FORD/MAZDA CD4E/LA4A-EL

HIGH LINE PRESSURE WITH NO CODES STORED

COMPLAINT: Line pressure is high and there may or may not be gear ratio error codes stored and transmission slip may or may not be experienced. A ***False*** code 452, for loss of vehicle speed signal, may also be stored.

CAUSE: The cause may be, a Forward Sprag and/or Forward Clutch slipping. When the computer sees this slip take place, the computer will go into Failure Mode Effects Management (FMEM), and line pressure will be set to the maximum, even though a gear ratio code has not yet been stored.
Note: The computer must see a slip only once to go into FMEM, but must see the slip occur three (3) times in order to store a slip code. This is the reason you may experience high line pressures with no gear ratio error codes stored.
Once the computer sees engine RPM rise as a result of the slip, and does not see vehicle speed also rise, it will suspect the vehicle speed sensor has failed and will store a ***false*** VSS code.

CORRECTION: Perform diagnostics in the following order:

(1) Scan the processor/computer for gear ratio error codes such as 645.

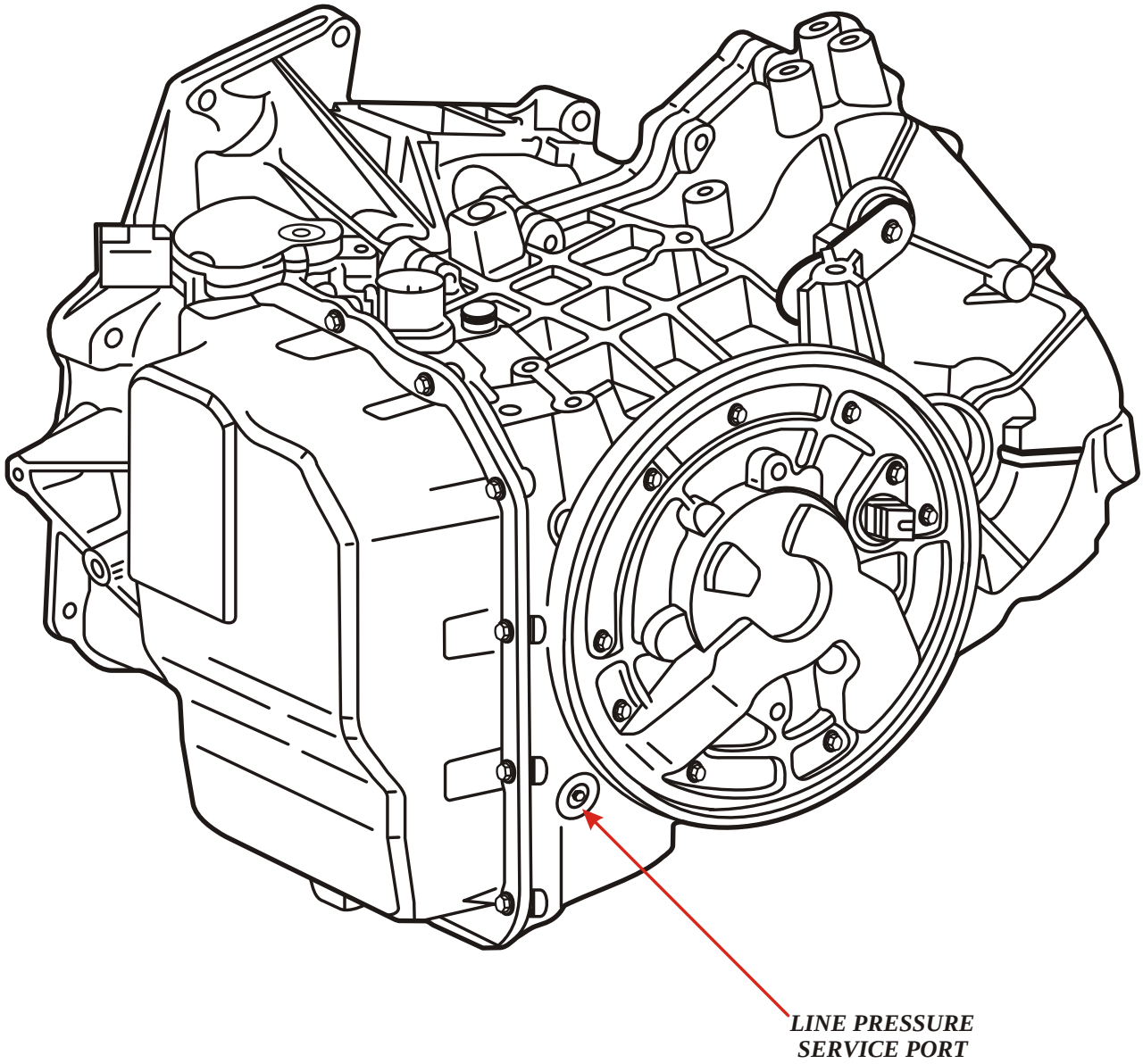
(2) Verify that line pressure is high, using the chart shown in Figure 1.

(3) Disassemble and check the condition of the forward sprag clutch, looking for wear, as shown in Figure 2.
Note: It is actually a good practice to make the Forward Sprag Assembly a mandatory replacement part, as they are notorious for looking and checking good, but are actually worn and not detectable with a visual inspection.

(4) Check the condition of the forward clutch pack, keeping in mind that the forward clutch drum is also notorious for cracking, which may cause forward clutch failure as well as direct clutch failure. Refer to Figure 3.

(5) Replace inspected parts as necessary.

LINE PRESSURE TEST



RANGE	TAP	PSI AT IDLE	PSI AT STALL
R	Line	64-76	259-294
D	Line	45-63	168-184
2	Line	45-63	168-184
1	Line	45-63	168-184

Figure 1

FORWARD ONE-WAY CLUTCH ASSEMBLY

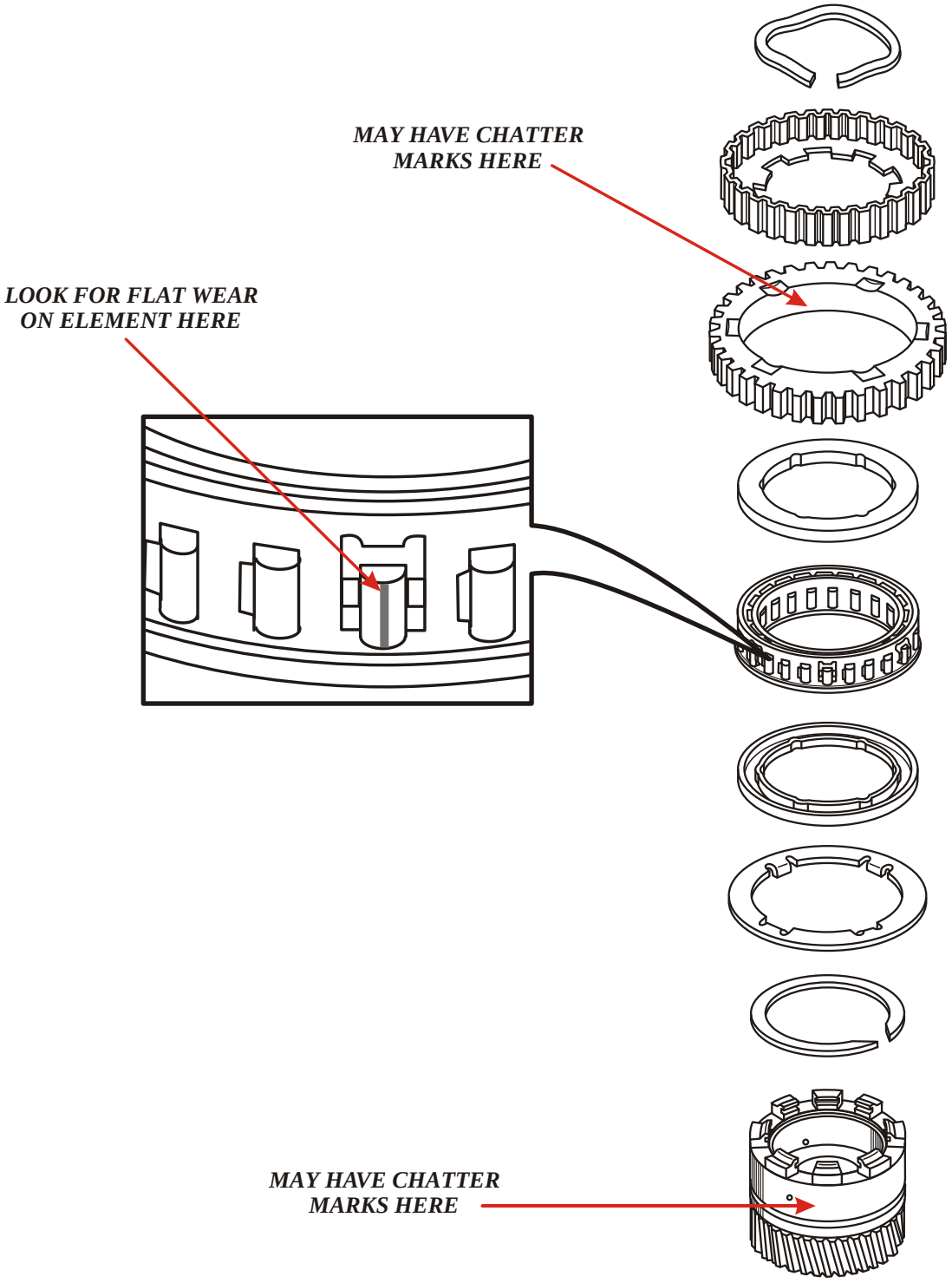


Figure 2

FORWARD/COAST/DIRECT CLUTCH DRUM

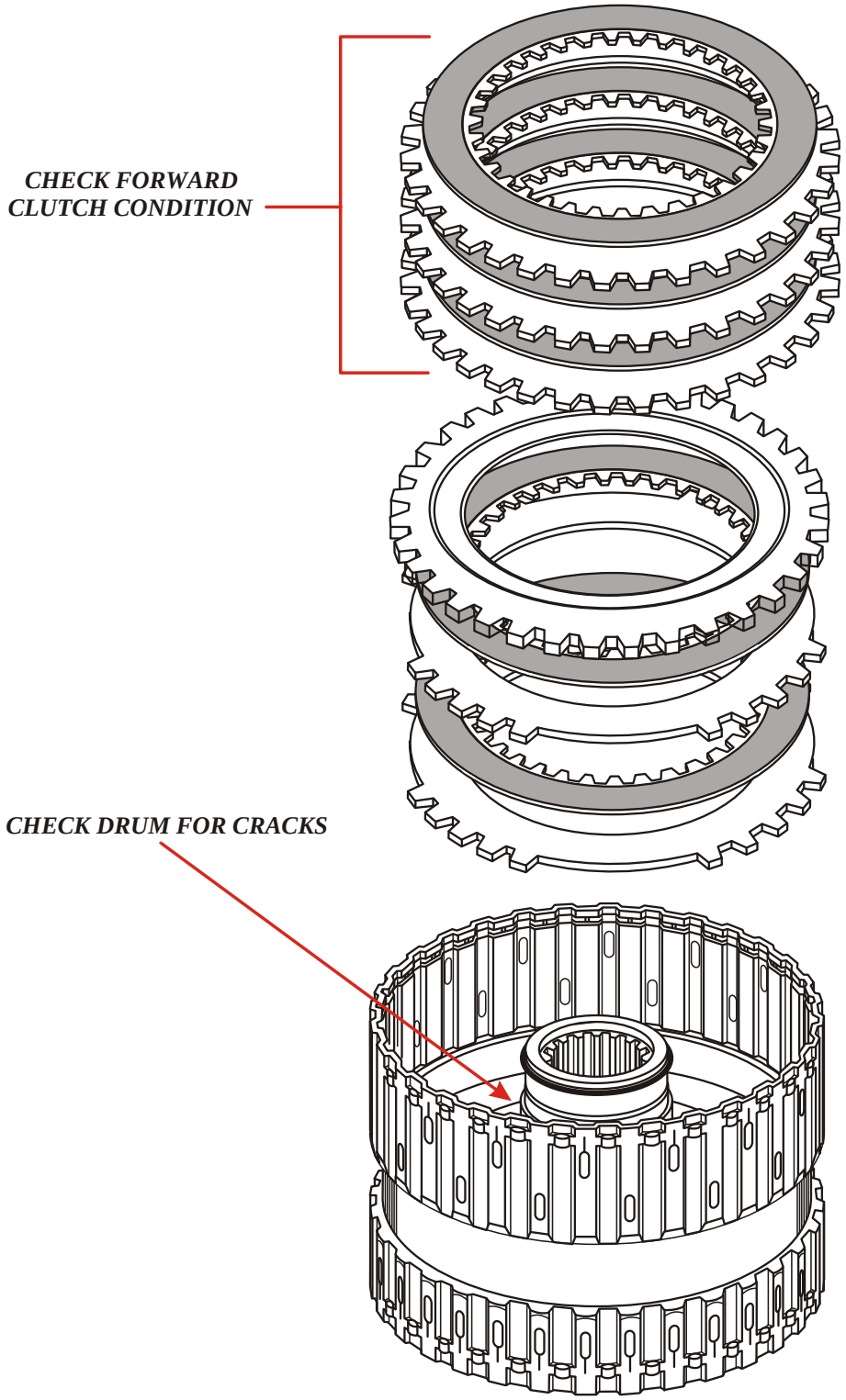


Figure 3