

VS206 CATALYSER BACK PRESSURE TESTING KIT

INTRODUCTION

The pressure testing kit can be used to establish the working condition of the exhaust catalyser by measuring the relative back pressure of the system. This is carried out using various access points including oxygen lambda sensor socket, air injection system or through the wall of exhaust, using equipment provided.

1. SAFETY INSTRUCTIONS

- **WARNING!** Ensure all health and safety, local authority, and general workshop practice regulations are strictly adhered to when using tools.
- ✗ DO NOT use tools if damaged. Always maintain tools in good and clean condition for best and safest performance.
 ✓ If required, ensure the vehicle to be worked on is adequately supported with axle stands, ramps and chocks.
- Inrequired, ensure the vehicle to be worked on is adequately supported with axe stands, ramps and chocks.
 Wear approved eye protection. A full range of personal safety equipment is available from your Sealey dealer.
- ✓ Wear suitable clothing to avoid snagging. Do not wear jewellery and tie back long hair.
- ✓ Allow all parts to cool before handling.
- ✓ When the exhaust system is disconnected during testing, keep exhaust stream away from wiring and inflammable materials.
- ✓ Use proper ventilation and avoid breathing in exhaust fumes.
- ✓ Keep a fire extinguisher to hand.
- ✓ Account for all tools and parts being used and do not leave them in or near the engine.

IMPORTANT: Always refer to the vehicle manufacturer's service instructions, or proprietary manual to establish the current procedure and data. These instructions for use are provided as a guide only.

2. INSTRUCTIONS FOR USE

2.1. TESTING THROUGH THE OXYGEN SENSOR PORT

- Note: See Section 4 for part number and description of each item.
- 2.1.1. If there are two or more oxygen sensors, start testing at the one nearest the engine and proceed down stream. Disconnect the oxygen sensor wires and remove the oxygen sensor.
- 2.1.2. Install the oxygen sensor adaptor (Item 1), using plate and gasket (Item 2) if necessary.
- 2.1.3. Connect the quick coupler (fig.1 C) onto the quick coupler plug that is on the oxygen sensor adaptor and test for pressure.
- 2.1.4. Start the engine and allow it to idle, read the LOWER scale on the gauge which should not register over 0.09 bar (1¼ psi). If the gauge registers over this pressure, stop the engine, locate the restriction and correct the fault.
- 2.1.5. If the idle reading is NOT in the RED zone on the LOWER scale, rev the engine to 2500RPM. If the UPPER scale reading is now in the RED zone at 3 psi, (0.21 bar), or above, a restricted exhaust system has been identified and must be rectified.
- 2.1.6. If the vehicle has a 'Y' pipe with a converter on each side, the reading must be taken ahead of both converters.
- 2.1.7. If the vehicle has two converters in series, it is necessary to test the restriction of each converter.
- 2.1.8. If the vehicle has a dual exhaust system each side must be checked.

2.2. TESTING THROUGH THE AIR INJECTION SYSTEM PORT

- 2.2.1. Remove the rubber hose attached to the exhaust manifold check valve, and then remove the check valve.
- 2.2.2. Chose the correct size rubber adaptor (Items 6 to 9) and quick coupler plug (Items 4 or 5) and then connect to the quick coupler.
- 2.2.3. Push the rubber adaptor into the exhaust manifold air pipe (where the check valve was removed), DO NOT insert into the hose. Then perform the pressure test.
- 2.2.4. Start the engine, allow to idle, and read the LOWER scale on the gauge which should not register over 0.09 bar (1¼ psi), or be in the RED zone. If it is, stop the engine, locate the restriction and correct the fault.
- 2.2.5. If the idle reading is NOT in the RED zone on the LOWER scale, rev the engine to 2500RPM. If the UPPER scale reading is now in the RED zone at 3 psi, (0.21bar), or above, a restricted exhaust system has been identified, and must be rectified.
- 2.2.6. If the vehicle has a 'Y' pipe with a converter on each side, the reading must be taken ahead of both converters.
- 2.2.7. If the vehicle has two converters in series, it is necessary to test the restriction of each converter.
- 2.2.8. If the vehicle has a dual exhaust system each side must be checked.

2.3. TESTING THROUGH THE EXHAUST PIPE WALL

- 2.3.1. Put the vehicle on a high lift and drill a 3/8" (9.5mm) hole in the exhaust pipe, in front of the converter, avoiding welded seams.
- 2.3.2. Slip the tool nut (Item 11b) onto the tool bolt (Item 11a) with the knurling on the nut away from the bolt head.
- 2.3.3. Screw the insert nut (Item 12b) onto the bolt, with the knurled end facing the knurling on the tool nut, until tight. Push the insert nut fully into the 3/8" hole.
- 2.3.4. Hold the tool nut with a 9/16" wrench and turn the hex bolt clockwise until it will no longer turn using reasonable force.
- 2.3.5. Loosen the hex bolt anti-clockwise and remove
- 2.3.6. Screw in brass test adaptor (Item 10), with washer (Item 12c), and connect quick coupler to adaptor.
- 2.3.7. Start the engine, allow to idle, and read the LOWER scale on the gauge which should not register over 0.09 bar (1¼ psi), or be in the RED zone. If it is, stop the engine, locate the restriction and correct the fault.
- 2.3.8. If the idle reading is NOT in the RED zone on the LOWER scale, rev the engine to 2500RPM. If the UPPER scale reading is now in the RED zone at 3 psi, (0.21bar), or above, a restricted exhaust system has been identified, and must be rectified.
- 2.3.9. On completion of test remove test adaptor from insert nut and seal nut with round head screw (Item 12a) and washer (Item 12c).
- 2.3.10. If the vehicle has a 'Y' pipe with a converter on each side, the reading must be taken ahead of both converters.
- 2.3.11. If the vehicle has two converters in series, it is necessary to test the restriction of each converter.
- 2.3.12. If the vehicle has a dual exhaust system each side must be checked.



3. QUICK REFERENCE CHART



. PARTS LIST



* Shown for clarity in instructions - items available only in sets.

NOTE: It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice.

IMPORTANT: No liability is accepted for incorrect use of product.

WARRANTY: Guarantee is 12 months from purchase date, proof of which will be required for any claim.

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