing and lightening of the crankshaft is allowed. No stroking of any kind is allowed. Balancing is allowed.

7. Camshaft: Camshaft must be 0.410 inch lift max. Measured on the valve spring retainer, with solid lifter. Hydraulic flat tappet camshaft only. No overhead camshaft designs allowed.

8. Connecting rods: Polishing, lightening and balancing is allowed. **No after market rods allowed.**

9. Intake Manifold: Cast aluminum, or cast iron production intake manifolds only. No splitting to port or relieve.

10. Rocker Arms: 1966 and older OEM spec. No roller or roller tip allowed. Stock stamped steel.

11. Headers are allowed. Oil pan mods allowed. No dry sump oil systems.

12. Balancer: Aftermarket crankshaft dampener optional.

13. Ignition can be OEM points with aftermarket coil or OEM stock HEI distributor. Aftermarket HEI coil and module allowed. External coil optional.

1986 and OLDER OEM SPEC ENGINE RULES

1. Any 6-cylinder Canadian or American car or truck production engine built up to and including 1986 OEM specifications. Cubic inch limit is 270 C.I.D.
2. Blocks: Blocks over bore are limited to 0.060 inch. Overstock bore plus 0.010 inch wear. Painting and polishing of the interior block is optional.
3. Cylinder head: Casting must be OEM for year and model of engine. Cylinder head must remain as cast, no coatings to the interior of the runners of any kind. No modifications of valve stem angle. No modifications of spark plug angle. Multiple angle valve job allowed. Blocking of exhaust crossover allowed. Milling of the deck surface allowed.
4. OEM valve size for year and model of engine. OEM spring diameter for year and model. Steel valve retainer only. One piece aftermarket valves are allowed.
5. Pistons: Piston heads must be flat top. Piston must be 0.000 inch deck or below. Wrist pin optional. Ring stack optional.
6. Crankshaft: No polishing, grinding or coating of any kind allowed.
7. Camshaft: Maximum lift of 0.410 inches measured on valve spring retainer, with solid lifter. Cam must be hydraulic flat tappet.
8. Connecting rods: Polishing is allowed. **No aftermarket rods allowed.**
9. Intake manifold: Must be Edlebrock #2111 for General Motors V6. Any other engines must have tech approved intake, TBD. No polishing, port matching, welding, brazing, coating, relieving or grinding allowed. Water passage modifications allowed.
10. Rocker arms: Must be OEM type and ratio for year and model. No roller or roller tip allowed. Stock stamped steel.
11. Headers are allowed. Oil pan mods allowed. No dry sump oil systems.
12. Balancer: Aftermarket crankshaft dampener optional.
13. Ignition must be OEM for year and model. GM HEI distributors: Aftermarket coil and module allowed. External coil optional. Other makes TBD. Ignition must be OEM electronic for year and model. GM HEI distributors: Aftermarket coil and module allowed. External coil optional.

WEIGHT RULE

1. Weight Limit Rule: 1750 lbs with driver minimum. 60.0% left side maximum weight with driver. May be weighed any time during a scheduled race night. Top three weigh immediately and go directly to the scales after a main event finish. Maximum three attempts to make weight. Scale tech person(s) to be determined/approved by the ISRL. Any weight added must be VERY well secured and subject to tech approval

TIRES

1. **Tires must be purchased through the ISRL to be permitted.** Tires may be serialized/branded and will be documented for replacement reasons. Any new tire must be run **four (4) race nights**

before it can be replaced. There will be penalties and fines for any violations, set by the ISRL officials. Any used tires you plan on using **must** have a serial number/mark from the previous year(s) on them for documentation. It is your responsibility to report any previously used tires that you intend on racing with, to get approval before entering an event with them. Tires damaged on the track can be replaced but you must justify the reason with an ISRL official before doing so.

2. **Tires qualified on must be run in the main event.** You can run used tires that meet class spec in the Trophy Dash or Heat race.

3. Tires will be checked prior to Qualifying and prior to the Main Event.

4. **Class spec tire is the American Racer**

Right Rear - 27.5x14x15" **M-32** compound

Left Rear - 26.0x13.5x15" **131** compound

Left Rear - 25.5x13.5x15" **131** compound

Right Front - 25x11x15" **131** compound

Left Front - open

Tire sizes, tire compounds, and tire rules are subject to change depending on availability or wear characteristics as determined by ISRL officials.

PROTEST AND PENALTIES

1. Any driver that starts in the ISRL main event may protest any other driver. Written notice must be given to the ISRL official or representative **within 30 minutes** of the end of the ISRL main event. The ISRL officials reserve the **right to protest** any and all parts of the race car **at any time** during a scheduled racing event. If you refuse a tech man or protest, all points will be lost to that point and a \$100.00 fine must be paid before you can participate again.

2. The protest fee is **\$200.00 cash** only. If the car protested is found to be legal, the owner will keep \$150.00, and \$50.00 will go to the Association. If found illegal, all earned points for the season to date will be taken away and \$150.00 will be returned to the protester. Those allowed at the tear down are as follows: The Protester, The Car Owner and/or Driver, Tech Man, and Board of Directors. The Board of Directors may close the protest and declare the car illegal if the owner or driver creates a problem.

3. **All penalties will be determined by the Board of Directors.** Fines and points loss may be the penalty depending on infraction. All drivers, owners and crew may be fined. Drivers may lose points and be fined at any time. All fines will be deducted from race earnings before the purse distributions are made.

4. Weight violation: Total Weight - First offense - \$50 fine and 20 points loss for up to 5 lbs under weight, and maintain your finishing position after fine is paid and points deducted. More than 5 lbs under, DQ'd for the night. Second offense - DQ'd for the night + \$100 fine. Additional offenses - All points for the season to that point will be removed. An additional \$150 fine must be paid before the next race. Left Side Weight - First offense - \$50 fine and 20 points loss for up to 0.5% over weight, and maintain your finishing position after fine is paid and points deducted. More than 0.5% over, DQ'd for the night. Second offense - DQ'd for the night +100 fine. Additional offenses - All points for the season to that point will be removed. An additional \$150 fine must be paid before the next race.

5. Shock claimer rule: - \$125 each shock claimed. Shock only. No exchange. Must be participant in that night's main event to make a shock claim.

4. Rough Driving: Will be determined by the race director. First violation: \$20.00 and 10 points

loss. Second violation: \$40.00 fine and 20 points loss. Third violation: You will pay a \$40.00 fine and start scratch for one night (including heat race). If problem continues, you will continue to run scratch and could face up to a \$75.00 fine.

OTHER

1. Rules are subject to change at any time. Written notice will be submitted to all ISRL members if any changes are made.

2. Rookies. All rookies entering the class must run three main events in the scratch position. Rookie drivers must run a minimum of three races in the scratch position in the same year to be eligible for end of the year rookie award. ISRL will determine rookie status. Rookie of the year will be determined by end of the year points between all tracks sanctioned by the ISRL.

3. Conduct. Any conduct detrimental to the ISRL or the sport of racing will not be tolerated. Driver's are responsible for their crews and car owners. Memberships may be revoked due to conduct. If you have any questions that you feel are not answered, it is your responsibility to ask. All of these rules will be determined by the Board of Directors, the ISRL officers and Tech Committee. We all know the rules, so follow them and have fun.

ISRL Points System

Qualifying: 1st 12pts
2nd 8pts
3rd 6pts
4th 4pts
5th 2pts
6th 1pt

A Heat: 1st 12pts
2nd 10pts
3rd 8pts
4th 6pts
5th 4pts
6th 2pts
7th 1 pt

B Heat: 1st 10pts
2nd 8pts
3rd 6pts
4th 4pts
5th 3pts
6th 2pts
7th 1 pt

C Heat: 1st 10pts
2nd 8pts
3rd 6pts
4th 4pts
5th 3pts
6th 2pts
7th 1 pt

Consi : 1st 10pts
Main 2nd 8pts
3rd 6pts
4th 4pts
5th 3pts
6th 2pts
7th 1 pt

Main: 1st 30pts
2nd 27pts
3rd 24pts
4th 21pts
5th 19pts
6th 18pts
7th 17pts

(all other positions drop by one point)

3 points per position gained from original assigned Main starting position. Consi Main determined by number of cars and qualifying times. Consi will start straight up. Main and Heats are started inverted.

Mission Statement:

The I.S.R.L. is committed to produce a fun, competitive and enjoyable race environment for our drivers, families and fans. We intend to create a show that our fans demand and track promoters cannot turn down. Racing is not just racing, it is a life style.....Are you ready to start living?