



INSTRUCTIONS

-J05041

REV. 2014-09-11

SOFTAIL SPRING SEAT MOUNTING KIT

GENERAL

Kit Numbers

54375-10, 54376-10A, 54377-10A, 52000014A

Models

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

Installation Requirements

Separate purchase of a Solo Spring Saddle is required for proper installation of this kit. See a Harley-Davidson dealer, the P&A retail catalog or the Parts and Accessories section of www.harley-davidson.com (English only) for available saddles.

Loctite® 243 Medium Strength Threadlocker and Sealant-Blue (Part No. 99642-97) is required for proper installation of this kit.

For FLST/C/N models: Proper installation of this kit requires four 1/4 in (6.4 mm) flat washers (Part No. 6235 or similar), or two equal washer stacks, each with a 0.10-0.25 in (2.5-6.4 mm) thickness.

WARNING

The rider's safety depends 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. (00333a)

NOTE

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

Kit Contents

See Figure 6 and Table 1.

PREPARATION

NOTE

For vehicles equipped with security siren: Verify that the Hands-Free Fob is present. Turn the ignition key switch to IGNITION.

WARNING

To prevent accidental vehicle start-up, which could cause death or serious injury, remove main fuse before proceeding. (00251b)

1. See the service manual and remove the main fuse.

Remove the seat, grab strap (if equipped) and rear tab seat mounting hardware.

2. **For FXST and FLSTSB models:** See Figure 6. Install plug (17) in the fender hole left vacant after seat hardware removal.

For FLST/C/N models: Remove **one** large plastic retaining washer from the stud bracket. Secure the stud bracket with two flat washers (Part No. 6235, not supplied) or an equivalent washer stack with a 0.10-0.25 in (2.5-6.4 mm) thickness, and the previously removed seat mounting nut (Part No. 3633). Repeat with the remaining large plastic retaining washer.

For FXS and FLS models:

- a. See Figure 6. Install plug (17) in the fender hole left vacant after seat hardware removal. Do not remove the grab strap mounting hardware in the fender.

- b. **NOTE:** Electrical connectors are identified in the service manual by the numbers and letters shown here **within brackets**.

Follow service manual instructions to disconnect the ECM harness connector [78B] and remove the ECM.

- c. If equipped with a "tall tower" ECM caddy (see Figure 1), follow steps 2d through 2h. If **not** equipped with a tall tower caddy, proceed to Step 3.

- d. Remove the ECM caddy per service manual instructions.

- e. See Figure 1. Place the ECM caddy (3) on a firm surface. Place a straightedge (2) across the ECM caddy as shown. Mark or scribe the taller tower (1) from the **underside** of the straightedge.

- f. See Figure 2. Measure from the first line (1), and mark or scribe a second line (2) 0.12 in (3 mm) above the first line.

- g. Cut off the top of the tower at the second line with a hacksaw or similar tool.

- h. Clean all cutting debris from the tower. Place the ECM caddy into position, but do not fasten into place at this time. Install the ECM, but do not connect the harness at this time.

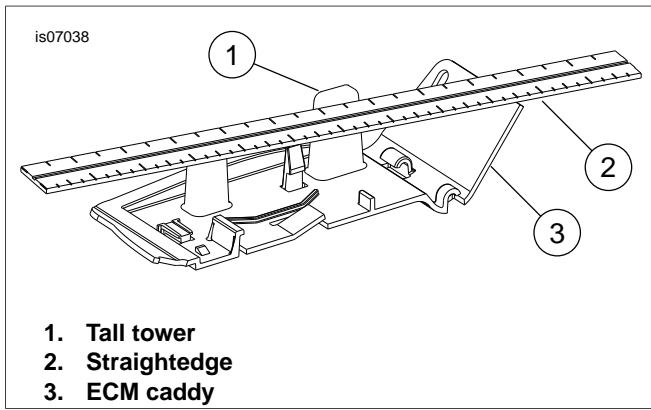


Figure 1. Place Straightedge Across Caddy

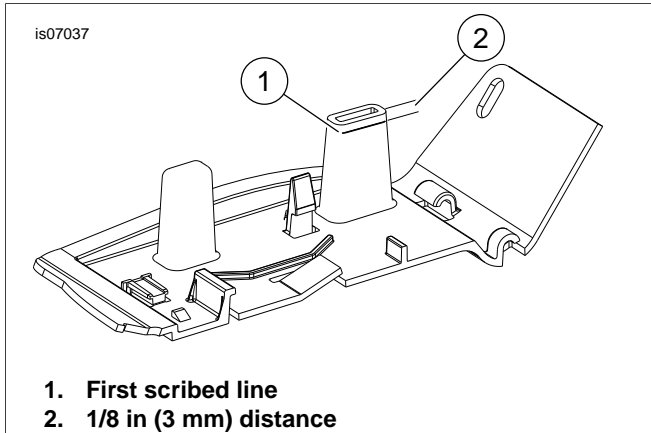


Figure 2. Cut Top of Tower

3. **For ALL models:** See Figure 3. If not already done, disconnect the ECM connector [78B] (7) and tail lamp connector [7] (2).
4. Remove the tail lamp connector (2) and data link connector (9) from the T-studs.

NOTE

If the right-side ground cables cannot be relocated to the left-side ground location, they can be mounted to the right side under the harness retaining bracket (8) later in the installation.

5. Relocate the grounding cables as follows:
 - a. Remove the right-side (5) and left-side (6) ground screws.
 - b. Secure all ground cables to the left-side ground location with the screw (6). Tighten the left-side screw to 90-110 in-lbs (10-12 Nm).
 - c. Save the right-side ground screw for later installation.

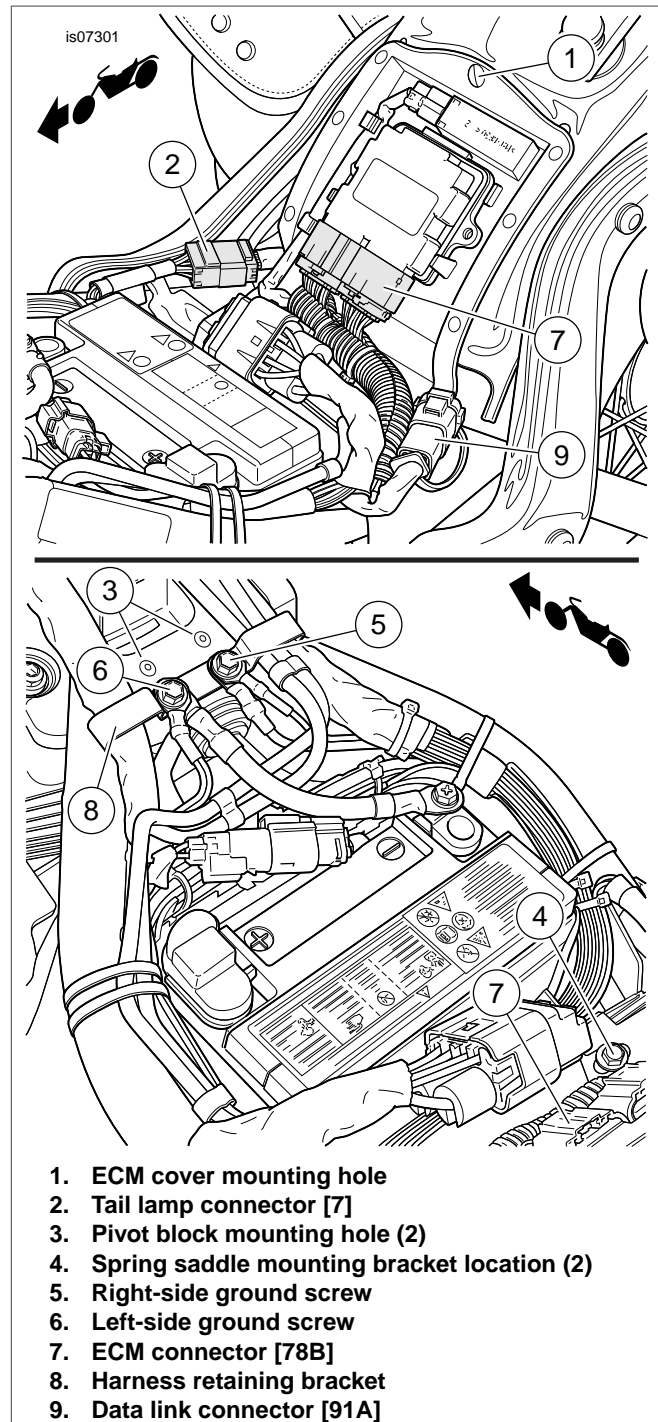


Figure 3. Install Spring Saddle

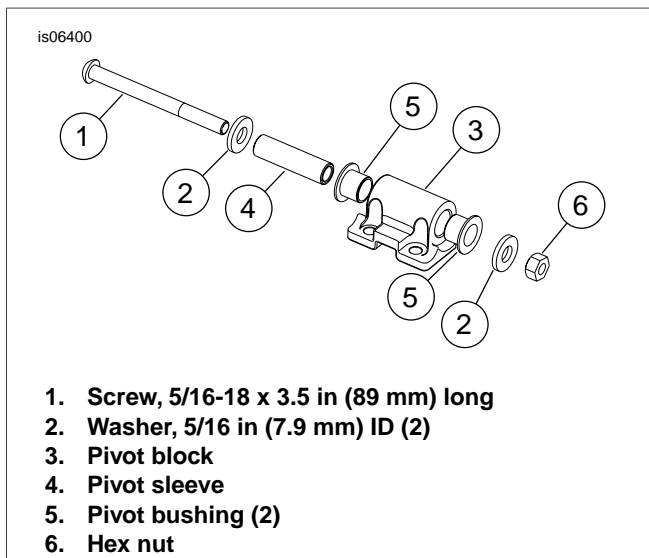


Figure 4. Pivot Block Assembly

FRAME COVER INSTALLATION

1. See Figure 4. Press two pivot bushings (5) into the pivot block (3) using one of the following methods:

Method 1, use a suitable press or vise, being careful to protect bushing surfaces, **or**

Method 2, use the supplied hardware from the kit to seat the bushings as follows:

 - a. Install two bushings (5) into the pivot block (3) and secure with the 3.5 in (89 mm) long screw (1), pivot sleeve (4), two washers (2) and nut (6).
 - b. Tighten the nut to seat the bushings until there is face contact with the pivot block.
 - c. Remove the nut, screw, pivot sleeve and washers, and save for later installation.
2. Get the two 1/4-20 x 5/8 in (16 mm) long hex socket head screws from the kit (see Figure 6, Item 8). Apply Loctite 243-Blue to the screw threads.
3. See Figure 3. Fasten the pivot block to the mounting holes at (3) with the screws from Step 2. Tighten the screws to 90-110 **in-lbs** (10-12 Nm).
4. Remove screws at (4), if equipped. The screws can be discarded or properly disposed of.
5. **FLST/C/N models:** Install the clip nut (see Figure 6, Item 20) for upper cover installation.
 - a. Using a drill, enlarge the hole (Item 1, Figure 3) to a diameter of 9/32-5/16 in (7-8 mm).
 - b. Apply paint to any metal exposed during drilling to prevent corrosion.
 - c. Install the clip nut (item 20, Figure 6) over the sheet metal edge of the ECM bracket and align the holes.
6. **FLST/C/N models:** See Figure 6. Apply Loctite 243-Blue to the threads of screws (15). Install the spring saddle mounting bracket (14) over the two spacers (21) with the two screws (15). Tighten the screws to 96-120 **in-lbs** (11-13 Nm).

All other models: See Figure 6. Apply Loctite 243-Blue to the threads of screws (15). Install the spring saddle mounting bracket (14) and two screws (15) over the mounting flange of the ECM caddy, and fasten to the vehicle frame. Tighten the screws to 96-120 **in-lbs** (11-13 Nm).

7. See Figure 3. Plug the ECM connector (7) into the ECM, and mate the tail lamp connector halves (2).

NOTES

Before installing the lower frame cover, secure any remaining right-side ground cables between the harness retaining bracket (8) and the vehicle frame.

Move harnesses as necessary to allow the frame covers to mount without interference. The ribs on the underside of the lower frame cover should rest on the battery without pinching the harness.

8. See Figure 6. Install the lower frame cover (24) using the right-side ground screw saved earlier. Tighten the screw to 90-110 **in-lbs** (10-12 Nm).
9. Install the upper frame (ECM) cover (18, 19, 22 or 23) over the ECM. Align the cover so the lower tab fits into the slot of the lower frame cover. Secure with the hex socket button head screw (16) from the kit. Tighten the screw to 60-90 **in-lbs** (7-10 Nm).

SPRING SADDLE ASSEMBLY

1. See Figure 5. Place the saddle (1) upside down on a clean surface.
2. Install each spring (2) to the seat as shown with a hex socket flat head screw (3) from the kit, but do not fully tighten at this time.
3. Align the springs so they are parallel to each other and the seat. Verify that the springs are seated against the metal seat pan under the edge of the leather. Secure the saddle to the springs. See Figure 6.

Seats with 1/2 in hole: secure with screws (13). Tighten the screws to 25-30 **ft-lbs** (34-41 Nm).

Seats with 3/8 in hole: secure with screws (26) and spacers (25). Tighten the screws to 120-144 **in-lbs** (14-16 Nm).
4. Install the seat pivot bracket (4) to the seat as shown with three hex socket head screws (6) and washers (5). The bracket will sit on top of the leather at the front of the seat. Center the screws in the bracket slots. Alternately tighten the screws to 48-72 **in-lbs** (5.5-8.0 Nm).

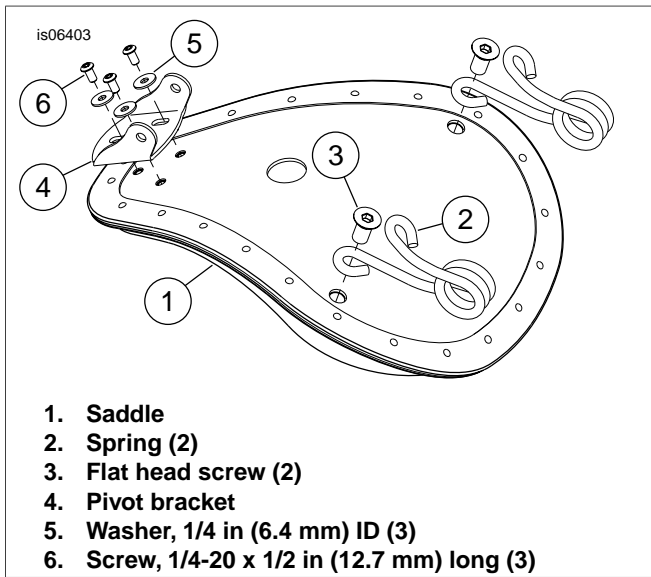


Figure 5. Install Pivot Bracket to Saddle

SPRING SADDLE INSTALLATION

1. See Figure 6. Get the 3.5 in (89 mm) long screw (1), two washers (2), the pivot sleeve (4), hex nut (6) and two pivot spacers (7) from the kit. Insert the pivot sleeve into the pivot block (3, mounted to the vehicle frame).
2. Apply Loctite 243-Blue to the threads of the long pivot screw (1).

3. Position the front pivot bracket (9, assembled to the saddle) over the pivot block.
4. Install a washer onto the threads of the screw. Insert the screw through the pivot bracket, a spacer, the pivot block and sleeve, the remaining spacer and pivot bracket. **Do not** install the nut or second washer at this time.

NOTE

*If the spring holes do not align with the rear seat bracket mounting holes, loosen the front pivot bracket on the seat and reposition until the seat and springs align properly. Tighten the pivot bracket screws to 48-72 **in-lbs** (5.5-8.0 Nm). Repeat as necessary.*

5. Pivot the seat over so the springs rest on the posts of the rear seat mounting bracket (14, fastened to the vehicle frame earlier). Position the seat so the springs align with the mounting holes on the posts.
6. See Figure 6. Secure the springs to the rear mounting bracket with flat head screws (13). Tighten the screws to 25-30 ft-lbs (34-41 Nm).
7. Secure the screw with the washer (2) and nut (6). Tighten the nut and screw to 96-120 **in-lbs** (11-13 Nm).

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)

8. See the service manual and install the main fuse.

SERVICE PARTS

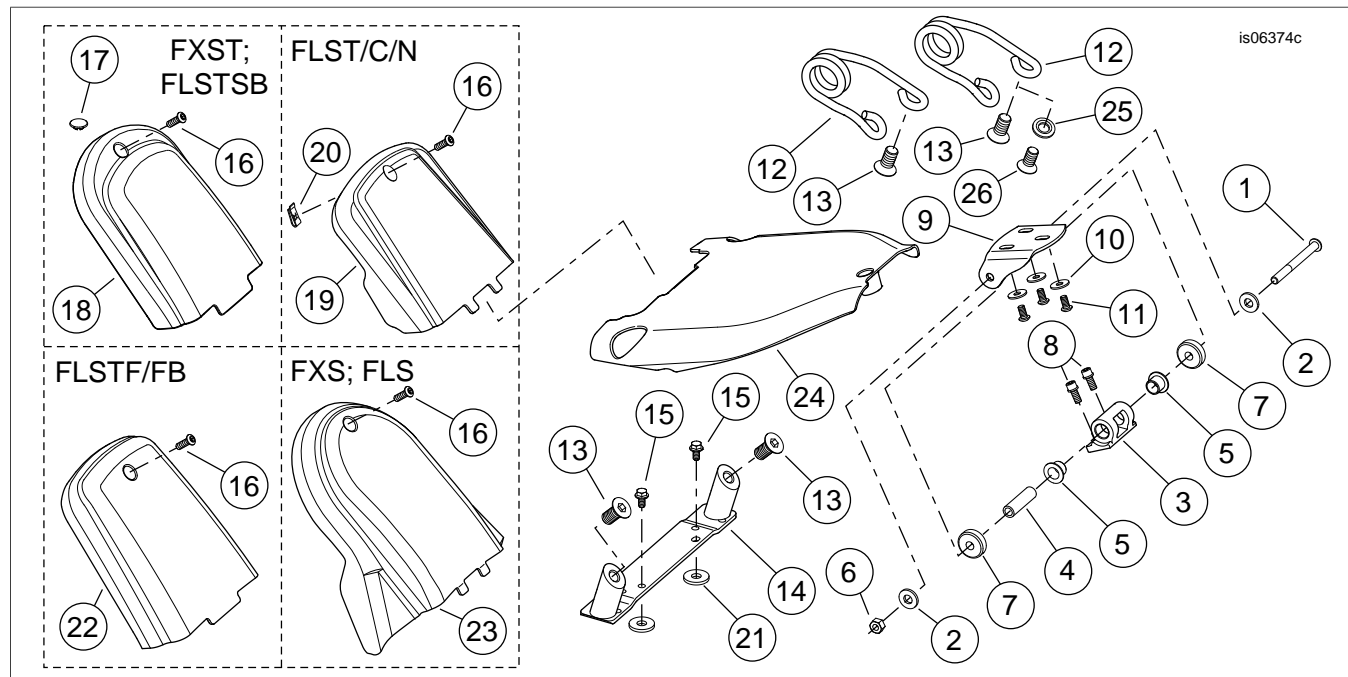


Figure 6. Service Parts: Softail Spring Seat Mounting Kit

Table 1. Service Parts

Item	Description (Quantity)	Part Number
1	Screw, hex socket button head, 5/16-18 x 3.5 in (89 mm) long	Not sold separately
2	Washer, 3/8 in (9.5 mm) ID x 13/16 in (20.6 mm) OD (2)	6400HB
3	Pivot block	52264-08
4	Pivot sleeve	9725
5	Pivot bushing (2)	52253-08
6	Hex nut, 5/16-18	7748W
7	Pivot spacer, nylon (2)	Not sold separately
8	Screw, hex socket head, with washer (SEMS), 1/4-20 x 5/8 in (15.9 mm) long (2)	3061
9	Pivot bracket	Not sold separately
10	Washer, 1/4 in (6.4 mm) ID x 3/4 in (19.0 mm) OD (3)	6253W
11	Screw, hex socket button head, 1/4-20 x 1/2 in (12.7 mm) long (3)	3063
12	Spring, seat (2)	Not sold separately
13	Screw, hex socket flat head, 1/2-13 x 1.0 in (25.4 mm) (4)	Not sold separately
14	Spring saddle mounting bracket	Not sold separately
15	Screw, hex flange head, self-tapping, 1/4-20 x 1.0 in (25.4 mm) (2)	939
16	Screw, hex socket button head, 1/4-20 x 3/4 in (19.0 mm)	923
17	Hole plug, for 0.406 in (10.3 mm) diameter hole (black)	761
18	ECM (upper frame) cover (for Kit 54375-10 only; FXST and FLSTSB models)	49801-10
19	ECM (upper frame) cover (for Kit 54376-10 only; FLST/C/N models)	49802-10
20	Clip nut, 1/4-20 (for Kit 54376-10 only; FLST/C/N models)	8108
21	Spacer, metal (2 - for Kit 54376-10 only; FLST/C/N models)	Not sold separately
22	ECM (upper frame) cover (for Kit 54377-10 only; FLSTF/FB models,)	49803-10
23	ECM (upper frame) cover (for Kit 52000014 only; FXS and FLS models,)	69200097
24	Lower frame cover	49800-10

Table 1. Service Parts

Item	Description (Quantity)	Part Number
25	Spacer, seat support (2)	52100019
26	Screw, hex button head, 3/8 in (2)	10200368