### **INSTALLATION INSTRUCTIONS**

# DRAG SPECIALTIES HIGH-PERFORMANCE COMPENSATOR KIT P/N 1120-0404

**ATTENTION INSTALLER** (if other than owner): Please forward this Instruction Sheet to the purchaser of this product. These instructions contain valuable information necessary to the end user.

**INTRODUCTION:** These instructions describe the procedure for properly installing the Drag Specialties seats onto Softail models.

Review these instructions carefully before beginning, as they contain important information. Please retain for future reference.

Particularly important information is distinguished in these instructions by the following notations:

**NOTE: A NOTE** provides key information to make procedures easier or clearer.

**CAUTION:** A **CAUTION** indicates special procedures that must be followed to avoid damage to the motorcycle and/or accessories.

**WARNING!:** A **WARNING** indicates special procedures that must be followed to avoid injury to a motorcycle operator or person inspecting or repairing the motorcycle.

#### **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).

Rotor (Part No. 30041-08A): 2006-2011 Dyna, 2007-2011 Softail (except 2008-2009 FXCW, 2008-2011 FXCWC, 2009 FXSTSSE3, 2010 FXSTSE and 2011 FXSTSE2) and 2007-2010 Touring models.

Stator (Part No. 30017-07): 2006 Dyna

**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 your dealer perform the installation.

**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 your dealer.

#### **REMOVAL**

- 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.

#### **INSTALLATION**

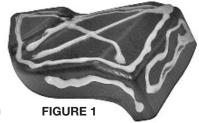
Before beginning, read and understand the MSDS for the adhesive used in the Oil Rib Installation Kit. Use only as instructed. Use appropriate safety equipment and gloves. Properly dispose of used application tip and replace cap.



- 1. Assemble adhesive cartridge and Caulk Gun Conversion Kit into caulk gun (not provided).
- Clean primary cover with contact cleaner or equivalent. Wipe the deflector installation area with rubbing alcohol to remove residue. Allow to dry completely.
- 3. Test-fit the appropriate oil deflector to the cleaned primary cover:
  - a. Part No. 62700063 for Touring Models
  - b. Part No. 62700064 for Softail or Dyna Models

**NOTE:** Before applying adhesive to part, purge the epoxy from the tube until it comes out a uniform grey.

- See Figure 1. 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.
- See Figure 2. Carefully position deflector in primary cover and press firmly into place. Slide deflector into position. DO NOT lift.
- Install retention clip over oil deflector rib and the adjacent aluminum rib as shown.



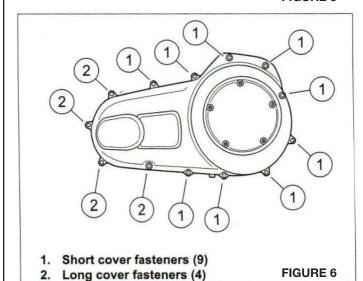
FIGURE 2



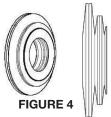
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- 7. See Figure 3. Protect the outside surface of the primary cover to avoid damage. Secure the oil deflector in place using a C-clamp. Allow approximately 30 minutes before handling.
- FIGURE 3



- 8. 2006-2011 Dyna, 2007-2011 Softail (except 2008-2009 FXCW, 2008-2011 FXCWC, 2009 FXSTSSE3, 2010 FXSTSE and 2011 FXSTSE2) and 2007-2010 Touring models: Install the new alternator rotor (15) to the engine compensating sprocket shaft per service manual instructions.
- 9. See Figure 6. 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.
- The outer diameters of the springs must contact each other as shown in Figure 4.
- 11. Install the sliding cam (5) with the flat face contacting the small disc spring. Lubricate the sliding cam ramps with primary chaincase oil.



**NOTE:** The compensating sprocket (6) is installed with the text "this side out" facing outward.

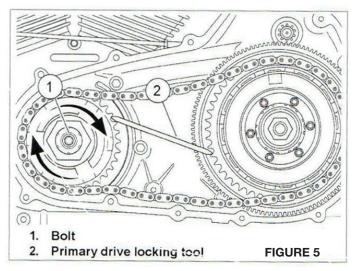
Clutch hub mainshaft nut has left-hand threads. Turn counterclockwise to install.

The primary chain, compensating sprocket and clutch assembly must be installed as an assembly.

- **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.
- 13. Clean and prime threads of clutch hub mainshaft nut. Apply two drops of HIGH STRENGTH THREADLOCKER AND SEALANT (red) to the threads. Start nut onto mainshaft. Hand-tighten.

**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.



15. See Figure 5. Place the PRIMARY DRIVE LOCKING TOOL between the teeth of the engine and clutch sprockets as shown.

NOTE: The compensating sprocket screw is a T70 drive.

16. Tighten compensating sprocket screw (10) to 100 ft-lbs.

**NOTE:** Make sure shims (14) do not fall between shaft extension and alternator rotor when loosening screw.

- 17. Loosen screw one half turn (180 degrees).
- 18. Final tighten to 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 (14) 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.



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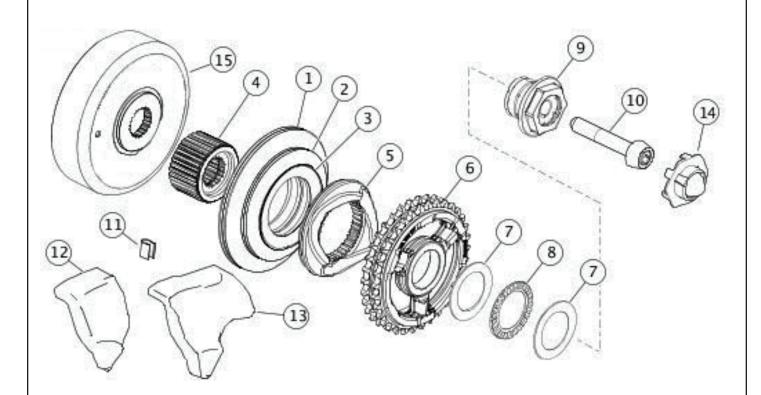
- **21.** Complete the assembly per instructions in the service manual:
  - a. Assemble the remaining drive components.
  - b. Adjust the clutch.
  - c. Install the primary chain tensioner.
  - d. Install the primary chaincase cover with a new gasket (sold separately).
  - e. Fill the primary chaincase with lubricant.
- **22.** Verify that the ignition/key switch is turned to the OFF position.

23. Apply a light coat of electrical contact lubricant, 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.

24. Install the seat as outlined in the service manual.

**WARNING!:** Before operating motorcycle, be sure all hardware is tight.



ITE	M DESCRIPTION	QTY.
1	Disc spring, large	2
2	Disc spring, medium	2
3	Disc spring, small	1
4	Shaft extension	1
5	Sliding cam	1
6	Compensating sprocket	1
7	Thrust washer	2
8	Thrust bearing	1
9	Sprocket retainer	1

ITE	MDESCRIPTION	QTY.
10	Screw	1
11	Retainer clip	1
12	Oil deflector, Touring models	1
13	Oil deflector, Dyna and Softails	1
14	Oil spinner for FXCW/C Rocker, FXSTSSE3 Screamin' Eagle	
	Softail Springer, FXSB/FXSB103 Breakout models only	1
15	Alternator rotor assembly OEM # 30041-08A	1
16	Stator assembly OEM # 30017-07	
	(required, not included for 2006 Dyna models only)	1

