



Liner Shim Availability for 3304 & 3306 Caterpillar Diesel Engines

The AERA Technical Committee offers the following information regarding liner shims for Caterpillar 3304 & 3306 diesel engines. These shims may be used to correctly adjust the liner height when installing them into the cylinder block. There are five different shims available and machining the blocks counter bores may be necessary to properly adjust the sleeve protrusion.

Liner Shim Availability, Thickness, Color, Part #				
.007" (.180 MM)	.008" (.200 MM)	.009" (.230 MM)	.015" (.380 MM)	.030" (.760 MM)
BLACK	RED	GREEN	BROWN	BLUE
8S6045	8S6046	8S6047	8S6048	8S6049

The machinist is reminded cylinder liner protrusion should be .0013-.0069" (.033-.1754 MM) for all liners with no more than .002" (.050 MM) difference between adjacent liners.

Counterbore depths should be averaged making 4 measurements and those measurements should not vary by more than .002" (.050 MM).

Additionally, the maximum permissible difference between average liner protrusion under one-cylinder head is:

- 3304003" (.080 MM)
- 3306..... .004" (.100 MM)