

# INSTRUCTION SHEET

**Buell**  
AMERICAN MOTORCYCLES

-J00750

Kit Number 49074-01Y

REV. 10-15-02

## BUELL M2, S3 AND S3T SHIFTER KIT

### General

This kit is designed for upgrading the footrest mounted shifter and linkage on 2000 and earlier M2 (Cyclone) and S3 (Thunderbolt) models to a 2001 style crankcase mounted shifter and linkage. For S3T Models, see the following note.

#### NOTE

For proper installation on S3T models, Fairing Lower Kit (part number M1000.MAxx, where xx denotes color) must be purchased separately from your Buell Dealer.

### Kit Contents

Qty	Description	Part Number
1	Shift lever, engine	T0225.02A8
1	Assembly, shift lever	N0621.01A3
1	Bushing, shift lever mounting	N0614.01A3
2	Bearing, pedal plastic	N0513.T
1	Shift lever tie bar assembly	N0617.01A1A
1	Cover, shaft tube, rubber	HS0002.01A1
1	Spacer, shift shaft	C0208.01A1
1	Screw, hex socket #10-24x1.25	AN1009.2CXZB
1	Screw, hex socket #10-24x5/8	AN1005.2CZ
1	Screw, 10-24 x 3/4 socket hex with Scotchgrip	AN1006.2CXZB
1	Bolt, hex head 5/16-18x4-3/4	AA0538.1CZ

#### NOTE

For M2 and S3 Models that have a Chin Fairing Kit installed, you will also need the following:

Outer Mounting Bushing (part number N0614.01A1)

Inner Mounting Bushing (part number N0616.01A1)

5/16 inch Washer (part number BA0511.2Z).

These parts must be purchased separately and are available from your Buell Dealer.

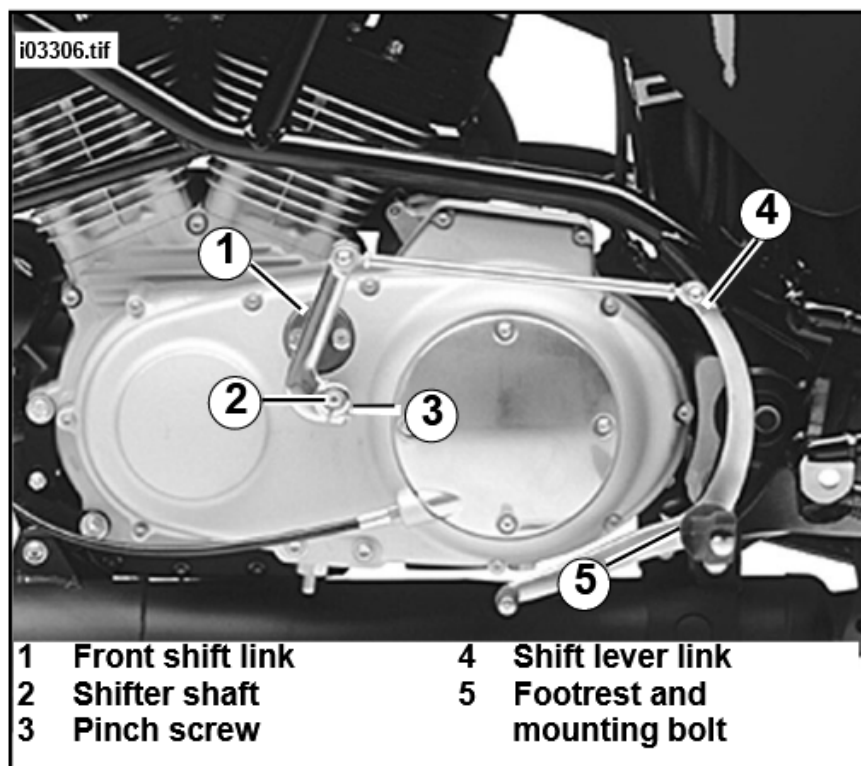


Figure 1. Remove Shifting Linkage (M2 Cyclone Shown)

### Removal

#### NOTE

The shift linkage can be removed as an assembly. It is not necessary to remove the shift linkage components separately.

1. See Figure 1. Remove the pinch screw (3) securing front shift link (1) to the shifter shaft (2).
2. Remove bolt (from backside of frame) securing footrest to frame and remove footrest and shift lever link. Save footrest and mounting bolt.
3. Slide front shift link (1) off of shifter shaft (2) and remove entire linkage as an assembly. Discard linkage assembly.
4. Remove rubber (spacer) washer from shifter shaft near crankcase and discard.
5. Reinstall footrest to frame using rubber shaft tube cover (part number HS0002.01A1) from kit and bolt saved in Step 2. Tighten bolt to 10-15 ft-lbs (13.6-20.3 Nm).
6. See Figure 2. Remove rear screw from lower crankcase housing. Discard screw but save washer.

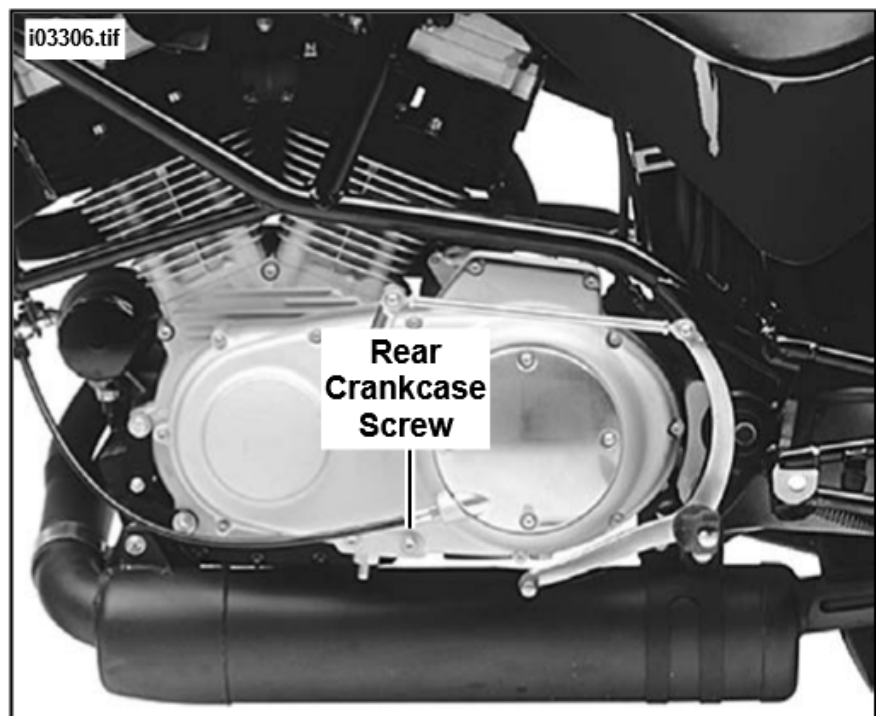


Figure 2. Remove Rear Crankcase Screw (M2 Cyclone Shown)

## Installation

- Obtain engine shift lever (part number T0225.02A8). Apply Loctite 243 (blue) to 1.25 inch screw (part number AN1009.2CXZB) and install engine shift lever to shifter shaft. Refer to Figure 5. Tighten screw to 59-66 **in-lbs** (6.7-7.5 Nm).

### NOTE

For M2 and S3 Models that have had a Chin Fairing Kit installed, when performing the next step, you will need to substitute Outer Mounting Bushing (part number N0614.01A1) and Inner Mounting Bushing (part number N0616.01A1) for Shift Lever Mounting Bushing provided in this kit. You will also need to substitute 5/16 inch Washer (part number BA0511.2Z) for Washer removed/saved in Step 6 of this Instruction Sheet. These parts can be purchased separately from your Buell Dealer.

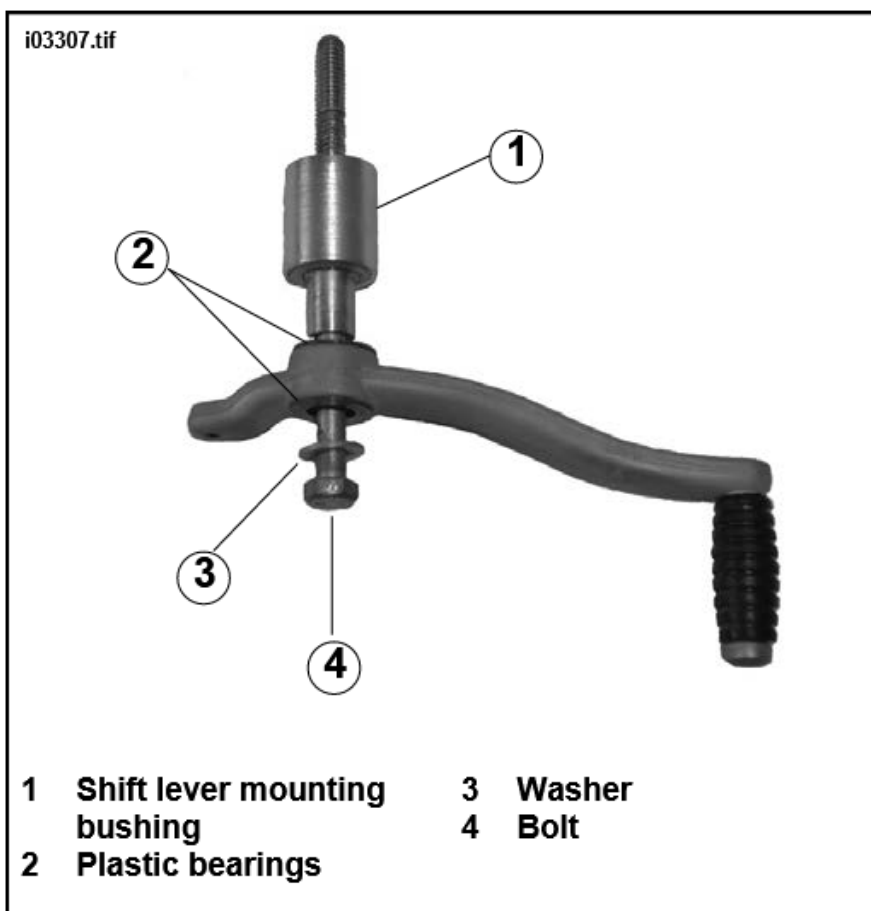


Figure 3. Shift Lever (Assembled)

- See Figure 3. Obtain shift lever (part number N0621.01A1) and install plastic bearings (part number N0513.T). Install washer saved from Step 6 to 4-3/4 inch hex bolt (part number AA0538.1CZ). Install bolt with washer through shift lever and shift lever mounting bushing (part number N0614.01A3) as shown.
- See Figure 4. Apply Loctite 243 (Blue) to threaded end of bolt and install assembled shift lever bolt as shown to lower crankcase. Tighten to 27-29 ft-lbs (36.6-39.3 Nm).
- See Figure 5. Obtain shift lever tie bar assembly (part number N0617.01A1A) and orient "bowed" toward crankcase as shown. Apply LOCTITE THREADLOCKER 243 (Blue) to threads of upper eye screw (part number AN1006.2XCZB) and install upper eye of lever tie bar to engine shift lever. Tighten screw to 39-60 **in-lbs** (4.4-6.7 Nm).

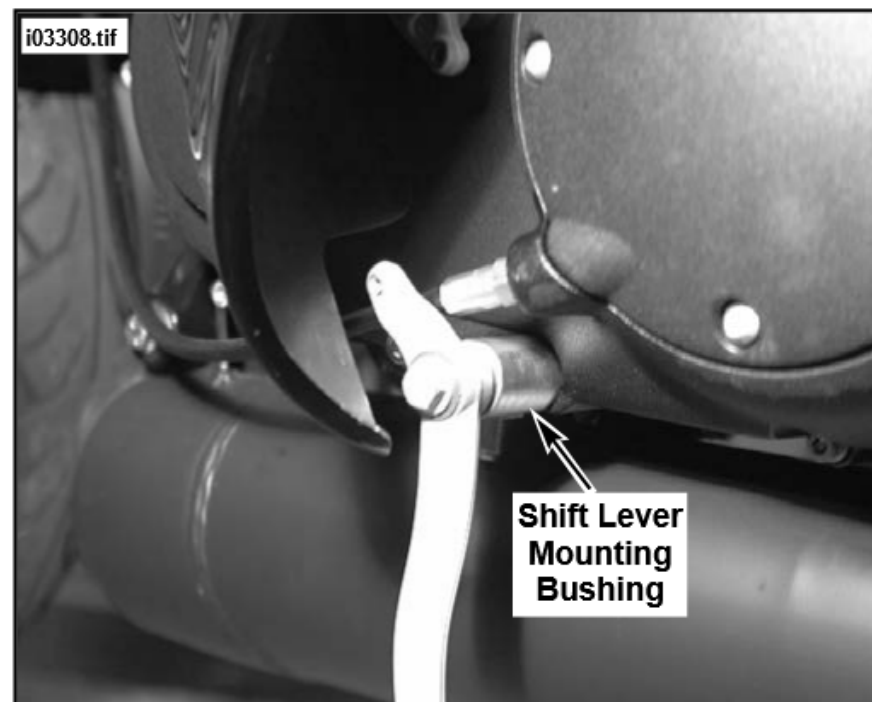


Figure 4. Shift Lever Assembly Installation (S3T Thunderbolt Shown)

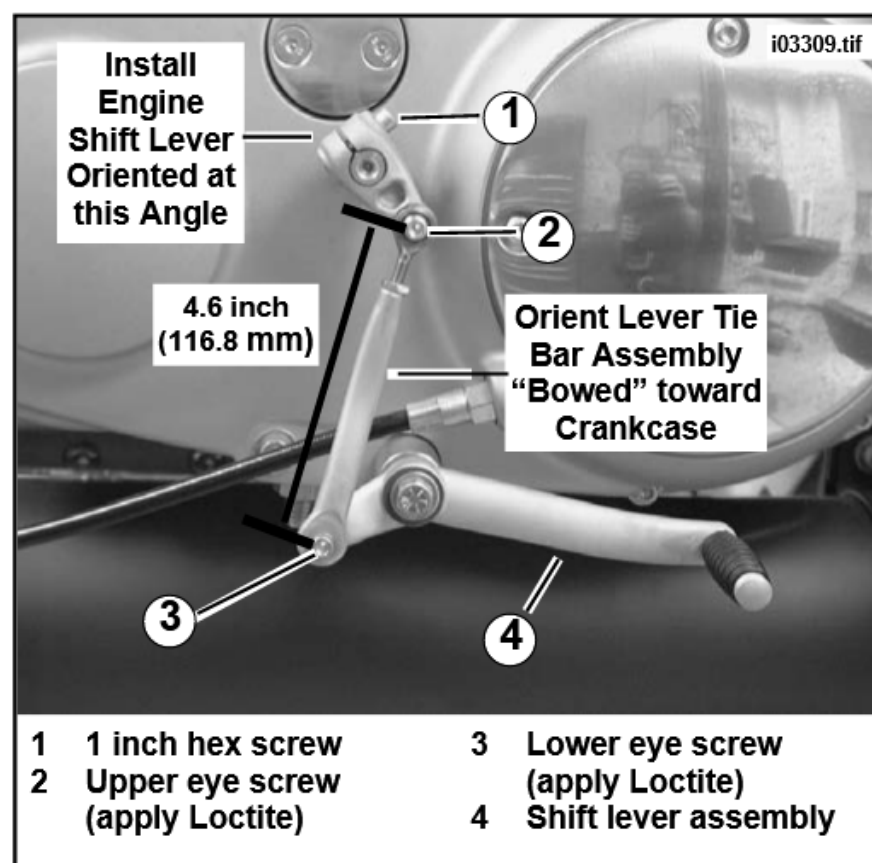


Figure 5. Shifter Kit (Assembled) (M2 Cyclone Shown)

- Apply LOCTITE THREADLOCKER 243 (Blue) to threads of lower eye screw (part number AN1005.2CZ). Install lower eye of shift lever tie bar to shift lever assembly. Tighten screw to 59-66 **in-lbs** (6.6-7.5 Nm).
- Check for proper shift lever/clutch operation.

### NOTE

Factory setting for shift lever linkage length (Center of upper eye to center of lower eye).

MODEL	FACTORY SETTING	MAXIMUM
All	4.6 inch (116.8 mm)	4.7 inch (119.4 mm)