Purpose
A revised procedure has been identified for adjusting steering head bearings on 2009 Touring model motorcycles. Please note this change is unique to 2009 models only and does not affect earlier model year vehicles.

Required Dealer Action
Inform service staff of this revised procedure and follow this method when servicing these motorcycles. Replace section 1.21 STEERING HEAD BEARINGS. Place the included pages into all 2009 Touring Models Service Manuals (Part No. 99483-09) that are in use in dealer service departments as well as unsold inventory.
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LUBRICATION

1. See Figure 1-37. Turn handlebar to the right fork stop to access grease fitting at the left side of the steering head.
2. Inject Special Purpose Grease, Part No. 99857-97 until it exits from the top and bottom of the steering head.

CHECKING

CAUTION

When lifting a motorcycle using a jack, be sure jack contacts both lower frame tubes where down tubes and lower frame tubes converge. Never lift by jacking on crossmembers, oil pan or other housings. Failure to comply can cause serious damage resulting in the need to perform major repair work. (00586c)

1. Raise the motorcycle so the front and rear wheels are lifted the same distance from the floor.
2. Verify that motorcycle is in stock configuration. Remove all non-factory accessories, since they can influence front end swing momentum (and lead to improper adjustment).
3. See Figure 1-38. Turn the front wheel to the left fork stop and then let go. The wheel should swing from side to side, finally stopping in the swing specified in the table shown below. If it stops in the lesser number swing, it should be at or after the straight-forward position.
4. If the clutch cable or main harness appears to be influencing swing momentum, proceed as follows and repeat the previous step:
   a. Clutch cable: Disconnect clutch cable from hand lever. Release cable from P-clamp, remove from inner fairing, or release from cable clip on instrument nacelle depending on model. See 2.25 CLUTCH CABLE.
   b. Main harness: Remove the rivet and P-clamp to release main harness from steering head. Secure P-clamp with a new rivet when procedure is complete.

NOTE

A steering head that is too tight can interfere with the vehicle’s ability to absorb a weave. A steering head that is too loose can interfere with the vehicle’s ability to absorb a wobble.

5. To correct a swing pattern, see 1.21 STEERING HEAD BEARINGS, Adjustment.

<table>
<thead>
<tr>
<th>Model</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Art Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLTR</td>
<td>1</td>
<td>2</td>
<td>(A)</td>
</tr>
<tr>
<td>FLHR, FLHRC</td>
<td>2</td>
<td>3</td>
<td>(A-B)</td>
</tr>
<tr>
<td>FLHX, FLHT, FLHTC, FLHTCU</td>
<td>3</td>
<td>4</td>
<td>(B-C)</td>
</tr>
<tr>
<td>TOO LOOSE</td>
<td></td>
<td>More than 4</td>
<td>(D)</td>
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</tbody>
</table>

Figure 1-37. Steering Head Bearing Grease Fitting

Figure 1-38. Steering Head Bearing Swing Count
ADJUSTMENT

1. Disassemble motorcycle as follows:
   a. **FLHR/C**: Remove headlamp nacelle. See 2.47 HEADLAMP NACELLE: FLHR/C.
   b. **FLHX, FLHT/C/U**: Remove outer fairing and radio or storage box as equipped. See 2.37 UPPER FAIRING AND WINDSHIELD: FLHX, FLHT/C/U and 7.33 ADVANCED AUDIO SYSTEM respectively.
   c. **FLTR**: Remove instrument bezel. See 2.42 INSTRUMENT BEZEL: FLTR.

2. See Figure 1-39. Loosen pinch bolts (3) on lower fork bracket.

3. Loosen the fork stem nut (1).

4. See Figure 1-40. Fashion a bearing adjuster tool using a drill rod 1/4 in. (6.4 mm) in diameter and 16 in. (406.4 mm) long.

**NOTES**

- See Figure 1-39. Turning the bearing adjuster nut (2) as little as one notch will make a noticeable difference in the swing pattern.
- Tap forks with a rubber hammer while turning adjuster nut to prevent forks from binding in lower bracket bores.

5. Turn bearing adjuster nut (2) as follows:
   a. To decrease the number of swings, rotate nut clockwise.
   b. To increase the number of swings, rotate nut counterclockwise.

**NOTE**

Original equipment fork stem nut has a blue dye coating. If a replacement nut is being installed, the replacement nut will not have the blue coating.

6. Tighten stem nut to 70-80 ft-lbs (94.9-108.4 Nm).

**NOTE**

Torque of the stem nut will affect the swing pattern.

7. Recheck the swing pattern and adjust as necessary.

8. Tighten pinch bolts to 53-57 ft-lbs (71.9-77.3 Nm).

9. Verify that the fork stem nut is tightened to 70-80 ft-lbs (94.9-108.4 Nm).

10. Recheck the swing pattern and adjust if necessary.

11. Assemble motorcycle as follows:
   a. **FLHR/C**: Install headlamp nacelle. See 2.47 HEADLAMP NACELLE: FLHR/C.
   b. **FLHX, FLHT/C/U**: Install radio or storage box (as equipped) and outer fairing. See 2.37 UPPER FAIRING AND WINDSHIELD: FLHX, FLHT/C/U and 7.33 ADVANCED AUDIO SYSTEM respectively.
   c. **FLTR**: Install instrument bezel. See 2.42 INSTRUMENT BEZEL: FLTR.

12. Install any accessories that were removed during the checking procedure.