



Item No.: S-31CTK



1. Air gauge with quick coupling & release valve.
2. High-tension connecting pipe with safety lock coupling.
3. Crank shaft type test pipe with rubber plug.
4. Transverse axis test pipe with rubber plug.
10. M10*1.0 Adapter
12. M12*1.25 Adapter
14. M14*1.25 Adapter
18. M18*1.5 Adapter

INSTRUCTION OF CAS CYLINDER COMPRESSION TESTER

PREPARATION

1. Start engine for 10 minutes approximately or until the motor up to the temperature in normal operation.
2. Stop engine then disconnect the spark plug and the connecting wires. Have the wires marked with number to distinguish and reconnect correctly.
3. Clear away the dirt around the spark plug and remove it. Put them in order on a clean surface to compare compression problems according to the condition.
4. Remove the high-tension wires from the center of the distributor and ground them. If an electronic ignition system, then disconnect the electronic ignition device or remove the primary battery terminal from the coil. If a GM HEI system, then disconnect the primary wire in the distributor cap.
5. Remove air filter then fit throttle plate. Remember, do not damage the connector or the components on the throttle.
6. Choose an appropriate adapter and attach it to the head of pressure tester (spark plug hole, see Fig. 1). To reach easily the hole and connect to the head of the gauge, a cone rubber regulator is used instead of a hose assembly (see Fig. 2). But, the reading of pressure got from this method is not so accurate.

TESTING

1. Connect the quick coupling's head of air gauge assembly to the pipe or the cone rubber hose then screw the pipe in or push the rubber hose into the spark plug hole.
2. Start engine to run at least 4 compression strokes or until the pressure of air gauge remains a fix level. Then, stop engine and write down the reading on air gauge.
3. Remove the tester and return air gauge to zero. Fit the spark plug and the connecting wires back and continue the test or the next cylinder.

RESULTS ANALYSIS

1. If a normal cylinder, the pressure should be getting higher after each compression stroke then up to the maximum. The pressure of each cylinder in the same engine should be within the standard set by the manufacturer.
2. If the pressure remain the same or not getting higher until several compression strokes, then the valve is probably clogged.
3. If the pressure in two adjacent cylinders is not more than 20 lbs, lower than another cylinder, then the gasket in the head is probably damaged.
4. If the pressure is much higher than the standard set by the manufacturer then probably carbon residue is existed.
5. If the pressure is low or a big difference between the cylinders, get a teaspoon of SAE30 oil into each cylinder then test again. After this test, if the pressure increased much, the problem is probably the cylinder was not seated properly or the piston ring was worn out. If the pressure not changed much, then the valve is probably leaked.
6. Please refer to the manufacturer's maintenance manual about the standard pressure in the cylinder.

WARNING

1. This tester is only suitable for gas cylinder (car or motorcycle). Do not use it on the diesel cylinder of car. Be careful, the high temperature of pressure during test.
2. During test, if the reading of air gauge is getting up but getting down after the engine is stopped, then the stop valve in the gauge is broken and has to be sent for repairment.