

Oversized Pressure Regulator Valve Kit

Part No.

97855-24K

- Valve
- Spring

NOTE: Replaces 3-spool pressure regulator valve in units with three or fewer solenoids. Does not work for the A340* 4-spool pressure regulator valve, 4 or fewer solenoids (late).

Tool Kit

Part No.

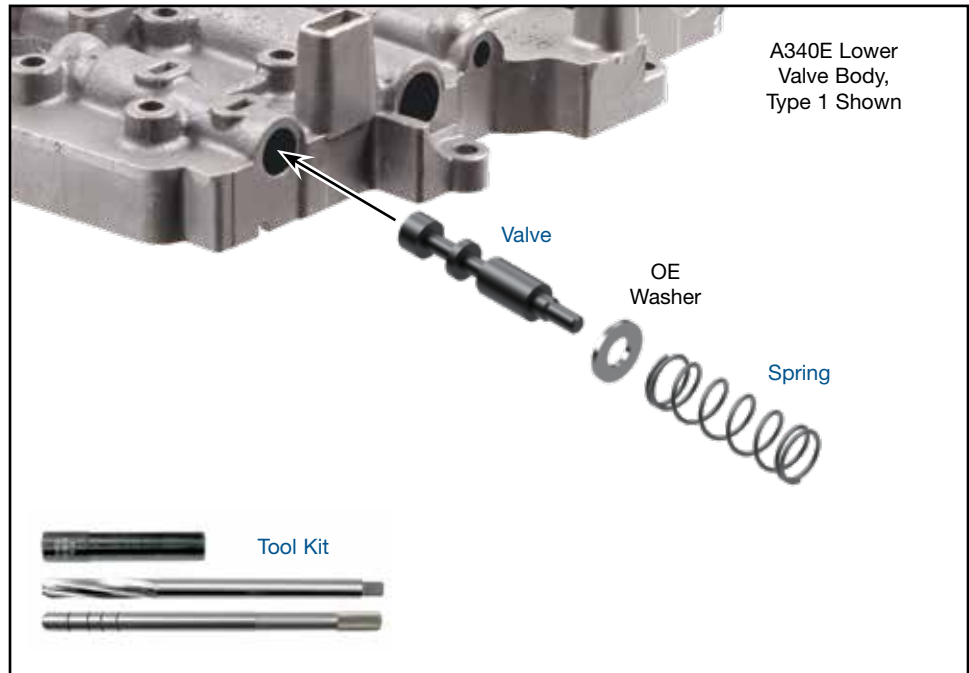
89010-TL

- Reamer
- Reamer Jig
- Bore Sizing Tool

WARNING: Required tool kit 89010-TL is no longer in production. Please check with distributor for availability.



Toyota/Lexus A340, A340E, A340F, A340H



NOTE: Take note and record of the position of the adjustable step on the original boost sleeve. Ensure that the adjustable step on the replacement sleeve or reused OE sleeve is in the same location when reassembled.

1. Disassembly

- After taking note of the adjustable step on the OE boost sleeve, remove all components from the valve body bore.
- Save OE boost valve assembly for reuse.
- Discard OE pressure regulator valve and spring, saving OE washer for reuse.

2. Bore & Reaming Preparation

- Clean the bore thoroughly in a solvent tank.
- Securely clamp the housing to a bench or vise, making sure not to clamp directly over the bore to be reamed.

3. Reaming

CAUTIONS AND SUGGESTIONS:

- The reaming action must be clockwise in a smooth and continuous motion.
- Turning the reamer backward will dull it prematurely.
- Pushing on the reamer results in poor surface finish and inadequate and sporadic material removal.
- Never use a crescent wrench, ratchet or pliers to turn the reamer.
- A dull reamer will cut a smaller hole. Reamers can be sharpened, but this should only be done by a professional tool sharpener. Actual life of a Sonnax reamer before resharpening or replacing averages 50-70 bores.

3. Reaming (continued)

- a. Insert the reamer jig into the bore.
- b. Generously lubricate the bore and reamer with cutting fluid (i.e. 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.
- c. Gently insert the reamer through the jig and into the bore until the cutting tip contacts the first bore to be reamed.
- d. Use a loose fitting reamer socket and a wobble adapter to ream the bore. The reamer can be turned by using a speed handle or with a low-RPM, high-torque air drill regulated to a maximum of 200 RPM. The reaming actions must be clockwise in smooth and continuous motion at 60-200 RPM. Continue reaming until the reamer stop is reached.

4. Finish & Clean-up

- a. Using low air pressure, blow the chips free before removing the reamer.
- b. To remove the reamer, turn clockwise while slowly pulling outward on the reamer.
- c. Examine the bore after cleaning for surface finish, debris and burrs. Flashing and burrs on the exit side of land and in bores must be carefully removed. A small piece of Scotch-Brite™ material attached to a wire and powered with a drill motor is ideal for the task. Scotch-Brite™ is a very abrasive material and all residual debris must be cleaned to ensure particles do not migrate or remain imbedded into the surface. Post cleaning involves several progressive steps with solvent on a lint-free rag.
- d. Clean the reamer after each use and store in its protective tube.

5. Installation & Assembly

- a. Be certain all debris has been removed from the valve bore and valve body.
- b. Place the OE washer over the Sonnax pressure regulator valve stem.
- b. Place the Sonnax spring over the Sonnax pressure regulator valve stem.
- c. Push the valve/washer/spring assembly into the bore, stem end out, until the valve bottoms in the bore.
- d. Return the OE boost valve assembly into the bore, open end first and secure with the OE retainer.

6. Final Testing

Vacuum testing at the port(s) indicated holds the recommended minimum 18 in-Hg.

