

Oversized Converter Regulator Valve Kit

96201-23K

- 1 Oversized Converter Regulator Valve
- 1 Inner Valve Body Clip
- 1 White Spring (2-Spool OEM Application)
- 1 Black Spring (4-Spool OEM Application)



96201-TL3

- 2 Reamers



F-96201-TL23

- 1 Reamer Jig
- 1 Reamer
- 1 Guide Pin



Also Available:

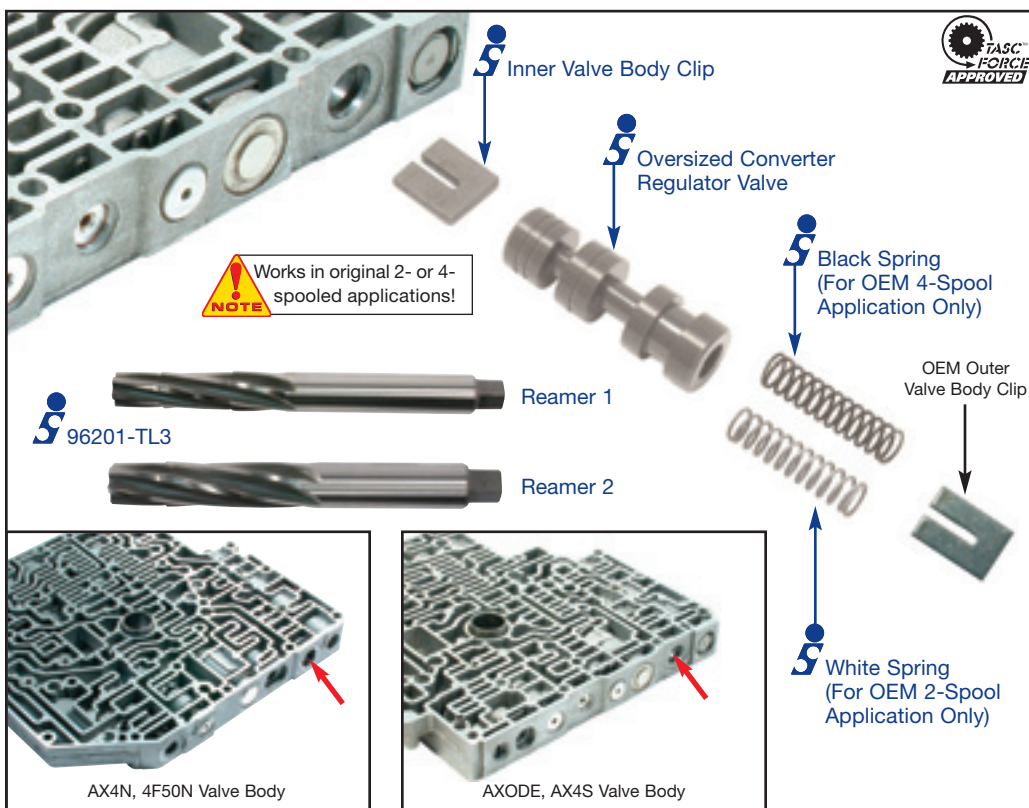
96201-21K

- 1 Oversized Solenoid Regulator Valve
- 1 Spring
- 1 Inner Valve Body Clip



96201-TL2

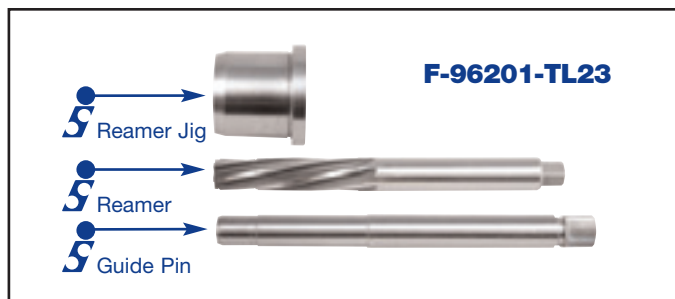
- 2 Reamers



NOTE: 96201-TL3 tool kit instructions are used here. Go to www.sonnax.com for the F-96201-TL23 tool kit reaming Instructions.

Prep and Set-up

1. Remove all components from the bore. Discard the OEM 4-spool regulator valve or 2-spool regulator valve, plug (2-spool design), and springs. Save the outer retaining clip and OEM solenoid regulator valve and spring if bore is NOT worn. If worn, replace with Sonnax **96201-21K**.
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 reamer #1 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 Reamer #1 into the bore until the cutting tip contacts the first bore to be reamed.
6. Select the correct size 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 #1 bottoms in the bore.
4. Use low air pressure, blow the chips free (before removing the reamer).

AXODE, AX4S, AX4N, 4F50N

PART NUMBERS 96201-23K, 96201-TL3, F-96201-TL23

Oversized Converter Regulator Valve Kit

5. To remove the reamer, turn clockwise while slowly pulling outward on the reamer.
6. Remove any remaining debris from the bore with low air pressure and clean in a solvent tank.
7. **VERY IMPORTANT:** Using Reamer #2, follow the same steps as above. Reamer #2 will cut more slowly than Reamer #1. It may feel like it wants to stop as it finds a new center. Continue until the reamer bottoms in the bore.

Finish and Clean-up

1. 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.
2. 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, inadequate and sporadic material removal.
3. Never use a crescent wrench, ratchet or pliers to turn the reamer.

Installation Instructions: Original 2-Spooled or 4-Spooled Valve

1. Lubricate the oversized converter regulator valve and reamed bore with ATF.
2. Check solenoid regulator valve for wear. If worn, replace with Sonnax 96201-21K. This bore will need to be oversized with tool kit 96201-TL2.

Installation Instructions: Original 2-Spooled or 4-Spooled Valve

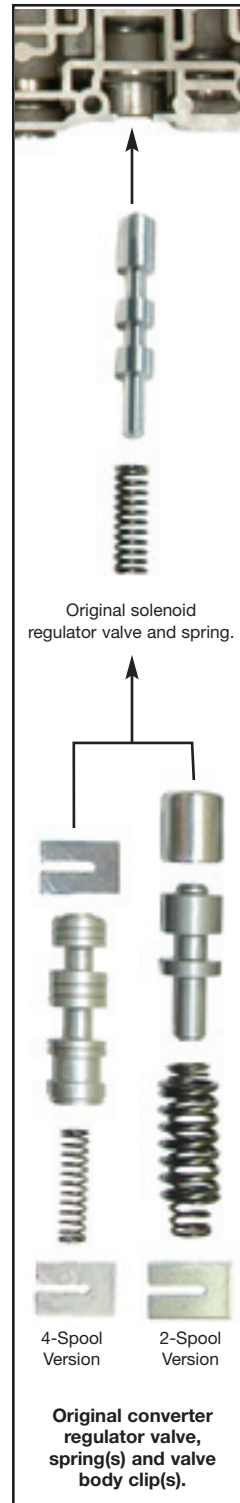
3. Install OEM or Sonnax solenoid regulator valve and spring. Retain with replacement inner valve body clip. Sonnax inner valve body clip is twice as wide as the OEM inner valve body clip and **MUST** be installed in this position.
4. Place the correct replacement spring into the converter regulator valve spring pocket, and push this spring/converter regulator valve assembly, 96201-23K, into the bore in the indicated orientation.
5. Reinstall the OEM outer valve body clip.

- Important Notes:**
- If OEM had a 4-spooled valve use the Sonnax black spring.
 - If OEM had a 2-spooled valve use the Sonnax white spring.

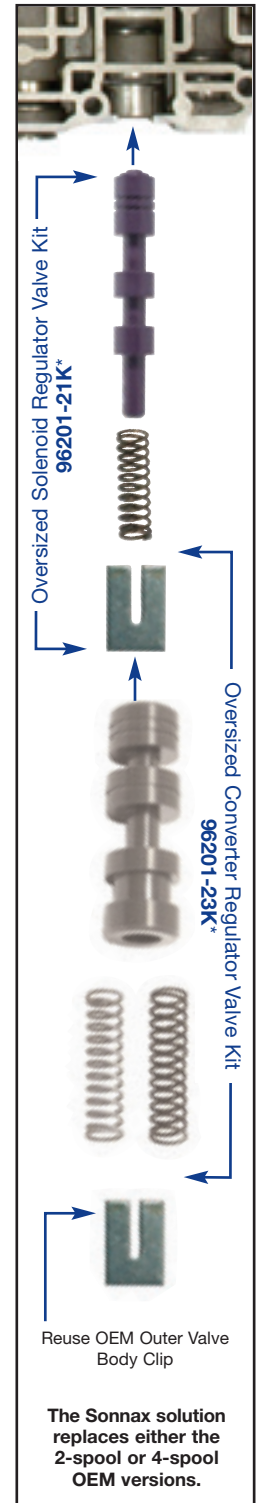
The white spring is stronger and has a higher rate than the black spring.

- If the white spring is installed in place of the black spring, it will result in higher EPC pressure and higher converter psi. Higher EPC can cause harsh reverse and forward piston failure at maximum EPC.
- If black spring is used in place of white spring, the result is lower converter psi and possible TCC shudder and lower line rise.

OEM LINE-UP



SONNAX LINE-UP



- **Note:** 96201-21K & 96201-23K are sold individually. Each of these kits comes with a new inner valve body clip. If using these two kits together, only one inner valve body clip is necessary in replacement line-up.