



# Installation Instructions 430 Series Rear Shocks For Harley Davidson Motorcycles

## ATTENTION

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

### Warning

This means there is the possibility of injury to yourself or others.

### Caution

This means there is the possibility of damage to the motorcycle.

### Note

*Information of particular importance has been placed in italics.*

## Warranty

Progressive Suspension warrants to the original purchaser of this Part to be free of manufacturing defects in materials and workmanship with a limited lifetime warranty. In the event warranty service is required, you must call Progressive Suspension immediately with a description of the problem.

If it is deemed necessary for Progressive Suspension to make an evaluation to determine whether the part is defective, a return authorization number will be given by Progressive Suspension. The parts must be packaged properly so as to not cause further damage and returned prepaid to Progressive Suspension with a copy of the original invoice of purchase and a detailed letter outlining the nature of the problem. If after the evaluation by Progressive Suspension the part was found to be defective it will be repaired or replaced at no cost to you. If we replace it, we may replace it with a reconditioned one of the same design.

Progressive Suspension shall not be held liable for any consequential or incidental damages resulting from the failure of a Progressive Suspension part. Progressive Suspension shall have no obligation if a part becomes defective as a result of improper installation or abuse.

### Warning

Lowering your motorcycle 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. Lowering a motorcycle can change the handling characteristics. Always use extreme caution when riding after a change is made and take time to get accustomed to any handling change.

## IMPORTANT NOTICE

Note: Please read the following instructions completely before starting installation!

These shocks can be mounted with the adjuster at the top or bottom. However, we recommend the shocks be mounted with the adjuster at the top for ease of spring adjustment.

Follow instructions in an authorized shop manual or take the motorcycle to a competent dealer.

### Warning

The motorcycle must be securely blocked to prevent it from tipping over when the shocks are removed. Failure to do so can cause serious damage and/or injury.

The use of lowering blocks on Progressive Suspension shocks is not recommended. Use of a lowering kit may void the warranty or damage the shock/motorcycle.

Progressive Suspension shocks are designed to work on the OEM (Original Equipment) frame and swingarm. Use of these shocks on a frame or swingarm other than OEM may produce an unsatisfactory ride and void the warranty.

Make sure that proper bushings/sleeves are installed in the shocks. Improper bushings/sleeves can cause unsatisfactory and/or unsafe operation (see the instructions packaged with the mounting hardware).

*Be sure to refer to instruction supplements provided in any included mounting hardware*

## Installation

1. Place a quality jack or sufficient blocks under the motorcycle to securely lift the rear wheel slightly off the ground.
2. Using the correct Harley Davidson shop manual for your bike, remove the old shocks and note location of mounting hardware. If additional accessories are installed on your motorcycle, please refer to their mounting instructions for removal to gain access to your shocks.
3. Before installing your new Progressive shocks you need to check the tire to fender clearance, making sure that the tire does not come in contact with the fender. If the rear fender or tire has been changed to anything other than stock, a travel limiter may be required. On some models with side bags or luggage, the bag or luggage mounts may need to be modified to eliminate any interference. Install the shock assemblies onto the motorcycle with the included hardware, note any special instructions in the

hardware kit. Tighten bolts / nuts to their proper torque. Check the clearances of the shock to the frame, shock to chain or belt, shock to chain or belt guard and shock to brake caliper and/or linkage. See arrows in Fig 1 , check both sides.

— Caution —

4. Reinstall any accessories removed in accord with their mounting instructions. Make sure accessories do not interfere with the shocks throughout their full travel. If any accessories bolt to the shock mounting points, a careful inspection must be made to insure that they do not bind the shocks in any way. Shock mounts should have a minimum clearance of .02" to insure the mounts are not binding. See Fig 2.

**Note:** Due to assembly requirements, the bump rubber and washer on the shock shaft are positioned where the washer may rattle slightly. A few miles of normal riding will position the washer where it will cease to rattle. The rattle (if any) will not damage or have any adverse effect on the shock.

5. Set your ride sag. The proper spring pre-load setting will permit the rear suspension to sag, or compress, approximately 1" from full extension. To check sag, take a measurement from the center of the rear axle, straight up to a vertical point on the rear fender or frame with the shocks fully extended. Then take a second measurement using the same points with the rider(s) on the bike. The difference between the two measurements is the ride sag. If the bike is sagging too much, increase the pre-load. These shocks are set at the factory to minimum pre-load.

6. Spring pre-load adjustments are made by turning the Upper (Long) Cover. Turn this adjuster clockwise to increase spring pre-load and counterclockwise to decrease spring pre-load. Below the body protector, there are 4 grooves, these are pre-load reference marks:

Minimum pre-load = 4 visible grooves

Maximum pre-load = No visible grooves.

Set the pre-load equally on both shocks using these reference marks as your guide. See Fig. 3

**NOTE:** The adjuster is a threaded device, so if you rotate the Adjuster (Upper Cover) fully to the minimum or the maximum setting, you will feel a sudden increase in rotational resistance as you reach the end of the range of adjustment. This sudden increase in resistance is the adjuster tightening against its stop. When you feel this, we recommend that you turn the adjuster back from the stop by approx ¼ turn. This will facilitate easy adjustments in the future. If the adjuster is tightened firmly against the stop, either at minimum pre-load or maximum, you may have difficulty re-adjusting the pre-load by hand. Should this occur the use of a strap wrench or similar tool will give you the needed leverage to rotate the adjuster away from its stop and return it to normal operation

7. Test ride: If excessive bottoming occurs you need to increase your spring pre-load setting as described above.

8. Then ride and enjoy.....Safely.

Compliment your new shocks with a set of Progressive Suspension fork springs.



Fig1

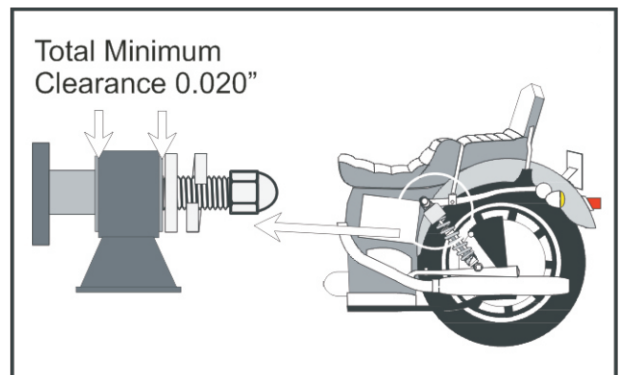


Fig 2



Fig 3