

SERVICE ENGINEERING BULLETIN SB2201

Goetze Anti-Polish Ring (Fire Ring)

During the normal combustion process, carbon deposits (partially burned hydrocarbons) form on the piston crown, top land and ring pack areas. Over a period of time these deposits harden causing an abrasive wear on the cylinder liner wall. This (often referred abrasive wear to as POLISHING) will render the rings unable to control the flow of oil resulting in an increase in oil consumption.

Commercial Vehicle engine manufacturers are adopting the solution of introducing an Anti-Polish Ring (Fire Ring) into the cylinder liner wall adjacent to the piston top land when the piston reaches Top Dead Centre (TDC).

The inner diameter of the fire ring is slightly smaller than that of the cylinder bore, and the piston top land is machined slightly smaller to compensate for the protrusion of the Anti-Polish Ring into the cylinder bore.

As the piston reaches TDC any carbon deposits forming on the top land will be scraped away thus preventing any polishing of the bore as the piston travels down the cylinder bore.

PLEASE NOTE:

The Anti-Polish Ring should always be fitted when supplied with a cylinder liner designed to accommodate one as failure to fit will result in severe loss of compression and engine power.

The range that incorporates this solution includes:

- 15-451070-10; 89-427000-00 Mercedes-Benz OM475 Euro 4/5 Anti polish ring sold separately 13-451070-00
- 15-451220-00; 89-420900-30; 89-420900-50
 Mercedes Benz OM501/502 LA Euro 4/5
 Anti polish ring sold separately 13-451220-00

ENGINE EXPERTISE

Inc. or one or more of its subs

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EP BIESEL GLYCO GOETZE[®]