



## Installation Instructions 435 Series Shock KAWASAKI EX250 Ninja

### 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 vehicle.

#### **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 lifetime limited 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**

Changing the suspension on your vehicle can drastically 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!

Follow instructions in a factory authorized shop manual or take the vehicle to a competent dealer.

#### **Warning**

The vehicle must be securely blocked to prevent it from tipping over when the shock is 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/vehicle.

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

Make sure that proper bushings/sleeves are installed in the shock. 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

Per your factory authorized shop manual, remove the shock and note location of mounting hardware. This will entail the following steps:

1. Place a quality jack or sufficient blocks under the vehicle to securely lift the rear wheel slightly off the ground, while granting access to the suspension linkage in front of the rear wheel.
2. Remove the lower shock nut & bolt (A) and the rearward linkage nut & bolt (B) - going through the swingarm (figure 1).

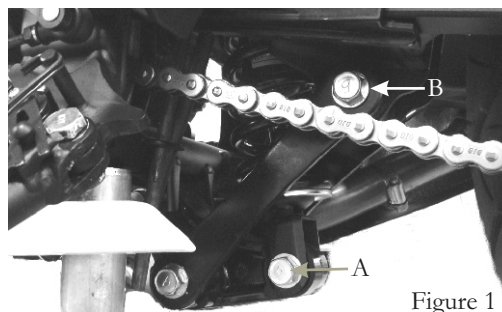


Figure 1

3. Allow the Uni-Trak rocker and linkage to swing down out of the way (figure 2).

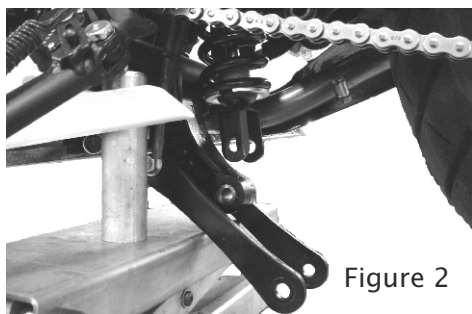


Figure 2

4. Remove upper shock bolt covers (both sides) to gain access to your upper shock nut & bolt (see figure 3). Then, using the proper sockets and extensions, remove the top nut & bolt (figure 4).

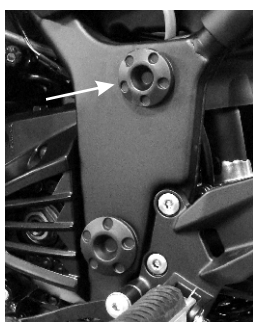


Figure 3

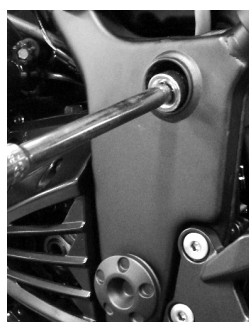


Figure 4

3. Slide stock shock out the bottom of the bike as illustrated in figure 5.

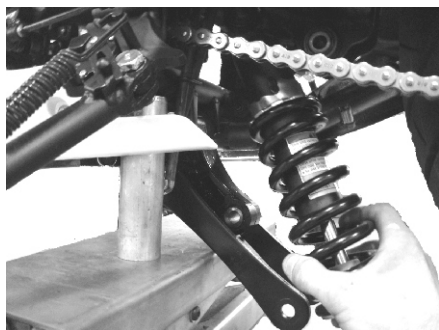


Figure 5

4. Shouldered sleeves with O-rings should already be installed in the upper eye of your new 435 shock. If not, insert sleeves with O-rings into the shock eye (figure 6).

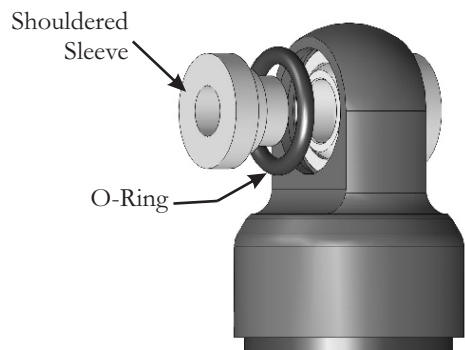


Figure 6

5. Install your new 435 shock in the reverse order which you removed the stock shock. Be sure the nitrogen fill port is facing towards the rear.

**Caution**

**The internal gas pressure has been set from the factory - DO NOT attempt to adjust the gas pressure. Failure to heed this warning may void your warranty and result in damage to the shocks and/or vehicle.**

6. Torque all three nut & bolt combinations that were removed to the factory recommended 59 Nm (44 ft/lb) and reinstall the upper shock bolt covers. Before lowering the bike and removing the jack, we recommend going to the “Preload Adjustment” step.

**Preload Adjustment**

Preload adjustment greatly affects handling & ride quality. When the preload is adjusted properly on your bike, the rear suspension should “sag” or compress from full extension about 35mm-45mm (1.38”-1.77”) with rider(s) & gear on the bike ready to ride – this is referred to as “rider sag”. To accurately adjust your preload we recommend the following procedure.

1. Begin by lifting/jacking the rear end up just high enough to extend the rear suspension until it's completely topped out (wheel slightly off the ground) then measure from the axle to a point on the frame or fender vertically above it. Write this measurement on the “Ext.” (or extended) line in **Rider Sag Worksheet** below.

2. Now, using a helper, sit on the bike with gear ready to ride and give the bike a few good bounces. Once it's settled, while balancing on the bike as evenly as you can, have the helper take the same measurement - note it down on the “With Rider(s) & gear” line of the **Rider Sag Worksheet** below.

3. Subtract the “With Rider & Gear” line from the “Ext.” line, and that is your actual Sag. Again, the proper spring pre-load setting will permit the rear suspension to sag, or compress, approximately 35mm-45mm (1.38”- 1.77”) from full extension. If the bike is sagging too much, you'll need to increase the pre-load. If it's not sagging enough, you'll need to reduce the preload.

**Rider Sag Worksheet**

Ext. \_\_\_\_\_  
With Rider(s) & gear - \_\_\_\_\_  
**Actual Sag =** \_\_\_\_\_

Adjust preload until **Actual Sag** is 35mm-45mm.

4. Spring pre-load adjustments are made with the supplied preload adjusting wrench by first loosening the upper locking ring, then adjusting the lower preload ring (figure 7). Once the proper preload has been achieved, re-tighten the locking ring against the adjusting ring. With the shock fully extended, the spring installed length must never be adjusted to a length longer than 186mm (7.32") or shorter than 165mm (6.50").

**Caution**

***The preload adjustment must not be set to allow for a spring installed length longer than 186mm (7.32") or shorter than 165mm (6.50").***

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

9. Then ride and enjoy.....Safely.

Compliment your new 435 Series shock with a set Progressive Suspension fork springs.

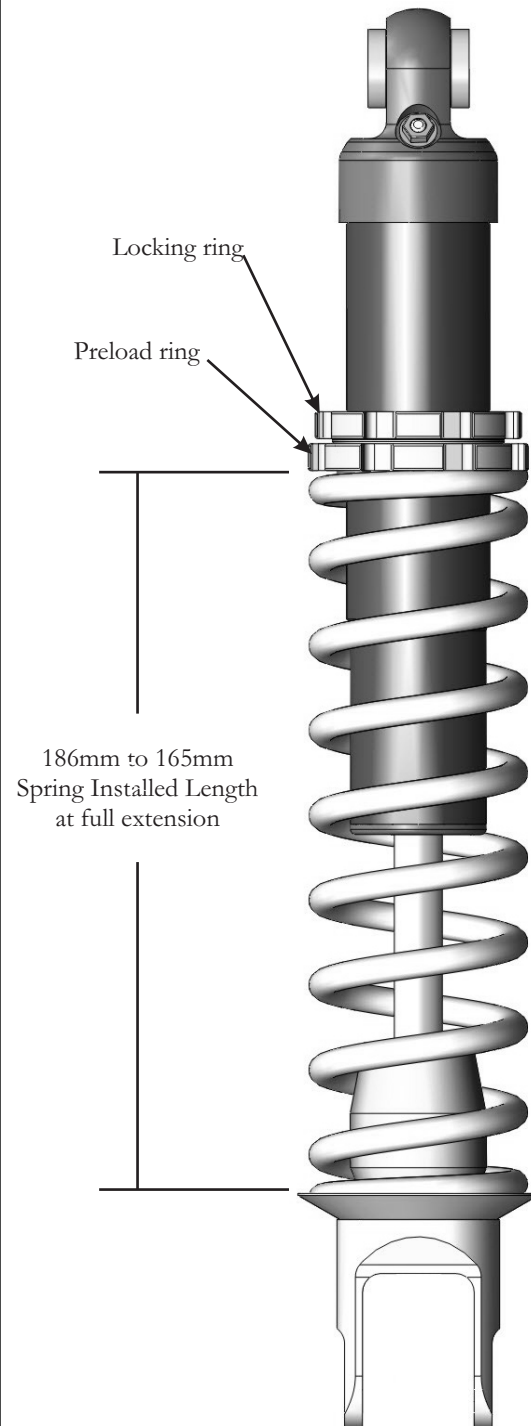


Figure 7