sonnax
Technical Bulletin
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You Have QUESTIONS?

We've Got ANSWERS

The Sonnax Technical Support Department fields calls every day from transmission rebuilders inquiring about Sonnax solutions. Some of you call with a question on the application or use of a specific Sonnax part. Some of you are evaluating the unit you are about to rebuild and are wondering if Sonnax has a solution to help address a specific problem or that might extend the life of your rebuild. Whether you need a quick and easy answer or a more detailed explanation of a Sonnax product, our department is here to help, on our toll-free line and vie e-mail at TechSupport@sonnax.com.

In the years since our Technical Support Department has been up and running, we've found that some product questions are asked with regularity. Here are a few of the most frequently asked questions, with the answers you need to get the job done.

QUESTION: I have noticed that the 4L60-E OE TCC regulator line-up looks different in the later model units. Will the Sonnax TCC regulator valve work in later model transmissions?

ANSWER: Yes, there are at least five different OEM line-ups (see Transmission Specialties® Volume 5, page 79, Figure 6). The Sonnax TCC Regulator Valve **77754-03K** (Volume 5, page 75) is recommended for units up to '97 only, while the **77754-04K** can be used in all applications, including present-year models.

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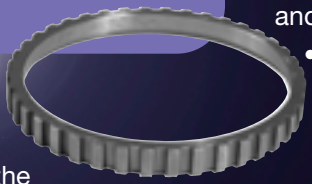
PRODUCT SPOTLIGHT

The output speed sensors in the 4L80-E transmissions are often damaged while rebuilding. The OEM material is very brittle and can break easily. These rings are not available separately but must be purchased with the OEM complete carrier assembly.

The Sonnax Output Speed Sensor Ring 34480-01 is a direct OEM replacement, and is more durable and less brittle than the OEM ring. Now you can replace the ring without purchasing the expensive carrier assembly.

4L80-E OUTPUT SPEED SENSOR RING
PART NO.: 34480-01



FIX THESE COMMON COMPLAINTS

- OEM rings not available separately
- Used rings are hard to find and prone to cracking
- Price is high for complete planetary carrier

QUESTION: I have installed the TCC Regulator & Isolator Kit **84754-01K** *in a 4T60-E and now the isolator valve seems to be sticking in the bore. Why?*

ANSWER: The original OE isolator valve sometimes creates a slightly raised area in the bore. In most cases, the new Sonnax valve will resize the bore when installed. Some more high-mileage valve bodies may require the bore to be resized with the shank of a 27/64" drill bit or a tool that can be made using a Sonnax isolator valve attached to a piece of brake tubing (see Figures 1 and 2).

Figure 1

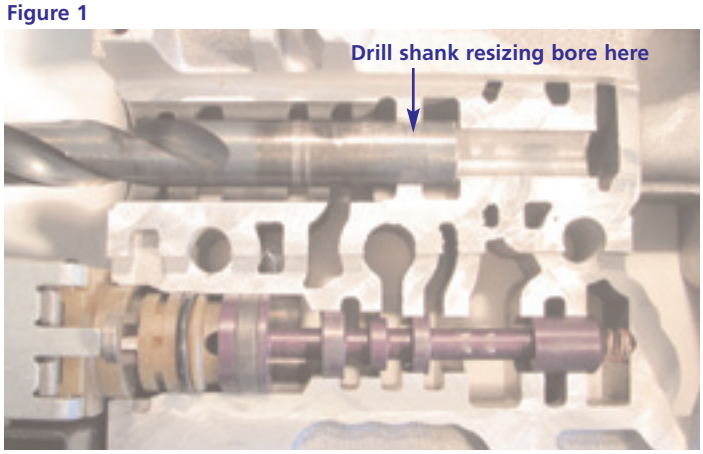
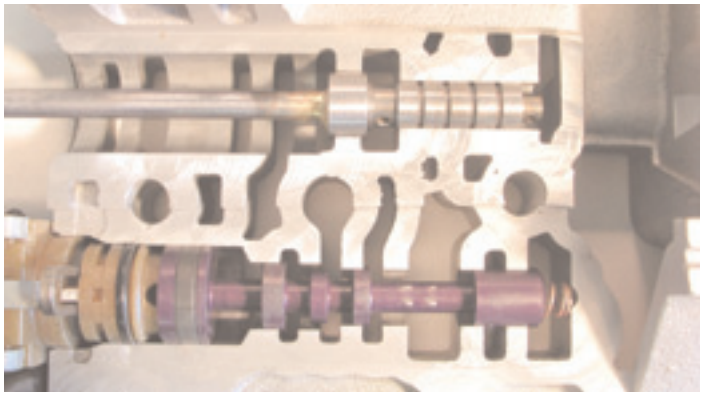


Figure 2 **Bore sizing tool made of tubing and isolator valve**



QUESTION: The Sonnax Transmission Specialties® Volume 5 Catalog lists a boost valve on page 88, **95200-03K***, that can only be used in a Type 1 valve body. How do I know if my valve body is a Type 1 or 2?*

ANSWER: The Type 1 valve body has an additional circuit (see Figure 3). Knowing the year of the unit that is being worked on will also help determine the type. The Type 1 is applicable in units from 1991 up to April 1992, while the Type 2 valve body is found in units built from May 1992 on.

QUESTION: I have purchased the Sonnax upgraded new Process 230 Series Output Shaft Retaining Ring **100420-01K***, but it doesn't fit. Am I doing something wrong?*

ANSWER: The NP 231/233 came with two shaft diameters. The Dodge, Jeep and some GM applications are the smaller size. Many of the later GM V-6 S-10s and Blazers had the larger shaft. Most transmission shops will recognize and be able to tell the difference between GM large and small shaft diameters by looking at the drive shaft yoke.

A quick way to identify the shaft diameters on GM vehicles is to measure the yoke. If you have a small GM yoke diameter (1.5 inches) use **100420-01K**. The large GM yoke diameter measures 1.885 inches (slightly more than 1⅞ inches) and for this you must use the **100420-02K**.

This method works fairly well for GM but not in Dodges and Jeeps. To positively identify which part number you need for any transfer case, you must measure the shaft where the bearing presses on. This requires the removal of the extension housing. This method will give consistent, accurate results for all manufacturers.

Sonnax part **100420-02K** fits all units with a 1.375-inch diameter shaft (diameter where rear bearing fits onto shaft). This will work in all New Process models 241, 242, 243 and 249. These are common to GM and Chrysler full-size trucks. It will also fit NP233 (with 1.375-inch diameter shaft). It replaces OE parts GM p/n 12470554 and 15580304, and Dodge p/n 6025755.

Sonnax part **100420-01K** fits all units with a 1.180-inch diameter shaft (diameter where rear bearing fits onto shaft). This will work in all New Process models 207, 231 and NP233 (with 1.180-inch diameter shaft). It replaces OE parts GM p/n 14071710, Dodge p/n 4338951 and 4446478, and Jeep p/n J8134488.

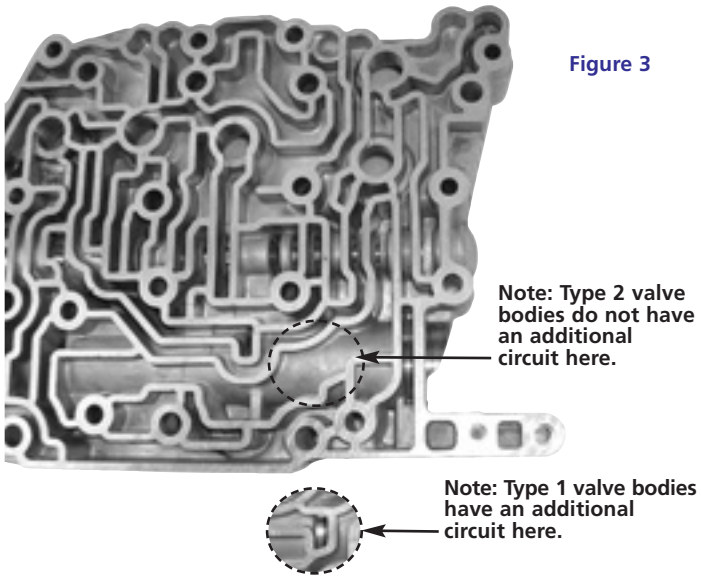


Figure 3