



# INSTRUCTIONS

J05322

2011-06-17



## DYNA REDUCED REACH FORWARD CONTROL KIT

### GENERAL

#### Kit Number

50700007, 50700008

#### 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

Separate purchase of LOCTITE® 243 Threadlocker and Sealant - blue (Part No. 99642-97) and Anti-Seize Lubricant (Part No. 98960-97) are required for proper installation of this kit. Both can be purchased from any Harley-Davidson Dealer.

#### ⚠ 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

*A service manual for your model motorcycle is required for proper installation of this kit and is available from a Harley-Davidson Dealer.*

### Kit Contents

See Figure 4 and Table 1 and Figure 5 and Table 2.

### INSTALLATION

#### Shifter Assembly

#### ⚠ WARNING

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

1. Disconnect battery cables, negative (-) cable first.
2. See Figure 4. Disconnect shift linkage from the shifter shaft and lever (4).
3. Remove the left-side rider footrest and bracket assembly. Remove and retain the footrest and fasteners for installation. Discard the remaining hardware.

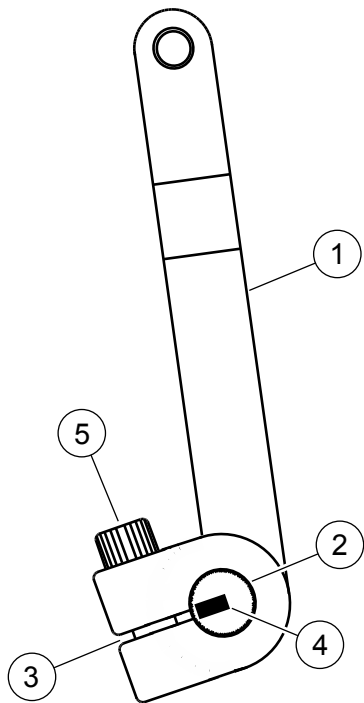
4. From the kit, press hole plugs (8) into the screw holes on the frame where the stock footrest assembly was mounted.
5. Remove plugs from forward control frame mount (J) and discard.
6. Remove the foot shift lever (A) with shifter peg (D). Save for future use. If the black kit is being installed, transfer shifter peg (D) to the **new** foot shift lever and discard the original.
7. See Figure 2. Remove the primary chaincase cover (6) and primary chaincase housing (1). Refer to your service manual for removal procedures.

#### NOTE

*See Figure 4. Before removing the transmission shifter lever (H), it is necessary to mark the correct orientation of the lever.*

8. See Figure 1. Draw a mark (4) on the end of the splined shaft (2) aligned with the casting split (3). This will allow the **new** transmission shifter lever to be installed in the same orientation as the old lever.





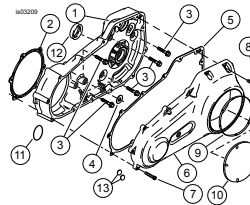
1. Gear shifter lever
2. Splined shaft
3. Casting split
4. Location marking
5. Lever bolt

**Figure 1. Transmission Shifter Lever Orientation**

9. Loosen lever bolt (5) and remove the old lever. From the kit, install the **new** gear shifter lever ( Figure 4, Item 6) onto the splined shaft in the same orientation as the old shifter lever.

**NOTE**

See Figure 4. The reduced reach plate (12) is installed between the shifter bracket and frame.



1. Primary chaincase housing
2. Housing cover gasket
3. Sealing fasteners (5)
4. Tower gasket
5. Primary cover gasket
6. Primary chaincase cover
7. Screw (4) (long)
8. Screw (9) (short)

**Figure 2. Primary Chaincase Cover and Housing Components**

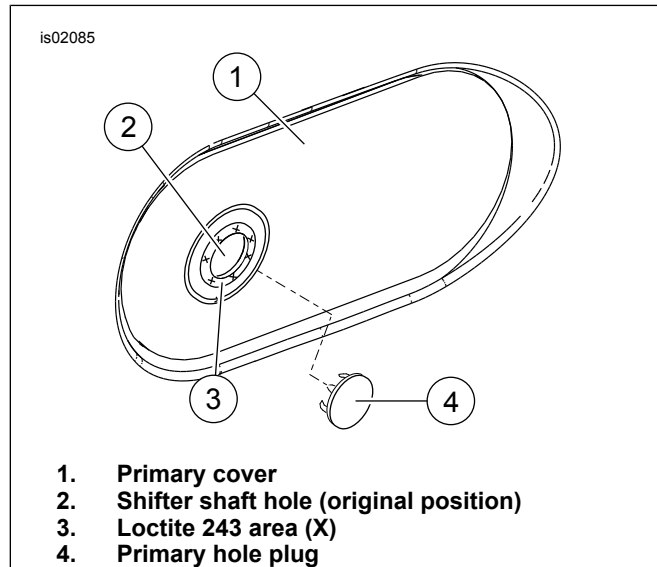
10. Position the reduced reach plate (12) on the frame where the shifter bracket was mounted with the tapped holes toward the rear and the counter bores facing out. Secure using two screws (10) and tighten to 41–47 N·m (30–35 ft-lbs).
11. Install spring washer (5) on the **new** shifter lever shaft (4). Coat the shaft with Loctite Anti-Seize and slide the shaft into the shifter bracket (7). Install the shifter bracket onto the reduced reach plate using two screws (10). Tighten to 41–47 N·m (30–35 ft-lbs).
12. Install the left footrest onto the shifter bracket.
13. Install **new** shifter rod (1) onto the transmission shifter lever (6) and shifter lever (4). Tighten to 8–10 N·m (70–90 in-lbs).
14. Install foot shift lever and peg assembly on shifter shaft (4) and adjust for rider comfort. Tighten pinch bolt (C) to 24.4–29.8 N·m (18–22 ft-lbs)

**NOTE**

After all shifter components are installed, move shifter through entire range of motion and check for interference

with other components. Put primary chaincase housing in position and check for clearance with shifter linkage components.

- See Figure 2. Using the gaskets and O-rings from the kit, install the primary chaincase housing (1) and cover (6). Refer to your service manual for installation procedures.



**Figure 3. Outer Cover Plug Installation**

- See Figure 3. Clean the area around primary cover hole (2), removing all dirt, oil and grease. Apply Loctite 243 (Harley-Davidson Part No. 99642-97) around opening (3). Insert primary hole plug (4) into opening. Remove any excess adhesive from surface. Allow Loctite to cure for 24 hours before operating vehicle.

## Brake Pedal and Linkage Assembly

- Remove the right-side rider footrest from the mount clevis. Retain the footrest and hardware for installation.
- See Figure 5. Loosen the brake rod jam nut (13) at the rear brake master cylinder.

### NOTE

Use the flats on the push rod (A) to remove the brake rod from the master cylinder.

- Rotate the master cylinder push rod to remove the original brake rod.
- Remove and discard the original brake pedal/bracket assembly and brake rod.
- Push hole plugs (Figure 4, Item 8) into the screw holes on the frame where the stock brake pedal assembly was mounted.

### NOTE

The reduced reach plate (12) is installed between the brake pedal bracket and frame.

- Position the reduced reach plate on the frame with the tapped hole toward the front and the counter bores facing out. Secure using screw (10) in the lower hole and align the upper hole with the threaded hole in the frame. Tighten to 41–47 N·m (30–35 ft-lbs).
- Fasten the brake pedal bracket (1) to the frame and reduced reach plate using screws (23 and 10). Tighten the screws to 41–47 N·m (30–35 ft-lbs).
- Coat the **new** brake pedal pivot shaft (2) with Loctite Anti-Seize.
- Fasten the new brake pedal pivot shaft (2), brake pedal and footrest mount clevis (5) to the brake pedal bracket (1) using the long Torx screw (6). Tighten the screw to 44–47 N·m (32–35 ft-lbs).
- Install the jam nut (13) all the way onto the new brake rod (12).

### ▲ WARNING

**When adjusting brake control rod, never allow more than nine threads to be exposed between control rod and jam nut. If more than nine threads are exposed, brake rod can come apart resulting in loss of rear brake, which could cause death or serious injury. (00306c)**

- Turn the master cylinder push rod onto the brake rod until about half the threads are used.
- Connect the brake rod (12) to the brake pedal with clevis pin (8), washer (9) and cotter pin (7).
- Verify that the water drain hole in the rubber boot (covering the brake rod) is on the bottom of the rubber boot.
- Turn the push rod on the brake rod until the brake pedal is elevated to an effective rider angle, and using at least half the threads available on the brake rod. Tighten the jam nut against the master cylinder push rod.
- Fasten the original footrest to the footrest mount clevis (8) using the original fasteners.

### ▲ 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)**

- Connect the battery cables, positive (+) cable first.

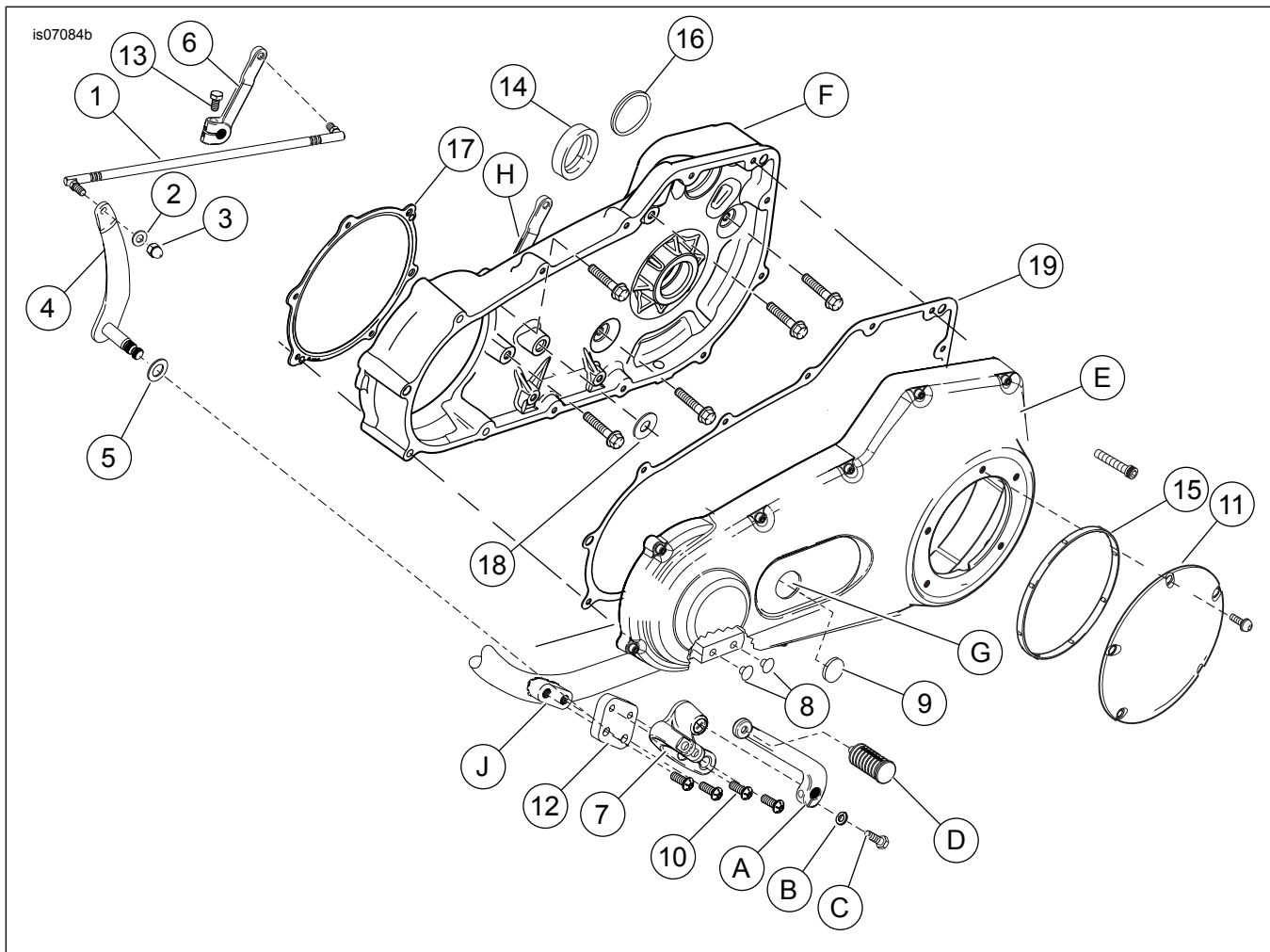
### ▲ WARNING

**After servicing brakes and before moving motorcycle, pump brakes to build brake system pressure. Insufficient pressure can adversely affect brake performance, which could result in death or serious injury. (00279a)**

**▲ WARNING**

17. Test brakes for proper operation before riding vehicle.

Brakes are a critical safety component. Contact a Harley-Davidson dealer for brake repair or replacement. Improperly serviced brakes can adversely affect brake performance, which could result in death or serious injury. (00054a)

**SERVICE PARTS****Figure 4. Service Parts: Reduced Reach Forward Foot Control Kit****Table 1. Service Parts Table**

Item	Description (Quantity)	Part Number
1	Shifter rod, chrome	34887-06
	Shifter rod, black	33737-09
2	Washer, 5/16 x 11/16 x 1/16 in. zinc (Chrome kit)	6702
	Washer, 5/16 x 11/16 x 1/16 in. black (Black kit)	6929
3	Acorn nut, 5/16-24 locknut, chrome	7736
	Acorn nut, 5/16-24 locknut, black	8196
4	Shifter shaft and lever, chrome	33789-06
	Shifter shaft and lever, black	33733-09
5	Spring washer	34625-90
6	Transmission shifter lever, chrome	33883-06
	Transmission shifter lever, black	33735-09
7	Shifter bracket, chrome	33695-03
	Shifter bracket, black	33649-09
8	Hole plug (4)	740
9	Primary hole plug, chrome	90357-89
	Primary hole plug, black	6943
10	Torx screw, 3/8-16 x 1.0 in. (6)	4059

Table 1. Service Parts Table

Item	Description (Quantity)	Part Number
11	Sealing fasteners (5)	786A
12	Plate, reduced reach, left	Not sold separately
13	Bolt	856A
14	Oil seal	12052A
15	Gasket, clutch cover	25418-06
16	Gasket, starter	27444-00Y
17	Gasket, inner primary	34934-06
18	Gasket	63869-06
19	Gasket, outer primary	60547-06
A*	Shifter lever, black	34501-09
<b>Items mentioned in text, but not included in kit:</b>		
A	Shifter lever	
B	Washer	
C	Pinch bolt	
D	Shifter peg	
E	Primary chaincase cover	
F	Primary chaincase housing	
G	Primary cover hole	
H	Transmission shifter lever (old)	
J	Forward control frame mount	
Included in kit part no. 50700007 only		

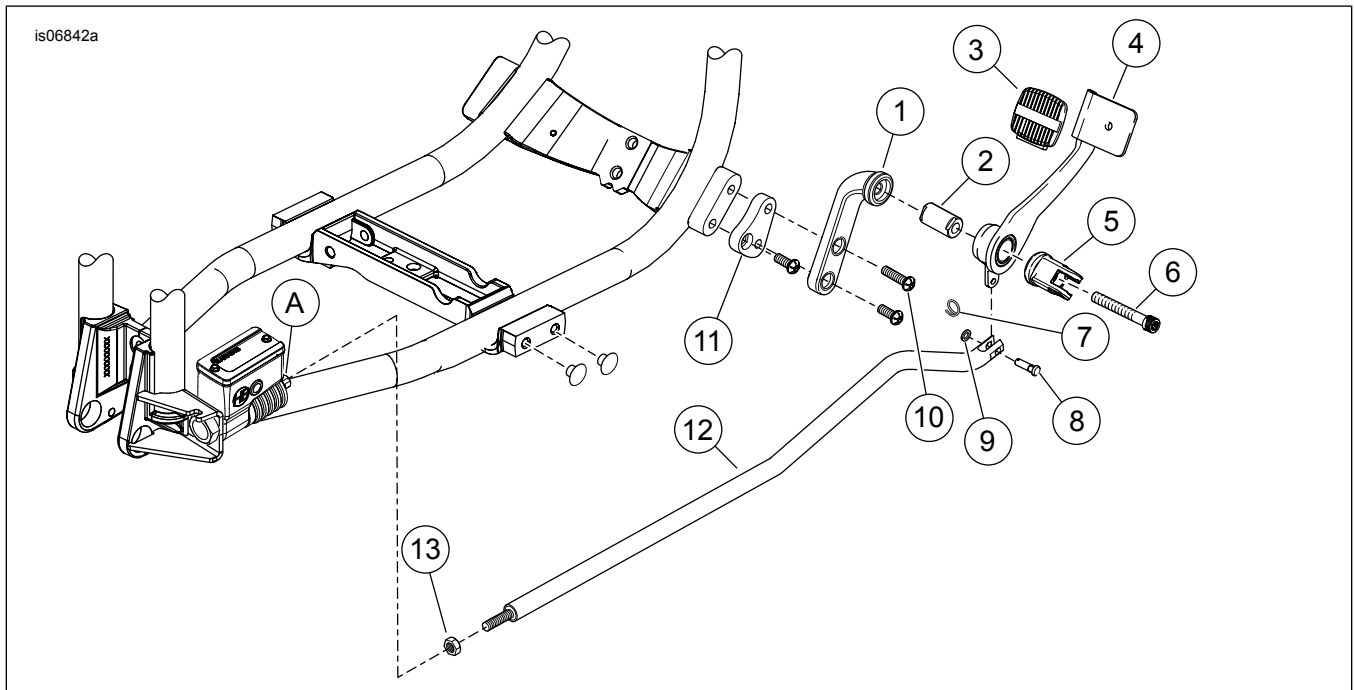


Figure 5. Service Parts: Reduced Reach Forward Controls Kit

Table 2. Service Parts Table

Item	Description (Quantity)	Part Number
1	Brake pedal bracket, chrome	33697-03A
	Brake pedal bracket, black	33682-09
2	Brake pedal pivot shaft	Not sold separately
3	Brake pedal pad	42532-06
4	Brake pedal, chrome	42542-03
	Brake pedal, black	42556-09
5	Footrest mount clevis, chrome	42664-03A
	Footrest mount clevis, black	42703-09
6	Torx screw, 3/8-16 x 2-3/4 in.	4339A
7	Cotter circle	51938-04
8	Clevis pin	42460-80B
9	Washer, 1/4 x 7/16 x 1/16 in.	6099
10	Torx screw, 3/8-16 x 1-1/2 in.	Not sold separately

**Table 2. Service Parts Table**

<b>Item</b>	<b>Description (Quantity)</b>	<b>Part Number</b>
11	Plate, reduced reach, right	Not sold separately
12	Brake rod	Not sold separately
13	Jam nut, 5/16-24	7744
<b>Items mentioned in text, but not included in kit:</b>		
A	Master cylinder push rod	Reference only