

COMPRESSION TESTER KIT

Item Number W80584

OWNER'S MANUAL

SPECIFICATIONS:

Adapters.....M18 X 1.5, M16 X 1.5, M14 X 1.25, M12 X 1.25, M10 X 1.0
Guages 2-1/2 in. Diameter, Rubber Protected
Gauge Scale 0 to 300psi in 5psi Increments; 0-21 Bar in 0.5 Bar Increments
17 in. Flexible Hose Offset and Straight Steel Test Hoses
Quick Disconnect Fittings Blow Molded Fitted Storage Case
Specifications are subject to change without notice.

LIMITED WARRANTY

PERFORMANCE TOOL® extends only the following warranties, and only to original retail purchasers. These warranties give specific legal rights. Except where prohibited by local law, the law of the State of Washington governs all warranties and all exclusions and limitations of warranties and remedies. There may be other rights which vary from state to state.

PERFORMANCE TOOL® warrants the product to be free from defects in materials and workmanship under normal use and service. A defective product may be returned for a free replacement within 90 days from the date of purchase, provided that product is returned to place of purchase immediately after discovery of defect. After 90 days and up to one year from date of purchase, PERFORMANCE TOOL® will replace at no charge any parts which our examination shall disclose to be defective and under warranty. These warranties shall be valid only when a sales receipt showing the date of purchase accompanies the defective product or defective part (s) being returned. For part (s) after 90 days, please remit your request, postage prepaid to:

PERFORMANCE TOOL, P.O. Box 88259 Tukwila, WA 98138

These warranties exclude blades, bits, punches, dies, bulbs, fuses, hoses, and other consumables which must be replaced under normal use and service. These warranties shall not apply to any product or part which is used for a purpose for which it is not designed, or which has been repaired or altered in any way so as to affect adversely its performance or reliability, nor shall these warranties apply to any product or part which has been subject to misuse, neglect, accident or wear and tear incident to normal use and service.

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WARNING!

READ, UNDERSTAND AND FOLLOW ALL INSTRUCTIONS AND WARNINGS BEFORE OPERATING THIS TOOL. FAILURE TO DO SO MAY RESULT IN PERSONAL INJURY AND/OR PROPERTY DAMAGE AND WILL VOID WARRANTY.

Some dust created by power sanding contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. An example of this type of chemical is lead from lead based paints. Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure: work in a well ventilated area and work with approved safety equipment, such as dusk masks that are specially designed to filter out microscopic particles.

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Performance Tool

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. 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 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 tools 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 Compression 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 Compression Test Kit, use only identical replacement parts.

OPERATING INSTRUCTIONS

1. If the test is being done on a vehicle, be sure the vehicle is on flat level ground, is in Park or Neutral, and the parking brake is set. All equipment needs to be on a stable flat surface.
2. **Engines with distributors:**
Pull the center wire from the distributor cap, rest the metal connector against a metal surface as far away from the spark plugs as possible.
2. **Engines without a distributor:**
Disconnect the ignition control module; refer to your shop manual for placement. If you're testing a small gas engine label and pull the spark plug wires.
3. Label and remove the spark plug wires from the plugs at the boot. Be sure these are marked properly for replacement back to the same cylinder they were pulled from.
4. Remove all the spark plugs; place them in a clean dry place. Pulling all the spark plugs is necessary to get an accurate reading at each cylinder. No resistance from the other cylinder will give the best results.
5. Identify the appropriate threaded fitting needed for your engine. Press on style steel test hoses with rubber ends are also included if they will work for your application. Screw the fitting that fits your application



OPERATING INSTRUCTIONS

onto the flexible extension hose. Screw the assembled unit into the spark plug hole until snug, do not over tighten. Connect the quick coupler on the gauge to the flexible hose.

6. Be sure your hands and equipment are clear of all moving parts. If you don't have a remote starter switch, have a friend turn on the ignition until the engine cranks over about six times. Otherwise, press the button of the remote starter switch. If using a steel test hose keep it firmly inserted while the engine is cranking.

NOTE: The engine won't start because the engine has been disabled.

7. Read the gauge and write down the reading, the gauge is calibrated in psi (pounds per square inch) and bars (kilogram by square centimeter) then reset the gauge.
8. Repeat these steps for each of the other cylinders. Don't forget to reset the gauge and crank the engine each time.
9. After you've tested each cylinder, look at the readings. The highest and lowest shouldn't vary by more than 15 percent. If one or more of the cylinders reads well below the rest, use trigger type oil can to send a good squirt of motor oil down the spark plug opening, and retest the compression of that cylinder with the gauge. If the reading is the same, the valves either are worn and letting pressure escape or are out of adjustment. If the reading rises dramatically after you insert the oil, you probably need new rings on the piston in that cylinder. If the pressure recorded by the gauges is less than 100 psi, the cylinder definitely isn't mechanically sound.
10. Replace each spark plug in the cylinder it came from. Make sure that the ignition is off before you reconnect the spark plug wires, and be sure to put the correct spark plug wire boot back on each plug. Screw the plugs in by hand to avoid cross threading and damaging the heads.



PARTS LIST

- 1 Gauge (0-300 psi)
- 2 17 in. Rubber Test Hose
- 3 Straight Steel Test Hose
- 4 Offset Steel Test Hose
- 5 M18 X 1.5
- 6 M14 X 1.25
- 7 M12 X 1.25
- 8 M10 X 1.0

