



PACCAR Liner Adjustment for 2010-2017 MX-13 Diesel Engines

The AERA Technical Committee offers the following information regarding the now available liners for 2010-2017 PACCAR MX-16 diesel engines. Cylinder block cavitation and erosion has been reported on these engines and recently, a repair has been made possible.

To salvage the block to allow reuse, three different size liners have been made available from PACCAR. Along with the standard liner three additional thickness flanged liners are available. Before attempts to repair the block deck, PACCAR offers the following qualifications. The cylinder liner seat can only be repaired when:

1. The surface of the cylinder block deck (A) is not damaged or been machined.
2. The cavitation surface of the liner seat (B) is not deeper than .0177" (.450 MM).
3. The surface of the liner bore (C) is not cavitated.

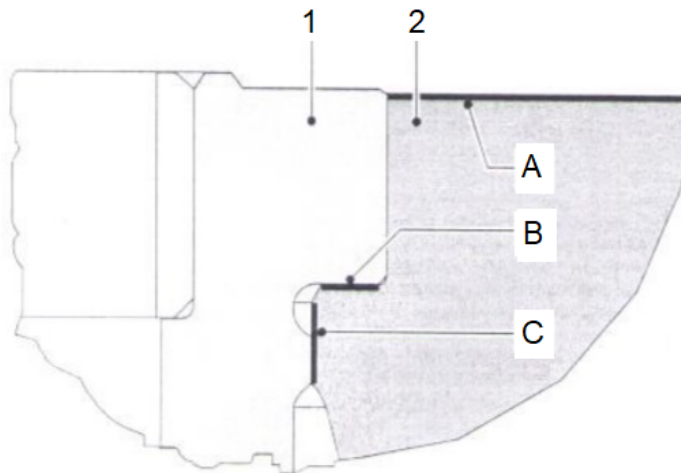


Figure 1. Legend: 1 Liner (white), 2 Block (shadowed)

The cylinder block is compressed graphite iron (CGI), which machines a little differently than other cast iron blocks. CGI machines nicely and leaves a very desirable even surface when care is expressed while machining.

The additional available liners are:

- A service liner with a .0016" (.040 MM) taller liner flange
- A service liner with a .0098" (.250 MM) taller liner flange
- A service liner with a .0020" (.500 MM) taller liner flange

All liners when properly installed should not vary in the average protrusion height of more than .0012" (.030 MM) from liner to liner. PAACAR offers a special motorized tool Part #1961378 and cutting tool Part #1903061 to facilitate counterbore machining.

AERA is also aware of a company that is supplying a liner shim of .020" (.500 MM) to help salvage those blocks that have been already cut to the tallest flanged liner. That company can be reached at phone number 717-367-3011.

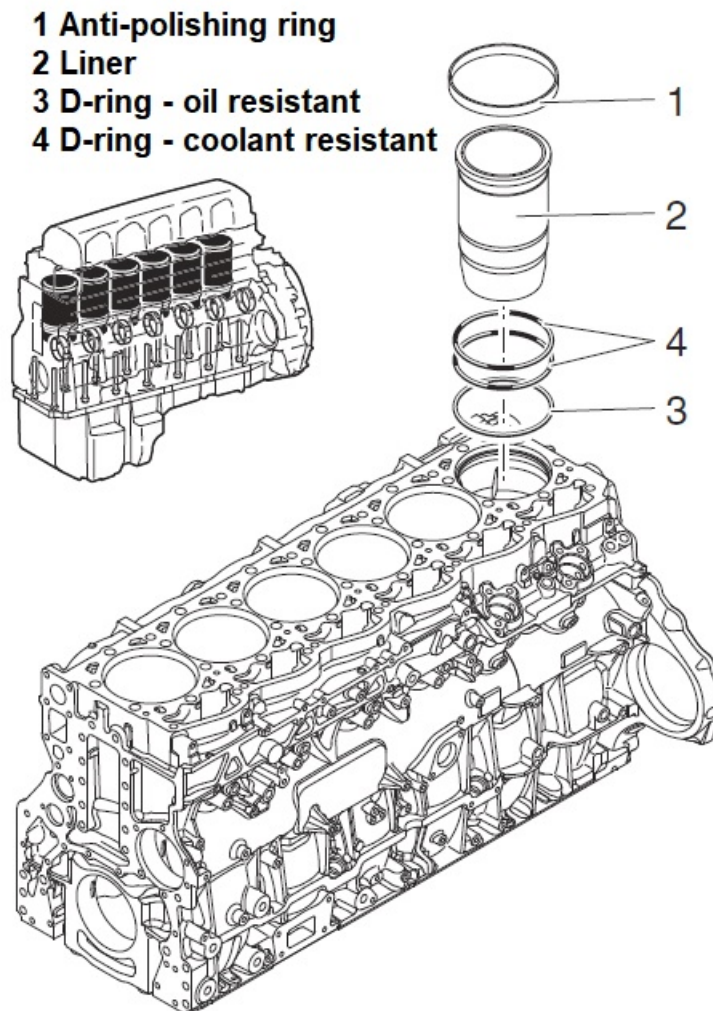


Figure 2. MX-13 CGI Cylinder Block & Liner