



Crankshaft Grinding Caution on 1998-2011 Mercedes Benz/DDC 12.8L 4000 Series Engines

The AERA Technical Committee offers the following information regarding a crankshaft regrinding caution for 1998-2011 Mercedes Benz/DDC 12.8L 4000 Series engines. It's been reported that OE (original equipment) and aftermarket suppliers of engine bearings for these engines do not offer all similar undersize options.

While there appears to be many undersizes available, the most significant caution is that OE undersizes of .020 & .040" (.500 & 1.000 MM) undersize main bearings come with a .020 & .040" (.500 and 1.000 MM) **Oversize Thrust Bearing**, respectfully. Most aftermarket bearing suppliers of those undersizes do not incorporate oversize thrust bearings. Being that as it is, the person grinding the crankshaft must be aware of those facts as well as the bearing source desired.

It should also be noted the oversize thrust bearings offer additional salvage possibilities for these crankshafts. Below is a sampling of the OE bearings available.

	Imperial (Inches)	Metric (MM)
Rod Bearings:	STD, .004, .010, .020, .030, .040	STD, .10, .25, .50, .75, 1.000
Main Bearings*:	STD, .004, .010, .020, .030, .040	STD, .10, .25, .50, .75, 1.000
Thrust Bearing Width		
STD.	1.801-1.804"	45.740-45.810
.020" Undersize	1.820-1.823"	46.240-46.310
.040" Undersize	1.840-1.843"	46.740-46.810

*OE undersizes of .020 & .040" (.500 & 1.000 MM) come with a .020" & .040" (.500 and 1.000 MM) **Oversize Thrust Bearing**. Other bearing undersizes have standard 1.801-1.804" (45.740-45.810 MM) thrust bearing widths.

It is highly advised to check the bearing source and availability before grinding the crankshaft on these engines.