

Installation Instructions 412 Series Cruiser Shocks

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

Raising or lowering the rear of your motorcycle will affect the steering and initial ground clearance. If the motorcycle is lower to the ground care should be taken to avoid bottoming, especially over bumps or in turns. Raising the rear of a motorcycle can change the steering head angle. 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 are designed to operate with the shock shaft up. Damage to the shocks may occur if fitted with the shock shaft down.

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.

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).

Installation

- Place the motorcycle on the centerstand or block the motorcycle securely so the rear wheel is slightly off the ground.
- Using the correct 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.
- Before installing your new Progressive shocks you need to check the tire to fender clearance, (see A in figure 1) 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. Install shock assemblies onto motorcycle and tighten mounting bolts/nuts to proper torque. Check clearances shock to frame (B) and shock to chain, chain guide, disc caliper and linkage (C) in figure 1. 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.



Installation (cont.)

- 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.
- 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.
- Test ride: If excessive bottoming occurs, adjust spring pre-load cam to a higher setting (see figure 2). 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 3).
- Then ride and enjoy—safely.

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





