SCREAMIN' EAGLE BIG TWIN COMPENSATOR

GENERAL

Kit Number
40100061, 42200064A, 42200095A

Models
This kit fits:
• 2006 and later Dyna
• 2007 and later Touring
• 2007 and later Softail

Additional Parts Required
• A new primary cover gasket must be ordered separately for the proper installation of this kit.
• Oil Deflector Installation Kit (Part No. 11100088). Available to dealers only.
• Stator (Part No. 30017-07): 2006 Dyna

Tools and Supplies Required
Caulk Gun Conversion Kit (Part No. 11100075).

REMOVAL

WARNING
To prevent accidental vehicle start-up, which could cause death or serious injury, disconnect battery cables (negative (-) cable first) before proceeding. (00307a)

1. Remove the seat and disconnect the battery cables, negative cable first, as outlined in the service manual. Retain all seat mounting hardware.
2. Remove the drive components as outlined in the service manual.
4. 2006 Dyna: Replace stator with new stator (Part No. 30017-07) as outlined in the service manual.

INSTALLATION

Before beginning, read and understand the MSDS for the adhesive used in the Oil Rib Installation Kit. Use only as instructed. Use appropriate safety equipment and gloves. Properly dispose of used application tip and replace cap.

1. See Figure 1. Assemble adhesive cartridge and Caulk Gun Conversion Kit (Part No. 11100075) into caulk gun (not provided).

WARNING
Rider and passenger safety depend upon the correct installation of this kit. Use the appropriate service manual procedures. If the procedure is not within your capabilities or you do not have the correct tools, have a Harley-Davidson dealer perform the installation. Improper installation of this kit could result in death or serious injury. (00333b)

NOTE
This instruction sheet references service manual information. A service manual for your year and model motorcycle is required for this installation and is available from a Harley-Davidson dealer.

Kit Contents
See Figure 7 and Table 1.
b. Part No. 62700064 for Softail or Dyna Models

4. See Figure 2. Place oil deflector (cover side up) on a clean protected surface. Apply adhesive:
   a. Apply adhesive to the perimeter of the part.
   b. Create an "X" pattern across the part.
   c. Apply adhesive to the sides that contact the primary cover.

Figure 2. Apply Adhesive

5. See Figure 3. Carefully position deflector in primary cover and press firmly into place. Slide deflector into position. DO NOT lift.

6. Install retention clip over oil deflector rib and the adjacent aluminum rib as shown.

Figure 3. Install Deflector and Retaining Clip

7. See Figure 4. Protect the outside surface of the primary cover to avoid damage. Secure the oil deflector in place using a C-clamp. Allow approximately 30 minutes before handling.

Figure 4. Clamp Components Together


9. See Figure 7. Apply a thin layer of primary chaincase oil to the sliding cam (5) splines and the outer splines of shaft extension (4). Install shaft extension with the flat side against alternator rotor.

10. The outer diameters of the springs must contact each other as shown in Figure 5.

   NOTE
   • The compensating sprocket (6) is installed with the text "this side out" facing outward.
   • Clutch hub mainshaft nut has left-hand threads. Turn counterclockwise to install.
   • The primary chain, compensating sprocket and clutch assembly must be installed as an assembly.

11. Install the sliding cam (5) with the flat face contacting the small disc spring. Lubricate the sliding cam ramps with primary chaincase oil.

12. Place the drive components (primary chain, compensating sprocket and clutch assembly) into position. A slight rotation of the chain drive aids installation onto the splines.
NOTE
When installing screw (10), make sure that the disc springs are properly aligned and that the spring nearest the rotor assembly has not slipped between the extension and rotor hub.


14. Lightly lubricate thrust bearing (8) with a thin layer of primary chaincase oil. Install thrust washer (7), bearing (8), thrust washer (7), retainer (9) and screw (10). Hand tighten.

NOTE
The compensating sprocket screw is a T70 drive. Use T70 SOCKET BIT (PART NUMBER: STX70E).

15. See Figure 6. Place the PRIMARY DRIVE LOCKING TOOL between the teeth of the engine and clutch sprockets as shown.

16. See Figure 7. Tighten compensating sprocket screw (10) to 135.6 N·m (100 ft-lbs).

17. Loosen screw one half turn (180 degrees).

18. Final tighten to 237.3 N·m (175 ft-lbs).

19. FXCW/C (Rocker), FXSTSSE3 (Screamin' Eagle Softail Springer), FXSBSE (Screamin' Eagle Softail Breakout) and FXSB/FXSB103 (Breakout) models: Install oil spinner (15) on sprocket retainer (9).

20. Rotate the compensating sprocket (6) to make sure that there is a light pressure on the sprocket from the springs. No clearance should be felt. A slight rotation should be possible by hand with the transmission in neutral.

21. Complete the assembly per instructions in the service manual:
   a. Assemble the remaining drive components.
   b. Adjust the clutch.
   c. Install the primary chain tensioner.
   d. Install the primary chaincase cover with a new gasket (sold separately).
   e. Fill the primary chaincase with lubricant.

RETURN TO SERVICE

1. Verify that the ignition/key switch is turned to the OFF position.

2. Apply a light coat of Harley-Davidson electrical contact lubricant (Part No. 99861-02), petroleum jelly or corrosion retardant material to the battery terminals. Connect the battery cables (positive cable first) as outlined in the service manual.

   ▶ WARNING
   Connect positive (+) battery cable first. If positive (+) cable should contact ground with negative (-) cable connected, the resulting sparks can cause a battery explosion, which could result in death or serious injury. (00068a)

   ▶ WARNING
   After installing seat, pull upward on seat to be sure it is locked in position. While riding, a loose seat can shift causing loss of control, which could result in death or serious injury. (00070b)

3. Install the seat as outlined in the service manual.
Figure 7. Service Parts: Screamin' Eagle Big Twin Compensator Kit

Table 1. Service Parts

<table>
<thead>
<tr>
<th>Item</th>
<th>Description (Quantity)</th>
<th>Part Number</th>
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<tbody>
<tr>
<td>*</td>
<td>Spring Pack (includes items 1 through 3)</td>
<td>83936-09A</td>
</tr>
<tr>
<td>1</td>
<td>Large disc spring (2)</td>
<td>Not sold separately</td>
</tr>
<tr>
<td>2</td>
<td>Medium disc spring (2)</td>
<td>Not sold separately</td>
</tr>
<tr>
<td>3</td>
<td>Small disc spring</td>
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<tr>
<td>*</td>
<td>Compensator Kit, 2006 and later Dyna, 2007 and later Touring, 2007 and later Softail (except models listed below) (includes items 4 through 13)</td>
<td>36500034A</td>
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<tr>
<td>*</td>
<td>Compensator Kit, FXCW/C (Rocker), FXSTSSE3 (Screamin' Eagle Softail Springer), FXSBSE (Screamin' Eagle Softail Breakout) and FXSB/FXSB103 (Breakout) models (includes items 4 through 13)</td>
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<tr>
<td>4</td>
<td>Shaft extension</td>
<td>Not sold separately</td>
</tr>
<tr>
<td>5</td>
<td>Sliding cam</td>
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</tr>
<tr>
<td>6</td>
<td>Compensating sprocket</td>
<td>Not sold separately</td>
</tr>
<tr>
<td>*</td>
<td>Bearing Service Kit (includes items 7 and 8)</td>
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</tr>
<tr>
<td>7</td>
<td>-- Thrust washer (2)</td>
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</tr>
<tr>
<td>8</td>
<td>-- Thrust bearing</td>
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</tr>
<tr>
<td>9</td>
<td>Sprocket retainer</td>
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</tr>
<tr>
<td>10</td>
<td>Screw</td>
<td>10500031</td>
</tr>
<tr>
<td>11</td>
<td>Retainer clip</td>
<td>12200065</td>
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<tr>
<td>12</td>
<td>Oil deflector, Touring models</td>
<td>62700063</td>
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<tr>
<td>13</td>
<td>Oil deflector, Dyna and Softail models</td>
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<tr>
<td>14</td>
<td>Oil spinner, FXCW/C (Rocker), FXSTSSE3 (Screamin' Eagle Softail Springer), FXSBSE (Screamin' Eagle Softail Breakout) and FXSB/FXSB103 (Breakout) models only</td>
<td>62700062</td>
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<tr>
<td>15</td>
<td>Alternator rotor assembly, as required</td>
<td>30041-08A</td>
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