

CLD200M Cylinder Gas Leakage Detector

These instructions should be for the proper operation of the differential cylinder pressure 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 10psi.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 90psi.
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 90psi, a gauge reading of 81 psi indicates cylinder leakage.

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 breatherDefective rings or worn cylinder walls
 Air escaping from exhaust systemDefective exhaust valve
 Air escaping from carburetorDefective intake valve
 Air bubbles in radiatorLeaking head gasket or crack in block or head

Percentage of Leakage	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Input Pressure	Right-Hand Gauge Reading ,psi														
100psi	99	98	97	96	95	94	93	92	91	90	89	88	87	86	85
90psi	89	88.2	87.3	86.4	85.5	84.6	83.7	82.8	81.9	81	80.1	79.2	78.3	77.4	76.5
75psi	74.2	74.2	72.7	72	71.2	70.5	69.7	69	68.2	67.5	66.7	66	65.2	64.5	63.7

WARNING **STAY CLEAR OF PROPELLERS AND OTHER MOVING ENGINE PARTS WHILE PERFORMING TEST PROCEDURES.**

Repair Parts SEE YOUR MAC DISTRIBUTOR FOR ORDERING REPAIR PARTS:

<u>Part Number</u>	<u>Description</u>	<u>Part Number</u>	<u>Description</u>
200-1	0-100psi	200-6	Case
200-2	Regulator	200-7	10mm Adapter
200-3	24"Hose Ass'y.	200-8	12mm Adapter
200-4	Cover Plate	200-9	18mm Adapter
200-5	Instructions		