



June 2004

TechLines

Brief notes and technical information tips about Jaguar products

Models: All Models

Symptom: Circuit checks

Information: When diagnosing a circuit for high resistance, minimize the disturbance to connections until the area of high resistance has been located. Disturbing connections may clean any corrosion or dirt, temporarily correcting the problem and making diagnosis difficult. Use of voltage drop test of operating circuit will provide a more accurate assessment of circuit condition than resistance tests. Measure the **DIFFERENCE** in voltage between two points in the circuit while powered (active). A general rule, voltage drops should not exceed the following values: Wire or cable - 200mV; Ground connection - 100 mV; Switch - 300mV; Connector - 50mV

NOTE: The voltage reading depends on the portion of the circuit being tested. The lower the voltage reading, the lower the resistance. High current circuits such as the starter motor circuit have greater voltage drops.

Models: X-TYPE 2002 MY Onwards

Symptom: Uneven air temperature or distribution from fascia vents

Information: For customer concerns of uneven air temperature from AC system, check the level of refrigerant charge in the system. A low charge will cause only half the evaporator to cool causing a measurable difference in side-to-side temperature from fascia vents. Gauge pressures may read to the low side of normal but passable; therefore an evacuation and recharge would be required. For uneven air distribution between center and side fascia vents, check the fitting of the side vent ducts to the evaporator box. The ducts may slide into the box causing a restriction in airflow.

Models – X-TYPE 2003 MY Onwards

Procedure: X-TYPE parking brake adjustment

Information: The parking brake cable adjustment process has changed as of D03129. Technicians are to follow the revised procedure found on the GTR web site, section 206-05, SRO 70.35.10.

Models: XJS 1994 MY Onwards

Procedure: Driver seat module replacement

Information: Original driver's seat module has been discontinued and replaced by the passenger's seat module. Instructions included with the module are valid only for pre-1993 MY cars. For 94 and later cars, remove terminals from 20-way connector and install in supplied 12-way as follows ((wire color) (original connector location) – (new connector location)); KR 2 – 12, KB 5 – 6, OU 3 – 1, OG 6 – 3, S 8 – 8, SN 9 – 7. All other wiring from 20-way connector is to be taped back to harness.

NOTE: The vehicle will **no longer** have driver's seat memory.

Thanks to **Dave Uus** at **Grand Touring Automobiles, Toronto, Ontario** for providing this tip.

Send your tip suggestion for TechLines to rhagama2@jaguar.com
(FAX to TechLines Editor at 201 818 8478)

Models: X-TYPE to VIN C37911

Information: When replacing fuel door release cable on cars prior to above VIN, driver's release handle must also be replaced. Order part number C2S-20867 for correct release handle.

Models: S-TYPE MY 2000-2002

Symptom: PCM DTC P0065

Information: DTC P0065 references a performance fault and not a specific hard part or wiring failure. When diagnosing, ensure there are no leaks/obstructions of the AAI system piping and manifold ports or opens/shorts in the AAI valve wiring prior to replacing parts. If no obstructions or wiring issues are found and AAI valve has been checked for proper operation, the AAI inlet port on the throttle body may be clogged. Remove AAI valve and **thoroughly** clean inlet port; if code subsequently returns, replace throttle body.

Models: All Models

Symptom: DTCs P0442, P0443, P0446, P0455, or P0456

Information: When diagnosing EVAP DTCs and there are no circuit faults or leakage from the system, perform the following diagnostics to help pinpoint the failure.

P0443 – purge valve circuit malfunction; **P0446** – close valve circuit malfunction: These DTCs indicate that the ECM has activated the purge or close valve and it did not see the expected result. Although electrical issues could be the cause, a mechanical fault in the designated valve or an EVAP component failure are also possible. Check electrical system for proper operation then use a vacuum pump and actuate valve to ensure proper mechanical function. A close valve should hold vacuum when activated and a purge valve should release vacuum under activation. If checks do not reveal fault, use purge rate test below.

P0442 – gross (0.040") leak; **P0455** – large leak; **P0456** –small (0.020") leak: Due to the monitoring method used to detect leaks, a failed FTP sensor, mechanically failed purge or vent valve, or restricted piping or canister can cause false flagging for a leak. Check FTP sensor first by monitoring output voltage with fuel cap off, it will read approximately 3.1 to 3.3 volts. Use techniques for testing P0443/P0446 above to ensure valves are functioning properly, review TSB 310-09 (techniques are relevant for all model lines), and then proceed to purge rate test.

Purge rate test: The detection of an EVAP leak is determined by the rate at which the system can purge the fuel tank to a minimum value and the ability to hold that value with a predetermined amount of decay. If the EVAP system fails to purge at the required rate, either from a leak or restriction/blockage, the system will flag a leak code. The rate is determined by many factors including altitude, air temperature, engine airflow, and fuel level and therefore has no typical purge rate. A known good car with the same fuel level in it will be needed for this test.

1. Prepare and install 2 leads for power and ground to the purge and vent solenoids.
2. Connect WDS to car, start session, then use data logger to monitor FTP sensor.
3. Start engine and bring to operating temperature.
4. Apply 12 volts and ground to vent solenoid to close. **NOTE:** FTP readings may begin to rise; this is normal.
5. With engine idling, energize purge solenoid and monitor FTP sensor. You must measure how long it takes to go from high pressure (approximately 3.2 volts) to low pressure (possibly as low as 0.2 volts). **NOTE:** If engine stalls while performing test, restart test from beginning using a higher, constant RPM.
6. When minimum FTP pressure is reached, deactivate purge valve. **NOTE:** FTP readings may begin to rise; this is normal. Deactivate close valve to release vacuum and monitor FTP for how long it takes to return to cap off pressure.
7. Perform test on know good car with similar level of fuel in tank.
8. Compare evacuate and release times between the two cars. If either the purge or vent portions of the EVAP system are restricted, the car under repair will have require a *much* longer time.
9. If restriction is confirmed, check all EVAP hardware for source and repair as required.

June TSB Summary:

Service Bulletin Listing

Number	Technical Bulletin Title	Model	VIN	Date
100-24	Buzzing/Knocking Noise After Start Or With Ignition On - Adaptive Speed Control Module - Repair Procedure	2001-04 MY XK	A11051-A39957	06/04
303-S845	Corroded Filter Vent Pipe - Canister Close Valve - Service Action S845	2001-03 MY XK	A13961-A33149	06/04
307-13	Driveline Clunk/Knock When Downshifting - ZF 6HP26 Automatic Transmission - Repair Procedure	2003 MY-ON XK	A30645-ON	06/04
S100-12	Buzzing/Knocking Noise After Start Or With Ignition On - Adaptive Speed Control Module - Repair Procedure	2003-04 MY S-TYPE	M44998-N13088	06/04
S307-12	Driveline Clunk/Knock When Downshifting - ZF 6HP26 Automatic Transmission - Repair Procedure	2003 MY-ON S-TYPE	M44998-ON	06/04
S501-23	Customer Intermittently Locked Out Of Vehicle After Closing Door - Install New Door Handle Damper	2001 MY-ON S-TYPE	M23023-ON	06/04
XJ100-03	Buzzing/Knocking Noise After Start Or With Ignition On - Adaptive Speed Control Module - Repair Procedure	XJ range	G00442-G27835	06/04
XJ303-02	MIL On - DTC P0128 Stored - Repair Procedure	XJ range	G00001-on	06/04
XJ303-04	Engine Pinging/Detonation - Check Long And Short Term Fuel Trim - Reprogram ECM	XJ range	G00421-G34527	06/04
XJ307-02	Driveline Clunk/Knock When Downshifting - ZF 6HP26 Automatic Transmission - Repair Procedure	XJ range	G00001-ON	06/04
XT100-09	Driveline Whine - Preliminary Checks	2002-04 MY X-TYPE	C00294-E02938	06/04
XT303-13	Hissing Noise/Drivability Issues - DTC P0171/P0174 - Leaking IMT O-ring - IMT O-ring Available Separately	2002 MY-ON X-TYPE	C00001-ON	06/04
XT303-S953	Driveline Shudder/Hesitation - 30 - 50 MPH - Automatic Transmission Vehicles - Reprogram ECM - Service Action S953	2004 MY X-TYPE 3.0L Auto. Trans.	D55322-D86655	06/04
XT501-16	Creak/Squeak When Opening Liftgate Or Glass - Lubricate Clevis Pins - Repair Procedure	2004 MY-ON X-TYPE Wagon	D77509-ON	06/04
XT501-17	Inability To Open/Close Luggage Compartment Lid - Actuator Binding - Revised Actuator Available	2002-04 MY X-TYPE Sedan	C94502-E07750	06/04
XT501-S952	Liftgate Spoiler Contacting Roof - High Ambient Temperatures - Canadian Vehicles - Service Action S952	2004 MY X-TYPE Wagon	D63936-E06289	06/04

Number	Administration Bulletin Title	Model	Date
2-113NAS	Fast PACE - 2004 Program Schedule - Program Application	ALL	06/04
2-114	ASE Computer-based Testing (CBT) - Scheduled Dates	ALL	06/04
3-191	Jaguar Repair Time Searcher (RTS) - NAS - Version 004	1995 MY-ON	06/04
3-192NAS	Service Action Campaign Closures - Advance Notification	ALL	06/04
6-47	Transit Isolation Device - Return to Jaguar	ALL	06/04
6-115NAS	Global Technical Reference (GTR) - New Service Information Communication Systems	ALL	06/04

Number	Parts Bulletin Title	Model	VIN	Date
A-24	Non-Return Of Battery Isolation Devices (Transit Relays)	ALL		06/04
A-25	Material Safety Data Sheet (MSDS) Database - Website Search Application	ALL		06/04
U-10	Front Bumper Cover Corner Retaining Clip	2003 MY S-TYPE	M45255-ON	04/04
X-25	CD Changer - Parts Required For Installation	2004 MY-ON X-TYPE	D55322-ON	04/04

FAQ'S

Subject	Model	Date
FAQ- 14241 New XJ/S-TYPE Sticking Ignition Lock	S-TYPE / XJ	06/03/2004
FAQ- 14301 XJ 04MY front number plate fixing screws	XJ	06/03/2004
FAQ- 14341 XJ (03/04MY) noisy door check arms	XJ	06/04/2004
FAQ- 14361 P1111 / System Readiness Test	X-TYPE / S-TYPE / XJ / XK	06/10/2004
FAQ- 14321 Telephone Inoperative	XK	06/14/2004
FAQ- 14421 Trunk Latch Intermittent Operation	XJ	06/14/2004
FAQ- 14441 REM, FEM, DDM Replacement	XJ	06/16/2004
FAQ- 14461 ABS/DSC light illuminated	XJ	06/17/2004
FAQ- 14582 Verizon V60s Installation Issue	X-TYPE / S-TYPE / XJ / XK	06/22/2004
FAQ- 14601 S952 – Spoiler / Roof Foul – Care Point	X-TYPE Estate	06/25/2004
FAQ- 14661 S-TYPE Instrument cluster trip inop	S-TYPE	06/30/2004
FAQ- 14681 Minidisc player will not play disc	S-TYPE	06/30/2004

Missing a Bulletin? You can find it on JBNonline.

Note: When contacting the Technical HelpLine, please be sure to have your pre-call worksheet filled out prior to contacting us. The more information you have at hand will shorten the time necessary to discuss and rectify your concerns