

Jaguar Hints and Tips

Jaguar XJ 1995

Fuel, Emission Control and Engine Management (V12) 202 – 5.2 (Continued)

Adaptive fuel – P0172

Model: Jaguar XJ 1995

Complaint: The fault code P0172 is likely to be set due to the system being too rich. The fault code P0172 refers to injectors no's 1 – 6.

Remedy: Ensure the code P1111 has been logged after the service drive cycle has been completed. If this is not the case then go to step 6 of the test below.

Check the harness and connectors to ensure they are in good condition and are reliable. If they are faulty then either repair or replace and go to step 6 of the test below. Disconnect the injector harness and go to step 1 of the test below if no faults are found.

Test:

- Check harness insulation PI 032/001 will complete a circuit to ground. PI 033/001 will complete a circuit to ground. PI 034/001 will complete a circuit to ground. PI 035/001 will complete a circuit to ground. PI 036/001 will complete a circuit to ground. PI 037/001 will complete a circuit to ground. If this gives a positive result then go to step 2. If the circuit shorts then find and repair the wiring fault, re-connect the harness and go to step 6.
- Ensure the fuel pressure is approximately 2.3 bar or 3.3 absolute. If this gives a positive result then go to step 3. If the pressure is incorrect then repair the fault, re-connect the harness and go to step 6.
- Ensure the injectors are functioning correctly. For instance ensure they are not continuously open. If they are functioning correctly then go to step 4. If they are faulty then replace the injector or repair the fault, re-connect the harness and go to step 6.
- Ensure the resistance of the faulty injector is between 13 – 17 Ohms. If this gives a positive result then go to step 5. If the reading is incorrect replace the injector or repair the fault, re-connect the harness and go to step 6.
- Ensure the fault codes ECT, MAPS, TP, EVAP, or IAT have not already been logged. If not then go to step 6. If they have been then clear the faults, re-connect the harness and go to step 6.
- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 7.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

Adaptive fuel – P0174

Model: Jaguar XJ 1995

Complaint: The fault code P0174 is likely to be set due to the system being too lean in Bank B. The fault code P0174 refers to injectors no's 1 – 6.

Remedy: Ensure the code P1111 has been logged after the service drive cycle has been completed. If this is not the case then go to step 10 of the test below.

Check the harness and connectors to ensure they are in good condition and are reliable. If they are faulty then either repair or replace and go to step 10 of the test below.

Disconnect the Bank B injector harness and go to step 1 of the test below if no faults are found.

Test:

- Ensure there is a sufficient amount of fuel in the tank. If this gives a positive result then go to step 2. If the tank is empty then refill and go to step 10.
- Check harness continuity PI 038/001 is correctly wired to PI 047/007. PI 039/001 is correctly wired to PI 047/009. PI 040/002 is correctly wired to PI 047/005. PI 041/001 is correctly wired to PI 047/007. PI 042/001 is correctly wired to PI 047/005. PI 043/001 is correctly wired to PI 047/009. If this gives a positive result then go to step 3. If the circuit is open then find and repair the wiring fault, re-connect the harness and go to step 10.
- Check harness continuity PI 038/002, PI 039/002, PI 040/002, PI 041/002, PI 042/002, and PI 043/002 is correctly wired to PI 020/005. If this gives a positive result then go to step 4. If the circuit is open then find and repair the wiring fault, re-connect the harness and go to step 10.
- Ensure there are no blockages or leaks in the fuel system. If there are no blockages or leaks then go to step 5. If there are blockages or leaks then either repair or replace faulty pipe work, re-connect the harness and go to step 10.
- When looking at the injector rail ensure the fuel pressure is approximately 2.3 bar or 3.3 absolute. If this gives a positive result then go to step 6. If the pressure is incorrect then repair the fault, re-connect the harness and go to step 10.
- Ensure the injectors are functioning correctly. If this gives a positive result then go to step 7. If they are faulty then replace the injector or repair the fault, re-connect the harness and go to step 10.
- Ensure the resistance of the faulty injector is between 13 – 17 Ohms. If this gives a positive result then go to step 8. If the reading is incorrect, replace the injector, re-connect the harness and go to step 10.
- Ensure the fault codes ECT, MAPS, TP, EVAP, or IAT have not already been logged. If not then go to step 9. If they have been then clear the faults, re-connect the harness and go to step 10.
- Ensure there are no intake air leaks. If not then re-connect the harness and go to step 10. If there are leaks repair the leak, re-connect the harness and go to step 10.
- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 11.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

Adaptive fuel – P0175

Model: Jaguar XJ 1995

Complaint: The fault code P0175 is likely to be set due to the system being too rich. The fault code P0175 refers to injectors no's 1 – 6.

Remedy: Ensure the code P1111 has been logged after the service drive cycle has been completed. If this is not the case then go to step 6 of the test below.

Check the harness and connectors to ensure they are in good condition and are reliable. If they are faulty then either repair or replace and go to step 6 of the test below. Disconnect the Bank B injector harness and go to step 1 of the test below if no faults are found.

Test:

- Check harness insulation PI 038/001 will complete a circuit to ground. PI 039/001 will complete a circuit to ground. PI 040/001 will complete a circuit to ground. PI 041/001 will complete a circuit to ground. PI 042/001 will complete a circuit to ground. PI 043/001 will complete a circuit to ground. If this gives a positive result then go to step 2. If the circuit shorts then find and repair the wiring fault, re-connect the harness and go to step 6.
- Ensure the fuel pressure is approximately 2.3 bar or 3.3 absolute. If this gives a positive result then go to step 3. If the pressure is incorrect then repair the fault, re-connect the harness and go to step 6.
- Ensure the injectors are functioning correctly. For instance ensure they are not continuously open. If they are functioning correctly then go to step 4. If they are faulty then replace the injector or repair the fault, re-connect the harness and go to step 6.

- Ensure the resistance of the faulty injector is between 13 – 17 Ohms. If this gives a positive result then go to step 5. If the reading is incorrect replace the injector or repair the fault, re-connect the harness and go to step 6.
- Ensure the fault codes ECT, MAPS, TP, EVAP, or IAT have not already been logged. If not then go to step 6. If they have been then clear the faults, re-connect the harness and go to step 6.
- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 7.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

Altitude Compensation (AC) – P1244

Model: Jaguar XJ 1995

Complaint: The fault code P1244 is likely to be set due to an AC range or performance fault.

Remedy: Clear the fault code. In order to check if the fault code has been cleared perform the service drive cycle.

Altitude Compensation (AC) – P0105

Model: Jaguar XJ 1995

Complaint: The fault code P0105 is likely to be set due to a circuit malfunction.

Remedy: Clear the fault code. In order to check if the fault code has been cleared perform the service drive cycle. If the fault is still logged then replace the ECM.

Crank Signal – P1245

Model: Jaguar XJ 1995

Complaint: The fault code P1245 is likely to be set due to a low input fault in the crank signal..

Remedy: Ensure the code P1111 has been logged after the service drive cycle has been completed. If this is not the case then go to step 4 of the test below.

Check the harness and connectors to ensure they are in good condition and are reliable. If they are faulty then either repair or replace and go to step 4 of the test below.

Turn off the engine and go to step 1 of the test below if no faults are found.

Test:

- Check harness continuity PI 046/007 is correctly wired to FC 001/033. If this gives a positive result, switch on the engine and go to step 2. If the circuit is open then find and repair the wiring fault, re-connect the harness and go to step 4.
- Check harness continuity PI 045/007 is correctly wired to LS 047/001. If this gives a positive result, switch on the engine and go to step 3. If the circuit is open then find and repair the wiring fault, re-connect the harness and go to step 4.
- Check harness insulation PI 046/007 will complete a circuit to Vbatt. If this gives a positive result then go to step 4. If the circuit shorts then find and repair the wiring fault, re-connect the harness and go to step 4.
- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 5.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

Crank Signal – P1246

Model: Jaguar XJ 1995

Complaint: The fault code P1246 is likely to be set due to a high input fault in the crank signal.

Remedy: Ensure the code P1111 has been logged after the service drive cycle has been completed. If this is not the case then go to step 6 of the test below.

Check the harness and connectors to ensure they are in good condition and are reliable. If they are faulty then either repair or replace and go to step 6 of the test below.

Turn off the engine and go to step 1 of the test below if no faults are found.

Test:

- Check harness continuity PI 046/007 is correctly wired to FC 001/033. If this gives a positive result, go to step 2. If the circuit is open then find and repair the wiring fault, re-connect the harness and go to step 6.
- Check harness continuity PI 046/007 is correctly wired to LS 047/001. If this gives a positive result, switch on the engine and go to step 3. If the circuit is open then find and repair the wiring fault, re-connect the harness and go to step 6.
- Check harness insulation PI 046/007 will complete a circuit to Vbatt. If this gives a positive result then go to step 4. If the circuit shorts then find and repair the wiring fault, re-connect the harness and go to step 6.
- Ensure the starter relay supply and operation functions are working correctly. If this gives a positive result then go to step 5. If they are faulty then repair or replace the relay, re-connect the harness and go to step 6.
- Ensure the ignition relay supply and operation functions are working correctly. If this gives a positive result then go to step 6. If they are faulty then repair or replace the switch, re-connect the harness and go to step 6.
- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 7.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

Fuel level – P1198

Model: Jaguar XJ 1995

Complaint: The fault code P1198 is likely to be set due to a high input fault in the fuel level sensor.

Remedy: Ensure the code P1111 has been logged after the service drive cycle has been completed. If this is not the case then go to step 7 of the test below.

Check the harness and connectors to ensure they are in good condition and are reliable. If they are faulty then either repair or replace and go to step 7 of the test below.

Turn off the engine, disconnect the fuel sensor/instrument pack harness at FC 009 and go to step 1 of the test below; if no faults are found.

Test:

- Check harness continuity PI 044/021 is correctly wired to BT 032. If this gives a positive result, go to step 2. If the circuit is open then find and repair the wiring fault, re-connect the harness and go to step 7.
- Check harness continuity PI 044/021 is correctly wired to FC 009/020. If this gives a positive result, go to step 3. If the circuit is open then find and repair the wiring fault, re-connect the harness and go to step 7.
- Check harness continuity BT 033 is correctly wired to ground. If this gives a positive result go to step 4. If the circuit is open then find and repair the wiring fault, re-connect the harness and go to step 7.
- Ensure the smooth running of switch segments, and the sensor resistance value is within limits of 50 – 1000 Ohms. If this gives a positive result then go to step 5. If the reading is incorrect then repair or replace the sensor, re-connect the harness and go to step 7.
- Check harness insulation BT 033 will complete a circuit to PI 044/021. If this gives a positive result then go to step 6. If the circuit shorts then find and repair the wiring fault, re-connect the harness and go to step 7.
- Check the harness insulation PI 044/021 will complete a circuit to Vbatt. If this gives a positive result then go to step 7. If the circuit shorts then find and repair the wiring fault, re-connect the harness and go to step 7.
- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 8.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

Fuel level – P1199

Model: Jaguar XJ 1995

Complaint: The fault code P1199 is likely to be set due to a low input fault in the fuel level sensor.

Remedy: Ensure the code P1111 has been logged after the service drive cycle has been completed. If this is not the case then go to step 7 of the test below.

Check the harness and connectors to ensure they are in good condition and are reliable. If they are faulty then either repair or replace and go to step 7 of the test below.

Turn off the engine, disconnect the fuel sensor/instrument pack harness at FC 009 and go to step 1 of the test below; if no faults are found.

Test:

- Check harness continuity PI 044/021 is correctly wired to BT 032. If this gives a positive result, go to step 2. If the circuit is open then find and repair the wiring fault, re-connect the harness and go to step 7.
- Check harness continuity PI 044/021 is correctly wired to FC 009/020. If this gives a positive result, go to step 3. If the circuit is open then find and repair the wiring fault, re-connect the harness and go to step 7.
- Check harness continuity BT 033 is correctly wired to ground. If this gives a positive result go to step 4. If the circuit is open then find and repair the wiring fault, re-connect the harness and go to step 7.
- Ensure the smooth running of switch segments, and the sensor resistance value is within limits of 50 – 1000 Ohms. If this gives a positive result then go to step 5. If the reading is incorrect then repair or replace the sensor, re-connect the harness and go to step 7.
- Check harness insulation BT 033 will complete a circuit to PI 044/021. If this gives a positive result then go to step 6. If the circuit shorts then find and repair the wiring fault, re-connect the harness and go to step 7.
- Check the harness insulation PI 044/021 will complete a circuit to ground. If this gives a positive result then replace the sensor and go to step 7. If the circuit shorts then find and repair the wiring fault, re-connect the harness and go to step 7.
- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 8.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

Fuel pump – P1641

Model: Jaguar XJ 1995

Complaint: The fault code P1641 is likely to be set due to a relay fault in fuel pump No. 1.

Remedy: Ensure the code P1111 has been logged after the service drive cycle has been completed. If this is not the case then go to step 4 of the test below.

Check the harness and connectors to ensure they are in good condition and are reliable. If they are faulty then either repair or replace and go to step 4 of the test below.

Turn off the engine, disconnect the fuel pump relay No. 1 and go to step 1 of the test below; if no faults are found.

Test:

- Check harness continuity PI 047/029 is correctly wired to BT 026/085. If this gives a positive result, go to step 2. If the circuit is open then find and repair the wiring fault, re-connect the harness and go to step 4.
- Check harness insulation PI 047/029 will complete a circuit to Vbatt. If this gives a positive result then go to step 3. If the circuit shorts then find and repair the wiring fault, re-connect the harness and go to step 4.
- Ensure the relay supply and operation functions are working correctly. If this gives a positive result then go to step 4. If they are faulty then repair or replace the relay, re-connect the harness and go to step 4.

- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 5.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

Fuel pump – P1646

Model: Jaguar XJ 1995

Complaint: The fault code P1646 is likely to be set due to a relay fault in fuel pump No. 2.

Remedy: Ensure the code P1111 has been logged after the service drive cycle has been completed. If this is not the case then go to step 4 of the test below.

Check the harness and connectors to ensure they are in good condition and are reliable. If they are faulty then either repair or replace and go to step 4 of the test below.

Turn off the engine, disconnect the fuel pump relay No. 2 and go to step 1 of the test below; if no faults are found.

Test:

- Check harness continuity PI 047/012 is correctly wired to FU 002/085. If this gives a positive result, go to step 2. If the circuit is open then find and repair the wiring fault, re-connect the harness and go to step 4.
- Check harness insulation PI 047/012 will complete a circuit to Vbatt. If this gives a positive result then go to step 3. If the circuit shorts then find and repair the wiring fault, re-connect the harness and go to step 4.
- Ensure the relay supply and operation functions are working correctly. If this gives a positive result then go to step 4. If they are faulty then repair or replace the relay, re-connect the harness and go to step 4.
- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 5.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

Bank A Injectors – P0201 TP P0206

Model: Jaguar XJ 1995

Complaint: The fault code P0201 – P0206 is likely to be set due to the injector circuit bank A. The fault code P0201 – P0206 refers to injectors no's 1 – 6.

Remedy: Ensure the code P1111 has been logged after the service drive cycle has been completed. If this is not the case then go to step 6 of the test below.

Check the harness and connectors to ensure they are in good condition and are reliable. If they are faulty then either repair or replace and go to step 6 of the test below. Disconnect the injector and go to step 1 of the test below if no faults are found.

Test:

- Check harness continuity PI 032/001 is correctly wired to PI 047/010. PI 033/001 is correctly wired to PI 047/006. PI 034/001 is correctly wired to PI 047/008. PI 035/001 is correctly wired to PI 047/006. PI 036/001 is correctly wired to PI 047/010. PI 037/001 is correctly wired to PI 047/008. If this gives a positive result then go to step 2. If the circuit is open then replace the sensor, re-connect the harness and go to step 6.
- Check harness continuity PI 032/002, PI 033/002, PI 034/002, PI 035/002, PI 036/002, and PI 037/002 are all correctly wired to RS 035/005. If this gives positive results then switch on ignition and go to step 3. If the circuit is open then find and repair the wiring fault, re-connect the harness and go to step 6.
- Ensure the voltage level at RS 035/002 is 12V. If this gives positive results then switch off the engine and go to step 4. If the level is under 12V then switch off ignition and go to step 6.
- Ensure the PI main relay operation is functioning correctly. If they are functioning correctly then go to step 5. If they are faulty then replace the relay or repair the fault, re-connect the harness and go to step 6.

- Ensure the resistance of injector pin 1 to injector pin 2 is between 13 – 17 Ohms. If this gives a positive result then re-connect the injector and go to step 6. If the reading is incorrect replace the injector, re-connect the harness and go to step 6.
- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 7.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

Bank A Injectors – P0207 TP P0212

Model: Jaguar XJ 1995

Complaint: The fault code P0207 – P0212 is likely to be set due to the injector circuit bank B. The fault code P0207 – P0212 refers to injectors no's 1 – 6.

Remedy: Ensure the code P1111 has been logged after the service drive cycle has been completed. If this is not the case then go to step 6 of the test below.

Switch off engine.

Check the harness and connectors to ensure they are in good condition and are reliable. If they are faulty then either repair or replace and go to step 6 of the test below. Disconnect the injector and go to step 1 of the test below if no faults are found.

Test:

- Check harness continuity PI 038/001 is correctly wired to PI 047/007. PI 039/001 is correctly wired to PI 047/009. PI 040/001 is correctly wired to PI 047/005. PI 041/001 is correctly wired to PI 047/007. PI 042/001 is correctly wired to PI 047/005. PI 043/001 is correctly wired to PI 047/009. If this gives a positive result then go to step 2. If the circuit is open then replace the sensor, re-connect the harness and go to step 6.
- Check harness continuity PI 038,002, PI 039/002, PI 040/002, PI 041/002, PI 042/002, and PI 043/002 are all correctly wired to RS 035/005. If this gives positive results then switch on ignition and go to step 3. If the circuit is open then find and repair the wiring fault, re-connect the harness and go to step 6.
- Ensure the voltage level at RS 035/002 is 12V. If this gives positive results then switch off the engine and go to step 4. If the level is under 12V then find and repair the wiring fault, re-connect the harness and go to step 6.
- Ensure the PI main relay operation is functioning correctly. If they are functioning correctly then go to step 5. If they are faulty then replace the relay or repair the fault, re-connect the harness and go to step 6.
- Ensure the resistance of injector pin 1 to injector pin 2 is between 13 – 17 Ohms. If this gives a positive result then re-connect the injector and go to step 6. If the reading is incorrect replace the injector, re-connect the harness and go to step 6.
- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 7.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

Sensor Power Supply – P1240

Model: Jaguar XJ 1995

Complaint: The fault code P1240 is likely to be set due to a power supply malfunction in the sensor.

Remedy: Ensure the code P1111 has been logged after the service drive cycle has been completed. If this is not the case then go to step 7 of the test below.

Check the harness and connectors at TP/MAP sensors to ensure they are in good condition and are reliable. If they are faulty then either repair or replace and go to step 7 of the test below.

Turn off the engine, disconnect the TP and MAP sensors and go to step 1 of the test below; if no faults are found.

Test:

- Check harness continuity PI 045/007 is correctly wired to PI 050/003. If this gives a positive result, go to step 2. If the circuit is open then find and repair the wiring fault, re-connect the harness or sensors and go to step 7.
- Check harness continuity PI 045/007 is correctly wired to PI 009/003. If this gives a positive result, go to step 3. If the circuit is open then find and repair the wiring fault, re-connect the harness or sensors and go to step 7.
- Check harness continuity PI 045/007 is correctly wired to PI 007/004. If this gives a positive result reconnect TP and MAP sensors and go to step 4. If the circuit is open then find and repair the wiring fault, re-connect the harness or sensors and go to step 7.
- Check harness insulation PI 045 will complete a circuit to ground. If this gives a positive result then go to step 5. If the circuit shorts then find and repair the wiring fault, re-connect the harness and go to step 7.
- Check the harness insulation PI 045/007 will complete a circuit to Vbatt. If this gives a positive result then disconnect the sensor harnesses, switch on engine, and go to step 6. If the circuit shorts then find and repair the wiring fault, re-connect the harness and go to step 7.
- Ensure the voltage level at PI 045/007 is within 4.75 – 5.25V. If the reading is within these limits then re-connect the harness and go to step 7. If the reading is out of limits then reset the level, re-connect the harness and go to step 7.
- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 8.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

Sensor Power Supply – P1241

Model: Jaguar XJ 1995

Complaint: The fault code P1241 is likely to be set due to a low input fault in the sensor power supply.

Remedy: Ensure the code P1111 has been logged after the service drive cycle has been completed. If this is not the case then go to step 3 of the test below.

Check the harness and connectors at TP/MAP sensors to ensure they are in good condition and are reliable. If they are faulty then either repair or replace and go to step 3 of the test below.

Turn off the engine, disconnect the TP and MAP sensors and go to step 1 of the test below; if no faults are found.

Test:

- Check harness insulation PI 045/007 will complete a circuit to ground. If this gives positive results then go to step 2. If the circuit shorts then find and repair the wiring fault, re-connect the harness or sensors and go to step 3.
- Ensure there are no faults logged in the TP/ MAP sensor. If no faults have been logged then go to step 3. If faults have been logged then repair the fault, re-connect the harness or sensors and go to step 3.
- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 4.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

Sensor Power Supply – P1242

Model: Jaguar XJ 1995

Complaint: The fault code P1242 is likely to be set due to a high input fault in the sensor power supply.

Remedy: Ensure the code P1111 has been logged after the service drive cycle has been completed. If this is not the case then go to step 3 of the test below.

Check the harness and connectors at TP/MAP sensors to ensure they are in good condition and are reliable. If they are faulty then either repair or replace and go to step 3 of the test below.

Turn off the engine, disconnect the TP and MAP sensors and go to step 1 of the test below; if no

faults are found.

Test:

- Check harness insulation PI 045/007 will complete a circuit to ground. If this gives positive results then go to step 2. If the circuit shorts then find and repair the wiring fault, re-connect the harness or sensors and go to step 3.
- Ensure there are no faults logged in the TP/ MAP sensor. If no faults have been logged then go to step 3. If faults have been logged then repair the fault, re-connect the harness or sensors and go to step 3.
- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 4.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

Misfire – P0300

Model: Jaguar XJ 1995

Complaint: The fault code P0300 is likely to be set due to a detected random misfire.

Remedy: Ensure the code P1111 has been logged after the service drive cycle has been completed. If this is not the case then go to step 7 of the test below.

Check the harness and connectors at injectors, HT leads and crank, cam and TDC sensors to ensure they are in good condition and are reliable. If they are faulty then either repair or replace and go to step 7 of the test below.

Turn off the engine, and go to step 1 of the test below if no faults are found.

Test:

- Ensure there is enough fuel in the tank. If the fuel level is satisfactory then go to step 2. If the fuel is too low then top up, re-connect the harness and sensors and go to step 7.
- Ensure there has been no air ingress in the fuel system. If not then go to step 3. If so then repair, re-connect the harness and sensors and go to step 7.
- Ensure the fault codes for the ignition and fuel have not been recorded. If not then go to step 4. If so, find and repair the fault, re-connect the harness and sensors and go to step 7.
- Ensure the fault codes P0335, P0336, P0340, P1335 or P1336 have not been recorded. If not then go to step 5. If they have then find and repair the wiring fault, re-connect the harness and sensors and go to step 7.
- Ensure ECT, MAP, TP or IAT fault codes have not been recorded. If not then go to step 6. If so, then find and repair the fault, re-connect the harness and sensors and go to step 7.
- Ensure the EVAP or PCV fault codes have not been recorded. If not then go to step 7. If they have been recorded find and repair the wiring fault, re-connect the harness and sensors and go to step 7.
- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 8.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

Misfire – P0301 – P0312

Model: Jaguar XJ 1995

Complaint: The fault code P0301 – P0306 is likely to be set due to a detected misfire in Bank A cylinder 1-6. Fault code P0307 – P0312 is likely to be set due to a detected misfire in Bank B cylinder 1-6.

Remedy: Ensure the code P1111 has been logged after the service drive cycle has been completed. If this is not the case then go to step 7 of the test below.

Check the harness and connectors at injectors, HT leads and crank, cam and TDC sensors to ensure they are in good condition and are reliable. If they are faulty then either repair or replace and go to step 7 of the test below.

Turn off the engine, and go to step 1 of the test below if no faults are found.

Test:

- Ensure there is enough fuel in the tank. If the fuel level is satisfactory then go to step 2. If the fuel is too low then top up, re-connect the harness and sensors and go to step 7.
- Ensure there has been no air ingress in the fuel system. If not then go to step 3. If so then repair, re-connect the harness and sensors and go to step 7.
- Ensure the fault codes for the ignition and fuel have not been recorded. If not then go to step 4. If so, find and repair the fault, re-connect the harness and sensors and go to step 7.
- Ensure the fault codes P0335, P0336, P0340, P1335 or P1336 have not been recorded. If not then go to step 5. If they have then find and repair the wiring fault, re-connect the harness and sensors and go to step 7.
- Ensure ECT, MAP, TP or IAT fault codes have not been recorded. If not then go to step 6. If so, then find and repair the fault, re-connect the harness and sensors and go to step 7.
- Ensure the EVAP or PCV fault codes have not been recorded. If not then go to step 7. If they have been recorded find and repair the wiring fault, re-connect the harness and sensors and go to step 7.
- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 8.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

Misfire – P1313

Model: Jaguar XJ 1995

Complaint: The fault code P1313 is likely to be set due to a detected misfire rate and catalyst damage fault in Bank A.

Remedy: Ensure the code P1111 has been logged after the service drive cycle has been completed. If this is not the case then go to step 7 of the test below.

Check the harness and connectors at injectors, HT leads and crank, cam and TDC sensors to ensure they are in good condition and are reliable. If they are faulty then either repair or replace and go to step 7 of the test below.

Turn off the engine, and go to step 1 of the test below if no faults are found.

Test:

- Ensure there is enough fuel in the tank. If the fuel level is satisfactory then go to step 2. If the fuel is too low then top up, re-connect the harness and sensors and go to step 7.
- Ensure there has been no air ingress in the fuel system. If not then go to step 3. If so then repair, re-connect the harness and sensors and go to step 7.
- Ensure the fault codes for the ignition and fuel have not been recorded. If not then go to step 4. If so, find and repair the fault, re-connect the harness and sensors and go to step 7.
- Ensure the fault codes P0335, P0336, P0340, P1335 or P1336 have not been recorded. If not then go to step 5. If they have then find and repair the wiring fault, re-connect the harness and sensors and go to step 7.
- Ensure ECT, MAP, TP or IAT fault codes have not been recorded. If not then go to step 6. If so, then find and repair the fault, re-connect the harness and sensors and go to step 7.
- Ensure the EVAP or PCV fault codes have not been recorded. If not then go to step 7. If they have been recorded find and repair the wiring fault, re-connect the harness and sensors and go to step 7.
- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 8.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

Misfire – P1314

Model: Jaguar XJ 1995

Complaint: The fault code P1314 is likely to be set due to a detected misfire rate and catalyst damage fault in Bank B.

Remedy: Ensure the code P1111 has been logged after the service drive cycle has been completed. If this is not the case then go to step 7 of the test below.

Check the harness and connectors at injectors, HT leads and crank, cam and TDC sensors to ensure they are in good condition and are reliable. If they are faulty then either repair or replace and go to step 7 of the test below.

Turn off the engine, and go to step 1 of the test below if no faults are found.

Test:

- Ensure there is enough fuel in the tank. If the fuel level is satisfactory then go to step 2. If the fuel is too low then top up, re-connect the harness and sensors and go to step 7.
- Ensure there has been no air ingress in the fuel system. If not then go to step 3. If so then repair, re-connect the harness and sensors and go to step 7.
- Ensure the fault codes for the ignition and fuel have not been recorded. If not then go to step 4. If so, find and repair the fault, re-connect the harness and sensors and go to step 7.
- Ensure the fault codes P0335, P0336, P0340, P1335 or P1336 have not been recorded. If not then go to step 5. If they have then find and repair the wiring fault, re-connect the harness and sensors and go to step 7.
- Ensure ECT, MAP, TP or IAT fault codes have not been recorded. If not then go to step 6. If so, then find and repair the fault, re-connect the harness and sensors and go to step 7.
- Ensure the EVAP or PCV fault codes have not been recorded. If not then go to step 7. If they have been recorded find and repair the wiring fault, re-connect the harness and sensors and go to step 7.
- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 8.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

Misfire – P1316

Model: Jaguar XJ 1995

Complaint: The fault code P1316 is likely to be set due to a misfire excessive emissions fault.

Remedy: Ensure the code P1111 has been logged after the service drive cycle has been completed. If this is not the case then go to step 7 of the test below.

Check the harness and connectors at injectors, HT leads and crank, cam and TDC sensors to ensure they are in good condition and are reliable. If they are faulty then either repair or replace and go to step 7 of the test below.

Turn off the engine, and go to step 1 of the test below if no faults are found.

Test:

- Ensure there is enough fuel in the tank. If the fuel level is satisfactory then go to step 2. If the fuel is too low then top up, re-connect the harness and sensors and go to step 7.
- Ensure there has been no air ingress in the fuel system. If not then go to step 3. If so then repair, re-connect the harness and sensors and go to step 7.
- Ensure the fault codes for the ignition and fuel have not been recorded. If not then go to step 4. If so, find and repair the fault, re-connect the harness and sensors and go to step 7.
- Ensure the fault codes P0335, P0336, P0340, P1335 or P1336 have not been recorded. If not then go to step 5. If they have then find and repair the wiring fault, re-connect the harness and sensors and go to step 7.

- Ensure ECT, MAP, TP or IAT fault codes have not been recorded. If not then go to step 6. If so, then find and repair the fault, re-connect the harness and sensors and go to step 7.
- Ensure the EVAP or PCV fault codes have not been recorded. If not then reconnect the harness and go to step 7. If they have been recorded find and repair the wiring fault, re-connect the harness and sensors and go to step 7.
- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 8.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

Engine speed sensor – P0335

Model: Jaguar XJ 1995

Complaint: The fault code P0335 is likely to be set due to an ESS circuit fault.

Remedy: Ensure the code P1111 has been logged after the service drive cycle has been completed. If this is not the case then go to step 7 of the test below.

Check the harness and connectors to ensure they are in good condition and are reliable. If they are faulty then either repair or replace and go to step 7 of the test below.

Turn off the engine, disconnect the ES sensor and go to step 1 of the test below; if no faults are found.

Test:

- Check harness continuity PI 046/014 is correctly wired to PI 023/001. If this gives a positive result, go to step 2. If the circuit is faulty then find and repair the wiring fault, re-connect the harness or sensors and go to step 7.
- Check harness continuity PI 046/019 is correctly wired to PI 023/002. If this gives a positive result, go to step 3. If the circuit is open then find and repair the wiring fault, re-connect the harness or sensors and go to step 7.
- Check harness insulation PI 023/001 will complete a circuit to ground. If this gives a positive result then go to step 4. If the circuit shorts then find and repair the wiring fault, re-connect the harness and go to step 7.
- Check the harness insulation PI 023/001 will complete a circuit to Vbatt. If this gives a positive result then replace the sensor, reconnect the harness and go to step 5. If the circuit shorts then find and repair the wiring fault, re-connect the harness and go to step 7.
- Check the harness insulation PI 023/002 will complete a circuit to Vbatt. If this gives a positive result then go to step 6. If the circuit shorts then find and repair the wiring fault, re-connect the harness and go to step 7.
- Ensure the resistance value of the sensor is within 800 – 1660 Ohms after removing sensor and cleaning sensing face. If the reading is within these limits then go to step 7. If the reading is out of limits then replace the sensor, re-connect the harness and go to step 7.
- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 8.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

Engine speed sensor – P0336

Model: Jaguar XJ 1995

Complaint: The fault code P0336 is likely to be set due to an ESS range or performance fault.

Remedy: Ensure the code P1111 has been logged after the service drive cycle has been completed. If this is not the case then go to step 7 of the test below.

Check the harness and connectors to ensure they are in good condition and are reliable. If they are faulty then either repair or replace and go to step 7 of the test below. Turn off the engine, disconnect the ES sensor and go to step 1 of the test below; if no faults are found.

Test:

- Check harness continuity PI 046/014 is correctly wired to PI 023/001. If this gives a positive result, go to step 2. If the circuit is faulty then find and repair the wiring fault, re-connect the harness or sensors and go to step 7.
- Check harness continuity PI 046/019 is correctly wired to PI 023/002. If this gives a positive result, go to step 3. If the circuit is open then find and repair the wiring fault, re-connect the harness or sensors and go to step 7.
- Check harness insulation PI 023/001 will complete a circuit to ground. If this gives a positive result then go to step 4. If the circuit shorts then find and repair the wiring fault, re-connect the harness and go to step 7.
- Check the harness insulation PI 023/001 will complete a circuit to Vbatt. If this gives a positive result then replace the CKP, reconnect the harness and go to step 5. If the circuit shorts then find and repair the wiring fault, re-connect the harness and go to step 7.
- Check the harness insulation PI 023/002 will complete a circuit to Vbatt. If this gives a positive result then go to step 6. If the circuit shorts then find and repair the wiring fault, re-connect the harness and go to step 7.
- Ensure the resistance value of the sensor is within 800 – 1660 Ohms after removing sensor and cleaning sensing face. If the reading is within these limits then go to step 7. If the reading is out of limits then replace the sensor, re-connect the harness and go to step 7.
- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 8.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

Camshaft position sensor – P0304

Model: Jaguar XJ 1995

Complaint: The fault code P0304 is likely to be set due to a CMP sensor circuit fault.

Remedy: Ensure the code P1111 has been logged after the service drive cycle has been completed. If this is not the case then go to step 8 of the test below.

Check the harness and connectors to ensure they are in good condition and are reliable. If they are faulty then either repair or replace and go to step 8 of the test below.

Turn off the engine, disconnect the CMP sensor and go to step 1 of the test below; if no faults are found.

Test:

- Check harness continuity PI 046/008 is correctly wired to PI 003/001. If this gives a positive result, go to step 2. If the circuit is faulty then find and repair the wiring fault, re-connect the harness or sensors and go to step 8.
- Check harness continuity PI 046/012 is correctly wired to PI 003/002. If this gives a positive result, go to step 3. If the circuit is open then find and repair the wiring fault, re-connect the harness or sensors and go to step 8.
- Check harness insulation PI 003/001 will complete a circuit to ground. If this gives a positive result then go to step 4. If the circuit shorts then find and repair the wiring fault, re-connect the harness and go to step 8.
- Check the harness insulation PI 003/001 will complete a circuit to Vbatt. If this gives a positive result then replace the CMP, reconnect the harness and go to step 5. If the circuit shorts then find and repair the wiring fault, re-connect the harness and go to step 8.
- Check the harness insulation PI 002/002 will complete a circuit to Vbatt. If this gives a positive result then go to step 6. If the circuit shorts then find and repair the wiring fault, re-connect the harness and go to step 8.
- Ensure the resistance value of the sensor is within 1556 – 3225 Ohms after removing CMP sensor and cleaning sensing face. If the reading is within these limits then go to step 7. If the reading is out of limits then replace the sensor, re-connect the harness and go to step 8.

- Fit the sensor, making sure there is no outer damage to the timing disc peg, and the mounting face is clean. If this gives a positive result then go to step 8. If there is any damage to the timing disc peg replace the disc or sensor depending upon what is required, re-connect the harness and go to step 8.
- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 9.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

Crankshaft position sensor – P1135

Model: Jaguar XJ 1995

Complaint: The fault code P1135 is likely to be set due to a CKP circuit fault.

Remedy: Ensure the code P1111 has been logged after the service drive cycle has been completed. If this is not the case then go to step 8 of the test below.

Check the harness and connectors to ensure they are in good condition and are reliable. If they are faulty then either repair or replace and go to step 8 of the test below.

Turn off the engine, disconnect the CKP sensor and go to step 1 of the test below; if no faults are found.

Test:

- Check harness continuity PI 046/013 is correctly wired to PI 002/001. If this gives a positive result, go to step 2. If the circuit is faulty then find and repair the wiring fault, re-connect the harness and go to step 8.
- Check harness continuity PI 046/018 is correctly wired to PI 002/002. If this gives a positive result, go to step 3. If the circuit is open then find and repair the wiring fault, re-connect the harness and go to step 8.
- Check harness insulation PI 002/001 will complete a circuit to ground. If this gives a positive result then go to step 4. If the circuit shorts then find and repair the wiring fault, re-connect the harness and go to step 8.
- Check the harness insulation PI 002/001 will complete a circuit to Vbatt. If this gives a positive result then replace the CKP, reconnect the harness and go to step 5. If the circuit shorts then find and repair the wiring fault, re-connect the harness and go to step 8.
- Check the harness insulation PI 002/002 will complete a circuit to Vbatt. If this gives a positive result then go to step 6. If the circuit shorts then find and repair the wiring fault, re-connect the harness and go to step 8.
- Ensure the resistance value of the sensor is within 800 – 1660 Ohms after removing CKP sensor and cleaning sensing face. If the reading is within these limits then go to step 7. If the reading is out of limits then replace the sensor, re-connect the harness and go to step 8.
- Fit the sensor, making sure the distance to crank damper is within 0.5 – 1.5mm, and the mounting face is clean. If this gives a positive result then re-connect the harness and go to step 8. If there is any damage or it is out of limits then replace the disc or sensor depending upon which is required, re-connect the harness and go to step 8.
- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 9.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

Crankshaft position sensor – P1136

Model: Jaguar XJ 1995

Complaint: The fault code P1136 is likely to be set due to a CKP range or performance fault.

Remedy: Ensure the code P1111 has been logged after the service drive cycle has been completed. If this is not the case then go to step 8 of the test below.

Check the harness and connectors to ensure they are in good condition and are reliable. If they are faulty then either repair or replace and go to step 8 of the test below.

Turn off the engine, disconnect the CKP sensor and go to step 1 of the test below; if no faults are

found.

Test:

- Check harness continuity PI 046/013 is correctly wired to PI 002/001. If this gives a positive result, go to step 2. If the circuit is faulty then find and repair the wiring fault, re-connect the harness and go to step 8.
- Check harness continuity PI 046/018 is correctly wired to PI 002/002. If this gives a positive result, go to step 3. If the circuit is open then find and repair the wiring fault, re-connect the harness and go to step 8.
- Check harness insulation PI 002/001 will complete a circuit to ground. If this gives a positive result then go to step 4. If the circuit shorts then find and repair the wiring fault, re-connect the harness and go to step 8.
- Check the harness insulation PI 002/001 will complete a circuit to Vbatt. If this gives a positive result then replace the CKP, reconnect the harness and go to step 5. If the circuit shorts then find and repair the wiring fault, re-connect the harness and go to step 8.
- Check the harness insulation PI 002/002 will complete a circuit to Vbatt. If this gives a positive result then go to step 6. If the circuit shorts then find and repair the wiring fault, re-connect the harness and go to step 8.
- Ensure the resistance value of the sensor is within 800 – 1660 Ohms after removing CKP sensor and cleaning sensing face. If the reading is within these limits then go to step 7. If the reading is out of limits then replace the sensor, re-connect the harness and go to step 8.
- Fit the sensor, making sure the distance to timing disc is within 0.5 – 1.5mm, there is no damage, and the mounting face is clean. If this gives a positive result then re-connect the harness and go to step 8. If there is any damage or it is out of limits then readjust the sensor or replace the disc or sensor depending upon which is required, re-connect the harness and go to step 8.
- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 9.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

Ignition diagnostic monitor – P1367

Model: Jaguar XJ 1995

Complaint: The fault code P1367 is likely to be set due to an ignition monitor fault in Bank A.

Remedy: Ensure the code P1111 has been logged after the service drive cycle has been completed. If this is not the case then go to step 12 of the test below.

Check the harness and connectors at the TP and MAP sensors to ensure they are in good condition and are reliable. If they are faulty then either repair or replace and go to step 12 of the test below.

Turn off the engine, disconnect the Bank A ignition coil and go to step 1 of the test below; if no faults are found.

Test:

- Check harness continuity PI 010/001 is correctly wired to PI 047/022. If this gives a positive result, go to step 2. If the circuit is open then find and repair the wiring fault, re-connect the harness and coil and go to step 12.
- Check harness continuity PI 010/003 is correctly wired to PI 047/21. If this gives a positive result, go to step 3. If the circuit is open then find and repair the wiring fault, re-connect the harness and coil and go to step 12.
- Check harness continuity PI 010/006 is correctly wired to PI 047/020. If this gives a positive result then go to step 4. If the circuit is open then find and repair the wiring fault, re-connect the harness and coil, and go to step 12.

- Check harness continuity PI 010/007 is correctly wired to PI 046/021. If this gives a positive result go to step 5. If the circuit is open then find and repair the wiring fault, re-connect the harness and coil, and go to step 12.
- Check harness continuity PI 010/004 is correctly wired to PI 053/003. If this gives a positive result then go to step 6. If the circuit is open then find and repair the wiring fault, re-connect the harness and coil, and go to step 12.
- Check harness continuity PI 010/002 is correctly wired to PI 012/002. If this gives a positive result then go to step 7. If the circuit is open then find and repair the wiring fault, re-connect the harness and coil, and go to step 12.
- Check harness continuity PI 010/005 is correctly wired to PI 012/003. If this gives a positive result then go to step 8. If the circuit is open then find and repair the wiring fault, re-connect the harness and coil, and go to step 12.
- Check harness continuity PI 010/008 is correctly wired to PI 012/004. If this gives a positive result then go to step 9. If the circuit is open then find and repair the wiring fault, re-connect the harness and coil, and go to step 12.
- Check harness continuity PI 012/001 is correctly wired to PI 053/003. If this gives a positive result then go to step 10. If the circuit is open then find and repair the wiring fault, re-connect the harness, and go to step 12.
- Check harness insulation PI 010 will complete a circuit to Vbatt. If this gives a positive result then go to step 11. If the circuit shorts then find and repair the wiring fault, re-connect the harness and coil and go to step 12.
- Ensure the ignition coil relay is operating sufficiently. If so then go to step 12. If it is not functioning correctly then repair or replace the relay, re-connect the harness and coil, and go to step 12.
- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 13.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

Ignition diagnostic monitor – P1368

Model: Jaguar XJ 1995

Complaint: The fault code P1368 is likely to be set due to an ignition monitor fault in Bank B.

Remedy: Ensure the code P1111 has been logged after the service drive cycle has been completed. If this is not the case then go to step 12 of the test below.

Check the harness and connectors at the TP and MAP sensors to ensure they are in good condition and are reliable. If they are faulty then either repair or replace and go to step 12 of the test below.

Turn off the engine, disconnect the Bank B ignition coil and go to step 1 of the test below; if no faults are found.

Test:

- Check harness continuity PI 011/001 is correctly wired to PI 047/019. If this gives a positive result, go to step 2. If the circuit is open then find and repair the wiring fault, re-connect the harness and coil and go to step 12.
- Check harness continuity PI 011/003 is correctly wired to PI 047/018. If this gives a positive result, go to step 3. If the circuit is open then find and repair the wiring fault, re-connect the harness and coil and go to step 12.
- Check harness continuity PI 011/006 is correctly wired to PI 047/017. If this gives a positive result then go to step 4. If the circuit is open then find and repair the wiring fault, re-connect the harness and coil, and go to step 12.
- Check harness continuity PI 011/007 is correctly wired to PI 046/020. If this gives a positive result go to step 5. If the circuit is open then find and repair the wiring fault, re-connect the harness and coil, and go to step 12.
- Check harness continuity PI 011/004 is correctly wired to PI 053/003. If this gives a positive result then go to step 6. If the circuit is open then find and repair the wiring fault, re-connect the harness and coil, and go to step 12.

- Check harness continuity PI 011/002 is correctly wired to PI 013/002. If this gives a positive result then go to step 7. If the circuit is open then find and repair the wiring fault, re-connect the harness and coil, and go to step 12.
- Check harness continuity PI 011/005 is correctly wired to PI 013/003. If this gives a positive result then go to step 8. If the circuit is open then find and repair the wiring fault, re-connect the harness and coil, and go to step 12.
- Check harness continuity PI 011/008 is correctly wired to PI 013/004. If this gives a positive result then go to step 9. If the circuit is open then find and repair the wiring fault, re-connect the harness and coil, and go to step 12.
- Check harness continuity PI 013/001 is correctly wired to PI 053/003. If this gives a positive result then go to step 10. If the circuit is open then find and repair the wiring fault, re-connect the harness, and go to step 12.
- Check harness insulation PI 011 will complete a circuit to Vbatt. If this gives a positive result then go to step 11. If the circuit shorts then find and repair the wiring fault, re-connect the harness and coil and go to step 12.
- Ensure the ignition coil relay is operating sufficiently. If so then go to step 12. If it is not functioning correctly then repair or replace the relay, re-connect the harness and coil, and go to step 12.
- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 13.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

Secondary air injection system – P0410

Model: Jaguar XJ 1995

Complaint: The fault code P0410 is likely to be set due to an AIR malfunction.

Remedy: Ensure the code P1111 has been logged after the service drive cycle has been completed. If this is not the case then go to step 15 of the test below.

Check the harness and connectors to ensure they are in good condition and are reliable. If they are faulty then either repair or replace and go to step 15 of the test below.

Go to step 1 of the test below if no faults are found.

Test:

- Ensure the AIR pump drive belt is working sufficiently. If so then go to step 2. If it is faulty then repair and go to step 15.
- Ensure the AIR pump hoses are working sufficiently. If so then switch off the engine, remove the AIR relay and go to step 3. If it is not working sufficiently then repair and go to step 15.
- Check harness continuity PI 052/001 is correctly wired to PI 046/017. If this gives a positive result, go to step 4. If the circuit is open then find and repair the wiring fault, re-connect the harness and go to step 15.
- Check harness continuity PI 052/002 is correctly wired to RS 006/005. If this gives a positive result, go to step 5. If the circuit is open then find and repair the wiring fault, re-connect the harness and go to step 15.
- Check harness continuity PI 052/003 is correctly wired to RS 006/005. If this gives a positive result then disconnect both the air pump clutch, and the solenoid vac valve, go to step 6. If the circuit is open then find and repair the wiring fault, re-connect the harness, and go to step 15.
- Check harness continuity PI 052/005 is correctly wired to PI 021/002. If this gives a positive result go to step 7. If the circuit is open then find and repair the wiring fault, re-connect the harness, and go to step 15.
- Check harness continuity PI 021/001 is correctly wired to ground. If this gives a positive result then go to step 8. If the circuit is open then find and repair the wiring fault, re-connect the harness, and go to step 15.

- Check harness continuity PI 022/001 is correctly wired to PI 052/005. If this gives a positive result then go to step 9. If the circuit is open then find and repair the wiring fault, re-connect the harness, and go to step 15.
- Check harness continuity PI 022/001 is correctly wired to PI 052/005. If this gives a positive result then go to step 10. If the circuit is open then find and repair the wiring fault, re-connect the harness, and go to step 15.
- Check harness continuity PI 022/002 is correctly wired to PI 047/011. If this gives a positive result then re-connect both the AIR clutch and the solenoid vac valve, switch on the engine and go to step 11. If the circuit is open then find and repair the wiring fault, re-connect the harness, and go to step 15.
- Check the voltage level at RS 006/005. If it reads at Vbatt, then go to step 12. If it reads under Vbatt then find and repair the wiring fault, reconnect the harness and go to step 15.
- Ensure the AIR relay operation is working sufficiently. If this gives a positive result then go to step 13. If it is not working sufficiently then replace the relay, re-connect the harness and go to step 15.
- Ensure the AIR pump operation is working sufficiently. If this gives a positive result then go to step 14. If it is not working sufficiently then replace the pump, re-connect the harness and go to step 15.
- Ensure the solenoid vac valve is working sufficiently. If this gives a positive result then go to step 15. If it is faulty then replace the valve, re-connect the harness and go to step 15.
- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 16.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

Secondary air injection system – P0414

Model: Jaguar XJ 1995

Complaint: The fault code P0414 is likely to be set due to a short circuit in the air switching valve.

Remedy: Ensure the code P1111 has been logged after the service drive cycle has been completed. If this is not the case then go to step 14 of the test below.

Check the harness and connectors to ensure they are in good condition and are reliable. If they are faulty then either repair or replace and go to step 14 of the test below.

Disconnect the AIR relay and go to step 1 of the test below if no faults are found.

Test:

- Ensure the AIR pump drive belt is working sufficiently. If so then go to step 2. If it is faulty then repair and go to step 14.
- Ensure the AIR pump hoses are working sufficiently. If so then switch off the engine, remove the AIR relay and go to step 3. If it is not working sufficiently then repair and go to step 14.
- Check harness continuity PI 052/001 is correctly wired to PI 046/017. If this gives a positive result, go to step 4. If the circuit is open then find and repair the wiring fault, re-connect the harness and go to step 14.
- Check harness continuity PI 052/002 is correctly wired to RS 006/005. If this gives a positive result, go to step 5. If the circuit is open then find and repair the wiring fault, re-connect the harness and go to step 14.
- Check harness continuity PI 052/003 is correctly wired to RS 006/005. If this gives a positive result then disconnect both the air pump clutch, and the solenoid vac valve, go to step 6. If the circuit is open then find and repair the wiring fault, re-connect the harness, and go to step 14.
- Check harness continuity PI 052/005 is correctly wired to PI 021/002. If this gives a positive result go to step 7. If the circuit is open then find and repair the wiring fault, re-connect the harness, and go to step 14.

- Check harness continuity PI 021/001 is correctly wired to ground. If this gives a positive result then go to step 8. If the circuit is open then find and repair the wiring fault, re-connect the harness, and go to step 14.
- Check harness continuity PI 022/001 is correctly wired to PI 052/005. If this gives a positive result then go to step 9. If the circuit is open then find and repair the wiring fault, re-connect the harness, and go to step 14.
- Check harness continuity PI 022/002 is correctly wired to PI 047/011. If this gives a positive result then go to step 10. If the circuit is open then find and repair the wiring fault, re-connect the harness, and go to step 14.
- Check the voltage level at RS 006/005. If it reads at Vbatt, then go to step 11. If it reads under Vbatt then find and repair the wiring fault, reconnect the harness and go to step 14.
- Ensure the AIR relay operation is working sufficiently. If this gives a positive result then go to step 12. If it is not working sufficiently then replace the relay, re-connect the harness and go to step 14.
- Ensure the AIR pump operation is working sufficiently. If this gives a positive result then go to step 13. If it is not working sufficiently then replace the pump, re-connect the harness and go to step 14.
- Ensure the solenoid vac valve is working sufficiently. If this gives a positive result then go to step 14. If it is faulty then replace the valve, re-connect the harness and go to step 14.
- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 15.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

Catalyst System Efficiency – P0420

Model: Jaguar XJ 1995

Complaint: The fault code P0420 is likely to be set due to a Low Catalyst Efficiency in Bank A.

Remedy: Ensure the code P1111 has been logged after the service drive cycle has been completed. If this is not the case then go to step 3 of the test below.

Check the harness and connectors to ensure they are in good condition and are reliable. If they are faulty then either repair or replace and go to step 3 of the test below.

Switch off engine and go to step 1 of the test below if no faults are found.

Test:

- Ensure the H02s fault codes have been logged. If not then go to step 2. If they have been logged then repair the fault and go to step 3.
- Ensure there is no damage in the catalyst. If this gives a positive result then go to step 3. If the catalyst is damaged then replace the Bank A catalyst and go to step 3.
- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 4.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

Catalyst System Efficiency – P0430

Model: Jaguar XJ 1995

Complaint: The fault code P0430 is likely to be set due to a Low Catalyst Efficiency in Bank B.

Remedy: Ensure the code P1111 has been logged after the service drive cycle has been completed. If this is not the case then go to step 3 of the test below.

Check the harness and connectors to ensure they are in good condition and are reliable. If they are faulty then either repair or replace and go to step 3 of the test below.

Switch off engine and go to step 1 of the test below if no faults are found.

Test:

- Ensure the H02s fault codes have been logged. If not then go to step 2. If they have been logged then repair the fault and go to step 3.

- Ensure there is no damage in the catalyst. If this gives a positive result then go to step 3. If the catalyst is damaged then replace the Bank B catalyst and go to step 3.
- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 4.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

Evaporative Emission Control – P0441

Model: Jaguar XJ 1995

Complaint: The fault code P0441 is likely to be set due to an EVAP purge flow fault in Bank A.

Remedy: Ensure the code P1111 has been logged after the service drive cycle has been completed. If this is not the case then go to step 7 of the test below.

Check the harness and connectors to ensure they are in good condition and are reliable. If they are faulty then either repair or replace and go to step 7 of the test below.

Turn off the engine, disconnect the Bank A purge valve and go to step 1 of the test below; if no faults are found.

Test:

- Check harness continuity PI 018/001 is correctly wired to RS 006/005. If this gives a positive result, go to step 2. If the circuit is faulty then find and repair the wiring fault, re-connect the harness and go to step 7.
- Check harness continuity PI 018/002 is correctly wired to PI 047/034. If this gives a positive result, go to step 3. If the circuit is open then find and repair the wiring fault, re-connect the harness and go to step 7.
- Check harness insulation PI 018/001 will complete a circuit to ground. If this gives a positive result then go to step 4. If the circuit shorts then find and repair the wiring fault, re-connect the harness and go to step 7.
- Check the harness insulation PI 018/002 will complete a circuit to Vbatt. If this gives a positive result then go to step 5. If the circuit shorts then find and repair the wiring fault, re-connect the harness and go to step 7.
- Ensure the resistance value of the Bank A purge valve is within 22 – 30 Ohms. If the reading is within these limits then go to step 6. If the reading is out of limits then replace the valve, re-connect the harness and go to step 7.
- Ensure the purge valve is operating correctly. If this gives a positive result then re-connect the harness and go to step 7. If the purge valve is not operating correctly then replace the valve, re-connect the harness and go to step 7.
- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 8.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

Evaporative Emission Control – P0443

Model: Jaguar XJ 1995

Complaint: The fault code P0443 is likely to be set due to a fault in the EVAP purge control valve circuit in Bank A.

Remedy: Ensure the code P1111 has been logged after the service drive cycle has been completed. If this is not the case then go to step 7 of the test below.

Check the harness and connectors to ensure they are in good condition and are reliable. If they are faulty then either repair or replace and go to step 7 of the test below.

Turn off the engine, disconnect the Bank A purge valve and go to step 1 of the test below; if no faults are found.

Test:

- Check harness continuity PI 018/001 is correctly wired to RS 006/005. If this gives a positive result, go to step 2. If the circuit is open then find and repair the wiring fault, re-connect the harness and go to step 7.

- Check harness continuity PI 018/002 is correctly wired to PI 047/034. If this gives a positive result, go to step 3. If the circuit is open then find and repair the wiring fault, re-connect the harness and go to step 7.
- Check harness insulation PI 018/002 will complete a circuit to Vbatt. If this gives positive results then switch on the engine and go to step 4. If the circuit shorts then find and repair the wiring fault, re-connect the harness and go to step 7.
- Ensure the voltage level at PI 018/001 reads at Vbatt. If so then go to step 5. If the reading is less than Vbatt then find and repair the wiring fault, re-connect the harness and go to step 7.
- Ensure the resistance value of the Bank A purge valve is within 22 – 30 Ohms. If the reading is within these limits then go to step 6. If the reading is out of limits then replace the valve, re-connect the harness and go to step 7.
- Ensure the purge valve is operating correctly. If this gives a positive result then re-connect the harness and go to step 7. If the purge valve is not operating correctly then replace the valve, re-connect the harness and go to step 7.
- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 8.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

Evaporative Emission Control – P1441

Model: Jaguar XJ 1995

Complaint: The fault code P1441 is likely to be set due to a fault in the EVAP purge flow in Bank B.

Remedy: Ensure the code P1111 has been logged after the service drive cycle has been completed. If this is not the case then go to step 7 of the test below.

Check the harness and connectors to ensure they are in good condition and are reliable. If they are faulty then either repair or replace and go to step 7 of the test below.

Turn off the engine, disconnect the Bank B purge valve and go to step 1 of the test below; if no faults are found.

Test:

- Check harness continuity PI 019/001 is correctly wired to RS 006/005. If this gives a positive result, go to step 2. If the circuit is open then find and repair the wiring fault, re-connect the harness and go to step 7.
- Check harness continuity PI 019/002 is correctly wired to PI 047/033. If this gives a positive result, go to step 3. If the circuit is open then find and repair the wiring fault, re-connect the harness and go to step 7.
- Check harness insulation PI 019/001 will complete a circuit to ground. If this gives positive results then go to step 4. If the circuit shorts then find and repair the wiring fault, re-connect the harness and go to step 7.
- Check harness insulation PI 019/002 will complete a circuit to Vbatt. If this gives a positive result then go to step 5. If the circuit shorts then find and repair the wiring fault, re-connect the harness and go to step 7.
- Ensure the resistance value of the Bank B purge valve is within 22 – 30 Ohms. If the reading is within these limits then go to step 6. If the reading is out of limits then replace the valve, re-connect the harness and go to step 7.
- Ensure the purge valve is operating correctly. If this gives a positive result then re-connect the harness and go to step 7. If the purge valve is not operating correctly then replace the valve, re-connect the harness and go to step 7.
- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 8.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

Evaporative Emission Control – P1443

Model: Jaguar XJ 1995

Complaint: The fault code P1443 is likely to be set due to a fault in the EVAP purge control valve circuit in Bank B.

Remedy: Ensure the code P1111 has been logged after the service drive cycle has been completed. If this is not the case then go to step 7 of the test below.

Check the harness and connectors to ensure they are in good condition and are reliable. If they are faulty then either repair or replace and go to step 7 of the test below.

Turn off the engine, disconnect the Bank B purge valve and go to step 1 of the test below; if no faults are found.

Test:

- Check harness continuity PI 019/001 is correctly wired to RS 006/005. If this gives a positive result, go to step 2. If the circuit is open then find and repair the wiring fault, re-connect the harness and go to step 7.
- Check harness continuity PI 019/002 is correctly wired to PI 047/033. If this gives a positive result, go to step 3. If the circuit is open then find and repair the wiring fault, re-connect the harness and go to step 7.
- Check harness insulation PI 019/002 will complete a circuit to Vbatt. If this gives positive results then switch on the engine and go to step 4. If the circuit shorts then find and repair the wiring fault, re-connect the harness and go to step 7.
- Ensure the voltage level at PI 019/001 reads at Vbatt. If so then go to step 5. If the reading is less than Vbatt then find and repair the wiring fault, re-connect the harness and go to step 7.
- Ensure the resistance value of the Bank A purge valve is within 22 – 30 Ohms. If the reading is within these limits then go to step 6. If the reading is out of limits then replace the valve, re-connect the harness and go to step 7.
- Ensure the purge valve is operating correctly. If this gives a positive result then re-connect the harness and go to step 7. If the purge valve is not operating correctly then replace the valve, re-connect the harness and go to step 7.
- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 8.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

Vehicle Speed Sensor – P0500

Model: Jaguar XJ 1995

Complaint: The fault code P0500 is likely to be set due to a VSS fault.

Remedy: Disconnect the VSS and go to step 1 of the test below.

Test:

- When vehicle is driving at 30mph ensure the PID OD is indicating vehicle speed. If so then go to step 3. If no speed is shown then re-connect the harness and go to step 2.
- Check harness continuity PI 044/010 is correctly wired to CC 048/030. If this gives a positive result then go to step 3. If the circuit is open then find and repair the wiring fault, re-connect the harness and go to step 4.
- Assess the TCM for stored fault codes P0720, P0721, and P0722. If no faults are stored then go to step 4. If the faults are stored then repair the fault, re-connect the harness and go to step 4.
- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 5.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

Idle Speed Control – P0506

Model: Jaguar XJ 1995

Complaint: The fault code P0506 is likely to be set due to a low fault in the ISC RPM in Bank A.

Remedy: Ensure the code P1111 has been logged after the service drive cycle has been completed. If this is not the case then go to step 14 of the test below.

Check the harness and connectors to ensure they are in good condition and are reliable. If they are faulty then either repair or replace and go to step 14 of the test below.

Go to step 1 of the test below; if no faults are found.

Test:

- Ensure there are no blockages in the intake air system. If not then go to step 2. If it is blocked then repair or replace valve and go to step 14.
- Ensure the MAP sensor filter has no blockages. If not then go to step 3. If it is blocked then clear or replace the filter and go to step 14.
- Ensure the MAP sensor hose is working correctly. If so then go to step 4. If faulty then repair or replace the hose and go to step 14.
- Ensure the ISC valve is operating correctly. If so then disconnect the bank A ISC valve and go to step 5. If it is faulty then repair or replace the valve and go to step 14.
- Check harness continuity PI 047/004 is correctly wired to PI 029/001. If this gives a positive result then go to step 6. If the circuit is open then find and repair the wiring fault, re-connect the harness, and go to step 14.
- Check harness continuity PI 047/003 is correctly wired to PI 029/003. If this gives a positive result go to step 7. If the circuit is open then find and repair the wiring fault, re-connect the harness, and go to step 14.
- Check harness continuity PI 029/002 is correctly wired to RS 006/008. If this gives a positive result then go to step 8. If the circuit is open then find and repair the wiring fault, re-connect the harness, and go to step 14.
- Check harness insulation PI 029/001 will complete a circuit to PI 029/002. If this gives a positive result then go to step 9. If the circuit shorts then find and repair the wiring fault, re-connect the harness, and go to step 14.
- Check harness insulation PI 029/001 will complete a circuit to PI 029/003. If this gives a positive result then go to step 10. If the circuit shorts then find and repair the wiring fault, re-connect the harness, and go to step 14.
- Check harness insulation PI 029/001 will complete a circuit to PI 029/003. If this gives a positive result then go to step 11. If the circuit shorts, then find and repair the wiring fault, re-connect the harness and go to step 14.
- Look at the misfire fault codes to check if they have been logged. If not then go to step 12. If so then repair the fault, re-connect the harness and go to step 14.
- Ensure the fuel pressure is correct. If so then go to step 13. If they are incorrect then repair the fault, re-connect the harness and go to step 14.
- Ensure the air conditioning compressor has not seized. If it has not then go to step 14. If it has seized, replace the compressor, re-connect the harness and go to step 14.
- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 15.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

Idle Speed Control – P0507

Model: Jaguar XJ 1995

Complaint: The fault code P0507 is likely to be set due to a high fault in the ISC RPM in Bank A.

Remedy: Ensure the code P1111 has been logged after the service drive cycle has been completed. If this is not the case then go to step 10 of the test below.

Check the harness and connectors to ensure they are in good condition and are reliable. If they are faulty then either repair or replace and go to step 10 of the test below.

Go to step 1 of the test below; if no faults are found.

Test:

- Ensure there are no blockages in the intake air system. If not then go to step 2. If it is blocked then repair or replace valve and/or ducting and go to step 10.
- Ensure the throttle valve is working sufficiently and not sticking. If it is not sticking then go to step 3. If it is sticking then repair or replace and go to step 10.
- Ensure the accelerator mechanism is working sufficiently. If so then go to step 4. If it is faulty then repair or replace the mechanism and go to step 10.
- Ensure the ISC valve is operating correctly. If so then disconnect the bank A ISC valve and go to step 5. If it is faulty then repair or replace the valve and go to step 10.
- Check harness insulation PI 029/001 will complete a circuit to ground. If this gives a positive result then go to step 6. If the circuit shorts then find and repair the wiring fault, re-connect the harness, and go to step 10.
- Check harness insulation PI 029/002 will complete a circuit to ground. If this gives a positive result go to step 7. If the circuit shorts then find and repair the wiring fault, re-connect the harness, and go to step 10.
- Check harness insulation PI 029/003 will complete a circuit to ground. If this gives a positive result then go to step 8. If the circuit shorts then find and repair the wiring fault, re-connect the harness, and go to step 10.
- Ensure the MAP sensor filter is working correctly. If so then go to step 9. If it is blocked then clear the blockage or replace the filter, re-connect the harness and go to step 10.
- Ensure the MAP sensor hose is working sufficiently. If so then go to step 10. If it is faulty then repair or replace the sensor hose, re-connect the harness and go to step 10.
- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 11.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

Idle Speed Control – P1506

Model: Jaguar XJ 1995

Complaint: The fault code P1506 is likely to be set due to a low fault in the ISC RPM in Bank B.

Remedy: Ensure the code P1111 has been logged after the service drive cycle has been completed. If this is not the case then go to step 14 of the test below.

Check the harness and connectors to ensure they are in good condition and are reliable. If they are faulty then either repair or replace and go to step 14 of the test below.

Go to step 1 of the test below; if no faults are found.

Test:

- Ensure there are no blockages in the intake air system. If not then go to step 2. If it is blocked then repair or replace valve and go to step 14.
- Ensure the MAP sensor filter has no blockages. If not then go to step 3. If it is blocked then clear or replace the filter and go to step 14.
- Ensure the MAP sensor hose is working correctly. If so then go to step 4. If faulty then repair or replace the hose and go to step 14.
- Ensure the ISC valve is operating correctly. If so then disconnect the Bank B ISC valve and go to step 5. If it is faulty then repair or replace the valve and go to step 14.
- Check harness continuity PI 047/002 is correctly wired to PI 030/001. If this gives a positive result then go to step 6. If the circuit is open then find and repair the wiring fault, re-connect the harness, and go to step 14.
- Check harness continuity PI 047/001 is correctly wired to PI 030/003. If this gives a positive result go to step 7. If the circuit is open then find and repair the wiring fault, re-connect the harness, and go to step 14.
- Check harness continuity PI 030/002 is correctly wired to RS 006/008. If this gives a positive result then go to step 8. If the circuit is open then find and repair the wiring fault, re-connect the harness, and go to step 14.

- Check harness insulation PI 030/001 will complete a circuit to PI 030/002. If this gives a positive result then go to step 9. If the circuit shorts then find and repair the wiring fault, re-connect the harness, and go to step 14.
- Check harness insulation PI 030/001 will complete a circuit to PI 030/003. If this gives a positive result then go to step 10. If the circuit shorts then find and repair the wiring fault, re-connect the harness, and go to step 14.
- Check harness insulation PI 030/002 will complete a circuit to PI 030/003. If this gives a positive result then go to step 11. If the circuit shorts, then find and repair the wiring fault, re-connect the harness and go to step 14.
- Look at the misfire fault codes to check if they have been logged. If not then go to step 12. If so then repair the fault, re-connect the harness and go to step 14.
- Ensure the fuel pressure is correct. If so then go to step 13. If they are incorrect then repair the fault, re-connect the harness and go to step 14.
- Ensure the air conditioning compressor has not seized. If it has not then go to step 14. If it has seized, replace the compressor, re-connect the harness and go to step 14.
- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 15.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

Idle Speed Control – P1507

Model: Jaguar XJ 1995

Complaint: The fault code P1507 is likely to be set due to a high fault in the ISC RPM in Bank B.

Remedy: Ensure the code P1111 has been logged after the service drive cycle has been completed. If this is not the case then go to step 10 of the test below.

Check the harness and connectors to ensure they are in good condition and are reliable. If they are faulty then either repair or replace and go to step 10 of the test below.

Go to step 1 of the test below; if no faults are found.

Test:

- Ensure there are no blockages in the intake air system. If not then go to step 2. If it is blocked then repair or replace valve and/or ducting and go to step 10.
- Ensure the throttle valve is working sufficiently and not sticking. If it is not sticking then go to step 3. If it is sticking then repair or replace and go to step 10.
- Ensure the accelerator mechanism is working sufficiently. If so then go to step 4. If it is faulty then repair or replace the mechanism and go to step 10.
- Ensure the ISC valve is operating correctly. If so then disconnect the Bank B ISC valve and go to step 5. If it is faulty then repair or replace the valve and go to step 10.
- Check harness insulation PI 030/001 will complete a circuit to ground. If this gives a positive result then go to step 6. If the circuit shorts then find and repair the wiring fault, re-connect the harness, and go to step 10.
- Check harness insulation PI 030/002 will complete a circuit to ground. If this gives a positive result go to step 7. If the circuit shorts then find and repair the wiring fault, re-connect the harness, and go to step 10.
- Check harness insulation PI 030/003 will complete a circuit to ground. If this gives a positive result then go to step 8. If the circuit shorts then find and repair the wiring fault, re-connect the harness, and go to step 10.
- Ensure the MAP sensor filter is working correctly. If so then go to step 9. If it is blocked then clear the blockage or replace the filter, re-connect the harness and go to step 10.
- Ensure the MAP sensor hose is working sufficiently. If so then go to step 10. If it is faulty then repair or replace the sensor hose, re-connect the harness and go to step 10.
- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 11.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

Closed Throttle Position – P1512

Model: Jaguar XJ 1995

Complaint: The fault code P1512 is likely to be set due to a low input fault in the CTP switch.

Remedy: Ensure the code P1111 has been logged after the service drive cycle has been completed. If this is not the case then go to step 3 of the test below.

Check the harness and connectors to ensure they are in good condition and are reliable. If they are faulty then either repair or replace and go to step 3 of the test below.

Switch off engine, disconnect the CTP sensor and go to step 1 of the test below; if no faults are found.

Test:

- Check harness continuity PI 045/003 is correctly wired to ground. If this gives a positive result then go to step 2. If the circuit shorts then find and repair the wiring fault, re-connect the harness and go to step 3.
- Ensure the sensor is in correct position. If so then reconnect the harness and sensor and go to step 3. If it is out of limits then adjust or replace the sensor, re-connect the harness and go to step 3.
- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 4.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

Closed Throttle Position – P1513

Model: Jaguar XJ 1995

Complaint: The fault code P1513 is likely to be set due to a high input fault in the CTP switch.

Remedy: Ensure the code P1111 has been logged after the service drive cycle has been completed. If this is not the case then go to step 3 of the test below.

Check the harness and connectors to ensure they are in good condition and are reliable. If they are faulty then either repair or replace and go to step 3 of the test below.

Switch off engine, disconnect the CTP sensor and go to step 1 of the test below; if no faults are found.

Test:

- Check harness continuity PI 045/003 is correctly wired to Vbatt. If this gives a positive result then go to step 2. If the circuit shorts then find and repair the wiring fault, re-connect the harness and go to step 3.
- Ensure the sensor is in correct position. If so then reconnect the harness and sensor and go to step 3. If it is out of limits then adjust or replace the sensor, re-connect the harness and go to step 3.
- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 4.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

Park/Neutral Switch – P1516

Model: Jaguar XJ 1995

Complaint: The fault code P1516 is likely to be set due to a fault in the gear change between neutral and drive.

Remedy: Ensure the code P1111 has been logged after the service drive cycle has been completed. If this is not the case then go to step 3 of the test below.

Check the harness and connectors to ensure they are in good condition and are reliable. If they are faulty then either repair or replace and go to step 3 of the test below.

Switch off engine, disconnect the PNPS sensor and go to step 1 of the test below; if no faults are found.

Test:

- Check harness insulation CC 021/006 is correctly wired to ground. If this gives a positive result then go to step 2. If the circuit shorts then find and repair the wiring fault, re-connect the harness and go to step 3.
- Ensure the PNPS is operating correctly. If this gives a positive result then go to step 3. If the PNPS is faulty then replace the switch, re-connect the harness and go to step 3.
- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 4.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

Park/Neutral Switch – P1517

Model: Jaguar XJ 1995

Complaint: The fault code P1517 is likely to be set due to a cranking fault between neutral and drive.

Remedy: Ensure the code P1111 has been logged after the service drive cycle has been completed. If this is not the case then go to step 5 of the test below.

Check the harness and connectors to ensure they are in good condition and are reliable. If they are faulty then either repair or replace and go to step 5 of the test below.

Go to step 1 of the test below; if no faults are found.

Test:

- Check harness continuity CC 021/006 is correctly wired to FC 002/020. If this gives a positive result then go to step 2. If the circuit is open then find and repair the wiring fault, re-connect the harness and go to step 5.
- Check harness continuity CC 021/006 is correctly wired to PI 044/018. If this gives a positive result then go to step 3. If the circuit is open then find and repair the wiring fault, re-connect the harness and go to step 5.
- Check harness insulation CC 021/006 will complete a circuit to Vbatt. If this gives a positive result then go to step 4. If the circuit shorts then find and repair the wiring fault, re-connect the harness and go to step 5.
- Ensure the PNPS is operating correctly. If this gives a positive result then go to step 5. If the PNPS is faulty then replace the switch, re-connect the harness and go to step 3.
- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 6.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

Engine Control Module – P1000

Model: Jaguar XJ 1995

Complaint: The fault code P1000 is likely to be set due to all on-board diagnostics will need to be completed.

Remedy: Ensure the code P1000 has been logged after the service drive cycle has been completed. This signifies that the drive cycle was not completed satisfactorily.

Perform service drive cycle.

Engine Control Module – P1111

Model: Jaguar XJ 1995

Complaint: The fault code P1111 is likely to be set due to all on-board diagnostics will need to be completed.

Remedy: This code signifies that the service cycle has been completed correctly and is purely an information code.

Engine Control Module – P1775

Model: Jaguar XJ 1995

Complaint: The fault code P1775 is likely to be set due to an MIL illumination request from TCM.

Remedy: Go to step 1 of the test below.

Test:

- Switch on engine, turn ignition switch to fully on, and switch off engine. If this process is positive go to step 2. If this process is incorrect then repair and go to step 3.
- Check TCM for stored fault codes. If this gives a positive result then go to step 3. If the TCM is faulty then repair and go to step 3.
- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 4.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

Engine Control Module – P1776

Model: Jaguar XJ 1995

Complaint: The fault code P1776 is likely to be set due to a duration fault in the ignition retard request.

Remedy: Perform the service drive cycle in order to clear the fault and re-scan. If the fault is still present go to step 1 of the test below.

Check the harness and connectors (both ECM and TCM) to ensure they are in good condition and are reliable. If they are faulty then either repair or replace and go to step 4 of the test below. Go to step 1 of the test below if no faults are found.

Test:

- Check harness continuity CC 048/007 is correctly wired to PI 047/006. If this gives a positive result then go to step 2. If the circuit is open then find and repair the wiring fault, re-connect the harness and go to step 4.
- Check harness insulation CC 048/007 will complete a circuit to ground or Vbatt. If this gives a positive result then go to step 3. If the circuit shorts then find and repair the wiring fault, re-connect the harness and go to step 4.
- Check TCM for stored fault codes. If this gives a positive result then go to step 4. If the TCM is faulty then repair, re-connect the harness and go to step 4.
- In order to check if the fault code has been cleared perform the service drive cycle. If this gives a positive result then stop. If the fault is still present then go to step 6.
- Repeat the diagnostic procedure. If this now omits a positive result then stop.

STEERING Diagnostics

Model: Jaguar XJ 1995

Complaint: The fault is the steering light is on at all times.

Remedy:

- If the steering light is on at all times it could be due to no speed signal. Therefore check the wiring harness continuity PSCM pin V is correctly wired to instrument pack pin 2.
- It could also be due to a wiring fault, therefore ensure the voltage level between transducer pin 1 (+ve) and ground, with the ignition on. If it reads 12V then repair or replace the harness. Also ensure the wiring between transducer pin 2 (-ve) and 0V. If it reads 0V either repair or replace harness.

Model: Jaguar XJ 1995

Complaint: The steering is heavy at all times.

Remedy:

- If the steering is heavy it could be due to a blown fuse. Therefore check the fuse F12 in the RH heel board fuse-box. If it has blown then determine reason for it, repair then replace the fuse.
- It could also be due to a wiring fault, therefore check wiring harness continuity between fuse F12 in RH heel board fuse-box and PSCM pin V. If this is positive then go to step 3.
- Check harness continuity PSCM pin W1 is correctly wired to transducer Pin 1. If this is positive then go to step 4.
- Check harness continuity PSCM pin W2 is correctly wired to transducer Pin 2. If this is positive then go to step 5.
- Check voltage between transducer pin 2 and ground with the ignition on. If it reads 12V then recorded then repair or replace harness and PSCM.

Model: Jaguar XJ 1995

Complaint: The steering becomes heavy during driving until the ignition is cycled.

Remedy: This is due to a short circuit. Therefore:

- Ensure the resistance between transducer pins 1 and 2 is at 7.5. If it is below 7.5 then replace the transducer. If the reading is fine then go to step 2.
- Check wiring harness between transducer connections. If the circuit shorts then replace the harness.

System Fault Indication

Model: Jaguar XJ 1995

Complaint: The ABS MIL lamp is on, after the engine is switched on and the instrument pack self test. This could be due to a blown fuse, defective wiring, defective wheel speed sensor, or harness or a defective ABS/TC CM

Remedy:

- After accessing the fault and correcting, drive the vehicle above 12.5mph this should extinguish the warning lamps. If they remain on then go to step 2.
- Ensure the fuses (F7) in the battery feed lines and (F16) in the ignition line are working.
- Unbolt the 28 way multi-plug connector from ABS/TC CM.
- Ensure the resistance across each wheel speed sensor measures 1100 Ohms +50%. If not then re-measure the sensor resistance after unplugging the sensor flying lead. If the sensor now measures within range then ensure the harness between ABS/TC CM and sensor is not faulty. If the sensor does not measure correctly then replace the sensor.
- Check continuity is correctly wired to ground from ABS/TC CM harness connections 13 and 14. If they read more than 0.1 Ohms then replace the harness.
- With the engine on measure the voltage reading between ABS/TC CM harness connection 14 and connections 1 and 2. Ensure the value is equivalent to the battery voltage. If not then replace the harness.
- With the engine on measure the voltage reading between ABS/TC CM harness connections 14 and 15. Ensure the value is equivalent to the battery voltage. If not then replace the harness.
- If all the procedures have been carried out and no fault has been located then replace the ABS/TC CM.

System Fault Indication

Model: Jaguar XJ 1995

Complaint: The ABS MIL lamp lights up at 12.5 mph. This could be due to a blown fuse, defective hydraulic module pump, motor unit or circuitry, or a defective ABS/TC CM

Remedy:

- Ensure fuses have not blown.
- After disconnecting pump and motor unit, measure the resistance across the two pin connector. If it measures above 0.8 Ohms or short circuits then replace the motor unit.
- After unbolting the 28 way connector from ABS/TC CM, measure the voltage between connections 1 and 14. Ensure the value is equivalent to the battery voltage. If not then replace the harness.
- If all the procedures have been carried out and no fault has been located then replace the ABS/TC CM.

System Fault Indication

Model: Jaguar XJ 1995

Complaint: The ABS MIL lamp lights up when pulling away or during driving. This could be due to a defective sensor or wiring, or a defective rotor or wheel bearing installation which will give conflicting messages to ABS/TC CM.

Remedy:

- Ensure the sensor does not have the following:
 - No sensor lead fixing bolt.
 - Damage to the sensor lead.
 - Damage to rotor.
 - Excessive play in wheel bearing.
 - Poor harness connection or damage causing intermittent faults.

System Fault Indication

Model: Jaguar XJ 1995

Complaint: The ABS MIL lamp stays on after the ignition is on and instrument pack self test. This could be due to a defective throttle position actuator, a defective actuator potentiometer or defective wiring.

Remedy:

- Once the flying lead has been disconnected to actuator motor bi-pin connector, measure the motor resistance. If the reading is above 1.6 Ohms or it short circuits then replace actuator.
- Disconnect the actuator potentiometer and measure the resistance across the pins 1 and 3. If it reads 6.4 Ohms then measure the resistance between pins 1 and 2 whilst accelerating, the reading should vary according to the acceleration. If the reading is below 6.4 Ohms or short circuits then replace the actuator.
- With the engine on measure the voltage across the harness connections to potentiometer pins 1 and 3. If the reading is below 4.5V then check that all supply fuses are intact and all the connections are secure. If so then replace the harness.
- Ensure the continuity between the harness connection is correctly wired to potentiometer pin 2 and pin 26 of 28-way multi plug connector to ABS/TC CM.

System Fault Indication

Model: Jaguar XJ 1995

Complaint: The ABS MIL lamp stays on for 8 seconds after the ignition is on. This can be caused by a defective harness or TCS switch.

Remedy: Ensure that pin 18 of 28 way multi-plug connector is not shorted to ground.