# Oversized Linear Solenoid Output Dampener Valve

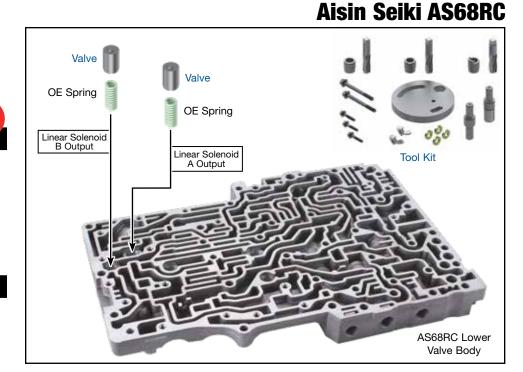




## **Tool Kit**

### Part No. 99740-TL4

- Reamers (3)
- Reamer Jigs (3)
- Jig Plate
- Guide Pins (2)
- Bolts, M5 (2)
- Bolt, M6
- Bolts, M5 (2)
- Washers (4)
- Wing Nuts (2)



#### 1. Disassembly

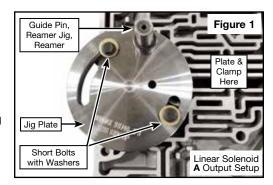
- a. Remove and discard OE linear solenoid output dampener valve.
- b. Retain OE linear solenoid output dampener spring for reuse.

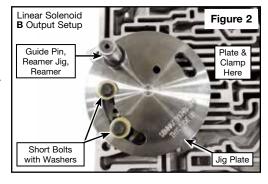
#### 2. Bore Reaming

 a. Place the lower valve body casting on bench with the OE linear solenoid output dampener bores facing upwards.

**NOTE:** Recommend using a 1" thick parallel block under the machined flat area of the valve body for support while reaming.

- b. Position Sonnax jig plate and use the shorter M5 bolts along with washers to hold it in place where indicated, do not tighten bolts at this time (Figure 1 & 2).
- c. Recommend using an appropriate plate and clamp to secure casting to bench, ensuring not to damage any of the surfaces of the casting. The plate must not contact any of the dampener bore protrusion's/boss's.
- d. Insert Sonnax guide pin **99740-GP3** into the jig plate with the large diameter facing up.





Short

Short

Long





#### TRANSMISSION PARTS

OVERSIZED LINEAR SOLENOID OUTPUT DAMPENER VALVE KIT 99740-04K, 99740-TL4

#### 2. Bore Reaming (continued)

- e. Slide Sonnax guide pin through jig plate and into casting bore.
- f. Once guide pin and jig plate are aligned with bore to be reamed, securely tighten both bolts. Ensure jig plate is tightly held in place while allowing guide pin to stroke freely in casting bore.
- g. Remove guide pin and insert Sonnax reamer jig **99740-RJ6** into the jig plate with the large end down. Soak the bore and reamer 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.
- h. Insert Sonnax reamer **99740-RM6** and ream bore with steady, clockwise rotation. Once reaming is complete, spin the reamer a few more times to burnish and improve surface finish (for full reaming instructions/reamer care, please visit www.sonnax.com).
- If necessary, deburr bore entrances slightly to facilitate assembly of the oversized linear solenoid output dampener.
- j. Thoroughly clean the casting after reaming

#### 3. Installation & Assembly

- a. Be certain all debris has been removed from the dampener bore and valve body.
- b. Install OE spring into the Sonnax linear solenoid output dampener valve.
- c. Install spring/valve assembly into bore, spring side downward.

#### 4. Final Testing

Vacuum testing at the port(s) indicated holds the recommended minimum 24 in-Hg (**Figure 3**).

