

BlueSpot[®]



8PCE PETROL COMPRESSION TESTER

User Manual



07908

General Information

Thank you for purchasing a BlueSpot product, you can find further information on our range at **www.bluespot.uk.com**. Please ensure that you are using the product correctly and that all guidance and cautions are followed in accordance with the instructions. Please retain these instructions for future reference.

Safe use

Please make sure that you read these instructions carefully in order to avoid injury when using the tool. Follow all health and safety rules and regulations. If in doubt and available please contact a more knowledgeable source.

DO NOT use if damaged.

- If tool is damaged do not use as this may cause damage to property or injury
- As with all vehicle testing and maintenance please use appropriate fixing such as axle stands or wheel chocks
- Maintain tool in good and clean condition for best and safest performance.
- Keep the work area clean, uncluttered and ensure there is adequate lighting.
- Maintain correct balance and footing. Ensure the floor is not slippery and wear non-slip shoes.
- Keep children and unauthorised persons away from the work area.
- Always dress appropriately and wear the correct PPE such as goggles and a dust mask if required.

Refer to vehicle manual and contact manufacturer if unsure. These instructions are intended as a guide only.

Introduction and Specification

The BlueSpot 8 Pce Petrol Compression Tester is ideal for accurately checking the compression of petrol engines. The 75mm diameter dial gauge reads up to 300psi.

The set contains 1 x 130mm straight push-on connector, 1 x 130mm angled push-on connector and 1 x 470mm flexible hose.

Thread sizes: M10 x 1, M12x1.25, M14x1.25, M18x1.5.

How to use

As always take care not to damage any other parts of the engine when working with this tool

1. To prepare for the test run engine so that car reaches "normal" operating temperature. (Refer to manual for this vehicle for normal safe engine temperature)
2. **TURN ENGINE OFF**
3. Place keys away from car to ensure that engine is not turned back on whilst you remove and number spark plugs wires according to cylinder. Keep a note of which wire corresponds with which cylinder
4. Loosen spark plugs
5. Clean spark plug wells with appropriate tools. We suggest an air blow gun and or wire brush.
6. Set throttle position wide open and remove the air filter from the vehicle

Remember to reset throttle position after completing test failure to do so could result in serious damage to engine and/or self

7. Disconnect the ignition system following manufacturers recommendations
8. From the kit select the proper adaptor and screw into the hose and then into the spark plug well. Hand tighten the adaptor into the well. You do not need to use a wrench to apply extra force, hand tight is correct for the test.
9. Connect the gauge to the hose and make sure that all fittings are correct and tight.

Vehicle is now ready for test. As a final precaution please review the above steps to make sure that all instructions have been followed.

Performing Test

1. Crank the engine between at least 5 times or until the test gauge stops rising.
2. Record the reading and then press the pressure release valve button
3. Repeat the test for all the cylinders on the vehicle

The push on connectors can also be used to test each cylinder

Findings

1. The test needle should travel up the scale until it reaches the peak for that cylinder. You should find that each cylinder does not vary more than 10% from cylinder to cylinder. If you find that they do you may have a problem.
2. If the test result is high then this may indicate that the cylinder has carbon build up. It may also indicate that the head of the cylinder has been modified.
3. If a reading on two adjacent cylinders is 20psi/kg/cm² (or more) lower than the other cylinders, the problem may be a cracked cylinder head or broken head gasket. In this case then coolant and oil may be found in both cylinders.
4. If the readings are too low, or vary too widely between cylinders, pour a teaspoon of SAE 30 oil into each cylinder and retest them. If the readings increase considerably, the problem may be poorly seated, or worn piston rings. If the readings remain about the same, the valves and/or associated components may be the problem. A burned or damaged piston may also cause the same results.

Completing test

1. When the test is complete please make sure that you clean and re install the spark plugs as they were initially removed. You can also take this opportunity to replace the spark plugs.
2. Reconnect the leads to the spark plugs
3. Return the throttle to closed position – **FAILURE TO COMPLETE THIS STEP CAN RESULT IN SERIOUS DAMAGE TO THE ENGINE**
4. Reconnect the ignition system

Contact

Find out more about the Bluespot® Lifetime Guarantee at www.bluespot.uk.com

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