TECHNICALLY Speaking

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Identifying the 722.6 converters

Mercedes has used the 722.6 transmission in a number of different vehicles and in combination with different engines. To accommodate these different vehicle and engine combinations, different converters were needed. Many of the converters were similar in appearance and only differed in their bolt circle or diameter.

In 2004 Daimler-Chrysler Corp. started using the 722.6 transmission in the Chrysler 300. By 2007 there will be 11 part numbers to cover the range of Chrysler 722.6 converters.

Torque converter rebuilders may find they never knew how easy they had it when they only had the Mercedes versions to identify.

Chrysler Built

Torque Converter Assembly Part Numbers per Model Years

2007		135K with turbine damper (28.5 Nm/deg)		175K w/o turbine damper			**175K** with turbine damper (35 Nm/deg)
	Obsolete					Obsolete	
2006		Start of production					Start of production
	135K with turbine damper (20 & 70 Nm/deg)			175K w/o turbine damper		**175K** with turbine damper (20 & 70 Nm/deg)	
			Obsolete		Obsolete		
2005				Start of production		Start of production	
	135K with turbine damper (20 & 70 Nm/deg)		**150K** w/o turbine damper		**150K** with turbine damper (20 & 70 Nm/deg)		
			Start of production		Start of production		
2004	**135K** with turbine damper (20 & 70 Nm/deg)						
	5137631AA	**4752580AB**	**5143212AA**	**5174299AA**	**4736478AA**	**4752603AA**	**4752447AA**
	5.7L & 6.1L	5.7L & 6.1L	3.5L	3.5L AWD	3.7L	3.7L	3.7L & 4.0L
2004	300						
2005	300 & 300SRT		AWD 300		Grand Cherokee		
2006	300			300		Grand Cherokee	
	European 300			European 300		Commander	
	SRT			Grd Cherokee SRT			
	European 300 SRT			European 300 SRT			
2007		300		300			Grand Cherokee
		European 300		European 300			European 300
		China 300		China 300			Commander
		300SRT		Grd Cherokee SRT			Dodge Nitro
		European 300 SRT		European 300 SRT			Jeep Patriot

Figure 1

This could be especially problematic if a converter wasted out and a replacement core had to be found. It was not uncommon to try to line up the converter bolt holes to the flywheel and find that the bolt circle was one-quarter-inch off. Even worse was when the pilot, bolt circle and overall height matched up, but you had a performance issue because the replacement converter was almost an inch different in diameter. The latest Dacco catalog does a good job of identifying these converters.

The chart in Figure 1 shows which part numbers were used with which engines and the years they were produced.

The major outward differences between the Chrysler-made and Mercedes-made converters are the pilots and the bolt circles. The pilots on all of the Chrysler converters are about .040" smaller than the Mercedes converters. The Mercedes converters are available with 9", 9-1/4" and 10-3/4" bolt circles, while all of the

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Chrysler converters (with the exception of the 3.0L diesel, which will be available in the Grand Cherokee in 2007) use a 10-3/8" bolt circle. The 3.0L diesel converter is also unique because the bolts enter the converter mounting pads from the transmission side.

Figure 2

Figure 3

Chrysler has made it easier to identify its converters. The part number is on the white bar code tag as seen in Figure 2. If the bar code tag is missing for whatever reason, the part number is also dot peened into the impeller. The 10 digits shown in Figure 3 contain the part number and the build date. The first three numbers and two letters are the last five digits of the converter part number. The first four dot peened digits after the part number show the converter build date.

Referring to the chart in Figure 1, you can see that in 2007 the clutch in converter No. 5137631AA changed from a two-stage clutch apply to a single-stage clutch apply and became part No. 4752580AB. You can tell because there is only one number in theNewton/Meter rating of the damper (28.5 NM/Deg). The previous years had two numbers (20 and 70 NM/Deg).

Some of the Mercedes-built converters also have Chrysler part numbers. These converters will have Mercedes-size pilots because they are usually found behind Mercedes power plants. The Sprinter vans and Chrysler Crossfire are good examples of these. The Sprinter converters were first used in 2002 behind the 2.7L diesel engines. They evolved with the 2.8L and 2.9L engines through 2006. The Chrysler part number is 5104567AA and crosses over to Mercedes part No. 9032500002. The Crossfire uses two different converters: the 3.2L non-turbo is part No. 5098047AA and crosses over to Mercedes part No. A2102500702. This is also Dacco part No. MC18. The turbo-charged 3.2L Crossfire uses part No. 5137842AA, which crosses over to Mercedes part No. A2112500302. One nice feature of having Mercedes-built converters used in Chrysler applications is the Chrysler identification numbers on the outside of the converters.

Hope this information makes identifying converters a little easier.

Special thanks to Lou Darling, senior specialist at T/C Engineering DCX for his technical assistance in writing this article.

Ed Lee is a Sonnax technical specialist who focuses on issues of interest to torque converter builders, and vice president of the Torque Converter Rebuilders Association. Additional information is also available to TCRA members on the organization's Web site at www.tcraonline.com