INSTALLATION INSTRUCTIONS
B28-107 "LOW BOY" FRONT LOWERING KIT 49mm
Harley-Davidson ™ 2017 - Later* FLH/FLT ®

Attention!

Statements in these instructions that are preceded by the following words are of special significance:

This symbol means there is a possibility of injury to yourself and others.

This symbol means there is a possibility of damage to the vehicle.

NOTE:

Information of particular importance has been placed in italics.

PARTS INCLUDED

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 the 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.

IMPORTANT NOTICE

Caution: Removing and replacing fork springs must be performed by a qualified mechanic or according to steps outlined in a factory authorized service manual that related to your particular make, model and year motorcycle.

The installation of this kit will require a press or some other fork spring compression tool. If you do not possess such resources, take your bike and this kit to a competent mechanic to have it installed.

The vehicle must be securely blocked to prevent it from dropping or tipping when the fork springs are removed. Failure to do so can cause serious damage and/or injury

Burly Brand Fork Springs are designed to work with the OEM (Original Equipment) forks. Use of this product on any forks other than OEM may produce an unsatisfactory ride and void the warranty.

WARNINGS & ALERTS

- **DO NOT USE 2-inch low configuration on FLHTKL.**
- To maintain proper balanced geometry, we recommend lowering the front and rear of the motorcycle equally. Burly offers rear lowering kits for your motorcycle too.
- Operators must use extreme caution when operating a modified motorcycle, particularly while familiarizing themselves with its altered handling characteristics.
- Check your motorcycle for proper parking lean angle. After lowering, your side stand may require modification.
- Enclosed sticker must be applied to the forks of any motorcycle a Burly Brand lowering kit has been installed on.

INSTALLATION INSTRUCTIONS

- Read all instructions carefully before installing this kit on your motorcycle. Use your factory authorized service manual as a reference while installing this kit.
- Support and lift the motorcycle securely so the front wheel is off the ground. The balance point is toward the front of the engine.
- Remove forks according to instructions contained in your factory authorized service manual.

------- NOTE -------

For maximum performance we highly recommend the forks be disassembled and thoroughly cleaned, inspected and new fork oil installed. We recommend a 10 wt. (Type E) fork oil. See ***FINE TUNING*** *on page 4 for more information. Fork oil level should be measured with the fork spring removed and the fork completely compressed. The measurement from the top edge of the fork tube to the fluid level should be 140mm.*

- *The Burly Brand fork spring kit is a direct replacement of your stock springs. You may use the supplied pre-load spacers (which you may have to cut to length).*

While the installation of this fork lowering kit will not change the compressed length of the front forks, we have found that some bikes may not have adequate clearance between the fender, fairing and/or accessories. So we recommend with the fork springs removed from both forks, reinstall the forks, fender, wheel and anything else you may have removed and lift the front forks, or lower the bike to completely compress the front forks. With the forks fully compressed, check for adequate clearance between the tire, fender, fairing, crash bar, accessories, etc. while turning left to right - lock to lock. You must correct any clearance issues prior to installing this kit to avoid damage and/or vehicle control problems.

- After removing both forks, start with one of the forks and remove the fork cap, then remove the spacer, washer & fork spring.

The fork cap is under spring pressure and care must be taken as it is removed to avoid injury! Keep downward pressure on the cap as you unscrew the final threads. This will minimize the spring "jump" that will occur as soon as the cap is fully un-threaded.

BE CAREFUL!

- **Removing and installing Fork Springs with high-preload:** As noted in the beginning of the instructions, the force required to compress the fork-spring to remove & reinstall the fork cap requires a press as illustrated on Page 3, or other fork-spring compression tool. Even while using either a press or such tooling, great care must be taken to avoid personal injury or damage to the fork. If you are in any way uncertain about this portion of the procedure - stop here and take your forks to a competent mechanic to have the remainder of the kit installed.

Refer to page 3 for instructions on using a press.

- **To use a press, we recommend this procedure:**

1. Loosen the fork-cap one full turn.
2. Position and secure fork assembly in press so it can be compressed slightly and the inner fork-tube can be freely rotated - also be sure that the ram can move upward from that position 3.00" to 4.00" inches to allow the spring to extend upward once the cap is removed.
3. Compress the fork about 050" to 1.00" inch **(figure 1).**
4. Now, with the press holding the spring tension, you should be able to unscrew the fork-tube from the cap by hand (**figure 2).**
5. Once the fork-tube is completely un-threaded from the cap (**figure 3),** carefully release pressure in the press allowing the fork-spring to safely extend **(figure 4).**

THE FORK CAP MUST BE HELD IN ALIGNMENT WITH THE PRESS RAM AT ALL TIMES TO ENSURE SAFE SPRING EXPANSION/COMPRESSION WHEN THE FORK-CAP IS UN-THREADED FROM THE FORK-TUBE.

For assembly, simply reverse the preceding steps.


figure 1


figure 2


figure 3


figure 4

- Drain the fork oil, and then with the fork completely compressed remove the damper rod and top out spring by removing the fork bolt (with crush-washer) in the bottom of the fork. Keep the fork assembly fully compressed at this point to keep the stock bottoming-cup properly located.

- In addition to the stock top out spring (on the damper-rod), install either ONE of the supplied top-out springs to lower your forks approximately 1" inch **OR** TWO of the supplied top-out springs to lower your forks approximately 2" inches - as illustrated on page 5. **** FLHTKL - DO NOT LOWER 2 INCHES**

- Drop the damper-rod along with the chosen number of top-out springs back into the fork. Place a drop of red thread-locking agent on the fork bolt that came out of the bottom of the fork and reinstall it (with the crush-washer), tightening it back into the damper rod. Torque the bolt to the factory recommended specification.

- Repeat the process on the other fork - putting the same number of top-out springs on the damper-rod.

- Preload spacer length - before going any further make sure you have the proper preload spacer lengths ready to install in your forks. If you are lowering your forks 1" inch the included preload spacers need to be cut to the correct length - 0.6"(15mm) before installation. If you are lowering your forks 2" inches you will not use any spacer at all.

- Secure the fork assembly so you can fill it with fluid. This may require stroking the assembly to draw fluid from the inner fork tube into the outer fork slider. Pour enough 10wt. fork fluid in each fork, pausing to stroke the assembly to get the fluid into the outer fork slider, to achieve the recommended 140mm fork fluid level - which is measured from the top lip of the fork tube to the fluid , with the fork compressed all the way and the fork spring removed.

NEVER ADD TOO MUCH OR TOO LITTLE FLUID RESULTING IN A MEASUREMENT LESS THAN 140mm WHEN USING THIS SPRING KIT.

INSTALLATION INSTRUCTIONS (CONTINUED)

- In each fork, install one of the supplied burly brand fork springs into the fork. Then install one of the stock washers followed by a preload spacer (0.6" (15mm) for 1 inch low only), and finally the stock fork-cap. No washer or spacer are used for the 2" inch low configuration. See Illustration on page 5.

- While reinstalling the fork cap be certain to torque it to the proper specification per a factory authorized service manual. Reinstall fork, fender, wheel, and all other components per a factory authorized manual. Remove motorcycle from lift and recheck all fasteners for proper tightness per your factory authorized manual.

- The operator must use extreme caution when operating a modified motorcycle, particularly while getting familiar with its altered handling characteristics and ground clearance.

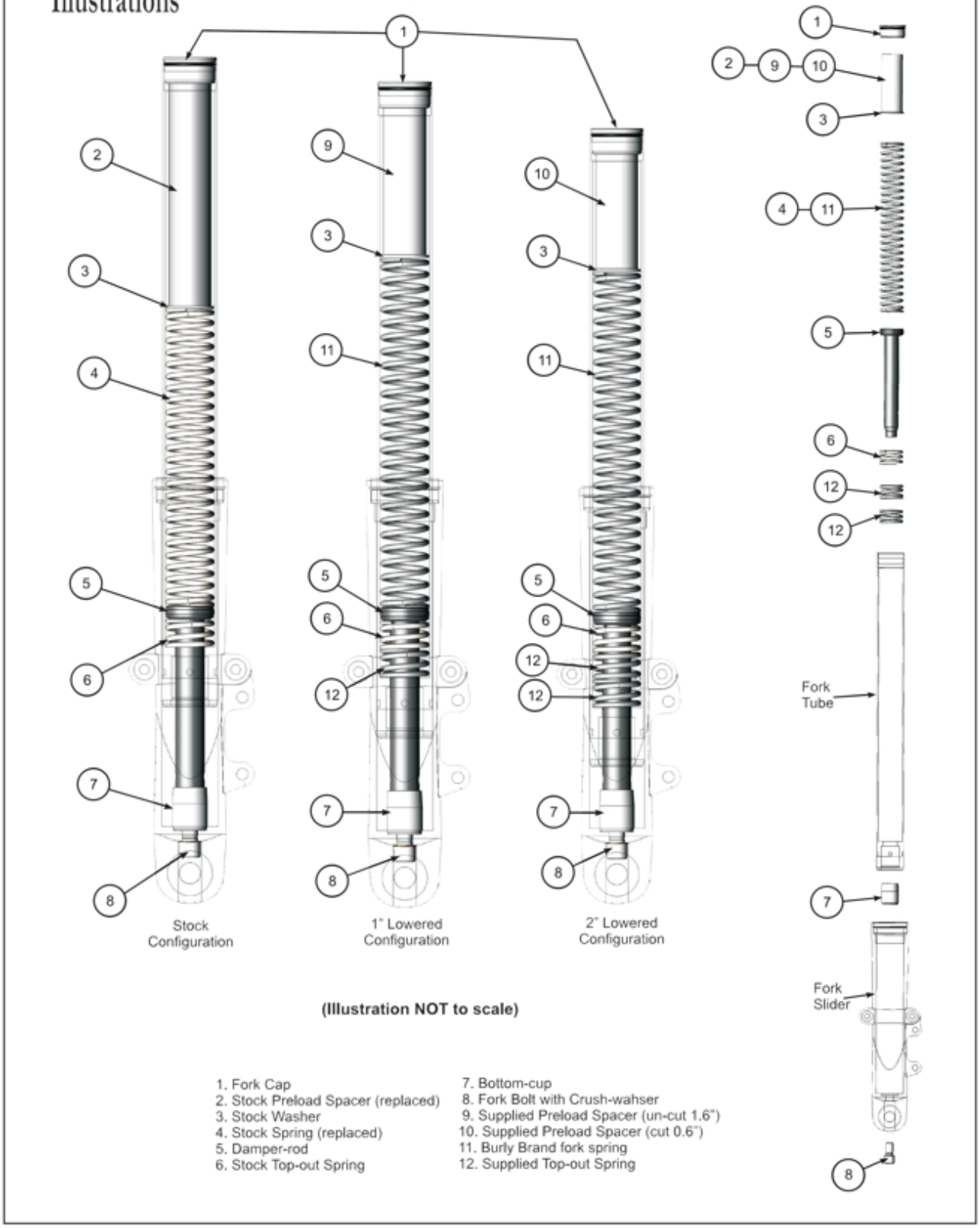
- For totally balanced suspensions, we highly recommend installing a pair of Burly Brand shocks, also available at your local dealer.

FINE TUNING

- Fork Oil: Though we recommend using a 10wt fork fluid, oil viscosity can be changed to alter damping. Heavier oil to increased damping. Lighter oil to decrease damping. Increase in 5 weight increments (i.e. from 10 weight to 15 weight). Oil viscosity will have more effect on rebound damping than compression damping; too high a viscosity can create harshness on sharp edge bumps.

Installing a lowering kit will decrease initial ground clearance. The motorcycle will be lower to the ground and care should be taken to avoid bottoming, especially over bumps or in turns. To maintain proper balanced geometry, we recommend lowering the front and rear of the motorcycle equally. After lowering, your side stand may be too long and require shortening or modification. Check your machine for proper balance. Modify the side stand if necessary.

Illustrations



(Illustration NOT to scale)

1. Fork Cap
2. Stock Preload Spacer (replaced)
3. Stock Washer
4. Stock Spring (replaced)
5. Damper-rod
6. Stock Top-out Spring
7. Bottom-cup
8. Fork Bolt with Crush-wahser
9. Supplied Preload Spacer (un-cut 1.6")
10. Supplied Preload Spacer (cut 0.6")
11. Burly Brand fork spring
12. Supplied Top-out Spring