FORD A4LD

CONVERTER CLUTCH DOES NOT RELEASE

COMPLAINT: Engine shudder during coast down due to late disengagement of the torque converter clutch.

CAUSE: 1) The lock-up solenoid may not have been correctly bench checked during overhaul or when failure is suspected. This is due to confusion in printed material regarding air test procedures and ohms check procedures.

2) The converter clutch shuttle spring is broken or collapsed

3) The converter clutch TV modulator spring is not strong enough to shut off line pressure to the converter clutch shuttle valve during coastdown.

CORRECTION: 1) The proper air test procedure is shown in Figure 1. You must use no more than 70psi. when checking the lock-up solenoid or else the results will not be valid. Ohms check the solenoid across the two terminals as shown in Figure 2. There should be 25 - 40 ohms of resistance across both terminals but no continuity to the solenoid body..

2) Remove the converter clutch shuttle valve and spring from the valve body. Inspect and replace as necessary. See Figure 3. the converter clutch shuttle valve spring should be 1.10 inches in length and should weigh about 2 lbs. before coil bind.

3) Replace the converter clutch shift valve spring with a stronger spring. This spring weighs about 5 lbs. in single solenoid valve bodies, and about 2 lbs in double solenoid valve bodies. (See Figure 4. Increase the tension in double solenoid valve bodies by 2 - 2 l/2 lbs. to about 4 l/2 - 5 l/2 lbs. maximum total weight.

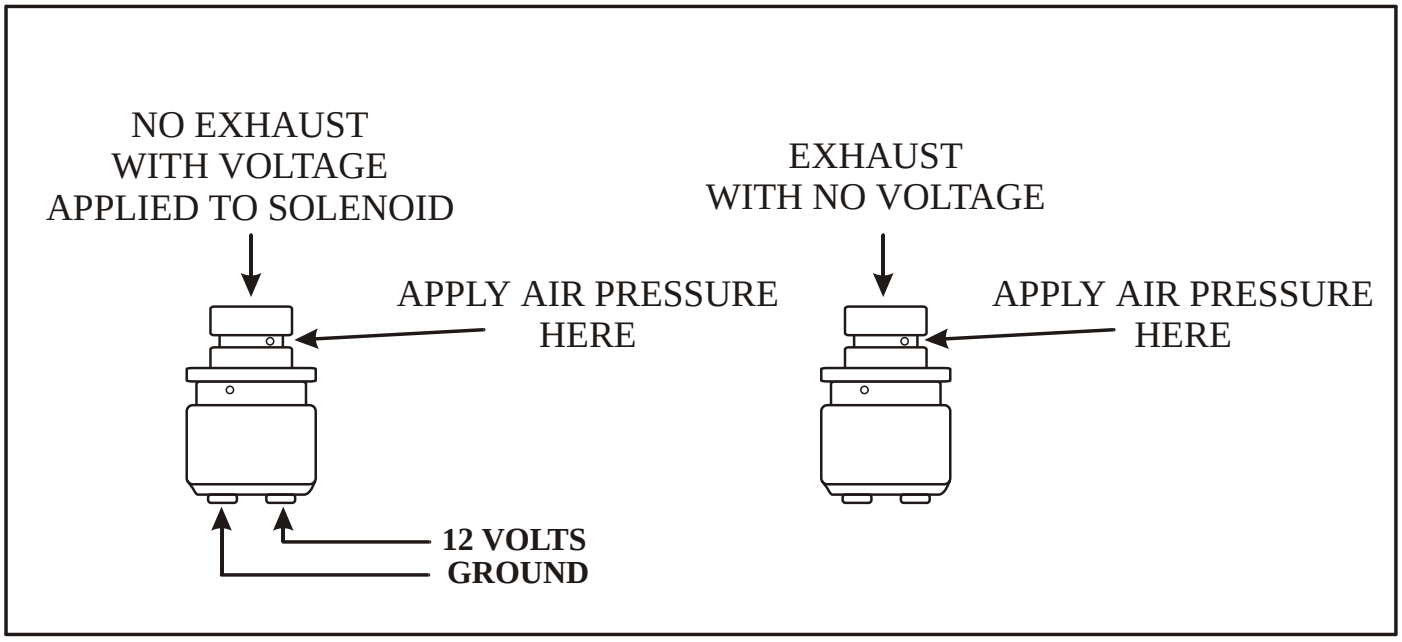


Figure 1

LOCK-UP SOLENOID SHOULD CHECK AT
25 - 40 OHMS OF RESISTANCE

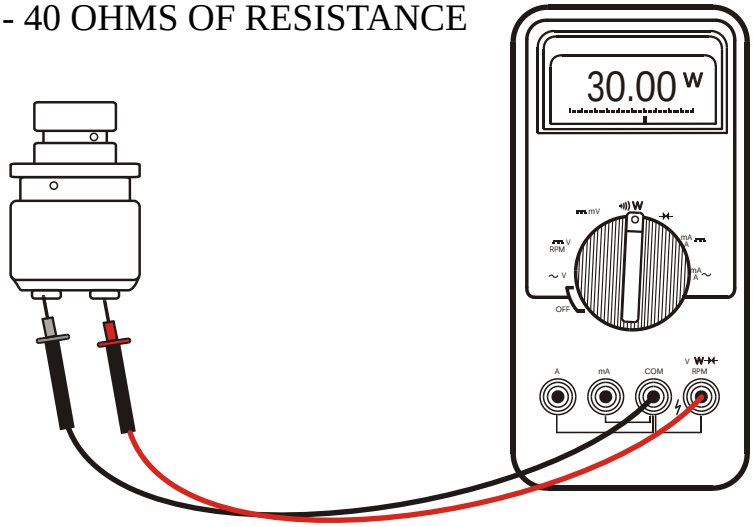
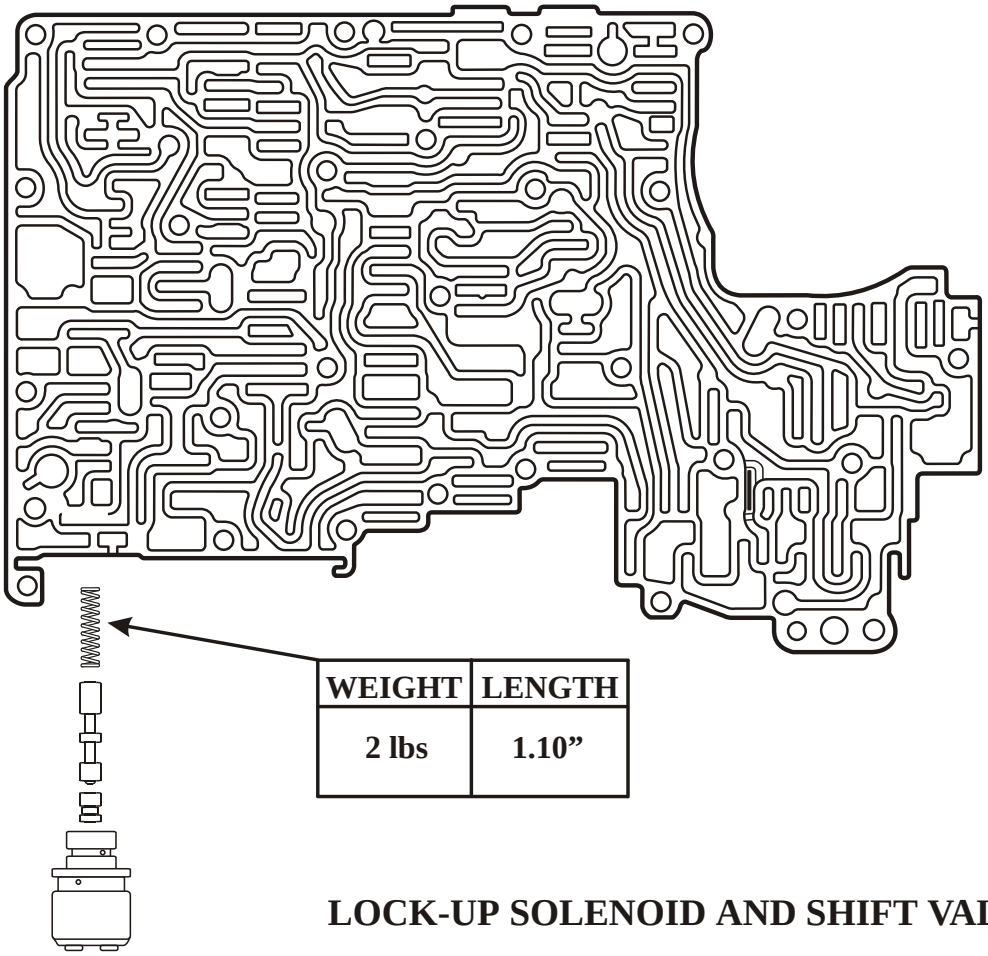


Figure 2



WEIGHT	LENGTH
2 lbs	1.10”

LOCK-UP SOLENOID AND SHIFT VALVE

Figure 3

3-4 SOLENOID AND SHIFT VALVE

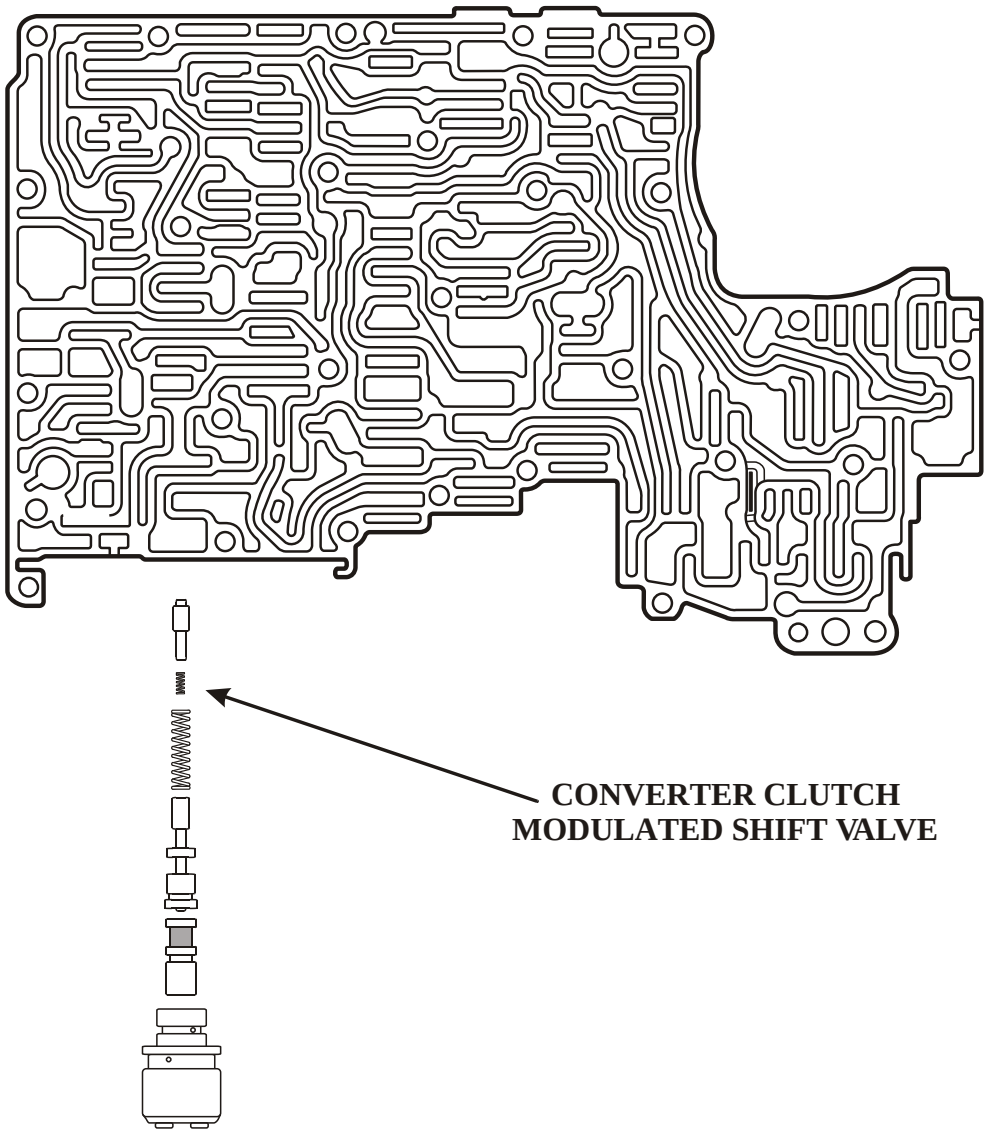


Figure 4