

Oversized PR Valve and Reverse Boost Valve & Sleeve Kit

F-76948-TL

- 1 Reamer Jig
- 1 Reamer
- 1 Guide Pin



Used for installation of following kit

76948-16K '91-'95

76948-17K '96-up

Each kit includes the following

- 1 Oversized Pressure Regulator Valve
- 1 Oversized Reverse Boost Valve & Sleeve



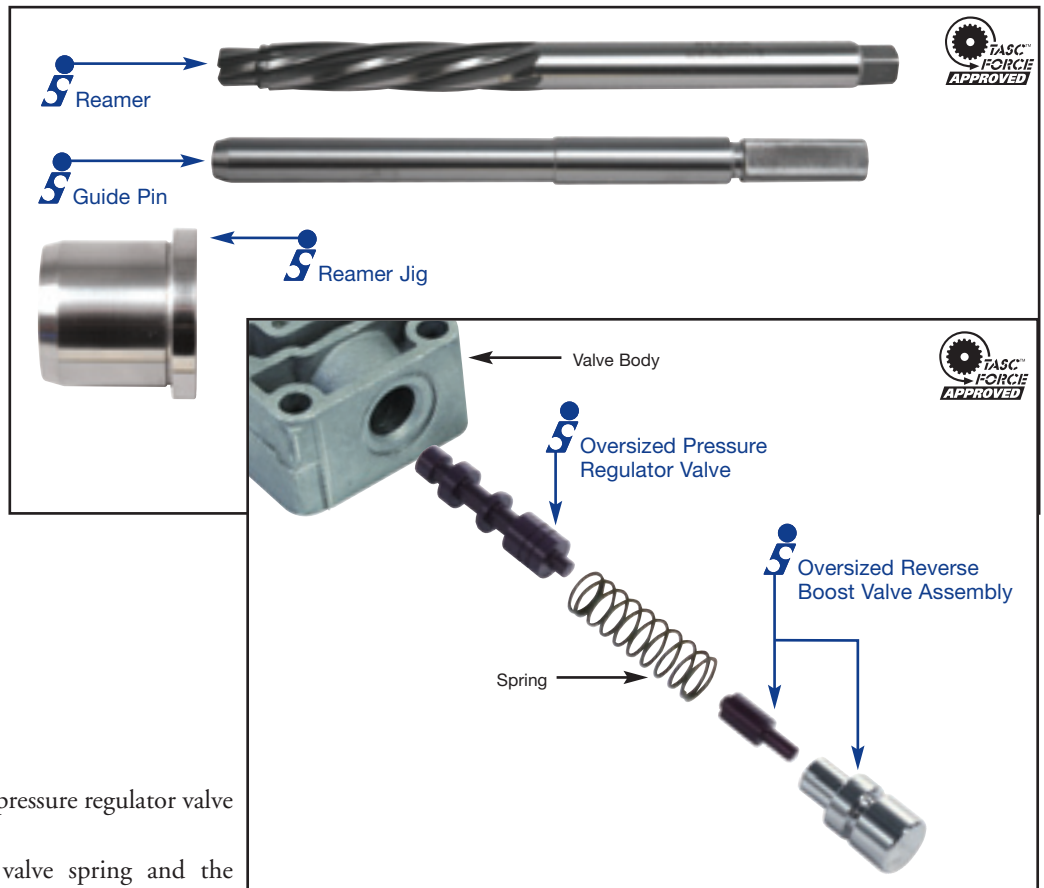
The oversized reverse boost valve and sleeve supplied in these kits must be used when replacing the PR valve.

Disassembly Steps

1. Remove all components for the pressure regulator valve bore.
2. Retain the pressure regulator valve spring and the retaining clip.
3. Discard the reverse boost assembly and pressure regulator valve.

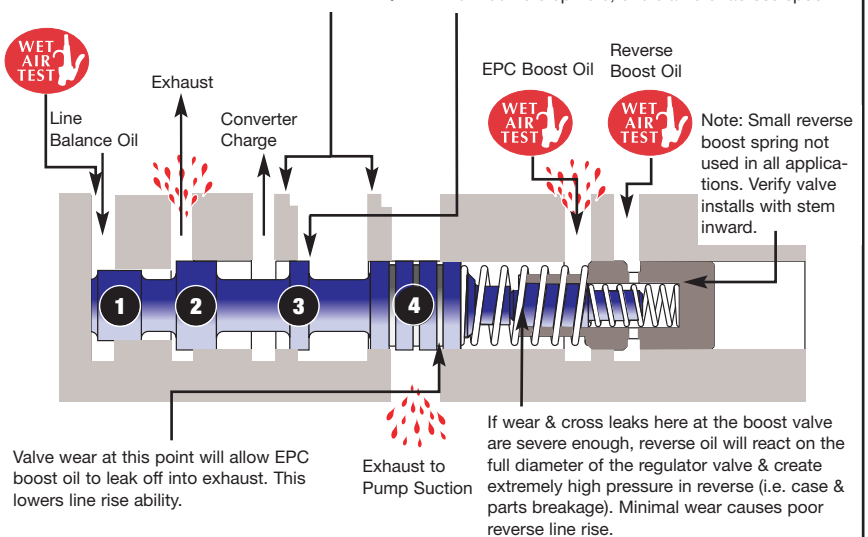
Prep and Set-up

1. Remove all components from the bore.
2. Clean the bore thoroughly in a solvent tank.
3. Place the valve body on the reaming fixture **VB-FIX**. Align and secure the valve body to the fixture according to the **VB-FIX** instructions, using the guide pin and reamer jig from the F-76948-TL tool kit. Do not loosen wing nuts or clamp once position has been established until the entire reaming process is complete.
4. Remove the guide pin.
5. Soak the bore and 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.



Two casting recesses only on '96 and later. 76948-16K does not function with this valve body.

Shallow step on # 3 spool identifies '96 and later. '91-'95 no step here, one diameter across spool



AODE, 4R70W, 4R75W

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Mobilmet S-122) 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

1. 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.
2. 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 stop is reached.

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 Scotchbrite™ on the end of a long wire.
5. 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 or replacing averages 50-70 bores.

Installation Instructions

Identify valve body and valve application (see Figures 1, 2, 3 & 4).

1. Lubricate the replacement valve prior to installing.
2. When returning the parts to the valve body, the oversized pressure regulator valve should be installed first with the smallest diameter spool at the bottom of the valve body bore.
3. Return the larger OEM spring to the bore.
4. The small reverse boost spring was eliminated in later applications. This spring is not required. If your application has the spring, you may reinstall it. The spring will return the boost valve and result in a slightly quicker reverse line rise.
5. Verify the reverse boost valve is assembled with smaller diameter stem into sleeve first.

Note: Only the oversized reverse boost valve and sleeve supplied in these kits should be used.

6. Push the Sonnax boost sleeve assembly into the valve body, open end first, just far enough to reinstall the retaining ring.



AODE, 4R70W, 4R75W

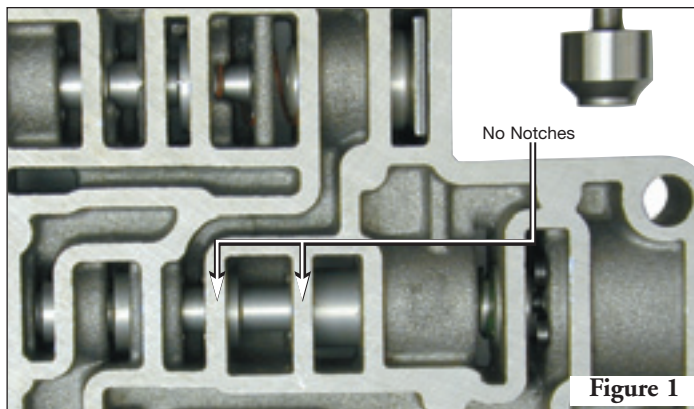
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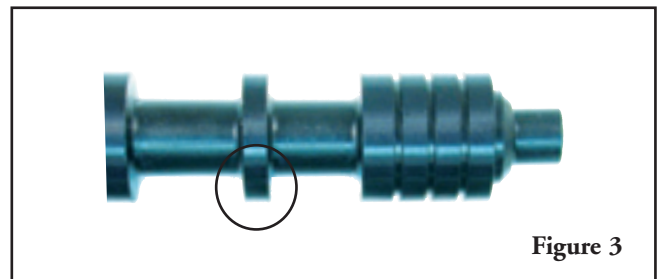
Valve Identification

- **76948-16K** is designed to replace the valve identified below, for '91- '95 applications only! These units will not have a step on the #3 spool. Valve bodies will have alignment pins with 13mm heads (see Figure 3).
- **76948-17K** is designed for use with '96 & up transmissions. In 1996 the valve body was changed with the smaller diameter alignment pins. These later design pins are 10mm at the bolt head and .173" in diameter. The valve body casting is recessed in two places and the # 3 spool is stepped (see Figure 4).
- Installation of **76948-16K** in '96 and up units will result in low line pressure in drive and/or reverse. Pressure will increase with engine RPM but only to a maximum of 50 to 75 psi.

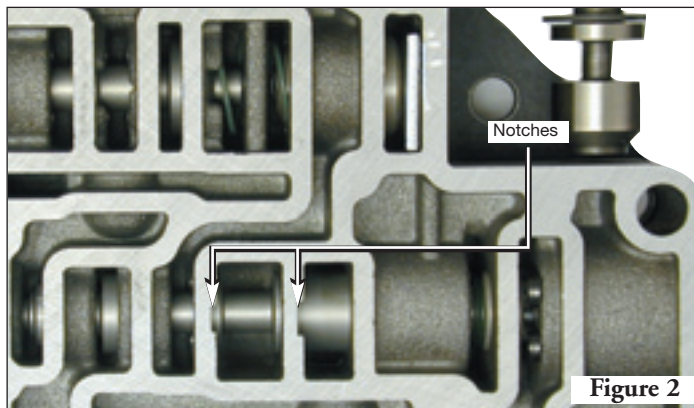
'91 & '95 - no notches



No Step



'96 & Up - notches



With Step

