



TECHNICAL BULLETIN

A307-01v2

04/2003

Subject

'J' GATE SETTING PROCEDURE

Model: X-TYPE

Year: 2001.5 to 2003

VIN C00294 to D15360

Section: 307

Automatic Transmission

Sub-Section: 307-05

Automatic Transmission/Transaxle External Controls

Summary

A307-01v2: This Technical Bulletin has been issued due to customer complaints of being unable to find a gear, or the message 'GEARBOX FAULT' flashing on the message center (or the powertrain malfunction lamp illuminating) causing the vehicle to run in limp-home mode.

This Technical Bulletin has been issued for a change to the finish VIN and is a replacement for Technical Bulletin A307-01. Please destroy all copies of A307-01 and replace it with this Technical Bulletin A307-01v2.

Action

Using Worldwide Diagnostic System (WDS), check for any fault codes stored. If any fault code is listed below, the 'J' gate assembly is functioning incorrectly and needs re-setting. On a customer complaint basis only, follow the workshop procedure outlined below.

Possible Fault Codes:

Scenario	Fault Codes		
Can cause the vehicle to run in limp-home mode	P1780 and/or P0706		
Difficulty finding a gear or lost drive	P0731	P0732	P0733
	P0734	P0735	P0740

Workshop Procedure

Note: Before starting the 'J' gate setting procedure, ensure the vehicle is cold, or has been left to cool for at least two hours.

Sanity Check:

- 1 Apply parking brake.
- 2 Apply footbrake.
- 3 Start vehicle engine.
- 4 Slowly, move the gear selector lever around the 'J' gate to check that all gears can be selected:
'P' to 'N', 'N' to 'R', 'R' to 'D', 'D' to '4', '4' to '3', '3' to '2', '2' to '3', '3' to '4', '4' to 'D', 'D' to 'N', 'N' to 'R' and 'R' to 'P'.

Fault Identification:

- 5 Move gear selector lever from 'P' to 'R'.
- 6 Holding gear selector lever tight to outside edge of 'J' gate, slowly move gear selector lever from 'R' to 'N' two to three times to ensure 'N' illuminates.

- 7 Applying minimal force, slowly move the gear selector lever from 'N' to 'D' two to three times to ensure 'D' does engage and illuminates.

Note: If illumination is not apparent, proceed to the following setting procedure.

Note: To ensure 'D' is engaged, check tachometer for a drop in RPM.

- 8 Move gear selector lever to '3'.
9 Holding gear selector lever to inside edge of 'J' gate, slowly move gear selector lever from '3' to 'D' two to three times.

Note: When moving gear selector from '3' to 'D', ensure gear selector lever passes round the corner of 'D'.

Note: If after moving the gear selector lever to 'D' at step 9, illumination is lost in all gear positions and cannot be recovered (even by shifting to 'N'), then proceed to the setting procedure outlined below. If at step 9 illumination is still apparent or can be recovered, no further action is required.

Setting procedure:

- 10 Switch ignition 'OFF'.
11 Move gear selector lever to 'N'.
12 Raise vehicle on 'four-post' ramp.
13 Undo and remove gear selector cover plate securing bolts.
14 Remove gear selector cover plate and place aside.
15 Undo, but do not fully remove gear selector cable adjusting bolt.
16 Hold gear selector lever tight to position 'N'.
17 Using corner of cool gray feature line (that follows the 'J' gate) as a datum, use a rule and move gear selector lever back 2mm and hold.
18 Using an assistant under the vehicle, wiggle gear selector cable at gearbox end.
19 Fully tighten gear selector cable adjusting bolt.
20 Start vehicle engine and repeat fault identification procedure to check if fault has been rectified.

Note: If illumination is not apparent at any point, proceed to the following setting procedure.

- 21 Move gear selector lever to 'N'.
22 Undo, but do not fully remove gear selector cable adjusting bolt.
23 Using a steel rule, adjust gear selector lever (see adjustment table) either towards or away from 'N' position and hold.
24 Using an assistant, wiggle gear selector cable at gearbox end.
25 Fully tighten gear selector cable adjusting bolt.
26 Repeat fault identification procedure to check if fault has been rectified.

Note: If illumination is still not apparent, further setting procedures may be necessary. (See table for adjustment limit)

- 27 Re-install gear selector cover plate.
28 Install and fully tighten cover plate fixing bolts (10Nm).
29 Lower vehicle.

Adjustment table:

Failure Position	Action
'N' or 'D'	Set gear selector lever closer to 'N' position in 1mm increments to a maximum of 1mm in front of 'N'.
'4'	Set gear selector lever away from 'N' position in 1mm increments to a maximum of 4mm behind 'N'.

If after the Workshop Procedure has been completed problems still exist, please contact Dealer Technical Support for further assistance. Complete the pre-call worksheet and fax it to 0044 (0) 24 7620 7808 then call 0044 (0) 24 7620 3990 for further assistance.

Parts Information

There are no parts required for this Technical Bulletin.

Warranty Information

Description	SRO	Labor Time Allowance	Warranty Code	Causal Part
'J' Gate adjustment procedure left hand drive	44 91 25	0.3 Hours	FD-BC-07	C2S 20251
'J' Gate adjustment procedure right hand drive	44 91 25	0.3 Hours	FD-BC-07	C2S 20252