

## VT No. 22-0662 FORWARD CONTROLS KIT CHROME

### WARNING

Rider and passenger safety depend upon the correct installation of this kit. If the procedure is not within your capabilities or you do not have the correct tools, have a dealer perform the installation. Improper installation of this kit could result in death or serious injury.

### WARNING

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

### Installation Requirements

LOCTITE 243 MEDIUM STRENGTH THREADLOCKER AND SEALANT (BLUE) (99642-97)

E-CLIP TOOL

Kit Contents

See Figure 11 and Table 1.

LEFT SIDE

Disassemble Left Side

1. See Figure 6. Remove footpeg from foot support bracket. Retain footpeg, E-clip, clevis pin, and torsion spring for later use.

a. Remove E-clip (3).

Special Tool: E-CLIP TOOL

### NOTE

When removing E-clip, use E-clip tool to prevent damage to painted surfaces.

b. Remove clevis pin (1).

c. Remove footpeg (4).

d. Remove torsion spring (2).

2. See Figure 1. Remove the left mid foot support bracket (3).

a. Remove screws (2).

b. Remove foot support bracket.

3. Remove and discard plastic plug (1) if present.

4. See Figure 2. Remove shifter assembly.

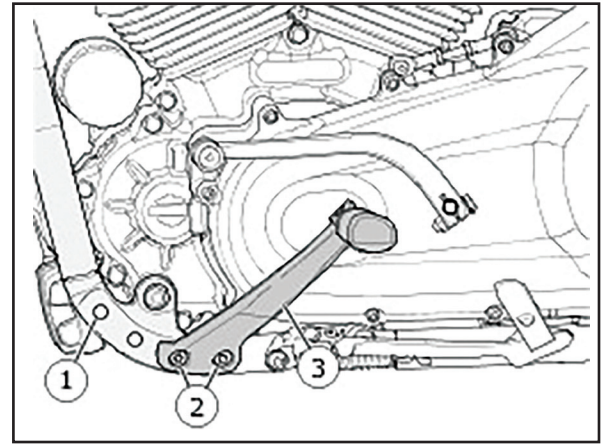
a. Remove screw (5) to free shifter rod (4) from rear shifter rod lever (3).

b. Remove pinch screw (1) from front shifter rod lever (2).

c. Pull foot shift lever (6) and shaft (8) outward until front shifter rod lever (2) is free.

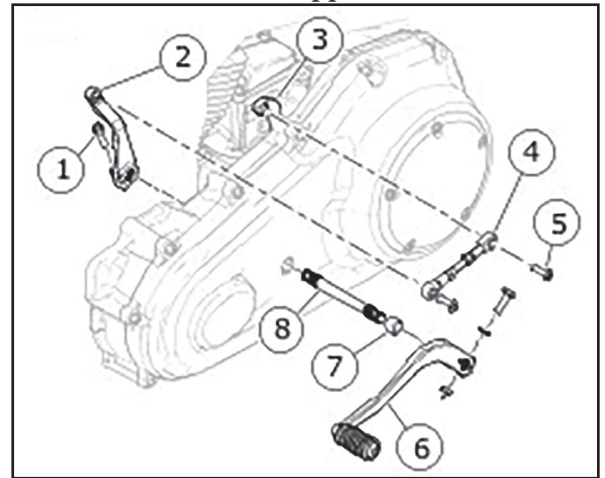
d. Remove front shifter rod lever and shifter rod.

e. Remove foot shift lever, shaft and spacer (7).



**Figure 1. Left Mid Foot Support Bracket**

- 1 Plastic plug
- 2 Screw (2)
- 3 Left mid foot support bracket



**Figure 2. Shift Linkage: Mid-Mount Foot Control Models**

- 1 Pinch screw
- 2 Shifter rod lever, front
- 3 Shifter rod lever, rear
- 4 Shifter rod
- 5 Screw
- 6 Foot shift lever
- 7 Spacer
- 8 Shaft

## Pre-Assemble Left Side Kit Components

1. See Figure 3. Install footpeg to foot support bracket.
  - a. Insert short leg of torsion spring (3) into hole in footpeg (1).
  - b. Insert long leg of torsion spring into hole in left foot support bracket (10).
  - c. Rotate footpeg into position and install clevis pin (2).
  - d. Install E-clip (14).

Special Tool: E-CLIP TOOL

### NOTE

When installing E-clip, use E-clip tool to prevent damage to painted surfaces.

2. Install shifter assembly to foot support bracket.
  - a. Install first small O-ring (11) onto shaft of shift rod lever (9).
  - b. Install shift rod lever through hole in left foot support bracket (10).
  - c. Install second small O-ring (11) onto shaft of shift rod lever.
  - d. Install nylon washer (5) onto shaft of shift rod lever.
  - e. See Figure 4. Align shift lever with shift rod lever at an angle of 65–75°.
  - f. See Figure 3. Install shift lever (4) onto shift rod lever.
  - g. Install lock washer (12) and screw (13). Tighten.  
Torque: 24.4–29.8 N·m (18–22 ft-lbs) Shift lever pinch screw
  - h. Install shifter linkage rod (8) to shift rod lever (9).
  - i. Install screw (6) and nut (7). Tighten.  
Torque: 13.5–19 N·m (120–170 in-lbs) Shifter rod screw

## Installation Left Side

1. Install left foot support assembly.
  - a. See Figure 11. Select left foot support bracket assembly and screws (12) from kit.
  - b. See Figure 5. Apply threadlocker to screws (6).LOCTITE 243 MEDIUM STRENGTH THREADLOCKER AND SEALANT (BLUE) (99642-97)
  - c. Install left foot support assembly (5).
  - d. Install screws (6). Tighten.  
Torque: 54–61 N·m (40–45 ft-lbs) Left-hand foot support screws
2. Install plug (4) into shifter shaft hole in primary cover.
3. Install shifter linkage.
  - a. Install shifter linkage rod (1) to rear shifter rod lever (3) with screw. Tighten.  
Torque: 13.5–19 N·m (120–170 in-lbs) Shifter rod screw
  - b. Adjust shifter rod ends (7) for rider posture and tighten jam nuts (8).

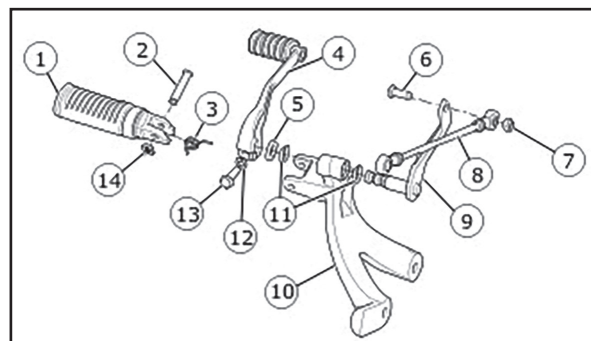


Figure 3. Left Side Pre-Assemble

- |    |                           |
|----|---------------------------|
| 1  | Left footpeg              |
| 2  | Footpeg clevis pin        |
| 3  | Footpeg torsion spring    |
| 4  | Shift lever sub-assembly  |
| 5  | Nylon washer              |
| 6  | Screw                     |
| 7  | Nut                       |
| 8  | Shifter linkage rod       |
| 9  | Shift rod lever           |
| 10 | Left foot support bracket |
| 11 | O-ring - small (2)        |
| 12 | Lock washer               |
| 13 | Screw                     |
| 14 | E-clip                    |

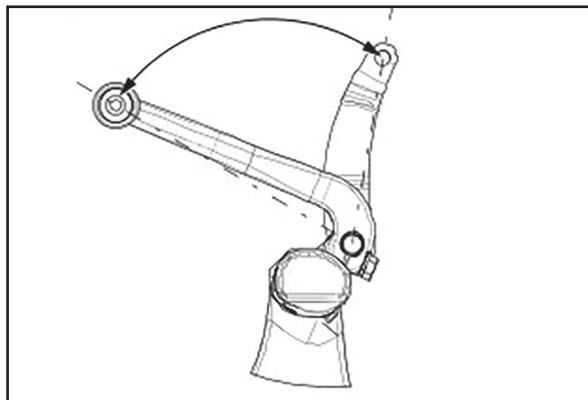


Figure 4. Shift lever assembly angle

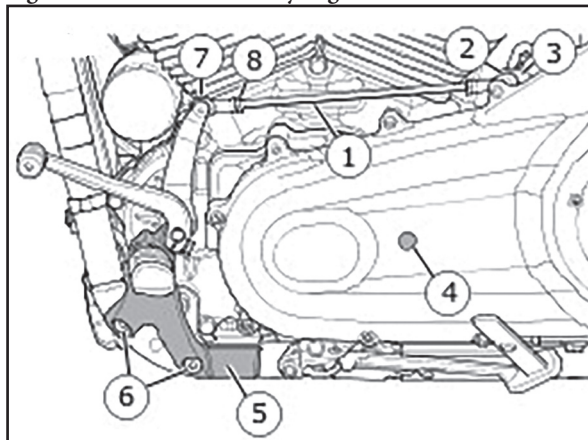


Figure 5. Left side forward controls

- |   |                            |
|---|----------------------------|
| 1 | Shifter linkage rod        |
| 2 | Screw                      |
| 3 | Shifter rod lever, rear    |
| 4 | Primary cover plug         |
| 5 | Left foot support assembly |
| 6 | Screw (2)                  |
| 7 | Shifter rod end (2)        |
| 8 | Jam nut (2)                |

## RIGHT SIDE

### Disassemble Right Side

1. See Figure 6. Remove footpeg from foot support bracket. Retain footpeg, E-clip, clevis pin, and torsion spring for later use.

#### NOTE

When removing E-clip, use E-clip tool to prevent damage to painted surfaces.

- a. Remove E-clip (3).

Special Tool: E-CLIP TOOL (HD-52369)

- b. Remove clevis pin (1).
  - c. Remove footpeg (4).
  - d. Remove torsion spring (2).
2. See Figure 7. Remove right side foot support bracket.
- a. Remove front linkage screw (2).
  - b. Remove screws (7).
  - c. Remove foot support bracket (1).
3. Remove rear master cylinder from bracket.
- a. See Figure 8. Remove cotter circle (1).
  - b. Remove clevis pin (2).
  - c. See Figure 7. Remove screws (4).
  - d. Support rear brake master cylinder (3).
4. Remove brake pedal bracket.
- a. Remove screw (5).
  - b. Remove brake pedal bracket (6).

### Pre-Assemble Right Side Kit Components

1. See Figure 9. Install footpeg to foot support bracket.
- a. Insert short leg of torsion spring (4) into hole in footpeg (6).
- b. Insert long leg of torsion spring into hole in right foot support bracket (3).
- c. Rotate footpeg into position and install clevis pin (5).
- d. Install E-clip (7).

Special Tool: E-CLIP TOOL (52369)

#### NOTE

When installing E-clip, use E-clip tool to prevent damage to painted surfaces.

2. Assemble brake pedal.
- a. Install first large O-ring (10) onto brake pedal mounting bracket (1).
- b. Install brake pedal (2) onto mounting bracket.
- c. Install second large O-ring (10) onto brake pedal mounting bracket.
- d. Install screw (8) and large washer (9).
- e. Install small washer (11) and nut (12). Tighten.
- Torque: 24.4–29.8 N·m (18–22 ft-lbs) Brake pedal pivot screw
- f. Install brake pedal pad (13) to brake pedal.

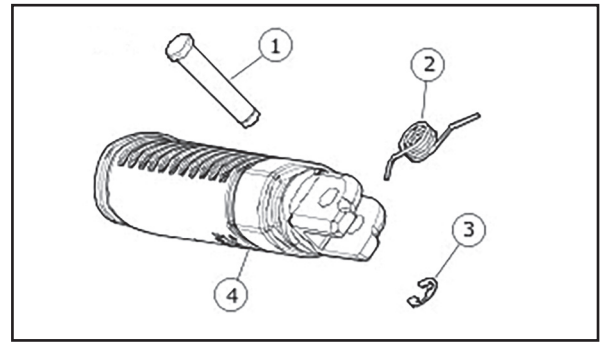


Figure 6. Rider Footpeg (Typical)

- 1 Clevis pin
- 2 Torsion spring
- 3 E-clip
- 4 Footpeg

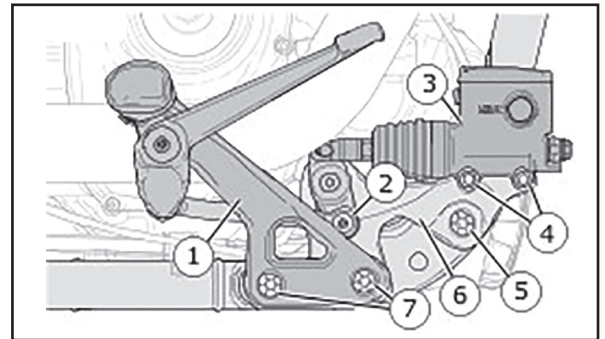


Figure 7. Right Side Mid Controls

- 1 Foot support bracket
- 2 Front linkage screw
- 3 Rear brake master cylinder
- 4 Master cylinder screw (2)
- 5 Brake pedal bracket screw
- 6 Brake pedal bracket
- 7 Screw (2)

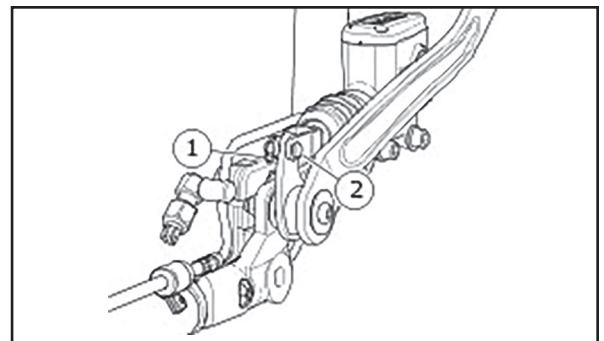
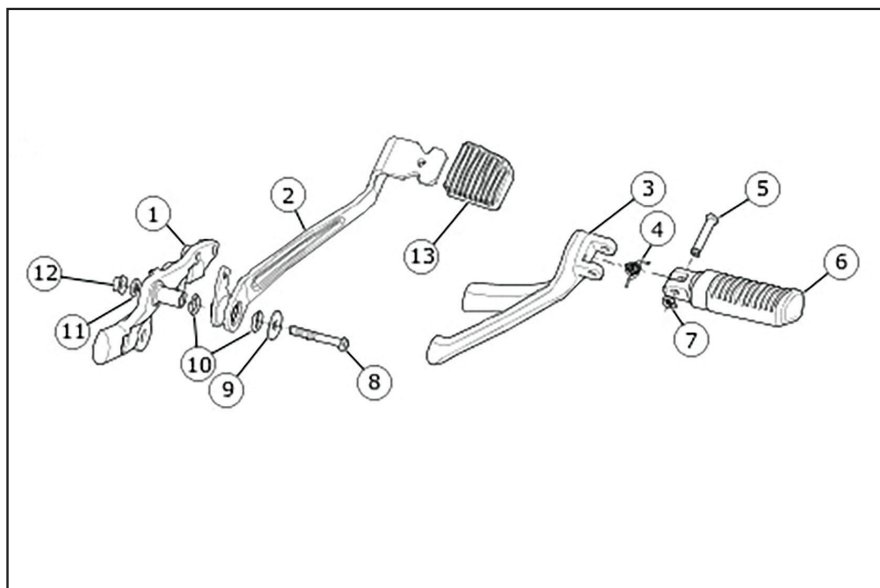


Figure 8. Rear Master Cylinder - Rear View: (exhaust remove for clarity)

- 1 Cotter circle
- 2 Clevis pin



**Figure 9. Right Side Pre-Assemble**

- 1 Brake pedal bracket
- 2 Brake pedal - Black
- 3 Right foot support bracket
- 4 Footpeg return spring
- 5 Footpeg clevis pin
- 6 Right footpeg
- 7 Wearpeg
- 8 E-clip
- 9 Screw
- 10 Washer - large
- 11 O-ring - large (2)
- 12 Washer - small
- 13 Nut
- 14 Brake pedal pad

## Installation Right Side

1. See Figure 11. Select the brake pedal bracket assembly and screw (23) from kit.
2. See Figure 10 Install brake pedal mounting bracket.
  - a. Apply threadlocker to screw (2).LOCTITE 243 MEDIUM STRENGTH THREADLOCKER AND SEALANT (BLUE) (99642-97)
  - b. Install brake pedal bracket (1).
  - c. Install screw (2). Hand tighten.
3. Install rear master cylinder to brake pedal mounting bracket.
  - a. Install rear master cylinder (5).

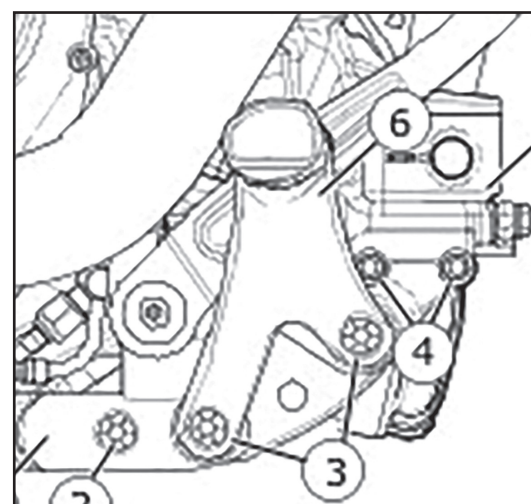
## NOTE

Verify that the brake pedal link is between the master cylinder yoke when placing the master cylinder into place.

- b. See Figure 8. Install clevis pin (2).
- c. Install cotter circle (1).
- d. See Figure 10. Install screws (4). Tighten.  
Torque: 24–30 N·m (18–22 ft-lbs) Rear master cylinder mounting screws

4. Install right foot support assembly.
  - a. See Figure 11. Select right foot support bracket assembly and screws (9) from kit.
  - b. See Figure 10. Apply threadlocker to screws (3).LOCTITE 243 MEDIUM STRENGTH THREADLOCKER AND SEALANT (BLUE) (99642-97)
  - c. Install right foot support assembly (6).
  - d. Install screws (3).
  - e. Tighten screws (2 and 3).

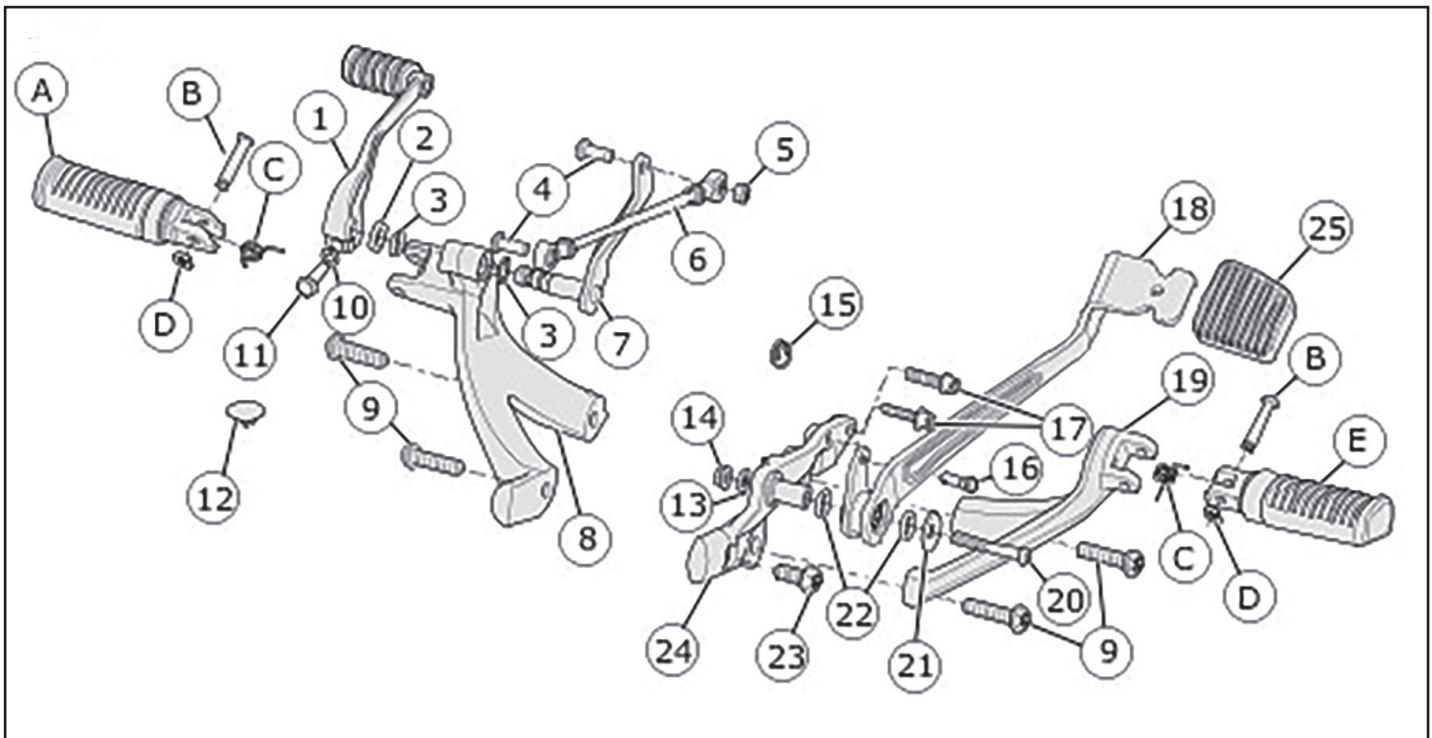
Torque: 54–61 N·m (40–45 ft-lbs) Right foot support screws



**Figure 10. Right Foot Support Bracket 1**  
**Brake pedal bracket**

- 2 Brake pedal bracket screw
- 3 Foot support bracket screw (2)
- 4 Master cylinder screw (2)
- 5 Rear master cylinder
- 6 Right foot support assembly





ITEM	BAG(1)	DESCRIPTION (QUANTITY)
1	A	Shift lever sub-assembly
2	A	Nylon washer
3	A	O-ring - small (2)
4	A	Socket head button screw (2)
5	A	Lock nut
6	A	Shifter linkage rod
7	A	Shift rod lever
8	A	Left foot support bracket
9	C	Cap screw, button head, 3/8-16 X 1.62 inch (4)
10	A	Lock washer
11	A	Hex head screw
12	A	Primary cover plug
13	B	Washer - small
14	B	Flange nut
15	B	Cotter circle
16	B	Rear brake clevis pin
17	B	Screw (2)
18	B	Brake pedal - Chrome
19	B	Right foot support bracket
20	B	Button head torx screw 2.25 inch
21	B	Washer
22	B	O-Ring - large (2)
23	B	Cap screw, button head, 3/8-16 X 1 inch
24	B	Brake pedal bracket
25	B	Brake pedal pad

**Items mentioned in text, but not included in kit:**

A	Left footpeg
B	Footpeg clevis pin (2)
C	Footpeg torsion spring (2)
D	E-clip (2)
E	Right footpeg