-J03395 2007-08-16

XL FRONT END LOWERING KIT

GENERAL

Kit Number

45480-05

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).

NOTE

The parts in this kit are stock parts on XL883L motorcycles, and will not lower those models.

Additional Parts Required

XL883, XL883R and XL1200R model motorcycles also require the separate purchase of a Rear Shock Kit (54750-05, 54731-04 or 54733-04) which is available for purchase at your Harley-Davidson dealer.

Installation of this kit also requires the following special tools: Fork Tube Holder (HD-41177), Fork Seal/Bushing Installation Tool (HD-36583), and Front Fork Oil Level Gauge (HD-59000B).

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.

Kit Contents

See Figure 8 and Table 1.

REMOVAL

Remove Right and Left Forks

- Place suitable blocking under frame to raise front wheel several inches off the floor. For best results, use a hydraulic center stand on a level surface.
- Refer to Sportster Models Service Manual and remove front wheel, fender and brake caliper.
- Spray glass cleaner on the fork tube between upper and lower fork bracket to lubricate.

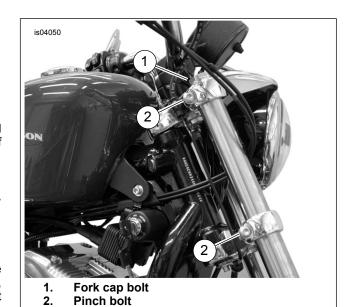


Figure 1. Loosen Pinch Bolt

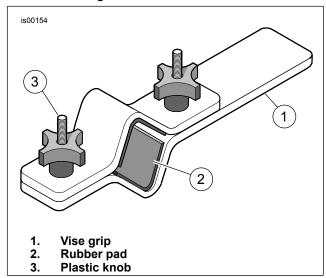


Figure 2. Fork Tube Holder (HD-41177)

- 4. See Figure 1. While holding the fork slider to prevent the fork from dropping, loosen pinch screws (2).
- 5. Slide fork tube down and out of the upper and lower fork brackets, in order to remove.
- 6. Repeat Steps 3-5 to remove opposite fork.
- Move forks to bench area. Place suitable drain pan on floor beneath vise.

Disassemble Left And Right Fork

- See Figure 3. Obtain FORK TUBE HOLDER (Part Number HD-41177) and proceed as follows:
 - a. Clamp end of tool in vise in a horizontal position with plastic knobs facing toward you.
 - b. With the fork cap topside, clamp fork tube between rubber pads on inboard side of tool. Tighten knobs until fork tube is securely held.
- 2. See Figure 8. Place a drain pan under fork and remove drain screw (R).
- 3. See Figure 3. Carefully remove fork tube cap (1) and o-ring from fork tube. Be aware that fork tube plug is under spring pressure, so have a firm grasp on plug as the last thread is turned.
- 4. See Figure 8. Remove and discard spring (1).
- 5. Remove cover (G) and dust seal (H).
- Compress internal circle clip (I). Remove clip from groove in top of slider bore.
- 7. Remove screw and washer (Q) from bottom of the slider.
- Withdraw slider tube (E) from slider (N, O or P) until lower bushing (F) on slider tube contacts upper bushing (L) in slider. Use lower bushing in a slide hammer motion to gently tap out oil seal, spacer and upper bushing from slider bore.
- Remove lower stop (M). The lower stop will be found within the slider (N, O or P) or on the bottom end of the damper tube (2).
- Insert a small diameter rod through the opening in the bottom of the slider tube to remove damper tube assembly.
- Remove rebound spring (D), from damper tube. Discard damper tube.
- See Sportster Model Service manual for front fork cleaning and inspection procedure. Replace parts as necessary.
- 13. Repeat Steps 1-12 for the opposite fork.

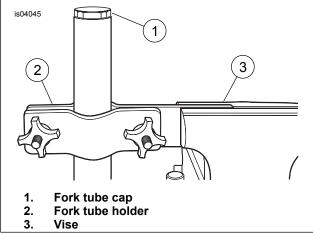


Figure 3. Install Fork Tube into Holder

INSTALLATION

Assemble Right and Left Fork

 See Figure 8. Install new lower bushing (F) in groove of slider tube (E). Expand bushing only wide enough to fit over the tube.

- 2. Place rebound spring (D) over damper tube (2) and insert damper tube into slider tube (E).
- 3. Insert new spring (1) into slider tube (E) with the dense coil end down. Push damper tube (2) through opening at the bottom of the tube using the spring. Place the lower stop (M) over the end of the damper tube.
- Install the slider tube assembly into the slider (N, O, or P).
- Install the screw (Q) into the bottom of the slider (N, O or P). Move the slider tube through its full range of travel within the slider several times to verify proper component alignment. Then, applying downward force on the spring and tighten the screw. Tighten screw to 15–25 N⋅m (12–18 ft-lbs).
- Place the upper bushing (L), spacer (K) (concave side downward), oil seal (J) (lettering side upward), and FORK SEAL AND BUSHING INSTALLATION TOOL (Part Number HD-36583) over slider.
- See Figure 5. Install bushing, spacer and seal into slider bore by tapping components downward with the installation tool.
- Install internal circle clip (I) into groove in top of the slider bore.
- 9. Install dust seal (H) and cover (G) at the top of the slider.
- 10. Install drain screw (R) into the lower end of the slider. Tighten the screw to 8–11 N·m (72–96 **in-lbs**).
- 11. Remove main spring (1) from slider tube (E).
- 12. Refer to Fork Oil Requirements and pour 350ml of Harley-Davidson Type E Fork Oil into fork tube.
- 13. Pump fork tube 10 times to remove air from system.



Figure 4. Fork Seal/Bushing Tool (HD-34634)

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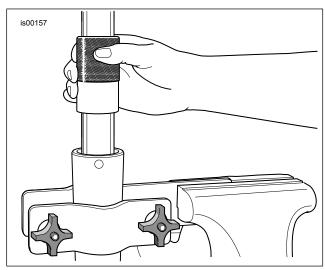


Figure 5. Install Fork Oil Seal

- 14. Adjust the fork oil level, so that it is 4.8 inches (122 mm) from the top of the fork tube. Proceed as follows:
 - a. See Figure 6. Obtain the FRONT FORK OIL LEVEL GAUGE (Part Number HD-59000B).
 - Loosen thumbscrew on metal ring and move it up or down the rod until the bottom of the ring is 4.8 inches (122 mm) from the bottom of the rod. Tighten thumbscrew.
 - c. Push the handle on the cylinder all the way in.
 - d. See Figure 7. Insert rod into top of fork tube until metal ring rests flat on top of fork tube, and the slider tube is pushed all the way into the slider.
 - Pull out handle to suck fork oil from fork tube.
 Observe fork oil through transparent tube as it is drawn into cylinder.
 - Remove rod from fork tube. Push handle into cylinder to eject excess fork oil into suitable container.
 - g. If necessary, repeat Steps 14(c)-14(f). Level is correct when no fork oil is observed being drawn through transparent tube.
- 15. Install main spring (1) into the slider tube (E) with the dense coil end down.
- 16. Install slider tube cap (A) and o-ring (B) on top of slider tube. Tighten cap to29.9–78.7 N⋅m (22–58 ft-lbs).

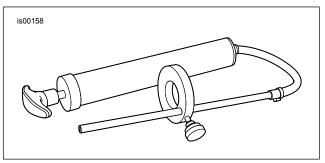


Figure 6. Front Fork Oil Level Gauge (HD-59000B)

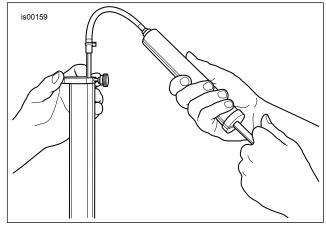


Figure 7. Remove Excess Fork Oil

- 17. Remove fork assembly from fork tube holder.
- 18. Repeat Steps 1-17 for the opposite fork assembly.

Install Front Forks

- See Figure 1. Insert fork slider through the front lower and upper brackets. Position slider tubes so that the top of each tube cap (1) extends 10.7–12.7 mm (0.42–0.5 in) above top surface of front fork upper bracket.
- On models with directional lamps mounted to the front fork bracket, hold directional lamp mounting brackets upright. On all models, tighten front fork upper and lower bracket pinch screws (2) to 40.7–47.5 N·m (30–35 ft-lbs).
- 3. Repeat Steps 1 and 2 for opposite fork.
- 4. Refer to instructions in Service Manual and install the front fender, wheel and brakes.

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SERVICE PARTS

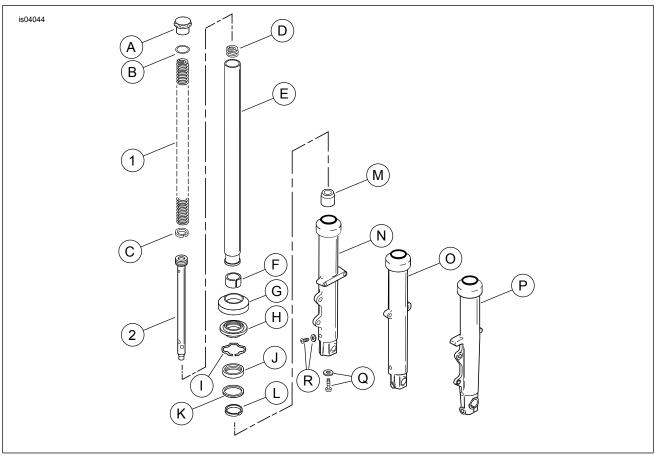


Figure 8. Service Parts for XL Front End Lowering Kit (45480-05)

Table 1. Service Parts Table

Item	Description (Quantity)	Part Number
1	Spring (2)	46267-05
2	Damper tube (2)	45938-92
Items mentioned in text, but not included in kit:		
Α	Cap, slider tube (2)	
В	O-ring (2)	
С	Ring, damper tube (2)	
D	Spring, slider (2)	
E	Slider tube with slider tube bushing (2)	
F	Bushing, lower (2)	
G	Cover, slider (2)	
Н	Seal, dust (2)	
I	Circle clip (2)	
J	Oil seal (2)	
K	Spacer, oil seal (2)	
L	Bushing, upper (2)	
M	Lower stop (2)	
N	Slider assembly, left	
0	Slider assembly, right (all except XL883R/XL1200R)	
Р	Slider assembly, right (XL883R/XL1200R)	
Q	Screw and washer (2)	
R	Drain screw with washer (2)	

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