



## Installation Instructions 435 Series Front Shocks Can-Am Spyder

### 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.*

#### **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 an 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 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/vehicle.

Progressive Suspension shocks are designed to work on the OEM (Original Equipment) frame, and A-arms. Use of these shocks on a frame, swingarm, or A-arms 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 vehicle to securely lift the front wheels slightly off the ground.
2. Using the correct shop manual for your vehicle, remove the front 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. Shouldered sleeves with O-rings should already be installed in the shock eyes. If not, insert sleeves with O-rings in the shock eyes (figure 1).

4. Mount the front shocks as you would your stock shocks per your authorized shop manual. Make sure the pressure valve is at the bottom and is facing outward - toward the wheel (figure 2). Tighten shock bolts to the proper torque specifications (refer to your manual).

**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.**

5. Reinstall any accessories removed in accord with their mounting instructions. Make sure accessories do not interfere with the shocks throughout their full travel.

6. Set your ride sag. The proper spring pre-load setting will permit the front suspension to sag, or compress, approximately 1.50" to 2.0" from full extension. To check sag, take a measurement from the center of the front skid-plate, straight down to a vertical point on the ground with the shocks fully extended (jacked up with front wheels barely touching the ground). Then, with the help of an assistant, take a second measurement using the same points with the rider(s) on the vehicle. The difference between the two measurements is the ride sag. If the vehicle is sagging too much, you'll need to increase the pre-load equally on both sides.

7. Spring pre-load adjustments are made with the supplied preload adjusting wrench by first loosening the lower locking ring, then adjusting the upper preload ring (figure 3). As you adjust the preload on the shock be sure to compare the lengths of the springs on either side to be certain the preload is adjusted equally. Once the proper preload has been achieved, re-tighten the locking rings against the adjusting rings. With the shock fully extended, the spring installed length must never be adjusted to a length longer than 9.20" inches or shorter than 7.90" inches (figure 4).

**Caution**

**The preload adjustment must not be set to allow for a spring installed length longer than 9.20" inches or shorter than 7.90 inches.**

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 front shocks with a Progressive Suspension rear shock.

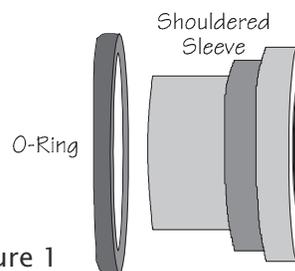


Figure 1

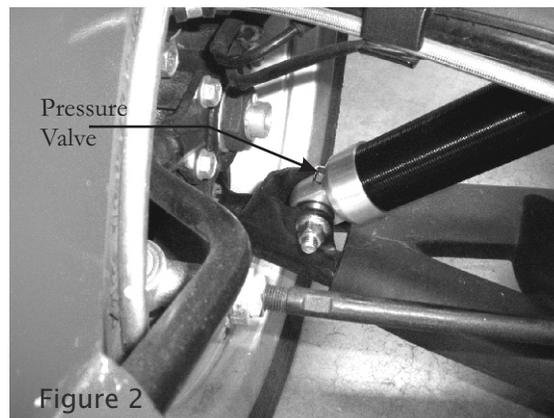


Figure 2

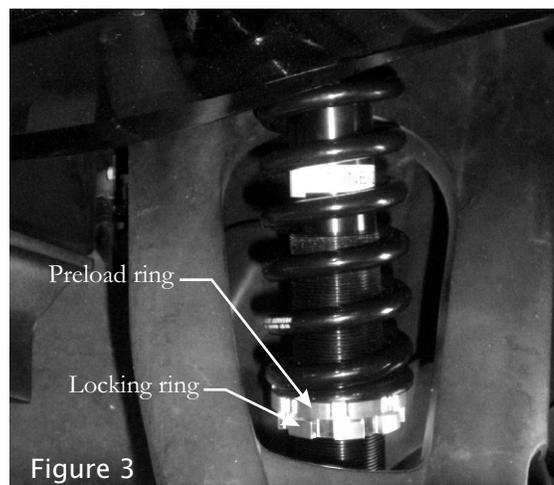


Figure 3

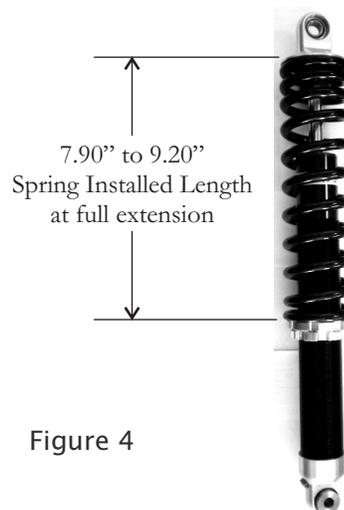


Figure 4



**PROGRESSIVE**  
S U S P E N S I O N

**Installation Instructions  
435 Series Front Shock  
BMW R1100GS/R1150GS standard length  
BMW R1150GSA 20mm lower**

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**Warning**

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**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 front 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 front wheel slightly off the ground.
2. Remove the seat, then remove the fuel tank bolts and slide the tank back a few inches to facilitate getting to the top shock mount post/nut. There should be no need to disconnect any hoses or wires. If additional accessories are installed on your vehicle, please refer to their mounting instructions for removal to gain access to your shock. Remove the top nut and the bottom bolt, then remove the stock shock (see figure 1).

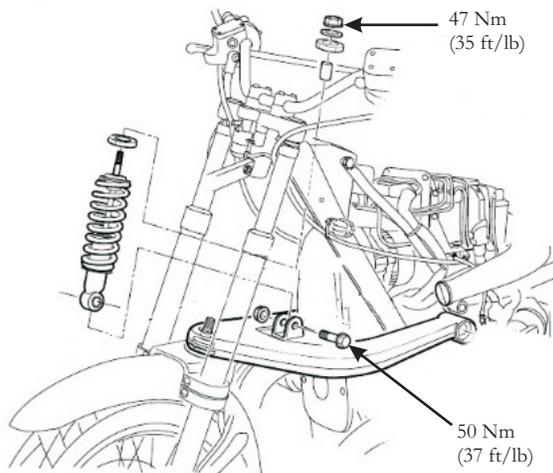


Figure 1

3. Shouldered sleeves with O-rings should already be installed in the lower eye of your new 435 shock. If not, insert sleeves with O-rings into the shock eye (figure 2).

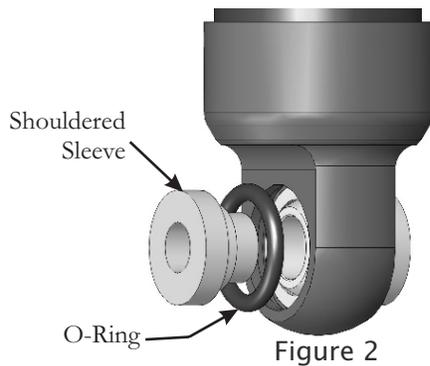


Figure 2

4. Install the supplied sleeve onto the top-post of your 435 series shock, followed by one of the supplied top-mount bushings - sliding the bushing over the sleeve. Then install the post end of your 435 shock through the frame, install the other supplied bushing, then the flat washer, and finally the nut (see figure 3). Using a hex key to keep the upper post from rotating, torque the nut to the factory recommended 47 Nm (35 ft/lb).

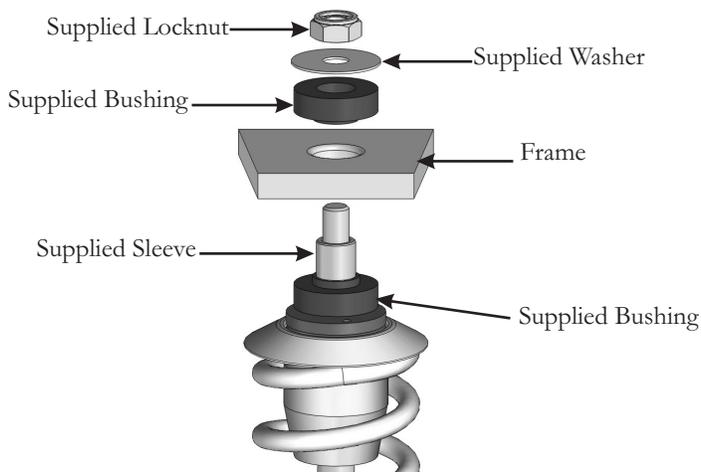


Figure 3

Make sure the pressure valve is facing rearward - toward the engine.

**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.**

5. Install the lower eye of your new 425 shock (with shouldered bushings and O-rings installed) into the Telelever clevis. Align the lower mount hole and reinstall the lower nut and bolt, torque to the factory recommended 50 Nm (37 ft/lb).

6. Reinstall the fuel tank and seat according to your factory authorized shop manual, and be sure to torque the fuel-tank-to-frame bolt to the factory recommended 22 Nm (16 ft/lb). Also reinstall any other accessories removed in accord with their mounting instructions. Make sure accessories do not interfere with the shock throughout it's full travel.

**Preload Adjustment**

Preload adjustment greatly affects handling & ride quality. When the preload is adjusted properly on your bike, the front suspension should "sag" or compress from full extension about 50mm-60mm (1.97"-2.36") 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 front end up just high enough to extend the front suspension until it's completely topped out (wheel slightly off the ground) then measure the exposed inner fork tube as illustrated in figure 4. Write this measurement on the "Ext." (or extended) line in **Rider Sag Worksheet** on page 3.

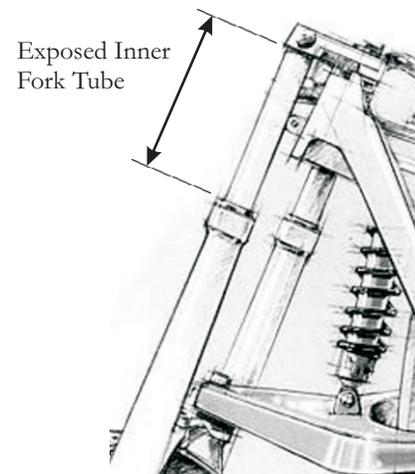


Figure 4

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 front suspension to sag, or compress, approximately 50mm-60mm (1.97"- 2.36") 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 pre-load.

4. Spring pre-load adjustments are made with the supplied preload adjusting wrench by first loosening the lower locking ring, then adjusting the upper preload ring (figure 5). 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 230mm (9.06") or shorter than 215mm (8.46").

**Caution**

***The preload adjustment must not be set to allow for a spring installed length longer than 230mm (9.06") or shorter than 215mm (8.46").***

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 front shock with a Progressive Suspension rear shock.

**Rider Sag Worksheet**

Ext. \_\_\_\_\_

With Rider(s) & gear - \_\_\_\_\_

**Actual Sag =** \_\_\_\_\_

Adjust preload until **Actual Sag** is 50mm-60mm.

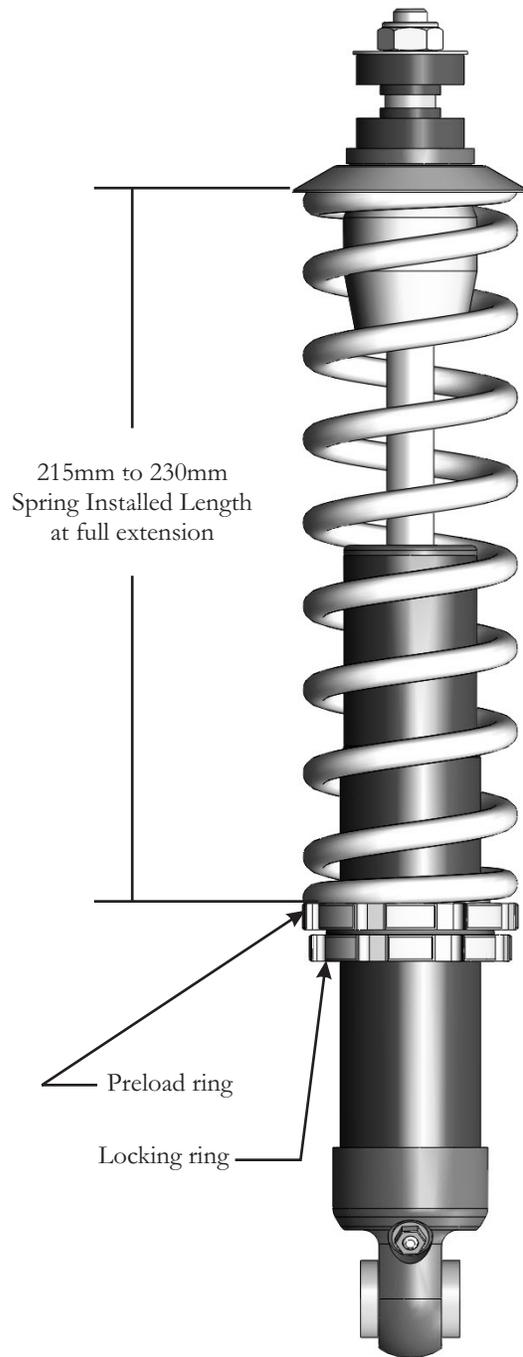


Figure 5



**PROGRESSIVE**  
S U S P E N S I O N

**Installation Instructions  
435 Series Front Shock  
BMW R1100GS/R1150GS 20mm lower  
BMW R1150GSA 40mm lower**

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**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 front 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 front wheel slightly off the ground.
2. Remove the seat, then remove the fuel tank bolts and slide the tank back a few inches to facilitate getting to the top shock mount post/nut. There should be no need to disconnect any hoses or wires. If additional accessories are installed on your vehicle, please refer to their mounting instructions for removal to gain access to your shock. Remove the top nut and the bottom bolt, then remove the stock shock (see figure 1).

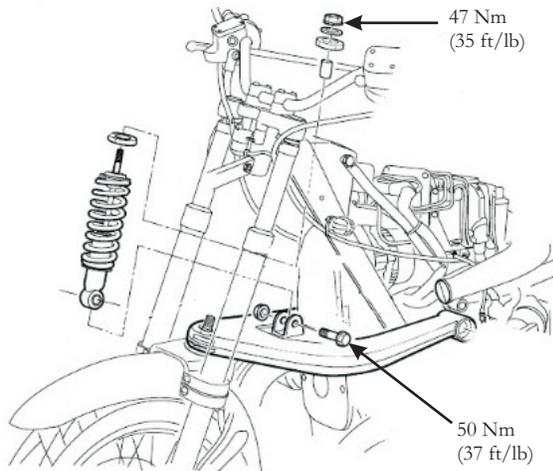


Figure 1

3. Shouldered sleeves with O-rings should already be installed in the lower eye of your new 435 shock. If not, insert sleeves with O-rings into the shock eye (figure 2).

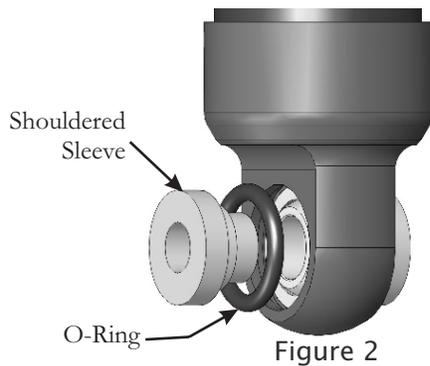


Figure 2

4. Install the supplied sleeve onto the top-post of your 435 series shock, followed by one of the supplied top-mount bushings - sliding the bushing over the sleeve. Then install the post end of your 435 shock through the frame, install the other supplied bushing, then the flat washer, and finally the nut (see figure 3). Using a hex key to keep the upper post from rotating, torque the nut to the factory recommended 47 Nm (35 ft/lb).

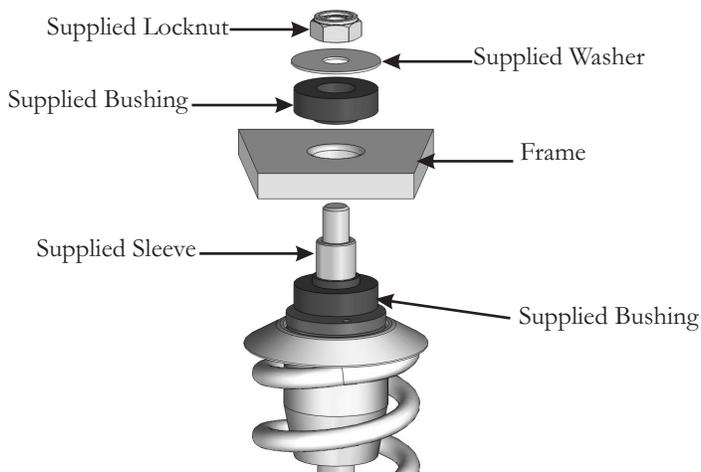


Figure 3

Make sure the pressure valve is facing rearward - toward the engine.

**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.**

5. Install the lower eye of your new 425 shock (with shouldered bushings and O-rings installed) into the Telelever clevis. Align the lower mount hole and reinstall the lower nut and bolt, torque to the factory recommended 50 Nm (37 ft/lb).

6. Reinstall the fuel tank and seat according to your factory authorized shop manual, and be sure to torque the fuel-tank-to-frame bolt to the factory recommended 22 Nm (16 ft/lb). Also reinstall any other accessories removed in accord with their mounting instructions. Make sure accessories do not interfere with the shock throughout it's full travel.

**Preload Adjustment**

Preload adjustment greatly affects handling & ride quality. When the preload is adjusted properly on your bike, the front suspension should "sag" or compress from full extension about 40mm-50mm (1.57"-1.97") 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 front end up just high enough to extend the front suspension until it's completely topped out (wheel slightly off the ground) then measure the exposed inner fork tube as illustrated in figure 4. Write this measurement on the "Ext." (or extended) line in **Rider Sag Worksheet** on page 3.

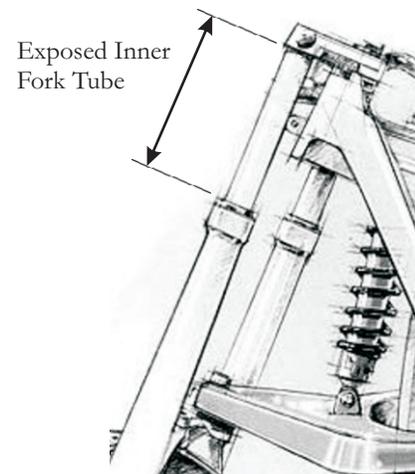


Figure 4

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 front suspension to sag, or compress, approximately 40mm-50mm (1.57"-1.97") 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 pre-load.

4. Spring pre-load adjustments are made with the supplied preload adjusting wrench by first loosening the lower locking ring, then adjusting the upper preload ring (figure 5). 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 229mm (9.02") or shorter than 203mm (7.99").

**Caution**

***The preload adjustment must not be set to allow for a spring installed length longer than 229mm (9.02") or shorter than 203mm (7.99").***

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 front shock with a Progressive Suspension rear shock.

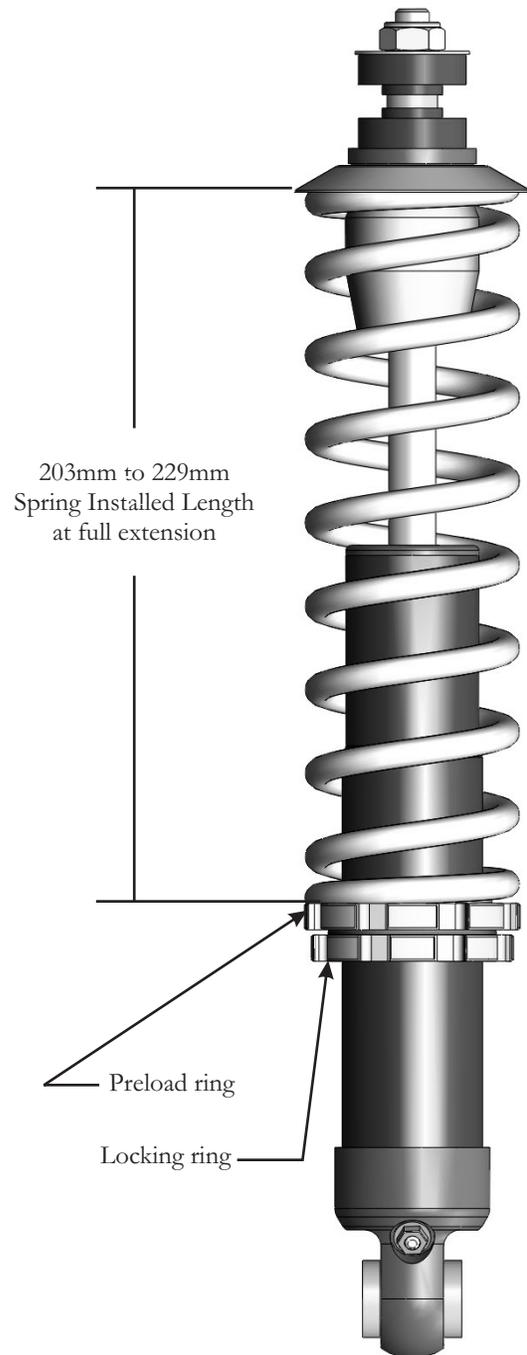


Figure 5



**PROGRESSIVE**  
S U S P E N S I O N

**Installation Instructions  
435 Series Front Shock  
BMW R1100GSA standard length  
BMW R1150GS 20mm taller**

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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 front 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 front wheel slightly off the ground.
2. Remove the seat, then remove the fuel tank bolts and slide the tank back a few inches to facilitate getting to the top shock mount post/nut. There should be no need to disconnect any hoses or wires. If additional accessories are installed on your vehicle, please refer to their mounting instructions for removal to gain access to your shock. Remove the top nut and the bottom bolt, then remove the stock shock (see figure 1).

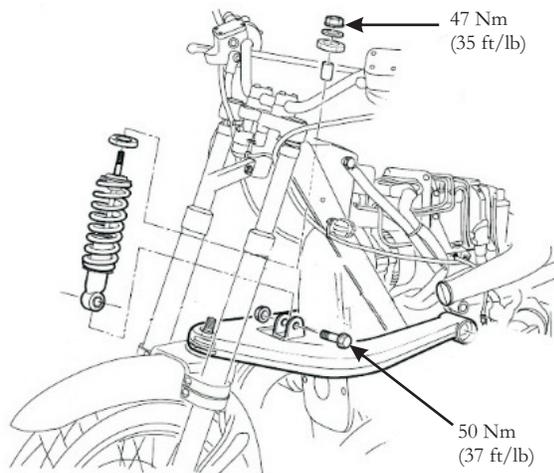


Figure 1

3. Shouldered sleeves with O-rings should already be installed in the lower eye of your new 435 shock. If not, insert sleeves with O-rings into the shock eye (figure 2).

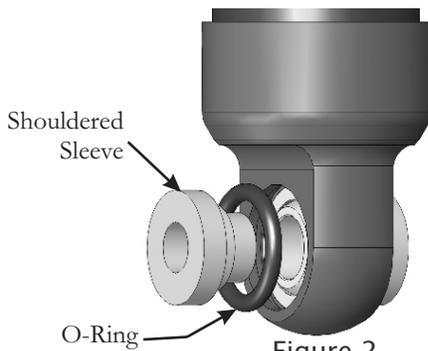


Figure 2

4. Install the supplied sleeve onto the top-post of your 435 series shock, followed by one of the supplied top-mount bushings - sliding the bushing over the sleeve. Then install the post end of your 435 shock through the frame, install the other supplied bushing, then the flat washer, and finally the nut (see figure 3). Using a hex key to keep the upper post from rotating, torque the nut to the factory recommended 47 Nm (35 ft/lb).

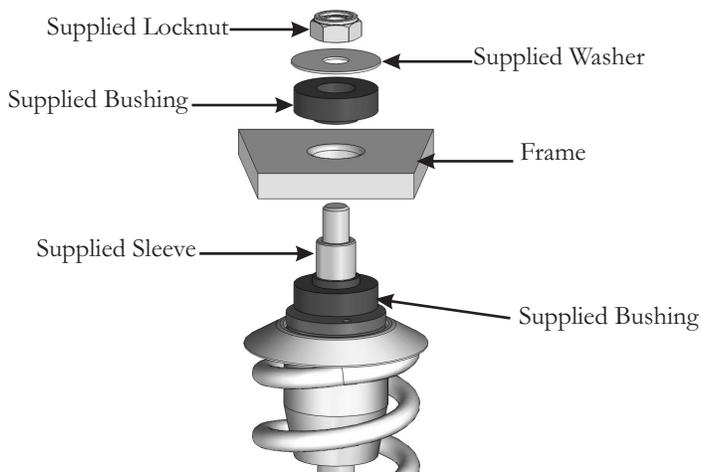


Figure 3

Make sure the pressure valve is facing rearward - toward the engine.

**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.**

5. Install the lower eye of your new 425 shock (with shouldered bushings and O-rings installed) into the Telelever clevis. Align the lower mount hole and reinstall the lower nut and bolt, torque to the factory recommended 50 Nm (37 ft/lb).

6. Reinstall the fuel tank and seat according to your factory authorized shop manual, and be sure to torque the fuel-tank-to-frame bolt to the factory recommended 22 Nm (16 ft/lb). Also reinstall any other accessories removed in accord with their mounting instructions. Make sure accessories do not interfere with the shock throughout it's full travel.

**Preload Adjustment**

Preload adjustment greatly affects handling & ride quality. When the preload is adjusted properly on your bike, the front suspension should "sag" or compress from full extension about 60mm-70mm (2.36"-2.76") 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 front end up just high enough to extend the front suspension until it's completely topped out (wheel slightly off the ground) then measure the exposed inner fork tube as illustrated in figure 4. Write this measurement on the "Ext." (or extended) line in **Rider Sag Worksheet** on page 3.

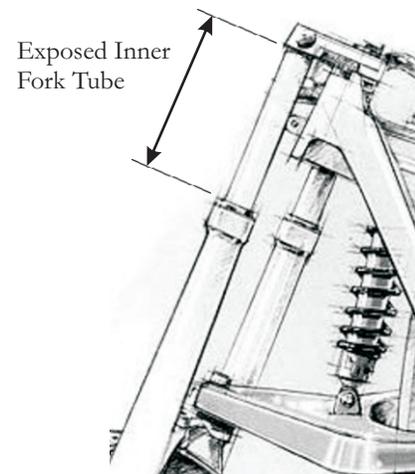


Figure 4

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 front suspension to sag, or compress, approximately 60mm-70mm (2.36"-2.76") 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 pre-load.

4. Spring pre-load adjustments are made with the supplied preload adjusting wrench by first loosening the lower locking ring, then adjusting the upper preload ring (figure 5). 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 250mm (9.84") or shorter than 227mm (8.94").

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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.

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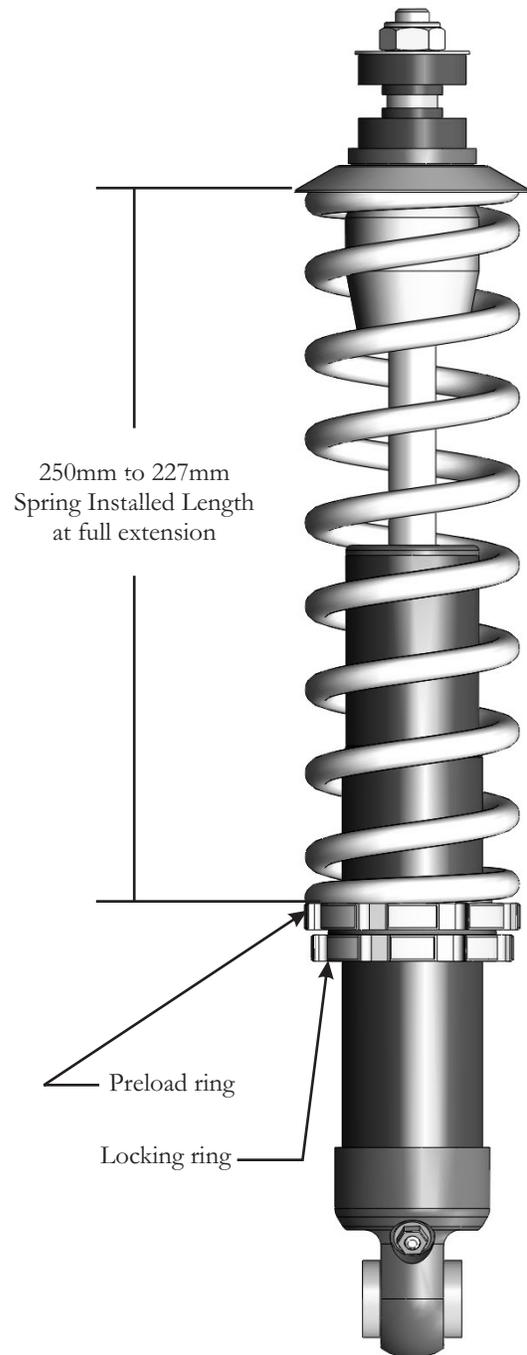


Figure 5



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2. Remove the seat, then remove the fuel tank bolts and slide the tank back a few inches to facilitate getting to the top shock mount post/nut. There should be no need to disconnect any hoses or wires. If additional accessories are installed on your vehicle, please refer to their mounting instructions for removal to gain access to your shock. Remove the top nut and the bottom bolt, then remove the stock shock (see figure 1).

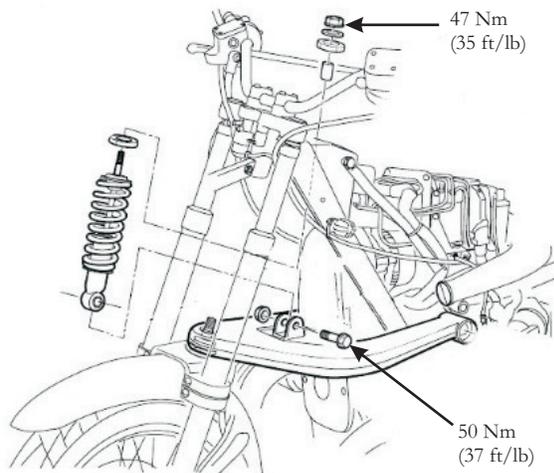


Figure 1

3. Shouldered sleeves with O-rings should already be installed in the lower eye of your new 435 shock. If not, insert sleeves with O-rings into the shock eye (figure 2).

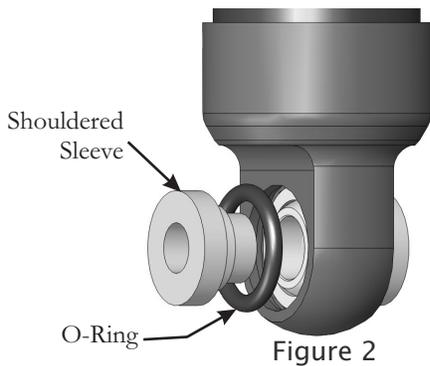


Figure 2

4. Install the supplied sleeve onto the top-post of your 435 series shock, followed by one of the supplied top-mount bushings - sliding the bushing over the sleeve. Then install the post end of your 435 shock through the frame, install the other supplied bushing, then the flat washer, and finally the nut (see figure 3). Using a hex key to keep the upper post from rotating, torque the nut to the factory recommended 47 Nm (35 ft/lb).

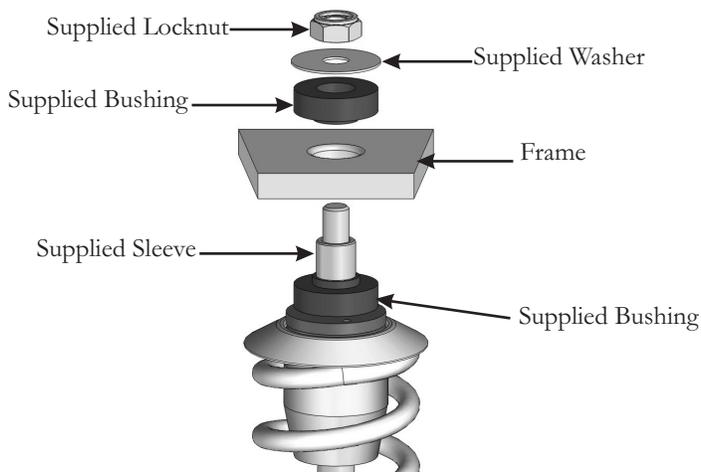


Figure 3

Make sure the pressure valve is facing rearward - toward the engine.

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**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.**

5. Install the lower eye of your new 435 shock (with shouldered bushings and O-rings installed) into the Telelever clevis. Align the lower mount hole and reinstall the lower nut and bolt, torque to the factory recommended 50 Nm (37 ft/lb).

6. Reinstall the fuel tank and seat according to your factory authorized shop manual, and be sure to torque the fuel-tank-to-frame bolt to the factory recommended 22 Nm (16 ft/lb). Also reinstall any other accessories removed in accord with their mounting instructions. Make sure accessories do not interfere with the shock throughout it's full travel.

**Preload Adjustment**

Preload adjustment greatly affects handling & ride quality. When the preload is adjusted properly on your bike, the front 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 front end up just high enough to extend the front suspension until it's completely topped out (wheel slightly off the ground) then measure the exposed inner fork tube as illustrated in figure 4. Write this measurement on the "Ext." (or extended) line in **Rider Sag Worksheet** on page 3.

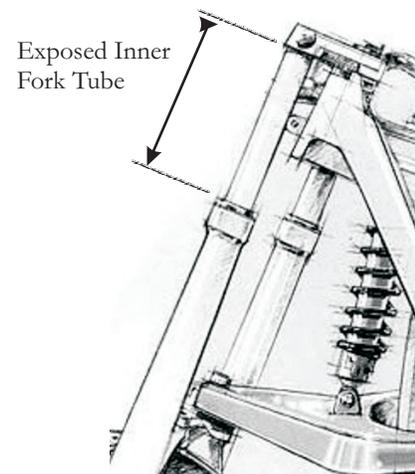


Figure 4

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 front 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.

4. Spring pre-load adjustments are made with the supplied preload adjusting wrench by first loosening the lower locking ring, then adjusting the upper preload ring (figure 5). 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 245mm (9.65") or shorter than 190mm (7.48").

**Caution**

***The preload adjustment must not be set to allow for a spring installed length longer than 245mm (9.65") or shorter than 190mm (7.48").***

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 front shock with a Progressive Suspension rear shock.

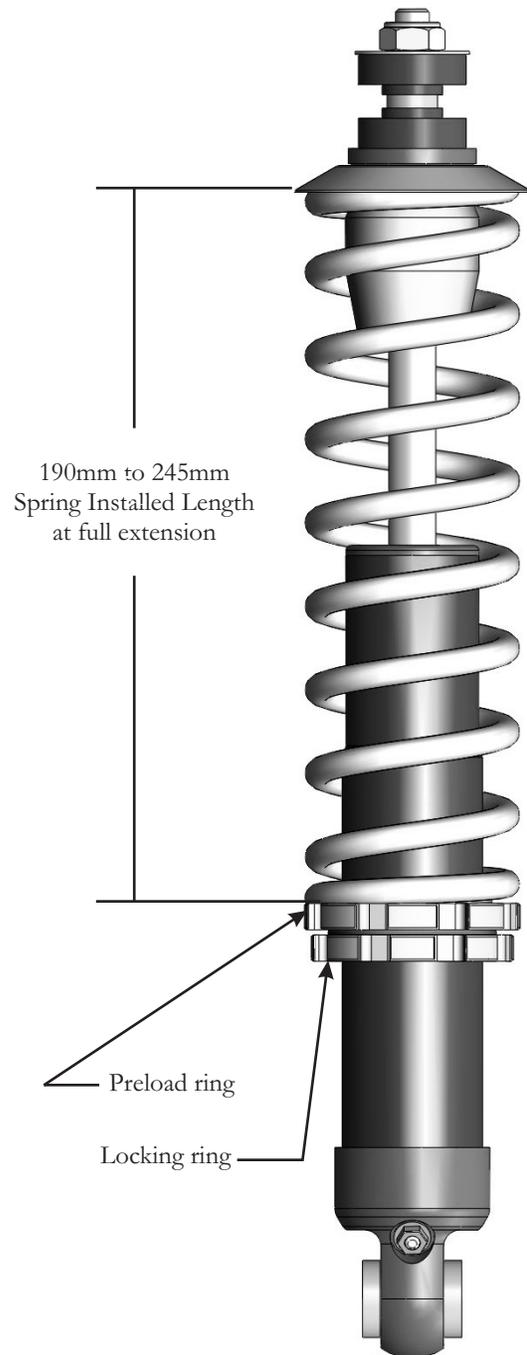


Figure 5

### 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.*

#### **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).

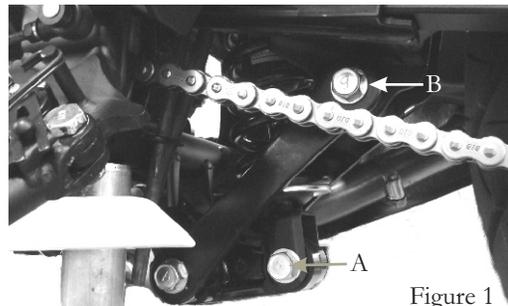


Figure 1

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

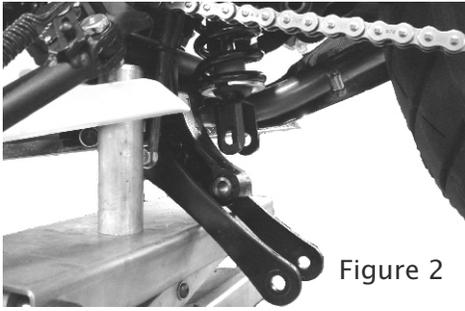


Figure 2

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).

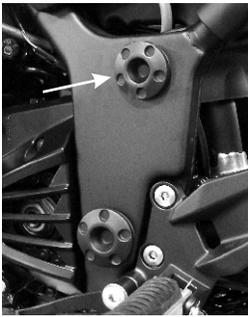


Figure 3



Figure 4

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

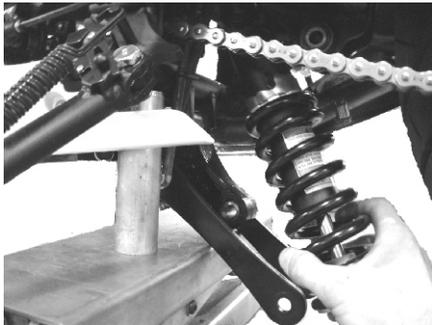


Figure 5

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).

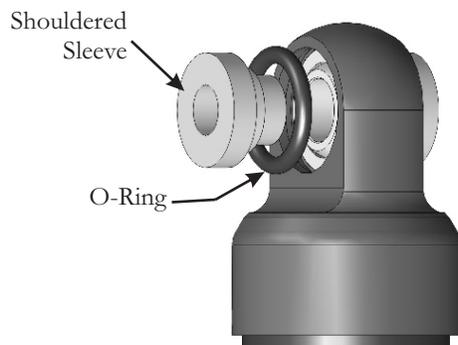


Figure 6

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.

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.

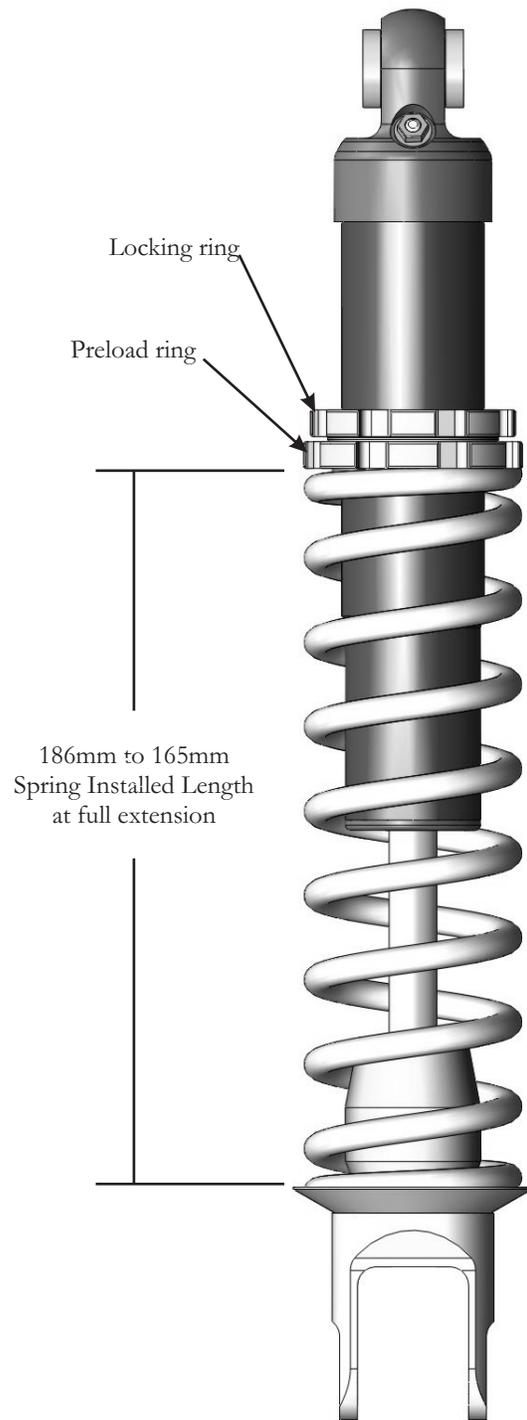


Figure 7

