

Oversized Pressure Regulator Valve Kit

74846-06K

1 Oversized Pressure Regulator Valve

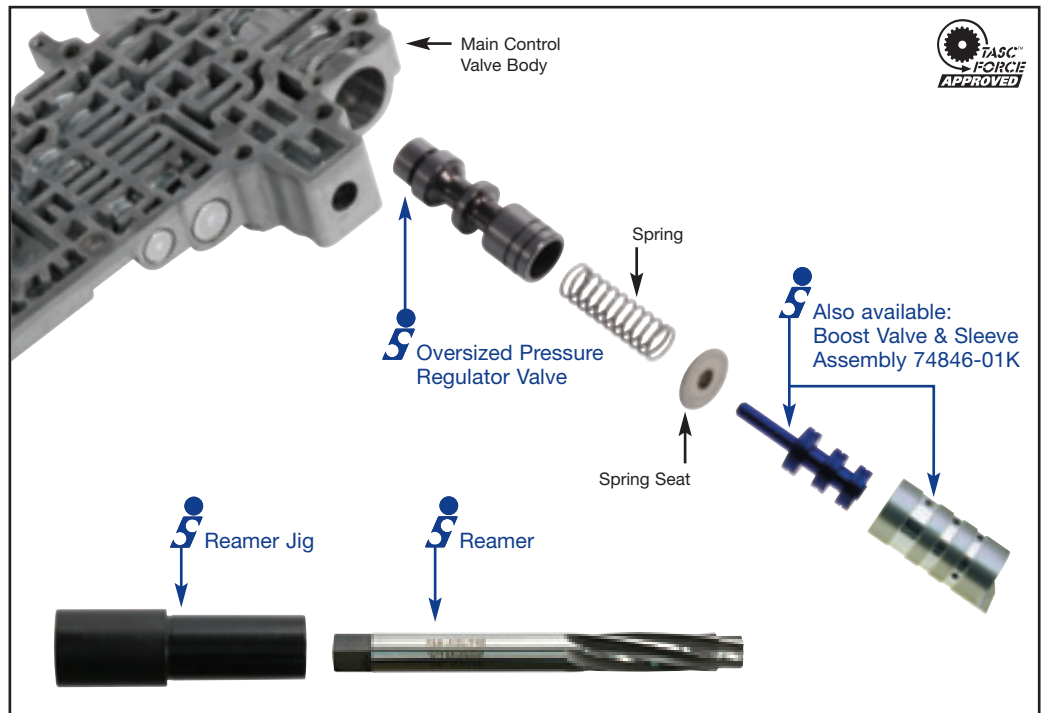
74846-TL6

1 Reamer

1 Reamer Jig



Always measure the OEM valve before reaming. The inboard smallest diameter must be .505" for this reamer & replacement valve!

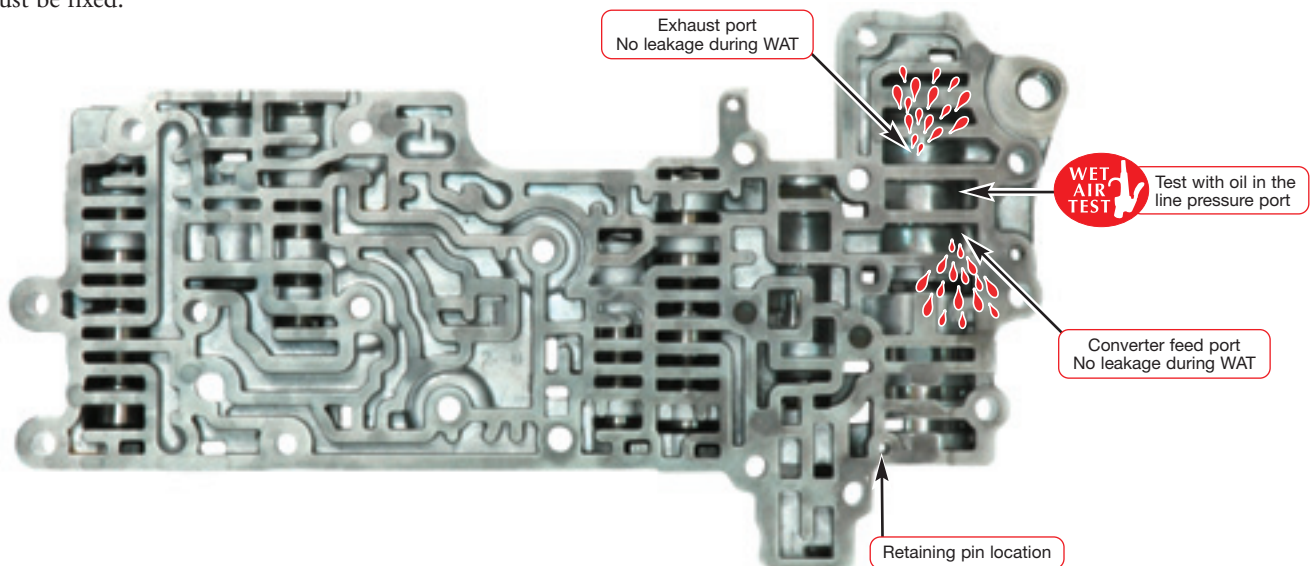


Testing:

Any visible wear at any circuit will cause a problem. These are usually very worn and visible to the eye. If wear is not obvious, use wet air test or vacuum test.

Wet Air Testing: Place a small amount of oil into the line pressure port. Follow with low air pressure. There should be minimal or no leakage through the converter feed or sump ports. If there is excessive leakage, the bore should be reamed and an oversized valve installed.

Vacuum Testing: A vacuum test can also be applied at the line pressure port. Air over vacuum or air conditioner evacuation pump able to pull 30" of vacuum is required. With a 30" capability: circuits holding 26" or above is normal; 22" to 24" is marginal; and 20" or below must be fixed.



F4A-EL, FA4A-EL, F4EAT, F4E-III

Oversized Pressure Regulator Valve Kit

PART NUMBERS 74846-06K, -TL6

Reaming Instructions:

Note: Always measure the OEM valve before reaming. The inboard smallest diameter must be .505" for this reamer & replacement valve!

1. Remove all components from the bore. Discard the OEM pressure regulator valve. Examine the boost sleeve for wear, and replace with Sonnax kit **74846-01K** if necessary.
2. Clean the valve body bore thoroughly in a solvent tank.
3. Securely clamp the valve body horizontally to the bench, with circuit facing up, making sure not to clamp directly over the bore to be reamed.
4. Soak the bore and reamer with cutting fluid (Tap Magic™, Mobilmet S-122, etc.).
5. Place the reamer jig into the bore. Gently insert the reamer through the jig and into the bore until the cutting tip contacts the first bore to be reamed.
6. Use a speed handle to turn the reamer in the bore. The reaming action should be clockwise in a smooth and continuous motion at 60-120 rpm or 200 rpm drill. In either process, use a wobble socket.
7. Continue reaming until the reamer bottoms in the bore. Approximate reaming time is 5 minutes.
8. Using low air pressure, blow the chips free prior to removing the reamer.
9. To remove the reamer, turn clockwise while slowly pulling outward on the reamer.
10. Remove any remaining debris from the bore with air pressure and clean in solvent tank.

Cautions:

- Never turn the reamer backward. This will dull the reamer.
- 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.
- Clean the reamer after each use and store in its protective tube.

Valve Installation:

1. Lubricate the components and bore with ATF prior to assembly.
2. Install the oversized pressure regulator valve and OEM components as shown in the photo.
3. Replace the OEM boost valve and sleeve assembly, or if worn, replace with Sonnax kit **74846-01K**.

| Year | Manuf. | Designations | Vehicles | Case | Reg. Valve | Boost slv. | Line mod. | Notes |
|---------|-------------|----------------------|-----------------------|-------------------|------------|------------|-----------|--|
| 2000-Up | Ford | 4F27E(FN) | Focus | | N.A. | N.A. | N.A. | This is a 4F27E Ford, a different unit. The case is not split in half as the -F- case: the driveline components come out one end. None of the F parts apply. |
| '97-'03 | Ford | FA4A-EL, F4E-III, FB | Escort, Tracer | Small single pan | 74846-06 | 74846-01K | 74846-07 | 5 solenoid, to include EPC. Has adjustable Line mod. screw on the opposite end of EPC. With or without a tube. The FB definition comes from the VB casting. It is not an OE reference, but from aftermarket. |
| '91-'96 | Ford | F4EAT | Escort, Tracer | Sml, snl pan | 74846-06 | 74846-01K | N.A. | 4 solenoid, T.V. cable, with or without tube. |
| '91-'97 | Ford | F3A- 3spd Aspire | Tracer | | N.A. | N.A. | N.A. | Not the same unit as F4EAT. The F3A is 3 spd used in the 1.6 ltr. This does not have accumulator piston covers visible at the front top as the 4 speed unit. |
| '99-Up | KIA | FA4A-EL, F4E-III | Rio, Spectra, Sephia | Small, single pan | N.A. | N.A. | N.A. | 5 solenoid w/special KIA EPC and gaskets. VB casting has a K, not an FB, like the Ford or Mazda. Opposite end of bore from EPC does not have an adjuster like the FB Ford casting. With or without a tube. Pressure reg. valve, boost sleeve, spring are not same as Ford/ Mazda. May design or ECN. |
| '97-'98 | KIA | F4A-EL | Sephia | Small, single pan | N.A. | N.A. | N.A. | 4 solenoid, Hydraulic T.V. cable, with or without a tube. Pressure reg. valve, boost sleeve, spring are not same as Ford/Mazda. 8-2-05 may ECN with spring to gain KIA app. |
| '99-Up | Mazda | FN-J39A | Protégé | | N.A. | N.A. | N.A. | This is a 4F27E Ford, a different unit. Case is not split in half as the F unit. None of the F parts apply. |
| '95-'98 | Mazda | F4A-EL, FB4 | Protégé | Small, | 74846-06 | 74846-01K | 74846-07 | 5 solenoid with EPC, adjustable line mod. screw opposite end of EPC. Has an FB cast into it. FB is not OE reference but aftermarket. FB is casting identification. |
| '90-'95 | Mazda | F4A-EL | Protégé, MX3 | Sml, snl pan | 74846-06 | 74846-01K | N.A. | 4 solenoid, T.V. cable, with or without tube. |
| '93-'02 | Ford, Mazda | GF4-EL | MX6 w/2.5 * | Big, dual pan | 71846-06 | 74846-01K | 74846-04 | 7 solenoid-full electronic EPC, No T.V. cable. (*other vehicles: MILLENIA, G.T., Probe) |
| '86-'92 | Ford, Mazda | G4A-EL or G4A-FEL | 626, 323 Probe, Capri | Big, dual pan | 71846-06 | 71846-01K | N.A. | 2 or 4 solenoid - no governor, with T.V. cable, Turbo or non-turbo, E cam wheel. |
| '86-'87 | Ford, Mazda | G4A-HL | 323, 626 | Big, dual pan | N.A. | 71846-01K | N.A. | 1 solenoid with governor, with T.V. cable, H cam wheel |

