



# Installation Instructions BURLY "STILETTO" SHOCK KIT

Sportster Models

## WARNINGS & ALERTS

- DO NOT INSTALL ON SPORT MODELS!
- DO NOT INSTALL IN CONJUNCTION WITH ANY REAR LOWERING KIT OR COMPONENT !
- The operator must use extreme caution when operating a modified motorcycle, particularly while getting familiar with its altered handling characteristics.
- Check your motorcycle for proper parking lean angle AFTER installation of this kit. Your side stand may require modification.
- Read and follow all instructions to properly install this kit.
- Make sure proper sleeves and spacers are installed with the shocks. Improper installation can cause unsatisfactory and / or unsafe operation.

## LIMITED GUARANTEE

We continually inspect and try to improve our products. All parts have been inspected prior to packaging, and our guarantee is limited to replacement of defective parts. This guarantee is in lieu of all guarantees or warranties implied or expressed. Because we cannot control the application of our products, buyer assumes risks for any and all damage caused by himself or third party, by virtue of failure of these parts. We make no warranty as to products distributed by us, expressed or implied, including without limitation any warranties or merchant ability and fitness for a particular purpose. We will however, pass on all warranties made by the manufacturer, who has sole responsibility for performing such warranties. The manufacturer shall solely be responsible for any damage to person or property arising from design, manufacturing and testing of all products, and we accept no liability for such damages. We shall not be liable for indirect or consequential damages.

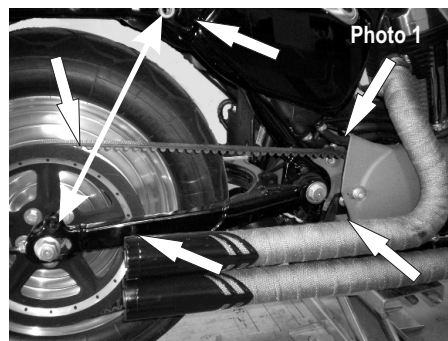
### Kit Contents

QTY	DESCRIPTION
2	Shock Absorbers
4	Shouldered Sleeves
4	Shock Mounting Spacers
1	Spanner Wrench
1	Lube Packet

## INSTALLATION INSTRUCTIONS BURLY STILETTO SHOCKS

- Read all the instructions carefully before installing this kit on your motorcycle. Use your Harley-Davidson manual as a reference while installing this kit.
- Support and lift the motorcycle securely so the rear wheel is off the ground and able to spin with light brake drag. The balance point is towards the rear of the transmission.
- Remove any accessories necessary to gain access to the rear shocks.
- Remove the stock shocks by removing the lower and upper shock nuts, bolts and washers. Save the nuts, bolts and washers as they will be re-used with this kit.
- If your bike is currently equipped with a "Bracket" Style lowering kit, such as a Burly Brand or other, You MUST remove that kit before installing this shock kit.
- With the stock shocks removed and prior to installing your new Burly Shocks, raise the rear wheel vertically until you feel contact between tire / fender or belt, belt guard / frame or fender or contact between any other accessory / frame, swing arm, tire etc. With the Rear wheel held in this "Point of Contact" position, measure the distance between the center of the upper shock mount and the center of the lower shock mount as indicated by the double-ended arrow shown in **Photo 1**. This measurement should and MUST be Equal to or less than 9.75" for 1988-2003 Sportsters.
- With the shocks still removed, now carefully lower the rear wheel until the upper and lower shock mount centers are 15" apart to make sure no contact will be made between the shock mounts or swingarm and the exhaust system or any other part or accessory when the shocks are mounted. Possible contact points are indicated by the arrows shown in **Photo 1**.
- Double check your measurements, **WARNING** DO NOT complete the installation of your Burly Stiletto Shocks until you have corrected any interference to achieve proper clearance.

**Failure to do so can result in damage to your bike and lead to loss of control and injury!**



Do Not complete your Burly Shock installation until you have checked to be sure you have adequate Wheel travel and clearance.

## INSTALLATION INSTRUCTIONS BURLY STILETTO SHOCKS

(continued)

- Before installing the shocks, check the chain/belt tension (see section below).
- These shocks are designed to operate with the shock shaft either up or down, however it may be necessary to remove the spring cover for clearance. For this reason, we recommend they be mounted shock shaft up.
- Install 1 shouldered sleeve into each shock eye. The shock must be mounted with the shoulder to the inside, between the frame or swing arm and the shock eye. **(Photo 2)**
- If additional clearance is needed between the shock and the bike, place the included spacers between the shoulder and the bike. **(Photo 3)**
- With the sleeves and spacers mentioned above, install the new Burly shocks on each side of the bike using the nuts, bolts and washers you removed with the stock shocks earlier. Be sure to apply thread locking compound to the bolts, but don't tighten them yet.
- Remove motorcycle from lift and using a torque wrench tighten all of the shock mounting bolts to the factory recommended torque (45-50 ft./lbs).
- Re-install any accessories removed earlier in accordance to the manufacturers installation instructions. Be sure they do not interfere with the operation of the shock absorbers in any way through their full range of movement.

### Drive Belt/Chain adjustment

Adjust the drive belt/chain as you normally would per your factory authorized manual noting the following. Pensive on the year and model bike you have, the manual may say to check the drive belt tension with or without the rider on the bike and may give different tensions for different models. This is related to the drive type (chain or belt) and the various stock shock lengths offered on the various models. Since we just changed the length of the shocks, we recommend the following guidelines:

- Be sure to find the tightest point in you drive chain/belt. Do this by lifting the rear wheel slightly off the ground and rotating it while checking the slack in the chain/belt (they stretch and have tight and slack points) - mark the point that is the tightest.
- With the belt/chain at the previously mentioned tightest point, make sure the rear axle, swing-arm pivot, and counter-shaft sprocket/cog are all aligned (see Figure 4). You may be able to do this by having someone sit on the bike to compress the shocks, or it may require temporarily removing the shocks. This is now the tightest the position the drive belt/chain will ever see. It's in this position you want to measure the "slack" or "play" on the lower side of the belt/chain about in the middle between the front and rear sprockets/cogs, and if need be adjust your chain/belt tension.
- In this position we recommend adjusting the tension to between .25" (6.4mm) and .31" (7.9mm). If you are adjusting a model with a belt rather than a chain, we recommend using a belt tensioning tool (HD part number 40006-85) as the belt requires approximately 10 lbs of force be applied while adjusting to this measurement - when you apply the 10 lbs of pressure, it should deflect the .25"-.31" of an inch.
- Be sure to align the wheel and tighten all bolts and fasteners to the proper torque per your factory authorized manual.

### FINE TUNING

- Rear ride height can be adjusted by turning the adjusting cam to a higher setting. This is also used to stiffen the shock if excessive bottoming occurs while riding the bike. Apply a small amount of the provided lubricant to the sliding surface of the cam and use the spanner wrench to rotate the cam. **Figure 5**
- The operator must use extreme caution when operating a modified motorcycle, particularly while getting familiar with its altered handling characteristics.

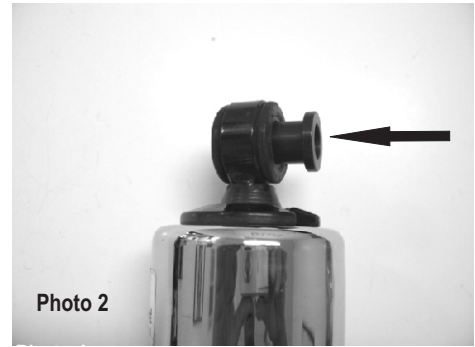


Photo 2

Install a shouldered sleeve as shown into each mounting eye of both shocks



Photo 3

On 1991 - Later Sportsters also use one additional spacer in conjunction with the shouldered sleeve to provide sufficient space between the shocks and the Frame / Swing arm.

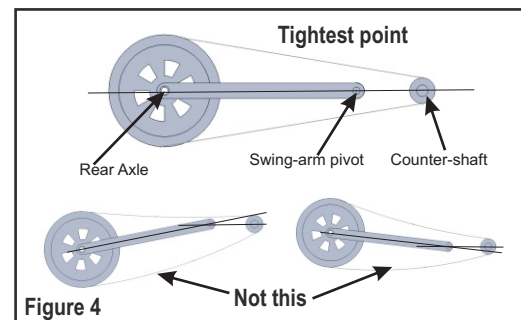


Figure 4

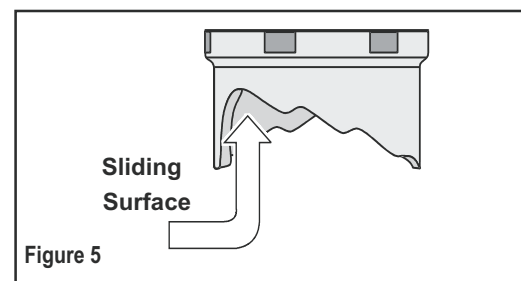


Figure 5

