

12 Series Shock Installation Instructions

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 the motorcycle on the centerstand or block the motorcycle securely so the rear wheel is slightly off the ground.
2. 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 the shocks.
3. Install one 12 series shock (without springs) and check clearance (#A in Fig. 1). Raise wheel into fender well until shock bottoms. There should be a minimum of 1" of clearance between the tire and fender.

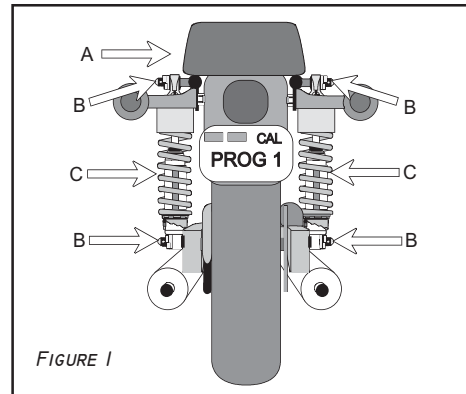


FIGURE 1

4. If clearance (#A) is sufficient, remove the shock and install the springs onto the shock (See Step 5) and reinstall the shock onto the motorcycle.

Caution: This step requires a spring compression tool (available from Progressive Suspension, part #32-5503). If a spring compression tool is not available, refer the work to your local dealer or repair shop. Attempting to compress the springs without the proper tool may result in serious injury!

Now check clearances (B & C) in figure 1.

(B) Shock to frame at mounting points.

(C) Shock to chain/chain guide, disc caliper and linkage. Also check clearance to any accessories.

Note: The lower shock mounts are offset to allow clearance between the shocks and the motorcycle. Install the shocks with offset towards the motorcycle.

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. Spring Installation (see figure 2):

A. Install cam adjuster to the minimum setting (lowest point on preload ramps).

B. Install plastic body protector insuring that the protrusion seats into the cam adjuster.

C. Make sure piston rod is fully extended and bump rubber/washer are pulled down at least 1 inch (25mm).

D. Mounting Springs:

(1) If shocks come equipped with single spring only, mount spring on shock and go to Procedure E below.

(2) If shocks come with dual springs, install short spring, plastic separator, long spring and go to Procedure E.

E. Install top cap (with decal) and using a spring compressor tool, compress the spring(s) enough to install the retaining clip (F), release the spring slowly, making sure the spring retainer clip seats fully in the top cap and the shock spring.

6. Install assembled shock absorbers onto motorcycle and tighten mounting nuts/bolts to proper torque specifications (consult your service manual for correct specifications).

7. Reinstall any accessories removed according to their mounting instructions. Make sure accessories do not interfere with shocks throughout full travel. If any accessories bolt to the shock mounting points, a careful check must be made to insure that they do not bind the shocks in any way (See Figure 3).

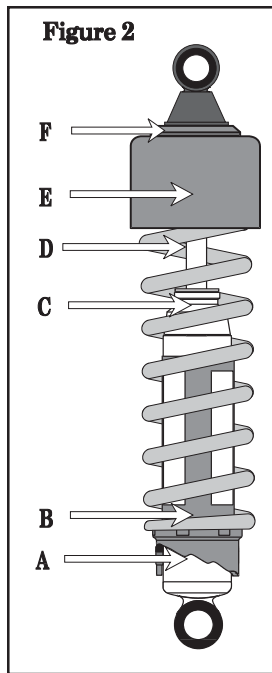


Figure 2

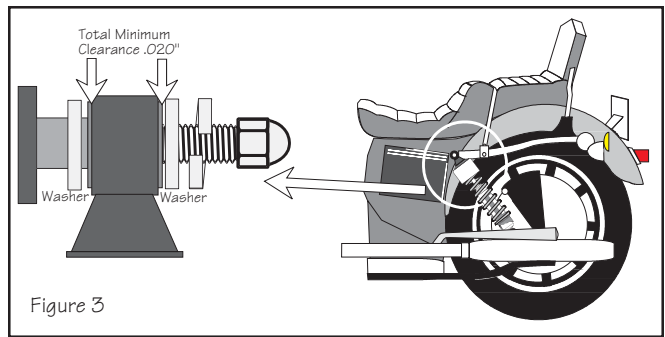


Figure 3

8. Make sure both cam adjusters are adjusted to the minimum setting (see figure 4).

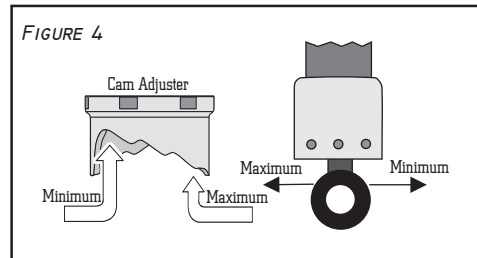


FIGURE 4

9. Test ride.

A. If excess bottoming occurs, adjust preload cam to a higher setting on both shocks. (See Figure 4) If bottoming persists after adjusting to the highest setting, a spring with a higher rate may be required.

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 5).

B. If excess topping occurs with the cam at the minimum setting, a spring with a lighter rate may be required.

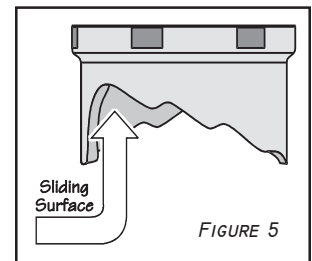


FIGURE 5

Note: The 12 Series Shock has a hydraulic anti-topping design which slows the rebound damping dramatically towards the end of the shock travel. This damping feature helps keep the motorcycle stable as the shock returns from compression.

9. Maintenance: Shock bushings should be checked and cleaned at periodic intervals.

10. For balanced suspension, we highly recommend the installation of a pair of our progressive rate fork springs.