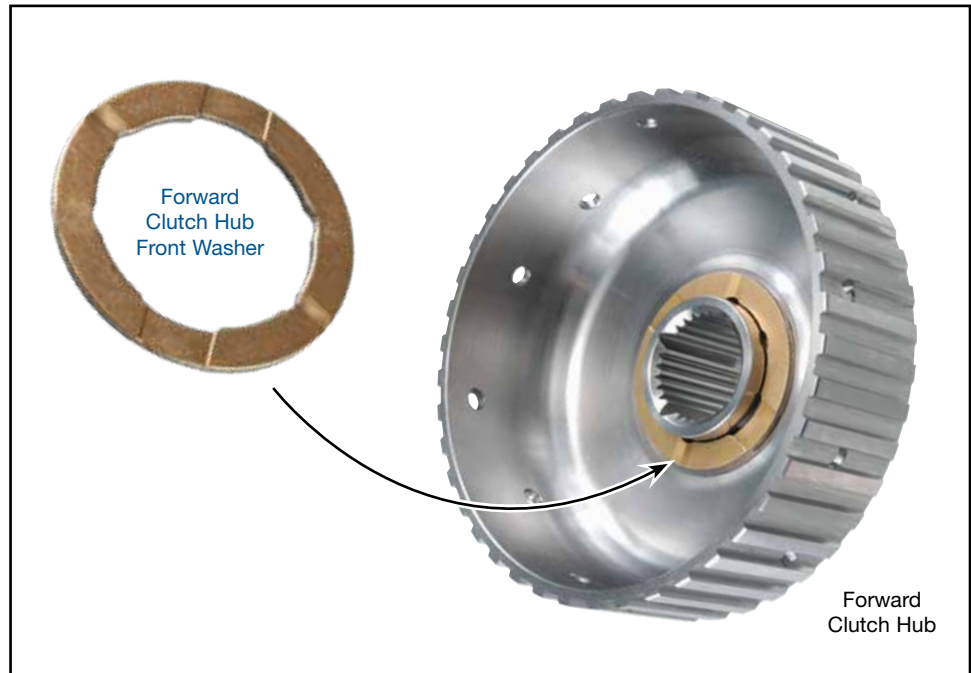


## GM TH400, TH425, 4L80-E, 4L85-E

### Forward Clutch Hub Front Washer

**Part No.**  
**34298-078**

Washers (5) .078" Thick



GM 400 Front Unit Endplay		
OE Shims	Color	Number
.060-.064"	Yellow	0
.071-.075"	Blue	1
.082-.086"	Red	2
.093-.097"	Brown	3
.104-.108"	Green	4
.115-.119"	Black	5
.126-.130"	Purple	6

1. Set rear endplay to .005-.025" travel.
2. Install Sonnax washer between forward clutch drum and forward clutch hub.
3. Push up on rear output shaft to take up rear endplay.
4. Check front unit endplay and verify .005-.025" travel.
5. Further adjustments can be done in combination with OE washers (see charts).



**NOTES:** Under normal circumstances the direct drum and sun gear shaft are not involved in setting front or rear unit end play. For example, the OE front and rear end play could be checked or set without the direct drum or sun gear shaft installed. Sonnax part numbers **34301-078** and **34301-094** can alter the end play path through the unit, transferring the end play from the main shaft to the sun gear shaft.

OE end play path = forward drum / forward clutch hub / main shaft / rear internal gear / output shaft.

Altered end play path with **34301-078** and **34301-094** = forward drum / forward clutch hub / direct drum / sun gear shaft / sun gear / rear internal gear / output shaft.

The altered end play path has the benefit of making the direct drum more stable, but in higher RPM applications the high relative speed between the direct drum and the forward clutch hub can cause premature wear of the **34301-078** and **34301-094** washers. For higher RPM applications it is advisable to check direct clutch drum free play by installing the forward clutch hub onto the main shaft and ensuring there is some up-and-down free play of the direct drum.

For more information check out this tech article "[Playing with Transmissions: Setting Total Endplay to Prevent TH400 Gear Train Failure](#)" by Randall Schroeder at [www.sonnax.com](http://www.sonnax.com).

GM 4L80-E Front Unit Endplay	
OE Shims	Color
.057-.061"	Blue
.073-.077"	Red
.089-.093"	Brown
.105-.109"	Green
.121-.125"	Plain