TECHNICAL BULLETIN

JAGUAR SERVICE

ZF 4HP 24 E9 Automatic Transmission – Poor Shift Quality in R, 3-4

44-27

MODEL **Sedan (4.0L) Range 1990 - 94 MY** DATE **6/95**
XJS (4.0L) Range 1993 - 94 MY
Up to trans. serial no. 158813

ISSUE:

Some vehicles may exhibit harsh 3-4 upshifts or slip/judder when shifting into reverse. This condition affects automatic transmission vehicles only with transmission unit serial numbers up to 158813.

ACTION:

In case of a customer complaint, advise the customer that this concern can be rectified in the majority of cases by a simple modification to the automatic transmission. Check the manufacturer's plate on the left side of the transmission for the serial number. On transmissions with a serial no. up to 158813, proceed as follows:

1. Check the transmission fluid level - engine running - with the transmission at normal operating temperature. If the fluid appears burnt, proceed to step 3 below. If necessary, adjust the fluid level to the correct level.
2. Verify that the fault is still present. If fault is no longer present, STOP - DO NOT PROCEED. If fault is still present, continue with step 3.
3. Drain the transmission fluid and check its condition. If the fluid is burnt, replace the transmission unit. Refer to procedure (R.O. number 44.20.01) in section 44, of the XJ6 or the XJS Service Manual, Volume 3.
4. If the fluid appears clean, remove the transmission oil pan. Refer to procedure in section 44 of Service Manual (R.O. number 44.24.04).

5. Remove the retaining bolts from the speed sensor mounting bracket, Illustration 1, and remove the bracket.

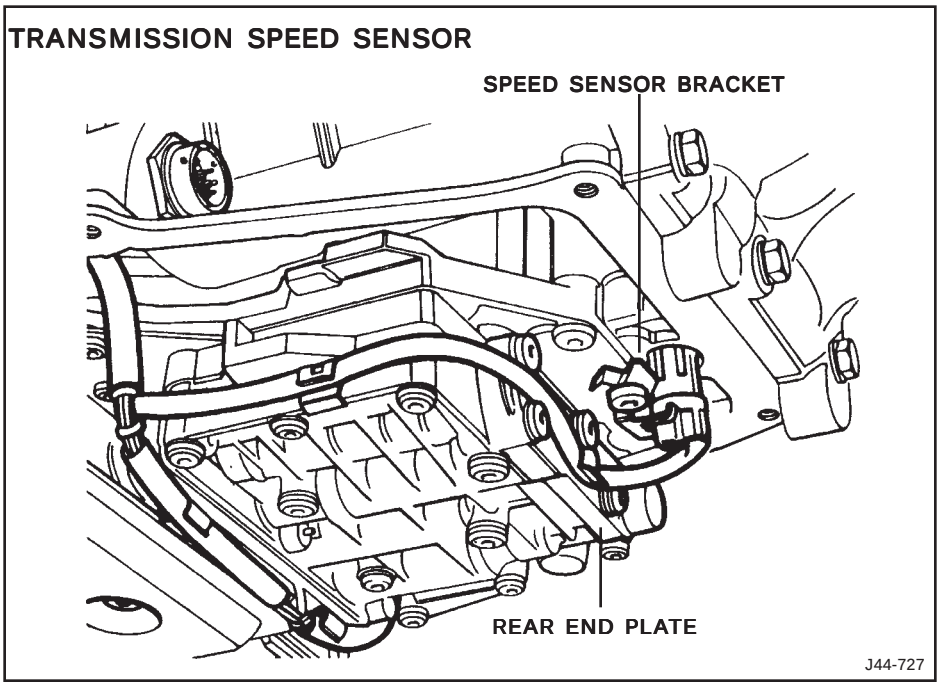

ILLUSTRATION 1

6. Loosen the bolts holding the rear end plate of the valve body (valve block). Pull the speed sensor out of the valve body, removing the harness from the securing clip.
7. Carefully remove the bolts that retain the rear end plate of the valve body. Remove the end plate, using care to ensure that the two outer springs and the center piston do not pop out.

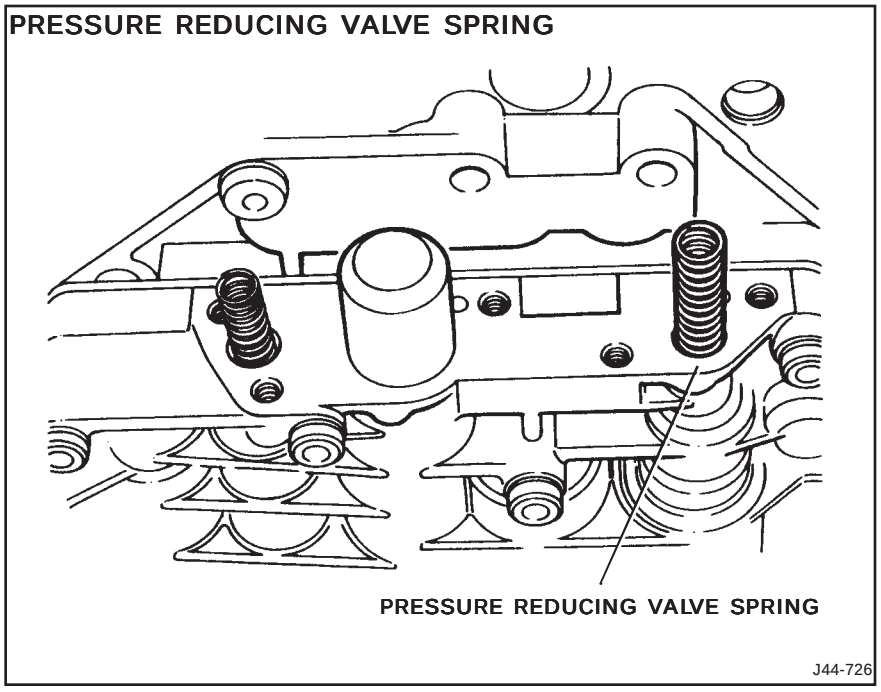

ILLUSTRATION 2

8. Remove and discard the pressure reducing valve spring from the right side location (Illustration 2).
9. Make sure that the pressure reducing valve behind the right side spring moves freely in its bore.
10. Install a new spring, part no. NHD 5601AA, into the bore of the pressure reducing valve.
11. Reinstall the valve body end plate and the clip for the speed sensor harness. Thread, but do not fully tighten, the retaining bolts.
12. Position and install the speed sensor and bracket on the valve body. Locate the speed sensor harness behind the securing clip.
13. Fully tighten the end plate bolts and torque to 8 lb ft (5 Nm).
14. Align the speed sensor retaining bracket and final tighten the retaining bolts and torque to 6 lb ft (8 Nm).
15. Install the transmission pan as described in section 44 of the Service Manual, (R.O. number 44.24.04), noting the following torque values:
    Dipstick tube nut 15 lb ft (20 Nm)
    Drain plug 11 lb ft (15 Nm)
    Transmission fluid pan bolts 6 lb ft (8 Nm)
16. Refill the transmission with the recommended fluid, as described in section 44 of the Service Manual (R.O. number 44.24.02). Approximately 4 quarts (4 liters) of fluid will be required.

PARTS INFORMATION:

DESCRIPTION	PART NUMBER	QTY
Spring	NHD 5601AA	1

WARRANTY INFORMATION:

FAULT CODE	R.O. NUMBER	DESCRIPTION	TIME ALLOWANCE
FG BC PQ	44.91.12	Vibration in reverse	1.05 hrs.
FG CD FG	44.91.12	Harsh 3 - 4 upshift	1.05 hrs.
FG BC NL	44.91.12	Slip in reverse	1.05 hrs.