

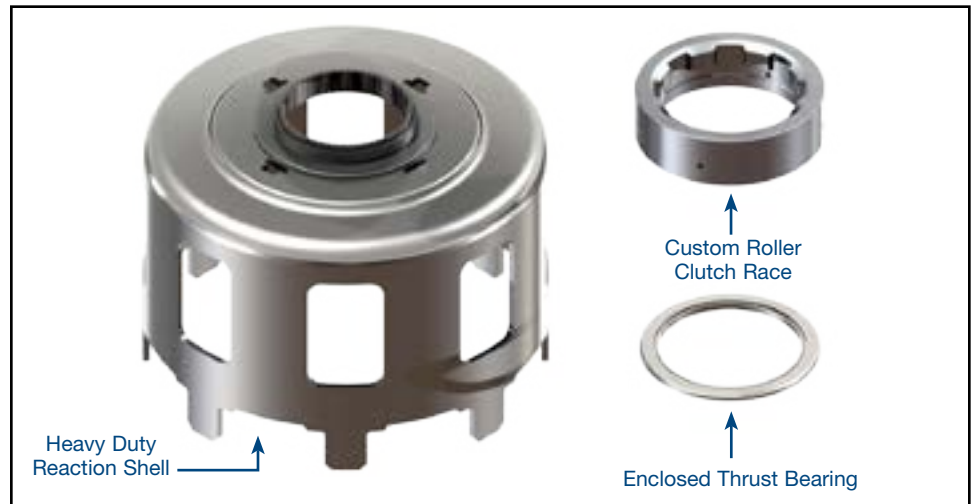
## SmartShell®

**Part No.**  
**77749-02K**

- Heavy Duty Reaction Shell
- Enclosed Thrust Bearing
- Custom Roller Clutch Race

Patent No. 8,377,365

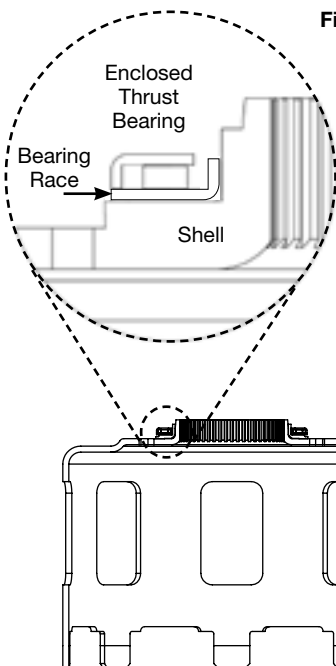
## GM 4L60, 4L60-E, 4L65-E, 4L70-E



### 1. Installation & Assembly

- Remove and discard original reaction sun shell, low/reverse roller clutch race and black plastic reaction shell to roller clutch race thrust washer.
- Install Sonnax custom roller clutch race with inner lugs locking into mating lugs on rear planet.
- Install (rear) OE reaction sun gear.
- Install Sonnax enclosed thrust bearing so the bearing race will contact the shell as seen in **Figure 1**.
- Install Sonnax SmartShell.
- Install reaction shaft to shell four-tab thrust washer *or* reaction shaft to shell bearing.
- Finish assembly using normal procedures.

Figure 1



### 2. Endplay Adjustment

Endplay specification is .005"/.035" [0.13mm/0.89mm].

Endplay Adjustment at Input Housing Thrust Bearing						
Sonnax #	77409-15 (qty 10)	Thickness	.015"	0.38mm		
GM #	8642074	Thickness	.120" - .124"	3.05mm - 3.15mm	I.D.	#74
	8642073		.114" - .118"	2.90mm - 3.00mm		#73
	8642072		.107" - .111"	2.72mm - 2.82mm		#72
	8642071		.100" - .104"	2.54mm - 2.64mm		#71
	8642070		.094" - .098"	2.39mm - 2.49mm		#70
	8642069		.087" - .091"	2.21mm - 2.31mm		#69
	8642068		.080" - .084"	2.03mm - 2.13mm		#68
	8642067		.074" - .078"	1.88mm - 1.98mm		#67
Alternate Endplay Adjustment at Output Ring Gear Support to Case						
Sonnax #	77406-10 (qty 10)	Thickness	.010"	0.25mm		