Always verify the origin of an oil leak by using fluorescent dye. At times, a Cam Cover Gasket or engine Oil Galley Plug (particularly at the rear of the right hand head) may be the source of the engine oil leak. (Figure 1)

1998 - 2000 Head Gasket/Cylinder Head Replacement Service Tips

NOTE
TAKE EXTRA CARE NOT TO DAMAGE THE HEAD GASKET SEALING SURFACE WHEN PERFORMING CYLINDER HEAD REPLACEMENT. THE SUCCESS OF THE REPAIR IS DEPENDENT UPON FOLLOWING THE INSPECTION PROCEDURE PAYING PARTICULAR ATTENTION TO THE AREAS DEPICTED IN THE ACCOMPANYING FIGURES.
When cleaning the block deck of residual gasket coating use Citrus Metal Surface Cleaner (part number F4AZ-19A536-RA) and a plastic scraper. Wipe with a LiNT-FREE shop rag. A shop vac can be used to pick up loose debris/dirt PRIOR to the citrus cleaner application.

NOTE
DO NOT USE A METAL TOOL OF ANY KIND ON THE GASKET SEALING SURFACE. RESULTING SCRATChES WILL PROVIDE A LEAK PATH.

• During normal inspection, pay particular attention to the RIGHT bank block deck area behind cylinder #4 or the LEFT bank block deck area in front of cylinder #5 around the oil hole breakout for dimples and impressions left by metal chips (Figures 2 and 3).

• The block surface around the cylinder head alignment dowels (2 per bank) is another common location for scratches or dimples.

• A known quality straight edge should be used to ensure the block surface is flat. If a dimple or impression measures over .001” (.025mm) deep, it is recommended to replace the block. This type of damage is rare.

• If block does not pass checks, a new or remanufactured long block engine assembly must be ordered. For truck applications, which require use of the Modular Engine Lift Bracket 303-F047 (014-00073) for engine removal, use nine links of 5/16 ″ chain in place of the rear bracket (Figure 4).

• As part of the inspection of the block for damage, remove any machining chips that may be in the bottom of the cylinder block bolt bosses. This can be done using a pencil style magnet.

• After removal of the chip from the block bolt bosses, and if no permanent damage to the block is found, verify that both the block and head sealing surfaces are clean prior to installing new gasket.

• During installation of the new head gasket(s) and the new cylinder head(s) to the block, lubricate the new head bolts with an oil soaked rag and allow oil to drip from the bolts, prior to assembly.

NOTE
INSPECT THE NEW CYLINDER HEAD FOR DAMAGE PRIOR TO INSTALLATION.

NOTE
GASKET SHOULD BE PLACED DIRECTLY INTO POSITION AND NOT DRAGGED OR MOVED ALONG SEALING SURFACE TO AVOID DAMAGE. THE GASKET COATING IS ESSENTIAL TO THE FUNCTION OF THE GASKET. CHIPS, SCRAPES, OR CUTS IN THE SURFACE OF THE GASKET COATING MAY CAUSE THE GASKET TO LEAK.

NOTE
DO NOT APPLY RTV, COPPER COAT, AVIATION CEMENT, ETC. TO THE GASKET OR BLOCK/HEAD SURFACES. THE GASKET IS TO BE INSTALLED DRY. ANY FOREIGN MATERIAL IN BETWEEN THE GASKET AND THE HEAD/BLOCK MAY CAUSE THE GASKET TO LEAK.

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>PART NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>XL3Z-6049-AARM</td>
<td>Remanufactured Cylinder Head</td>
</tr>
<tr>
<td>XL3Z-6049-BARM</td>
<td>Remanufactured Cylinder Head</td>
</tr>
<tr>
<td>F4AZ-19A536-RA</td>
<td>Citrus Metal Surface Cleaner</td>
</tr>
</tbody>
</table>

OTHER APPLICABLE ARTICLES: NONE
WARRANTY STATUS: INFORMATION ONLY
OASIS CODES: 401000, 499000
Figure 1 - Article 01-21-10

Figure 2 - Article 01-21-10