

SUBJECT: Head Gasket Surface Preparation

The head gasket surface preparation procedures described below must be followed to ensure proper performance of all cylinder head gaskets offered by Alliant Power. Failure to follow these approved procedures will lead to gasket failure and will not be considered for warranty.

- When cleaning the head gasket sealing surfaces, use plastic or brass scrapers as well as appropriate cleaning chemicals to remove any debris from the cylinder head and engine block. The use of wire wheels, metal scrapers, sand paper, and sanding discs is NOT permitted.
- Using the latest OEM specifications, ensure the cylinder head and engine block surfaces are flat.
- On applications where machining of cylinder head and engine block is permitted, ensure the proper OEM specified surface finish is achieved.
- Reuse of the cylinder head bolts is NOT permitted. Anytime the head bolts are removed, new bolts or studs must be installed.
- Ensure the cylinder head bolts or studs are installed using the latest recommended torque sequence and procedures. Clean all bolt holes and blow out with filtered compressed air to ensure the threads are free from oil and contaminants.

Note: Staining of the sealing surfaces is normal and will not affect sealing ability. It is only necessary to clean carbon deposits and foreign material from the sealing surfaces, buffing or sanding to remove such witness marks or stained areas can result in improper combustion sealing.

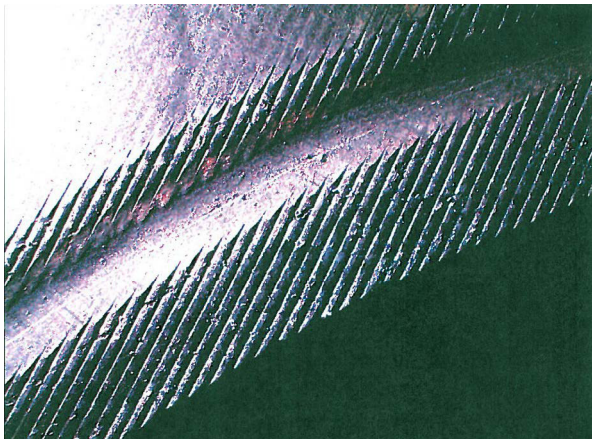


Figure 1

Figure 1 shows a magnified view of a cylinder head gasket that was installed on a head that was machined to improper specifications. These coarse concentric impressions left in the gasket create valleys which allow combustion and fluid migration to occur and are not warrantable.

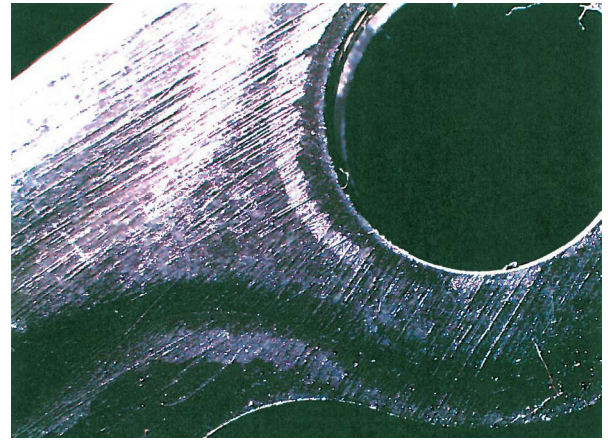


Figure 2

Figure 2 shows a magnified view of a cylinder head gasket that shows crisscrossing small diameter striations. These impressions are consistent with those produced by a surface that has been cleaned using a small diameter high speed sanding disc. These impressions create leak paths and are not warrantable.

For more information visit

AlliantPower.com

Alliant Power Technical Support: 800.735.9775 | techsupport@AlliantPower.com