sonnax®
PERFORMANCE

HIGH PERFORMANCE **TRANSMISSION** PARTS

Instructions

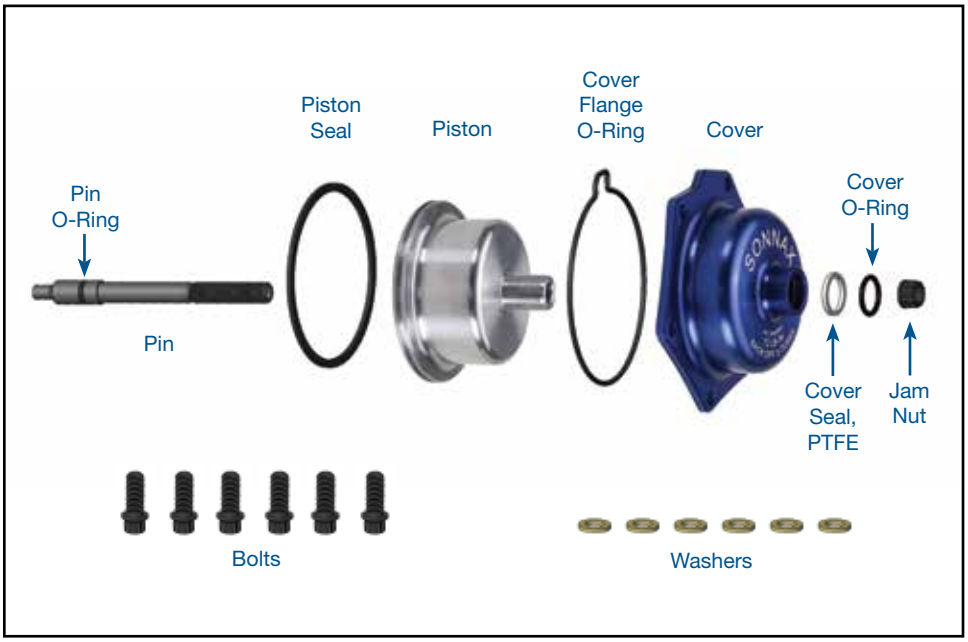
GM TH400

Externally Adjustable Low/Reverse Servo Kit

Part No. 34914-20K

- Cover
- Piston
- Pin
- Jam Nut
- Bolts (6)
- Washers (6)
- Cover Seals (2) PTFE, 1 Extra
- Piston Seal
- Cover O-Ring
- Pin O-Ring
- Cover Flange O-Ring

Patent Pending



NOTE: This servo kit can be set up in several different ways depending on the application. It does retain the ability to be setup keeping all functionality of the OE 1-2 accumulator, however most transbrake racing applications eliminate accumulator function. If a transbrake is being used, refer to transbrake instructions for setup of return spring(s) and 1-2 accumulator piston. The following instructions detail assembly and adjustment of the piston, pin and cover.

1. Assemble Servo Piston

a. Thread the servo pin into the servo piston until about a 1/2" of threads extend out the bottom of the piston.

b. Install jam nut onto the threads extending out the bottom of the servo piston.

c. Install servo pin O-ring into the groove on the pin.

NOTE: Many transbrake applications do not have oil pressure between the servo and the case. For these applications the O-ring is not needed and can be discarded.

d. Install the servo piston seal into the seal groove of the piston.

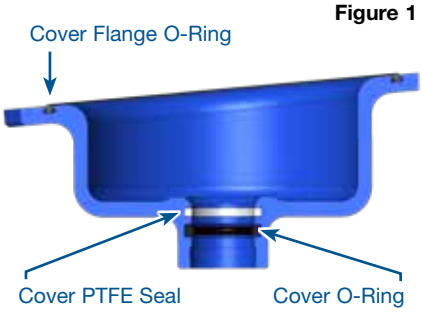
2. Assemble Servo Cover & Piston

a. Install the servo cover flange O-ring seal into the groove on the servo cover flange.

NOTE: Ensure the O-ring is fully seated into the groove.

b. Install the servo cover PTFE seal and O-ring into their respective grooves in the cover snout (**Figure 1**).

Figure 1



800-843-2600 • 802-463-9722 • F: 802-463-4059 • www.sonnax.com

2. Assemble Servo Cover & Piston *(continued)*

c. Lubricate the inner seals with oil or assembly lube. Carefully assemble the servo piston into the cover and ensure the PTFE seal is fully seated in its groove.

3. Installation

NOTE: OE servo gasket should not be used with this servo cover.

a. Install the servo piston into the transmission case.

b. Install the servo cover onto the transmission case. Install the six flange bolts and washers and lightly tighten.

c. To ensure the cover is fully centered, back all the bolts off a half a turn before retightening them.

4. Final Adjustment & Checks

a. Back off the jam nut several turns.

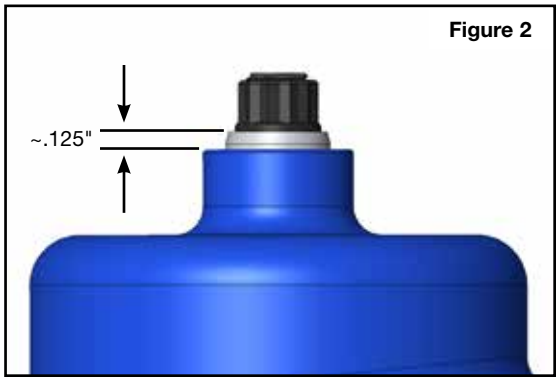
b. Using a 7/32" allen driver, tighten the pin to 72 lb-in.

c. Back the pin out three turns.

d. While holding pin, tighten the jam nut.

e. Air test the servo or push on the end of the pin to cycle the servo piston. When the servo is properly adjusted and applied, the protruding portion of the piston (**Figure 2**) should be close to flush with the snout on the cover (**Figure 3**).

Figure 2



Properly Adjusted Servo When Applied

Figure 3