

S-TYPE, XJ, XK 13 FEB 2009

NUMBER JTB00071 (Issue 2)

Service

# **TECHNICAL BULLETIN**

# ISSUE '2' CHANGES ARE HIGHLIGHTED WITH GRAY BACKGROUND.

SECTION: 307

# **Harsh Transmission Shifts – Repair Procedure**

# **AFFECTED VEHICLE RANGE:**

S-TYPE (X200) VIN: M45255 - N52047

Model Year: 2003 - 2005

XJ (X350) VIN: G00442 - G49700

Model Year: 2004 - 2005

XK8 (X100) VIN: A30645 - A48684

Model Year: 2003 - 2005

# **CONDITION SUMMARY:**

**Situation:** The customer may complain of harsh transmission shifting. The adaptive shift strategy can drift over time causing higher than normal clutch pressures.

NOTE: The customer should be informed that after the adaption clearing procedure and re-configuration repair the transmission shift quality will improve over time as the transmission adapts to the customer's driving requirements.

**Action:** Should a customer express the above concern, clear the adaptions, reconfigure the TCM, and reset the adaptions by following the Repair Procedure below.

#### PARTS:

No parts necessary; information only

# **TOOLS:**

Latest IDS DVD; software first available on IDS DVS116 Patch File 4 Midtronics PSC-550 Vehicle Power Supply

# **WARRANTY**:

NOTE: Repair procedures are under constant review, and therefore times are subject to change; those quoted here must be taken as guidance only. Always refer to DDW to obtain the latest repair time.

DDW requires the use of causal part numbers. Labor only claims must show the causal part number with a quantity of zero.

Description	SRO	Time (Hours)	Condition Code	Causal Part
Re-configure the TCM and carry out adaption drive cycle - S-TYPE, XJ (includes time for two people to carry-out the adaption drive cycle)	86.99.14	1.1	- 42	C2C 6718, C2C 27751, or C2C 33532
Re-configure the TCM and carry out adaption drive cycle - XK (includes time for two people to carry-out the adaption drive cycle)	86.99.14	1.2		

Normal warranty policy and procedures apply.

NOTE: The information in Technical Bulletins is intended for use by trained, professional Technicians with the knowledge, tools, and equipment required to do the job properly and safely. It informs these Technicians of conditions that may occur on some vehicles, or provides information that could assist in proper vehicle service. The procedures should not be performed by 'do-it-yourselfers'. If you are not a Dealer, do not assume that a condition described affects your vehicle. Contact an authorized Jaguar service facility to determine whether this bulletin applies to a specific vehicle.



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# REPAIR PROCEDURE

#### RECONFIGURE TRANSMISSION CONTROL MODULE

CAUTION: Ensure the ignition is switched 'OFF', parking brake is 'ON', and the transmission selector lever is in park.

CAUTION: A Midtronics PSC-550 Vehicle Power Supply must be connected to the vehicle battery during diagnosis / module programming.

1. Connect the Midtronics PSC-550 Vehicle Power Supply to the vehicle battery.

igtriangle NOTE: IDS must be loaded with software release DVD116 Patch File 4 or later.

- 2. Connect the IDS to the vehicle and begin a new diagnostic session by entering the correct VIN for the current vehicle.
- 3. Follow the IDS prompts to read the vehicle configuration.
- 4. Select 'No' when prompted 'Do you wish to read diagnostic trouble codes?'
- 5. Select 'tick' to continue.
- 6. Select the 'Vehicle Configuration' tab when Content Model is displayed.
- 7. From the Vehicle Configuration menu, clear the transmission adaptions by selecting from the drop-down menu:
  - 'Special Applications' > Transmission Control Module Adaption Clear' > 'Application'
- 8. Select 'tick' to continue, following all on-screen instructions to complete this task.
  - IDS will return to the Vehicle Configuration menu when completed.
- 9. From the Vehicle Configuration menu, configure the 'Transmission control module' by selecting from the drop-down menu:
  - 'Module programming' > 'Configure existing module' > 'Transmission control module'
- 10. Select 'tick' to continue, following all on-screen instructions to complete this task.
  - IDS will return to the Vehicle Configuration menu when completed.

### PERFORM TRANSMISSION ADAPTIONS DRIVE CYCLE

- 1. Select 'Special Applications'.
- 2. Select 'Transmission Control Module Adaption'.

**!** CAUTION: On-road testing *must* be performed as a two-man operation.

CAUTION: Do not move the accelerator pedal during gear shifts. Follow all on-screen instructions and note all warnings.

NOTE: The car may be driven as normal to a suitable flat road before carrying out the drive cycle road test. The clutches may be adapted in any order; it is not necessary to carry out the adaptions in the order shown on the IDS screen. The process below gives the ideal adaption drive cycle; however, if road conditions do not permit the drive cycle to be completed the car may be driven normally until suitable conditions are found, then the drive cycle can be continued.

NOTE: This process must be carried-out with the transmission in 'normal' mode (*not* sports mode) on a flat road. The transmission fluid temperature must be above 50°C (122°f) and below 100°C (212°f). If the maximum temperature is reached, drive vehicle at a constant speed to cool the transmission.



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# 3. 'C' Clutch (1-2 upshift)

- Using light throttle, accelerate from rest, ensuring the torque band is within the indicated bar graph range.
- Once the 1-2 upshift is completed and the correct torque conditions have been met, the next vacant box
  adjoining 'C' clutch will turn green with a 'tick' to show 'C' clutch has adapted. The highlight will move to 'B'
  Clutch.

### 4. 'B' Clutch (2-3 upshift)

- Maintaining constant throttle input and the torque band is within the indicated bar graph range, continue accelerating.
- Once the 2-3 upshift is completed and the correct torque conditions have been met, the next vacant box
  adjoining 'B' clutch will turn green with a 'tick to' show 'B' clutch has adapted. The highlight will move to 'E'
  Clutch.

#### 5. 'E' Clutch (3-4 upshift)

- Maintaining constant throttle input and the torque band is within the indicated bar graph range, continue
  accelerating.
- Once the 3-4 upshift is completed and the correct torque conditions have been met, the next vacant box
  adjoining 'E' clutch will turn green with a 'tick' to show 'E' clutch has adapted. The highlight will move to 'A'
  clutch.

# 6. 'A' Clutch

- Maintaining constant throttle input and the torque band is within the indicated bar graph range, continue accelerating to 50 mph (80kph), ensuring the transmission upshifts into fifth gear.
- Lift off the throttle, allowing the vehicle to slow down until fourth gear engages. The next vacant box for 'A' clutch will turn green with a 'tick'.

# 7. 'D' Clutch

- Gently braking from fourth gear to a standstill and holding for 10 seconds will alternately populate one of the clutches ('A' on the first standstill and 'D' on the next standstill, etc).
- 8. Once each clutch has adapted three times as shown by the green 'ticks' in the boxes, the 'Status Adaption Complete' box will turn green with a 'tick' and the transmission adaption drive cycle operation is complete.
- 9. When the task is complete, exit the current session.
- 10. Disconnect IDS.
- 11. Exit the current session.
- 12. Disconnect IDS and the Midtronics PSC-550 Vehicle Power Supply from the vehicle.