

Oversized Pressure Regulator Valve Repair Kit

120940-01K

- 1 Oversized PR Valve
- 1 Oversized Plunger Valve
- 1 Custom Pressure Regulator Spring

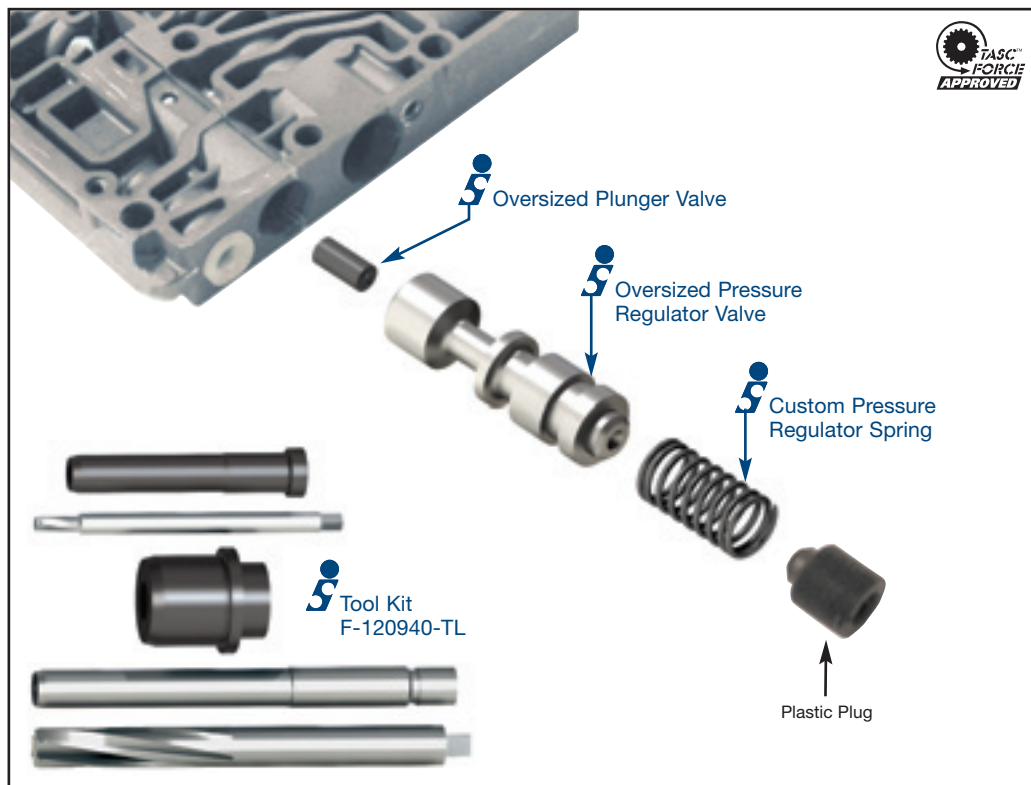


F-120940-TL

- 2 Reamers
- 2 Reamer Guides
- 1 Guide Pin



More technical information
is available at www.sonnax.com. Type
in this part number under "Part Finder."



Notes or Cautions:

If you are exchanging valve body cores, you must match the separator plate code to the original separator plate. There are at least four (4) variations.

Each valve body has four (4) or five (5) threaded end plugs. Each plug has a specific calibration. The PR bore threaded end plug must be removed to ream the bore and install the Sonnax oversize PR valve.

It is critical to observe, mark and record the position and depth of the PR end plug adjuster prior to disturbing the OE setting. The PR end plug adjuster affects base line pressure, pressure sensor reading and shift quality.

Removing the other threaded end plugs is not required. However, removal is suggested to avoid reaming debris contamination of the other valve bores.

It is critical to observe, mark and record the position and depth of any end plug adjuster prior to disturbing the OE setting.

More information about the "Disassembly of the AL4/DPO Valve Body" is available on-line at <http://www.sonnax.com/tech/120940-01K-TECH.pdf>

Disassembly Steps:

1. Place a punch mark on the casting aligned with the index molded into the plastic plug (see Figure 1).
2. Measure and record the depth or height of the plug. Some protrude outward, some are recessed. Count and record the number of rotations needed to remove the plugs.
3. Unscrew the end plug and remove the other valve train components. Keep the end plug for reuse. Discard the two OE valves and the OE PR spring.
4. Clean the PR and Plunger bores to remove any debris or grit.

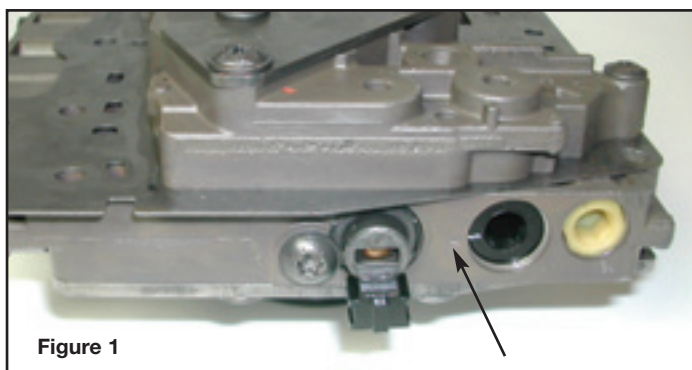


Figure 1

Renault DPO, Citroën AL-4

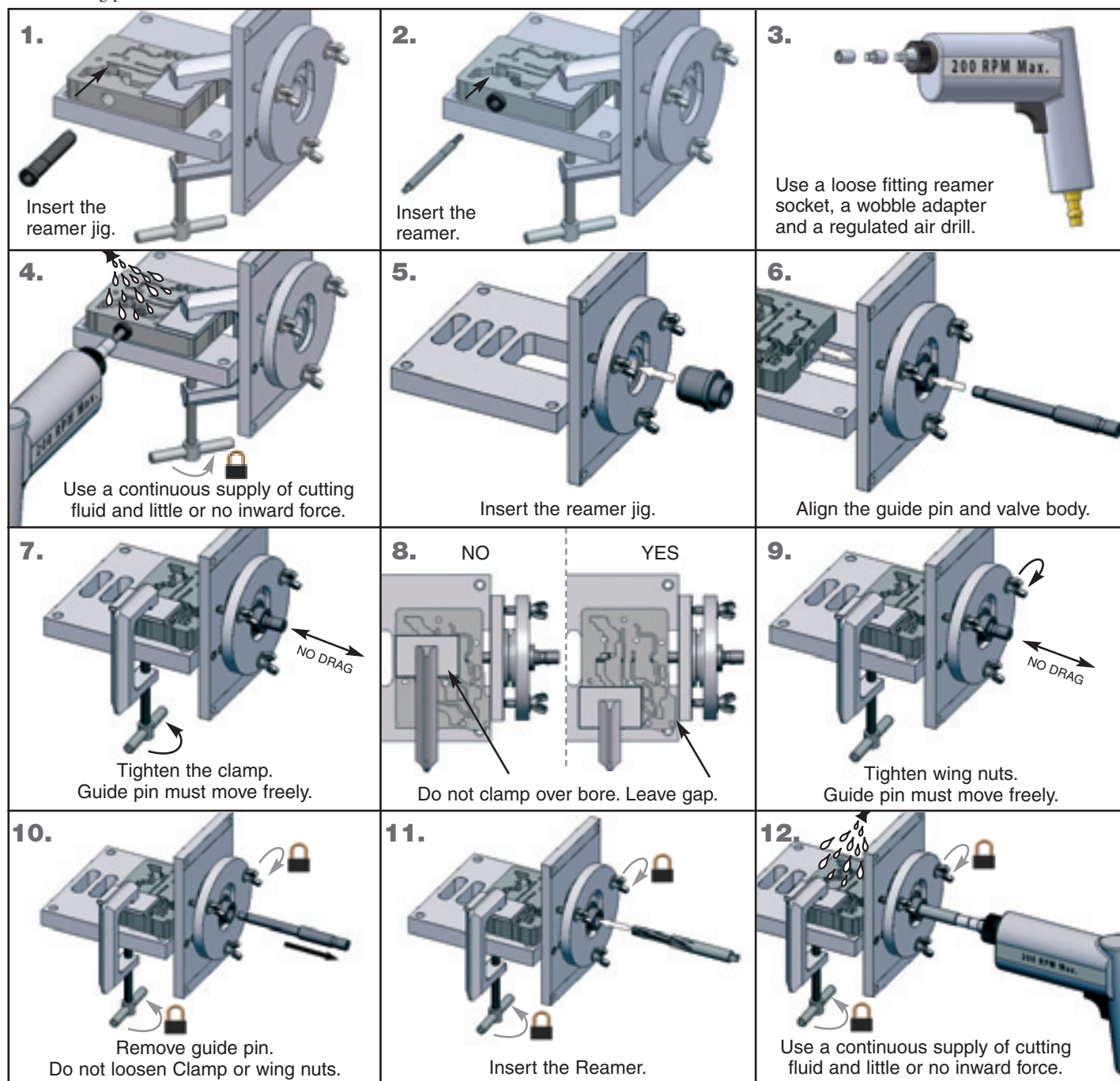
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PART NUMBER 120940-01K, F-120940-TL

Important Notes:

- The plunger valve bore **MUST** be reamed **BEFORE** the P.R. Bore.
- Clean the bore thoroughly in a solvent tank.
- 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.

- The reamers should be turned using a low rpm, high torque air drill regulated to a maximum of 200 rpm. **Manually turning the reamer in this application is not recommended.**
- Examine the bore after cleaning for surface finish, debris, and burrs. Flashing and burrs on the exit side of lands and bores must be carefully removed. A small piece of Scotchbrite™ material attached to a wire and powered with a drill motor is ideal for the task.



Installation / Assembly Steps:

1. Lubricate and install the SONNAX Plunger valve, PR valve and Spring. Position and orient the valve train components as shown in the main photo.
2. Install the threaded end plug adjuster into the PR bore and return it to the OE position recorded prior to disassembly.

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Final Verification Steps: In-vehicle Pressure Testing:

1. Locate the line pressure port next to the line pressure transducer.
2. Verify and adjust main line pressure to the following specification: **Cold, Idle and Park:** Line pressure should be 39.2 psi (2.7 bar)
3. If pressure is too high: harsh engagements will result. To reduce pressure turn the PR end plug adjuster anti-clockwise.
4. If pressure is too low: neutral at idle or loss of "hill hold" results. To increase pressure turn the PR end plug adjuster clockwise.