

A/T Controls - ZF A/T Adaptions Drive Cycle

NUMBER: JTB00145

(ISSUE 1)

MODEL:

S-TYPE

XJ

XK

DATE: 03 FEB 2009

SECTION: 307

ZF Transmission Adaptions Drive Cycle - IDS Procedure

**S-TYPE (X200)**

**VIN: M45255 - N91220**

**Model Year: 2003- 2008**

**XJ (X350)**

**VIN: G00001 - Onwards**

**Model Year: 2004 - Onwards**

**XK (X100)**

**VIN: A30645 - A48684**

**Model Year: 2003 - 2006**

AFFECTED VEHICLE RANGE

CONDITION SUMMARY:

Situation:

The Integrated Diagnostic System (IDS) now contains a process to 'adapt' the transmission clutch pressures after they have been cleared for ZF transmissions fitted to vehicles listed in the Affected Vehicle Range above.

Action:

In the event it becomes necessary to perform a transmission adaptions drive cycle (for example: after a customer complaint of harsh shifting following transmission control module reconfiguration), refer to the IDS Procedure outlined below.

PARTS:

No parts necessary, information only

TOOLS:

Latest IDS DVD; software first available on IDS DVD116 Patch File 2



**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.

<i>Description</i>	<i>SRO</i>	<i>Time (hours)</i>	<i>Condition Code</i>	<i>Causal Part</i>
ZF Transmission Adaption Drive Cycle using IDS (Includes time for two people to carry-out the adaption drive cycle)	86.99.77	0.80	42	C2C33532

*Normal warranty policy and procedures apply.*

## WARRANTY

## IDS PROCEDURE

### PERFORM TRANSMISSION ADAPTION DRIVE CYCLE

#### **CAUTION:**

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

#### **NOTE:**

IDS must be loaded with software release DVD116 Patch File 2 or later.

1. Connect the IDS to the vehicle and begin a new diagnostic session by entering the correct VIN for the current vehicle.
2. Follow the IDS prompts to read the vehicle configuration.
3. Select 'No' when prompted 'Do you wish to read diagnostic trouble codes?'
4. Select 'tick' to continue.
5. Select the 'Vehicle Configuration' tab when Content Model is displayed.
6. Select 'Special Applications'.
7. 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 adaptations 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.

8. '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.

9. '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.

10. '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.

11. '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'.

12. '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).

13. 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.

14. When the task is complete, exit the current session.

15. Disconnect IDS.