

## **IPD TECH BULLETIN**

Determining the correct Head gasket on 3114, 3116 & 3126 (2 valve) engines.

DECEMBER 2007 IPDTB-0014

Oversized head gaskets may not be something you would normally think about when repairing or rebuilding a Caterpillar® engine. While other engine manufacturers have utilized thicker head gaskets to help salvage cylinder blocks they are not so common to Caterpillar® engines.

As the 3114, 3116 and 3126 (2-valve) engines age you may encounter engines that have or will require thicker (oversized) head gaskets. IPD does not offer these oversized head gaskets at the time of this publication, but our intent in our tech bulletins is to help inform you of issues within the engine ranges that we do offer products for.

Items that could cause issues include the block deck surface to crankshaft center line measurements decreasing due to machining of the deck or the line bore of bearing journals. Be aware that the last machine shop may not have stamped the block so you may need to do your own inspection to tell which head gasket is correct for the engine you have.

There are a number of ways to determine whether a standard or oversized (thick) head gasket is correct.

• Measure the block height. Cylinder block deck to crankshaft centerline

Correct Gasket	Block dimension from deck to centerline of the crankshaft
Use "Standard" thickness	
gasket	Greater than 321.75mm (12.6673")
Use "Thick" (oversized) gaskets	321.50 to 321.75mm (12.657 to 12.6673")

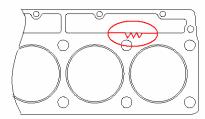
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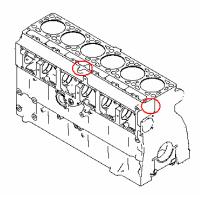
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- Measure the thickness of the existing head gasket
  - o Standard gaskets have an <u>assembled</u> thickness of approx 1.5mm (.060")
  - Thicker oversized gaskets have an <u>assembled</u> thickness of approx. 1.75mm (.070")
- You may be able to identify the old gasket by a remaining part number or by the
  gaskets profile. Standard gasket have a straight edge, whereas the thicker
  oversized gasket should have a series of notches cut in the area shown below



• Look for previous machine shop stamping to indicate block height. According to OE publications, if the block has been remanufactured by them there will be a "TG" stamped on the remanufacture tag located on the upper rear corner of the block or on the center tab on the top surface of the block.



3126B - 3 valve engines are not addressed in this bulletin and to date OE has not released oversized gaskets for those applications.

IPD is considering producing these gaskets and would be interested in your input on these, as well as other products you frequently have requests for. Please forward any information to your IPD Regional Manager or Distribution Center or email to <a href="mailto:sales@ipdparts.com">sales@ipdparts.com</a>. We appreciate your comments and input!

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