V-Twin Mfg. SHOCK LOWERING KIT, REAR, BLACK FITS 1997-2001 FLT; Except FLHRCI LOWERS 1-1/2" VT No. 54-0521

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:

- 1. Support the motorcycle securely so the rear wheel can be lifted slightly off the ground.
- 2. Remove the saddle-bags.
- 3. Loosen the upper shock bolts and remove the lower shock bolt and washers. Save these parts as they will be re-used with this lowering kit.
- 4. Tilt the shocks up and back then re-tighten the upper shock bolts.
- 5. Remove both belt adjuster nuts. Do not loosen the axle at this time.
- 6. Slip the lowering kit brackets over the belt adjustment studs and up against the belt adjuster plates. The welds on the brackets mount away from the swing arm on the left and right. The lowering kit brackets should fit flush against the belt adjuster plates when the lowering kit mounting screws are installed.
- 7. Two sets of 1/2" tapered Allen bolts are supplied. Determine which thread pitch (fine or coarse) your lower shock bolts are, and install the correct bolts using Loctite, then torque the 1/2" bolts to 40 ft lb. making sure that the lowering kit bracket is positioned flush on the swingarm.
- 8. Due to manufacturing inconsistencies on the swing arms it may be necessary to remove the belt adjuster plates on some models to get a flush fit. Additionally, the belt adjuster stud may keep the brackets from mounting flush.
- 9. If this occurs first try loosening the axle nut slightly and re-aligning the adjuster in the bracket.
- 10. If re-aligning the adjuster stud doesn't allow a flush fit, use a file to slot the hole in the bracket a little more. Once the brackets mount flush, loosely re-install the adjuster nuts. Be sure to tighten the axle nut as per OEM specifications.
- 11. Remove the top shock bolt from the frame and place the enclosed 1/4" spacer behind the shock between the shock and the frame. **Do not allow** the shock to hang from the plastic air line.
- 12. Tighten the top bolt to OEM specifications.
- 13. A longer shoulder bolt (1/2" x 2-1/2") is supplied for applications where the OEM bolt is too short.
- 14. Raise the rear wheel and attach the bottom shock mounts to the lowering brackets. Use the enclosed bolts and locking nuts to secure the shocks; torque the nuts to 40 ft lb. Tighten the belt adjuster nuts.

Note: This Lowering kit slightly changes the angle and position of the shocks. It places them further back and closer to the saddlebags. You may encounter clearance problems when re-installing the saddlebags. Check for a minimum of at least .5cm clearance to prevent damage to the saddlebags. Be sure to measure clearance in the recessed area in the backside of the saddlebags where the shock sits. Check the front, back and side for clearance. The bags must install without undo force. If they don't, they are hitting the shock and/or shock boot and will require more clearance.

For proper clearance check the following:

- 1. Place washers between the mounting points where the saddlebags are attached to the rails. This will move the saddlebag slightly outward and away from the body of the shock.
- 2. Remove or slide off the rubber boot that covers the shock shaft and attaches the body of the shock. The boot can be altered for better fitment and reattached to the shaft (not the body) and secured with nylon ties and/or removed completely. This should gain you a minimum of 3mm of clearance.
- 3. Slot and/or space the saddlebag "rail/frame cage" mounting holes to allow the entire frame assembly to be moved out slightly from the shock body. This modification should only be used as a last resort.
- Lower motorcycle and check preload.
- 5. Make adjustments as necessary to suit rider comfort.
- 6. Test Ride.
- 7. Recheck the mounting hardware and bag clearance after test riding the motorcycle. Adjust if necessary.

Parts List:

Description	Qty
Hex bolt black 1/2-13x2.5"	2
Flat socket cap black 1/2-20x1"	2
Flat socket cap black 1/2-13x1"	2
Flat socket cap black 1/2-20x2"	2
Jam nyloc nut zinc 1/2-20	2
Spacer 1/2-1/4x1"	2

