

MacDizzy

The Enthusiast

The Thread Spread

- Leakdown -

Bubble Trouble

The question - I'm looking to build a leak down tester for my 250R. Do you have any plans or kits available?

The response - Air leaks of any kind are a problem that must be attended to. Pressure testing your motor will reveal them easily. Leak-down testers are fairly expensive (about \$200 or so for a Motion-Pro) but you can make one for a lot less. You'll need a few things to make one properly.

1) Get a hold of the air pump from a blood pressure test kit. You know the rubber bulb that they pump the air into it with - it has a air bleed screw on it too which is ideal for a leak down tester. You'll want the hoses as well. Medical supply stores sell the bulbs. You'll also need an inline low pressure air gauge.

2) Get some 1/8 think black rubber (from a hardware store) or use a thick inner tube from a car tire (a few pieces about 3"x 3")

3) Either get an expanding plug (from a hardware store) that will fit the inside diameter of your exhaust port manifold, or remove the manifold and cut a piece of thick rubber to the same size as it and punch holes in it so you can screw it back on the motor.

4) Get a piece of round aluminum stock the same size as your carburetor about 1 1/2 inches think. Drill a hole in it and press in or drill and tap in a fitting in it so you can attach a hose to it. It has to be air tight.

5) Get some Windex or 409.

Screw a spark plug in the motor. Screw the exhaust manifold on with the rubber between it and the motor or use the expanding plug to seal off the exhaust port. Put your aluminum piece in the carburetor boot (carb removed) and clamp it with the carb hose clamp. At this point everything should be sealed except for the fitting on the aluminum block. To it attach a rubber or vinyl hose with the low pressure gauge in between the fitting and the bulb.

Pump the bulb to about 8 psi. A tight motor should be able to hold this setting for more than 10 minutes without losing any air. If the air gauge starts to read lower, spray some Windex or 409

all around the motor. You'll see where your leak is. Be sure that your setup is not leaking air either.

Air leaks out the flywheel side of the crank usually leave evidence of oil in the case when you remove the cover. Since the other side of the crank is in the clutch cover it is always in oil. If you are losing transmission oil (the level goes down) it may be getting sucked into your motor and burned in combustion. If the flywheel side seal is leaking - replace them both. Base gaskets are famous for leaking air too - check there well. So to are the reed cage gaskets.

If everything is tight and you're still losing pressure it's probably blown head gasket and the air is leaking into the coolant passages.

Rick - [see <http://www.motionpro.com/> and <http://www.teleport.com/~wcc/products.html> for commercially available units.]

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