

5609 Cylinder Leakage Tester Kit

Operating Instructions

1. Allow engine to run until sufficiently warm. Turn off engine.
2. Remove all spark plugs. Remove air cleaner, radiator cap, and crankcase filler cap.
3. Rotate crankshaft until piston in cylinder under test is at top dead center on compression stroke (valves closed).
4. Install proper adapter on end of test hose. Screw adapter with test hose attached into spark plug hole.
5. Connect test hose quick-disconnect to cylinder leak tester.
6. **⚠️ Turn pressure regulator knob on cylinder leak tester fully counterclockwise.**
7. **⚠️ Connect a source of compressed air to the tester. The test pressure used should be 10 psi less than the maximum pressure produced by the air source, but not to exceed 100 psi.**
8. **⚠️ Slowly turn pressure regulator knob clockwise until left-hand gauge indicates desired test pressure. Test pressure must not exceed 100 psi.** Right-hand gauge will indicate the pressure maintained in the cylinder under test. The difference between the gauge readings indicates the amount of leakage in the cylinder. See chart for gauge readings compared to the percent leakage.
9. **⚠️ When cylinder test is complete, turn pressure regulator knob fully counterclockwise before disconnecting and proceeding to next cylinder.**

Due to standard engine clearances and normal wear, no cylinder should be expected to maintain a perfect no-leak reading. It is important that all cylinders have a relatively constant reading. A difference of 5 psi between cylinders is satisfactory. A difference of 10-15 psi indicates the need for further investigation.

Test Results

By listening or looking for the following, the cause of low pressure can be determined:

Air escaping from crankcase breather.....	Defective rings or worn cylinder walls
Air escaping from exhaust system.....	Defective exhaust valve
Air escaping from carburetor.....	Defective intake valve
Air bubbles in radiator.....	Leaking head gasket or crack in block or head

Left-Hand Gauge Reading	Right-Hand Gauge Reading, psi														
	99	98	97	96	95	94	93	92	91	90	89	88	87	86	85
100 psi	99	98	97	96	95	94	93	92	91	90	89	88	87	86	85
90 psi	89	88	87	86	85.5	85	84	83	82	81	80	79	78	77	76.5
75 psi	74	73.5	73	72	71	70.5	70	69	68	67.5	67	66	65	64.5	64
Percentage of Leakage	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

Repair Parts List

Part Number	Description	Part Number	Description
0031-0461	0-100 psi Pressure Gauge	0180-0893	10mm Adapter
0400-3009	Gauge Boot	0180-1495	12mm Adapter
0400-3117	Pressure Regulator	0180-1496	18mm Adapter
0400-0138	Hose Assembly, 24"	0400-3118	Carry Case
0180-1522	Cover Plate	0001-3898	Instruction Label

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