

Leak tester instructions.

Using this test with a spray bottle and a soapy water solution will aid in finding a leak

when you spray the suspected area with the soap water solution.

If there is a leak, bubbles will form, however you may have more than one leak so the test must be repeated to find other leaks.

Before performing the test it is important that the spark plug is in tight, the head and cylinder bolts are torqued to specs.

1. Remove the carb, insert the tool adapter into the intake boot and tighten clamp.
2. Remove the exhaust header pipe and flange and block the exhaust port, either by using an expandable plug or by placing a piece of inner tube between the flange and cylinder and tightening down to specs.
3. Pressurize the inlet to 7psi,(no more) by using a cycle pump or surgical bulb.
4. Observe the pressure for 30 seconds, if the pressure is stable at 7psi, continue to observe for 5 minutes.
If 7psi holds for 5 minutes there are no leaks!
5. If pressure is lost, firstly check the tester for leaks by spraying it all over with soapy water. Bubbles will form at the point of the leak.
6. Maintain pressure at 7psi and spray all around reed cage, carb boot and where the adapter is inserted. Bubbles will be seen if there is a leak.
7. Spray around the exhaust plug or flange block off and observe for bubbles.

Maintain a pressure of 7psi.

8. Spray around the base of the cylinder where it meets the case, and around the nuts.
9. Spray around where the head meets the cylinder (you may need to spray a little extra to make sure the gasket is wetted).
Spray around the spark plug and head bolts.
10. Immerse the gearbox breather tube in fluid and observe for bubbles.
(If bubbles appear you will have to remove the gear case and spray the crankshaft seal and crankshaft collar.
You will need to remove the soapy water by spraying with brake cleaner before re assembly.)

To continue testing clamp breather tube.

11. Remove **flywheel** with an approved puller, then remove the stator assembly and spray soapy water around the crank seal.
12. Spray soapy water all around the crankcase join and observe for bubbles. If the pressure still drops
and you have to continually top up the pressure, again clamp the gearbox breather to confirm an internal case leak.
There may be some internal damage that will need addressing.
13. After all leaks have been found and repaired, leak test again.

It is very important that a leak test be performed at least twice a riding season to insure that a lean mixture does not harm the engine.

Leak tests should be performed after every engine rebuild and intake related hardware replacement.