

V-Twin Mfg.
Reduced Reach Forward Control Kit
Fits 2006 – Up FXD Models
VT Part No. 22-0226

This is a custom application and rider safety depends on proper installation. This product should only be installed by a knowledgeable and trained motorcycle technician. V-Twin Mfg. accepts no responsibility for improper installation.

Installation Instructions:

Shifter Assembly

1. Disconnect shift linkage from the shifter shaft and lever (4).
2. Remove the left-side rider footrest and bracket assembly. Remove and retain the footrest and fasteners for installation. Discard the remaining hardware.
3. From the kit, press hole plugs (8) into the screw holes on the frame where the stock footrest assembly was mounted.
4. Remove plugs from forward control frame mount (J) and discard.
5. 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.
6. Remove the primary chaincase cover (6) and primary chaincase housing (1). Refer to your service manual for removal procedures.

Note: Before removing the transmission shifter lever (H), it is necessary to mark the correct orientation of the lever.

7. 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.
8. 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.

Note: The reduced reach plate (12) is installed between the shifter bracket and frame.

9. 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 30-35 ft-lbs.
10. 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 30-35 ft-lbs.
11. Install the left footrest onto the shifter bracket.
12. Install new shifter rod (1) onto the transmission shifter lever (6) and shifter lever (4). Tighten to 70-90 in-lbs.
13. Install foot shift lever and peg assembly on shifter shaft (4) and adjust for rider comfort. Tighten pinch bolt (C) to 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 proper clearance with shifter linkage components.

14. 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.
15. Clean the area around primary cover hole (2), removing all dirt, oil and grease. Apply Loctite 243 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

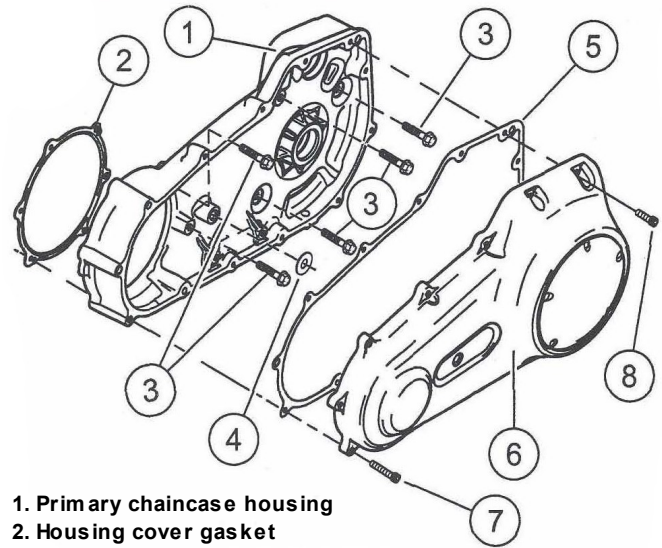
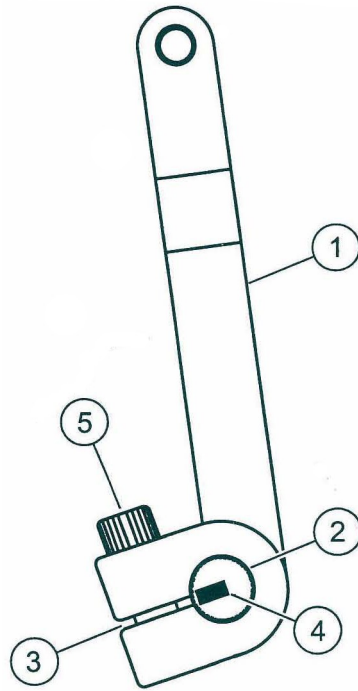
1. Remove the right-side rider footrest from the mount clevis. Retain the footrest and hardware for installation.
2. Loosen the brake rod jam nut (13) at the rear brake master cylinder. Use the flats on the push rod (A) to remove the brake rod from the master cylinder.
3. Rotate the master cylinder push rod to remove the original brake rod.
4. Remove and discard the original brake pedal bracket assembly and brake rod.
5. Push hole plugs 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.

6. 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 30-35 ft-lbs.
7. Fasten the brake pedal bracket (1) to the frame and reduced reach plate using screws (23 and 10). Tighten the screws to 30-35 ft-lbs.
8. Coat the new brake pedal pivot shaft (2) with Loctite Anti-Seize.
9. 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 32-35 ft-lbs.
10. Install the jam nut (13) all the way onto the new brake rod (12).
11. Turn the master cylinder push rod onto the brake rod until about half the threads are used.
12. Connect the brake rod (12) to the brake pedal with clevis pin (8), washer (9) and cotter pin (7).
13. Verify that the water drain hole in the rubber boot (covering the brake rod) is on the bottom of the rubber boot.

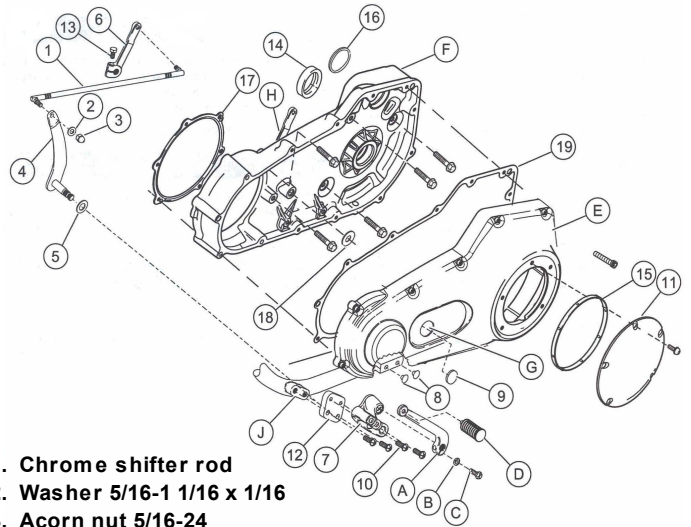
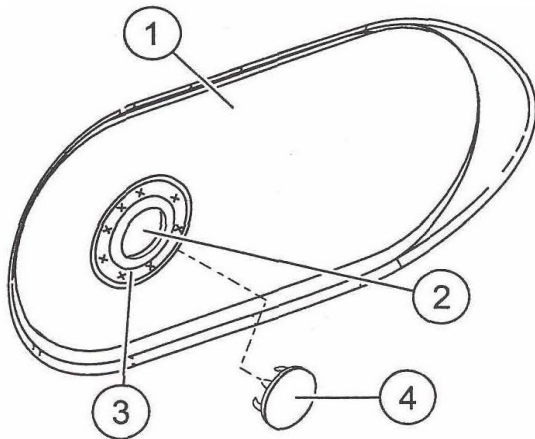
14. Turn the push rod on the brake rod until the brake pedal is elevated to an effective rider angle, and using at least half the threads available on the brake rod. Tighten the jam nut against the master cylinder push rod.
15. Fasten the original footrest to the footrest mount clevis (8) using the original fasteners.
16. Pump brakes to build brake system pressure and then Test brakes for proper operation before riding vehicle.

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

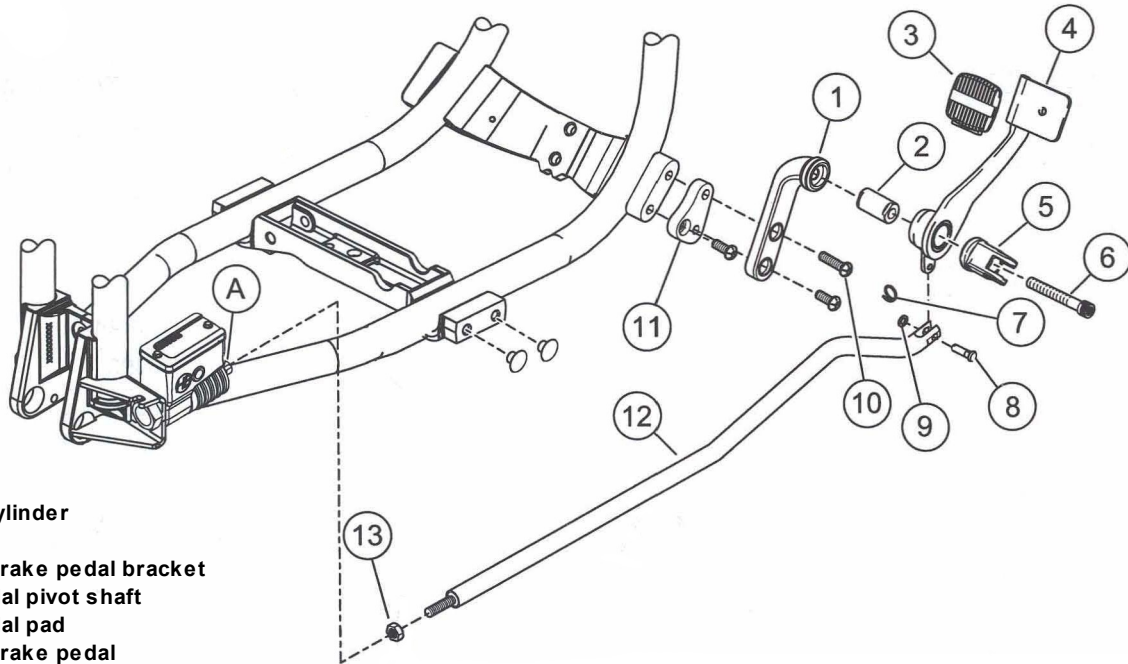


1. Primary chaincase housing
2. Housing cover gasket
3. Sealing fasteners
4. Tower gasket
5. Primary cover gasket
6. Primary chaincase cover
7. Screw long (4)
8. Screw short (9)

1. Primary cover
2. Shifter shaft hole
3. Loctite this area
4. Primary hole plug



1. Chrome shifter rod
2. Washer 5/16-1 1/16 x 1/16
3. Acorn nut 5/16-24
4. Chrome shifter shaft lever
5. Spring washer
6. Chrome Transmission shifter lever
7. Chrome shifter bracket
8. Hole plug (4)
9. Chrome Primary hole plug
10. Torx screw 3/8-16 x 1" (6)
11. Sealing fasteners (5)
12. Left plate
13. Bolt
14. Oil seal
15. Clutch cover gasket
16. Starter gasket
17. Inner primary gasket
18. Gasket
19. Outer Primary gasket
- 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



A. Master Cylinder

1. Chrome brake pedal bracket
2. Brake pedal pivot shaft
3. Brake pedal pad
4. Chrome brake pedal
5. Chrome footrest mount
6. Torx screw 3/8-16 x 2 3/4"
7. Circular cotter clip
8. Clevis pin
9. Washer 1/4 x 7/16 x 1/16
10. Torx screw 3/8-16 x 1 1/2"
11. Right Plate
12. Brake Rod
13. Jam nut 5/16-24