



INSTRUCTIONS

J05814

2013-11-27



ROAD ZEPPELIN AIR ADJUSTABLE SEAT KITS

GENERAL

Kit Numbers

52000145, 52000147, 52000148, 52000149, 52000150, 52000152

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

⚠ WARNING

Do not install these seat kits on motorcycles that are not equipped with an appropriate grab strap and passenger footpegs. If footpegs and grab strap are not installed, passenger could fall from moving motorcycle or grab onto operator, causing loss of control and death or serious injury. (00410b)

Models WITHOUT passenger footpegs require their installation. See the P&A retail catalog or the Parts and Accessories section of www.harley-davidson.com (English only) for the correct passenger footpegs and mounts.

FXSTC Softail Custom models with original equipment (OE) upright and king or queen seat require separate purchase of:

- A Seat Nut Kit (Part No. 59768-97).
- A seat mounting screw (Part No. 2952A).
- If desired, a passenger backrest compatible with the OE upright.

⚠ WARNING

Rider and passenger safety depend upon the correct installation of this kit. 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. (00308b)

NOTE

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

Kit Contents

See Figure 9 and Table 2.

IMPORTANT: READ BEFORE RIDING

Pressure Adjustment

1. Before sitting on the seat, inflate the seat to the point of bulging the seating surface. Inflation takes 30 pumps or more with the bulb pump.
2. While seated, adjust the air pressure first by deflating with the vent valve until seated pressure feels distributed throughout the seating surface. Experiment to find the most comfortable inflation state.
3. If too much air pressure is released, inflate the seat again with the bulb pump while either on or off the seat.
4. Periodically check to see if there is adequate pressure in the seat. Shift your weight, or lean your body (**not the motorcycle**) from side to side. The air within the seat transfers from cell to cell beneath you to redistribute the pressure.

NOTE

- *Avoid adjusting this seat while in motion. Get as close as possible to ideal seating pressure while stationary to avoid distraction while riding.*
- *Proper adjustment can only be made while the rider is seated on the cushion, in normal riding position.*
- *For optimum comfort, find the balance between air pressure and foam support from the seat. Adjust the seat according to rider and passenger size, weight, riding position and time in the saddle.*
- *Do not over-inflate! This seat works most effectively with a moderate amount of air. Over-inflation results in a floating, unstable feeling, and does not effectively distribute the seated pressure loads.*

Care and Maintenance

- When mounting or dismounting the vehicle, avoid dragging a boot or other potentially damaging object across the seat surface. Boot edges, buckles and conchos can snag and scar the seat material. This damage is NOT a warrantable condition.
- To clean the seat material, treat as furniture upholstery. Vacuum regularly to remove dust and debris embedded in the fabric. Use water and mild detergent (NOT laundry detergent) to remove minor blemishes. Commercial spot removers can also be used with light wiping or blotting. DO NOT "brush" clean as that can damage or snag the fabric.
- The seat materials are resistant to contact with all common chemicals used in and around the vehicle. However, flush with water and clean up as soon as chemical contact occurs.
- Seat fabric surfaces are treated with a water-resistant coating, but use a seat cover when vehicle is stored outdoors.



- Do not direct any high-pressure water toward seat surfaces. When washing vehicle with a pressure washer, remove the seat or use a seat cover.

Proceed to the **INSTALLATION** section for the specific model.

INSTALLATION, SPORTSTER MODELS

NOTE

Avoid scratching painted surfaces with tools or metal seat tabs during installation.

Preparation and Removal

1. Remove seat per the service manual. Save the mounting screw for installation of the new seat.
2. See Figure 1. If there is **NO seat retention nut** at the forward seat-mount location (2), install the seat retention nut from the Seat Nut Kit (Figure 9, Item 7).
 - a. Remove the plastic plug, if present, from the forward hole location in the fender by pushing up from under the fender. Save the plug.
 - b. See Figure 2. Get the cable strap (3) from the kit as an aid to install the seat retention nut (1) and washer (2). Place the nut over the cable strap so the wide end of the nut rests on the eye of the strap. Thread the cable strap up under the fender and through the fender hole. Pull up on the cable strap to hold the seat retention nut snug against the underside of the fender.
 - c. Position the seat nut rib in the fender hole notch. Slide the retention washer into the exposed retention nut slot from the rear to lock the nut in place. Remove cable strap.

3. See Figure 1. **Chopped-fender Sportster models (like 883L, 883N, 1200N, 1200V 1200X)** have a threaded hole at the rear seat mount location (4), and require a nylon step washer (Figure 9, Item 10) to protect the fender when the seat is installed. Remove the screw in the rearmost fender hole and discard. **Full-fender Sportster models:** If the motorcycle is not equipped with a seat retention nut at the rear seat mount hole location (4), one must be installed in order to install the seat.
 - a. If the retention nut from the Seat Nut Kit (Figure 9, Item 7) is available, install **that** nut. If the retention nut from the Seat Nut Kit was installed earlier, remove the mid-fender location (Figure 1, Item 3) retention nut already installed on the vehicle.
 - b. Remove the plastic plug from the rear hole location in the fender by pushing up from under the fender. Save the plug.
 - c. See Figure 2. Get the cable strap (3) from the kit as an aid to install the seat retention nut (1) and washer (2). Place the nut over the cable strap so the wide end of the nut rests on the eye of the strap. Thread the cable strap up under the fender and through the fender hole. Pull up on the cable strap to hold the seat retention nut snug against the underside of the fender.
 - d. Position the seat nut rib in the fender hole notch. Slide the retention washer into the exposed retention nut slot from the rear to lock the nut in place. Remove cable strap.
 - e. If desired, install the plastic plug removed earlier into the vacant fender hole.

Grab Strap Installation

1. See Figure 9. Get the grab strap (3), hex screw (5) and fender washer (9) from the kit.
2. Determine the correct hole choice for the grab strap from Figure 3 and Table 1. Loop the strap so the seam is on the inside and the chosen holes are aligned.
3. Place the fender washer onto the screw threads. Insert the screw through the aligned grab strap holes from the inside of the loop outward.
4. See Figure 1. At the forward hole location (2), thread the hex screw into the retention nut finger-tight.
5. Pivot the outboard ends of the grab strap around the hex screw so the strap ends cross each other at about 90 degrees with the strap ends facing rearward.
6. Tighten the screw to 6.8–10.2 N·m (60–90 in-lbs).

Seat Installation

1. From the front, insert the rear of the **new** seat through the grab strap loop until the seat front tongue engages the fuel-tank seat mount.

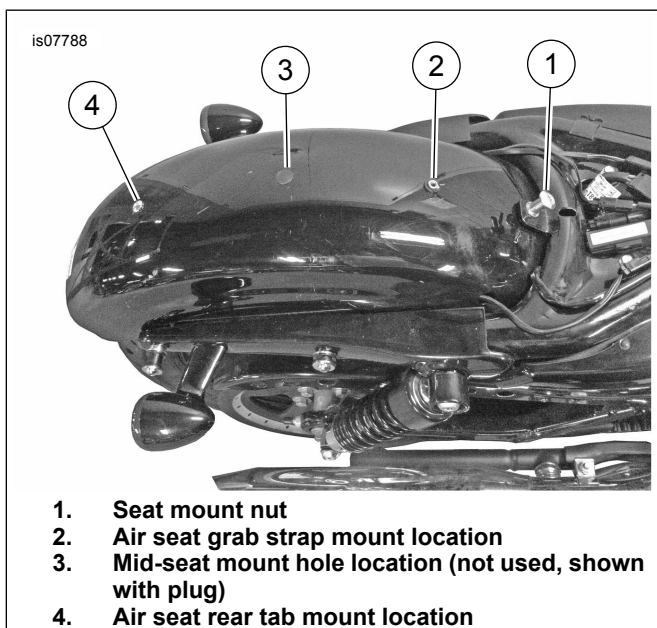


Figure 1. Sportster Rear Fender Configuration

2. Angle the front of the seat into place so the front tongue engages the slot at the rear of the fuel-tank mounting location.
3. Push the seat forward. Rotate the rear of the seat downward until the seat contacts the frame. Flex the seat slightly in the middle. Slide the seat towards the rear so that the bracket on the underside engages with the center seat post on the frame.

▲ 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. Pull up on the **center** of the seat to verify that it is locked into place. There will be a small amount of play, but the seat should be held firmly in place by the post on the underside. If the seat is not firmly in place, repeat previous steps until the seat is locked into place. See the owner's or service manual for further seat placement instruction.
5. Install the seat mounting screw removed earlier. Fasten the seat mounting bracket to the top of the rear fender.
6. **Chopped-fender models (like XL883L, 883N, 1200N, 1200V 1200X):** Place guide washer over rear seat mounting hole in fender before installing seat screw.
7. **ALL Sportster models:** Tighten the mounting bracket screw securely to the fender to 6.8–10.2 N·m (60–90 in-lbs).
8. Read and understand the **Pressure Adjustment and Care and Maintenance** sections on Page 1 before riding with your new seat for the first time.

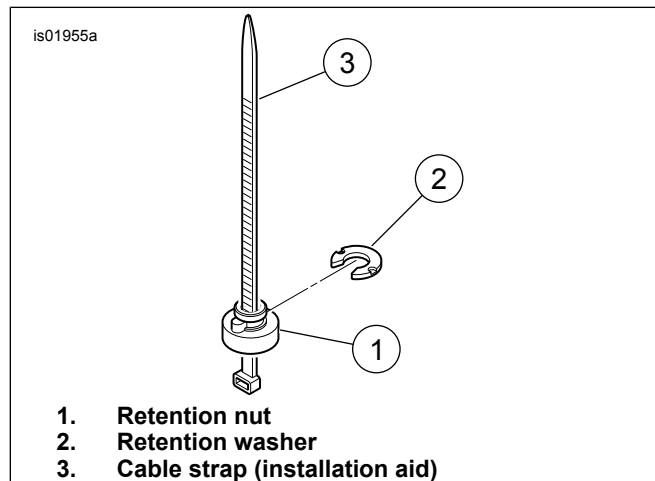


Figure 2. Install Retention Nut

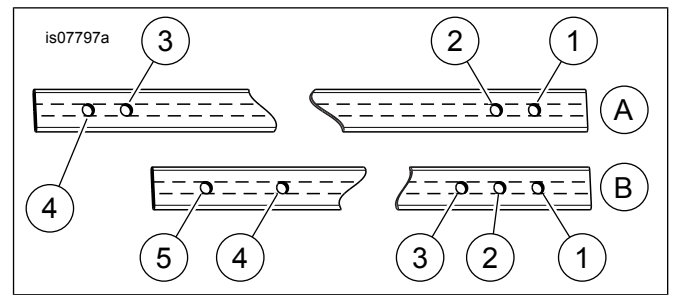


Figure 3. Grab Strap Holes

Table 1. Grab Strap Hole Selection

Kits	Models	Strap	Hole Location	Length
52000145	Sportster	A	1; 3	74.9 cm (29.5 in)
52000147	Dyna	A	1; 4	77.5 cm (30.5 in)
52000148	Softail FLSTF/B	B	3; 4	54.6 cm (21.5 in)
52000148	Softail FX	B	1; 5	64.8 cm (25.5 in)
52000149	Softail FLSTC/SC	B	2; 4	57.2 cm (22.5 in)
52000150	Softail FLSTN	B	3; 4	54.6 cm (21.5 in)
52000152	Touring	B	2; 5	62.2 cm (24.5 in)

INSTALLATION, DYNA MODELS

NOTE

Avoid scratching painted surfaces with tools or metal seat tabs during installation.

Preparation and Removal

1. Remove seat per the service manual. Save the mounting screw for installation of the new seat.
2. See Figure 4. Remove the OE grab strap (2), if present, by removing the nut and washer (1) from the forward fender location. Save the hardware for later installation. Discard the strap.
3. If small rubber cushions are attached to the rear fender, peel up at a corner to remove. Remove any residue left behind.
4. If the motorcycle is not equipped with a grab strap mount stud at the forward strap-mount hole location (1), one must be installed in order to install the seat.
 - a. See Figure 9. Get the flange screw (5) and plastic retention nut (6) from the kit.
 - b. See Figure 4. Install the flange screw from the underside of the fender through the grab strap mounting hole (1) in the fender. Secure the screw with the retention nut.

NOTE

2010-Later FXDWG Models: Check underneath the fender to verify that the flange screw head is clear of the wire guide and is installed against the fender.

5. **ALL Dyna Models:** If the motorcycle is not equipped with a seat retention nut at the rear seat mount hole location (3), one must be installed in order to install the seat.
 - a. See Figure 9. Get the retention nut kit (7) and cable strap (12) from the kit.
 - b. Remove the plastic plug from the rear hole location in the fender by pushing up from under the fender.
 - c. See Figure 2. Use the cable strap (3) as an aid to install the seat retention nut (1) and washer (2) from the retention nut kit. Place the nut over the cable strap so the wide end of the nut rests on the eye of the strap. Thread the cable strap up under the fender and through the fender hole. Pull up on the cable strap to hold the seat retention nut snug against the underside of the fender.
 - d. Position the seat nut rib in the fender hole notch. Slide the retention washer into the exposed retention nut slot from the rear to lock the nut in place. Remove cable strap.

5. Tighten the mounting bracket screw securely to the fender to 6.8–10.2 N·m (60–90 **in-lbs**).
6. Read and understand the **Pressure Adjustment and Care and Maintenance** sections on Page 1 before riding with your new seat for the first time.

Grab Strap Installation

1. See Figure 9. Get the grab strap (3), hex nut (8) and fender washer (9) from the kit.
2. Determine the correct hole choice for the grab strap from Figure 3 and Table 1. Loop the strap so the seam is on the inside and the chosen holes are aligned.
3. See Figure 4. Install the grab strap holes over the forward fender stud (1) so the stud protrudes inside the loop.
4. Place the fender washer over the stud threads. Thread the hex nut onto the stud finger-tight.
5. Pivot the outboard ends of the grab strap around the stud so the strap ends cross each other at about 90 degrees, pointing rearward.
6. Tighten the grab strap hex nut to 6.8–10.2 N·m (60–90 **in-lbs**).

Seat Installation

1. From the front, insert the rear of the **new** seat through the grab strap loop until the seat front tongue engages the fuel-tank seat mount.
2. Angle the front of the seat into place so the front tongue engages the slot between the fuel tank bracket and frame.
3. Push the seat forward. Rotate the rear of the seat downward until the seat contacts the frame.
4. Install the seat mounting screw removed earlier. Fasten the seat mounting bracket to the top of the rear fender.

⚠ 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)

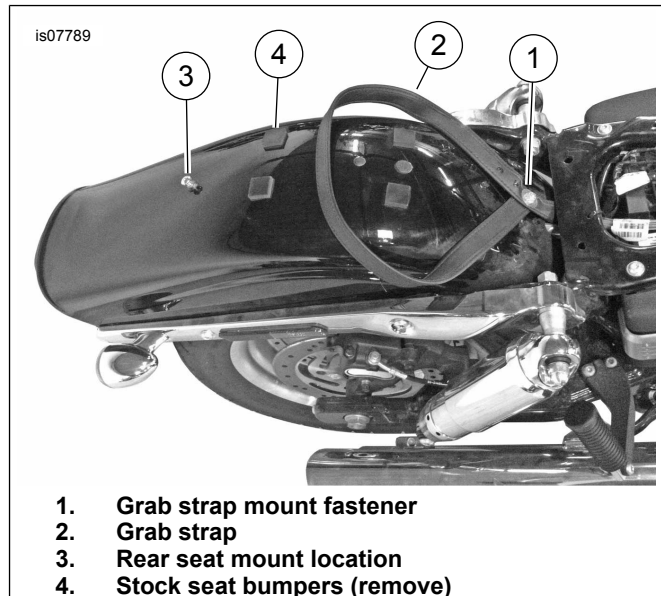


Figure 4. Dyna Model Rear Fender Configuration

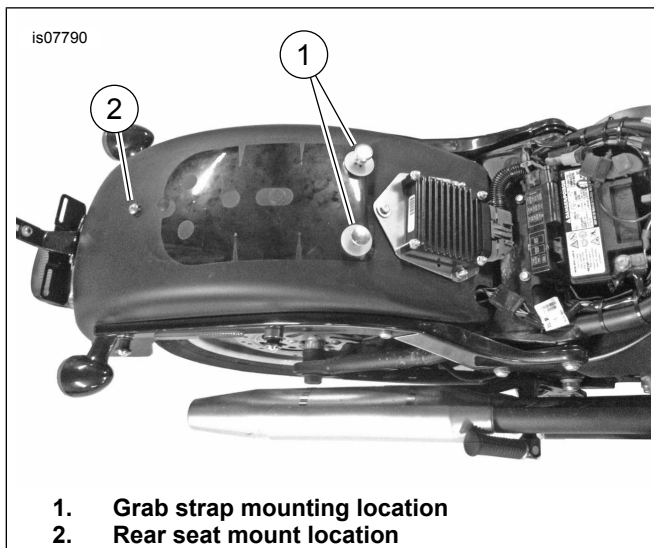
INSTALLATION, SOFTAIL MODELS

NOTE

Avoid scratching painted surfaces with tools or metal seat tabs during installation.

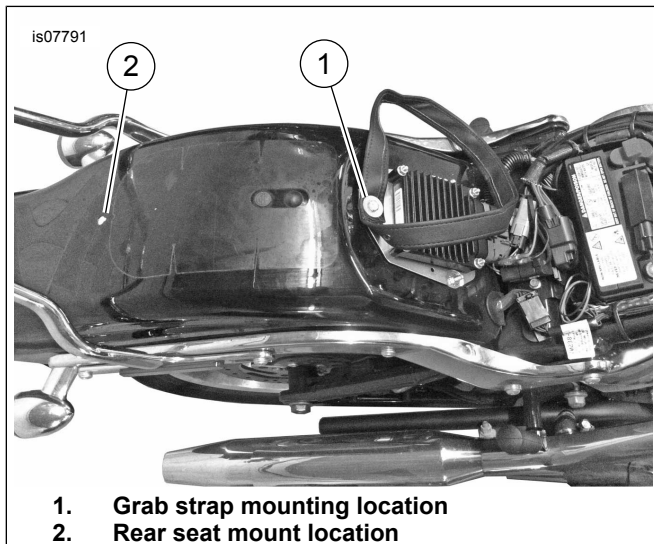
Preparation and Removal

1. Remove seat per the service manual. **FL Softail models:** Save the rearmost pillion mounting screw for installation of the new seat. Discard the two forward rider seat mounting mushroom nuts. **FXSTC models:** Discard all OE seat mounting hardware. FXSTC models require separate purchase of a Seat Nut Kit (Part No. 59768-97) and a seat mounting screw (Part No. 2952A). **ALL other FX Softail models:** Save the rearmost pillion mounting screw for installation of the new seat.



1. Grab strap mounting location
2. Rear seat mount location

Figure 5. FL Softtail Model Fender Configuration



1. Grab strap mounting location
2. Rear seat mount location

Figure 6. FX Softtail Model Fender Configuration

2. **FL Softtail models:** See Figure 5. Remove the OE grab strap from the studs (1) protruding through the fender. Discard the strap. **FX Softtail models:** See Figure 6. Remove the hex cap screw and fender washer (1). Remove the grab strap. Save the hardware for later installation. Discard the grab strap.
3. **FXSTC models** require installation of a Seat Nut Kit (Part No. 59768-97, purchased separately) at the rear seat mounting hole location (2).
 - a. Get the Seat Nut Kit. Get a cable strap from **this** kit.
 - b. Remove the plastic plug from the rear hole location in the fender by pushing up from under the fender.
 - c. See Figure 2. Use the cable strap (3) as an aid to install the seat retention nut (1) and washer (2) from the retention nut kit. Place the nut over the cable strap so the wide end of the nut rests on the eye of the strap. Thread the cable strap up under the fender and through the fender hole. Pull up on the cable strap to hold the seat retention nut snug against the underside of the fender.

- d. Position the seat nut rib in the fender hole notch. Slide the retention washer into the exposed retention nut slot from the rear to lock the nut in place. Remove cable strap.

Grab Strap Installation

1. See Figure 9. Get the grab strap (4) and flange nuts (11) from the kit.
2. Determine the correct hole choice for the grab strap from Figure 3 and Table 1. **FL models:FX models:**
 - a. Place the larger hole location number from the figure (hole 4 or 5) over the grab strap fender stud on the high-side of the vehicle with the grab strap seam facing up.
 - b. Thread a flange nut (11) onto the stud finger-tight.
 - c. Hold the grab strap straight out, perpendicular to the vehicle fender. Tighten the flange nut to 6.8–10.2 N·m (60–90 in-lbs).
 - d. The other end of the grab strap is installed after the seat is in position.
 - e. Loop the strap so the seam is on the inside and the chosen holes are aligned.
 - f. Get the hex screw and fender washer saved earlier. Insert the screw through the washer and into the aligned grab strap holes from the inside of the loop.
 - g. See Figure 6. At the grab strap hole location (1), thread the hex screw into the retention nut finger-tight.
 - h. Orient the outboard ends of the grab strap on either side of the hex screw so the strap ends oppose each other, pointing outward.
 - i. Tighten the grab strap hex screw to 6.8–10.2 N·m (60–90 in-lbs).

Seat Installation

⚠ 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)

1. **FL models:FX models:**
 - a. Angle the front of the new seat into place so the front tongue engages the slot in the frame.
 - b. Place the seat in final position. Slightly push up the seat on the fender toward the high side of the vehicle. Wrap the grab strap over the "waist" of the seat.
 - c. Determine the correct hole choice for the **free end** of the grab strap from the smaller number side in Figure 3 and Table 1. A hole from the larger number side was chosen for the end already installed.

- d. Wrap the grab strap around the seat, aligning the correct second hole with the remaining grab strap fender stud. The remainder of the close-fitting grab strap installation is done in tight quarters under the partially installed seat.
 - e. Thread a flange nut onto the fender stud finger-tight.
 - f. Pull the grab strap straight out, perpendicular to the vehicle fender. Tighten the flange nut to 6.8–10.2 N·m (60–90 **in-lbs**).
 - g. Push the seat forward. Rotate the rear downward until the seat contacts the frame.
 - h. Install the seat mounting screw removed earlier. Fasten the seat mounting bracket to the top of the rear fender.
 - i. Tighten the mounting bracket screw securely to the fender to 6.8–10.2 N·m (60–90 **in-lbs**).
 - j. From the front, insert the rear of the **new** seat through the grab strap loop until the seat front tongue engages the fuel-tank seat mount.
 - k. Angle the front of the new seat into place so the front tongue engages the slot in the frame.
 - l. Push the seat forward. Rotate the rear of the seat downward until the seat contacts the frame.
 - m. Install the seat mounting screw removed earlier. Fasten the seat mounting bracket to the top of the rear fender.
 - n. Tighten the mounting bracket screw securely to the fender to 6.8–10.2 N·m (60–90 **in-lbs**).
3. **2013-earlier models:** Remove the grab strap. **2014-later models:** Remove the grab strap.
 - a. See Figure 7. Remove the left side screw (1) and washer (2). Remove the bracket (4) and passenger grab strap (3).
 - b. Repeat for the right side saddlebag mounting bracket.
 - c. See Figure 8. Remove the grab strap screws (4), washers (5) and grab strap (3) from the vehicle. Discard hardware and grab strap.
 - d. Grab strap mount brackets (6) can be left on the vehicle or removed. IF removed, install the mount bracket fastener removed earlier per the service manual.

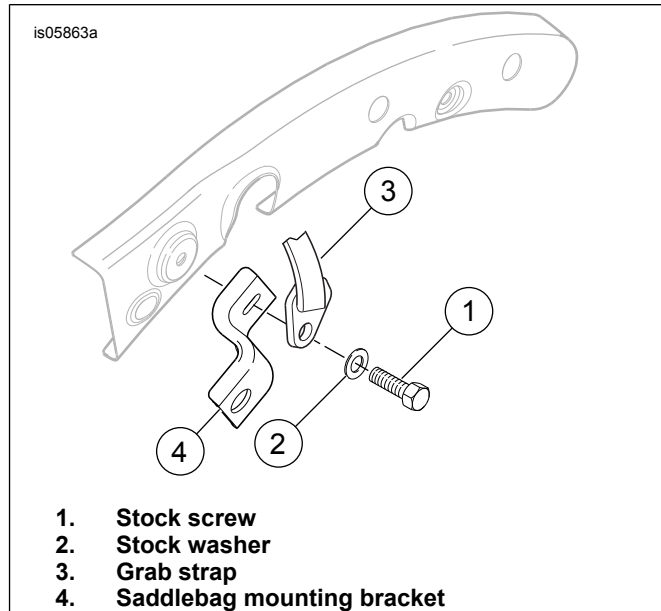


Figure 7. Remove and Install Grab Strap

▲ 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)

2. **ALL Softail models:** Read and understand the **Pressure Adjustment** and **Care and Maintenance** sections on Page 1 before riding with your new seat for the first time.

INSTALLATION, TOURING MODELS

Preparation and Removal

NOTE

Avoid scratching painted surfaces with tools or metal seat tabs during installation.

1. Remove seat per the service manual. Save the mounting screw for installation of the new seat.
2. Remove the left and right saddlebags per the service manual. Save all hardware for installation.

NOTE

Record the orientation of the saddlebag mounting brackets before removing the bracket fasteners.

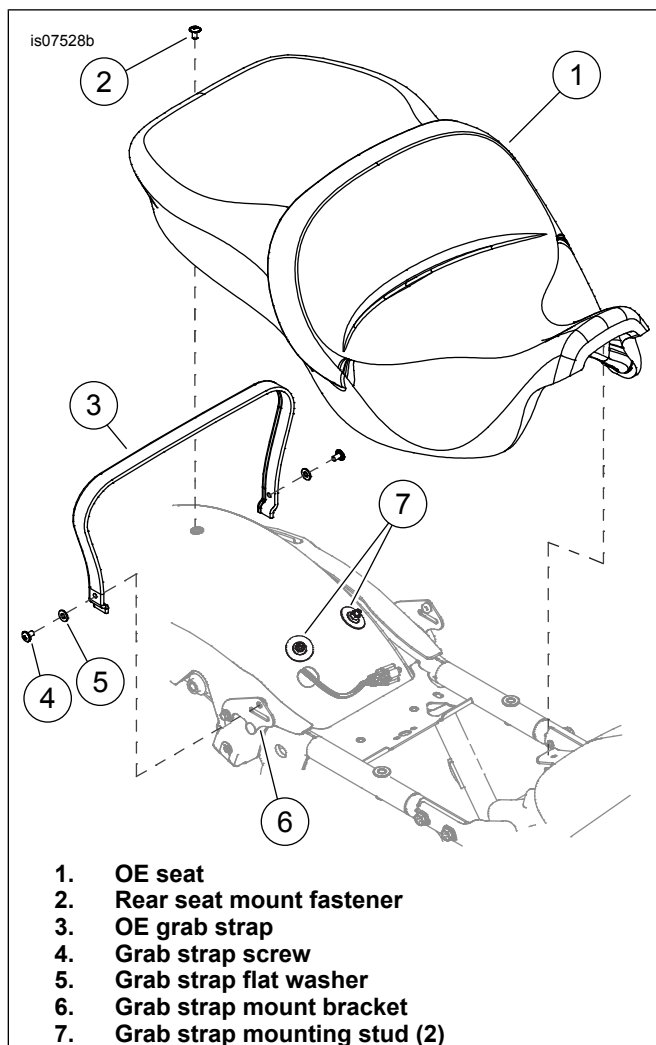


Figure 8. 2014 - Later Touring OE Seat and Grab Strap

4. Remove the two flanged nuts from the studs (7) near the front of the rear fender. Keep assemblies separate until installation.
5. **Models with fender trim strips:** Remove the trim strips from the rear fender.
 - a. Cover the tip of a regular screwdriver with tape to protect chrome and painted surfaces.
 - b. Insert the tip of the screwdriver between the chrome bezel and the rubber trim strip.
 - c. Pry up the bezel enough to grip. Pull up the bezel away from the rubber trim strip.
 - d. Starting at either end, peel the rubber trim strip away from the fender.
 - e. Clean the trim strip area with a 50-50 mixture of isopropyl alcohol and distilled water. Allow to dry completely.

Grab Strap Installation

1. See Figure 9. Get the grab strap (4) from the kit.

2. See Figure 3 and Table 1 for the correct hole choice (5 and 2) for the grab strap.
 - a. Place hole 5 from the figure over the grab strap fender stud on the high-side of the vehicle with the grab strap seam facing up.
 - b. Thread a flange nut (11) from the kit over the stud. Snug finger-tight.
 - c. Loop the strap so hole 2 can be placed over the remaining fender stud.
 - d. Thread the second flange nut (11) over the stud. Snug finger-tight.
 - e. Hold the grab strap straight out, perpendicular to the vehicle fender. Tighten the flange nut on that side to 6.8–10.2 N·m (60–90 **in-lbs**).
 - f. Hold the grab strap straight out in the opposite direction. Tighten the second flange nut to 6.8–10.2 N·m (60–90 **in-lbs**).

Seat Installation

1. From the front, insert the rear of the **new** seat through the grab strap loop until the seat front slot can engage the fuel-tank seat mount tongue.
2. Angle the front of the seat into place so the front slot engages the tongue of the frame.
3. Push the seat forward. Rotate the rear of the seat downward until the seat contacts the frame.
4. Install the seat mounting screw removed earlier. Fasten the seat mounting bracket to the top of the rear fender.

▲ 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)

5. Tighten the mounting bracket screw securely to the fender to 6.8–10.2 N·m (60–90 **in-lbs**).
6. If removed, install the saddlebags to the motorcycle per the instructions in the service manual. Secure with the original bail head studs and flat washers.
7. **2013-earlier models:** Tighten the forward saddlebag mounting bolts to 13.6–16.3 N·m (10–12 **ft-lbs**).
8. **ALL models:** Adjust backrest pads and wiring as necessary.
9. Read and understand the **Pressure Adjustment** and **Care and Maintenance** sections on Page 1 before riding with your new seat for the first time.

SERVICE PARTS

Table 2. Service Parts

Kit	Item	Description (Quantity)	Part Number
KIT 52000145 Sportster	1	Seat	Not sold separately
	2	Kit, Rear Seat Tab Mounting	51699-09
	3	Grabstrap, Sportster and Dyna models	52400100
	5	Screw, Hex Hd, 1/4-20 x 1.0 in	3574
	6	Nut, Plastic, 1/4-20 (Dyna models only)	7891
	7	Kit, Seat Nut	59768-97
KIT 52000147 Dyna	8	Nut, KEPS, 1/4-20 in (Dyna models only)	7792
	9	Washer, fender, 1/4 in	6036
	10	Washer, Nylon Step	7487
	12	Cable Strap	10039
	KITS 52000148, 52000149 and 52000150 Softail	1	Seat
2		Kit, Rear Seat Tab Mounting	51699-09
4		Grabstrap, Softail and Touring	52400101
11		Nut, Hex Flange, 5/16-18 in (2)	7499
KIT 52000152 Touring	1	Seat	Not sold separately
	2	Kit, Rear Seat Tab Mounting	51699-09
	4	Grabstrap, Softail and Touring	52400101
Items on seat identified (see Inset)			
	A	Seat cover fabric	
	B	Independent air cell bladder systems	
	C	Rider bulb pump (for inflation)	
	D	Rider release valve (for deflation)	
	E	Passenger bulb pump (for inflation)	
	F	Passenger release valve (for deflation)	

SERVICE PARTS

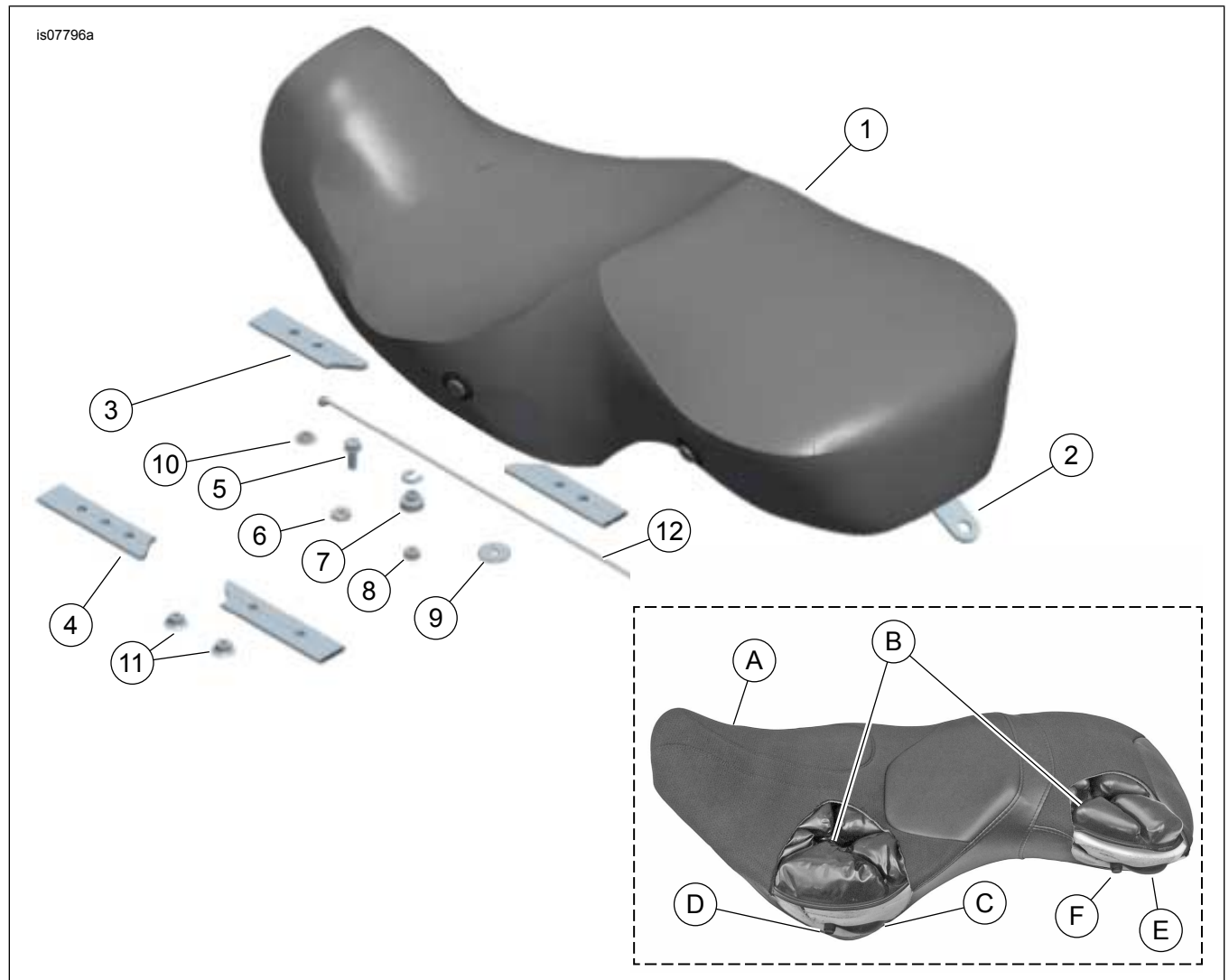


Figure 9. Service Parts, Road Zeppelin Air Adjustable Seat Kits