

Western Promotions Ltd. 2207 Millstream Road Victoria, B.C. V9B 0J7

Phone at track: 250-474-2151

# Island Dwarf Car Club Rule Book (last updated 2012)

Do not attempt to build a dwarf car without first contacting the ISLAND DWARF CAR CLUB (I.D.C.C.) for specifications. If a car is built that does not meet the specifications and pass the I.D.C.C.'s technical inspection, it will not be an I.D.C.C. car and will not be allowed to compete with I.D.C.C. cars.

Please note that the following are "common sense" type rules.

DWARF CARS are to reflect the nostalgic look of the early stock car racing car, these cars are 2/3 scale replicas of the 1928 to 1948 American Vintage coupes and sedans. These are all-metal car bodies and are scaled to a 73" wheelbase and are 40"in height and are powered by four-cycle motorcycle engines, up to 1250 cc. displacement.

### Body:

- 1. Car bodies will be replicas of 1928 to 1948 vintage coupes, sedans and pick-ups that were in production in America during that time period. No special purpose cars are allowed. All frames and roll cages, including firewalls, doors, and rear section framing, must be fabricated as a single unit forming the actual contour and dimensions of the finished body. Cars must be visible in the darker portions of the tracks.
- 2. No open top cars, such as roadsters or convertibles. Bodies must have full roofs of metal construction.
- 3. No foreign makes, panels, station wagons or woodies allowed. Only closed top, meaning hardtop American passenger cars and pick-ups.
- 4. Will be of all metal construction. No fiberglass plastic, nylon, etc. with the exception of the grille shell. Outer skins, firewall and bulkhead are mandatory and shall be a minimum of 26-gauge steel or .040" aluminum.
- 5. No fenders allowed.
- 6. Doors and windows must remain stock, in appearance. Right and left doors must be operational. The left door may be shortened a maximum of 8" from the bottom of the frame rail. The right door may be shortened to the top of the driveline tunnel.
- 7. Each car will have a grille shell or simulated open radiator, matching the body style.
- 8. Engine compartment must conform to scale of body length, and must match the contour of the body, where it meets right and left side body panels. A hole or bulge will be allowed for clearance of air boxes on late model engines only, not for any type of ram air.
- 9. All main lower frame rails will be made of 1" x 2" rectangular steel tubing with a minimum of 0.120 wall thickness (lower frame rails on both sides, running from the extreme front to the extreme rear). There will be a minimum of three cross members in the driver's compartment: one in the front, one in the rear and one near the center.
- 10. At the beginning of each race, the car must have all body parts intact.



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- 11. No engine/transmission assembly may extend to rear more than 21" from the center of the front axle, except for separate transmissions, which may be mounted in place of jackshaft, i.e. Harley Davidson. Front axle location will be determined by scaling a photograph of the car, to a 73" wheelbase and mounting the front axle in actual proportion to the car body.
- 12. No wings, airfoils, or streamlining of the bodies shall be allowed.
- 13. No body shall be more than 40" tall, from the bottom outer edge to the extreme top, including the frame rail. No body shall be over 48" tall from the ground to the extreme top.
- 14. No body prior to 1941 will exceed 36"in width. No body 1941 or later will exceed 38" in width, being measured at the widest point of the doorpost.
- 15. All bodies must have a trunk lid, or trunk access panel to conform to the original bodylines.
- 16. Quick release type steering hub and wheel is mandatory.
- 17. Exhaust and headers must be installed as not to distract from the stock appearance of the hood, with the exception of side panel. Each car must run an adequate muffler to satisfy the race tracks noise requirements.
- 18. No glass of any kind will be permitted. A ½" wire mesh windscreen or Lexan is required.
- 19. No rearview mirrors of any kind will be permitted.
- 20. Positive door lock system, sliding bolt system, required on both doors.
- 21. Hood and trunk access panels must be fastened securely by a spring or rubber latch, bolt and nut or Dzus fasteners. No self-tapping screws permitted.

### **Bumpers and Nerf Bars:**

- 22. Front bumpers will not extend more than 6" forward of the front tires. They will be made of round tubing not to exceed 1" o.d. x 0.083" wall thickness, with no more than three horizontal bars. It must be mounted securely enough to lift the car with an overhead hoist or tow truck. Bumpers will not be backed up with plate steel or heavy gauge mounts. :WIDTH 30" minimum to 36" maximum.
- 23. Rear bumper width will be 36" minimum to 50" maximum, and not extend more than 6" behind the extreme rear body panel. It will be made from round tubing not exceeding 1" o.d. x 0.083" wall thickness, with no more than three horizontal bars. It must be mounted securely enough to lift the car with an overhead hoist or tow truck.
- 24. Side nerf bars must be mounted between the axles only. A maximum of 18" from rear axle centerline to kick out. The upper mounting location not to exceed 18" from the bottom of the frame rails. They must not extend beyond the



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tire tread in width. They will be made of round tubing, not exceeding 1" o.d. x 0.083" wall thickness. Recommend double nerf bars.

25. The horizontal bars for both bumpers and nerf bars will not extend below 4" or above 14" above the ground.

### **Engines:**

Modifications to engines with two valves per cylinder is limited only by the criteria listed in the paragraph below (paragraph 26).

26. Engines must be four-cycle motorcycle engines that have been built by a factory, for motorcycle installation only. They must have been from a regular production (a minimum of 500 units or more a year) motorcycle, with a maximum displacement of 1250 cc., and it will be normally aspirated, an exception will be the factory produced 750 cc. (or smaller) turbo-charged engines.

Addition: Any O.E.M. cooling other than air, is a liquid cooled engine and shall remain stock. No modifications. Intake and exhaust ports may be reworked to fit manifolds for a depth of 3/16" only, casting/parting lines must be visible, must use OEM carburetors and OEM type ignition boxes and coils. The car owner has to show any non-stock ignition to the TECH COMMITTEE before using them.

#77 Steve Jacques engine (size) is grand fathered.

Modifications to engines with more than two valves per cylinder are limited by the first paragraph (Paragraph 26), of this section, and all of the remaining paragraphs below.

Aftermarket pistons are permitted with the following restrictions. They must be factory replacement type. No oversize sleeves allowed. Aftermarket guides, springs, and valves are permitted, if they are stock size, shape, and are not constructed of lightweight materials.

No modification to the stock valve seat radius is permitted, three angle valve seats only. No modification to any portion of the intake or exhaust ports is permitted. Aftermarket manifolds are permitted. Crankshaft may be trued and balanced. Lightening and/or knife edging is not permitted.

Crankshafts must remain within 5% of OEM specifications. No aftermarket connecting rods are permitted. No modifications to rods permitted.

No changes to cam timing permitted. Slotting of cam sprockets is not permitted.

An aftermarket clutch is permitted. Clutch basket must meet OEM specifications, and must remain stock.

All other engine, clutch, and transmission parts must meet OEM specifications, and must remain stock.

All engine electronic controls must be stock, except additional rev limiters.



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The following list is the only liquid cooled engines approved by ISLAND DWARF CAR Club for club events.

YAMAHA: 87-95 FZR 1000 96-00 YZF 1000R 98-01 YZF 1000R1 02-03 YZF 1000R1

SUZUKI: 86-92 GSXR 1100 88-95 GSX 1100 1200 Bandit

KAWASAKI: 86-90 ZX 10 86-04 GPZ 1000 90-01 ZZR 1100 (ZX11) 94-02 ZX9R

HONDA: 93-00 CBR 1000F 98-03 CBR 900/954

These engines are all near 150hp. This is the club limit on horsepower. If you want to run an other engine ,bring all documentation to the BOARD OF DIRECTORS. If unanimous support of the Island Dwarf Car Club is won, that engine will be added to the list.

Engine must have all original parts operational, such as transmission and clutch. Clutch and transmission must be in-engine and clutch and gears operational. Charging system does not need to be operational, and may be removed internally. The engine must be cooled by manufacturers intent. An extra fan or oil cooler is allowed. Technical inspectors will record all engine and ignition module serial numbers on the inspection form.

- 27. All engines must be front mounted, in the stock location for that model of car. No auxiliary starters allowed. Must be able to start engine by original intent from the factory, i.e. electric or kick.
- 28 Must be shaft driven connected to an automotive differential and rear axle assembly, modified for Dwarf Car use. Must drive rear wheels only. Spools allowed. No quick-change rear ends permitted.
- 29. Drivelines loops shall be 360 degree, constructed of 2" x  $\frac{1}{4}$ " flat bar or round tube minimum size  $\frac{3}{4}$ " o.d. x 0.065" wall thickness. Two loops are required, the front loop shall be within 8" of the front U-joint, the second loop is required in the knee/thigh area of the driver. A third loop is recommended, in the bulkhead area.
- 30. Drivelines are to be painted white for visibility.

#### Brakes:

31. Must have brakes on both front wheels, and at least a single brake operating both rear wheels.

### Wheels and tires:

- 32. Any type of 13" steel automotive wheels only, Beadlock type wheels are not allowed.
- 33. D.O.T. approved tires, only, no recapped tires. They can be grooved in any manner. Dirt track: 50 Durometer or harder maximum tread width 8" (Hoosier RC 3, (dirt stockers), Mediums (UDRA)) Asphalt track: RACE TIRE AMERICA (McCreary A4, Nedwarf)

## Wheelbase:

34. Wheel base on all cars will be 73", plus or minus ½"



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- 35. Maximum width 62", car must be able to roll through a 62" opening.
- 36. No offset allowed, the front axle hubs and the rear axle flanges will be equal distance from the centerline of the frames, tolerance is ½".

## Suspension:

37. Must be coil-over type suspension only, shock absorbers will be non-adjustable at all races. All adjustable shocks grandfather for 2008 season only.

#### Fuel:

38. Must use any type of automotive gasoline only. No alcohol, methanol, nitro or nitrous oxide systems allowed.

#### Fuel Tank and Lines:

- 39. Must use a fuel cell manufactured and intended for racing use, in an acceptable condition, a foam filler is optional but recommended. Non-leaking, positive-locking cap required. No pressurized fuel systems. Tank must be vented in such a manner as to not leak in any position. Fuel filler necks may not extend beyond the side of the car body. It is not to exceed 5-gallon capacity.
- 40. All fuel lines in the driver's compartment must be steel or stainless wire-braided construction. No rubber hoses allowed in the driver's compartment. Any fuel line routed through the driveline tunnel must be enclosed in a minimum 1" o.d. x 0.083" steel tube.

### Electrical:

- 41. All batteries and electric fuel pumps must be mounted in trunk area. A mandatory main power disconnect will be mounted below the rear window on the right side.
- 42. Batteries must be securely mounted .
- 43. All cars must have one, and only one, push/pull switch, being the master power switch. It must be located to the extreme right hand side of all other switches, and on the right hand side of the dashboard. All other switches must be of another type of switch.

## Weight:

44. Minimum weight of 1,200 pounds, maximum weight of 1400 pounds, with driver, as the car leaves the track, after each race. No single ballast is to weigh more than 25 pounds, and all ballast must be securely bolted or welded directly to the frame. No ballast is to be mounted outside the body or outside of the frame rails. Ballast must be painted white for visibility and have the car number and "I.D.C.C." painted boldly on it, for identification.



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### Safety:

- 45. No sharp edges or protruding objects allowed within the driver's compartment, which can endanger the driver. All cut edges open to the driver must be folded or molded. No sharp objects allowed inside or outside of the car. Both doors must have at least two bars of a minimum 1" o.d. x 0.065" wall thickness, of round or square steel tubing, welded to the midsection of the door frames. The lower one of the two bars in the driveline side door may be omitted, if a bar of the same size is welded horizontally in the door jam area, between 4" from the top of the frame rail and the top of the driveline tunnel. Also there must be door supports welded inside the door opening, front and rear, to withstand an equal impact force as the door itself. Padding of the bars in the knee, arm and helmet areas are highly recommended. 46. A 5-point SFI approved seat belt system, correctly installed according to the manufactures recommendations and in good condition
- 47. All cars are required to have a 2 ½ lbs. 5 B.C. fire extinguisher mounted inside of car, within easy reach of the driver, and one in the pit area in plain view.
- 48. The driver is required to wear: Approved fire suit, minimum rated 32A-1 Approved neck collar Goggles or face shield Safety helmet Snell 95 or newer Arm restraints –if the car doesn't have window nets Racing gloves Adequate footwear
- 49. No radiator or oil cooler will be mounted in the driver's compartment, or on the rear deck.

### Seat:

- 50. An independent seat structure adequate to provide lateral support to the upper torso is required. The back of the driver's seat must be no more than 68" from the center of the front axle, at 23" above the bottom of the frame rail.
- 51. Floor and Seat pans must be steel, 18 gauge minimum thickness, and must be welded in place.

#### Numbers:

52. All members in good standing will be issued a car number by the Island Dwarf Car Club. Selection of numbers will be on a first come, first serve basis. There will be no duplicated numbers. The number 1 is reserved for the points champion of the preceding year, who shall retain their original number for future years. Numbers must be in at least three places; right door, left door and on the roof. Numbers must be a minimum of 12" high, and approximately 2/3 the height, in width, except for the number 1. Roof numbers must be positioned to be read from the right side of the car. Numbers should contrast with base colour of the car, to ensure accurate scoring.

## **Technical Inspections:**

53. All cars must pass an annual technical inspection, by the technical committee, before they can compete that season. During the season, if any safety discrepancies should arise, they must be corrected before the car returns to the track. If any non-safety related (performace or visual) issues arise the technical committee and the board of directors will take action to insure that the condition is corrected before the next event. Any attempt to cheat or bend the rules, will lead to stiff penalties.



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- 54. Each driver has the right to appeal any and all technical inspection discrepancies to the Board of Directors. The Board of Directors, present at the track, shall review the appeal and vote to uphold or overturn the Technical Committee's original ruling. The decision of the Board of Directors shall be final.
- 55. No electronic communication with the driver.
- 56. Transponders will be mounted according to the manufactures recommendations, 10" ahead (maximum) of the center line of the rear axle.