



INSTRUCTIONS

-J04413

REV. 2007-10-08

SOFTAIL EXTENDED REACH CONTROLS KITS

GENERAL

Kit Number

49171-08 - Chrome; 49223-08 - Black

Models

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

Additional Parts

In addition to the parts from the kit, LOCTITE® 243 (blue) Threadlocker and Sealant (Part Number 99642-97), Harley-Davidson Wheel Bearing Grease (Part Number 99855-80) and DOT 4 Silicone Brake Fluid (Part Number 99953-99A) is also required for installation.

This kit requires the separate purchase of the Extended Reach Brake Line Kit: **For 2007 models:** Part Number 44970-07. **For 2008 models:** Part Number 44972-08).

For accessories and kit part numbers see your local Harley-Davidson dealer, www.harley-davidson.com or your Harley-Davidson Genuine Motor Accessories and Parts catalog.

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

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)

Kit Contents

See Figure 9 and Table 1.

PREPARE THE MOTORCYCLE

1. For models equipped with saddlebags: Remove the saddlebags following the instructions in the appropriate Service Manual.
2. Remove the seat following the directions in the Owner's Manual.

⚠ WARNING

To prevent accidental vehicle start-up, which could cause death or serious injury, disconnect negative (-) battery cable before proceeding. (00048a)

3. Disconnect the negative battery cable.
4. Secure motorcycle in upright position.

NOTE

This kit is not compatible with engine guards.

5. If the engine guard is present, remove and discard it.

LEFT SIDE

Component Removal

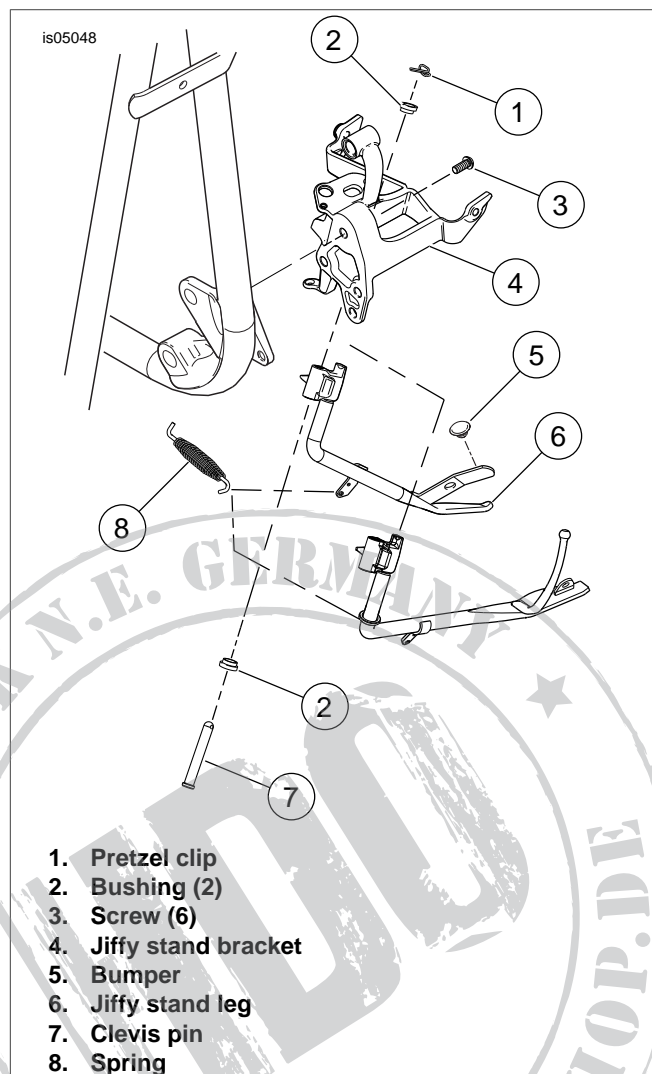


Figure 1. Jiffy Stand

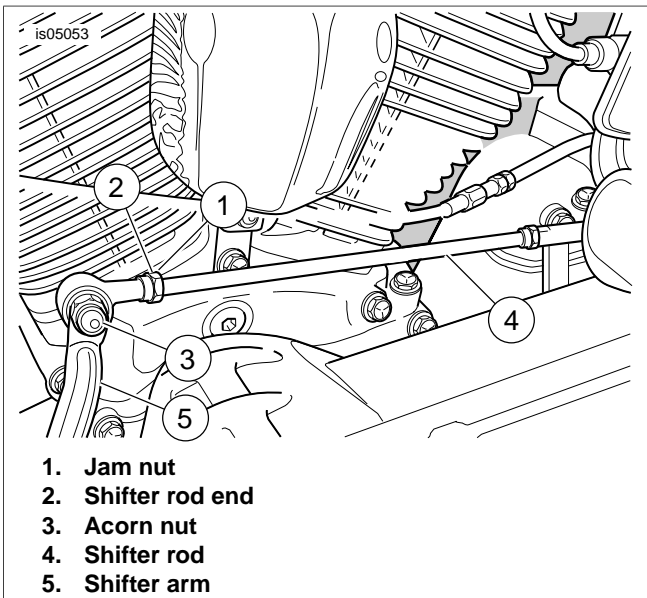


Figure 2. Shifter Linkage

1. **For HDI Vehicles:** Remove the left side foot control support, and jiffy stand sensor, jiffy stand and spring, shifter linkage, shift lever and footpeg following the instructions in the appropriate Service Manual.

For all other models: Remove the left side foot control support, jiffy stand and spring, shifter linkage, shift lever and footpeg following the instructions in the appropriate Service Manual.

NOTE

Two bearing sleeves will remain inside the footrest bracket. The extended controls bracket from the kit will include two sleeves pressed into the bore of the shift lever arm support.

2. Remove rod ends and jam nuts from the shifter rod. Save the rod ends and jam nuts for installation.

Component Installation

1. See Figure 9. Select shifter mounting assembly (6), O-rings (5), nylon washer (4) and the shift rod (1) from the kit.
2. Install the shift arm and **new** O-rings in the bracket.
3. Apply LOCTITE 243 Threadlocker and Sealant to the three mounting screws and mount the shifter bracket with shift arm to the frame. Tighten the mounting screws to 25-30 ft-lbs (33.9-40.7 Nm)
4. Apply LOCTITE Anti-Seize Lubricant to the shaft of the jiffy stand.
5. Install the jiffy stand following the instructions in the appropriate Service Manual.

For HDI Vehicles: Install the jiffy stand sensor.

NOTE

See Figure 1. Ensure the hook of the spring (9) is installed so the forward hook faces up and the rear hook faces down when the jiffy stand is retracted.

⚠ WARNING

The jiffy stand locks when placed in the full forward (down) position with vehicle weight on it. If the jiffy stand is not in the full forward (down) position with vehicle weight on it, the vehicle can fall over which could result in death or serious injury. (00006a)

6. Check that the jiffy stand operates correctly.
7. Assemble the shifter rod from the kit with the original rod ends and jam nuts.
8. Thread the shifter rod into the shifter rod lever at the transmission and adjust the shifter rod rod ends for the rider posture. Tighten jam nuts to 80-120 **in-lb** (9.0-13.5 Nm).
9. Install the shifter rod to the shifter arm with a washer and acorn nut. Tighten the acorn nut to 90-110 **in-lb** (10.2-12.4 Nm).
10. Install the nylon washer and shift lever over the shift arm shaft. Tighten clamp bolt to 18-22 **ft-lb** (24-30 Nm).
11. Install the footrest with the bolt, spring washer and locknut. Tighten the locknut allowing the footrest to fold.

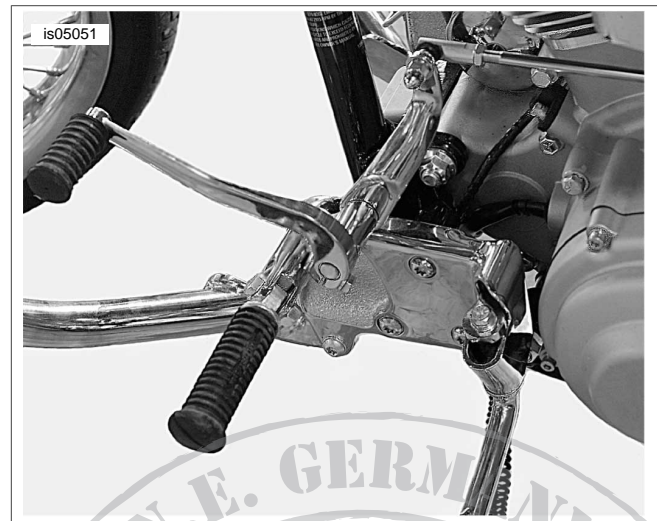


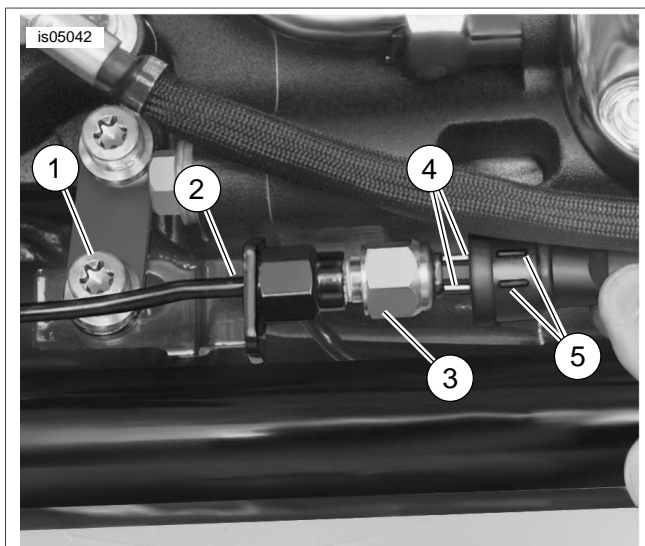
Figure 3. Extended Reach Controls - Left Side (engine guard not included in kit)

RIGHT SIDE

Removal of Components

1. Remove the right side foot control support, rear brake line, rear brake lever, rear master cylinder and footpeg following the instructions in the appropriate Service Manual.





1. Rear brake line mounting fastener
2. Rear brake line
3. Stoplamp switch
4. Terminals
5. Alignment marks

Figure 4. Brake Line Bracket and Stoplamp Switch

2. See Figure 4. Pull the wire lead connectors and disconnect stoplamp switch (3).

CAUTION

Remove brake line components carefully. Damage to seating surfaces can cause leakage. (00320a)

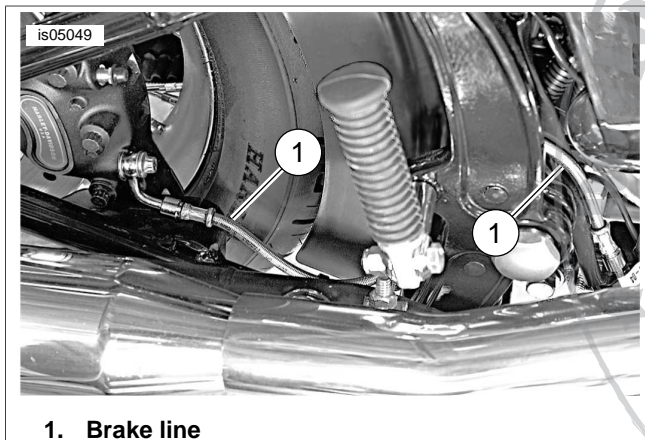
WARNING

Be sure that no lubricants or fluids get on tires, wheels or brakes when changing fluid. Traction can be adversely affected, which could result in loss of control of the motorcycle and death or serious injury. (00047d)

NOTE

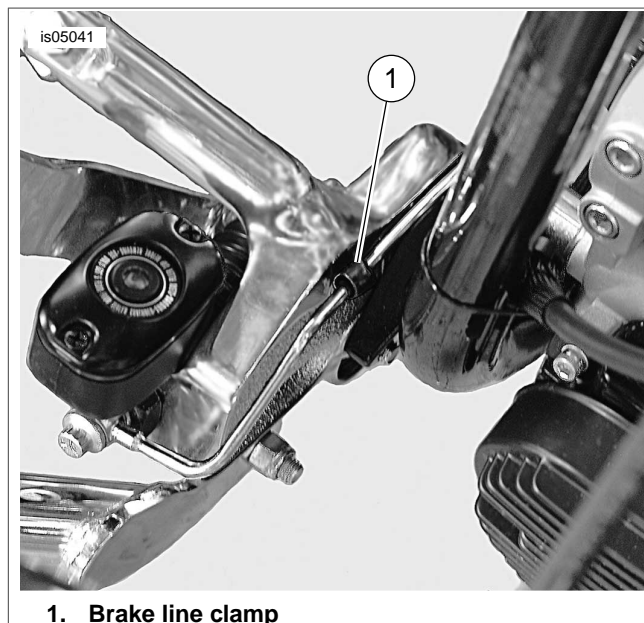
Brake lines are different on 2007 and 2008 models. Refer to the appropriate Service Manual.

3. Remove brake line following the instructions in the appropriate Service Manual.



1. Brake line

Figure 5. Brake Line Routing (2007 Models Shown)



1. Brake line clamp

Figure 6. Brake Line Clamp

Installation of Components

1. Install the right side foot control support, rear brake lever, rear master cylinder and footpeg following the instructions in the appropriate Service Manual.
2. Install the rear brake line and stoplamp switch following the instructions in the separate brake line kit.
3. See Figure 5. Route the braided wire section over the rear fork pivot and clip to the lower rear fork tube in the original location.
Verify that the brake line runs parallel to the rear of the brake lever bracket and that the brake line does not rub against any part of the bracket.

WARNING

Use denatured alcohol to clean brake system components. Do not use mineral-based solvents (such as gasoline or paint thinner), which will deteriorate rubber parts even after assembly. Deterioration of these components can cause brake failure, which could result in death or serious injury. (00291a)

4. See Figure 6. Install the clamp around the brake line following the instructions in the brake line kit.
5. See Figure 7. Install the cable straps at locations (1).



Figure 7. Cable Strap Location



Figure 8. Extended Reach Controls - Right Side (engine guard not included in kit)

BLEEDING THE REAR BRAKE

⚠ WARNING

Be sure that no lubricants or fluids get on tires, wheels or brakes when changing fluid. Traction can be adversely affected, which could result in loss of control of the motorcycle and death or serious injury. (00047d)

1. Check the brake fluid level and refill if necessary following the instructions in the Owner's Manual.

CAUTION

D.O.T. 4 brake fluid will damage painted and body panel surfaces it comes in contact with. Always use caution and protect surfaces from spills whenever brake work is performed. Failure to comply can result in cosmetic damage. (00239b)

⚠ WARNING

Use fresh D.O.T. 4 fluid. Contaminated fluid can adversely affect braking, which could result in death or serious injury. (00504b)

NOTE

Hydraulic brake fluid bladder-type pressure equipment can be used to fill brake master cylinder through the bleeder valve. Remove the master cylinder reservoir cover so that the system cannot pressurize. Do not use pressure bleeding equipment when the hydraulic system is sealed with master cylinder reservoir cover and gasket in place.

⚠ CAUTION

Direct contact of D.O.T. 4 brake fluid with eyes can cause irritation. Avoid eye contact. In case of eye contact flush with large amounts of water and get medical attention. Swallowing large amounts of D.O.T. 4 brake fluid can cause digestive discomfort. If swallowed, obtain medical attention. Use in well ventilated area. **KEEP OUT OF REACH OF CHILDREN.** (00240a)

2. Bleed the brakes following the instructions in the appropriate Service Manual.

RETURN TO SERVICE

1. For models equipped with saddlebags: Install the saddlebags following the instructions in the appropriate Service Manual.
2. Connect the negative battery cable.

⚠ 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)

3. Install the seat following the instructions in the Owner's Manual.

⚠ WARNING

The jiffy stand locks when placed in the full forward (down) position with vehicle weight on it. If the jiffy stand is not in the full forward (down) position with vehicle weight on it, the vehicle can fall over which could result in death or serious injury. (00006a)

⚠ WARNING

Be sure jiffy stand is fully retracted before riding. If jiffy stand is not fully retracted, it can contact the road surface causing a loss of vehicle control, which could result in death or serious injury. (00007a)

4. Verify jiffy stand operation.
5. With the ignition/light key switch turned to IGNITION, actuate the rear brake pedal to verify operation of the brake lamp.

⚠ WARNING

After repairing the brake system, test brakes at low speed. If brakes are not operating properly, testing at high speeds can cause loss of control, which could result in death or serious injury. (00289a)

6. Test ride the motorcycle. If the brake feels soft, repeat the rear brake bleeding procedure.



SERVICE PARTS

is05050

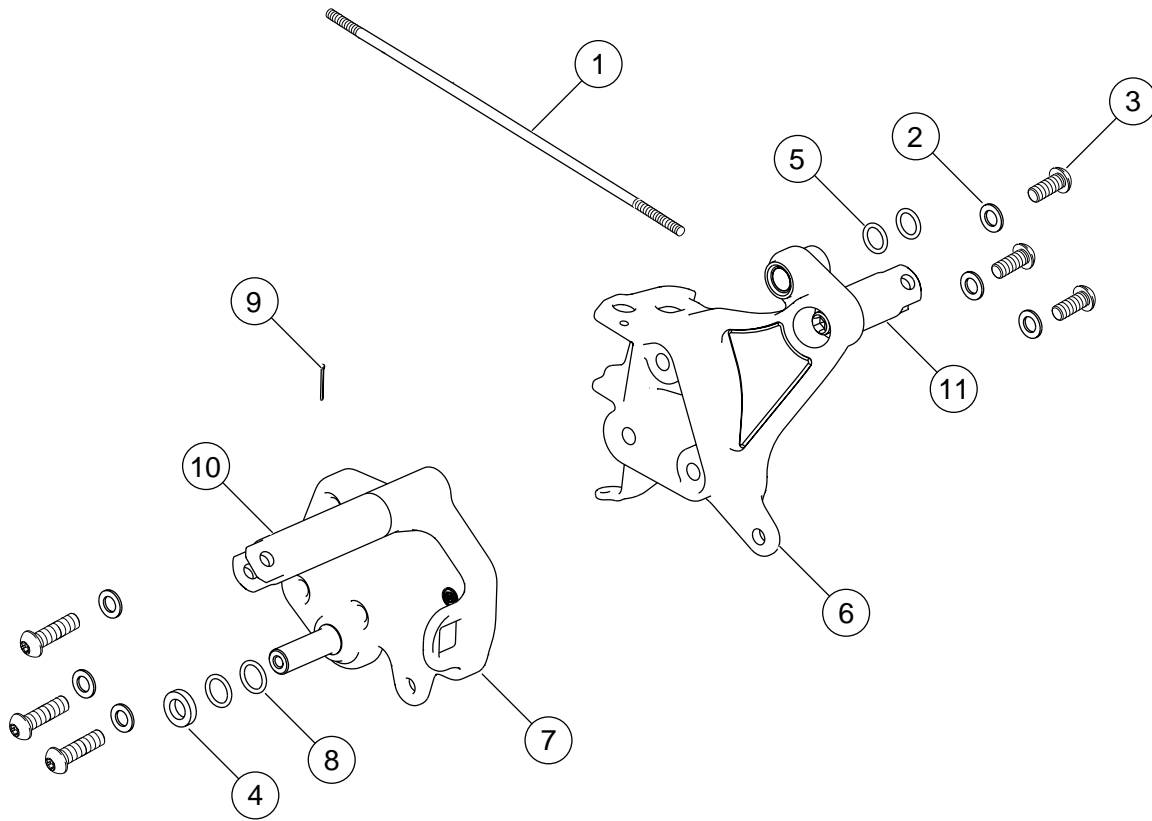


Figure 9. Service Parts: Extended Reach Controls Kit

Table 1. Service Parts

Item	Description (Quantity)	Part Number
1	Shift rod	11744
2	Washer (6)	6812
3	Cap screw, button head (6)	94606-98
4	Washer, nylon	6057
5	O-ring (2)	11191
6	Shifter mounting assembly, black	33723-08
	Shifter mounting assembly, chrome	33650-08
7	Brake lever mounting assembly, black	42564-08
	Brake lever mounting assembly, chrome	42525-08
8	O-ring (2)	11364
9	Cotter pin	515
10	Pin, clevis, black	33952-08
	Pin, clevis, chrome	33948-08
11	Pin, clevis, black	33958-08
	Pin, clevis, chrome	33951-08