2004 SERVICE LITERATURE UPDATE

Purpose
To communicate updates to 2004 model year service literature.

Motorcycles Affected
2004 Sportster and Softail models.

Required Dealer Action
Notify service personnel of service bulletin. Update affected manuals.

2004 Sportster Models Parts Catalog P.N. 99451-04
New Part Number–Fork Lock O-ring
See Page 71. The fork lock O-ring is now available separately, under Part Number 48027-99. This item will be available April 15, 2004.

2004 Sportster Models Electrical Diagnostic Manual P.N. 99495-04
Ignition Timing at Idle
See first Table on page 4-1 under SPECIFICATIONS. Correct the “Spark timing advance” data entry to read “0°-58° BTDC (range), 16° BTDC @ 1000 RPM”.

Alternator–Current and Voltage Output Test

2004 Sportster Models Service Manual P.N. 99484-04
Transmission Main Drive Gear–Needle Bearing Prelube
When assembling and installing the transmission, it is important to pre-lubricate the needle bearings in the main drive gear. Refer to Tech Tip dated May 24, 2004 for this procedure.

Fork Stem Lower Bearing–Procedural Change
See page 2-67. Correct step 4a under CLEANING, INSPECTION AND REPAIR to read: “The lower bearing cone is no longer a press fit on the fork stem. Remove lower bearing cone by sliding it up and off fork stem. If necessary, gently pry bearing cone off fork stem with a pair of flat blade screw drivers. Remove lower dust shield (2).”

Fork Oil Change–Specifications and Procedural Changes
See page 2-1. Correct the FRONT FORK (PER FORK SIDE) section of Table 2-3 to match Table 2-3 below.

Table 2-3. Capacities

<table>
<thead>
<tr>
<th>MODEL</th>
<th>FRONT FORK (PER FORK SIDE)</th>
<th>FUEL TANK TOTAL</th>
<th>FUEL TANK RESERVE</th>
<th>OIL TANK WITH FILTER</th>
<th>TRANSMISSION</th>
</tr>
</thead>
<tbody>
<tr>
<td>XL 883/XL 1200R</td>
<td>11.6  342  5.75  146</td>
<td>3.3 gal</td>
<td>12.5 L</td>
<td>0.8 gal</td>
<td>3.6 qt</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4.5 gal</td>
<td>17.0 L</td>
<td>1.0 gal</td>
<td>3.41 L</td>
</tr>
<tr>
<td>XL 883C/XL 1200C</td>
<td>11.6  342  5.75  146</td>
<td>3.6 qt</td>
<td>3.41 L</td>
<td>32 oz</td>
<td>946 ml</td>
</tr>
</tbody>
</table>

IMPORTANT NOTE
In the interest of preserving customer safety and satisfaction, always check for outstanding recalls whenever any motorcycle is brought into your dealership for either maintenance or service.
See page 2-66. Correct step 7 under ASSEMBLY to read: “7. Pour 11.6 fl oz. (342 ml) of TYPE “E” HYDRAULIC FORK OIL (Part No. 99884-80) into top end of slider tube. Install slider tube cap (7) with O-ring (6). Tighten to 22-58 ft-lbs (29.9-78.7 Nm).”

See page 1-39. Replace steps 6 through 10 of the procedure under CHANGING FORK OIL with the procedure below.

NOTE
Refer to Table 1-1. Fork oil amounts can be measured two ways.

- Use oz/ml measurement if fork is left in frame.
- Use in/mm measurement if fork is disassembled.

Filling Fork Oil—Forks Assembled, in Frame
1. Block motorcycle under frame so that the front wheel is raised off the ground slightly; this enables front fork to extend fully and allows most of spring preload (compression force) to be relieved.

11 WARNING
Wear safety glasses or goggles when servicing fork assembly. Do not remove slider tube caps without relieving spring preload or caps and springs can fly out, which could result in death or serious injury. (00297a)

2. Unscrew fork slider tube cap (1) with O-ring (2) from each slider tube (3). Replace the O-ring if damaged or worn.
3. Fill each slider tube/slider assembly with 11.6 fl oz. (342 ml) TYPE “E” HYDRAULIC FORK OIL (Part No. 99884-80).
4. Install each slider tube cap with O-ring. Tighten to 22-58 ft-lbs (29.9-78.7 Nm).
5. Lower motorcycle to the ground.

Filling Fork Oil—Forks Disassembled, out of Frame
1. Position fork tube assembly upright. Remove spring and compress assembly fully.
2. Pour approximately 12 fl oz. (355 ml) Type E fork oil into fork.
3. See Figure 1. Using Pro-Level Oil Gauge (Part No. HD-59000-A), adjust oil level to 5.75 in. (146 mm).
4. Install spring and slider tube cap with O-ring. Tighten to 22-58 ft-lbs (29.9-78.7 Nm).
5. Assemble fork and install in frame.
6. Repeat this procedure for other fork tube assembly.

<table>
<thead>
<tr>
<th>MODEL</th>
<th>OZ</th>
<th>ML</th>
<th>IN</th>
<th>MM</th>
</tr>
</thead>
<tbody>
<tr>
<td>All XL</td>
<td>11.6</td>
<td>342</td>
<td>5.75</td>
<td>146</td>
</tr>
</tbody>
</table>

Table 1-1. Type E Fork Oil Amounts

Figure 1. Refilling Front Fork Oil

Ignition Timing at Idle
See Table 3-19, page 3-3. Correct the “Timing with engine speed at 950-1050” value entry to read “10° BTDC”.

2004 Softail Models Service Manual P.N. 99482-04

Starter Jackshaft Bolt—Torque Change
The starter jackshaft bolt torque is specified as 84-108 in-lbs (9.5-12.2 Nm). The correct torque value is 60-80 in-lbs (6.8-9.0 Nm).

Correct the starter jackshaft bolt torque value in the following three spots in the service manual:

a. Page 5-1, TORQUE VALUES table
b. Page 5-8, INSTALLATION step 4
c. Page 5-16, ASSEMBLY/INSTALLATION step 7