



Sedan Range

DATE 6/96
Amended 9/96

08.1-03

SERVICE

TECHNICAL BULLETIN

ZF 4 HP 24 E Transmission – Diagnostic Flowcharts

MODEL 1995 MY-ON
Sedan (4.0L NA) Range
VIN
720001-ON

Remove and destroy Bulletin 08.1-03, Date 6/96.
Replace with this Bulletin.
Revisions are marked with a bar and in **bold text**.

ISSUE:

The following diagnostic flowcharts are designed to assist technicians in the correct diagnosis of automatic transmission problems.

The flowchart headings list the potential customer comments which are then systematically investigated in the chart using methods based on extensive field experience.

ACTION:

When diagnosing transmission complaints perform the following checks before the road test:

1. Check that the throttle is fully open when the accelerator pedal is fully depressed.
2. Check that kickdown occurs at the correct point when the accelerator pedal is depressed.

During the road test, record the speeds at which the shifts occur.

NOTE: Transmissions not installed in a vehicle must have the torque converter retaining bracket in place. The bracket should only be removed immediately before installing the transmission in a vehicle. The bracket prevents any excessive loading on the torque converter bushing as a result of the torque converter being unsupported.
Transmissions returned under warranty must be accompanied by a completed W-28 form and must have the torque converter retaining bracket installed.

ZF 4 HP 24 E DIAGNOSTIC FLOWCHART

Judder during upshifts & TCC engagement
 Judder in Reverse
 Harsh TCC engagement
 Harsh 3-4 & part throttle 4-3 shift (FG DB FG)
 Harsh change at 50-55 mph
 Judder when hot
Poor quality 3-4 shift (FG CD FG)
 Shifts with clunk
 Cut out at idle
 Erratic shifts
 Shudder through steering wheel during 3-4 shift

Is the fluid level correct?
 (check at operating temperature)

NO

Fill and retest

OK

Does a fluid sample contain water?
 (water separates from ATF when
 sample is allowed to sit)

YES

Install a replacement
 transmission, cooler & flush system

Test OK

NO

Is shudder felt through steering
 wheel at 3-4 shift?

YES

Install rear suspension
 monostrut

Test OK

NO

Does harsh 3-4 shift
 occur when fully laden?

YES

Install longer rear springs
 (see Tech. Bulletin 11-03)

Test OK

NO

Has a new valve body
 been installed?

NO

Install replacement valve body

Test OK

YES

Has the problem been solved?

NO

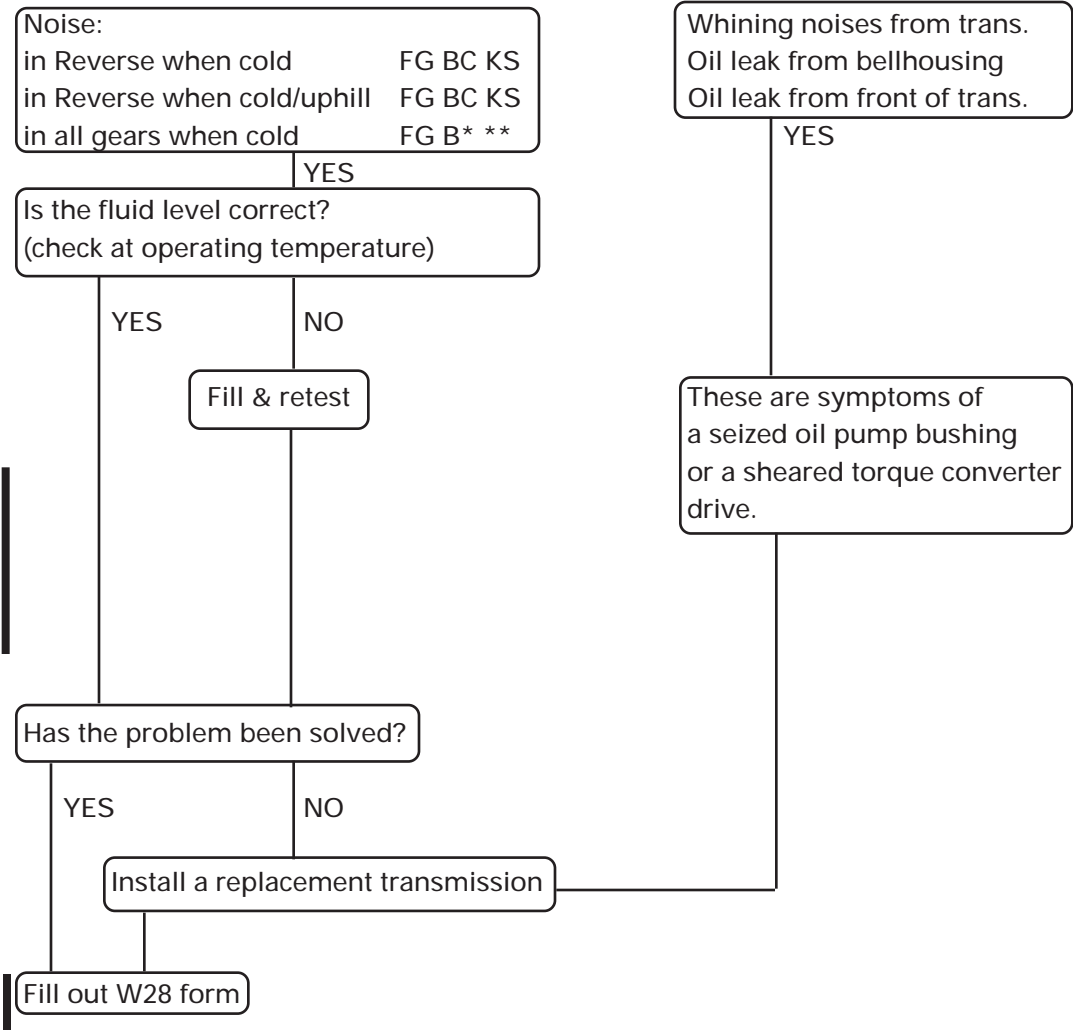
Install replacement transmission

Test OK

YES

Fill out W28 form

ZF 4 HP 24 E NOISE DIAGNOSIS



PARTS INFORMATION:

<u>DESCRIPTION</u>	<u>PART NUMBER</u>	<u>QTY</u>
Rear suspension monostrut	MNA 3713AA	1

WARRANTY INFORMATION:

Refer to Section FB and FG of the Warranty Codes and Repair Operation Times Manual for the appropriate fault codes. (Use DL BB HB for a cooler failure).

<u>FAULT</u>	<u>R.O.</u>	<u>DESCRIPTION</u>	<u>TIME</u>
<u>CODE</u>	<u>NUMBER</u>	<u>DESCRIPTION</u>	<u>ALLOWANCE</u>
FB FD **	44.40.01	Replace valve body	1.75 hrs.
FB ** **	44.20.01	Replace transmission	5.00 hrs.
FG CD **	64.91.05	Monostrut conversion	0.50 hrs.