



# Installation Instructions 425 Series Shocks for Yamaha Rhino

### 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.*

### 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 or take the vehicle to a competent dealer.

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

The use of wheel spacers with Progressive Suspension shocks are not recommended. Use of wheel spacers may damage the shocks/vehicle and void the warranty.

Progressive Suspension shocks are designed to work with the OEM (Original Equipment) chassis and wheels, use of these shocks with a chassis or wheels 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

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

### Warranty

Progressive Suspension warrants to the original purchaser of this Part to be free of manufacturing defects in materials and workmanship with a one year limited warranty (lifetime limited warranty for the spring(s) only). 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 shock absorbers on any vehicle will change the handling characteristics of that vehicle. Care should be taken when operating the vehicle with the new shocks while getting accustomed to the new handling characteristics.

### Installation

1. Place a quality jack or sufficient blocks under the vehicle to securely lift the wheels slightly off the ground.
2. Using the vehicle manufacturers service manual, remove the old shocks and note location of mounting hardware. If additional accessories are installed on your vehicle, please refer to their mounting instructions for removal to gain access to your shocks.

3. Before installing your new Progressive Suspension shocks, you need to check your tire to fender / chassis clearance. If the body work or tires are other than original equipment, you may need to trim the body work or install a travel limiter on the shocks.

3a. To check clearance, position each wheel so the measurement between the top (frame) and bottom (A-arm) shock mounting bolt holes are equal to the following dimensions;

Front: 11.41" (290mm)

Rear: 11.65" (296mm)

With each wheel in position, check to be sure there is no tire, fender or chassis contact. For the Front, be sure to turn the steering through its complete range of motion for a proper check. **Photo 1**

4. After correcting any clearance issues found in step 3, install the shocks using the original mounting hardware.

5. Torque all shock mounting bolts to manufacturers specifications.

6. Your Progressive Suspension shocks come with the spring Pre-Load adjusted to the optimum setting for most users. However, the pre-load is adjustable by means of a threaded Adjusting Ring and Lock Ring.

**Photo 2**

### Pre-Load Adjustment

1. Using the provided spanner tool and 3/8 drive ratchet, loosen the Lock Ring away from the Adjusting Ring by threading it down the shock body.

2. To stiffen the ride, raise ride height and reduce sag, thread the Adjusting Ring up the shock body. Or to soften the ride, lower the ride height and increase sag, thread the Adjusting Ring down the shock body.

**Photo 3**

3. After Adjusting the Spring Pre-load, you must tighten the Lock Ring against the Adjusting Ring firmly.

### Sag

Sag is the amount the suspension compresses when the vehicle is loaded with driver/passenger and cargo compared to when the vehicle suspension is fully extended (shocks "Topped Out")

1. On flat level ground with all tires properly inflated. Place a jack under the front skid pan and raise the vehicle just to the point where the shocks stop extending (Top Out) Do not lift the wheels off the ground. Measure the ground clearance between the skid pan and ground. Note this front measurement.

2. Repeat this process at the rear of the vehicle. note this Rear measurement.

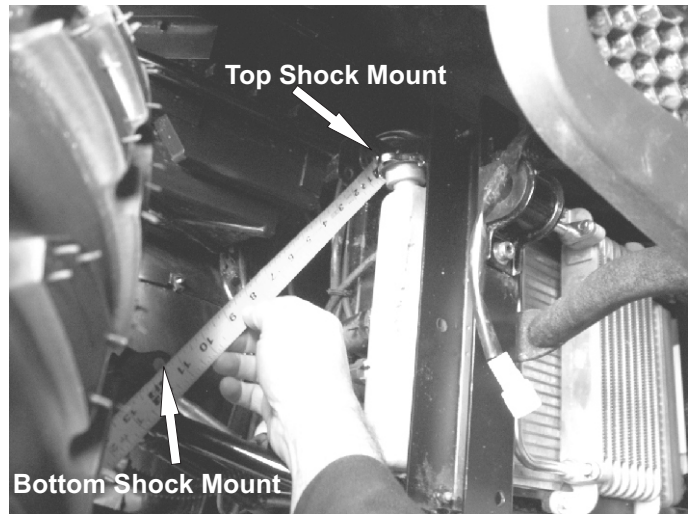


Photo 1

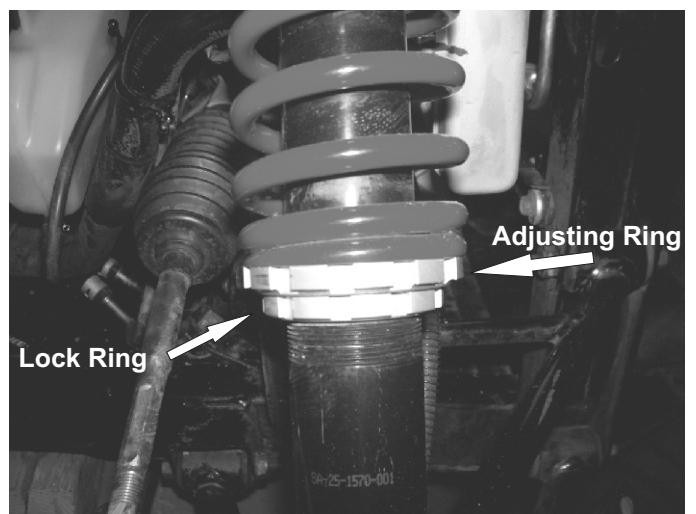
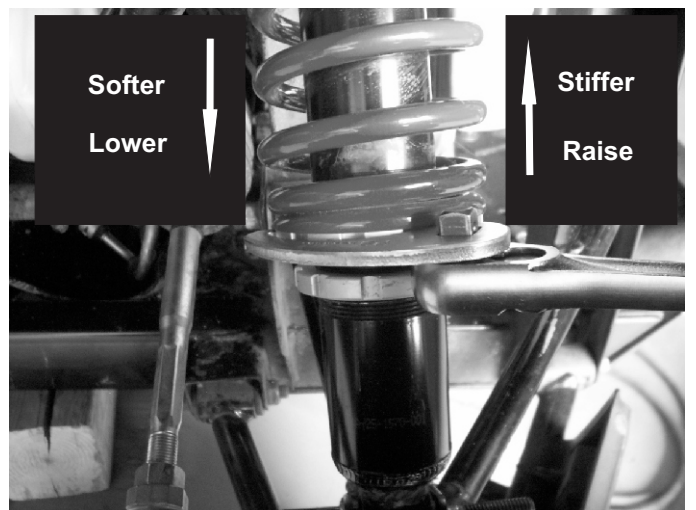


Photo 2



3. Now with driver / passenger and cargo in the vehicle gently back the vehicle up several feet and then slowly drive back up the same spot. This eliminates tire scrub and allows the suspension to settle into position.

4. Take front and rear ground clearance measurements at the same spots you took the first set of measurements. Subtract the second measurement from the first one for the front and again for the rear. This difference is the Sag.

### **Recommended Sag**

**Front            2"-3"            (50mm-75mm)**

**Rear             2.5"-3.5"        (64mm-89mm)**

Refer to **Pre-Load Adjustment** section if you need to adjust your sag. Keep in mind optimum suspension performance and vehicle handling are directly related to proper sag, so if you will be operating your vehicle with a dramatically different load for any reason, we highly recommend that you check and readjust pre-load for proper sag.

### **Drive and Enjoy**

**Look for additional Progressive  
Suspension performance parts and  
accessories for your Rhino at your local  
Dealer or Parts and Accessories store.**