

### Instructions

### GM 400, 4L80-E, 4L85-E



## Sleeve Kit Part No.

**Direct Drum** 



• Sleeve

• Spring Pin

**NOTE:** In 4L80-E units, part can be used in either early or late-model drums.

Recommended

# **Installation Tool**

### Part No. 34838-TL

- Sleeve Press/Installation Tool
- Alignment/Dowel Pins (2)

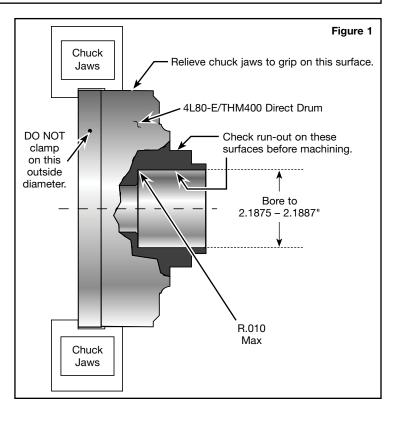
WARNING: This tool kit is no longer in production. Check with your distributor for availability.

### **1. Machining Instructions**

a. Fixture the direct drum in a 3-jaw chuck, with the center support bore facing outward.

Sleeve

- b. Using a .0005" reading test indicator, check the run-out of the drum on both the bore and the race surface. Run-out of the drum installed in the lathe must be less than .001" TIR. If the observed run-out is greater than .001" TIR, realign chuck or re-fixture the drum as necessary.
- c. Turn drum bore to a diameter of 2.1875 2.1887". The resized bore must have a 63-microinch or better surface finish.



©2019 Sonnax Transmission Company, Inc. • A Marmon/Berkshire Hathaway Company

34838-01K-IN 03-19-19

# Sonnax TRANSMISSION PARTS

#### DIRECT DRUM SLEEVE KIT 34838-01K, 34838-TL

### Instructions

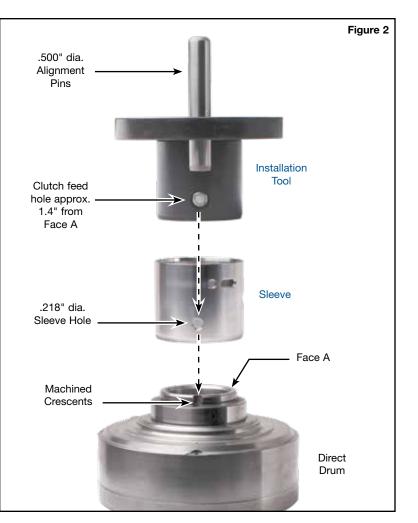
### 2. Installation & Assembly

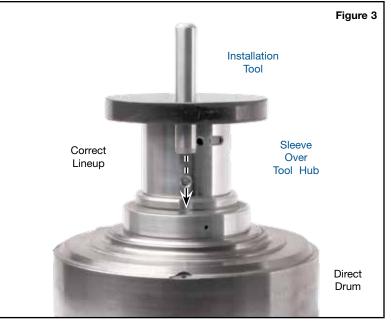
**NOTE:** Use of the Sonnax sleeve installation tool is recommended to ensure proper alignment of the sleeve in the bore.

- a. Slide and align the sleeve over the installation tool hub until the .218" diameter sleeve hole has engaged the spring plunger ball on the tool hub (**Figure 2**).
- b. Place the two .500" diameter alignment pins vertically on the direct drum so that they are mated with the machined crescents on the direct drum (**Figure 2**).
- c. Locate the 3rd/Reverse apply feed hole in the drum, which will be aligned with one of the machined crescents.
- d. Postition the sleeve/tool assembly over the drum bore, sleeve side down, rotate the tool until the spring plunger ball is aligned with the 3rd/Reverse apply hole. The center of the clutch feed hole is located approximately 1.4" from face A (Figure 2). The dowel pin holes in the tool hub should now be aligned with the two dowel pins (Figure 3).
- e. Lubricate the outside diameter of the sleeve to aid installation. Using an arbor press, press directly on the installation tool, install the repair sleeve into the drum.
- f. The installation tool flange should bottom against the drum hub surface. Remove the installation tool.
- g. After installing the new sleeve, drill a 1/16" x .525" .535" deep hole between the sleeve O.D. and the direct drum I.D. Apply a drop of Loctite<sup>®</sup> into the hole and then press in the spring pin provided. The spring pin must be flush with or below the carrier surface.
- h. Ensure the hole is deeper than the spring pin and the pin does not install with excess force. If it does, the sleeve may deform in that area.

### **3. Sleeve Surface Finish**

- a. If using PTFE piston rings, the sleeve surface finish is correct as supplied.
- b. If using either cast iron or Peek® piston rings, the sleeve surface finish should be roughened slightly. Using Scotch-Brite®, mar the surface to obtain the equivalent of a 63-microinch surface finish.





©2019 Sonnax Transmission Company, Inc. • A Marmon/Berkshire Hathaway Company

34838-01K-IN 03-19-19