



## CYLINDER LEAKAGE TESTER

### **Moroso Part Nos. 89600 & 89601 Installation Instructions**

This is a precision instrument and should be treated as such. You may notice that the gauge may not rest on the stop peg when not in use. This condition is acceptable, due to the way the gauge is calibrated to be accurate between 0 and 30 percent leakage.

To correctly operate this instrument, connect the tester to the air compressor in your shop, (the tester must be used with a compressor capable of producing a minimum of 80 psi and regulated to 100 psi max.). Once the gauge is coupled to the air supply, “zero the gauge by turning the knob located in front of the regulator. (It might be necessary to pull up on the knob to unlock it).

**TESTING SHOULD BE PERFORMED ON A WARM ENGINE.**

After zeroing the gauge, select the proper spark plug adapter and connect it to the short whip hose. Screw the assembled hose into the desired cylinder’s spark plug hole, making sure that both the intake and exhaust valves are closed and that the piston is at TDC.

**CAUTION! KEEP HANDS, TOOLS AND OTHER LOOSE OBJECTS AWAY FROM THE ENGINE WHILE USING THIS TOOL. THE CRANKSHAFT MAY SPIN IF THE ENGINE IS NOT PROPERLY ALIGNED.**

Connect the whip hose to the tester by means of the coupler supplied. You will then be able to read the percentage of air in the cylinder, which is leaking past the rings and the valves.

If more than 15 percent of leakage is present on a warm race engine, consider tearing it down to find the cause. Use the following guidelines to further pinpoint the area that requires repair:

- Whistling or airflow detected in the exhaust: faulty exhaust valve or seat.
- Whistling or airflow in the intake: faulty intake valve or seat.
- Bubbling coolant in manifold or water neck: defective head gasket, cracked head or sleeve.
- Whistling or airflow detected in the crankcase ventilation: defective/worn piston rings.