

Small Tips for Big Rebuilding Headaches

By Frank Biolsi

I look forward to reading this column every month because there's always something to learn. There is always a suggestion that can help us fix something better, faster, smarter or in some way more effectively than the way we've been doing it before. This column always contains at least one nugget of knowledge that can help us in a big way.

Small things are often the cause of problems that can create grief in our everyday operations. Those seemingly inconsequential items can and on occasion do bring production to a halt. What seemed like nothing of great importance now becomes the stopper.

Many of you who call us for technical support and advice ask for items that fit this description. While we are always open to new ideas for new products that solve root-cause problems, there are times when these parts are already readily available and reasonably priced. It's just that few rebuilders know about them. So, here are a few brief tips for you on some of the parts you asked for and where you can find them.

Chrysler:

The flat wire-style clip that secures the governor sensor in the housing tends to disappear while the unit is being rebuilt. You can replace that clip in your 42-47RE ('95-'99) with a governor sensor retainer, OEM part number 4617219.



Mercedes:

On many 722 series units, the thrust pin (strut) on the anchor side of the bands are held in the case mounted thrust element by a small plastic retainer. The plastic retainers become brittle and break during disassembly or reassembling the bands. These plastic retainers are used on all the bands on the 722.1 and 2 units and for the rear bands on the 722.3, .4 and .5. These are available as OEM part number 140277-01-51.



140277-01-51

Honda B7TA:

Most of the Honda/Acura 4-speeds have mainshaft and countershaft speed sensors that drop in and are bolted flat to the case. In some cases, at least on the B7TA units, a washer or spacer sits on the case, underneath the countershaft sensor mount. Like many of those small, easy-to-miss but necessary items, this puppy has a habit of not being around when it's time to reinstall the sensor after a rebuild. So if you are building a unit and notice it is locked up and the shafts will not turn or, worse, has torn up a speed sensor after installation, you are going to need a countershaft speed sensor washer, OEM part number 90561-P7T-000



Sensor washer, OEM part number 90561-P7T-000

GM:

In the past the plastic 4-tab washer between the two planets in the 4L80-E/400 has never been available separately. The plastic 4-tab washer has always been serviced with the metal 4-tab washer that is also used between the output shaft and the selective spacer. In 2002 GM changed the output carrier by eliminating two of the washer locating holes and changing the 4-tab plastic washer into a 2-tab plastic washer. This new 2-tab plastic washer back-services all years of 4L80-E & 400, regardless of whether the carrier has 2 or 4 locating holes. The good news is the new plastic washer is available as GM part number 24214809.



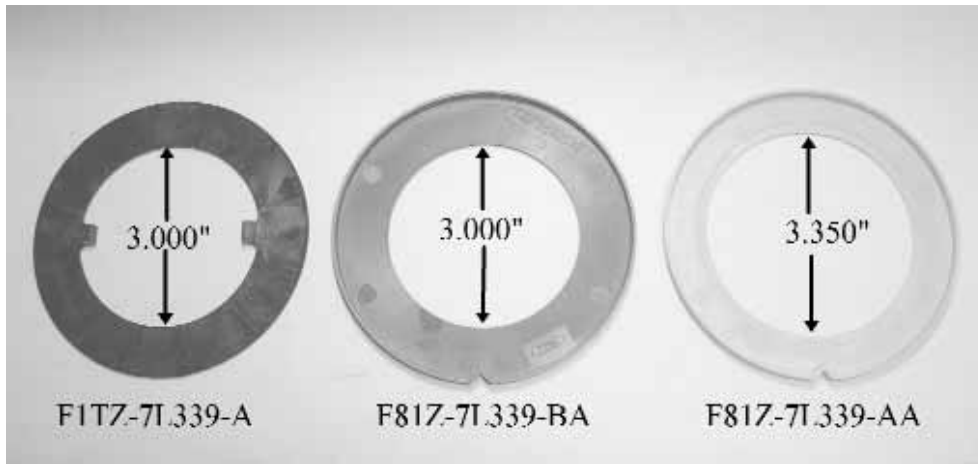
Ford:

E4OD;

Problems can occur in your E4OD if you are updating the overdrive planet only and try to use the late style No. 3 washer with a sprag style overdrive one-way clutch. The late-style washer has a larger inner diameter and will not properly support the OD sprag inner race, allowing the inner race to move out of position and contact the OD planet. In OE production there are two versions of the No. 3 thrust washer, depending on what overdrive planet and one-way clutch the unit came with. The early OD planets have two cut-outs to accept the No. 3 thrust washer. The later planets eliminated the cut-outs and the No. 3 thrust washer is located by a lip and notch on the outer diameter. Ford has a hybrid service No. 3 washer that allows the late planet to be used with the early OD sprag. The hybrid washer has the outer diameter lip like the later washer and the smaller inner diameter like the earlier washer.

E4OD No. 3 Thrust Washer Versions

	Part #	Color	Retention	I.D.	Thickness
Early Washer	F1TZ-7L339-A	Black	2 ID Tabs	3.000"	.063"
Late Washer	F81Z-7L339-AA	White	OD Lip & One Notch	3.350"	.063"
Service Washer	F81Z-7L339-BA	Blue	OD Lip & One Notch	3.000"	.063"



Thanks to Maura Stafford, Gregg Nader, Ed Lee and Jeff Brown for their help with these tips.

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