

V-Twin Mfg.
BILLET FORWARD CONTROLS
1986-1999 ST and 1958-1999 BT Models
VT Part No. 22-0760

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.

Notes:

1. The OEM foot boards if equipped can not be used with this kit.
2. Use thread lock on all hardware

Installation Instructions:

Left side Installation instructions:

1. Secure the motorcycle on a lift or stand upright.
2. Using the service manual remove the OEM side stand and foot boards, or forward pegs if equipped.
3. Remove the cap from the shifter pivot shaft and remove the allen set screw on the outer shift lever, then remove the outer shift lever from the forward control assembly.
4. Secure the transmission shift rod to the forward control inner lever.

Note: The use of a 5/16-24 tap to clean the hole may be required.

5. Install one 5/16-18X3/4 bolt provided in the kit, into the lower front side stand hole of forward control bracket.
6. Using three 3/8-16x3/4 bolts, provided with the kit install the left bracket as shown. Torque hardware to OEM specification. See figure 1.

Note: The placement of the bolt installed in step 5.

7. Using three 5/16-18X3/4 bolt and the one installed in step 5, reinstall the OEM side stand.
8. Select the desired position and install the outer shift lever remover in step 3.
9. Adjust shift rod as necessary. See figure 2 for left side installation view.
10. Insure all hardware is properly torqued.
11. Check for proper movement of shift linkage prior to test ride.

Right side Installation instructions:

1. Using the service manual remove the brake line, master cylinder, brake pedal, and OEM foot boards, or forward pegs if equipped.

Note: Take care not to get any contamination into the brake line.

2. Remove the master cylinder plunger from the right side forward control kit to ease installation.
3. Using two 3/8-16x3/4 bolts, provided with the kit and install the right forward bracket as shown. See figure 3. Torque hardware to OEM specification.

Note: Depending on model and year motorcycle, determine if the OEM brake line can be used. Some bending of the brake line or brake line replacement will be required. (Use a tubing bender to avoid damage to the brake line) The Kit master cylinder will accept a standard 10mm banjo bolt.

4. Install the master cylinder plunger removed in step 2.
5. Install the brake line.
6. See figure 4 for right side installed view.
7. Bleed the brake system using the instructions provided in the service manual.
8. Insure all hardware is properly torqued.
9. Check for proper brake operation prior to test ride.



Figure 1

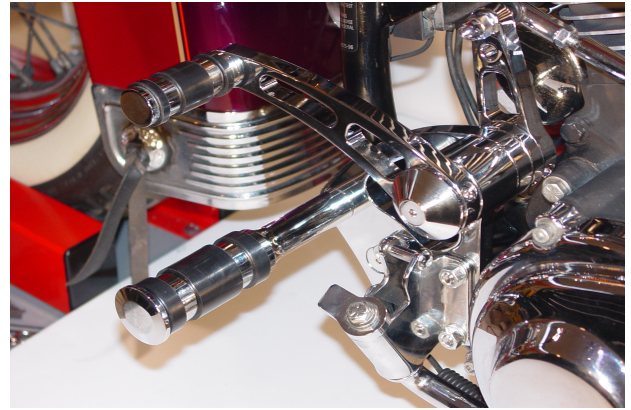


Figure 2



Figure 3



Figure 4

Parts List

Description	Qty
Left forward control assembly	1
Right forward control assembly	1
3/8-16X3/4 bolts	5
5/16-18x3/4 bolts	4

Forward Controls Brake lines Installation Tips

After installing the Forward Control Kit, we selected the parts for the brake line installation. There are many options available depending on the look and the motorcycle you are working on. Measure each brake line length requirement. This will ease the installation. The following is a suggested method.



1. The master cylinder does not have a flare in the outlet port. You will need a banjo fitting and bolt or a flare fitting to install the front section brake line. On our installation we selected the proper fitting (VT No. 23-1988) and 150 degree line (VT No. 23-4284).

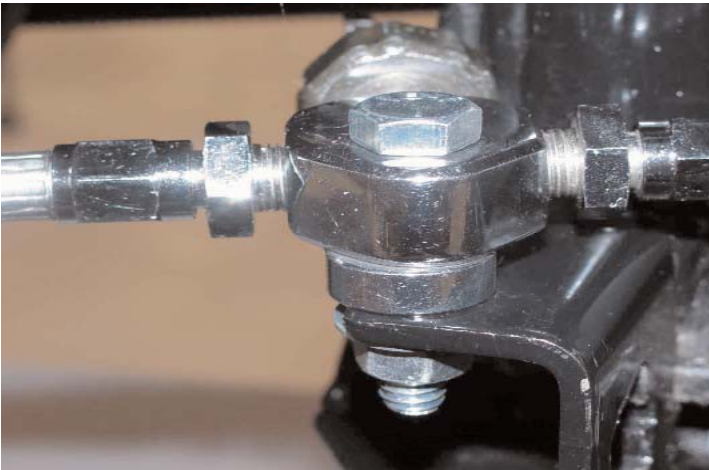
3. Using a Billet Aluminum brake block (VT No. 23-9228), Brake switch (VT No. 32-0443), and 2 fittings (VT No. 23-4396) to replace the OEM brake switch and provide a secure mounting location for the rear of the line assembly.

4. Select the proper line length for the bike you have. Consider the routing to determine the proper length. We selected a 30" line (VT No. 23-8110).

5. Secure the rear and front lines to the brake block.



2. Working from the rear caliper we installed a banjo fitting (VT No. 23-4047) and a 12" Russell brake line (VT No. 23-8020).



6. Using Loctite, secure the brake block on to the frame insuring sufficient room for the brake line wires. A spacer may be necessary.

8. Refer to the service manual to properly bleed the brake system.



7. Secure the brake line as shown.