

2006 Spec Moto 125 Standards (Stock moto)

1.0 Induction System

Air Filters and Air Boxes

Motor must be equipped with either Air Filter or Air box. Air Box Requirements may be imposed by Local Track requirements. In cases where an Air box is required they may have some form of filtration and must be commercially available for under \$60 USD from the Track Operator or a supplier designated by the Track Operator.

Fuel Pump

Fuel Pump(s) must be driven by pulse pressure in the motor, no Electronic Fuel Pumps. Dual Fuel Pumps for Pump around Carburetors allowed. Fuel Pump must be a separate component from the Carburetor.

Carburetor

Pumper Carburetors not allowed.

Pump around Carburetors are allowed.

Any make/model of Float Bowl style carburetor allowed

Venturi Diameter not allowed to exceed 38.6 mm in diameter.

Using Inside calipers measure widest point downstream from slide.

Carburetor Boot

The stock 1999 CR125 30° Boot is recommended. As this part is optimal from the factory and measurements very subjective, there are no other restrictions on it.

For Seat Clearance Purposes, the RS125 Straight Boot or the RS125 5° boot are allowed. As a handicap the Stuffer Lobes of the Straight Boot and the 5° boot must be cut off flush with mounting surface and may not extend into Reed cage.

Reed cage and Reeds

Reeds are open.

Reed cage must be 1999 CR125 6-Petal Design. No material may be added or removed.

Reed Stops must be 1999 CR125. Bending stops to fit into unaltered reed throat of crankcase allowed. No removal of material from Reed Stops allowed.

2.0 Exhaust System

Pipe/Expansion chamber Max Circumference: 17-1/8 (440mm)

Pipe is restricted to the following RLV 6800 series, RCE T3, and RLV-R4 The maximum size of circumference of any portion of the pipe is 17-1/8". (440 mm)

Addition of exhaust gas temperature lead is legal, but hole must be plugged if exhaust temp lead is not used. External mounting brackets may be added.

Measure largest diameter of the drum section (between convergence and divergence cones) with a flexible tape measure. Pipes may have obstructions such as mounting flanges, metal tags, seams, or weldments in the way. It is the racers obligation to assure there is an area where the circumference can be measured by tech.

Silencer

Silencer should be a minimum of 10" long by 2-1/2" in diameter. Tracks that have noise emission requirements shall provide any necessary supplemental rules for where noise abatement is required.

Exhaust Flange

Open

3.0 Cylinder Head

Cylinder Head Model

1998-1999 CR125 Cylinder Head only. This cylinder head has 5 holes for mounting studs in a concentric circle.

Cooling spigots may be replaced with a substitute in the original location. One spigot may be plugged for single water outlet.

Combustion Chamber Profile

Using approved Shockwave 99 CR125 Cylinder Head Gage, inspect Parabola of Chamber Dome and Squish recess for apparent gaps greater than .005" deep. Competitor may clean off carbon build up with abrasive pad. Spark Plug sealing surface must be above spark plug stem of gage. The overall height is measured also. "The "go" portion of the stem of the profile gage should protrude above the spark plug sealing surface. The "No Go" portion of the stem should not."

Piston - Cylinder Deck Minimum is .020" (.50mm)

Rotate flywheel to bring piston close (to but not at) Top Dead Center. Set Depth Gage on Cylinder Deck with edge facing down over piston. Rotate piston to TDC and past. Piston impact with gage should not be felt by inspector. - Alternate method (not preferred) - measure depth at TDC with Depth Gage.

Cylinder Head Gasket thickness range - .008"-.012" (.20 - .30 mm)

Aftermarket Head Gaskets may be used.

Measure thickness of Head Gasket with calipers

4.0 Cylinder-Bore-Stroke-Piston

Cylinder must be unaltered 1999 CR125.

Exhaust Port - Cylinder top Minimum Distance: 1.145" (29.08 mm)

Note 1: This measurement is taken from the top of the cylinder to the exhaust port opening. It is not intended to measure opening in relation to piston travel alone.

Note 2: Exhaust Valves may be plugged. Plug is a non-tech item. Plugs may have blades removed or angled to blend flow into passage. In some cases the blades may appear to provide a false reading of depth - this is OK as long as inspection does not indicate any grinding. CR125 Exhaust ports have a height that is controlled by the machining operation of the Exhaust valve and is very accurate in controlling port location.

Insert Approved Port Height Check Gage (1.140" Step) tool into Cylinder in line with Exhaust Port Center. Inspect through Port - Gage end should not extend past Port Opening at edge. Check both ports at highest points.

Stroke: 2.149" (54.59 mm) maximum

Piston may rock on pin. Measure depths directly above pin. Measure Piston depth at TDC. Measure Piston depth at BDC. Subtract TDC from BDC to get the stroke.

Bore: 2.129" (54.10 mm) Maximum

Measure with Inside Micrometer.

Cylinder Height Minimum: 3.305" (83.95mm)

Remove Cylinder and measure Base Surface to Head Surface with calipers.

Base Gasket Thickness: .010 - .030

Measure Base Gaskets

Port Inspection

If Ports appear substantially different the Tech Inspector should follow up with a close inspection for any evidence of grinding to modify the port sizes. Small differences in sizes make very little difference in performance gains. Any DQ actions should be based on obvious modification evidence.

Ancillaries

Studs Bolts and washers are non-tech.

Piston

Flat Top design only.

Distance from Piston Pin edge to top of Piston - .800 - .810" (20.32 mm - 20.57 mm)

Slide piston pin out of piston with no more than 1/4" protruding. Measure depth from top of piston to pin top edge with caliper slide.

Piston Ring Minimum Thickness: .038" (.96 mm)

Measure with calipers.

5.0 Ignition

Stock 1999 Honda CR125 Coil**Stock 1999 Honda CR125 Capacitive Discharge Ignition (CDI) System.**

Denso Part Number 071000-1410 should be legible on Tag. CDI cannot be DQ'd over TAG legibility. This only serves to validate component.

CDI Grid Swap

The Tech Steward shall have the option to collect CDI Units between heats and redistribute them at impound. This is at the Tech Steward/Promoters discretion. It is only recommended when some motors appear by sound to be revving a little higher than others, or needing less gearshifts on a given lap.

Stock 1999 Honda CR125 Flywheel and stator.

No material may be removed from Flywheel. Flywheel Key may not be machined to offset timing. Stator may be mechanically advanced or retarded. Stator Plate may be slotted for adjustment

Spark Plug and Ignition Wires are non-tech.

No additional components may be electrically connected to the CDI or Coil. Only an inductive RPM sensor may be used

6.0 Crankcase

Kick Start Boss may be removed and plugged. The 5° horizontal RS Boot does not require the boss to be removed to fit most carburetors.

Internal Crankcase modifications are not allowed. No excessive material removal or addition. Some grinding of flash is allowed not to exceed .04" in depth. (Some cases come with flash removed)

Legacy Cases- The use of legacy cases, ie, fully modified cases may be utilized. The use of a legacy motor must utilize the other stock components such as cylinder, head, ignition etc. A weight penalty may be imposed (10 pounds). The use of Legacy motors is good through 2007.

Crankshaft must be OEM Honda CR125 any year. May be polished for slip fit of bearings. This does not enhance performance but allows for easier assembly/disassembly. Precision alignment of crank is allowed. No material may be added or removed from Crank Wheels or Rod.

Main Bearing Balls to be steel material.

Seals and gaskets are non-tech. Seals must be same size and diameter as OEM.

7.0 Clutch and Gearbox

Stock OEM Honda CR125 Clutch components only. All 7 Clutch Disks and 6 Clutch Plates must be installed. Stock OEM 1999 CR125 Clutch Basket and Pressure Plate. Any Clutch Springs allowed.

Transmission Bearing Balls and Rollers to be steel material.

Micro-polishing of Gears allowed. There are no power gains with this treatment, and seldom any performance gains. Occasionally Micro-polishing may help solve a sticking gear problem that normally corrects itself after a few hours of use.

Five or six gears are allowed.

Gears are per the 1994-96 ratios as follows;

First - 14/33

Second - 15/28

Third - 19/29

Fourth - 21/27

Fifth - 23/26

Sixth - 24/24