



INSTRUCTIONS

J01624

2013-11-01



HIGH PERFORMANCE 1.4KW STARTER (CHROME)

GENERAL

Kit Number

31559-99A

Models

For model fitment information, see the P&A retail catalog or the Parts and Accessories section of www.harley-davidson.com (English only).

Kit Contents

See Figure 2 and Table 1. FLT Models will also require a new Oil Spout Gasket, Part Number 62432-93A (available separately).

⚠ 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 model motorcycle is required for this installation and is available from a Harley-Davidson Dealer.

INSTALLATION

⚠ WARNING

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

⚠ WARNING

Disconnect negative (-) 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. (00049a)

1. See the Service Manual. Remove the seat and disconnect the battery cables, negative cable first.
2. See the Service Manual. Remove the existing starter.

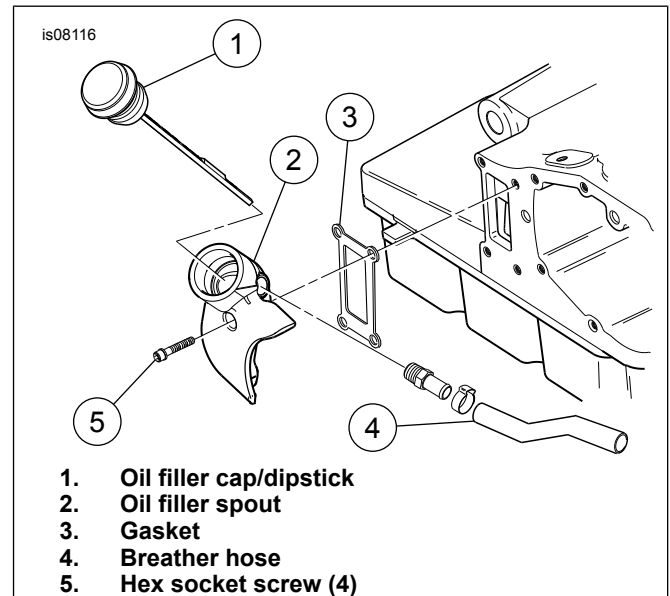


Figure 1. Remove Oil Filler Spout (FLT Models Only)

3. For all except FLT Models: See the Service Manual. Install the new starter. Proceed to Step 4. For FLT Models: See Figure 1. When installing this starter on FLT model motorcycles, remove the oil filler spout. To remove the oil filler spout on FLT Models: Screws are difficult to reach, but can be carefully removed without disconnecting the exhaust system.
 - a. Place a drain pan under the engine oil pan.
 - b. Remove the oil filler cap/dipstick (1) and set aside.
 - c. Leave the breather hose (item 4, if so equipped) to the oil filler spout (2). Remove the four hex socket screws (5) holding the spout to the transmission housing. Remove the oil filler spout. Wrap with a shop rag and set aside, out of the way.
 - d. Carefully scrape all gasket material from the transmission housing, being sure not to cut into the gasket surface on the transmission housing.
 - e. See the Service Manual. Install the new starter.
 - f. Place the new gasket (3) in position, and re-attach the oil filler spout. Tighten the screws to 7-9 ft-lbs (9.5- 12.2 Nm).
 - g. Install the oil filler cap/dipstick. Check the oil level.



⚠ 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)

4. Connect the battery cables, positive cable first.

5. See the Service Manual. Install the seat.

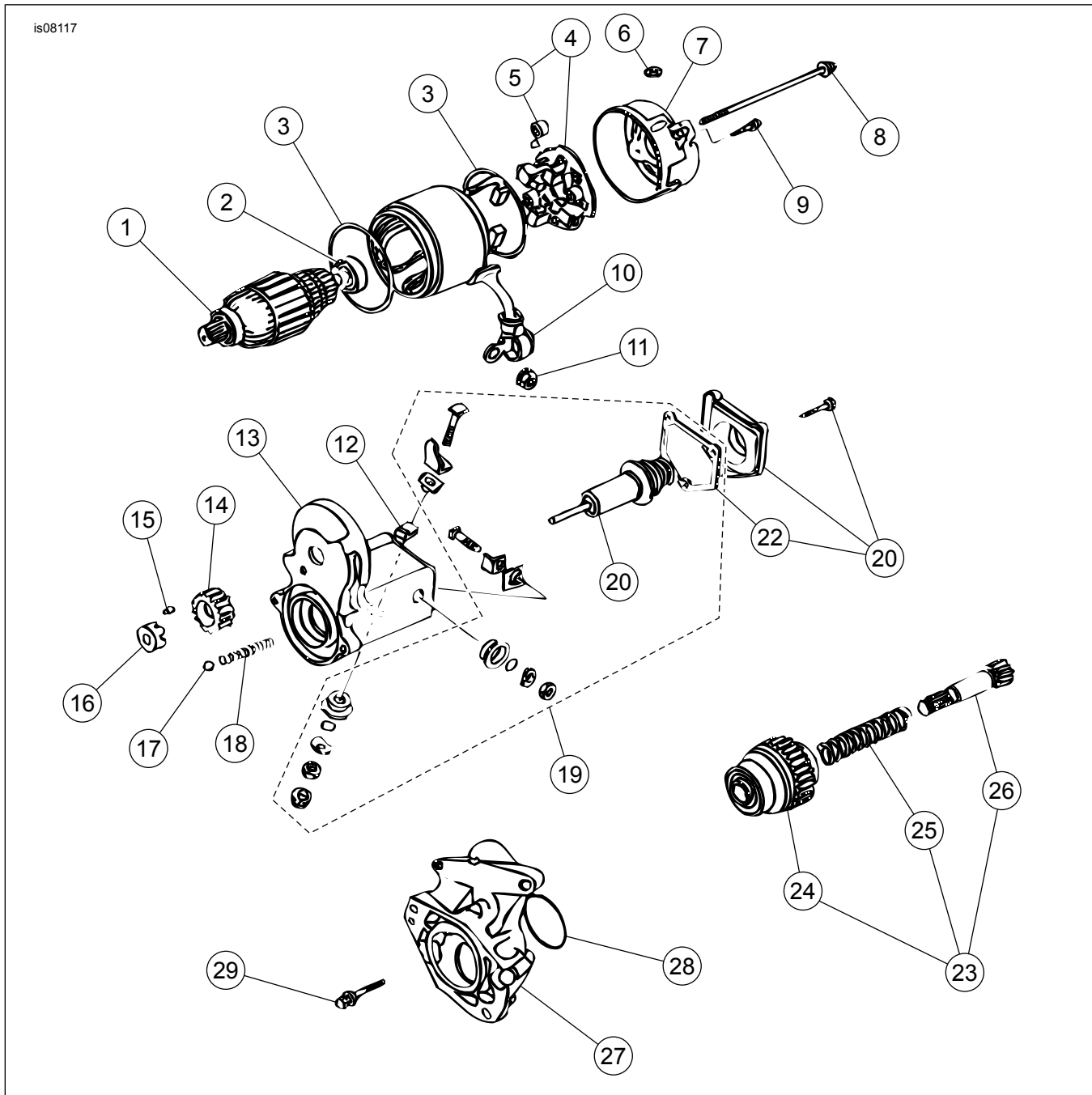


Figure 2. Service Parts

Table 1. Service Parts

Item	Description (Quantity)	Part Number
1	Bearing, Ball (15mm I.D.)	8871
2	Bearing, Ball (8mm I.D.)	8883
3	"O"-Ring, Yoke (2)	31695-90

Table 1. Service Parts

Item	Description (Quantity)	Part Number
4	Holder Assembly, Starter Brush (includes Brush Springs)	31518-90
5	Spring, Starter Brush (4)	31661-90
6	Drain Vent	31660-90

Table 1. Service Parts

Item	Description (Quantity)	Part Number
7	End Frame, Starter	Not sold separately
8	Through Bolt (Chrome) (2)	3624
9	Screw, Chrome, w/ "O"-Ring (2)	1036
10	Cap, Terminal (Rubber)	31662-90
11	Nut, Flange	3403
12	Washer	6217
13	Switch Assembly	Not sold separately
14	Gear, Idler	31525-90
15	Roller, Idler	9077
16	Retainer, Idler	31530-90
17	Ball, Steel	8879
18	Spring, Return	31600-90
19	Repair Kit, Starter (incl. Plunger and Gasket)	31604-91
20	Plunger Sub-Assembly	31665-90
21	Solenoid Cover Kit (Chrome) (includes Switch Gasket)	31783-00
22	Gasket, Switch	31687-90
23	Clutch Sub-Assembly, Starter (incl. Clutch, Spring & Shaft)	31516-94
24	Clutch, Starter	31663-90
25	Spring	31692-90
26	Shaft, Output	31664-94
27	Housing, Starter	Not sold separately
28	"O"-Ring	11116
29	Bolt, Starter (w/ Washer) (2)	928
30	Nut w/ Washer (not shown)	31694-90