

## Smart-Tech® Ratio-Style Servo Kit

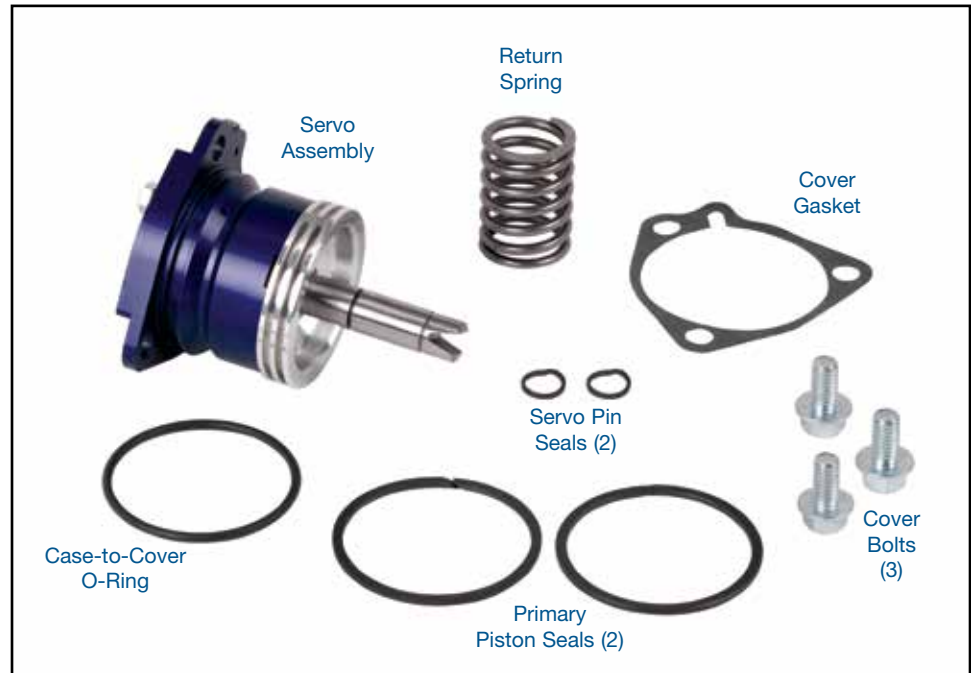
### Part No.

**28821-10K**

- Servo Assembly
- Cover Gasket
- Case-to-Cover O-Ring
- Servo Pin Seals (2) PTFE, 1 Extra
- Primary Piston Seals (2) PTFE
- Return Spring
- Cover Bolts (3)

**NOTE:** See page 2 for ratio-style servo components cross-section and exploded-view illustrations (**Figures 1 & 2**).

## GM Powerglide



### 1. Preparation

- Chamfer the pin bore in the case to aid installation of the PTFE seal on the servo pin.
- Remove sharp edges from feed hole in case where feed hole meets large diameter of servo bore.

- Install only the servo pin PTFE seal. Without installing cover O-ring or return spring, piston seals or return spring on the servo assembly, and only the PTFE seal installed, test fit the servo pin and PTFE seal into the case to size the seal and verify ease of installation.

### 2. Installation

- Install the gasket onto the servo cover flange.
- Install O-ring on the servo cover and primary piston seals onto the piston.
- Place the return spring into the case.
- Lube all seals with TransJel and install servo piston assembly into case.
- Install the three cover bolts using thread locking compound.
- Install the threaded plug into the servo cover.
- Adjust the band using normal procedures.

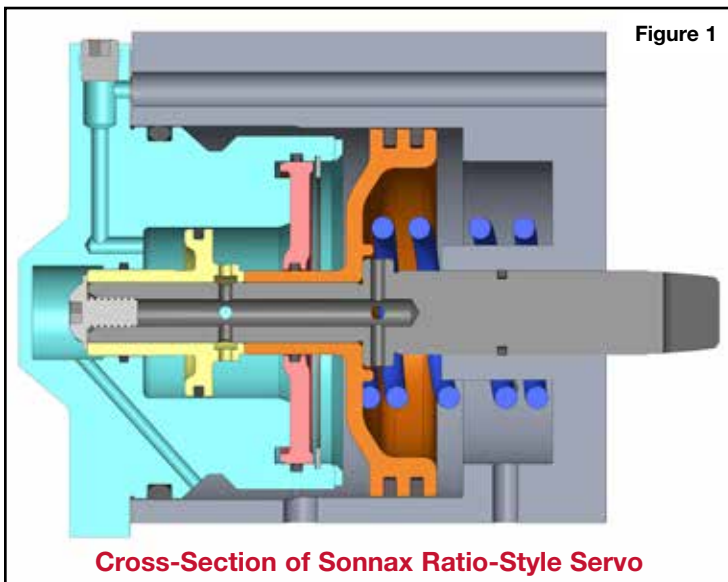


Figure 1

Cross-Section of Sonnax Ratio-Style Servo

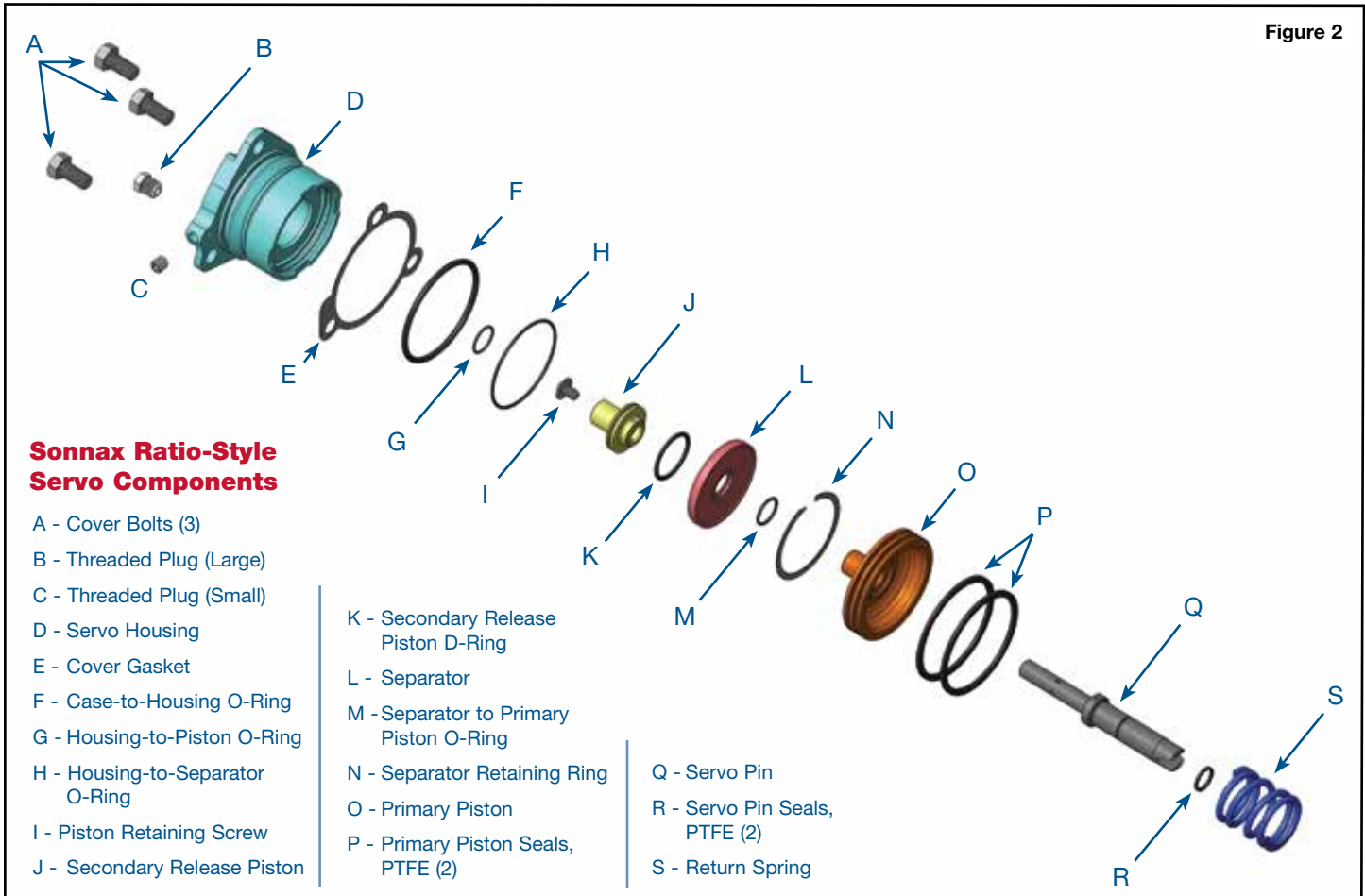


Figure 2

### 3. Final Check & Verification

- a. With band adjusted very loose or with apply/anchor struts removed, apply servo with approximately 30 psi air pressure. Servo action as it applies and releases should be smooth and free of binding.
- b. Some brands of aftermarket cases have been found where the pin-bore and seal-bore are not concentric on the same center line by as much as .050". It is possible to fabricate a simple tool for screening cases before servo installation by welding a small nut onto the end of a spare servo pin (**Figure 3**).



Figure 3