

Servo Release Check Valve Kit

Part No.

77701-076

- Valve
- O-Ring

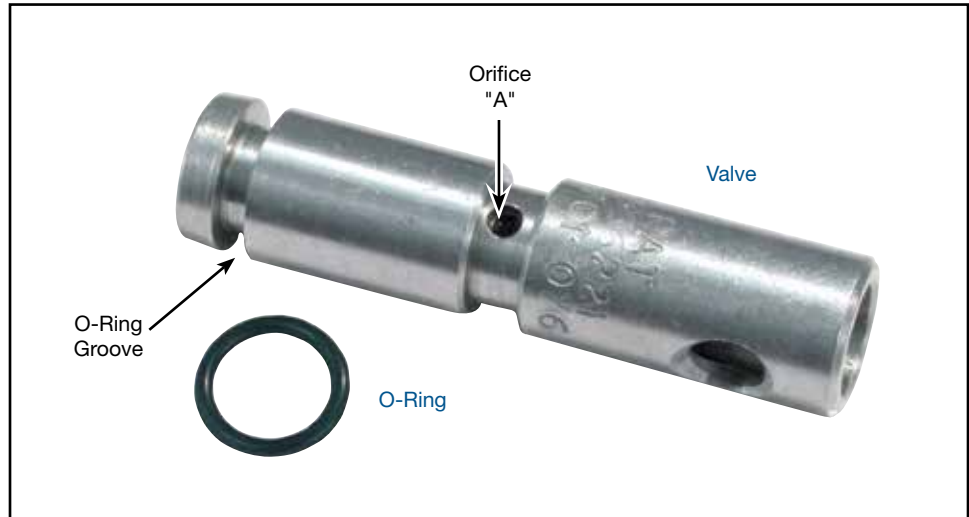
NOTE: 2nd Gear Servo Release.

Patent No. 5,536,221



WARNING: Must be used with properly functioning OE capsule.

GM 4L60, 4L60-E, 4L65-E, 4L70-E



1. Determine Servo Application

- Sonnax servo release check valve comes ready to install in units with OE servos with casting numbers 8642554, 8642553 and 24229159. If casting number on inner recess of servo piston housing is missing or illegible, measure to determine which servo is in use (**Figure 1**).
- Servos with part number 8642093 and Sonnax servos **77701-04K** and **77911-03K** (**Figure 1**) have greater volume and require more oil flow. When using these servos, orifice "A" on Sonnax check valve should be enlarged to .120 – .125" using a #31 drill bit (**main picture**). Ensure debris is cleared from valve after enlargement.



NOTE: Drill carefully; too large an orifice will cause 2-3 flares or bump shifts.

2. Spacer Plate Modification

- For normal use, NO plate modification is necessary; proceed to step 3 "Installation & Assembly".
- For moderate performance applications, enlarge appropriate orifice to .090" using #43 drill bit (**Figure 2**, page 2).
- For maximum performance applications, enlarge appropriate orifice to .100" using #39 drill bit (**Figure 2**, page 2).

3. Installation & Assembly

- Ensure OE 3rd accumulator checkball capsule is installed and seals without leaks or seepage.
- Install Sonnax check valve into same bore as OE capsule, tapered end first (**Figures 3 & 4**, page 2).



NOTE: Bore variation is common. Install Sonnax check valve without O-ring; if valve slides in without resistance, remove valve. Install Sonnax O-ring, lubricate and roll on clean bench to size O-ring into groove, then reinstall. O-Ring ensures good hydraulic seal in cases with enlarged bores.

- Installed valve should be slightly below flush to avoid spacer plate interference and damage.



NOTE: If check valve requires removal for any reason, a #5 easy-out can be used or the valve can be tapped and removed with bolt and puller.

