Head Gasket Selection on Kubota V3300, V3600 & V3800 Diesel Engines

The AERA Technical Committee offers the following information to consider during head gasket selection for Kubota V3300, V3600 & V3800 diesel engines. This information should be read before engine disassembly as different head gaskets are used for these series engines.

Selecting Cylinder Head Gasket & Replacing the Cylinder Head Gasket

It is suggested during engine disassembly to carefully remove the head gasket and preserve it for future reference while noting the notch detail in the corner(a) of removed gasket as shown in Figure 1.

![Diagram of Cylinder Head Gasket Detail]

1. Make sure of the notch mark (a), (b) or (c) of old cylinder head gasket (1) in advance of assembly, see Figure 1.
2. If you do not replace piston(s), piston pin bush, connecting rod, crankpin bearings, or crank journal bearings, replace the same notch mark (a), (b) or (c) as the original cylinder head gasket (1).

Selecting the Cylinder Head Gasket

Select the cylinder head gasket (1) thickness to meet with the top clearance if replacing the piston, piston pin bush, connecting rod, crankpin bearings, or crank journal bearings.

1. Measure and record the piston head’s protrusion (+) recessing (-) from the crankcase cylinder face (4 spots per each piston and average of four pistons as shown in Figure 2 (see page 2) using a dial gauge and measuring within .500" (12.700 MM).
2. Select the suitable cylinder head gasket by referring to the table on page 3.

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AERA is currently unaware of an aftermarket source for any of the head gaskets listed below and availability is limited to the equipment or engine manufacturer. Failure to select the proper head gasket may lead to engine damage or an engine lacking power.

Figure 2.
Piston Position Measuring Points
### [V3600-E3B, V3600-T-E3B, V3600-E3CB, V3600-T-E3CB, V3600-T-E3BG]

<table>
<thead>
<tr>
<th>Notch of Cylinder Head Gasket</th>
<th>Thickness of cylinder head gasket</th>
<th>Part Code</th>
<th>Piston Head's protrusion or recessing from the level of crankcase cylinder face. (average of 4 pistons)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before tightening</td>
<td>After tightening</td>
<td></td>
</tr>
</tbody>
</table>
| 2 notches (a)                 | 0.90 mm 0.035 in. | 0.60 mm 0.031 in. | 1C020-03310                                | -0.301 to -0.420 mm  
-0.0118 to -0.0165 in. |
| 1 notch (b)                   | 1.00 mm 0.0394 in. | 0.90 mm 0.035 in. | 1C020-03600                                | -0.201 to -0.300 mm  
-0.00791 to -0.0016 in. |
| Without notch (c)             | 1.05 mm 0.0413 in. | 0.95 mm 0.037 in. | 1C020-03610                                | -0.150 to -0.200 mm  
-0.00501 to -0.00787 in. |

### [V3600DI-T-E3B, V3600DI-T-E3CB, V3800DI-T-E3BG]

<table>
<thead>
<tr>
<th>Notch of Cylinder Head Gasket</th>
<th>Thickness of cylinder head gasket</th>
<th>Part Code</th>
<th>Piston Head's protrusion or recessing from the level of crankcase cylinder face. (average of 4 pistons)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before tightening</td>
<td>After tightening</td>
<td></td>
</tr>
</tbody>
</table>
| 2 notches (a)                 | 0.90 mm 0.035 in. | 0.60 mm 0.031 in. | 1G514-03310                                | -0.07 to +0.049 mm  
-0.0026 to +0.0019 in. |
| 1 notch (b)                   | 1.00 mm 0.0394 in. | 0.90 mm 0.035 in. | 1G514-03600                                | +0.050 to +0.149 mm  
+0.0020 to +0.00580 in. |
| Without notch (c)             | 1.05 mm 0.0413 in. | 0.95 mm 0.037 in. | 1G514-03610                                | +0.150 to +0.200 mm  
+0.0059 to +0.0078 in. |

### [V3300-E3BG]

<table>
<thead>
<tr>
<th>Notch Mark of Cylinder Head Gasket</th>
<th>Thickness of cylinder head gasket</th>
<th>Part Code</th>
<th>Piston Head's protrusion or recessing from the level of crankcase cylinder face. (average of 4 pistons)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before tightening</td>
<td>After tightening</td>
<td></td>
</tr>
</tbody>
</table>
| 2 notches (a)                    | 0.90 mm 0.035 in. | 0.60 mm 0.031 in. | 1C020-03310                                | -0.070 to +0.049 mm  
-0.0027 to +0.0019 in. |
| 1 notch (b)                      | 1.00 mm 0.0394 in. | 0.90 mm 0.035 in. | 1C020-03600                                | +0.0500 to +0.149 mm  
+0.00197 to +0.00586 in. |
| Without notch (c)                | 1.05 mm 0.0413 in. | 0.95 mm 0.037 in. | 1C020-03610                                | +0.150 to +0.200 mm  
+0.00591 to +0.00787 in. |

(1) Cylinder Head Gasket  
(2) Measuring Point  
(A) Gear Case Side  
(B) Flywheel Side  
(a) 2 Notches  
(b) 1 Notch  
(c) Without Notch

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