

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

Boost Valve Kit

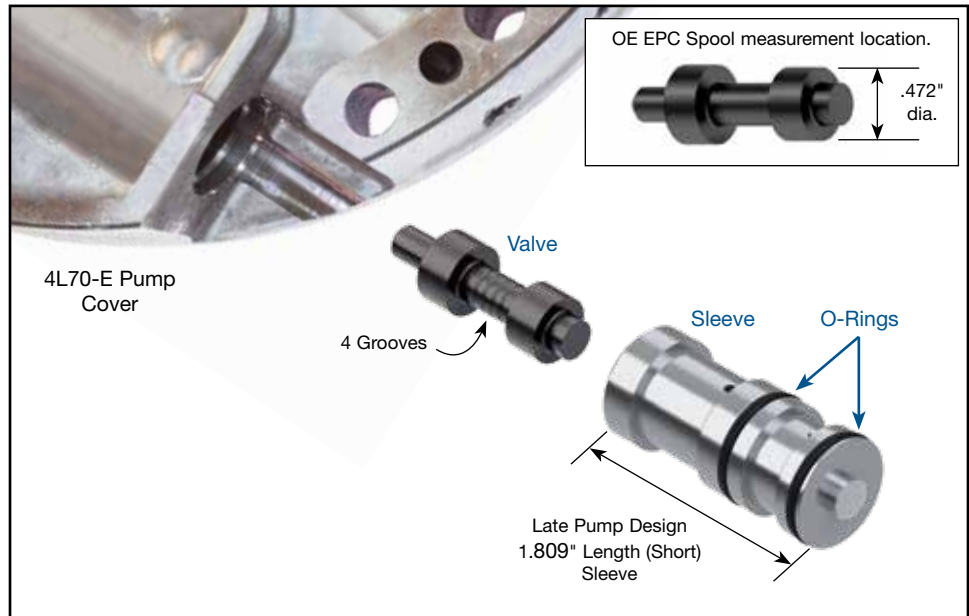
Part No.

77898E-16K

- Valve 4 Grooves, .472" dia.
- Sleeve
- O-Rings (3) 1 Extra

NOTE: Late pump design, .472" dia., O-ring style with OE ratio. See chart for details (**Figure 2**).

WARNING: OE has made multiple pump design changes. Transmission will not function properly if the wrong length sleeve is installed. Verify length of OE sleeve and select Sonnax kit with equivalent sleeve length (**Figure 2**).



1. Verify Length of OE Sleeve & Ratio of OE valve.

- a. Compare OE valve and sleeve measurements to chart (**Figure 1**).
- b. Select correct Sonnax replacement for application.

2. Disassembly

- a. Remove OE retaining ring and save for reuse.
- b. Remove and discard OE boost sleeve and valve.

3. Installation & Assembly

- a. Lubricate all pieces of the Sonnax kit and position OE springs with assembly lube. Incorrect location will create high pressure.
- b. Install Sonnax O-rings into the indicated grooves of Sonnax sleeve. Lubricate with Sonnax Slippery Stick **O-LUBE** and roll on bench to size.
- c. Carefully push the Sonnax sleeve assembly into the pump body with the open end toward the two OE springs. Insert deep enough to reinstall the OE retaining ring.
- d. Return the OE retaining ring to the pump body.

4. Final Testing

Vacuum testing at the port(s) indicated holds the recommended minimum 18 in-Hg (**Figure 1**).

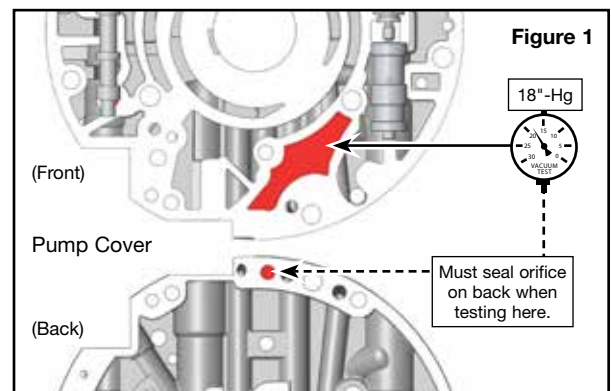


Figure 2

Sleeve	EPC Spool	OE Valve/Sleeve Design	Sonnax with O-Rings		Sonnax "Factory Style"	
Early Pump Design, 1.907" Long Sleeve	.421"	Valve 1 Band	No Sonnax ratio available. Sonnax 77898E-4K may be used, but noticeably firmer shifts will occur.		No Sonnax ratio available. Sonnax 77898E-6K may be used, but noticeably firmer shifts will occur.	
		Sleeve No Groove				
	.470"	Valve 2 Bands	77898E-4K	Valve: 1 Groove	77898E-6K	Valve: 1 Groove
		Sleeve 1 Groove		Sleeve: No Groove		Sleeve: No Groove
	.490" Upgrade for OE .470"	Valve N/A	77898E-K	Valve: No Groove	77898E-3K	Valve: No Groove
		Sleeve N/A		Sleeve: No Groove		Sleeve: No Groove
Late Pump Design, 1.809" Short Sleeve	.421"	Valve 3 Bands	77898E-14K	Valve: 3 Grooves	No Sonnax ratio available.	
		Sleeve No Groove		Sleeve: No Groove		
	.472"	Valve 4 Bands	77898E-16K	Valve: 4 Grooves	No Sonnax ratio available.	
		Sleeve 1 Groove		Sleeve: No Groove		