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INSTRUCTION SHEET FOR TOOL #953

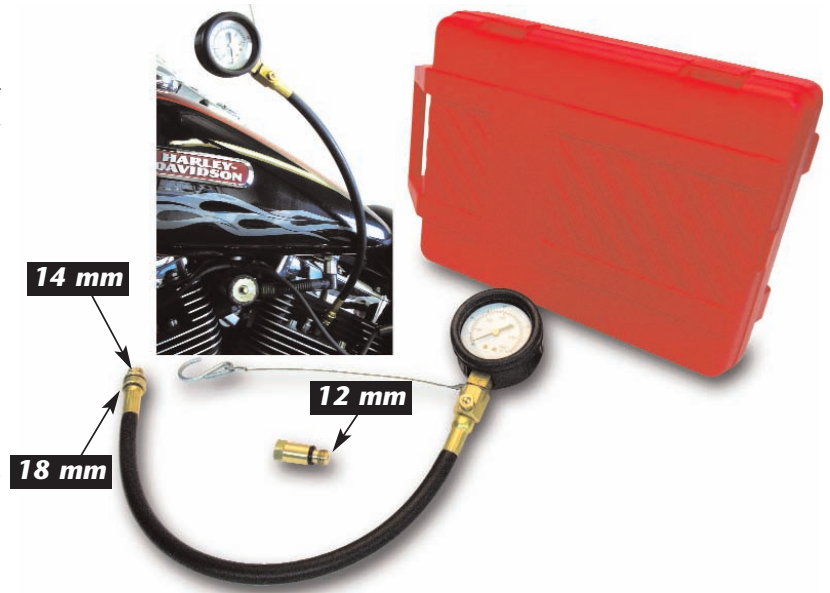
CYLINDER COMPRESSION TESTER

No.953 – Use on any motorcycle application that has a 12mm, 14mm, or 18mm spark plug hole.

Performing a compression test can help determine the source of cylinder leakage. Leakage could be from rings, valves, or head gasket issues.

ADDITIONAL TOOLS REQUIRED TO PERFORM A COMPRESSION TEST:

1. H-D Service manual or equivalent for year and model you are testing.
2. Ft-lb torque wrench.
3. Deep Socket for spark plug size you are working with and ratchet wrench.



Note: The following instruction is an example of a compression test on a 2012 H-D Touring model. All the different years and models motorcycles have slight differences when performing a compression test so it is very important to refer to the correct service manual for the motorcycle you are working on.

PREPARATION FOR TEST:

1. Read the complete instructions before starting this test.
2. Locate the correct service manual for the motorcycle you are working on.
3. Clean the area around the spark plug holes to get sand or road grime out before pulling spark plugs from head. Compressed air is good but make sure you are wearing your safety glasses before applying air.
4. Next get the engine up to normal operating temperature then shut engine off. Do not allow warmed engine to sit longer than 10 minutes prior to resting.

PERFORMING COMPRESSION TEST:

1. Disconnect spark plug wires, clean around the base of the plugs and remove plugs.
2. Remove air cleaner. See removal of air cleaner in the appropriate H-D Service Manual.
3. Disconnect the TCA (Throttle Control Actuator) connector. See manual for reference.

Warning: Never use any metal object to hold the throttle plate open. Damage to the throat of the induction module or throttle plate could happen.

4. Insert a 3/4" diameter by about 12" long piece of plastic or wooden dowel to hold the throttle open.
5. Install the 12mm tool adapter into the front cylinder spark plug hole. Then hang the gauge head

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cable off the clutch cable. Thread the hose end into the 12mm adapter in the front cylinder spark plug hole.

6. Put the transmission in the neutral position.
7. Crank the engine continuously through five to seven full compression strokes. Note gauge readings at the end of the first and last compression strokes. Record the test results.
8. Remove the system relay from fuse block to disable ACR and repeat test. See H-D Service manual section, "System Fuses and Relays" for location reference.
9. After second test install system relay.
10. Repeat tests on the rear cylinder.
11. After cylinder tests are completed hold throttle valve open and remove dowel and connect TCA connector.
12. Removal of the system relay may set diagnostic trouble codes. Clear codes when test are complete.
13. Assemble and install the air cleaner assembly. See H-D service manual.
14. Refer to H-D Service Manual for Compression Specifications to make sure your test is good. The manual also gives information on diagnosing reasons why your test wasn't within Specification.
15. Remove tool from motorcycle and install spark plugs and torque to 12-18 ft lbs.
16. Connect spark plug wires.

1 YEAR WARRANTY

JIMS will repair or replace at our option any product found to be defective in materials or workmanship for one year from date of purchase. This warranty does not cover items damaged by accident, misuse, or neglect. Any implied warranties are expressly excluded, and JIMS shall not be liable for any loss of product use, or other consequential or incidental costs incurred by the user of our tools.

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