



# INSTRUCTIONS

J03697

2011-05-24



## TOURING FRONT LOWERING KIT

### GENERAL

#### Kit Number

54628-06

#### Models

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

#### Additional Parts Required

##### ⚠ WARNING

This kit is not designed to be used with Sidecar installed. Any attempt to use this front suspension kit with sidecar can adversely affect stability and handling. (00430c)

##### ⚠ WARNING

This Front End Lowering Kit cannot be used independently. It must be used with an appropriate Low Rear Suspension Kit or handling and cornering can be affected, which could distract the rider, causing loss of control and death or serious injury. (00429b)

Proper installation of this kit also requires installation of an FL Profile Low Rear Suspension Kit (54631-02).

Proper installation of this kit also requires the following: two fork oil seals (45875-84A), two O-rings (45845-77), two quad ring seals (45733-48), and two screws with crush washer (45405-75A).

Proper installation of this kit also requires the following special tools: FORK TUBE HOLDER (HD-41177), FORK SEAL/BUSHING TOOL (HD-34634) 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 6 and Table 1.

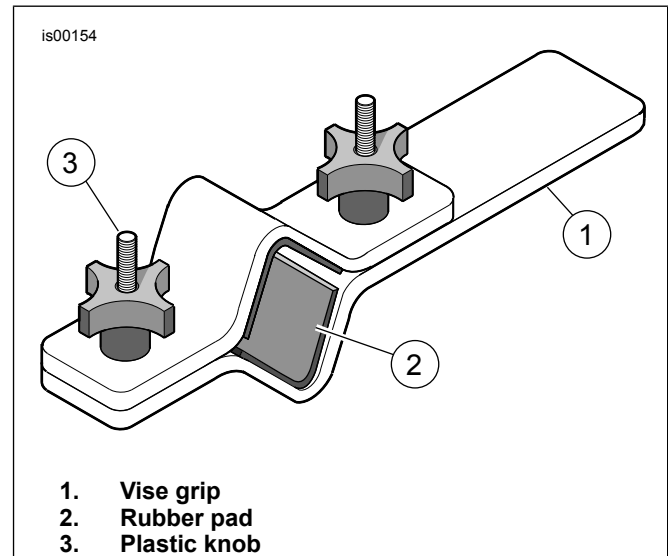


Figure 1. Fork Tube Holder (HD-41177)

### REMOVAL

1. 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.
2. Refer to the appropriate service manual and remove the front forks.
3. Move forks to bench area. Place suitable drain pan on floor beneath a vise.

### INSTALLATION

#### Fork Disassembly

1. See Figure 6. Remove nuts (U), lockwashers (T), flat washers (S) and axle holder (R) from studs at end of fork slider.
2. See Figure 1. Obtain FORK TUBE HOLDER (HD-41177) and proceed as follows:
  - a. Clamp end of tool in vise (1) in a horizontal position with plastic knobs facing toward you.
  - b. With the fork cap bolt topside, clamp fork tube between rubber pads (2) on inboard side of tool. Tighten knobs (3) until fork tube is securely held.
3. See Figure 6. Remove fork cap bolt (A) from fork tube plug. Remove quad ring seal. Save bolt but discard quad ring seal.
4. Using wrench flat, slowly unthread fork tube plug (B) from fork tube (G). Be aware that fork tube plug is under spring pressure, so have a firm grasp on plug as the last thread is turned.
5. Remove fork spring (1) from fork tube.



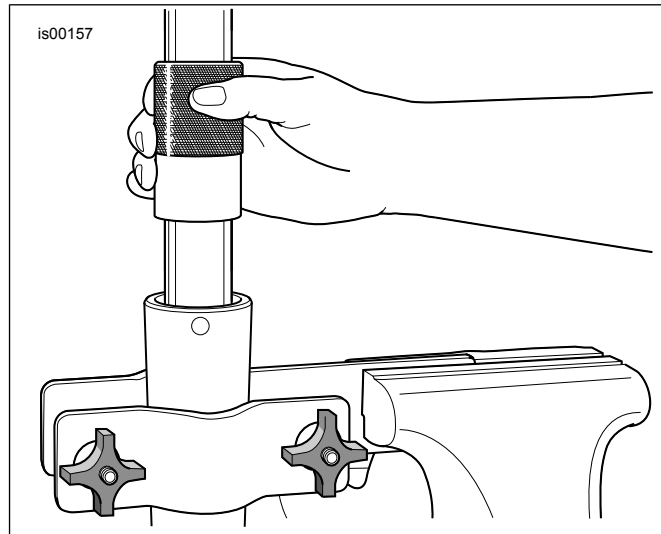
6. Remove fork assembly from fork tube holder.
7. Turning fork upside down, drain fork oil into drain pan. For best results, slowly pump fork tube and slider at least 10 times.
8. Install fork spring back into fork tube.
9. Place a shop rag on the floor, and turning fork assembly upside down, press end of spring against rag. While compressing spring to prevent rotation of damper tube, remove screw and washer (Q) from end of fork slider. Use air impact wrench for best results.
10. Remove and discard fork spring.
11. Remove and save blow valve (E).
12. Remove damper tube (2).
13. Remove rebound spring (F) from damper tube.
14. Using pick tool, remove retaining clip (H) between fork slider and fork tube.
15. Remove fork tube (G) from fork slider. Slide fork tube gently in a slide hammer motion against the slider to remove the seals and bushing from slider.
16. Slide fork oil seal (I), slider spacer (J) and slider bushing (K) off end of fork tube (G).
17. Remove the lower stop (L).

## Fork Assembly

1. See Figure 6 . Obtain new damper tube (2) from kit and install rebound spring (F) over the lower end.
2. With the wear ring topside, slide new damper tube into fork tube, so that tube end drops through hole at bottom of fork tube (G). Install lower stop (L) on the lower end of damper tube.
3. Install fork slider (O or N) in fork tube holder. Slide fork tube into fork slider.
4. If necessary, obtain new slider bushing (K) (45940-84, not included). Coat slider bushing ID with clean fork oil. Slide slider bushing (K) down fork tube.
5. Slide slider spacer (J) down fork tube until it contacts slider bushing.
6. Obtain new fork oil seal (I) (45875-84A, not included). Coat fork oil seal ID with clean fork oil. With the lip garter spring side facing down (toward the fork slider), slide oil seal down fork tube until it contacts slider spacer (J). Remove masking tape from edge of fork tube.



**Figure 2. Fork Seal/Bushing Tool (HD-34634)**



**Figure 3. Install Fork Oil Seal**

7. See Figure 2. Obtain the FORK OIL SEAL INSTALLER (HD-34634) and proceed as follows:
  - a. Slide the fork seal installer down the fork tube until it contacts the fork oil seal.
  - b. See Figure 3. Using the tool like a slide hammer, drive fork oil seal (with slider spacer and guide bushing) down the fork tube until retaining clip groove is visible in fork slider ID.
  - c. Slide the retaining clip (H) down the fork tube until it contacts the fork oil seal. Install retaining clip in the fork slider groove. Do not expand or stretch retaining clip to install on fork tube or clip may become bent or distorted.

### NOTE

*Make sure the fork spring is installed with dense section of coils to the bottom.*

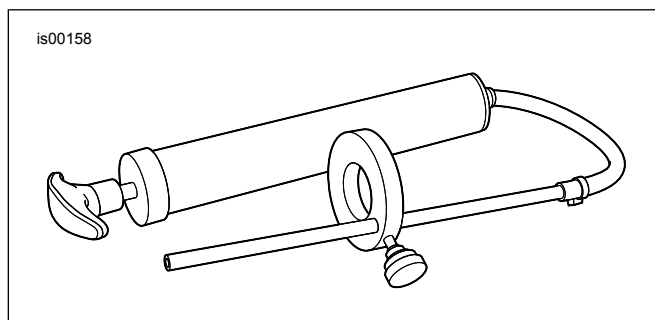
8. Obtain new fork spring (1) from kit. Install new fork spring into fork tube.
9. Remove fork assembly from fork tube holder.
10. Place a shop rag on the floor, and turning fork assembly upside down, press end of spring against rag.

11. Install new screw with copper crush washer (45405-75A, not included). Slide screw through hole at bottom of fork slider and start into end of damper tube.
12. While compressing spring to prevent rotation of damper tube, tighten the screw to 15–24 N·m (11–18 ft-lbs).
13. Remove fork spring from fork tube.
14. With the fork tube topside, clamp fork slider (not the fork tube) into fork tube holder.

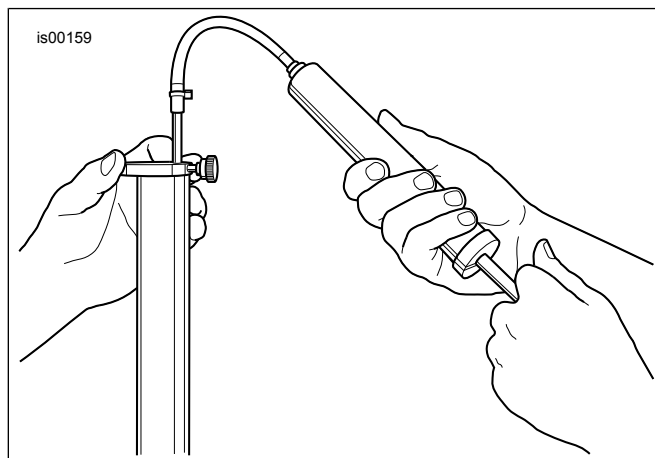
**NOTE**

*Install the drain screw at the bottom of the fork slider, if removed. Tighten the screw to 8–11 N·m (72–96 in-lbs).*

15. Pour 350 ml of Harley-Davidson Type E Fork Oil into fork tube.
16. Pump fork tube 10 times to remove air from system.



**Figure 4. Front Fork Oil Level Gauge (HD-59000B)**



**Figure 5. Remove Excess Fork Oil**

17. Adjust the fork oil level, so that it is 4.88 inches (124 mm) from the top of the fork tube with the fork tube compressed, the main spring removed and the blow valve installed. Proceed as follows:
  - a. See Figure 4. Obtain the FRONT FORK OIL LEVEL GAUGE (Part Number HD-59000B).
  - b. Loosen thumbscrew on metal ring and move it up or down the rod until the bottom of the ring is 4.88 inches (124 mm) from the bottom of the rod. Tighten thumbscrew.
  - c. Push the handle on the cylinder all the way in.
  - d. See Figure 5. Insert rod into top of fork tube until metal ring rests flat on top of fork tube.
  - e. Pull out handle to suck fork oil from fork tube. Observe fork oil through transparent tube as it is drawn into cylinder.
  - f. Remove rod from fork tube. Push handle into cylinder to eject excess fork oil into suitable container.
  - g. If necessary, repeat Steps 17(c) through 17(f). Level is correct when no fork oil is observed being drawn through transparent tube.

18. Install fork spring into the fork tube with the dense end down.

**NOTE**

*Do NOT overtighten or O-ring damage may occur.*

19. Install new O-ring (45845-77, not included) onto fork tube plug (B). Compressing fork spring with end of fork tube plug, thread fork tube plug into fork tube. Tighten fork tube plug to 30–79 N·m (22–59 ft-lbs).
20. Install new quad ring seal (D) (45733-48, not included) onto fork cap bolt. Thread fork cap bolt (A) into fork tube plug to prevent loss of fork oil while handling.
21. Loosely install axle holder, flat washers, lockwashers and nuts on studs at end of fork slider.
22. Repeat steps 1 thru 20 for left side fork.

## Fork Installation

1. Remove fork cap bolt from front fork.
2. Refer to the appropriate Service Manual and install the front forks on the motorcycle.

SERVICE PARTS

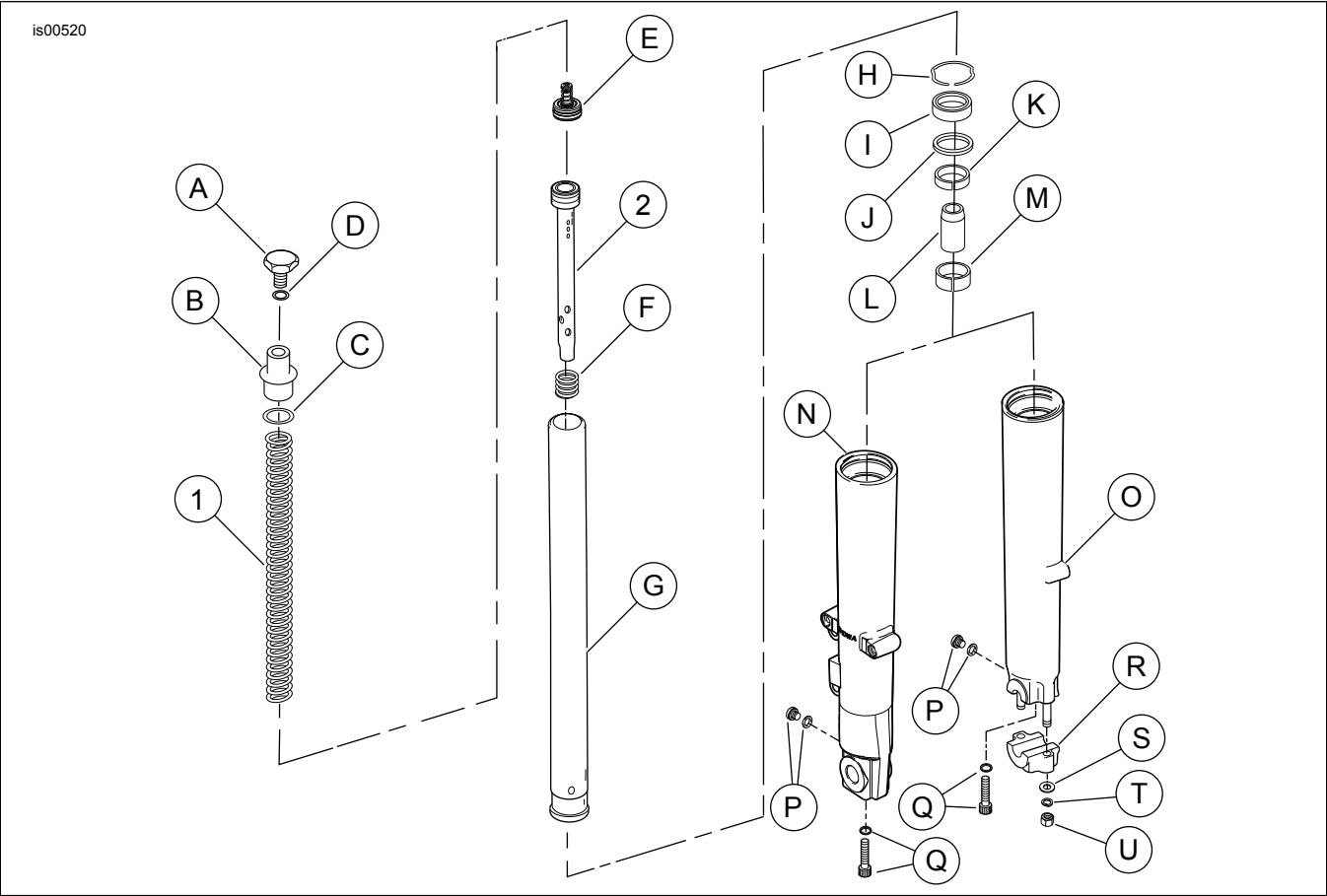


Figure 6. Service Parts for Touring Front Lowering Kit

Table 1. Service Parts: Touring Front Lowering Kit

Item	Description (Quantity)	Part Number
1	Fork spring (2)	Not Sold Separately
2	Damper tube	Not Sold Separately

Table 2. Items Referenced in I-Sheet, but Not Included in Kit:

Item	Description (Quantity)	Item	Description (Quantity)
A	Fork cap bolt	L	Stop, oil lock
B	Fork plug	M	Bushing
C	O-ring	N	Slider, fork (left side)
D	Quad ring seal	O	Slider, fork (right side)
E	Blow valve	P	Drain screw
F	Rebound spring	Q	Screw with washer
G	Slider tube	R	Axle holder
H	Retaining ring	S	Washer
I	Oil seal	T	Lock washer
J	Spacer seal	U	Nut
K	Bushing, slider		