

Oversized Cooler & Converter Relief Valve Kit



Part No.
122740-10K

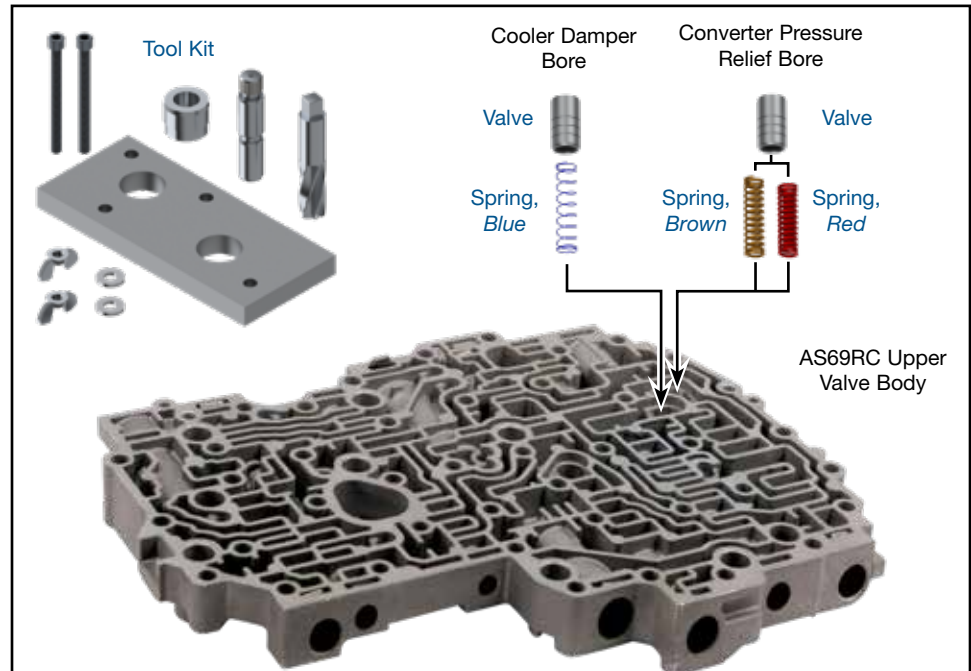
- Cooler Damper Valve
- Cooler Damper Spring Blue
- Converter Pressure Relief Valve
- Converter Pressure Relief Spring Brown, Gas
- Converter Pressure Relief Spring Red, Diesel

Tool Kit

Part No.
122740-TL10

- Washers (2)
- Wing Nuts (2)
- Bolts (2)
- Jig Plate
- Reamer Jig
- Reamer
- Guide Pin

Aisin Seiki AS66RC, AS69RC



NOTE: The blue spring is always used with the cooler damper valve. The red spring is used in diesel applications with the converter relief valve. The brown spring is used in gas applications with the converter relief valve.



NOTE: It is necessary to clear out chips from the bore to ensure that the reamer is able to ream the entire bore.

1. Disassembly

Remove and discard both OE valves and their corresponding springs.

2. Bore Reaming

- Place OE upper valve body on bench with the cooler and converter relief bores facing upwards.
- Fit two washers, over two bolts and slide them up, through channel plate holes.
- Place Sonnax jig plate over the bolts, aligning the converter pressure relief bore (**Figure 1**).
- Place and loosely tighten wing nuts on the bolts.
- Recommend using small plate and clamp to secure casting to bench.
- Install Sonnax reamer jig into plate hole over bore to be reamed.



2. Bore Reaming (continued)

- g. Slide Sonnax guide pin through reamer jig and into casting bore until bottomed.
- h. Once guide pin, reamer jig and jig plate are aligned with bore to be reamed, securely tighten wing nuts. Ensure jig plate is tightly held in place while allowing guide pin to stroke freely in reamer jig and casting bore.
- i. Remove guide pin and insert Sonnax reamer into reamer jig.
- j. Ream bore with steady, clockwise rotation using either speed handle or regulated air drill. 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).
- k. Ensure the bore is clear of chips and that the reamer was able to bottom out in the bore.
- l. Reposition jig plate and clamp, with the washers and bolts as shown (Figure 2). Repeat steps 2f–2k to ream the second bore.
- m. If necessary, deburr bore entrances slightly to facilitate assembly of the oversized valves.
- n. Thoroughly clean the upper valve body after reaming.

3. Installation & Assembly

- a. Install Sonnax springs into bores.
 - Cooler damper bore: Blue spring in the cooler damper bore
 - Converter pressure relief bore:
 - Red spring = diesel application
 - Brown spring = gas application
- b. Install Sonnax valves on top of the springs.

4. Final Testing

Vacuum test with a tapered plastic tip and ensure that the damper piston is against the separator plate (Figures 3, 4 & 5).

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

