

## REAR SET CONTROL KIT

### General

This Pro Series Billet Aluminum Rear Set Control kit is designed to fit on the S1 and S1 White Lightning models only.

#### NOTE

A Service Manual for your motorcycle is available from your Buell Dealer.

#### ⚠ CAUTION

**USE THE APPROPRIATE SERVICE MANUAL PROCEDURE! If the procedure is not within your capabilities or you do not have the correct tools, have your Buell dealer perform this installation.**

This kit relocates brake and shifter controls approximately four inches rearward and two inches higher for a more aggressive - and surprisingly comfortable - sport riding position. Installation of this kit requires the removal of the foot pegs, brake lever, shifter lever, shifter rod, and rear brake line. You will also have to bleed the rear brakes.

#### ⚠ CAUTION

**Read this entire Instruction Sheet before beginning. If any procedures are not within your capabilities, or you do not have the correct tools, have your Harley-Davidson Dealer perform the installation.**

Kit Contents:

QTY	PART NO.	DESCRIPTION
1	45255-97Y	Shifter Side Body Clamp (2 pcs.)
2	2801Y	5/16-18 x 7/8 SHCS-SS
2	45259-97Y	Lever Spacer
1	45260-97Y	Shifter Lever (rear)
2	6349Y	5/16-18 x 1 1/4 SHCS-SS
1	45261-97Y	Shifter Linkage Rod
2	2505Y	1/4-20 x 3/4 BSHCS-SS
1	45252-97Y	Rear Brake Line - Braided
1	45254-97Y	Brake Side Body Clamp (2 pcs.)
1	45256-97Y	Brake Pedal Stop
1	6354Y	10-24 x 1/2 SHCS-SS
1	7607Y	1/4-20 Jam Nut-SS
1	45268-97Y	Master Cylinder Mount
2	2805Y	1/4-20 x 1 SHCS-SS
1	45257-97Y	Master Cylinder Guard
2	45258-97Y	Master Cylinder Spacer
1	91249-97Y	Cushioned Clamp
2	102204	Cushioned Clamp
1	6301Y	1/4-20 x 5/8 BSHCS-SS
1	45253-97Y	Brake Lever
4	41771-96Y	Sealing Washer
1	5895Y	Sleeve Spacer
2		6 mm x 35 mm bolt
2		6 mm Locknut

#### NOTE

Removing the rear inner fender prior to beginning kit installation will ease the installation process. To remove the rear inner fender, follow the Service Manual instructions.

### Removal of existing Shifter Control

1. Remove the shifter rod at both ends.
2. Remove the male rod swivel ends and jam nuts from the shifter rod.

#### NOTE

The male rod swivel ends and jam nuts are threaded different. The one attached to the shift lever (front) is left hand threaded and the other is right hand threaded.

3. Remove the footpeg mounting bolt and washer located on the back side of the motorcycle frame. This removes the shifter lever (rear) assembly.
4. Remove the toe peg from the shifter lever (rear).

### Shifter Control Assembly

1. Position the shifter side body two piece clamp on the motorcycle frame tube located in front of the passenger footrest. The outside clamp has the slotted hole in the front and on the bottom.

#### NOTE

The location of the two piece clamp to the motorcycle frame is determined by the machined surface of the clamp.

2. Secure this two piece clamp to the frame using the furnished 5/16-18 x 7/8 bolt, for the top hole.
3. Install the furnished shifter lever spacer onto the existing bushing. Insert this into the back side (large hole) of the furnished shift lever (rear).
4. Insert the existing footpeg and thrust washer into the bushing on the furnished shift lever (rear).
5. Insert the footpeg/shift lever (rear) into the slotted bottom hole of the new two piece clamp, and mount from the back side using the 5/16-18 x 1-1/4 Allen head bolt. Apply LOCTITE THREADLOCKER 262 (red) to the bolt.
6. Install the existing male rod swivel ends and jam nuts that were removed from the discarded shifter rod, to the furnished shifter rod.
7. Install the shifter rod (right hand thread end) using the furnished 1/4-20 x 3/4 button head bolt through the swivel and then through the back side of the shifter lever (rear) threaded 1/4-20 hole.
8. Install the front portion of the shifter rod (left hand thread) using the existing 1/4-20 x 1-1/2 Allen head bolt. Insert from the front through the shift lever (front), and then through the shifter rod swivel. Tighten with the existing 1/4-20 spring lock nut.
9. Re-install the existing toe peg. Apply LOCTITE THREADLOCKER 262 (red) to the bolt.

## Removal of existing Rear Brake Control

1. Drain the rear brakes per the instructions in the service manual. **Be sure to discard the old brake fluid per your local environmental requirements.**
2. Remove the brake push rod bolt and locknut that secure the push rod swivel to the brake lever. Remove the push rod.
3. Remove the bolt that mounts the master cylinder reservoir assembly to gain access to the banjo bolt on the brake line/master cylinder.
4. Remove the banjo bolts and brake sealing washers, on both ends of the brake line.
5. Remove the brake line mounting cushion clamps to free up the brake line, and remove the brake line.
6. Remove the brake lamp pressure switch from the brake line.
7. Remove the two bolts and locknuts that mount the rear master cylinder, reservoir hose, and reservoir to the motorcycle frame. Remove as one assembly.
8. Remove the footpeg mounting bolt and washer located on the back side of the motorcycle frame. This will now remove the brake lever assembly.
9. Remove the toe peg from the brake lever assembly.

## Brake Control Assembly

1. Install the existing brake lamp pressure switch to the furnished brake line. Be sure to use Teflon pipe sealant and tighten to 7 - 8 ft-lbs.
2. Locate the front brake side body clamp (clamp with the slotted hole) and mount the brake stop in the slot on the right side of the clamp. Use the furnished 10-24 x 1/2 screw.
3. Insert the furnished 1/4-20 x 3/4 button head bolt into the brake stop from the top, and thread on the furnished 1/4-20 jam nut.
4. Install the master cylinder mount to the left side of the clamp using the two furnished 1/4-20 x 1 bolts.

5. **1997 Models:** Insert the two furnished 6mm x 35mm bolts through the master cylinder guard, through the master cylinder, through the furnished spacers, and then through the master cylinder mount. Tighten the assembly using the furnished 6mm locknuts.

**1998 Models:** Insert the two furnished 6mm x 35mm bolts through the master cylinder guard, through the furnished spacers, through the master cylinder, and then through the master cylinder mount. Tighten the assembly using the furnished 6mm locknuts.

6. Position the brake side body two piece clamp on the motorcycle frame tube located in front of the passenger footrest. The outside clamp has the slotted hole in the front and on the bottom.

### NOTE

*The location of the two piece clamp to the frame is determined by the machined surface of the clamp.*

7. Secure this clamp using the furnished 5/16-18 x 7/8 bolt for the top hole.
8. **1997 Models:** Install the existing master cylinder push rod by sliding the rod into the master cylinder and then installing the furnished 1/4-20 x 5/8 bolt from the back side into the threaded hole of the furnished brake lever.  
**1998 Models:** Install the existing master cylinder push rod using the furnished 1/4-20 x 5/8 inch bolt and furnished sleeve spacer from the back side into the threaded hole of the furnished brake lever.
9. Install the furnished brake lever spacer onto the existing bushing. Insert this into the back side (large hole) of the furnished brake lever.
10. Insert the existing footpeg and thrust washer into the bushing on the furnished brake lever.
11. Insert the footpeg/brake lever into the slotted bottom hole of the new clamp, and mount from the back side using the furnished 5/16-18 x 1-1/4 Allen head bolt. Apply LOCTITE THREADLOCKER 262 (red) to the bolt.
12. Re-install the existing toe peg to the furnished brake lever. Apply LOCTITE THREADLOCKER 262 (red) to the bolt.

Install the furnished brake line using the two existing banjo bolts and four furnished brake seals (two sealing washers per banjo bolt). Route the brake line the same as the previous brake line.

13. Secure the brake line in place by installing the following furnished cushion clamps:

**1997 Models for Europe/England:** Install the smaller mounting hole cushion clamp near the brake lamp pressure switch. The second cushion clamp mounts under the oil tank. Use the hardware from the removed clamps.

**NOTE**

*The brake line has a mounting indicator mark for proper positioning to the cushion clamps. This mark should be located flush with the left side of the clamp mounted under the oil tank as viewed from the rear of the motorcycle.*

The third clamp is mounted to the rear inner fender mount using the existing fender hardware.

**1997 Models for Domestic/Canada/California/Japan:** Install the smaller mounting hole cushion clamp near the brake lamp pressure switch. The second cushion clamp mounts under the oil tank. Use the hardware from the removed clamps.

**NOTE**

*The brake line has a mounting indicator mark for proper positioning to the cushion clamps. This mark should be located flush with the left side of the clamp mounted under the oil tank as viewed from the rear of the motorcycle.*

**1998 Models for Europe/England/Australia:** Install the smaller mounting hole cushion clamp near the brake lamp pressure switch. The second cushion clamp mounts under the oil tank. Use the existing hardware removed from the existing clamps.

**NOTE**

*The brake line has a mounting indicator mark for proper positioning of the other models and can be ignored. Position the brake line to ensure that it is free of interferences.*

The third clamp is mounted to the rear inner fender mount using the existing fender hardware.

**1998 Models for Domestic/Canada/California/Japan:** Install the smaller mounting hole cushion clamp near the brake lamp pressure switch. The second cushion clamp mounts under the oil tank. Use the existing hardware removed from the existing clamps.

**NOTE**

*The brake line has a mounting indicator mark for proper positioning to the cushion clamps. This mark should be located 1-1/4 inches from the left side of the clamp mounted under the oil tank as viewed from the rear of the motorcycle.*

The third clamp is mounted to the rear inner fender mount using the existing fender hardware.

14. Re-install the rear inner fender if necessary per Service Manual instructions.
15. Re-install new brake fluid and bleed the rear brakes per Service Manual instructions.
16. Adjust the brake plunger pedal stop per Service Manual instructions.

**⚠ CAUTION**

**After completing repairs or bleeding the system, always test motorcycle brakes at low speed. If brakes are not operating properly or braking efficiency is poor, testing at high speeds may result in personal injury.**