



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.

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 must be mounted with the adjuster at the bottom. Follow instructions in an authorized shop manual.

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 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. Offset lower eye may be rotated in or out to gain clearance where needed.

▬ Caution ▬

4. Reinstall any accessories removed in accord with their mounting instructions, while watching for possible clearance issues. The bushings in the shock eyes are designed to allow a certain amount of rotation and deflection necessary for proper operation, and binding and/or metal-to-metal contact must NOT occur throughout this range of movement. If any accessories bolt to – or near – the shock mounting points it is crucial that there is no metal to metal contact with a minimum clearance of .02” from the shock be maintained through its range of motion to insure no binding or contact occurs.

5. Set your ride sag. The proper spring pre-load setting will permit the rear suspension to sag, or compress, approximately 1.7”-2.0” inches from full extension. This is more sag than with typical shocks, but is by design as the 412CRZ Series shock is specifically designed to deliver a lower ride height. 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 Preload Cam near the bottom of the shock. Turn this adjuster clockwise to increase spring pre-load and counterclockwise to decrease spring pre-load. There are 5 steps/positions on the preload cams, set the pre-load equally on both shocks. See Fig. 2

NOTE: Do not turn Preload Adjuster cams past the highest setting, as damage may occur.

For easier spring preload adjustments, put a small amount of cam lube (supplied) on the sliding surface prior to rotating the cam. See Fig. 3

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

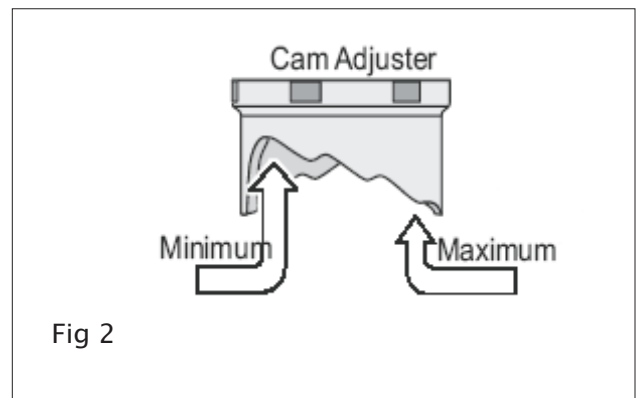


Fig 2

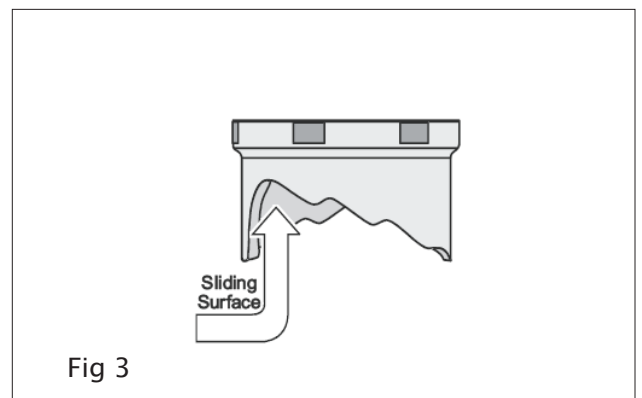


Fig 3

412 Series for Harley Davidsons

Note: Please read all instructions thoroughly before starting installation!

These shocks are designed to operate with the shock shaft up. Damage to the shocks may occur if fitted with the shock shaft down.

Caution

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

The motorcycle must be on the centerstand (if equipped) or 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 any lowering blocks is not recommended and **will** 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).

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, 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, removal of the top cover may be required to eliminate any interference. Due to clearance on some belt drive models, it is necessary to check clearances

around the lower chrome cover (chrome series shocks only.) Install shock assemblies onto motorcycle and tighten mounting bolts/nuts to proper torque. Offset lower eye may be rotated in or out to gain clearance where required. This can be used to gain clearance for the lower cover, if this does not work, removal of the lower cover may be necessary.

4. Reinstall any accessories removed in accord with their mounting instructions. Make sure accessories do not interfere with shocks throughout full travel. If any accessories bolt to shock mounting points, a careful inspection must be made to insure that they do not bind the shocks.

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. Test ride: If excessive bottoming occurs, adjust cam to a higher setting.

For easier spring preload adjustments, put a small amount of cam adjuster lube (supplied) on the sliding surface prior to rotating the cam (see figure 1).

6. Then ride and enjoy...Safely.

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

