

Oversized Accumulator Control Valve, Plunger Valve & Sleeve Kit



Part No.

147741-24K

- Oversized Accumulator Control Valve
- Oversized Accumulator Control Plunger Valve
- Oversized Accumulator Control Plunger Sleeve
- Adjustable Valve Stop

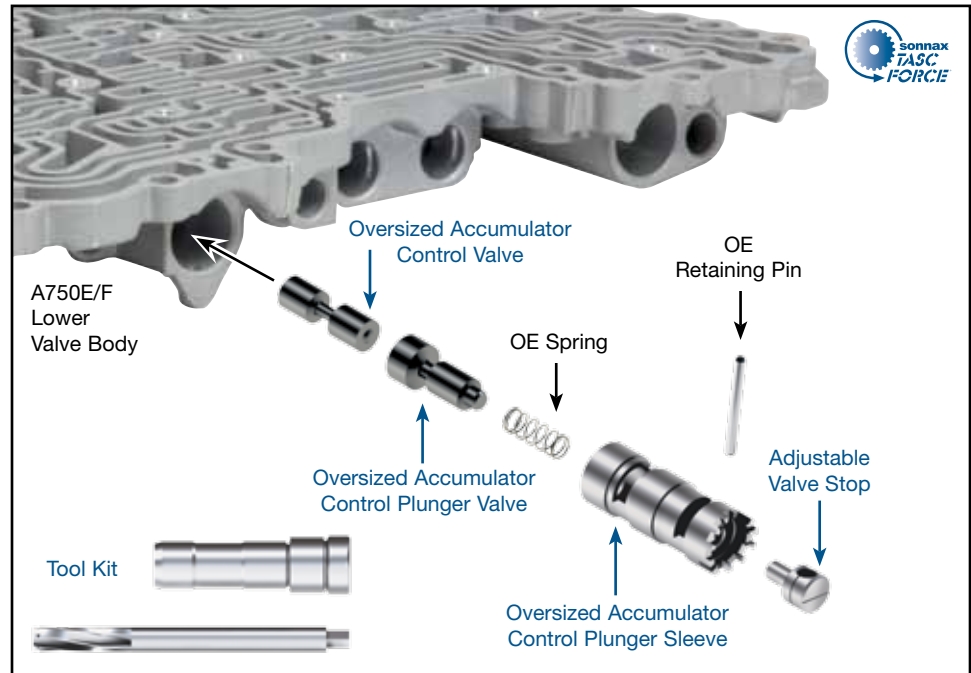
Tool Kit

Part No.

147741-TL24

- Reamer
- Reamer Jig

Toyota A750E/F, A760E/H, A761E



IMPORTANT NOTE

Before disassembling the valve body, observe and record the OE position of the retaining pin on the step of the OE castellated plunger sleeve. Be sure to reassemble the Sonnax components with the retainer in the same step position.

1. Disassembly

- Remove the OE valve train: retaining pin, accumulator control plunger sleeve, valve and adjustable valve stop as well as the accumulator control valve in the inner bore.
- Keep the OE retaining pin and spring for reuse, discard other OE pieces.

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.

- 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.
- e. Gently insert the reamer through the jig and into the bore until the cutting tip contacts the first bore to be reamed.
- f. 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. Insert the Sonnax accumulator control valve into the reamed bore.
- b. Disassemble the Sonnax accumulator control plunger valve, sleeve and valve stop.
- c. Insert the OE spring between the Sonnax accumulator control plunger valve and sleeve with the small OD of the valve spool pointing into the sleeve as shown (see photo on page 1).
- d. Install the new accumulator control assembly into the bore with the sleeve's castellated end outboard.
- e. Insert the stem of the Sonnax valve stop into the outboard visible end of the accumulator control assembly, then install the OE retaining pin through the valve body and the hole in the valve stop.

NOTE: Make sure the retaining pin is engaged at the correct step on the Sonnax sleeve as recorded prior to disassembly.

6. Final Testing

A vacuum test at the ports indicated should hold the recommended in-Hg of vacuum.

