

No.JTB00071v2 04 February 2009

Reissue

Please replace the previous edition of this bulletin.

This bulletin supersedes TSB JT B00071/2007 dated 29 November, which should either be destroyed or clearly marked to show it is no longer valid (e.g. with a line across the page).

Subject/Concern: Harsh Transmission Gearshifts

Models:				
S-TYPE	Gasoline Only	Gasoline Only VIN-range: M45255-N52047		
XJ Range	Gasoline Only	Gasoline Only VIN-range: G00442-G49700		
XK Range	Gasoline Only	Gasoline Only VIN-range: A30645-A48684		

Markets: All Section: 307-00

## Summary:

Vehicle has harsh transmission shifts.

This Version has been issued for a change in the adaption drive cycle road test.

Cause: The adaptive shift strategy drifts over time. Suggested Customer Concern Code - P66.

**NOTE:** The 'Transmission Control Module Adaption' process will ensure that the clutches are fully adapted before returning the car to the customer, but other causes of harsh transmission shifts will not be repaired using this process. The transmission shifts will further adapt over time dependant on the customer driving requirements.

**Action:** Should a customer express concern, reset the transmission adaptions and reconfigure the transmission control module (TCM). Follow the Service Instruction outlined below.

**NOTE:** The Transmission Adaption Drive Cycle using IDS (Includes time for two people to carry out the adaption drive cycle).

Labour Time:				
Operation Description	Operation No.	Time		
Reconfigure the TCM and carry				
out adaption drive cycle -	86.99.14	1.1 hours		
S-TYPE and XJ Range				

Reconfigure the TCM and carry	l	
out adaption drive cycle - XK	86.99.14	1.2 hours
Range		

Repair/Claim Coding:		
Causal Part:	C2C 6718, C2C 27751, C2C 33532	
ACES Condition	42	
Code:	42	
Defect Code:		

## **Service Instruction**

When installing the software, it **MUST** be carried out as described in the Service Instruction:

- 1. Clear adaptions.
- 2. Reconfigure existing TCM.
- 3. Carry out drive cycle.
- 1. CAUTION: This procedure requires IDS DVD116 with Patch file 4 loaded or later.

Connect a Midtronic battery conditioner/power supply to the vehicle.

- 2. Ensure the ignition is switched 'OFF', parking brake is 'ON' and the transmission selector lever is in park.
- 3. Connect IDS to the vehicle and begin a new diagnostic session, by entering the correct VIN for the current vehicle.
- 4. Navigate to DTC monitor, read and clear all DTCs, then navigate to configuration main menu.
- 5. From the configuration main menu select 'Special applications', then select 'Transmission control module Adaption Clear', and then run 'Application'.
- 6. After the adaption clear has been carried out, select from the menu 'Configure existing module'.
- 7. Select and run 'Transmission control module'.
- 8. Follow all on-screen instructions to complete this task.
- 9. When the task is completed, exit the current session.
- 10. Disconnect the Midtronic battery conditioner/power supply from the vehicle.

## Carry out the adaption drive cycle road test using IDS:

On-road testing must be performed as a two man operation.

The car may be driven as normal to a suitable flat road before carrying out the drive cycle road test. The clutches can 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 can be driven normally until suitable conditions are found, then the drive cycle can be continued.

11.

## CAUTION: This procedure requires IDS DVD116 with Patch file 4 loaded or later.

**NOTE:** Ensure the IDS unit has sufficient battery charge to carry out the Transmission Adaption Drive Cycle using IDS.

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

- 12. Select the 'Vehicle Configuration' tab.
- 13. Select 'Special Applications'.
- 14. Select 'Transmission Control Module Adaption'.
- 15. **NOTE:** This process must be carried out 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.

**NOTE:** Do not move the accelerator pedal during gear shifts.

**NOTE:** The 'adaptions - total' boxes against each clutch must read zero before carrying out the drive cycle. If these are not zero the transmission adaptions must be cleared by following this process from step 1.

Follow the on-screen instructions and note all warnings.

- 16. C Clutch (1 to 2 shift)
  - 1 Accelerate from rest with light throttle the throttle position must ensure the torque
  - . band is kept within the bar graph range. Once the shift is complete 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.
- 17. B Clutch (2 to 3 shift)
  - 1 Carry on accelerating keeping the throttle position constant and the torque within the
  - . indicated torque range. Once the shift is complete 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.
- 18. E Clutch (3 to 4 shift)
  - 1 Carry on accelerating keeping the throttle position constant and the torque within the
  - . indicated torque range. Once the shift is complete 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.
- 19. A Clutch (Petrol Variants)
  - 1 Continue to accelerate gently to 50mile/h (80km/h) so that transmission shifts into 5th
  - . gear. Lift off the throttle and allow the vehicle to slow down until 4th gear is engaged. The next vacant box for A clutch will turn green with a tick.

- 2 D Clutch Gently braking from 5th gear to a standstill and holding for 10 seconds will
- . alternately populate 1 of the clutches (A on the first standstill and D on the next standstill etc).
- 20. A and D Clutches (Diesel Variants)
  - 1 Continue to accelerate gently to 50mile/h (80km/h) so that transmission shifts into 5th
  - . gear. Gently braking from 5th gear to a standstill and holding for 10 seconds will populate the clutch. A and D clutches will be populated on alternate occasions (A on the first standstill and D on the next standstill etc).
- 21. 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 operation is complete.
- 22. When the task is complete, exit the current session.
- 23. Disconnect IDS.

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