



INSTRUCTIONS

J02478

2006-08-11



FXST AND FLSTS SOFTAIL SADDLEBAG KIT

GENERAL

Kit Number

90225-XX

Models

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

This kit will not fit bikes equipped with the following accessories:

Table 1.

Description	Part Number
Axle cover kit	48056-97A
Chrome 3-channel luggage rack w/handrail	53831-00
Chrome 3-channel luggage rack w/handrail	53465-87B
Chrome rear saddlebag guards	49158-89D
Chrome 3-channel luggage rack/fender rack	53461-90
Flat lens turn signal kit	68431-95
Flat lens turn signal kit	68432-95

Additional Parts Required

Installing these saddlebags on models equipped with a **Detachable Sissy Bar or Detachable Luggage Rack** requires the additional purchase of mounting hardware kit as follows:

Table 2. Additional Mounting Hardware

Hardware Kit	Fitment
53075-03	2003 and later FXST models with detachables
53009-03	1987 through 2002 FXST models with detachables

⚠ 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.

⚠ WARNING

Do not exceed saddlebag weight capacity. Put equal weight in each bag. Too much weight in saddlebags can cause loss of control, which could result in death or serious injury. (00383a)

NOTE

Maximum saddlebag weight capacity is 7 lbs (3.2 Kg)

Wide Tire

If a wide tire kit has been installed, utilize the hardware and installation instructions found in that kit to reorient the fasteners to come from the inside to the outside of the fender.

⚠ WARNING

Button head screws from wide tire kit must be installed with button heads on inside of fender. Fastener contact with tire can lead to premature tire failure, which could result in death or serious injury. (00417b)

Kit Contents

See Service Parts section for a list of Service Parts.

INSTALLATION

1. Remove seat.

⚠ 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)

2. Disconnect battery cables, negative cable first.

Remove Turn Signals

1. Refer to the Appendix covering Amp Electrical Connectors in applicable Service Manual and locate left and right signal wiring at turn signal connector under seat. Unplug connector and following instructions in Service Manual, remove terminals from connector.



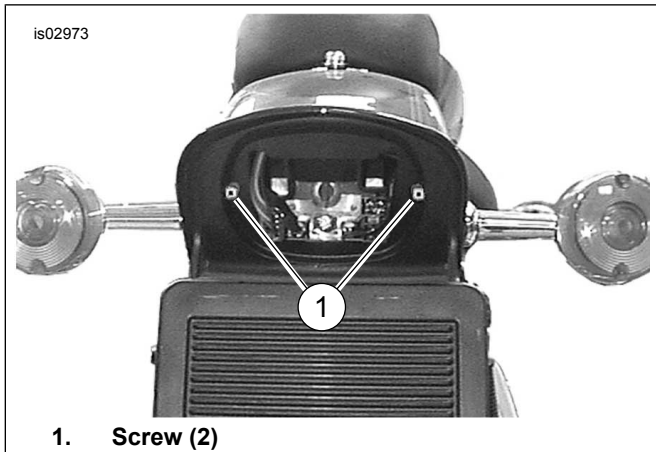


Figure 1. Remove Tail/Stop Lamp Lens (2000 FXSTS Shown)

2. On 1987 to 1999 FXST models, remove wiring from clips under fender (from signals to front of fender). Repeat for opposite side. On 2000 and later FXST models, perform the following: On 2005 and later FLSTS models, perform the following:

- a. See Figure 1. Remove two screws (1) securing tail/stop lamp lens assembly and remove lens assembly.
- b. See Figure 2. Disconnect left (1) and right (2) turn signal (2-Place) connectors from sockets. Refer to Appendix covering Amp Electrical Connectors and remove left and right signal wires from connectors. Save connectors for installation.
- c. See Figure 3. Remove turn signal wiring (running from signal to tail/stop lamp assembly from clip (1) under rear of fender and pull signal wire out. Repeat for the opposite side.
- d. From under fender, disconnect left and right turn signal wires.
- e. Cut off turn signal connector from turn signal wire as close to connector as possible. Discard old connectors.
- f. Remove turn signals and turn signal mounting brackets.

NOTE

When performing Steps 3 through 5, completely perform steps for one side before continuing to the opposite side. This will provide support for the fender during removal.

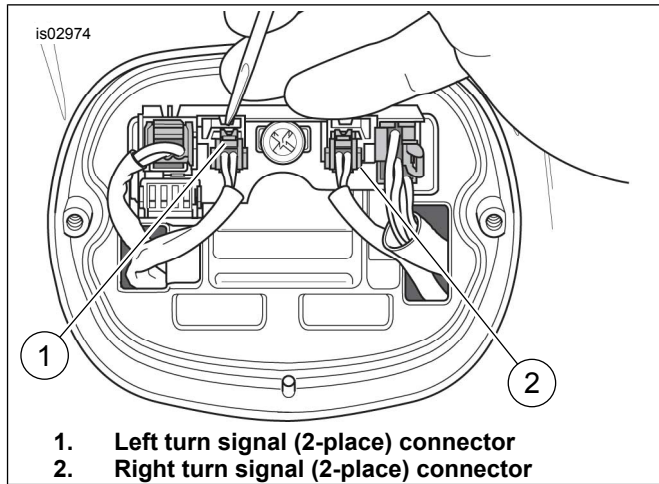


Figure 2. Disconnect Turn Signals (2000 and later FXST)

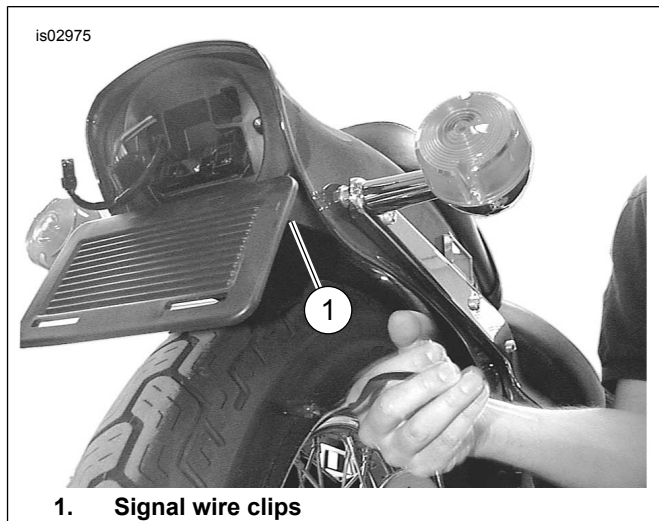


Figure 3. Remove Signal Wires from Clips

3. See Figure 4. Remove hardware (1) securing right side strut and gently pull wiring out through fender.

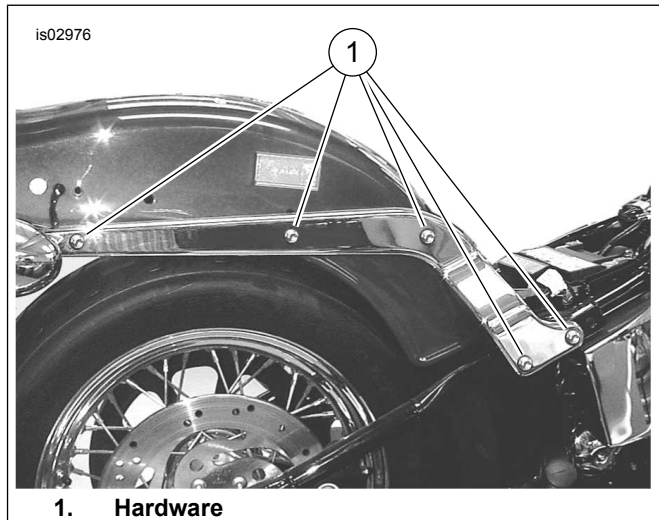


Figure 4. Strut Mounting Hardware

4. Remove turn signal and standoff hardware from strut, then remove signal from standoff. Carefully pull signal wire out through standoff. Discard standoff.

5. Install fender strut using original hardware and snug into place.
6. Repeat Steps 3 through 5 for the opposite side.

Install Saddlebag Supports

NOTE

If Wide Tire Kit is installed, refer to Instruction Sheet provided with Wide Tire Hardware Kit 90299-00.

Select the correct hardware to complete the next steps.

When installing these saddlebags without detachables, select the correct hardware from this kit:

2003 and later models 3/8-16 x 1-3/8 inch socket head screws (Part Number 4029A)

1987 to 2002 models- 3/8-16 x 1-5/8 inch socket head screws (Part Number 4371 WA)

When installing these saddlebags with detachables select the hardware provided in kit:

2003 and later models 3/8-16 x 2-1/4 inch screws (Part Number 1002)

1987 to 2002 FXST models 3/8-16 x 2-1/2 inch screws (Part Number 53009-03)

▲ WARNING

Be sure fasteners do not extend inward beyond fender mounting bracket. Fastener contact with tire can lead to premature tire failure, which could result in death or serious injury. (00389a)

NOTE

Do not use the 2-1/2 inch screws if docking hardware is not present.

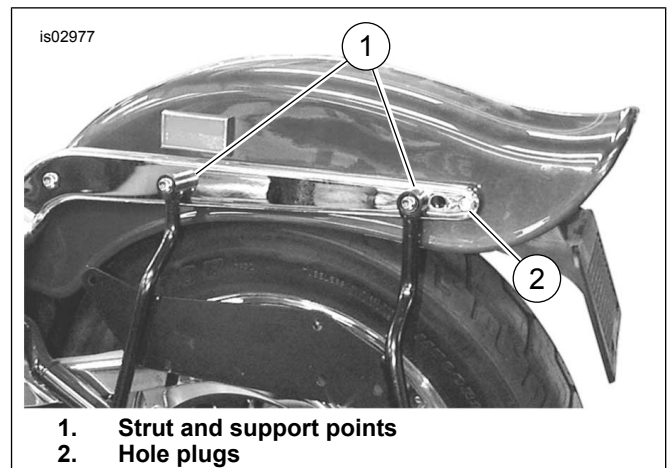
1. See Figure 5. Install saddlebag support to strut and fender as shown using two socket head screws and: **1987 to 2002 models** use flange nuts (Part Number 7601) provided in this kit. **2003 and later models** re-use the original stud plate from the vehicle. If docking hardware is installed, install docking points between strut and support (1). Tighten fasteners to 27 ft-lbs. (37 Nm).
2. If docking hardware is installed, obtain chrome plated hole plugs from kit and press into holes to cover original turn signal mounting locations (2).
3. Repeat Steps 1 and 2 for the opposite side.

Install Signal Lamp Relocation Bars

1. See Figure 6. Obtain signal lamp relocation bar (1) and fasten to support as shown using two screws (2), (Part Number 3540) and nuts (Part Number 7739). Repeat for the opposite side.

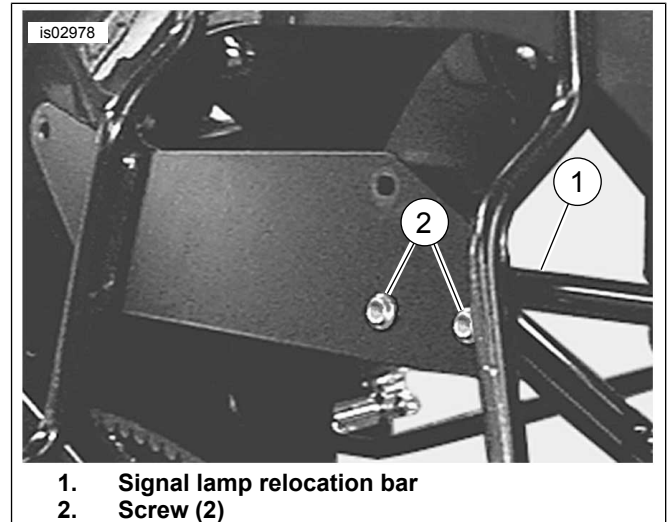
NOTE

On 1987-1994 models, when performing the next step, note that the signal lamp will have only one wire (Power) exiting the lamp. On these models, obtain the ground strap (Part Number 70507-00) from kit.



1. Strut and support points
2. Hole plugs

Figure 5. Install Saddlebag Support Screws



1. Signal lamp relocation bar
2. Screw (2)

Figure 6. Install Turn Signal Relocation Bar

2. See Figure 7. Obtain signal lamp and route lamp wiring (1) through relocation bar (2) as shown.

NOTE

On 1987-1994 models, during the next step, install ring terminal from ground strap to mounting screw when securing signal lamp to relocation bar. Secure ground wire to relocation bar using cable straps.

NOTE

Perform Step 3 to install 3 inch (Standard Style) Signal Lamps. Perform Step 4 to install 2-3/8 inch (Bullet Style) Signal Lamps.

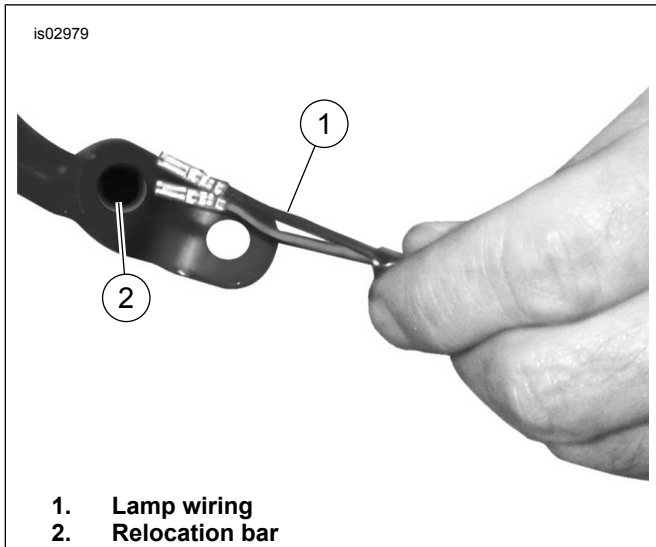


Figure 7. Route Signal Wiring

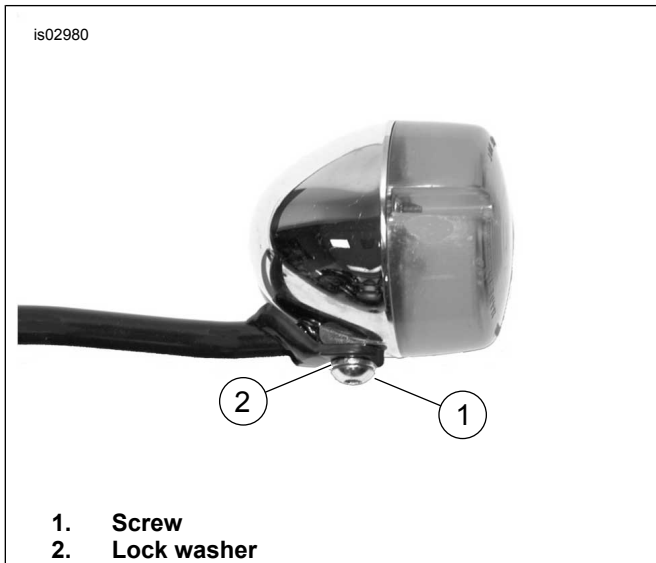


Figure 8. Installing 3 Inch Turn Signals (Standard Style)

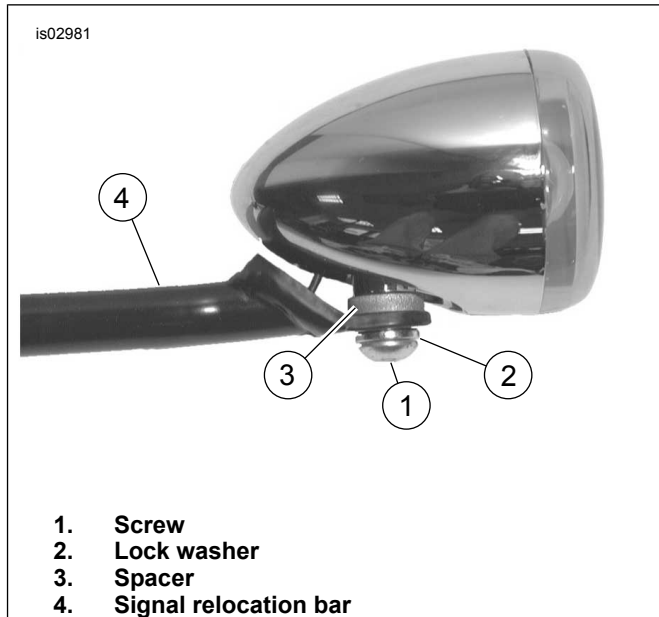


Figure 9. Installing 2-3/8 Inch Turn Signals (Deuce Style)

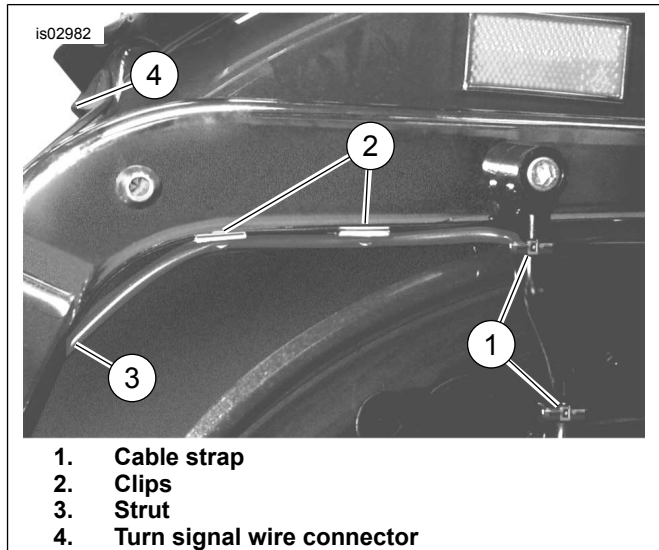


Figure 10. Route Wiring and Install Clips

3. **Installing 3 inch (Standard Style) Signal Lamps**, see Figure 8. Apply Loctite 243 (Blue) (Harley-Davidson Part Number 99642-97) to screw (1), (Part Number 3538). Using screw and lock washer (2) (Part Number 7041), attach lamp to signal relocation bar as shown. Tighten securely. Repeat Steps 2 and 3 for the opposite signal.
4. **Installing 2-3/8 inch (Bullet Style) Signal Lamps**, see Figure 9. Apply Loctite 243 (Blue) (Harley-Davidson Part Number 99642-97) to screw (1), (Part Number 4092). Using screw, lock washer (2), (Part Number 7041) and spacer (3), (Part Number 65849-01), attach lamp to signal relocation bar (4) as shown. Spacer should be installed between signal and signal relocation bar. Tighten securely. Repeat Steps 2 and 4 for the opposite signal.

NOTE

On 2000 and later FXST models, obtain turn signal extension wiring (Part Number 72509-00) and 2-place connectors saved earlier. Refer to Appendix covering Amp Multilock Connectors and install terminals from existing wiring to 2-place connectors. Connect 2-place male connector to 2-place female connector of wiring extension. Repeat for the opposite side.

5. **On 2005 and later FLSTS models**, perform the following:
 - Remove adhesive backing from 2 adhesive clips (Part Number 10102) and install to support plate. Route wiring from relocation bar along support plate and bend clip tabs to capture wiring.
 - a. Obtain turn signal extension wire (Part Number 72508-00).
 - b. Cut off the 2-place wire connector.
 - c. Butt splice the turn signal extension wires to the turn signal wires. Match black-to-black and violet-to-violet.
6. See Figure 10. Continue routing wiring up the inside of front saddlebag support hanger and fasten wiring to hanger using cable straps (1), (Part Number 10006) provided in kit. Clip excess plastic from ends of straps. Remove adhesive backing from 2 clips and install to bottom of strut as shown (2). Insert wiring into each clip and bend tabs to capture wiring.

7. Continue to route wiring under strut (3) and around front of fender to turn signal wire connector (4) (right side of fender under seat).
8. **On 1987 to 1999 models**, refer to Appendix covering Amp Multilock Electrical Connectors and install power wire terminal to turn signal connector. Attach ring terminal end of ground strap to appropriate chassis ground. **On 2000 and later FXST models**, refer to Appendix covering Amp Multilock Electrical Connectors in Service Manual and install signal wiring terminals to turn signal connector. **On 2005 and later FLSTS models**, perform the following:
 - a. Locate the 8-place wire connector under seat for the rear lighting harness.
 - b. Remove rear turn signal wires from the connector. Note the location of each wire. Cavity 1, Brown wire for right turn signal. Cavity 3, Violet wire for left turn signal. Cavity 4 and 8, Black wires for turn signal ground.
 - c. Connect new turn signal wires into the main harness connector in locations of the original turn signal wires.
 - d. Re-connect the main connector.

NOTE

In some cases, after routing, the power wire may be too short to reach connector. If this is the case, refer to section covering "Installing Sealed Butt Connectors" in Electrical Section of Service Manual. Measure and cut a section of wire from the turn signal extension (Part Number 72509-00) provided in kit. Cut terminal end off leaving approx. 3 inches of wire. Using butt connectors (Part Number 70596-93) provided, splice jumper between original wire and terminal end. Install power and ground as described in Step 8.

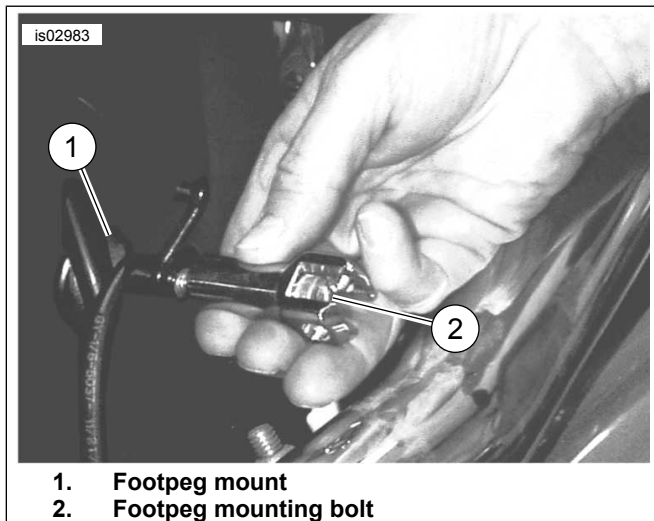


Figure 11. Remove Footpeg and Mount

9. Repeat Steps 5 through 8 for the opposite signal.

Remove Rear Footpegs and Mounts

NOTE

Reference the appropriate service manual for procedure to remove the splash guard from the front of the swing arm. Splash guard removal will provide easier access to fasteners when removing the exhaust mounting bracket hardware and left side footrest mounting hardware.

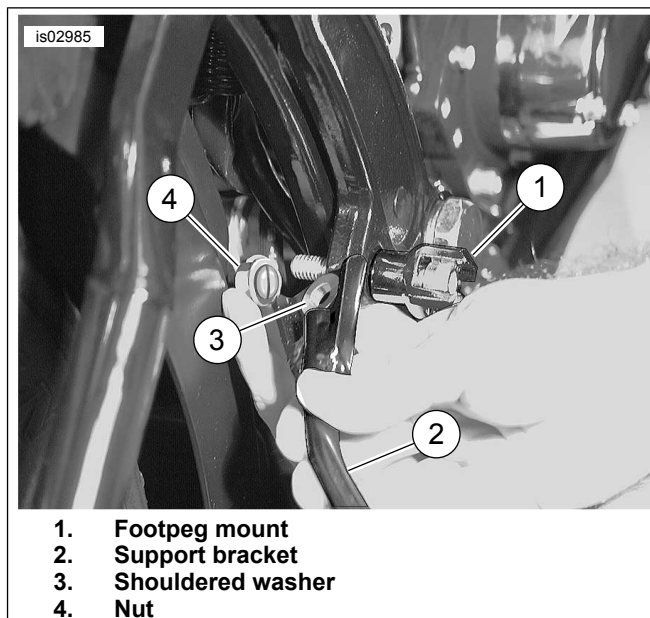
1. Following instructions in applicable Service Manual, remove rear fender extension/splash guard to provide adequate access for installing bracket hardware.
2. **On 2000 and later models**, remove nut from bolt running through passenger footpeg and remove footpeg. Save parts for installation.
3. **On 1987 to 1999 models**, see Figure 11. Remove footpeg mount by removing bolt (from inside of frame) (2). Discard bolt. **On 2000 and later models**, see Figure 11. Remove footpeg mount by removing bolt (2) (running through footpeg mount). Discard bolt.
4. Repeat Steps 2 and 3 for the opposite side.

Install Saddlebag Support Brackets

1. **On 1987 to 1999 models**, perform the following:
 - a. See Figure 12. Obtain 1/2-13 x 1-1/2 inch socket head bolt (1) (Part Number 3549A) and insert through support bracket (2), then through frame (3) (from inside).
 - b. Install footpeg mount (previously removed) to bolt and finger tighten.
 - c. Repeat Steps 1a and 1b for the opposite side. Proceed to Step 2.
2. **On 2000-2006 and later FXST models**, perform the following:
 - a. See Figure 13. For 2000-2006 models, obtain 3/8-16 x 2-1/4 inch socket head bolt (Part Number 4029A) and for 2007 models obtain 3/8-16 x 3 inch socket head cap screw, TORX[®], grade 8 (Part Number 4314) from kit and install through footpeg mount (1), thread completely into frame and tighten to 25-30 ft-lbs (34-41 Nm). Threads should be exposed approximately 1/2 inch on inner side of frame.
 - b. Install support bracket (2) onto bolt (oriented as shown), then install "shouldered washer" (3), (Part Number 5816) with shoulder oriented toward bracket. Install nut (4), (Part Number 7601) to bolt and finger tighten.
 - c. Repeat Steps 2a and 2b for the opposite side.

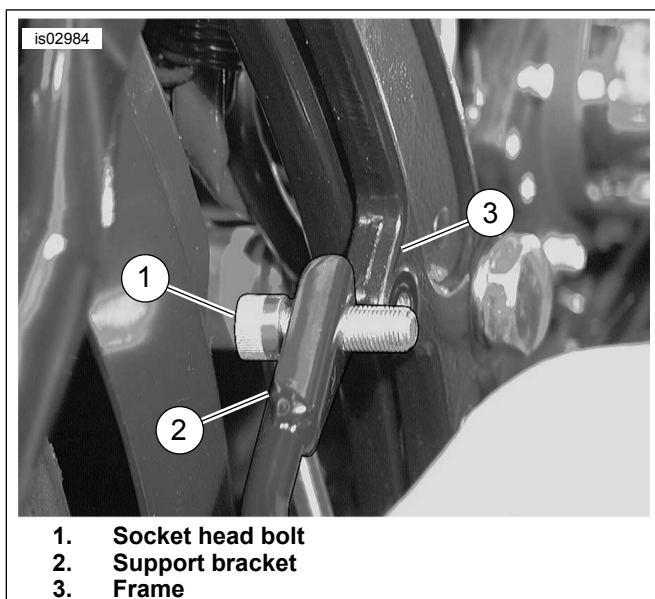
3. **On 2005 and later FLSTS models:** Right Side: Left Side:

- a. See Figure 13. For 2000-2006 models, obtain 3/8-16 x 2-1/4 inch socket head bolt (Part Number 4029A) and for 2007 models obtain 3/8-16 x 3 inch socket head cap screw, TORX[®], grade 8 (Part Number 4314) from kit and install through footpeg mount (1), thread completely into frame and tighten to 25-30 ft-lbs (34-41 Nm). Threads should be exposed approximately 1/2 inch on inner side of frame.
- b. Install support bracket (2) onto bolt (oriented as shown), then install "shouldered washer" (3), (Part Number 5816) with shoulder oriented toward bracket. Install nut (4), (Part Number 7601) to bolt and finger tighten.
- c. See Figure 13. Obtain 3/8-16 x 4 inch socket head bolt (Part Number 4202) from kit and install through footpeg mount (1), thread completely into frame and tighten to 25-30 ft-lbs (34-41 Nm). Threads should be exposed approximately 1/2 inch on inner side of frame. Do not use 4029A, 3/8-16 x 2-1/4 inch.
- d. Install support bracket (2) onto bolt (oriented as shown), then install "shouldered washer" (3), (Part Number 5816) with shoulder oriented toward bracket. Install nut (4), (Part Number 7601) to bolt and finger tighten.



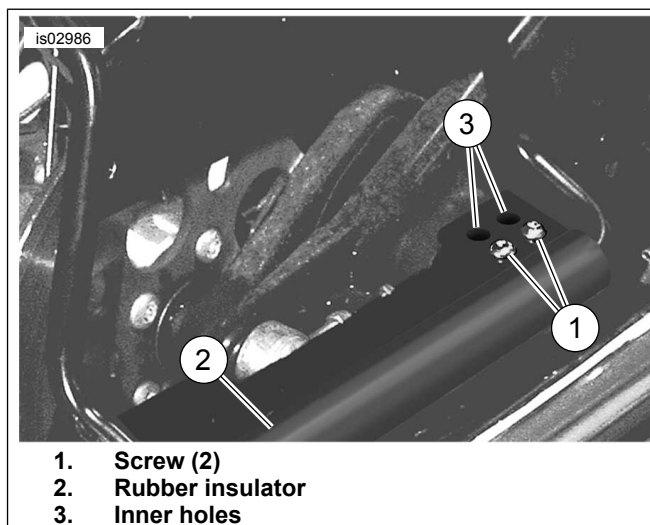
1. **Footpeg mount**
2. **Support bracket**
3. **Shouldered washer**
4. **Nut**

Figure 13. Saddlebag Support Bracket and Frame (2000 and Later Models)



1. **Socket head bolt**
2. **Support bracket**
3. **Frame**

Figure 12. Saddlebag Support Bracket and Frame (1987-1999 Models)



1. **Screw (2)**
2. **Rubber insulator**
3. **Inner holes**

**Figure 14. Install Support Bracket to Support
Install Brackets to Saddlebag Supports**

NOTE

See Figure 14. If docking hardware was installed, use the inner two holes (3) to mount the support bracket to the saddlebag support. If docking hardware has not been installed, use the outer two holes.

1. See Figure 14. Install two screws (1) (Part Number 3540) through saddlebag support and into support bracket as shown. Install nuts (Part Number 7739). Tighten to 10 ft-lbs (13.1 Nm).
2. Return to the frame end of the bracket and perform the following: **On 1987-1999 models**, align and tighten footpeg mount bolt to 78 ft-lbs (106 Nm). **On 2000 and later models**, align footpeg mount and tighten nut (from inside frame) to 25-30 ft-lbs (34-41 Nm). Install footpeg to footpeg mount using original bolt, wave washer and nut. Tighten nut to 25-30 ft-lbs (34-41 Nm).
3. Perform Steps 1 and 2 for the opposite side.

4. Refer to the applicable Service Manual and install rear fender extension/splash guard.

Prepare Saddlebags for Installation

1. See Figure 14. Install rubber isolator (2) over support bracket with "flat" side facing down. Repeat for the opposite side.
2. See Figure 15. Install rubber grommets (1), (Part Number 90148-00) into holes in side of saddlebag as shown.
3. Install a metal sleeve (2), (Part Number 90186-00) into each of the grommets as shown.
4. Repeat Steps 1 and 2 for the opposite saddlebag.

Install Saddlebags To Supports

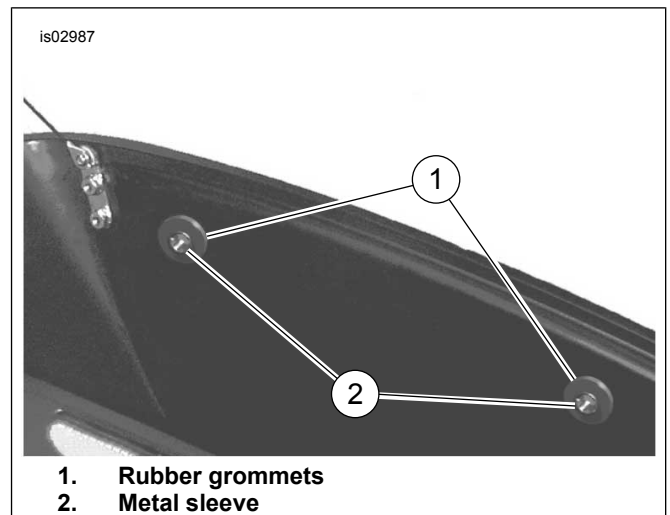
1. See Figure 16. Hold saddlebag up to support (1) and locate spacer (2), (Part Number 90175-00) between saddlebag and support.
2. See Figure 17. Install screw (1) (Part Number 4214) and washer (2) (Part Number 6213) from inside saddlebag, through spacer (3), then install nut (4) (Part Number 7739). Finger tighten.
3. Perform Step 1 for the remaining hole in saddlebag and support.
4. Make sure saddlebag is aligned properly and tighten screws and nuts securely.
5. Perform Steps 1 through 4 for the opposite saddlebag.

Install Reflectors to Saddlebags

⚠ WARNING

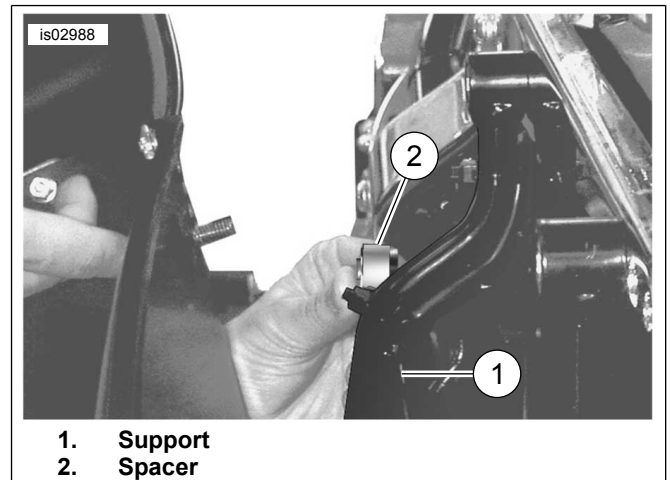
Federal Motor Vehicle Safety Standard (FMVSS) 108 requires motorcycles to be equipped with rear and side reflectors. Be sure rear and side reflectors are properly mounted. Poor visibility of rider to other motorists can result in death or serious injury. (00336b)

1. See Figure 18. Locate area approximately 7 inches (178 mm) (1) from front and 1/4 inch (6 mm) (2) from lid lip of lower section of saddlebag.
2. Using isopropyl alcohol, thoroughly clean the area in which reflector is to be installed. Let dry completely. Remove adhesive backing and install reflector. Repeat for opposite saddlebag. Let adhesive cure for 24 hours.



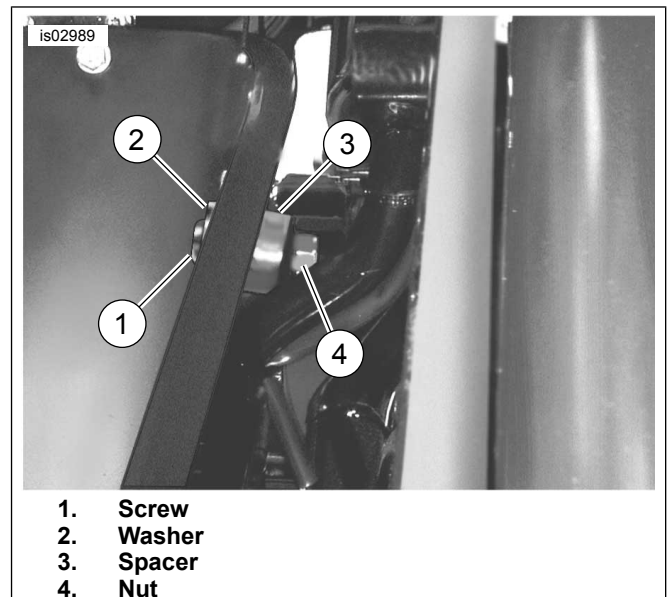
1. Rubber grommets
2. Metal sleeve

Figure 15. Install Grommets and Sleeves



1. Support
2. Spacer

Figure 16. Install Spacer



1. Screw
2. Washer
3. Spacer
4. Nut

Figure 17. Secure Saddlebag to Support

Hinge Replacement (Optional)

NOTE

Saddlebags are shipped with hinge and tether for raising and lowering lid. However, due to various styles of seat or accessories installed, it may be preferable to replace existing hinge with optional hinge provided in kit which allows complete removal of lid. If hinge replacement is desired, perform the following:

1. See Figure 19. Remove screws securing upper portion of tether (1) to saddlebag lid and lower portion of tether (2) to saddlebag body. Remove tether.
2. See Figure 20. Remove C-clip (1) securing hinge pin and remove pin from hinge. Separate lid from saddlebag body.
3. Remove two screws (2) securing hinge to saddlebag lid and carefully slide hinge out from under rubber seal.
4. Obtain replacement hinge half for saddlebag lid. Carefully slide hinge under rubber seal and fasten hinge half to lid using screws removed in Step 2. Tighten screws securely.
5. Install original pin to hinge and secure with C-clip removed in Step 2.
6. Install lid to saddlebag body by aligning hinge halves and close lid. Pull up on front of lid to make sure lid is fastened securely.

⚠ 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)

7. Connect battery cables, positive cable first.

⚠ WARNING

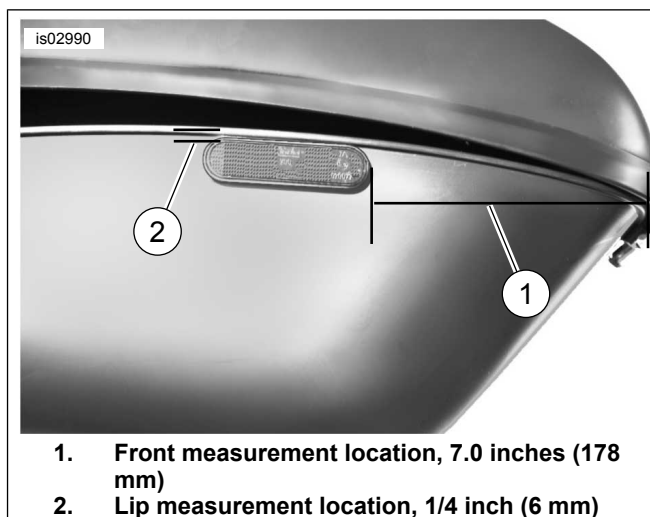
After installing seat, pull upward on seat to be sure it is locked in position. While riding, a loose seat can shift causing loss of control, which could result in death or serious injury. (00070b)

8. Install seat.

⚠ WARNING

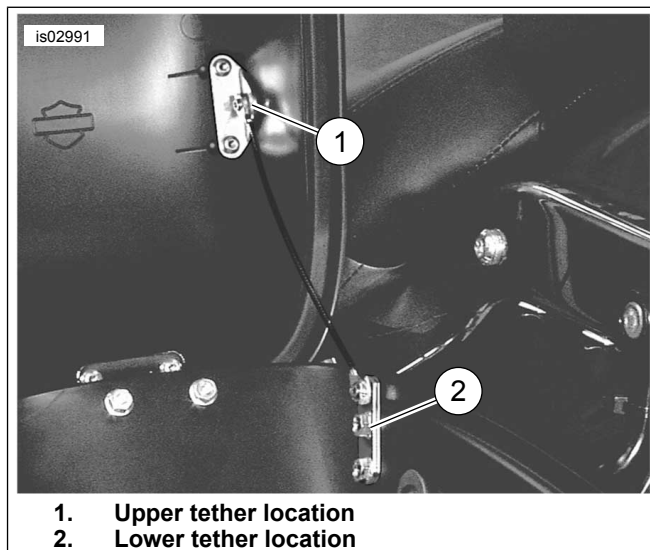
Be sure that all lights and switches operate properly before operating motorcycle. Low visibility of rider can result in death or serious injury. (00316a)

9. Check turn signals for proper operation.
10. Remove old reflector from fender support.



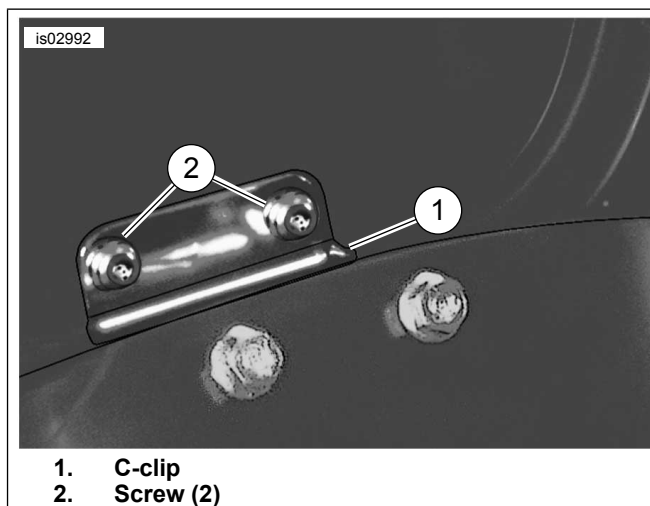
1. Front measurement location, 7.0 inches (178 mm)
2. Lip measurement location, 1/4 inch (6 mm)

Figure 18. Install Reflectors to Saddlebags



1. Upper tether location
2. Lower tether location

Figure 19. Remove Tether



1. C-clip
2. Screw (2)

Figure 20. Remove Hinge

SERVICE PARTS

is02997

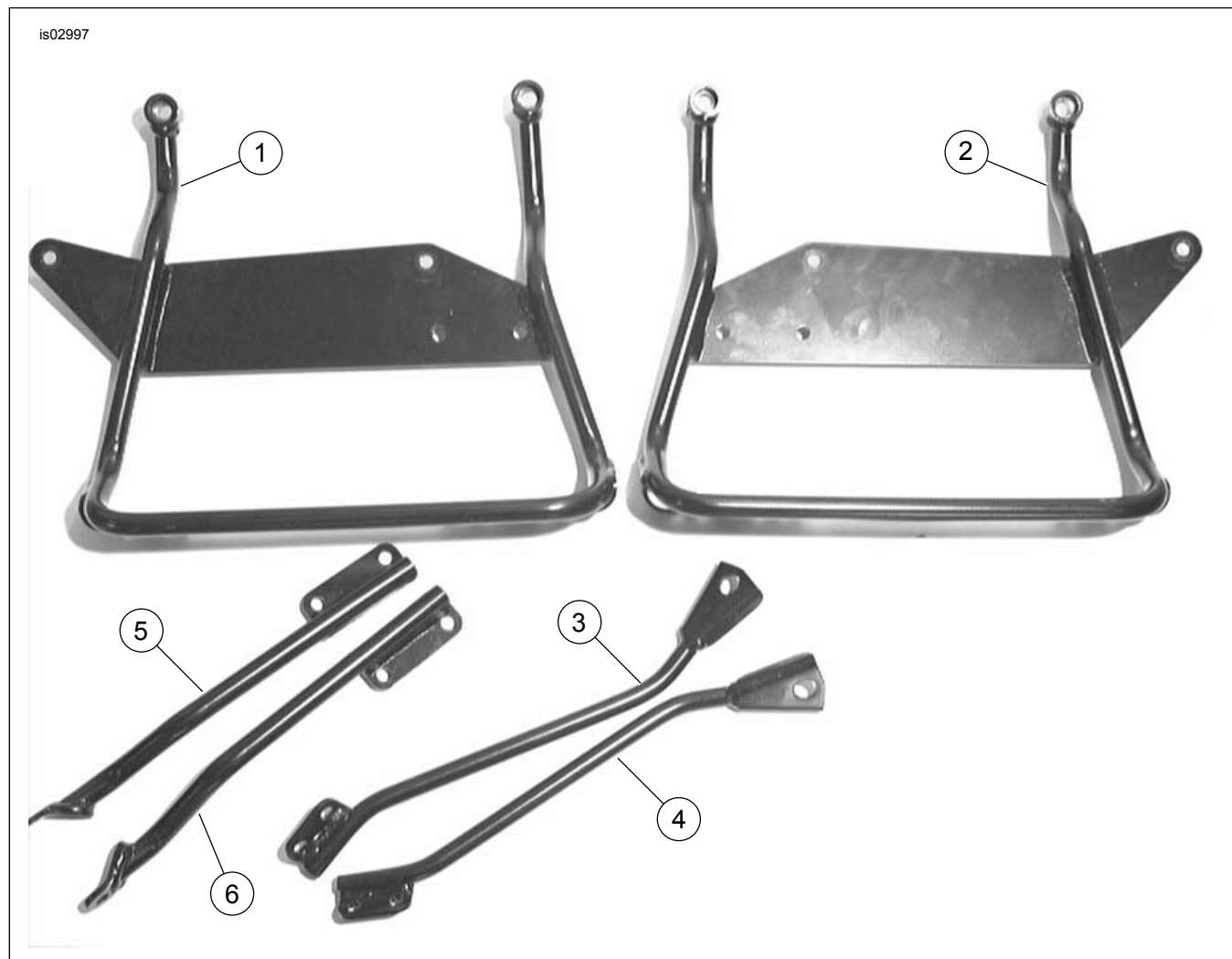


Figure 21. Service Parts: FXST Softail Saddlebag Kit, Sub-assembly

Table 3. Service Parts Table

Kit	Item	Description (Quantity)	Part Number
Sub-assembly (Part Number 90227-00) (1987-2005 models)	1	Support (left hand)	90177-00
	2	Support (right hand)	90160-00
	3	Support, forward (left hand) (1987-2005)	90412-00
	4	Support, forward (right hand) (1987-2005)	90413-00
	5	Support, turn signal (left hand)	90414-00
	6	Support, turn signal (right hand)	90415-00
Sub-assembly (Part Number 90227-06) (2006 and later models)	1	Support (left hand)	90177-00
	2	Support (right hand)	90160-00
	3	Support, forward (left hand) (2006 only)	90412-06
	4	Support, forward (right hand) (2006 only)	90413-06
	5	Support, turn signal (left hand)	90414-00
	6	Support, turn signal (right hand)	90415-00

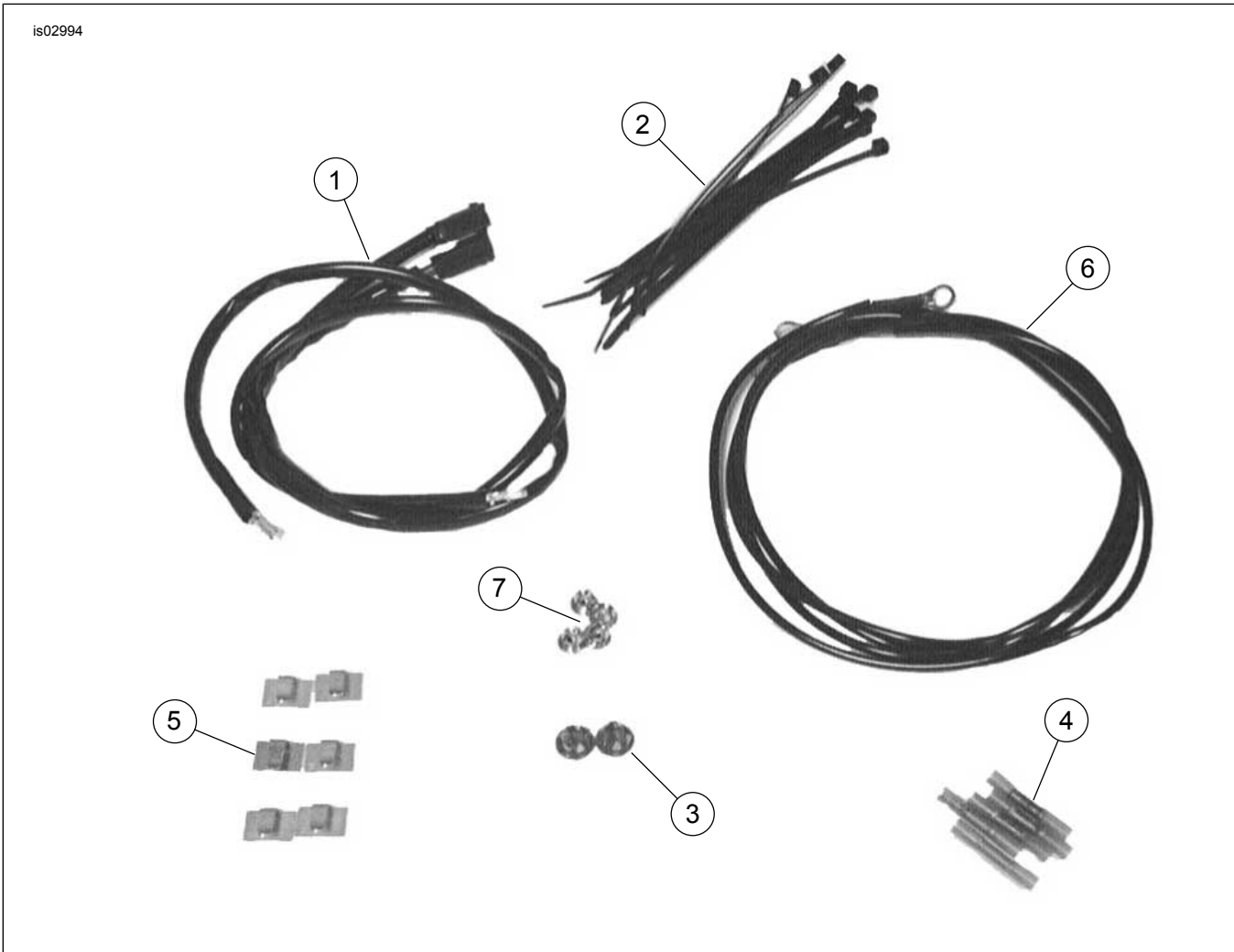


Figure 22. Service Parts: FXST Softail Saddlebag Kit, Wiring Parts

Table 4. Service Parts Table

Item	Description (Quantity)	Part Number
Wiring Kit (Part Number 72509-00)		
1	Harness, wire (2)	70508-00
2	Cable strap (10)	10006
3	Plug, button (2)	53830-00
4	Connector, sealed butt (5)	70586-93
5	Clip, adhesive (8)	10102
6	Ground strap (2)	70507-00
7	Plug, button (4)	68446-00

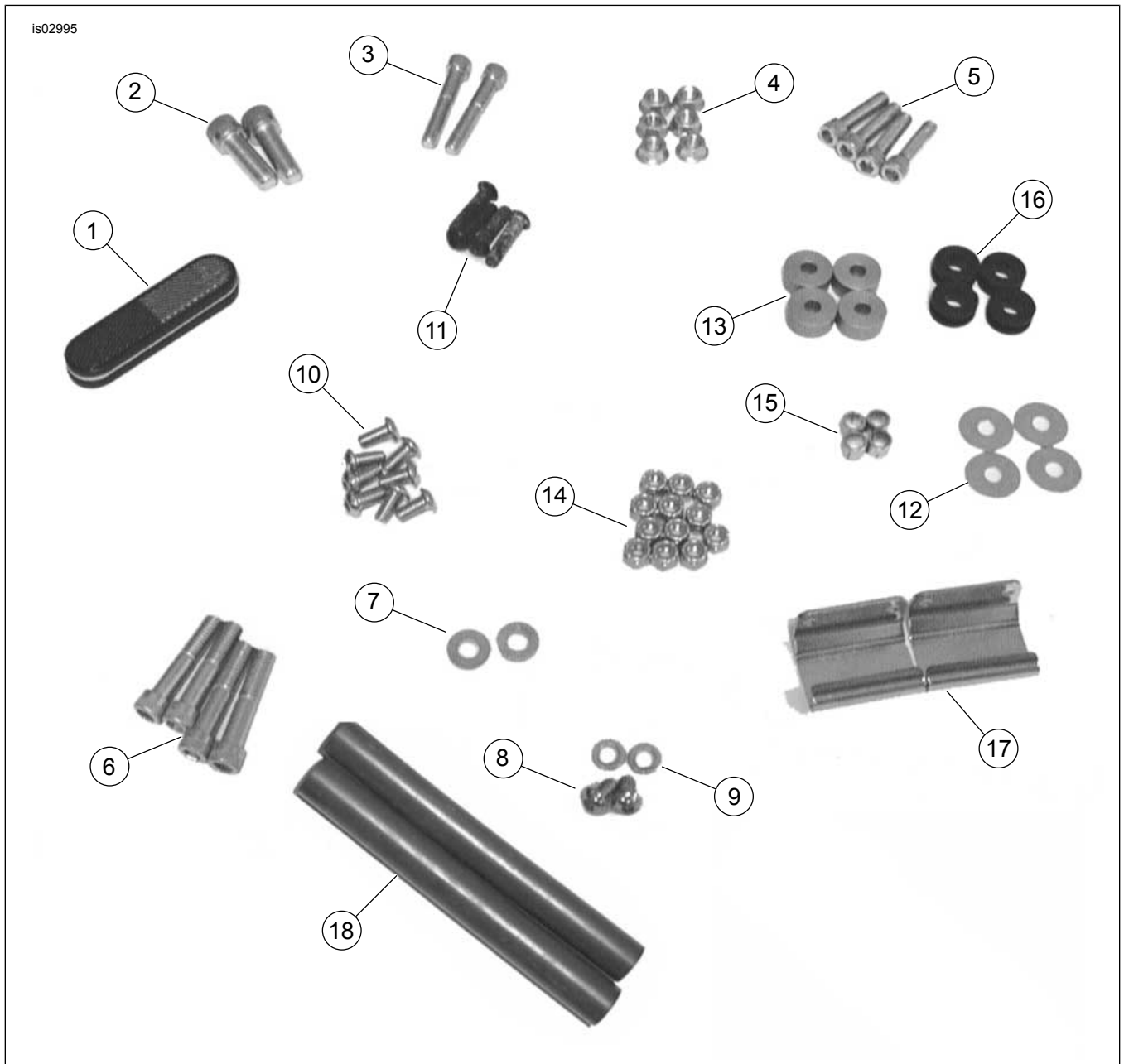


Figure 23. Service Parts: FXST Softail Saddlebag Kit, Sub-assembly

Table 5. Service Parts Table

Item	Description (Quantity)	Part Number	Item	Description (Quantity)	Part Number
Sub-assembly (Part Number 90052-03A)					
1	Reflector, red (2)	59173-00	12	Washer, bag mount (4)	6213
2	Bolt, socket head, 1/2-13 x 1-1/2 inch (2)	3549A	13	Spacer, bag mount (4)	90175-00
3	Bolt, socket head, 3/8-16 x 2-1/4 inch (2)	4029A	14	Locknut, 5/16-18 (12)	7739
4	Locknut, flange 3/8-16 (6)	7601	15	Sleeve, steel (4)	90186-00A
5	Bolt, socket head 3/8-16 x 1-5/8 inch (4)	4371WA	16	Grommet, rubber (4)	90148-00
6	Bolt, socket head 3/8-16 x 1-3/8 inch (4)	1002	17	Hinge, open (2)	90229-00
7	Washer, shoulder (2)	5816	18	Isolator, rubber (2)	90267-00
8	Screw, 5/16-24 x 1/2 inch (2)	3538	19	Spacer (2) (not shown)	65849-01
9	Washer, lock (2)	7041	20	Bolt, socket head, 3/8-16 x 4 inch (not shown)	4202

Table 5. Service Parts Table

Item	Description (Quantity)	Part Number	Item	Description (Quantity)	Part Number
10	Screw, 5/16-18 x 5/8 inch (8)	3540	21	Bolt, socket head, 5/16-18 x 3/4 inch (2) (not shown)	4092
11	Screw, bag mount, 5/16-18 x 1-3/8 inch (4)	4214	22	Screw, socket head, Torx, 3/8-16 x 3 inch (2) (not shown)	4314

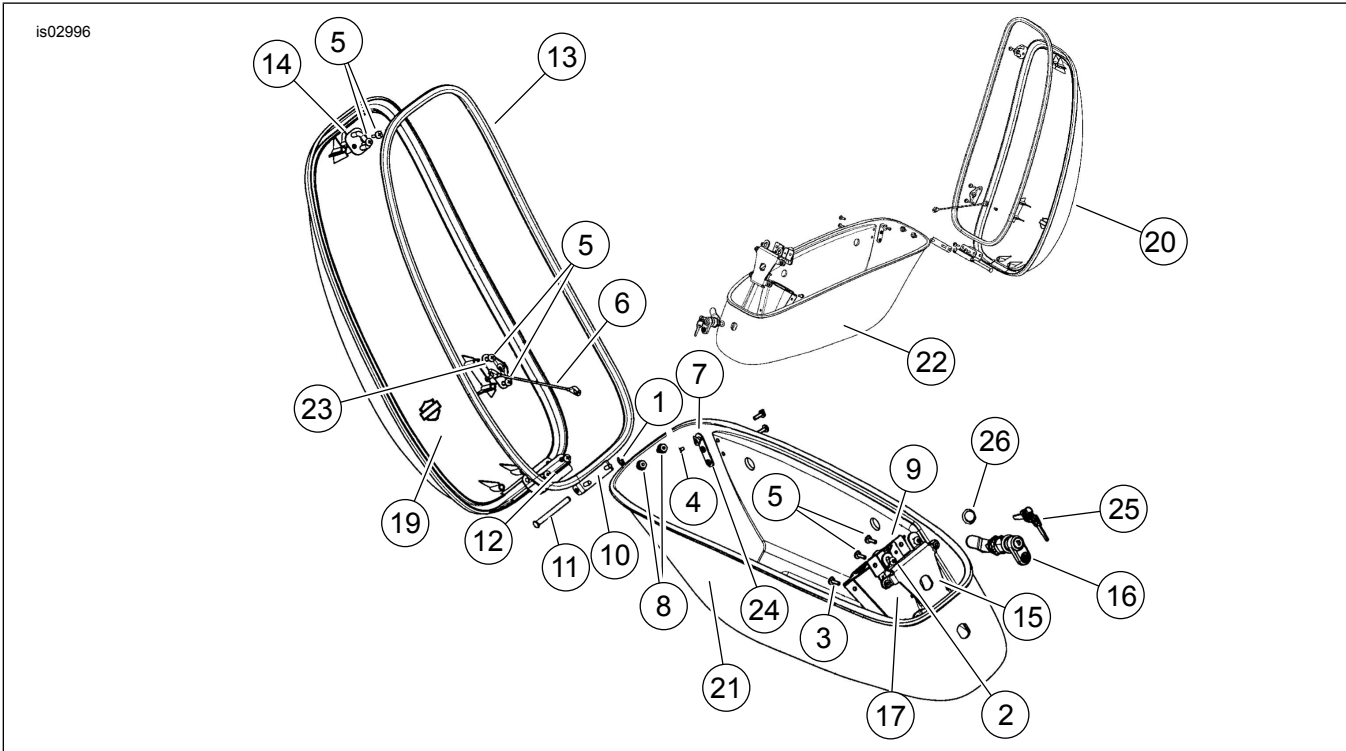


Figure 24. Service Parts: FXST Softail Saddlebag Kit, Saddlebag Assembly

Table 6. Service Parts Table

Item	Description (Quantity)	Part Number	Item	Description (Quantity)	Part Number
1	Retaining ring	11015	14	Loop latch	90231-00
2	Screw, M6-6H (2)	1394	15	Bracket, latch	90232-00
3	Screw, 10-24 x 3/8 inch (6)	3018	16	Lockset, saddlebag	90235-00
4	Machine screw, panhead (2)	3595	17	Cover latch assembly	90237-00
5	Screw, hi-lo (8)	3596	18	Label, saddlebag (not shown)	Not sold separately
6	Tether	53633-00	19	Lid, saddlebag (left)	90261-00
7	Washer, spring curved (2)	6970	20	Lid, saddlebag (right)	90260-00
8	Nut, flanged (2)	7878	21	Body, saddlebag (left)	90264-00
9	Assembly, latch	90166-00	22	Body, saddlebag (right)	90262-00
10	Catch, hinge	90172-00	23	Bracket, upper tether	90417-00
11	Pin	90173-00	24	Bracket, lower tether	90418
12	Hinge, hook bracket	90176-00	25	Key set (specify code)	90234-00
13	Gasket	90230-00	26	Gasket, lock (2)	90290-02