CD4E, LA4A-EL

PART NUMBERS 73840-27K, F-73840-TL27

73840-27K

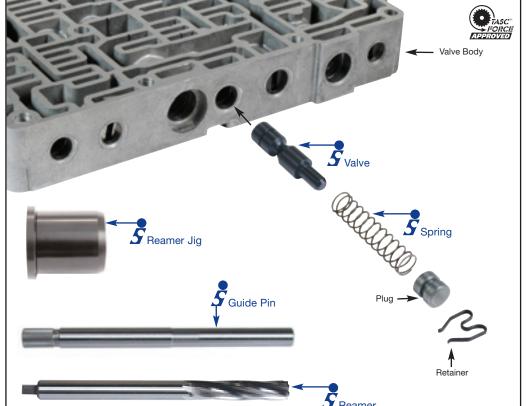
- 1 Valve
- 1 Spring



F-73840-TL27

- 1 Reamer
- 1 Reamer Jig
- 1 Guide Pin

Note: Due to the nature of the valve body design, the Sonnax Valve Body Reaming Fixture **VB-FIX** is required for use with this tool kit.



INSPECTION

Place a small amount of oil into the balance port. Follow with low air pressure. There should be minimal/no leakage past the valve spool and out the line pressure port.

DISASSEMBLY STEPS

- 1. Remove all components from the bore.
- 2. Discard the OEM valve and spring.
- 3. Retain the OEM end plug and retaining clip.

REAMING INSTRUCTIONS

Prep and Set-Up

- 1. Remove all components from the bore.
- 2. Clean the bore thoroughly.
- 3. To align the line modulator valve bore in the fixture follow the **VB-FIX** instructions.
- 4. From tool kit **F-73840-TL27**, use jig **F-73840-RJ27** and guide pin **F-73840-GP27**, then ream with reamer **F-73840-RM27**.



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NOTE: Extra attention should be paid to alignment and securing the valve body to the fixture on this bore. A very smooth action to insert and remove the guide pin after final securing is a must to provide easy, on-center reaming of the bore.

- 5. Soak the bore and reamer with cutting fluid (Mobilmet S-122, Lubegard Bio-Tap, Tap MagicTM, etc.). For best results, provide a continuous flow of water-soluble cutting fluid during the reaming process.
- 6. Gently insert the reamer through the jig and into the bore until the cutting tip contacts the first bore to be reamed.
- 7. Select the correct sized socket to fit the square shank of the reamer, and attach it to a wobble/swivel socket drive.

Reaming

NOTE: Once valve body alignment has been established on the **VB-FIX**, do not disturb or loosen the valve body setting or guide setting in any way until the reaming process is complete. Be sure to use plenty of continuously supplied cutting fluid while reaming these bores.

- 1. The reamer should be turned by hand using a speed handle or by a low rpm, high torque air drill regulated to a maximum of 200 rpm.
- The reaming action should be clockwise in a smooth and continuous motion, at 60-200 rpm. The reamer should actually pull itself through the bore, so little or no forward force should be applied.
- 3. Continue reaming until the reamer bottoms in the bore. The approximate reaming time is 2 minutes.

Finish and Clean-Up

- 1. Using low air pressure, blow the chips free before removing the reamer.
- 2. To remove the reamer, turn clockwise while slowly pulling outward on the reamer.
- 3. Remove any remaining debris from the bore with low air pressure and clean in a solvent tank.
- 4. Examine the bore after cleaning for surface finish, debris, and burrs. Flashing and burrs on the exit side of casting bores can be carefully removed with a small piece of ScotchbriteTM on the end of a long wire.
- 5. Clean the reamer after each use and store in its protective tube.

Cautions and Suggestions

Turning the reamer backward will dull it prematurely.

Pushing on the reamer will result in poor surface finish and inadequate and sporadic material removal.

Never use a crescent wrench, ratchet or pliers to turn the reamer.

A dull reamer will cut a smaller hole.

INSTALLATION

Install the Sonnax valve, spring and OEM end plug and retainer as shown in the photo on Page 1.

