Instruction Data Sheet

AODE, 4R70W, 4R75W

PART NUMBER **76948-31**

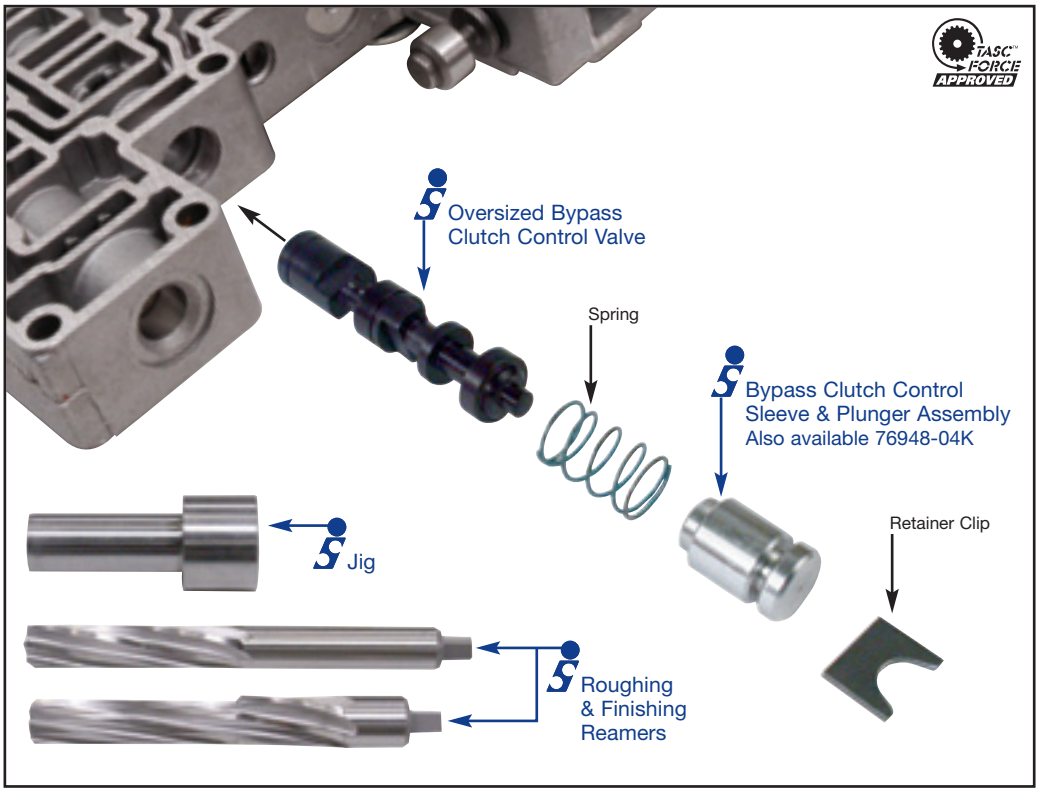
Oversized Bypass Clutch Control Valve

76948-31

1 Oversized Bypass Clutch Control Valve

76948-TL6

1 Roughing Reamer
1 Finishing Reamer
1 Reamer Jig



Disassembly:

1. Remove the bypass sleeve and plunger, spring and bypass valve.
2. Discard the OEM bypass clutch control valve. Save the spring.

Note: It is recommended you also replace the bypass sleeve & plunger with Sonnax part **76948-04K**.

Reaming Instructions:

1. Remove all components from the bore.
2. Clean the bore thoroughly in a solvent tank.
3. Securely clamp the housing to the bench, making sure not to clamp directly over the bore to be reamed.
4. Soak the bore and **76948-RM6** reamer with cutting fluid (Mobilmet S-122, Lubegard Bio-Tap, Tap Magic™, etc). For best results, provide a continuous flow of water-soluble cutting fluid (i.e. Mobilmet S-122) during the reaming process.
5. Gently insert the **76948-RM6** reamer into the bore until the cutting tip contacts the first bore to be reamed.
6. Select the correct sized socket to fit the square shank of the reamer, and attach it to a wobble/swivel socket drive.

7. The reamer should be turned either by hand using a speed handle or by a low rpm, high torque air drill regulated to a maximum of 200 rpm.
8. 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.
9. Continue reaming until the reamer bottoms in the bore.
10. Using low air pressure, blow the chips free before removing the reamer.
11. To remove the reamer, turn clockwise while slowly pulling outward on the reamer.
12. Lubricate the valve body bore, reamer jig **76948-RJ6** and reamer **76948-RM7**.
13. Fully insert the reaming jig into the bore, and insert reamer **76948-RM7** into the reamer jig.
14. Repeat steps 6 through 9 with reamer **76948-RM7**. Reaming time for the second reaming will be 1½ to 2 times as long as the first.
15. Remove any remaining debris from the bore with low air pressure and clean in a solvent tank.
16. 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 Scotchbrite™ on the end of a long wire.
17. Clean the reamer after each use and store in its protective tube.

Cautions and Suggestions

1. Turning the reamer backward will dull it prematurely.
2. Pushing on the reamer will result in poor surface finish and inadequate and sporadic material removal.
3. Never use a crescent wrench, ratchet or pliers to turn the reamer.
4. A dull reamer will cut a smaller hole. Reamers can be sharpened, but should only be done by a professional tool sharpener. Actual life of a reamer before resharpening averages 50-70 bores.

Installation:

After thoroughly cleaning the valve body, lubricate the oversized valve with ATF and install the valve into the bore. Complete the assembly by inserting the spring, sleeve, plunger valve and retaining clip.