

# SWS Official Rules

## Mini Dwarf Division

### Important Mini Dwarf Racing Information

- Current insurance release forms must be filled out and signed by BOTH parents before a minor is able to race. Parental release sheets are valid for each calendar year, from January 1st to December 31st.
- Mini dwarf divisions will be determined by age and or ability. To be determined by track officials. Main events will be limited to 14 cars. B Mains will be used to determined main event cars if necessary.
- No more than two crew members and or parents will be allowed on the race track during practice, heats, and mains of the mini dwarfs. This is for your safety and speedway officials as well. An area will be provided to view the racing.

**Drivers:** Drivers in this class shall be from the age of 5 through age 13, along with all necessary registration papers and minor releases. The minor release must be signed by both legal parents in the presence of a KCRP registration person or a certified notary public. No minor may compete or drive a vehicle without these forms on file.

Mini dwarf cars will be divided into two divisions as follows:

1. Mini Dwarf Age Group 1 (Junior) - age 5 through 8. The first group will be from age 5 through age 8. This age group will run on the 1/8 mile track. Points will be awarded in accordance with the KCRP Point Schedule.
2. Mini Dwarf Age Group 2 (Senior) - age 9 through 13. The second group will be from age 9 through 13. This age group will run on the 1/8 mile track. Points will be awarded in accordance with the KCRP Point Schedule.

**Switching Age Groups.** If you start racing in Juniors and you turn 9 years during the year you may elect to start racing in Seniors. If you elect to do so you will become a "rookie in this division" and start at ZERO points. There is no carryover of points from Juniors. If you elect to switch your child from Juniors to Seniors you MUST get approval from the SWS race director one week in advance.

**Race Certification:** All drivers and crew in this class must be knowledgeable of SWS Race etiquette, flag meaning and usage, and all SWS race procedures. The driver of any car and at least one parent and or adult crewmember must attend a SWS driver meeting scheduled at every race.

**Pit Passes and Pit Location:** All drivers and crew members in this class must have pit passes. Drivers and cars in this class must pit their vehicles the area directed by race officials.

**Driver and Crew Conduct:** In case of any rules challenge, scoring questions or disagreements of any kind involving race procedure, a car or driver, one adult crew member may discuss the issues with the Race Director. At no time may any driver, crew member or parent verbally abuse or physically abuse any SWS Official, other driver or crew member. At no time may a driver, crew member or parent go into another drivers pit space to confront them about issues involved in racing. Any problems must be taken up with a SWS Official, who will deal with the problem. Failure to follow these rules may result in disciplinary action.

**Car Body and Roll Cage:**

The car body may be vintage coupe, sedan, sedan delivery, wagon or truck. The entire body of the car shall be made of steel or aluminum. ALL MAIN CAGE BARS MUST BE ONE PIECE, PERMANENT STRUCTURE. NO HINDGED OR TWO PIECE DESIGN. NO PART OF THE DRIVERS HELMENT SHALL BE TALLER THEN THE MAIN CAGE. BOTH RIGHT AND LEFT DOORS MUST HAVE A MINIMUM OF ONE BAR WELDED THROUGH THE MID SECTION OF THE DOOR FRAME. All cars must be fabricated so driver may exit through a roof hatch or a driver door that opens and provides quick and safe entrance or exit from the car by the driver. Body panels must cover the sides of the car in the leg and foot area to prevent any intrusions. There shall be no sharp edges or corners on any body parts. Maximum height of car body from the lower frame rail is 42".

**Width Rule:**

Maximum width of car is 42" at any point. Car must be able to roll straight through width gage before race to be legal to race.

**Wheel Base:**

Minimum 57.5" maximum 58.5" measured from the front to the rear axle center points. Maximum width is 42".

**Car Weight:**

Minimum weight for 5 through 8 year olds with driver is 300 lbs. Minimum weight for 9 through 13 year olds with driver is 325 lbs.

**Ground Clearance:**

A minimum of 2" ground clearance at bottom of seat is required. Frame rails must be higher than bottom of seat.

**Tires and Wheels:** MAY RUN EITHER THE 8" OR 6" REAR TIRE. .

Wheels 6" in front, 6" or 8" in rear, standard offset, left and right wheels may be steel or aluminum. Tires will be as follows: Front 15 x 600 x 6 turf tread, Rear 16 x 6.5 x 6 or 8 turf tread. Race track reserves the right to implement right rear tire pressure rule at any time during the racing season.

No racing compound of any kind. No bead lock wheels allowed.

**Clutch:**

One dry centrifugal type clutch permitted. Chain driven.

**Brakes:**

One or two brakes on rear axle only. Disc or drum style, foot brake only. Rotor can be drilled.

**Drive Sprockets:**

Any steel or aluminum split or solid rear drive sprockets. Jackshafts are allowed. No torque converters. No belt drive systems. Chain guards are required at the engine. Cannot be bigger than 99 tooth gear.

**Engines:**

**The Honda GX200 or Honda GX160 are the only engines allowed for the Mini Dwarf division.**

The engine must remain stock and meet all of the Honda Original Manufactures Specifications and must be mounted behind the driver. No other brand of engine will be allowed to compete.

All engines will be subject to complete tear down to ensure stock engine at all times.

Promoter reserves the right to request engine tear down to any motor to ensure stock engine.

Engine rules are as follows:

**Block:**

The engine block must be in an OEM 'as cast' condition with no machining.

Bore: 2.685" minimum – 2.718" maximum. Stroke is 2.123" +.010"-.005"

Block head mating surface may be machined, however, No piston pop out is allowed. Welding to repair cracks or breakage is allowed only in areas where the affected portion does not require re-machining, and not in areas where the welding may be construed as a performance gain. The crankcase may only be vented using the normal, stock unaltered methods. The crankcase cannot be vented additionally through the plugged governor apparatus, the side cover gasket, main seals, valve cover gasket, valve cover check valve (which must be retained and unaltered), or any other means.

**Bearings, Main:**

Main bearings must remain as a press fit in the block.

Main bearings must be standard, unaltered, uncoated, genuine Honda parts, manufactured and listed for the GX200.

**Crankshaft:**

Must be stock unaltered OEM. No alteration, polishing, additions, removal of material, modification or machining of any kind is permitted. Crankshaft journal diameter is 1.180" max – 1.168" min. Governor gear removal OK.

**Crankshaft Gear:**

Must be stock unaltered OEM. The crankshaft gear may not be rotated to change the camshaft timing. The timing marks must line up.

**Piston:**

Must be stock unaltered OEM flat top or dished only. No domed or valve relieved piston of any kind allowed. Coating, anodizing, re-sizing, knurling, or lightening of pistons is not permitted.

**Piston Rings:**

Must be stock Honda rings. All three piston rings must be used, installed correctly and in working order. Ring tension may not be changed by heating or other means.

**Connecting Rod:**

Must be stock unaltered OEM. No machining of any type allowed. Stock rod bolts only.

**Combustion Chamber Volume:**

25 cubic centimeter minimum, with piston at TDC, using prescribed procedure. The liquid CC check is the official check (If the engine fails the CC liquid check at any time during the tech procedure it will not be considered as allowed.)

**Cylinder Head:**

Must be stock unaltered OEM for GX200. Cylinder head model casting number must be visible to tech and match engine block.

No alteration, modification or machining is permitted to the head except for the head gasket surface. The entire inlet and exhaust tract surfaces must remain stock and is considered a no touch area.

**Camshaft:**

Must be stock unaltered OEM. No alteration, polishing, additions, removal of material, modification or machining of any kind is permitted. Max lift intake .232" at push rod, Max lift exhaust .232" at push rod.

**Throttle:**

Must be operated by a foot pedal only. All cars must have a positive return spring at the carburetor and the foot pedal. Throttle must always fully close.

**Valve Cover Gasket:**

Stock Honda valve cover gaskets may be replaced with any gasket of the same basic shape as the stock Honda gasket. The thickness of the gasket must be within the specifications listed for the engine model.

**Valve Seat:**



Stock Honda 2 or 3 angle valve job must be used. Valve seats may not be reseated shallower in the head.

**Valve Guides:**

New valve guides must be installed as close to stock position. They cannot be pressed flush with the port floor.

**Valve Springs:**

Valve springs must be the Honda Factory valve springs and be unaltered (including but not limited to shot or glass beading of surface, or heat treating). Shimming of valve springs of any kind is not permitted. 18lb valve springs only. Honda # 14751-883-000.

**Rocker Arms:**

Rocker Arms must remain in stock unaltered condition. Only stock GX200 rocker arms are allowed. Ratio must remain stock (1:1) as well as all dimensions. No filing, grinding, milling, bending, welding or any modification is allowed. Part may be checked against a known stock part both visually and dimensionally in tech inspection.

**Valves:**

Stock Honda GX200 valves must be used. Valves must not be altered, polished, lightened, welded, brazed, or machined in any way. Only stock, unmodified valve keepers may be used, installed properly on the appropriate valve.

**Valve Keeper:**

Must run stock Honda supplied keepers. Aftermarket keepers are not permitted.

**Ignition:**

Must be stock unaltered OEM system. Only OEM parts are permitted.

Stock timing and flywheel key must be run at all times.

Flywheel key must be stock. No offset, ground or reshaped keys allowed.

**Flywheel:**

Must be stock unaltered OEM only (5lbs 4oz minimum) including plastic fins. No small fans.

**Recoil:**

The standard utility recoil starter assembly must be entirely in place on all Honda

**Gaskets:**

Side cover gaskets as well as carburetor bowl gaskets and o-rings must be of stock appearing shape.

**Governor:**

The governor may be removed from the engine. All external holes caused by this removal must be plugged and cannot be used for crankcase ventilation.

**Coatings:**

The cylinder block, side cover, head finish, and texture must be AS CAST by Honda for the Honda engine models GX160 and GX200.

**Carburetors:**

Thai and Honda models only. Carburetor to intake sealer will be gasket only, no other sealer materials allowed. Choke must be supplied from factory. Venturi will be a .585" (point five eighty five inch) No-Go. Rear carburetor bore will be .751" (point seven fifty one inch) No-Go. No alteration, modifications, or machining of any kind is permitted to any part of the carburetor and must remain stock as it was originally built and supplied with the motor. An aftermarket air filter adapter will be allowed.

**Phenolic Spacer:**

Must be stock GX200 Phenolic Spacer. Two induction gaskets are required, one on each side of the phenolic spacer. These induction gaskets shall be of stock appearing shape and each shall have a maximum thickness of 0.030" compressed.

**Fuel:**

Must run track approved race gas only. No fuel enhancers, nitrous or alcohol allowed. Must pass water separation and or color verification test at all times.

**Engine Oil:**

Standard engine oil only. No oil enhancers or additives allowed. Must pass burn and or sniff test at all times.

**Suspension:**

Front axle shall be made of one solid bar and have a one or two spring suspension. Mechanical front shocks only. No air, oil or gas allowed in shock at any time. Shock must be drilled with 3/16" hole and visible at all times for tech inspection. No independent front suspension of any kind. Weight jacks are permitted. There is no rear suspension allowed of any kind. Rear axle must be solidly attached to the rear frame rails.

**Bumpers and Nerf bars:**

There will be no sharp points or edges. Front and rear bumpers must be minimum 42" wide, 6" high, 5" above the ground, measured at the center of the bumper. Nerf bars must be mounted in a minimum of 3 points on both sides, in front of rear tires and behind the front tires. Nerf bars must extend out to become same width as front and rear bumpers. The lower bar must be parallel to the lower frame rail, in front of the rear tires, then curve or bend toward lower frame rail, attaching behind the front tires. The upper bar must be attached to the roll cage.

**Safety:**

A positive bi-directional "kill" switch must be mounted toward the rearward portion on top of the roof. No push type switches allowed.

An additional bi-directional "kill" switch must be mounted within reach of the driver inside of the car. NO push type switches allowed.

All cars must have an approved 5-point racing harness, 2" wide minimum, with a quick release buckle. Belts must be attached to the frame or cage with not less than 3/8" grade 8 bolts. All seatbelts will be installed at a 45 degree angle to the drivers hips, shoulder harnesses come from behind the driver and will go over both shoulders so that they will be held securely in seat (all safety restraint harnesses shall be installed in accordance with manufactures guidelines). All cars must be equipped with a high backed approved racing seat. Helmets must be approved, full face, racing type and must be worn at all times with visors in the down position. Current SA safety rated helmets. The Snell M Rated helmet may be used only with a SFI fire rated head/face sock. Neck collars are allowed. A Hans or Hutchins type device preferred. All drivers will wear an approved type driving suit and gloves. Drivers must wear closed toe shoes with racing shoes recommended. Arm restraints are mandatory. All internal roll cage areas that could contact the driver must have sufficient padding

**Numbers:**

All cars must have a minimum of three large numbers located one on each door and one on the roof. Numbers must be a minimum of 12" high. A 3" number will be placed on the rear of the car and also on the front facing part of the roof. All numbers shall be plainly visible and in contrasting colors to the car with officials having final approval.

**Conclusion:**

Amendments may be made at any time. They will be posted. All drivers will have one race to make changes. We appreciate your participation in this exciting and challenging division designed for our youth.

Rules match those of KCRP, Speedway changes include on track viewing as well as the nonuse of transponders. Questions contact Ray Butler (661)361-0871 1safetydude@gmail.com