

# DIFFERENTIAL CYLINDER PRESSURE TESTER

## **Operating Instructions**

These instructions should be followed for the proper operation of the cylinder leakage tester:

- 1. Allow engine to run until sufficiently warm. Turn off engine.
- 2. Remove all spark plugs from engine, plus air cleaner, radiator cap and crankcase filler cap.
- 3. Rotate crankshaft until piston of cylinder being tested is at top dead center on the compression stroke.
- 4. Install the proper adapter into the spark plug hole.
- 5. Connect tester quick-disconnect to the adapter.
- 6. Connect an adequate air source to the tester. Air sources should be 10 psi greater than the regulated input pressure shown on the left hand gauge.
- 7. When using a 100 psi source, adjust left-hand, regulated gauge to read 90 psi.
- 8. The relative pressure of the cylinder being tested is automatically indicated on the right-hand gauge. For example, using the chart below, with a regulated pressure of 90 psi, a gauge reading of 81 psi indicates a 10% cylinder leakage.

Left-Hand Gauge Reading	Right-Hand Gauge Reading, psi														
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

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					

## PRODUCT NUMBER

### **DESCRIPTION**

2 1/2 0-100 PSI Gauge
2 1/2" Gauge Boot, Red
Pressure Regulator
Aluminum Square manifold
Female Q.C. Connector
24" Hose Assembly
Male Q.C. Plug
Carry Case, Red
10MM Adapter
12MM Adapter
18MM Adapter

Made In Taiwan

