

# INSTALLATION INSTRUCTIONS

## A&B SHIFT SOLENOID

for KM-175, 176, & 177 SERIES

for F4A21-1, F4A22-2 & F4A23-2

'87 - '97

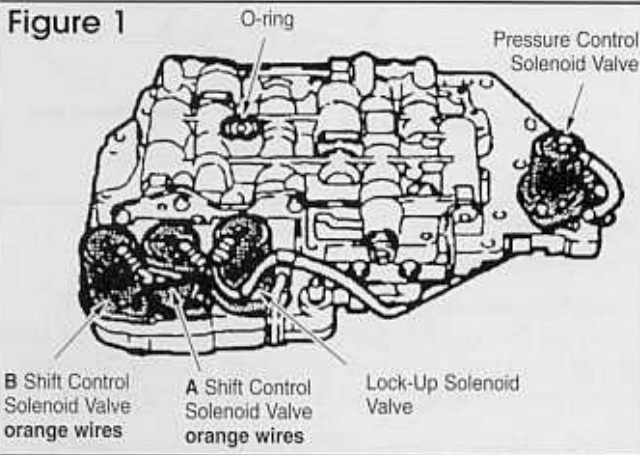
42930 20.8 to 23.8 ohms



**NOTE:** Some O.E.M. shift solenoids have a large stem with an O-ring. Teckpak Solenoids are surface sealed and retrofit all.

- To Remove:** Disconnect the negative battery cable, drain the ATF out of unit, and remove the pan.
- Remove the transmission filter. Note length of bolts.
- Remove solenoid wiring harness case plug from case. Remove ten (10) valve body bolts, noting the different length bolts: 20 mm, 28 mm and 45 mm.

Figure 1



- Remove valve body. The manual valve can come out – **be careful not to drop it.**
- Remove solenoids from valve body. Cut wires from old solenoid as close to metal base as possible. Keep track of solenoid wire locations to match correct solenoid wires back to the original solenoid positions (**Figure 1**).
- To Install:** Attach black ground wire with eyelet to the same bolt that was used originally. Cut original grounding wire from OEM eyelet.
- Strip back lead wires cut from the old solenoid and original solenoid harness approximately 1/2" and twist braided wire to form a tight strand. Loosen the Posi-Lock™ Connectors. Insert the bare wire into the connector until it bottoms out. Tighten the connector. Repeat this procedure for all of the connections (**Figure 2**).
- Install the new solenoids on the valve body (**Figure 1**). Place over the opening, insert solenoid bolts through the valve body and into threaded holes of solenoid housing.

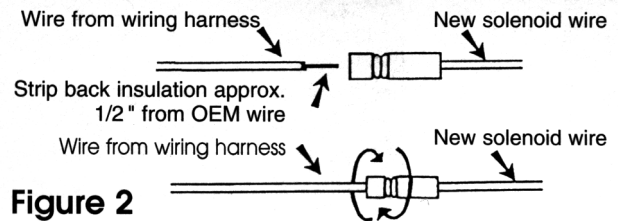



Figure 2

Start both bolts by hand, then tighten to 10 to 11.5 Nm (7.5 to 8.5 ft. lbs.).

- Make sure the O-ring is still on the upper surface of the valve body, at the place shown in **Figure 1**.
  - Reinstall the valve body into the transaxle, then insert the solenoid wiring harness case plug into the case. Be sure the notched part of the connector is in the proper place. Also check that the lead wire isn't caught between case and valve body.
  - Tighten the ten (10) valve body bolts to 10 to 11.5 Nm (7.5 to 8.5 ft. lbs.).
  - Install new filter, tighten four bolts to 6 to 6.5 Nm (4 to 5 ft. lbs.).
- Helpful Hint:** While installing the new filter, insert a pick (or paper clip) through the lock-up retaining plate, and work the valve while tightening filter bolts. This will keep the valve from binding.
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- Install new oil pan gasket and oil pan, tighten bolts to 10 to 11.5 Nm (7.5 to 8.5 ft. lbs.).
  - Connect the negative battery cable.
  - Fill unit with ATF and check fluid level with engine running and in "Park."

GEAR	SOLENOID	
	A	B
1st Gear	ON	ON
2nd Gear	OFF	ON
3rd Gear	OFF	OFF
4th Gear	ON	OFF