

# **TECHNICAL BULLETIN**

S307-15v2

01/2004

Subject

## **Transmission Noise During Gearshifts**

**Model: S-TYPE (Automatic Vehicles)** 

Year: 2002.5 Onwards VIN M45255 Onwards

Section: 307-01 Automatic Transmission/Transaxle

#### **Summary**

S307-15: This Technical Bulletin has been issued to address customer concerns of a squeal or squeak noise heard during gearshifts under acceleration.

This Technical Bulletin has been issued for a change in the transmission fluid part number and JTIS reference and is a replacement for Technical Bulletin S307-15. Please destroy all copies of S307-15 and replace it with this Technical Bulletin S307-15v2.

#### Action

If customers express a concern of a squeal or squeak noise heard during gearshifts whilst accelerating, the transmission needs to be flushed and the fluid replaced. Follow the workshop procedure outlined below.

Note: Please inform the customer that the squeal or squeak noise may persist until the vehicle has covered at least 20 miles. This is to allow the transmission fluid to flow through all areas of the transmission.

#### **Workshop Procedure**

- 1 Raise vehicle on a four-post ramp.
- 2 Place clean drain container under the transmission.
- 3 Undo and remove the transmission drain plug and allow fluid to drain.
- 4 Clean, install and tighten transmission drain plug to 8Nm.
- 5 Transfer transmission fluid from container to a suitable measuring jug, measure quantity and discard transmission fluid.
- 6 Clean measuring jug.
- 7 Measure equivalent quantity of new transmission fluid into the clean measuring jug.
- 8 Undo and remove filler plug using special tool 307-452.
- 9 Using a clean syringe, fill the transmission with some of the measured fluid to filler plug level.
- 10 Turn ignition 'ON'.
- 11 Ensure the selector lever is in 'P' and the handbrake is applied.
- 12 Start the engine.
- 13 Immediately fill the transmission with remainder of the measured new transmission fluid.
- 14 Install and tighten transmission filler plug.
- 15 Apply footbrake.
- 16 Shift through selector lever positions from 'P' to 'R', 'N' and 'D' and back to 'N'.
- 17 With the selector lever in 'N', operate engine at 1500 rpm for one to two minutes.
- 18 Return selector lever to 'P'.
- 19 Release footbrake.
- 20 Switch off engine.
- 21 With the drain container under the transmission, undo and remove the transmission drain plug.
- 22 Allow transmission fluid to drain.

- 23 Remove and discard the transmission drain plug seal.
- 24 Clean the transmission drain plug.
- 25 Install a new transmission drain plug seal.
- 26 Install and tighten transmission drain plug to 8Nm.
- 27 Clean excess fluid from the transmission fluid pan.
- 28 Transfer transmission fluid from container to the measuring jug, measure quantity and discard transmission fluid.
- 29 Clean measuring jug.
- 30 Measure equivalent quantity plus 0.5 Litre of new transmission fluid into the clean measuring jug.
- 31 Undo and remove filler plug using special tool 307-452.
- 32 Using a clean syringe, fill the transmission with some of the measured fluid to filler plug level.
- 33 Position WDS alongside vehicle, switch Portable Test Unit (PTU) 'ON' and allow software to load.
- 34 Connect PTU to vehicle using diagnostic cable.

### Note: Ensure WDS is loaded with software release JTP 759/27 or later.

- 35 Enter vehicle VIN and navigate to content model screen.
- 36 Select 'Transmission System'.
- 37 Press datalogger icon tab at the top of the screen.
- 38 Select and view 'Transmissio Oil Temperature' signal ensuring the handbrake is on, with 'P' selected and start the engine as instructed.
- 39 Press tick to monitor temperature.
- 40 Immediately fill with remainder of measured fluid to filler hole level (fluid running from hole).
- 41 Install and tighten transmission filler plug.
- 42 Apply footbrake.
- 43 Shift through selector lever positions from 'P' to 'R', 'N' and 'D' and back to 'N'.
- 44 With the selector lever in ' N' . operate engine at 1500rpm for one to two minutes.
- 45 Return selector lever to ' P' .
- 46 Release footbrake.
- 47 Allow transmission fluid temperature to reach 37°C.
- 48 Undo remove and discard transmission filler plug.
- 49 Allow the transmission fluid to drain from the filler plughole until it becomes a slow trickle.
- Install the new transmission filler plug using special tool 307-452 and tighten (see Workshop Manual, JTIS CD ROM, section: 307-01, Transmission Fluid Level Check).

# Note: Make sure the transmission fluid temperature has not exceeded 50°C. If the transmission fluid has exceeded 50°C, install the transmission filler plug and allow the transmission to cool and repeat the complete level check.

- 51 Clean fluid residue from transmission.
- 52 Remove drain container.
- 53 Switch the ignition ' OFF.
- 54 Switch 'OFFPTU, disconnect from vehicle and return WDS to original location.

#### **Parts Information**

The following parts must be ordered via Jaguar Cars Parts Operations (or through NSC/Importer).

Description	Part Number	Quantity
Transmission fluid	C2C 8432	6
Transmission drain plug seal	C2C 6730	1
Transmission filler plug	C2C 6729	1

#### **Warranty Information**

Description	SRO	Labor Time Allowance	Causal Part
Transmission flush procedure	44 91 30	1.3 Hours	C2C 8432