AXODE, AX4S, AX4N

PART NUMBERS 96206-10K, -TL2

Oversized Pressure Regulator Valve Kit

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96206-10K

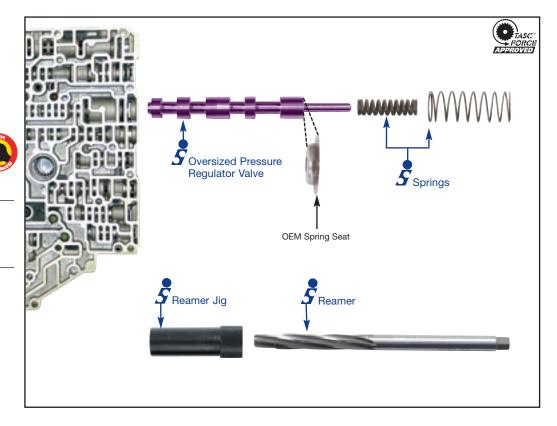
1 Oversized Pressure Regulator Valve





1 Reamer

1 Reamer Jig



Wet Air Test

Place a small amount of oil into the balance line port. Follow with low air pressure.

There should be minimal/no leakage past the valve spool and out the neighboring exhaust port.

Reaming and Installation Instructions

Prep and Set-up

- 1. Remove all components from the bore. Discard the OEM valve and 2 springs.
- 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. Insert the reamer jig into the bore.
- 5. Soak the bore and reamer with cutting fluid (Mobilmet S-122, Lubegard Bio-Tap, Tap MagicTM, etc). For best results, provide a continuous flow of water-soluble cutting fluid (i.e. 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, as shown in the illustration.
- 7. Select the correct sized socket to fit the square shank of the reamer, and attach it to a wobble/swivel socket drive.



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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 it bottoms in the bore. The approximate reaming time is 5 minutes.

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 ScotchbriteTM 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.

Installation

- 1. Install the OEM spring seat over the stem of the replacement valve, as shown in the illustration.
- 2. Place the small bumper spring included in the kit over the valve stem.
- 3. Push this spring/valve/seat assembly into the reamed bore, stem outward.
- 4. Install the included larger regulating spring into the bore, flush with the spring seat.
- 5. Inspect boost valve and sleeve for wear. Reinstall OEM boost valve and sleeve or replace with Sonnax parts 96201-01K, -08K, -12K or -13K into the bore as illustrated. Ensure the bumper spring nestles into the spring pocket on the boost valve, and the regulating spring slides over the sleeve snout.

