

**S-TYPE**

DATE 12/02

S307-09

**SERVICE****TECHNICAL BULLETIN****Harsh Shifts – Transmission MIL Illuminated  
With Reverse Selected –  
DTC P0736 Stored**MODEL 2003 MY  
S-TYPE  
VIN M45255-M70000**Issue:**

On some 2003 MY S-TYPE vehicles within the above VIN range, the transmission warning lamp may illuminate when selecting reverse gear. Harsh shifts may also occur. When interrogated with the Worldwide Diagnostic System (WDS) the **only** Diagnostic Trouble Code (DTC) logged in the Transmission Control Module (TCM) is P0736 (reverse gear ratio fault). This condition can indicate that the fluid level is low or that the transmission oil pump has failed.

**Action:**

In case of a customer complaint of the above symptoms and **only** DTC P0736 is logged in the TCM, first check that the fluid level is correct, as described in JTIS section 307-01, "Transmission Fluid Level Check."

If the fluid level is correct, replace the transmission, following the workshop procedure below.

**WORKSHOP PROCEDURE**

1. Open hood and fit fender protectors.
2. Open luggage compartment lid and displace carpet for access to battery.
3. Disconnect battery (see Workshop Manual, JTIS CD ROM section: 414-01).
4. Remove the automatic transmission (see Workshop Manual, JTIS CD ROM, section: 307-01, SRO 44.20.01).
5. For installation of transmission into 3.0L vehicles see Workshop Manual, JTIS CD ROM, section: 307-01, SRO 44.20.01, for installation of transmission into 4.2L vehicles continue with the workshop procedure below.

**TRANSMISSION INSTALLATION - 4.2L VEHICLES ONLY**

1. Flush the transmission oil cooler and fluid tubes.

**⚠ Caution:** If the automatic transmission fluid is very dirty or it contains metallic particles, then install new automatic transmission oil cooler and tubes.

2. Apply a thin layer of high-temperature grease, meeting Jaguar specification, to the centering spigot bore on the torque converter.

**⚠ WARNING:** Do not let the torque converter drop out of the automatic transmission. Failure to follow this instruction may result in personal injury.

**⚠ CAUTION:** The torque converter hub must engage fully in the oil pump drive gear throughout the whole installation procedure.

3. Raise the automatic transmission to the vehicle.
4. Install and fully tighten the retaining bolts to 48 Nm (Illustration 1).

#### TRANSMISSION RETAINING BOLTS

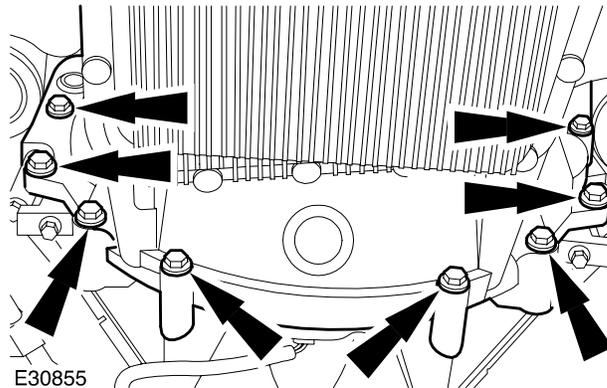


ILLUSTRATION 1

5. Install and fully tighten the retaining bolts to 48 Nm (Illustration 2).

**⚠ CAUTION:** Make sure the transmission control module (TCM) and main control valve body is protected against electrostatic discharge. Failure to follow this instruction may result in component damage.

#### TRANSMISSION RETAINING BOLTS

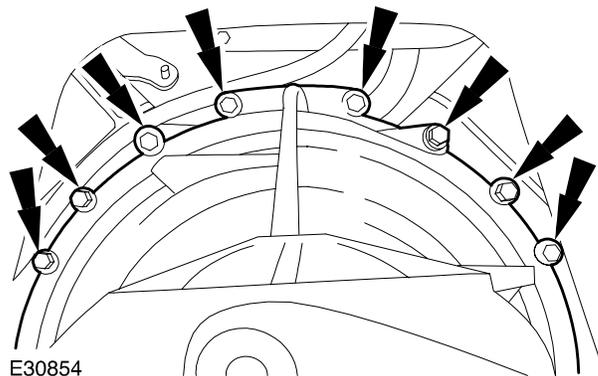


ILLUSTRATION 2

6. Connect the automatic transmission electrical connector.
7. Remove the tie-down strap (Illustration 3).

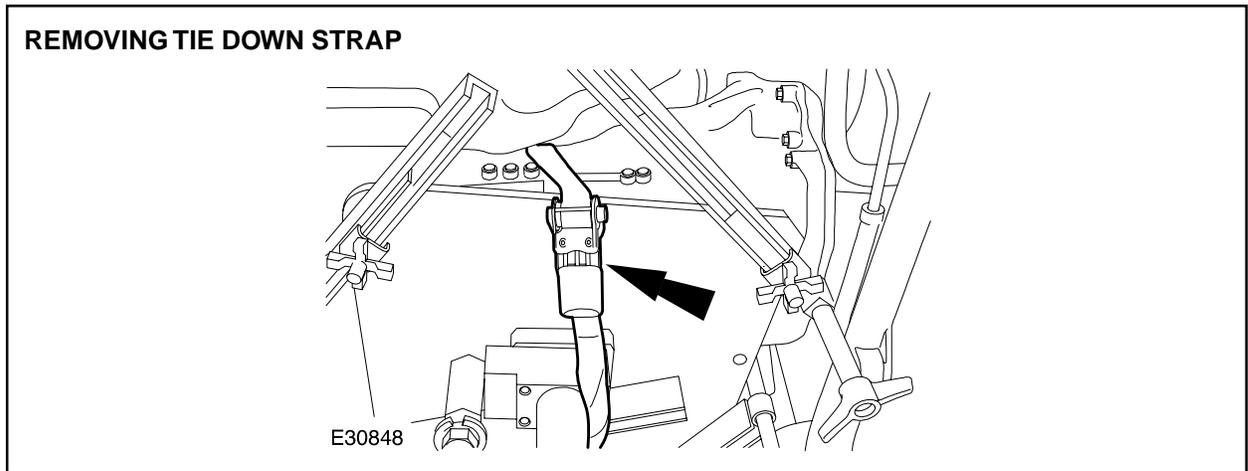


ILLUSTRATION 3

8. Raise the rear of the transmission.
9. Install and fully tighten the automatic transmission mount retaining bolts to 50 Nm (Illustration 4).

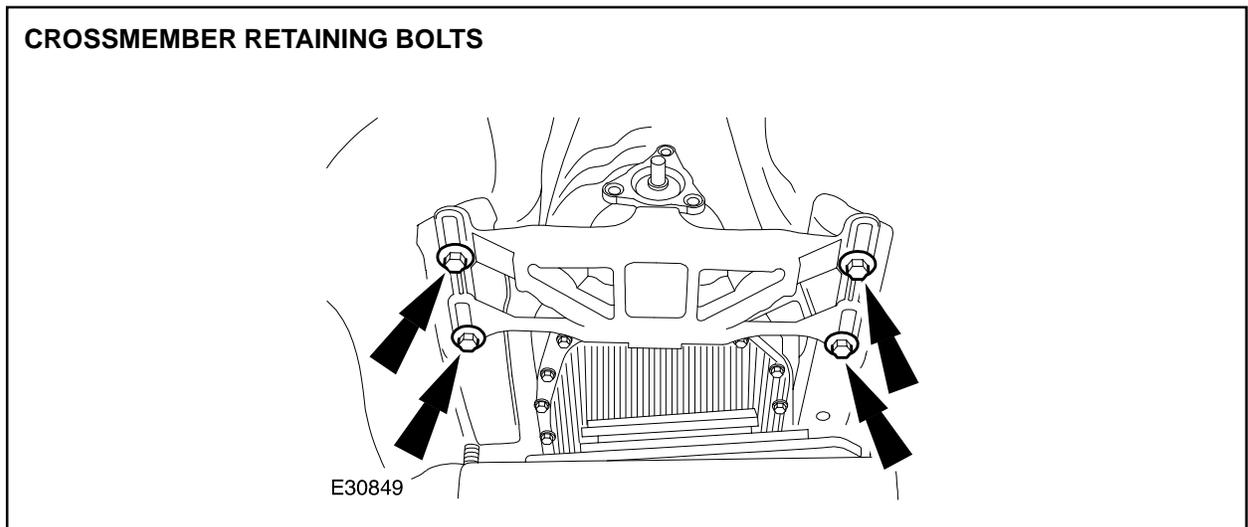


ILLUSTRATION 4

10. Remove the special tool (Illustration 5).

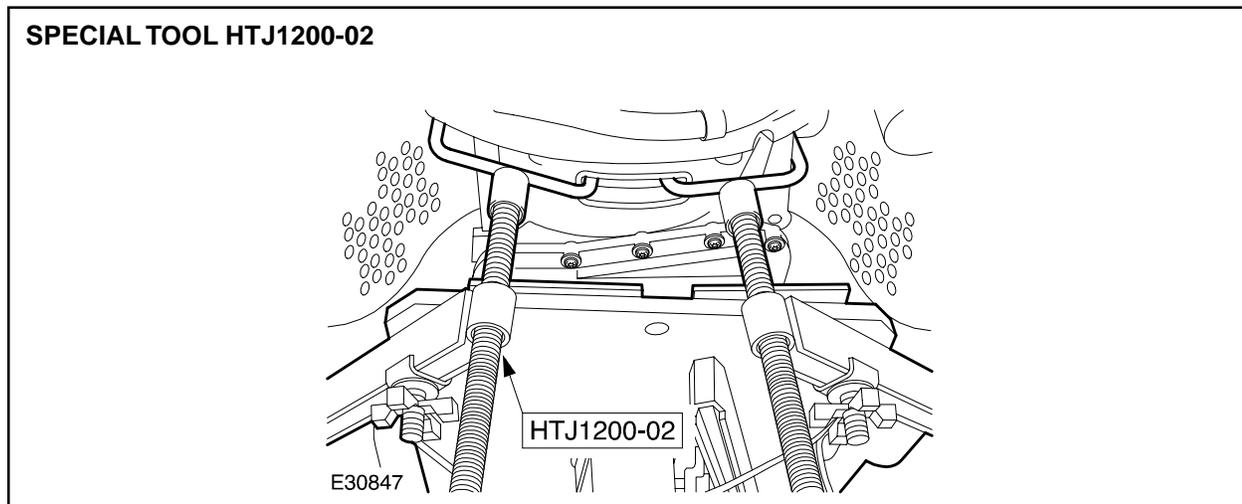


ILLUSTRATION 5

11. Align the selector lever cable. Install and fully tighten the retaining bolts to 11 Nm (Illustration 6).

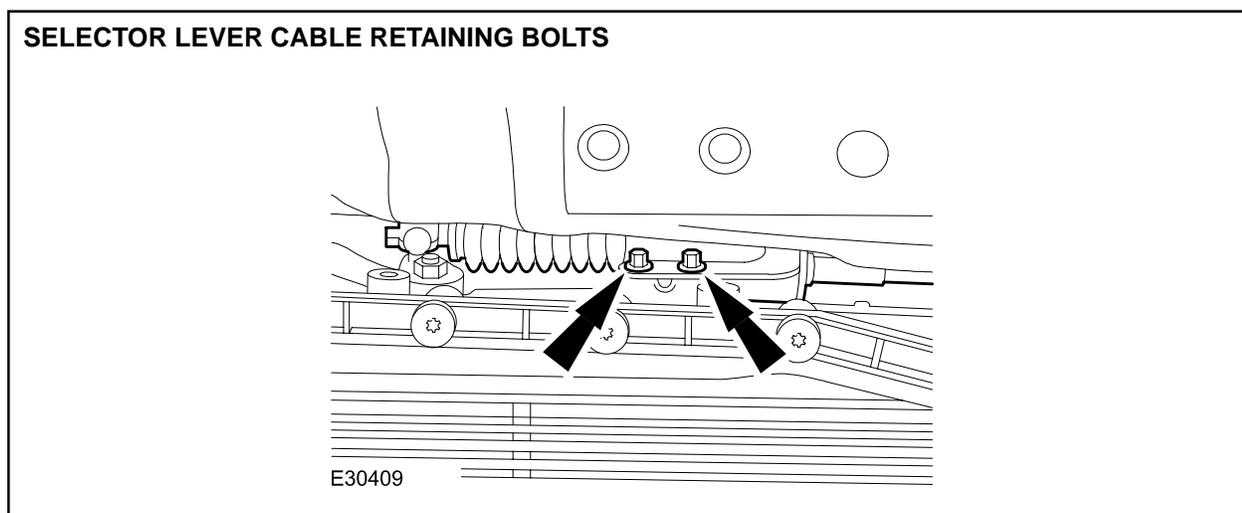


ILLUSTRATION 6

12. Attach the selector lever cable (Illustration 7).

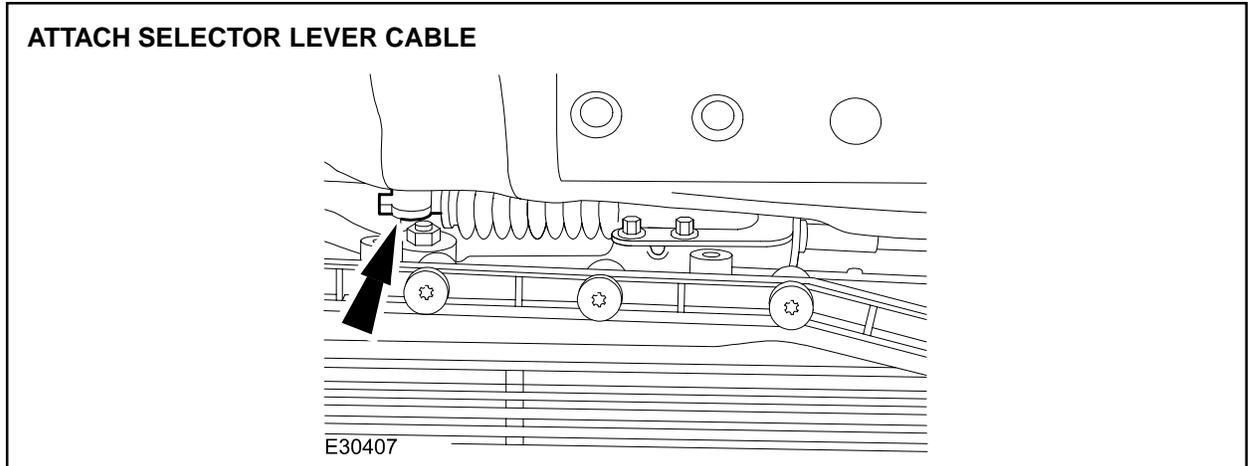


ILLUSTRATION 7

13. Align the transmission fluid cooler tubes to the automatic transmission.

14. Install and fully tighten the retaining plate and retaining bolt to 23 Nm (Illustration 8).

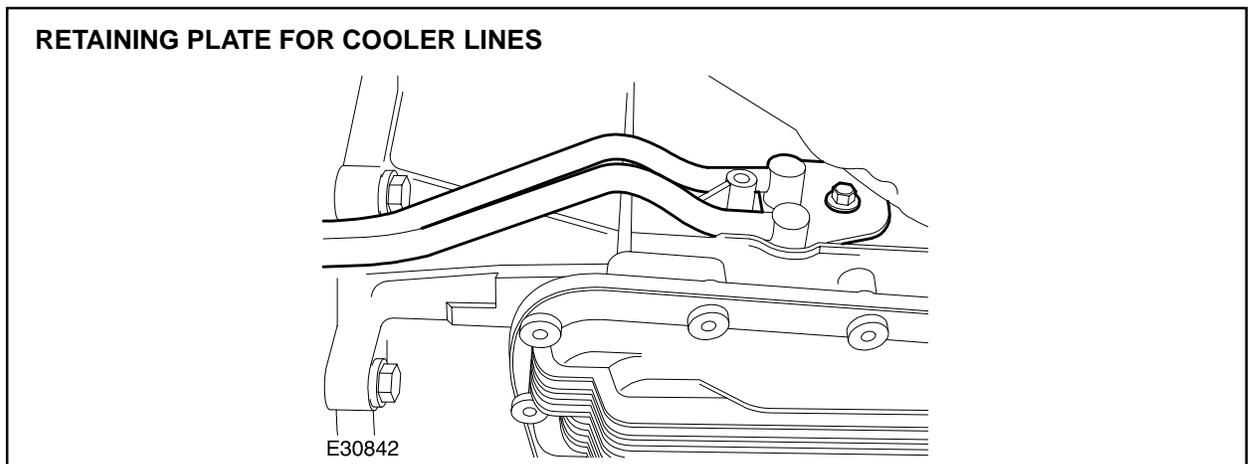


ILLUSTRATION 8

15. Attach the transmission fluid cooler tubes to the oil pan (Illustration 9).

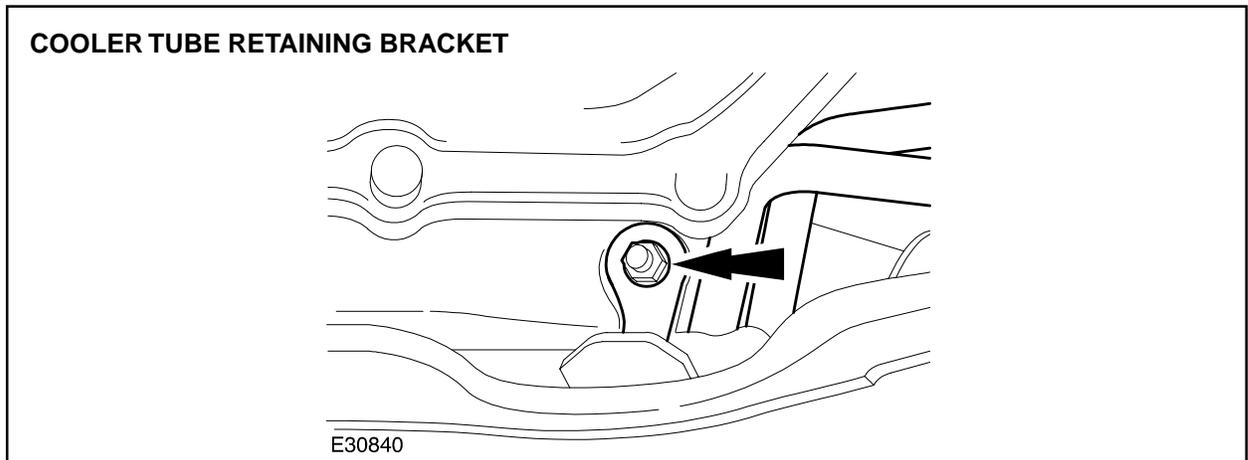


ILLUSTRATION 9

16. Install and fully tighten the torque converter retaining bolts to 55 Nm (Illustration 10).

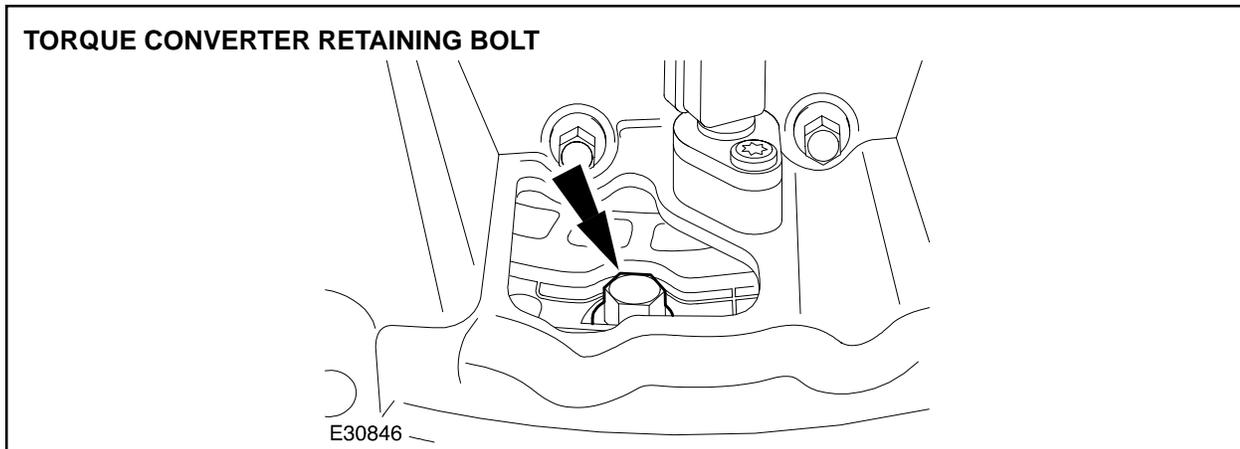


ILLUSTRATION 10

17. Install the rubber access cover (Illustration 11).

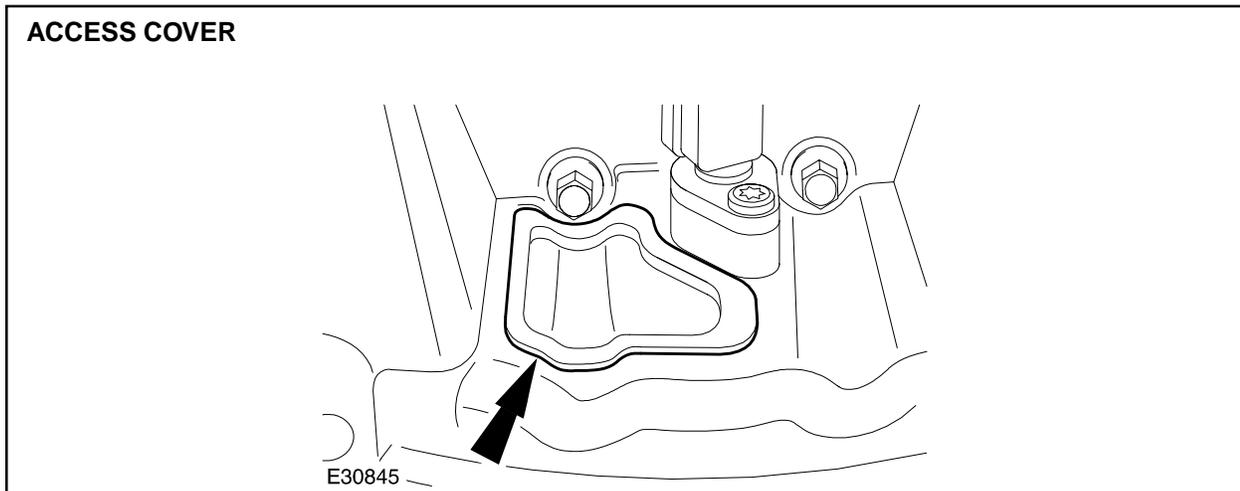


ILLUSTRATION 11

18. Install the starter motor (see Workshop Manual, JTIS CD ROM, section: 303-06, SRO 86.60.01).
19. Install the driveshaft (see Workshop Manual, JTIS CD ROM, section: 205-01, SRO 47.15.01).
20. Install the exhaust system (see Workshop Manual, JTIS CD ROM, section: 309-00).

21. Remove the engine support bracket, special tool number 303-021 (Illustration 12).

**Note:** Vehicles with 4.2L engine with supercharger shown, vehicles with 4.2L engine without supercharger similar. Left-hand shown, Right-hand similar.

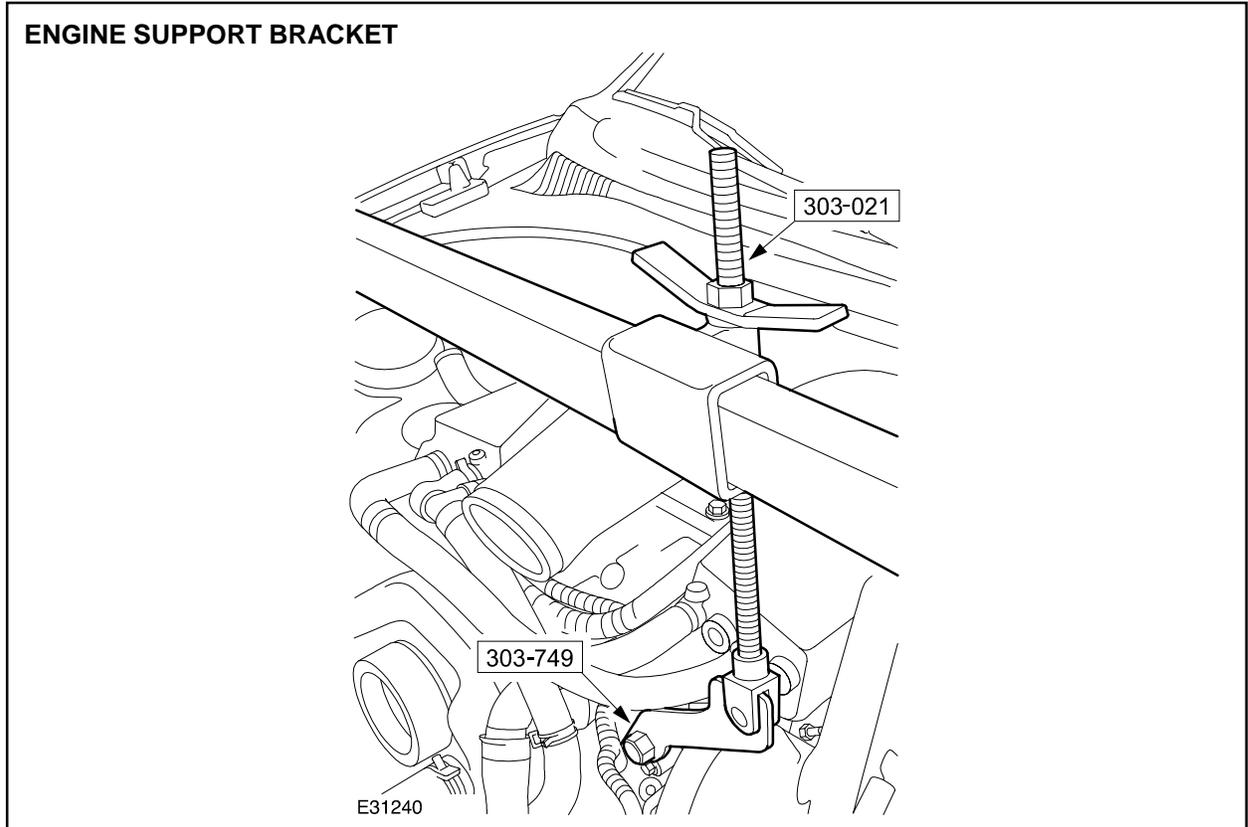


ILLUSTRATION 12

22. Remove the special tools (Illustration 13).

**Note:** Vehicles with 4.2L engine without supercharger shown, vehicles with 4.2L engine with supercharger similar.

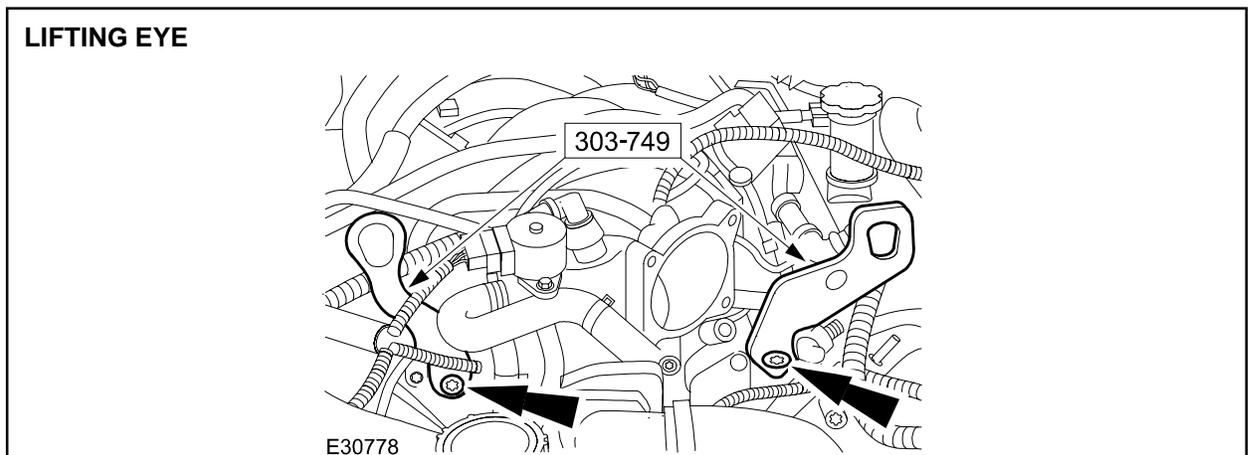


ILLUSTRATION 13

## VEHICLES WITH 4.2L N/A ENGINE ONLY

1. Install the throttle body (see Workshop Manual, JTIS CD ROM, section: 303-04B, SRO 19.70.04).
2. Connect the battery (see Workshop Manual, JTIS CD ROM, section: 414-01, SRO 86.15.01).
3. Use special tool 307-452 to carry out a transmission fluid level check (see Workshop Manual, JTIS CD ROM, section: 307-01).

**Note:** Use special tool 307-452 instead of FRDHM10 as listed in JTIS.

## RECONFIGURE TRANSMISSION CONTROL MODULE

Ensure WDS is loaded with Issue 21 software and configure the TCM as a new module.

### **Parts Information:**

<u>DESCRIPTION</u>	<u>PART NUMBER</u>	<u>QTY</u>
Automatic transmission - 3.0L	C2C 12376	1
Automatic transmission - 4.2L N/A	C2C 12374	1
Throttle Body Gasket - 4.2L N/A	AJ8 2355	1
Automatic transmission - 4.2L SC	C2C 12375	1

### **Warranty Information:**

Warranty claims should be submitted quoting the information found in the table below. This will result in payment of the stated time and, where applicable parts/miscellaneous expense codes as listed.

<b>Description</b>	<b>SRO</b>	<b>Time</b>	<b>Causal Part Number</b>	<b>Causal Part Description</b>
Automatic transmission renew - 3.0L	44.20.01	5.6 hrs.	C2C 12376	Automatic transmission
Automatic transmission renew - 4.2L N/A	44.20.01	5.4 hrs.	C2C 12374	Automatic transmission
Automatic transmission renew - 4.2L SC	44.20.01	5.3 hrs.	C2C 12375	Automatic transmission