Victocor[®] 500 Cylinder-Head Gaskets



Sealing The High-Performance Diesel Engine.

Today's diesel engines produce high engine firing pressures and elevated temperatures. These demands can place stress on the cylinder-head gasket. Victocor[®] 500 cylinder-head gaskets use a patented material capable of withstanding these high cylinder pressures where other gaskets fail.



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Sophisticated Five-Layer Design

The Victocor® 500 cylinder-head gasket is composed of five layers. A perforated steel sheet is adhesively bonded to each side of a thick steel center layer, and thin layers of graphite are mechanically bonded to the perforated steel sheets to form the outer surfaces. This results in a solid center layer to support combustion pressure and thin graphite layers to seal fluids. The center layer provides support to the combustion seal and stabilizes flange motion. As a result, high blowout resistance and exceptional flange durability are achieved.

Conventional wire rings are used to seal combustion openings, providing a seal with high performance and durability.

Product Features

- Robust, proven combustion seal
- Layers of graphite-based composite
- Solid steel core reinforcement
- Stabilizes flange motion, virtually eliminating flange thinning
- Increases hoop strength of combustion seal for elevated cylinder pressure
- Thin graphite facing
- Superior fluid sealing performanceConstant thickness for controlled
- Optional molded inserts for enhanced sealing of coolants and oils



2-D Finite Element Analysis (FEA) Stress distributed in a molded rubber insert at maximum compression.



3-D Finite Element Analysis (FEA) Aids in determining the combustion seal load, minimum loads to seal, load balance, hardware deformation, operating thickness, and head motion.



Cross-section

Victocor® 500 cylinder-head gasket is composed of five layers and capable of withstanding high cylinder pressures.

Product Benefits

- Combustion seal conformability
- · Ability to accept liner-to-liner variance
- Conformance to less-than-perfect hardware surface finishes
- Very low thermal creep
- Ability to seal fluids at low stress level



Victocor® 500 Durability Flange intact with no thinning or cracking after 10 million cycles at 2,500 psi.

Sales Office – North America Dana Holding Corporation 3939 Technology Drive Maumee, Ohio, USA 43537 T: 419.887.3000 F: 419.887.5961 www.dana.com Sales Office – Asia-Pacific Room 1103, Cloud Nine Plaza 1118 Yan An Road West Shanghai 200052 T: +86.21.5258.5577 F: +86.21.5258.0660

