NEW CYLINDER BASE GASKETS AND CYLINDER STUDS

Purpose
The purpose of this Service Bulletin is to inform you of the new cylinder base gaskets and cylinder studs being installed in 1340cc and XLH engines. The dates, as encoded in crankcase numbers, indicating when the base gaskets and cylinder studs went into production are listed below.

Beginning Crankcase No. For Cylinder Studs
All 1340cc and XLH engines built on March 22, 1994 and thereafter have the new cylinder studs. This date is encoded in crankcase numbers as follows:

EXAMPLE CRANKCASE NO.: XX94 081 001
WHERE:
• XX = Model, See Tables 1 and 2.
• 94 = Model year
• 081 = Day of year (March 22)
• 001 = First engine built on March 22

Table 1. 1340 cc Crankcase Codes

<table>
<thead>
<tr>
<th>MODEL CODE NO.</th>
<th>ENGINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>1340 cc</td>
</tr>
<tr>
<td>20</td>
<td>1340cc, California EVAP</td>
</tr>
</tbody>
</table>

Table 2. XLH Crankcase Codes

<table>
<thead>
<tr>
<th>MODEL CODE NO.</th>
<th>ENGINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>883 cc</td>
</tr>
<tr>
<td>25</td>
<td>1200cc</td>
</tr>
<tr>
<td>26</td>
<td>883 cc, California EVAP</td>
</tr>
<tr>
<td>27</td>
<td>1200cc, California EVAP</td>
</tr>
<tr>
<td>29</td>
<td>883 cc, Swiss</td>
</tr>
<tr>
<td>30</td>
<td>1200 cc, Swiss s</td>
</tr>
<tr>
<td>31</td>
<td>883 cc, International</td>
</tr>
<tr>
<td>32</td>
<td>1200 cc, International</td>
</tr>
</tbody>
</table>

Beginning Crankcase No. For Cylinder Base Gaskets

1340 cc Engines:
Some engines built on April 25, 1994, and all engines thereafter have the new cylinder base gaskets. This date is encoded in crankcase numbers as follows:

BEGINNING CRANKCASE NO. 49 STATE ENGINES:
1594 115 085
WHERE:
• 15 = 1340 cc engine 49 state
• 94 = Model year
• 115 = Day of year (April 25)
• 085 = 85th engine built on April 25

BEGINNING CRANKCASE NO. CALIFORNIA ENGINES:
2094 119 012
WHERE:
• 20 = 1340 cc engine, EVAP equipped for California
• 94 = Model year
• 119 = Day of year (April 29)
• 012 = 12th engine built on April 29

XLH (SPORTSTER®) ENGINES
All engines built on April 29, 1994 and thereafter have the new cylinder base gaskets. This date is encoded in crankcase numbers as follows:

XX94 119 001
WHERE:
• XX = XLH engines, see Table 2.
• 94 = Model year
• 119 = Day of year (April 29)
• 001 = 1st engine built on April 29
Required Dealer Action

SERVICE CHANGES WITH NEW CYLINDER STUDS

The new studs no longer provide an interference thread fit with the crankcase tapped holes. See Figures 1 and 2. Figure 1 shows the old cylinder stud, and Figure 2 shows the new stud.

Identifying Studs

See Figure 2. The new studs may be identified by the Locotite® applied to the first 6 - 8 threads on the shouldered end of the stud.

Installing New Studs

The new studs must be installed with the shouldered end down. Thread shouldered end into crankcase and tighten to 10 ft-lbs (13.6 Nm) torque. This torque should "bottom" the stud shoulder on the crankcase.

NOTE

The Service Manuals that cover 1986 and later XLH models, and 1985 and later 1340 cc models show the procedure for old studs. Mark the new procedure for new replacement studs in your Service Manuals.

Mixing Old And New Studs In An Engine

Old studs may be replaced with new studs as needed. If an old stud is bent or broken, replace it with a new stud. It is not necessary to replace all old studs with new.

Locotite® Required

If new studs are removed and reinstalled, apply Locotite® 271, red, to the crankcase - end threads of the stud.

NEW CYLINDER BASE GASKETS

See Figure 3. The new cylinder base gaskets must be installed with the silicone bead facing the crankcase.

IDENTIFYING NEW CYLINDER BASE GASKETS

The new gaskets do not have the slot or cut-out at the hole as marked in Figure 3. Also, the new gaskets have a silicone bead on one side and are gray in color.

RETURN OLD CYLINDER BASE GASKETS

If your dealership has old cylinder base gaskets, Part No. 16774-86C, in stock, return them for credit. Order the new cylinder base gaskets, Part No. 16774-86D, to replenish your stock. See following "Credit Procedure" for details.

Credit Procedure

Dealer Inventory

Complete a regular Warranty Claim form referencing Service Bulletin M-1043 and please write "Dealer Inventory" in the OWNER section of the form. Make sure you fill in your dealer account number, your dealer name and address. Please use customer concern code 9901 and condition code 9110. Submit the properly completed Warranty Claim form and the old gaskets, Part No. 16774-86C, to Harley-Davidson. Upon receipt of claim and gaskets, you will receive credit for parts and postage.
Silicone bead on gaskets faces down against crankcase

Rear cylinder

Front cylinder

Old gasket, P/N 16774-66C had slot here.

Figure 3. New Gaskets Installed On Crankcase