4L60 & E

PART NUMBERS **77964-01K, -04K, -RM, -RM2**

Oversized 4-3 Sequence Valve Kits

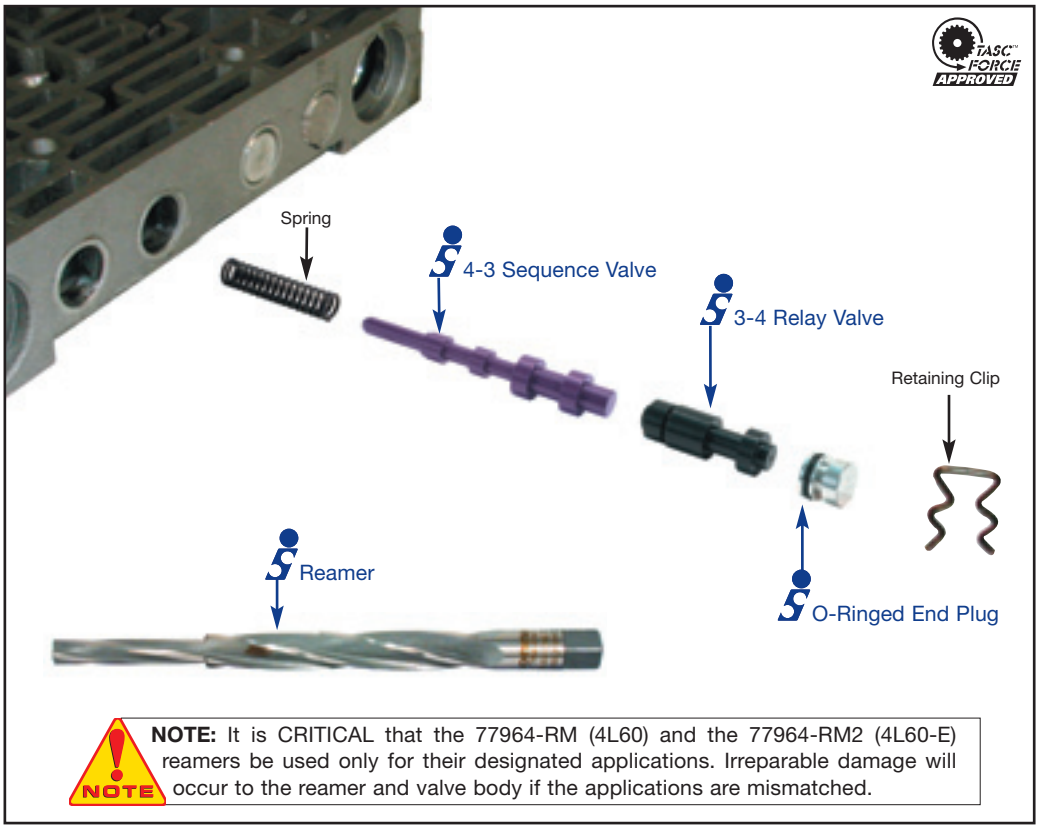
77964-01K 4L60
77964-04K 4L60-E

1 3-4 Relay Valve
1 4-3 Sequence Valve
1 End Plug
1 O-Ring

TOOL REQUIRED

77964-RM 4L60
77964-RM2 4L60-E

1 Reamer

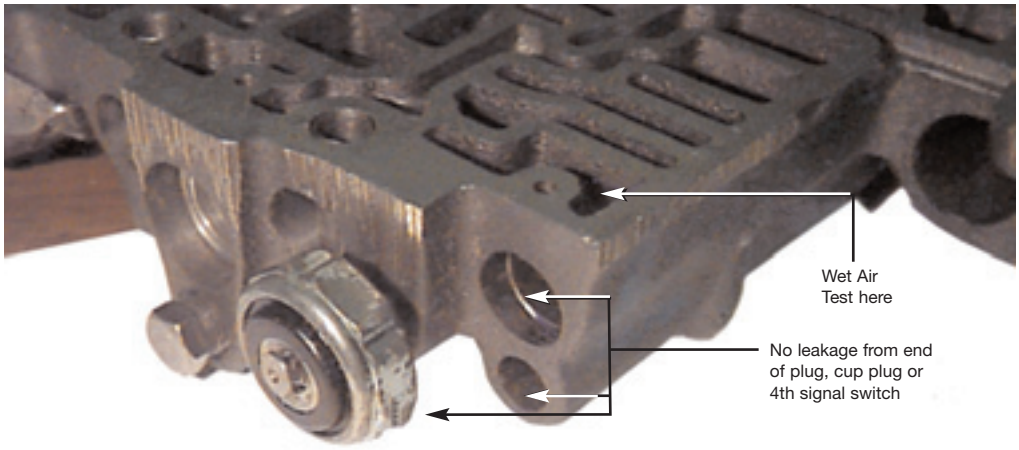


NOTE

NOTE: It is CRITICAL that the 77964-RM (4L60) and the 77964-RM2 (4L60-E) reamers be used only for their designated applications. Irreparable damage will occur to the reamer and valve body if the applications are mismatched.

Wet Air Test

To Wet Air Test for a leaking end plug or cup plug and switch bore (4L60), place a small amount of oil into the 4th signal orifice. Follow with low air pressure. There should be no leakage past the end plug, switch or cup plug.



To test for a worn valve bore, a visual inspection should be done. The valve may also be inserted into the bore backward and a wiggle test performed. Excessive wiggle indicates a worn bore.

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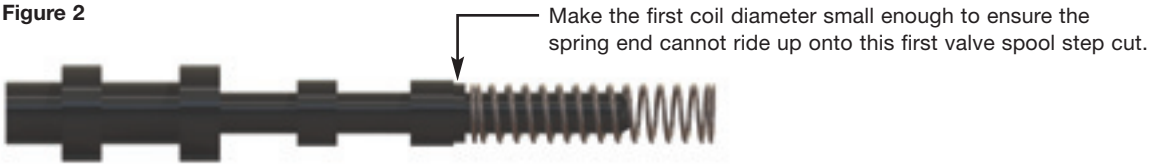
Instructions

1. Ream the valve body bore as described in the "Reaming Instructions" section, using reamer **77964-RM2** (4L60-E) or **77964-RM** (4L60).
2. Modify the OEM spring by reducing the diameter of the first coil *(see Figure 1)*. Make the first coil diameter small enough to ensure the spring end cannot ride up onto the step cut in the face at the first valve spool *(see Figure 2)*.
3. Lubricate and install the Sonnax replacement valves, reusing the OEM spring and end plug retaining clip. Refer to the photo (4L60-E) or the illustration (4L60) for proper orientation.

Figure 1

Figure 2



Reaming Instructions:

1. Remove valves from the bore to be reamed.
2. Clean valve body.
3. Clamp the valve body to bench with open circuits up.
4. Fill bore with cutting fluid (kerosene, Tap Magic™, etc.).
5. Soak fluted end of reamer with cutting fluid.
6. Insert reamer into the bore until reamer tip contacts the first bore to be cut.
7. With the reamer carefully and securely positioned, use a speed handle to ream the bore. The reaming action should be clockwise in a smooth and continuous motion, at approximately 1 to 1½ revolutions per second.
8. Continue reaming until the tip of the reamer bottoms in the bore. Spin the reamer 5-10 more times after bore bottoming to allow for excess material removal and better surface finish.
9. Using low air pressure, blow free the chips before removing the reamer.
10. To remove the reamer, turn clockwise while slowly pulling outward on the reamer.
11. Remove any remaining debris from the bore with low air pressure and mineral spirits/degreaser.
12. Lubricate the replacement valve with ATF. Fit the valve into the reamed bore. If snug, repeat the reaming procedure with an air drill at 200 rpm.

Cautions

1. Never turn the reamer backward.
2. Pushing on the reamer will result in poor surface finish, inadequate and sporadic material removal, and material being left behind as the reamer exits a bore.
3. Blow free any chips from the reamer after each use.
4. Never use a crescent wrench to turn the reamer.