

**V-Twin Mfg.
Shock Lowering Kit
VT Part No. 54-0513
For use on 1991 – 1999 FXD Models**

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.

Warning:

This kit was designed for use with stock tire and stock length (12.5") shocks ONLY! We do not recommend using shorter than stock length (12.5") shocks with this kit. Fender to tire clearance will be reduced if a larger tire or shorter shock is used. While the springs are removed from the shocks check the tire to fender clearance, brake caliper to fender clearance and belt guard to fender clearance.

Reducing the ride height on any motorcycle will create reduced cornering and ground clearance. The operator must use extreme caution when operating the motorcycle.

We highly recommend that you have this installed by a qualified motorcycle technician. For proper installation the rear wheel and shocks must be removed. If you do not have access to a motorcycle stand capable of supporting the rear of the motorcycle so that the wheel can be removed, as well as the tools capable of removing and replacing the shock spring, please allow your local dealer to assist you.

To maintain a proper balanced geometry, we recommend lowering the front and rear of the motorcycle equally.

The operator must use extreme caution when operating a modified motorcycle. particularly when familiarizing himself with it's altered handling characteristics.

Check your motorcycle for proper parking lean grade. Alter lowering, your side stand may require bending.

This kit **will not fit** FXD Convertibles with **OEM** saddlebags! Owners of models using saddlebags (hard or soft) must check for sufficient clearance.

This kit should not be used on FDXL (Lowrider). This motorcycle is equipped with shocks that are less than 12.5" from the factory.

Installation time is usually under 2 hours, with no permanent modifications required to the machine.

INSTALLATIONS INSTRUCTIONS

1. Support motorcycle securely so that rear wheel is off the ground.
2. Remove rear exhaust muffler to gain access to axle/axle nut.
3. Remove upper drive belt guard.
4. Remove rear wheel and slide brake caliper assembly off the swingarm.
5. Remove shocks and Install 3/4" travel limiters following the guidelines below.
 - a. Remove shock spring using a spring compressor VT # 16-5506. Compress the spring & remove spring retainer. Care should be taken as the spring is under tension. (See picture)
 - b. Twisting the snap ring slightly, slip the snap ring onto shock shaft between shock body and rubber bumper.
 - c. Install travel limiter halves onto shock shaft. Using snap ring pliers, install snap ring into groove of travel limiter. (See picture)
 - d. Re-install shock springs.
6. Install smaller Lowering Kit Bracket to the right side of swingarm, through hole in stock shock mount. Use 1/2-20 x 1.25" long bolt (provided) from backside of swingarm mount. Secure with 1/2-20 nylock nut (provided). Torque to 30 foot pounds.
7. Repeat the above (#6) for the left side (larger) Lowering Kit Bracket.
8. Place 1/2-20 x 3" bolt (provided in right side Lowering Kit Bracket hole. Place on of the 1/4" spacers on the bolt on outside of the block (this bolt is for the new shock position).
9. Place 1/2-20 x 3" bolt (provided) in left side Lowering Kit Bracket hole (this bolt is for the new shock position).
10. Remove the right side upper shock stud. Install the remaining 1/4" spacer (provided) and replace the stud. The right shock mount requires this spacer for proper alignment.
11. Reinstall both modified shocks onto their new mounting positions (stock Acorn nuts and washers are retained on lower mounts).Torque top/bottom nuts/bolts to 25 foot pounds.
12. Reinstall the rear wheel and brake caliper assembly. Refer to Harley manual for proper belt alignment and axle nut torque.
13. Install belt guard, and then check for proper clearance. Trim belt guard if necessary.

