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Leakdown Test Kit

Stock Number W89729

OWNER'S MANUAL



PRODUCT SPECIFICATIONS

Adapters Included – 12mm and 14mm spark plug adapters
Gauges – 2-1/2" diameter, rubber protected
Gauge Scale – 0 to 100psi in 2psi increments; 0-7 bar in 0.2 bar increments
Maximum Inlet Pressure – 100psi

IMPORTANT SAFETY INSTRUCTIONS, READ AND UNDERSTAND ALL INSTRUCTIONS
Failure to follow all instructions detailed in this manual may result in serious personal injury.
SAVE THESE INSTRUCTIONS

**Performance
Tool®**

GENERAL SAFETY RULES

1. Keep your work area clean and well lit. Cluttered and dark work areas invite accidents.
2. Stay alert. Watch what you are doing, and use common sense when operating tools and equipment. Do not assemble or use this product while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating tools and equipment may result in serious personal injury.
3. Wear eye protection. Wear ANSI-approved safety impact glasses and full face shield when using this product.
4. Do not force the Leakdown Test Kit. Use the correct product for your application. The correct product will do the job better and safer at the rate for which it is designed.
5. Maintain the Leakdown Test Kit with care. Keep this product clean. Properly maintained products are less likely to malfunction. Do not use damaged products. Tag damaged products "Do not use" until repaired.
6. Check for any condition that may negatively affect the Leakdown Test Kit's operation. If readings are inconsistent, or if it appears that the gauge is not functioning properly, the Test Kit should be serviced by a qualified service technician. Many accidents are caused by poorly maintained products.
7. Use only accessories that are recommended by the manufacturer for your model. Accessories that may be suitable for one product may become hazardous when used on another product.
8. Industrial applications must follow OSHA requirements.
9. Maintain labels and nameplates on the Leakdown Test Kit. These carry important information. If unreadable or missing, contact Wilmar Corporation for a replacement.
10. Use the right product for the job. There are certain applications for which this product was designed. Do not use small products to do the work of larger industrial products. Do not use this product for a purpose for which it was not intended.
11. Product service must be performed only by qualified service technician. Service or maintenance performed by unqualified personnel could result in a risk of injury.
12. When servicing the Leakdown Test Kit, use only identical replacement parts.

ABOUT CYLINDER LEAK TESTING

A cylinder leakdown tester can give you valuable information about where an engine's compression is being lost. For example, a compression test on an engine shows a cylinder with low compression. Performing a leakdown test will show where the loss of compression is, such as intake or exhaust valves, head gaskets, rings or pistons, or the engine block itself. Here are some places to look when a high leakdown result is found:

1. Tailpipe for exhaust valve leaks
2. Carburetor or throttle body for intake valves
3. Oil filler or dipstick tube for rings and piston issues
4. Radiator for head gasket or cylinder block issues

Keep in mind that all engines will have some leak loss, no engine seals 100%. If there is low compression and the gauge shows that the cylinder is 100% sealed, look for a blockage of the tool or low pressure setting. If the cylinder is leaking very high or at 100% leak, check to see that the piston being tested is at TDC on the compression stroke, otherwise an intake or exhaust valve will be open, causing a faulty reading.

Always refer to the vehicle's factory repair manual for acceptable leakdown numbers.

OPERATING INSTRUCTIONS

IMPORTANT NOTE: Be sure the regulator knob is turned fully counter-clockwise before connecting the cylinder leakage tester to a pressurized air source. Failure to do so may result in damage to the tool.

Note: Engine must be at normal operating temperature for accurate testing. Start engine and let it warm up to normal operating temperature, then turn it off for testing. **WARNING:** Always run engine in a well ventilated space. Running engines produce Carbon Monoxide, a colorless, odorless gas that can cause personal injury or death. Keep hands and loose objects away from running engines. Always wear approved eye protection.

1. Prior to removing spark plugs, clean area around spark plugs using compressed air to free loose debris that could fall into the cylinder upon spark plug removal.
2. Remove all spark plug wires and spark plugs from engine.
3. Remove air cleaner or intake tube, oil filler cap, radiator cap and dipstick. This will assist in locating source of excessive leak.
4. Position cylinder to be tested at TDC for that cylinder. Refer to vehicle manual for engine timing marks.
5. Turn the regulator knob fully counter-clockwise. Connect the leakdown tester to a compressed air source.
6. Set the air compressor's regulator to 7psi to 100psi. Never operate tool with more than 100psi inlet pressure or damage to the tool can result.
7. Turn the regulator knob clockwise until the cylinder leakage gauge reads "0" at the end of the yellow band.
8. Hand screw the adapter hose into the spark plug hole of the cylinder to be tested. Connect the male end of the adapter hose to the female coupler of the extension hose.
9. You can now read the leakage on the gauge as a percentage loss.
10. Perform same steps on remaining cylinders.

PARTS LIST

1. Female quick connector
2. Metric adapter M12 x 1.25 (with O-ring)
3. Metric adapter M14 x 1.5 (with O-ring)
4. Extension hose
5. Gauge base
6. Leakage gauge
7. Pressure gauge
8. Male quick connector
9. Regulator
10. Adapter hose

