

Extra Long Servo Pin and Seals

Part No.

77787-02K

Extra Long Servo Pin and Seals

Also Available:

Part No.

77911-03K

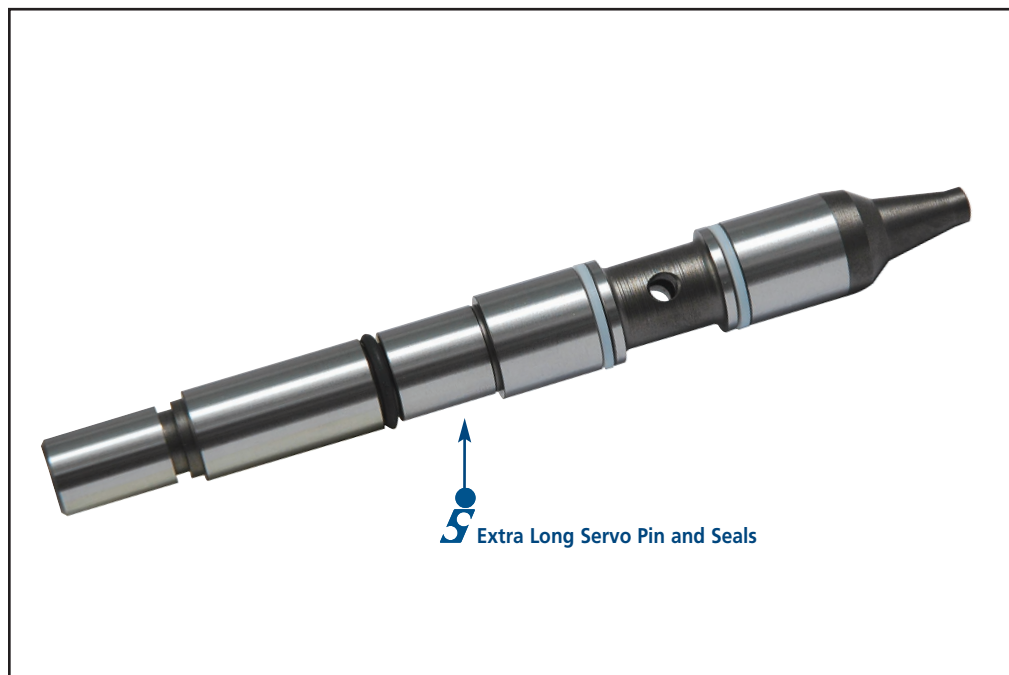
2nd Gear "Super Hold"
Servo Assembly (Includes the
Servo Pin)

Part No.

77767K

"Super Hold" 4th Gear Servo

GM 4L60 & E, 4L65E, 4L70E



Tools Required:

- Dial indicator or GM servo pin length checking tool #J33037
- Small flat-blade screwdriver
- Pry bar
- Assembly lube

NOTES:

It is important to maintain a spherical tip radius when grinding the pin. The inner hole of a 3/8" flat washer cut in half makes a good gauge for this (see Figure 2).

To prevent case damage, do NOT reuse servo-to-case retaining ring with the flat sides (MY 2004 up to mid-April 2004, see GM Bulletin #04-07-30-025A).

If servo travel is insufficient, the band will not be able to fully release. Doublecheck by looking up into the case near the manual shaft while turning the output shaft. The band drum should rotate inside the band.

To cushion the 1-2 shift and reduce the 3-2 downshift clunk, install additional cushion spring (GM part #8681195).

Instructions:

1. Assemble the 2nd gear servo, separator piston and pin. Do not install any seals at this time. Make sure the 2nd gear release spring is on the pin..

2. Set pin travel using one of the two methods outlined below.

Method 1, set pin travel (with dual indicator):

- a. Install the 2nd gear servo assembly, 4th gear servo assembly and retaining ring into case (without seals).
- b. Set up the dial indicator as shown in Figure 1.
- c. Depress the servo cover and measure the distance the cover travels.
- d. Grind the pin tip as necessary to achieve .075"-.125" of servo travel.

Method 2, set pin travel (using GM tool #J33037):

- a. When using GM tool #J33037, follow the instructions included with the tool.
- b. Grind pin tip until the white line is within the window.



Figure 1

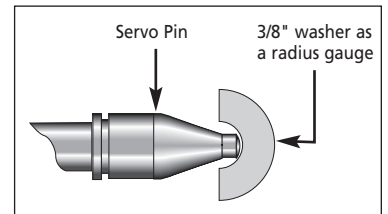


Figure 2

Final Assembly:

Install seals onto the servo pistons and complete the assembly using normal build procedures.

Air Test Servo:

1. When air checking during overhaul (and pump removed), check for leaks of 3rd clutch oil at the OE 3rd accumulator check ball capsule (No. 2 in Figure 3).
2. No. 1 in Figure 3 is orifice to spray lube oil onto 2-4 band. Some leakage here is normal.

WARNING: If using Sonnax "Super Hold" 4th Gear Servo **77767K**, do not air test 4th apply unless band and drum are in place, otherwise 4th apply seals may come out of position.

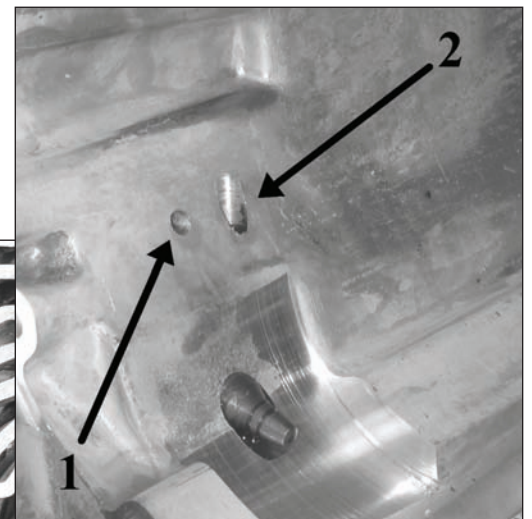


Figure 3

- A= 2nd Feed
- B= 3rd Accumulator
- C= 4th Feed
- D= Exhaust

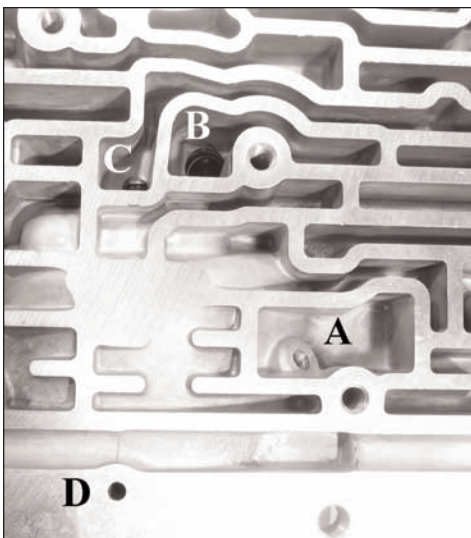


Figure 4 (4L60-E)

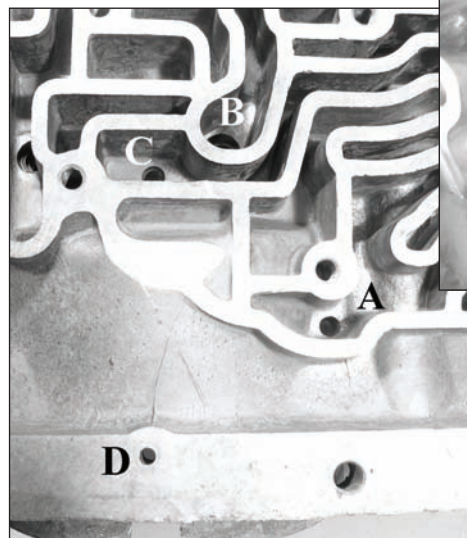


Figure 5 (4L60)