

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 can be mounted with the adjuster at the top or bottom. However, we recommend the shocks be mounted with the adjuster at the top for ease of adjustment.

Follow instructions in an authorized shop manual or take the motorcycle to a competent dealer.

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.

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

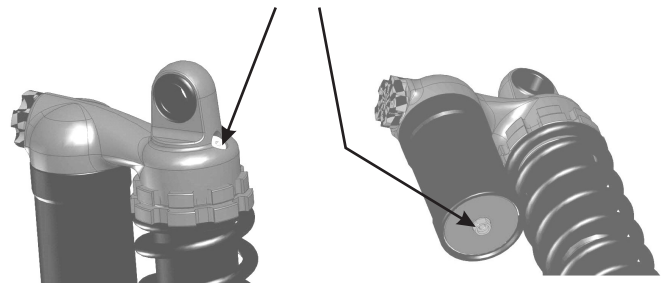
Make sure that proper bushings/sleeves are installed in the shocks. Improper bushings/sleeves can cause unsatisfactory and/or unsafe operation (see the instructions packaged with the mounting hardware).

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

Caution

NOTE: The internal pressure and fluid level of your 970 shocks are set from the factory and NOT to be adjusted by the customer. Do NOT attempt to add/remove any fluid or pressure from any fill/bleed ports on the shocks (see below) as damage and/or injury will result and the warranty will be voided.

DO NOT ADJUST/REMOVE



Installation

1. Place a quality jack or sufficient blocks under the motorcycle to securely lift the rear wheel slightly off the ground.

2. Using the correct shop manual for your bike, 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.

3. Before installing your new Progressive shocks you need to check the tire to fender clearance, 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, the bag or luggage mounts may need to be modified to eliminate any interference. Install the shock assemblies onto the motorcycle with the included hardware, note any special instructions in the hardware kit. Tighten bolts / nuts to their proper torque. Check the clearances of the shock to the frame, shock to chain or belt, shock to chain or belt guard and shock to brake caliper and/or linkage. See arrows in Fig 1 , check both sides.

4. 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.

5. Set your ride sag. The proper spring pre-load setting will permit the rear suspension to sag, or compress, approximately 1” from full extension. To check sag, take a measurement from the center of the rear axle, straight up to a vertical point on the rear fender or frame with the shocks fully extended. Then take a second measurement using the same points with the rider(s) on the bike. The difference between the two measurements is the ride sag. If the bike is sagging too much, increase the pre-load. These shocks are set at the factory to minimum pre-load.

6. Spring pre-load adjustments are made by using the supplied preload wrench to loosen the preload locking ring, and then turn the preload adjusting ring (Fig. 2). Turn this adjuster clockwise (looking at the shock from the reservoir end) to increase spring pre-load and counterclockwise to decrease spring pre-load. Set the pre-load equally on both shocks, measuring the installed spring lengths making sure they are the same. Never adjust the preload to produce a spring length less than the minimum installed springs lengths listed below for each shock part number, or damage will occur. Once you’ve adjusted the preload, be sure to tighten the preload lock ring back down on the adjuster ring.

Part Number Minimum Installed Spring Length

970-1001	-----	7.00” inches (178mm)
970-1002	-----	6.50” inches (165mm)
970-1003	-----	8.70” inches (221mm)
970-1004	-----	8.30” inches (211mm)
970-1005	-----	6.90” inches (175mm)
970-1006	-----	7.50” inches (191mm)
970-1010	-----	8.10” inches (206mm)

7. Another adjustment that can be made on your 970 Series shocks is compression damping. Compression damping is the hydraulic force generated by the damper portion of the shock during the compression of the shock. To increase the compression damping, simply turn the knob on the reservoir clockwise and to reduce the compression damping turn it counter clockwise (Fig. 3). Adjust both shocks equally by counting the “clicks” from all the way in (MAX compression).

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

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

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



Fig 1

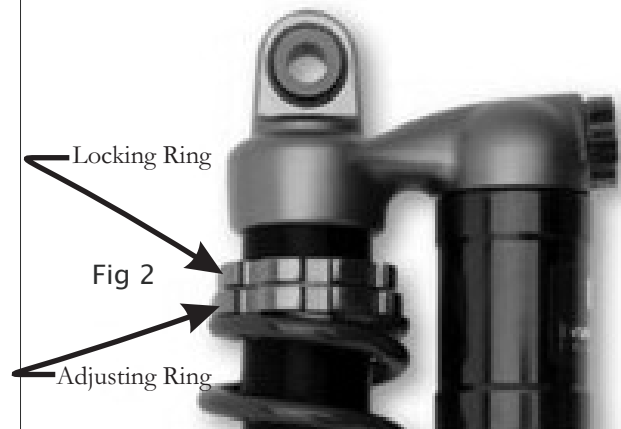


Fig 2



Fig 3

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 can be mounted with the adjuster at the top or bottom. However, we recommend the shocks be mounted with the adjuster at the top for ease of adjustment.

Follow instructions in an authorized shop manual or take the motorcycle to a competent dealer.

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.

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

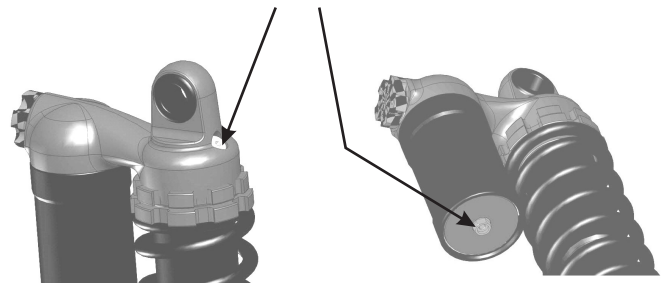
Make sure that proper bushings/sleeves are installed in the shocks. Improper bushings/sleeves can cause unsatisfactory and/or unsafe operation (see the instructions packaged with the mounting hardware).

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

Caution

NOTE: The internal pressure and fluid level of your 970 shocks are set from the factory and NOT to be adjusted by the customer. Do NOT attempt to add/remove any fluid or pressure from any fill/bleed ports on the shocks (see below) as damage and/or injury will result and the warranty will be voided.

DO NOT ADJUST/REMOVE



Installation

1. Place a quality jack or sufficient blocks under the motorcycle to securely lift the rear wheel slightly off the ground.

2. Using the correct shop manual for your bike, 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.

3. Before installing your new Progressive shocks you need to check the tire to fender clearance, 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, the bag or luggage mounts may need to be modified to eliminate any interference. Install the shock assemblies onto the motorcycle with the included hardware, note any special instructions in the hardware kit. Tighten bolts / nuts to their proper torque. Check the clearances of the shock to the frame, shock to chain or belt, shock to chain or belt guard and shock to brake caliper and/or linkage. See arrows in Fig 1 , check both sides.

4. 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.

5. Set your ride sag. The proper spring pre-load setting will permit the rear suspension to sag, or compress, approximately 1” from full extension. To check sag, take a measurement from the center of the rear axle, straight up to a vertical point on the rear fender or frame with the shocks fully extended. Then take a second measurement using the same points with the rider(s) on the bike. The difference between the two measurements is the ride sag. If the bike is sagging too much, increase the pre-load. These shocks are set at the factory to minimum pre-load.

6. Spring pre-load adjustments are made by using the supplied preload wrench to loosen the preload locking ring, and then turn the preload adjusting ring (Fig. 2). Turn this adjuster clockwise (looking at the shock from the reservoir end) to increase spring pre-load and counterclockwise to decrease spring pre-load. Set the pre-load equally on both shocks, measuring the installed spring lengths making sure they are the same. Never adjust the preload to produce a spring length less than the minimum installed springs lengths listed below for each shock part number, or damage will occur. Once you’ve adjusted the preload, be sure to tighten the preload lock ring back down on the adjuster ring.

Part Number Minimum Installed Spring Length

970-1001	-----	7.00” inches (178mm)
970-1002	-----	6.50” inches (165mm)
970-1003	-----	8.70” inches (221mm)
970-1004	-----	8.30” inches (211mm)
970-1005	-----	6.90” inches (175mm)
970-1006	-----	7.50” inches (191mm)
970-1010	-----	8.10” inches (206mm)

7. Another adjustment that can be made on your 970 Series shocks is compression damping. Compression damping is the hydraulic force generated by the damper portion of the shock during the compression of the shock. To increase the compression damping, simply turn the knob on the reservoir clockwise and to reduce the compression damping turn it counter clockwise (Fig. 3). Adjust both shocks equally by counting the “clicks” from all the way in (MAX compression).

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

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

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



Fig 1

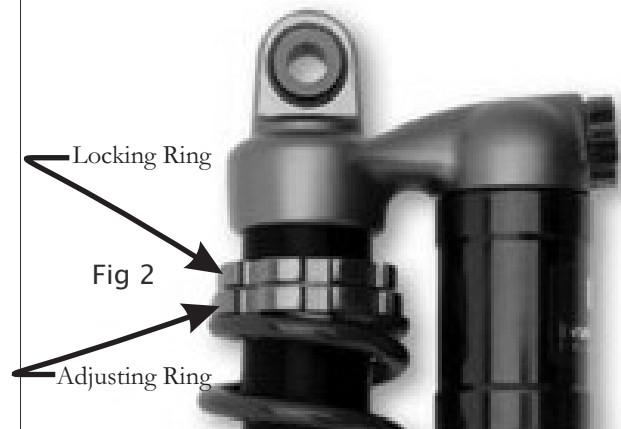


Fig 2



Fig 3

Installation Instructions 970 Series Rear Shocks Triumph Thruxton

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 can be mounted with the adjuster at the top or bottom. Though we recommend the shocks be mounted with the adjuster at the top for ease of adjustment, it may be necessary to mount it at the bottom to avoid spring contact with the OE exhaust system (at full extension).

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

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.

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

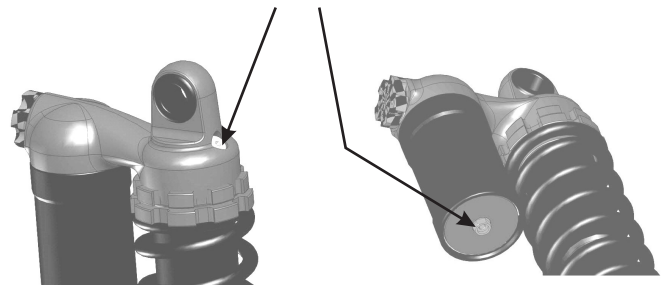
Make sure that proper bushings/sleeves are installed in the shocks. Improper bushings/sleeves can cause unsatisfactory and/or unsafe operation (see the instructions packaged with the mounting hardware).

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

Caution

NOTE: The internal pressure and fluid level of your 970 shocks are set from the factory and NOT to be adjusted by the customer. Do NOT attempt to add/remove any fluid or pressure from any fill/bleed ports on the shocks (see below) as damage and/or injury will result and the warranty will be voided.

DO NOT ADJUST/REMOVE



Installation

1. Place a quality jack or sufficient blocks under the motorcycle to securely lift the rear wheel slightly off the ground.
2. Using the correct shop manual for your bike, 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.
3. Before installing your new Progressive 970 shocks you need to check the tire to fender clearance, 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, the bag or luggage mounts may need to be modified to eliminate any interference.

NOTE: The standard length (970-1007) shock can make contact with the OE muffler when fully extended, thus it needs to be mounted with the reservoir/adjuster at the bottom.

In each shock eye install one of the included steel sleeves with the 14mm inside diameter, then install the shock assemblies onto the motorcycle using the OE washers and bolts. Tighten the bolts to their proper torque. Check the clearances of the shock to the frame, chain, chain-guard, and exhaust. See arrows in Fig 1, check both sides.

4. 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.

5. Set your ride sag. The proper spring pre-load setting will permit the rear suspension to sag, or compress, approximately 1.18”-1.40” (30mm-36mm) from full extension. To check sag, take a measurement from the center of the rear axle, straight up to a vertical point on the rear fender or frame with the shocks fully extended. Then take a second measurement using the same points with the rider(s) on the bike. The difference between the two measurements is the ride sag. If the bike is sagging too much, increase the pre-load.

6. Spring pre-load adjustments are made by using the supplied preload wrench to loosen the preload locking ring, and then turn the preload adjusting ring (Fig. 2). Turn this adjuster clockwise (looking at the shock from the reservoir end) to increase spring pre-load and counterclockwise to decrease spring pre-load. Set the pre-load equally on both shocks, measuring the installed spring lengths making sure they are the same. **Never adjust the preload to produce a spring length less than the minimum installed springs lengths listed below for each shock part number, or damage will occur.** Once you've adjusted the preload, be sure to tighten the preload lock ring back down on the adjuster ring.

Part Number	Minimum Installed Spring Length
970-1007 -----	6.80” inches (173mm)
970-1008 -----	6.10” inches (156mm)

7. Another adjustment that can be made on your 970 Series shocks is compression damping. Compression damping is the hydraulic force generated by the damper portion of the shock during the compression of the shock. To increase the compression damping, simply turn the knob on the reservoir clockwise and to reduce the compression damping turn it counter clockwise (Fig. 3). Adjust both shocks equally by counting the “clicks” from all the way in (MAX compression).

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

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

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



Fig 1

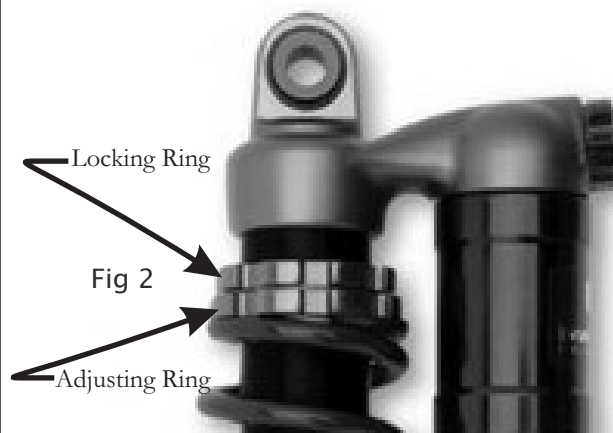


Fig 3

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!

Follow instructions in an authorized shop manual or take the motorcycle to a competent dealer.

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.

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

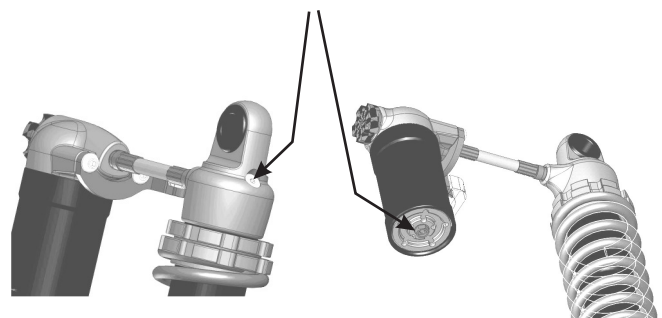
Make sure that proper bushings/sleeves are installed in the shocks. Improper bushings/sleeves can cause unsatisfactory and/or unsafe operation (see the instructions packaged with the mounting hardware).

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

Caution

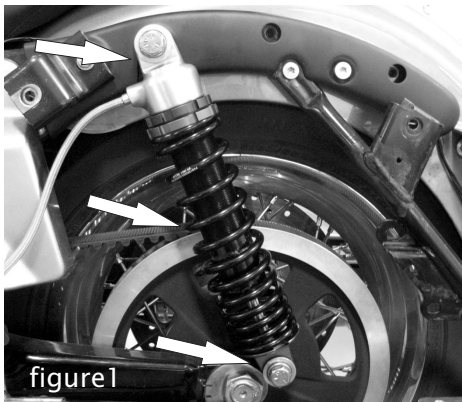
NOTE: The internal pressure and fluid level of your 970 shocks are set from the factory and NOT to be adjusted by the customer. Do NOT attempt to add/remove any fluid or pressure from any fill/bleed ports on the shocks (see below) as damage and/or injury will result and the warranty will be voided.

DO NOT ADJUST/REMOVE

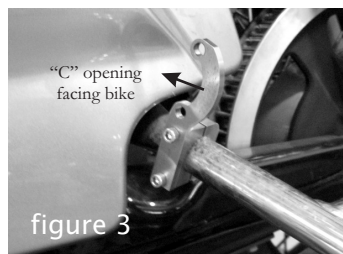
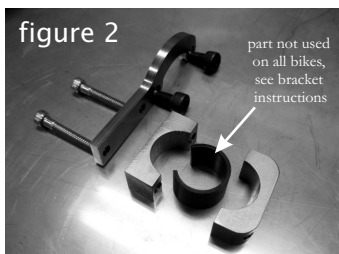


Installation

1. Place a quality jack or sufficient blocks under the motorcycle to securely lift the rear wheel slightly off the ground.
2. Using the correct shop manual for your bike, remove the Bags and old shocks noting the 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.
3. Using the included hardware, install the shock assemblies onto the motorcycle with the reservoir hydraulic lines at the top and pointing forward. Note any special instructions in the hardware kit. Tighten bolts / nuts to their proper torque. Check the clearances of the shock to the frame, shock to chain or belt, shock to chain or belt guard and shock to brake caliper and/or linkage. See arrows in Fig 1 , check both sides.



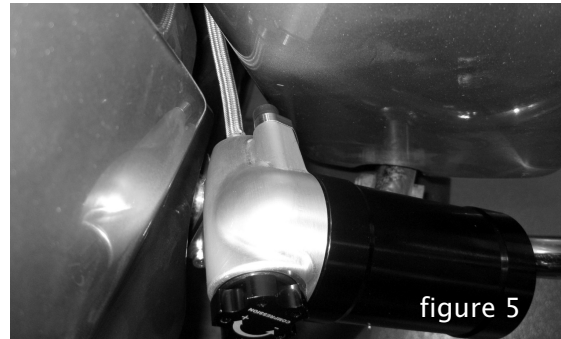
4. Install the reservoir mounting brackets (figure 2) on either the 7/8" diameter crash-bars or if your model does not have crash-bars on the 3/4" saddle-bag support - see supplemental instructions in mounting bracket kit for details. Be sure the tall flat piece is mounted towards the front, and the "C" opening is facing inward toward the motorcycle (figure 3). Leave the bracket assemblies loose enough to be adjusted, and they will be tightened later.



5. Using the included hardware, attach the shock reservoirs to the front face of the mounting brackets as shown (figure 4) and tighten the fasteners into the reservoirs.



6. Carefully reinstall the saddle bags making sure the reservoirs, hydraulic lines, and brackets do not contact the saddle bags. Adjust the mounts by sliding them in or out and/or tilting them forward or back to achieve optimum clearance of all components as shown (figure 5 & 6). Then remove the bags and tighten the brackets.



7. 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..

Sag & Preload Adjustment

Preload adjustment greatly affects ride quality. When the preload is adjusted properly, the suspension should “sag” or compress about one third of the total available travel with rider(s) & gear on the bike ready to ride – this is referred to as “ride sag”. Start by extending the suspension until it's completely topped out then measure from the axle to a point on the chassis directly above it - this is “Ext.” (or extended) in ride sag worksheet below. Then get a helper to take the same measurement with you - and any passenger or gear - on the bike ready to ride, note that measurement down on the next line “With Rider(s) & gear” and subtract it from the first line. The result is your “Actual Sag”. Your target ride sag is listed for your shock part number below (see “Rider Sag Worksheet” below).

Ride Sag Worksheet

Ext. _____

With Rider(s) & gear - _____

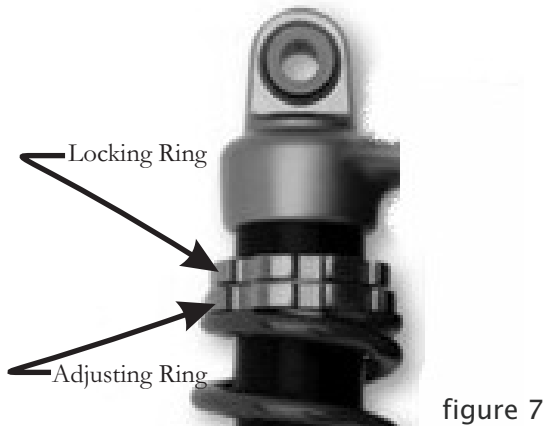
Actual Sag = _____

p/n	Target Ride Sag
970-2001.....	1.00"-1.25"
970-2002.....	1.00"-1.25"
970-2003.....	.75" -1.00"
970-2004.....	.75" -1.00"

Adjust preload until **Actual Sag** matches **Target Sag**.

If the bike is sagging too much, you will need to increase the pre-load. If it's not sagging enough, you need to decrease the pre-load.

Spring pre-load adjustments are made by using the supplied preload wrench to loosen the preload locking ring, and then turn the preload adjusting ring (figure 7). Turn this adjuster clockwise (looking at the shock from the reservoir end) to increase spring pre-load and counterclockwise to decrease spring pre-load. Set the pre-load equally on both shocks, measuring the installed spring lengths making sure they are the same.

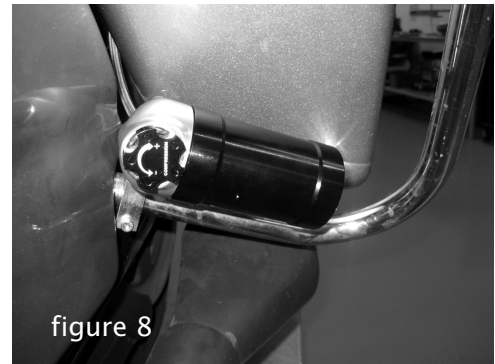


Never adjust the preload to produce a spring length less than the minimum installed springs lengths listed below for each shock part number, or damage will occur. Once you've adjusted the preload, be sure to tighten the preload lock ring back down on the adjuster ring.

Part Number	Minimum Installed Spring Length
970-2001	6.92" inches (176mm)
970-2002	7.12" inches (181mm)
970-2003	5.80" inches (147mm)
970-2004	5.90" inches (150mm)

Compression Adjustment

Another adjustment that can be made on your 970 Series shocks is compression damping. Compression damping is the hydraulic force generated by the damper portion of the shock during the compression of the shock. To increase the compression damping, simply turn the knob on the reservoir clockwise and to reduce the compression damping turn it counter clockwise (figure 8). Adjust both shocks equally by counting the “clicks” from all the way in (MAX compression).



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

Then ride and enjoy....Safely.



Installation Instructions 970 Series Rear Shocks Triumph Bonneville, SE, T-100

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 can be mounted with the adjuster at the top or bottom. Though we recommend the shocks be mounted with the adjuster at the top for ease of adjustment, it may be necessary to mount it at the bottom to avoid spring contact with the OE exhaust system (at full extension).

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

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.

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

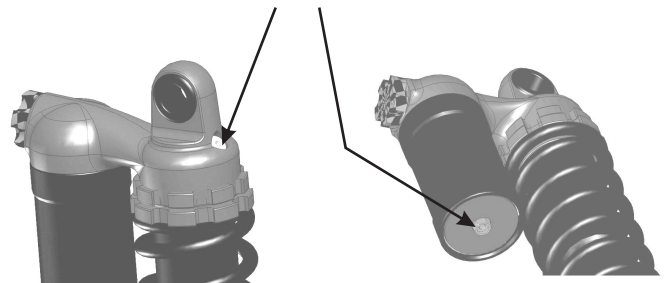
Make sure that proper bushings/sleeves are installed in the shocks. Improper bushings/sleeves can cause unsatisfactory and/or unsafe operation (see the instructions packaged with the mounting hardware).

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

Caution

NOTE: The internal pressure and fluid level of your 970 shocks are set from the factory and NOT to be adjusted by the customer. Do NOT attempt to add/remove any fluid or pressure from any fill/bleed ports on the shocks (see below) as damage and/or injury will result and the warranty will be voided.

DO NOT ADJUST/REMOVE



Installation

1. Place a quality jack or sufficient blocks under the motorcycle to securely lift the rear wheel slightly off the ground.

2. Using the correct shop manual for your bike, 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.

3. Before installing your new Progressive 970 shocks you need to double-check the overall clearances. Though your 970 shocks will work with the reservoirs in any position, your reservoir orientation choices may be limited depending upon which model Bonneville you are installing your 970 shocks on – for example on a T-100 model if mounting with reservoirs up, they must point forward (as in Fig 1) to avoid contact with the lower edge of the seat. Remember, things can flex and bushings compress, as a rule try to make sure there is at least .20" (5mm) of clearance all around the shock & reservoir though out the entire stroke. Also if the rear fender or tire has been changed to anything other than stock, double-check the tire to fender clearance making sure that the tire does not come in contact with the fender. In the event that it does a travel limiter may be required. On some models with side bags or luggage, the bag or luggage mounts may need to be modified to eliminate any interference.

4. 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.

5. Set your ride sag. The proper spring pre-load setting will permit the rear suspension to sag, or compress, approximately .94"-1.34" (24mm-34mm) from full extension. To check sag, take a measurement from the center of the rear axle, straight up to a vertical point on the rear fender or frame with the shocks fully extended. Then take a second measurement using the same points with the rider(s) on the bike. The difference between the two measurements is the ride sag. If the bike is sagging too much, increase the pre-load.

6. Spring pre-load adjustments are made by using the supplied preload wrench to loosen the preload locking ring, and then turn the preload adjusting ring (Fig. 2). Turn this adjuster clockwise (looking at the shock from the reservoir end) to increase spring pre-load and counterclockwise to decrease spring pre-load. Set the pre-load equally on both shocks, measuring the installed spring lengths making sure they are the same. **Never adjust the preload to produce a spring length less than the minimum installed springs lengths listed below for each shock part number, or damage will occur.** Once you've adjusted the preload, be sure to tighten the preload lock ring back down on the adjuster ring.

Part Number	Minimum Installed Spring Length
970-1009 -----	7.20" inches (183mm)

7. Another adjustment that can be made on your 970 Series shocks is compression damping. Compression damping is the hydraulic force generated by the damper portion of the shock during the compression of the shock. To increase the compression damping, simply turn the knob on the reservoir clockwise and to reduce the compression damping turn it counter clockwise (Fig. 3). Adjust both shocks equally by counting the "clicks" from all the way in (MAX compression).

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

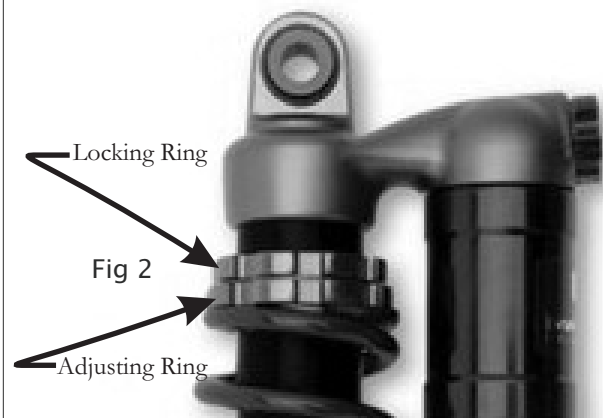
9. Then ride and enjoy.....Safely.

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



Fig 1

(shown on "T-100")



Locking Ring

Fig 2

Adjusting Ring



Fig 3



Installation Instructions

970 Series Rear Shocks

Harley Davidson V-Rod

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!

On the V-Rod models it is necessary to mount the 970 Series reservoirs at the bottom (pointing rearward) to avoid contact with the OE fender.

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

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.

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

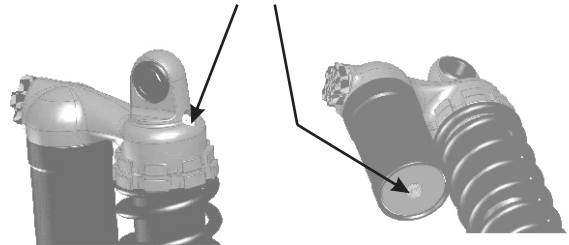
Make sure that proper bushings/sleeves are installed in the shocks. Improper bushings/sleeves can cause unsatisfactory and/or unsafe operation.

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

Caution

NOTE: The internal pressure and fluid level of your 970 shocks are set from the factory and NOT to be adjusted by the customer. Do NOT attempt to add/remove any fluid or pressure from any fill/bleed ports on the shocks (see below) as damage and/or injury will result and the warranty will be voided.

DO NOT ADJUST/REMOVE



Installation

1. Place a quality jack or sufficient blocks under the motorcycle to securely lift the rear wheel slightly off the ground.
2. Using the correct shop manual for your bike, 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.

Installation (continued)

3. Though the 970 Series shocks will work with the reservoirs in any position, on every V-Rod model the reservoirs must be at the bottom facing rearward (as in Figure 1) to avoid contact with the rear fender. It is crucial that the proper sleeves, spacers, and mounting hardware be used at each of the four mounting points - and don't forget to apply a thread-locking agent on each of the shock bolts. On the top mounts, both left & right, the stock bolt first goes through one of the supplied flat-washers, then the shouldered-sleeve installed in the shock eye (with the shoulder towards the frame), then one of the supplied spacers, and finally into the frame (see Figure 2). On the bottom mounts, both left & right, the stock bolt first goes through the stock flat-washer, then the shouldered-sleeve installed in the shock eye (with the shoulder towards the swingarm), and finally into the swingarm - NOTE if the bolt protrudes out the back of the threads (beltguard/nut), install one of the supplied flat-washers between the shouldered sleeve and the swingarm (see Figure 3). Tighten all shock bolts per the torque specification in your factory authorized service manual.

Caution

Remember, things can flex and bushings compress, as a rule try to make sure there is at least .20" (5mm) of clearance all around the shock & reservoir though out the entire stroke. Also if the rear fender or tire has been changed to anything other than stock, double-check the tire to fender clearance making sure that the tire does not come in contact with the fender. In the event that it does, a travel limiter may be required. On some models with side bags or luggage, the bag or luggage mounts may need to be modified to eliminate any interference.

4. 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.

5. Set your ride sag. The proper spring pre-load setting will permit the rear suspension to sag, or compress, approximately 1.04"-1.21" (26mm-31mm) from full extension. To check sag, take a measurement from the center of the rear axle, straight up to a vertical point on the rear fender or frame with the shocks fully extended. Then take a second measurement using the same points with the rider(s) on the bike. The difference between the two measurements is the ride sag. If the bike is sagging too much, increase the pre-load.

6. Spring pre-load adjustments are made by using the supplied preload wrench to loosen the preload locking ring, and then turn the preload adjusting ring (Figure 4). Turn this adjuster clockwise (looking at the shock from the reservoir end) to increase spring pre-load and counterclockwise to decrease spring pre-load. Set the pre-load equally on both shocks, measuring the installed spring lengths making sure they are the same. **Never adjust the preload to produce a spring length less than the minimum installed springs listed below for each shock part number, or damage will occur.** Once you've adjusted the preload, be sure to tighten the

Part Number	Minimum Installed Spring Length
970-1011/B-----	6.06" (154mm)
970-1012/B-----	6.54" (166mm)

preload lock ring back down on the adjuster ring.

7. Another adjustment that can be made on your 970 Series shocks is compression damping. Compression damping is the hydraulic force generated by the damper portion of the shock during the compression of the shock. To increase the compression damping, simply turn the knob on the reservoir clockwise and to reduce the compression damping turn it counter clockwise (Figure 5). Adjust both shocks equally by counting the "clicks" from all the way in (MAX compression).

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

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

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

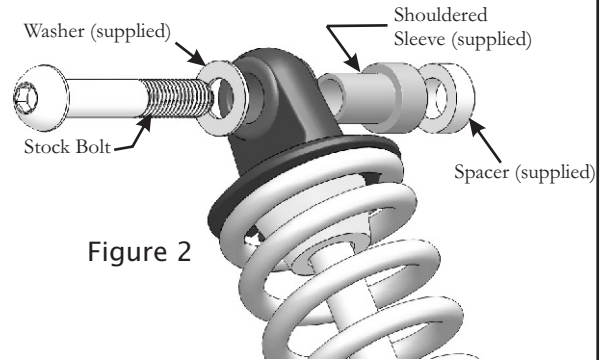
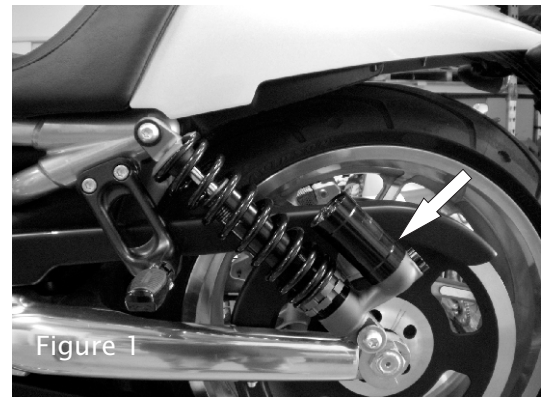


Figure 2

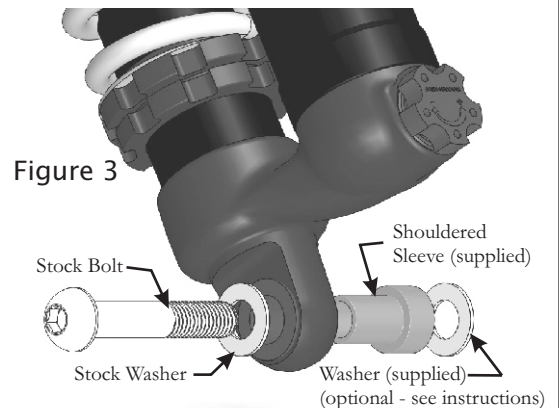


Figure 3

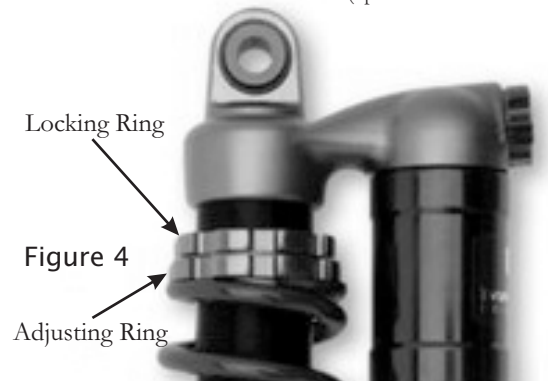


Figure 4



Figure 5

Installation Instructions 970 Series Rear Shocks Indian Scout

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!

On Scout models it is necessary to mount the 970 Series reservoirs at the bottom (pointing rearward) to avoid contact with the OE Exhaust.

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

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.

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

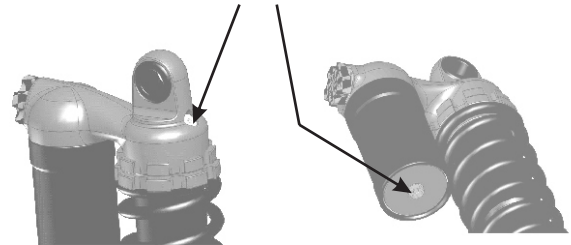
Make sure that proper bushings/sleeves are installed in the shocks. Improper bushings/sleeves can cause unsatisfactory and/or unsafe operation.

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

Caution

NOTE: The internal pressure and fluid level of your 970 shocks are set from the factory and are NOT to be adjusted by the customer. Do NOT attempt to add/remove any fluid or pressure from any fill/bleed ports on the shocks (see below) as damage and/or injury will result and the warranty will be voided.

DO NOT ADJUST/REMOVE



Installation

1. Place a quality jack or sufficient blocks under the motorcycle to securely lift the rear wheel slightly off the ground.
2. Using the correct shop manual for your bike, 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.

Installation (continued)

3. Though the 970 Series shocks will work with the reservoirs in any position, on Scout models with OE mufflers, the reservoirs must be at the bottom facing rearward (as in Figure 1) to avoid contact with the top muffler. It is crucial that the proper sleeves and mounting hardware be used at each of the four mounting points - and don't forget to apply a thread-locking agent on each of the shock bolts. On the top mounts, both left & right, install the shouldered sleeves into the bushings, and install as shown in Figure 2 with the OE flat washer between the shock and frame. On the bottom mounts, both left & right, install the straight sleeves into the bushings and install as shown in Figure 3. Tighten all shock bolts per the torque specification in your factory authorized service manual.

Caution

Remember, things can flex and bushings compress, as a rule try to make sure there is at least .20" (5mm) of clearance all around the shock & reservoir though out the entire stroke. Also if the rear fender or tire has been changed to anything other than stock, double-check the tire to fender clearance making sure that the tire does not come in contact with the fender. In the event that it does, a travel limiter may be required. On some models with side bags or luggage, the bag or luggage mounts may need to be modified to eliminate any interference.

4. 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.

5. Set your ride sag. The proper spring pre-load setting will permit the rear suspension to sag, or compress, approximately 1.0"-1.25" (25mm-32mm) from full extension. To check ride sag, take a measurement from the center of the rear axle, straight up to a vertical point on the rear fender with the shocks fully extended. Then take a second measurement using the same points with the rider(s) on the bike. The difference between the two measurements is the ride sag. If the bike is sagging too much, increase the pre-load. If the bike is not sagging enough, decrease the pre-load.

6. Spring pre-load adjustments are made by using the supplied pre-load wrench to loosen the pre-load locking ring, and then turn the pre-load adjusting ring (Figure 4). Turn this adjuster clockwise (looking at the shock from the reservoir end) to increase spring pre-load and counterclockwise to decrease spring pre-load. Set the pre-load equally on both shocks. By, with the shocks fully extended, measuring the installed spring lengths making sure they are the same. **Never adjust the pre-load to produce a spring length less than the minimum installed springs lengths listed below or damage will occur.** Once you've adjusted the pre-load, be sure to tighten the pre-load locking rings against the adjuster rings.

Part Number	Minimum Installed Spring Length
970-1013B-----	6.40" (163mm)

7. Another adjustment that can be made on your 970 Series shocks is compression damping. Compression damping is the hydraulic force generated by the damper portion of the shock during the compression of the shock. To increase the compression damping, simply turn the knob on the reservoir clockwise and to reduce the compression damping turn it counter clockwise (Figure 5). Adjust both shocks equally by counting the "clicks" from all the way in (MAX compression).

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

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

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

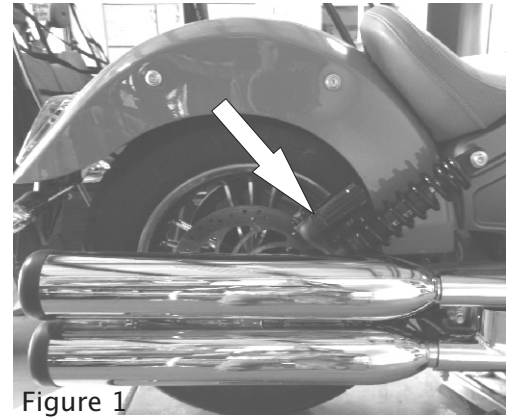


Figure 1

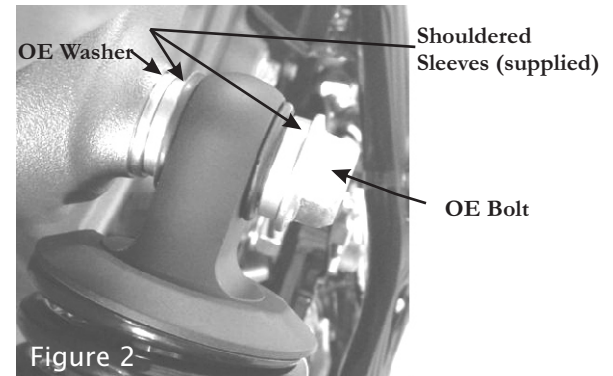


Figure 2

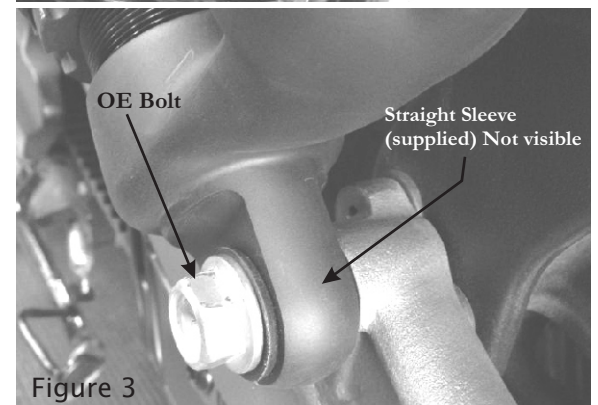


Figure 3

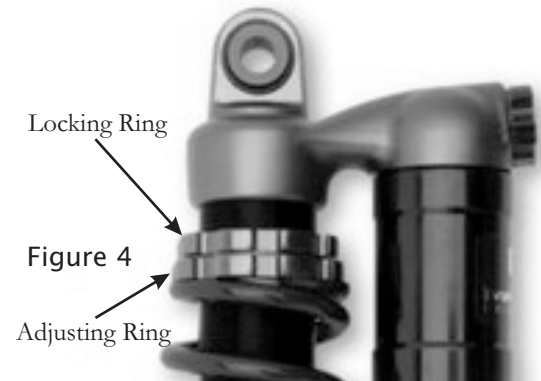


Figure 4



Figure 5



Installation Instructions 970 Series Rear Shocks Indian Scout

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!

On Scout models it is necessary to mount the 970 Series reservoirs at the bottom (pointing rearward) to avoid contact with the OE Exhaust.

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

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.

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

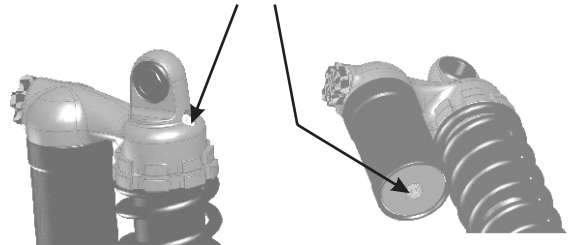
Make sure that proper bushings/sleeves are installed in the shocks. Improper bushings/sleeves can cause unsatisfactory and/or unsafe operation.

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

Caution

NOTE: The internal pressure and fluid level of your 970 shocks are set from the factory and are NOT to be adjusted by the customer. Do NOT attempt to add/remove any fluid or pressure from any fill/bleed ports on the shocks (see below) as damage and/or injury will result and the warranty will be voided.

DO NOT ADJUST/REMOVE



Installation

1. Place a quality jack or sufficient blocks under the motorcycle to securely lift the rear wheel slightly off the ground.
2. Using the correct shop manual for your bike, 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.

Installation (continued)

3. Though the 970 Series shocks will work with the reservoirs in any position, on Scout models with OE mufflers, the reservoirs must be at the bottom facing rearward (as in Figure 1) to avoid contact with the top muffler. It is crucial that the proper sleeves and mounting hardware be used at each of the four mounting points - and don't forget to apply a thread-locking agent on each of the shock bolts. On the top mounts, both left & right, install the shouldered sleeves into the bushings, and install as shown in Figure 2 with the OE flat washer between the shock and frame. On the bottom mounts, both left & right, install the straight sleeves into the bushings and install as shown in Figure 3. Tighten all shock bolts per the torque specification in your factory authorized service manual.

Caution

Remember, things can flex and bushings compress, as a rule try to make sure there is at least .20" (5mm) of clearance all around the shock & reservoir throughout the entire stroke. Also if the rear fender or tire has been changed to anything other than stock, double-check the tire to fender clearance making sure that the tire does not come in contact with the fender. In the event that it does, a travel limiter may be required. On some models with side bags or luggage, the bag or luggage mounts may need to be modified to eliminate any interference.

4. 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.

5. Set your ride sag. The proper spring pre-load setting will permit the rear suspension to sag, or compress, approximately 1.0"-1.25" (25mm-32mm) from full extension. To check ride sag, take a measurement from the center of the rear axle, straight up to a vertical point on the rear fender with the shocks fully extended. Then take a second measurement using the same points with the rider(s) on the bike. The difference between the two measurements is the ride sag. If the bike is sagging too much, increase the pre-load. If the bike is not sagging enough, decrease the pre-load.

6. Spring pre-load adjustments are made by using the supplied pre-load wrench to loosen the pre-load locking ring, and then turn the pre-load adjusting ring (Figure 4). Turn this adjuster clockwise (looking at the shock from the reservoir end) to increase spring pre-load and counterclockwise to decrease spring pre-load. Set the pre-load equally on both shocks. By, with the shocks fully extended, measuring the installed spring lengths making sure they are the same. **Never adjust the pre-load to produce a spring length less than the minimum installed springs lengths listed below or damage will occur.** Once you've adjusted the pre-load, be sure to tighten the pre-load locking rings against the adjuster rings.

Part Number	Minimum Installed Spring Length
970-1013B-----	6.40" (163mm)

7. Another adjustment that can be made on your 970 Series shocks is compression damping. Compression damping is the hydraulic force generated by the damper portion of the shock during the compression of the shock. To increase the compression damping, simply turn the knob on the reservoir clockwise and to reduce the compression damping turn it counter clockwise (Figure 5). Adjust both shocks equally by counting the "clicks" from all the way in (MAX compression).

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

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

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

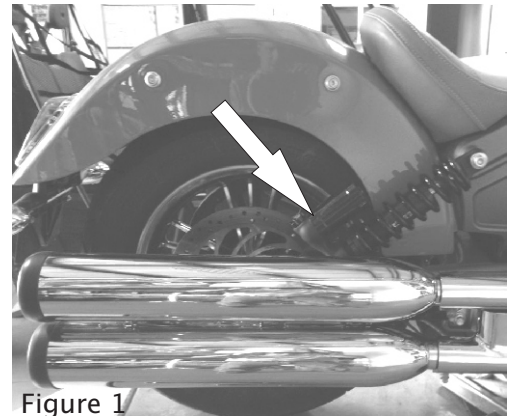


Figure 1

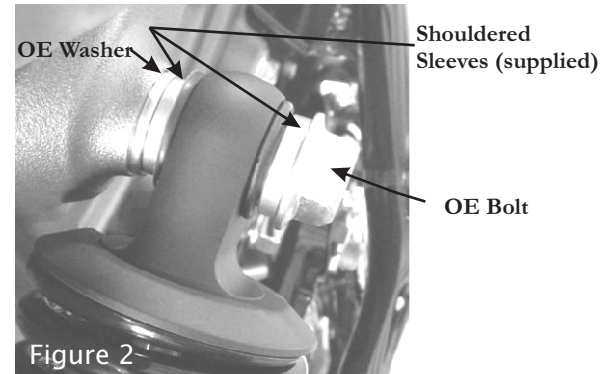


Figure 2

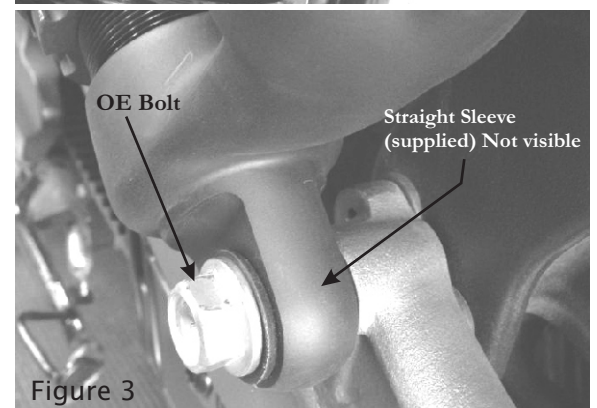


Figure 3

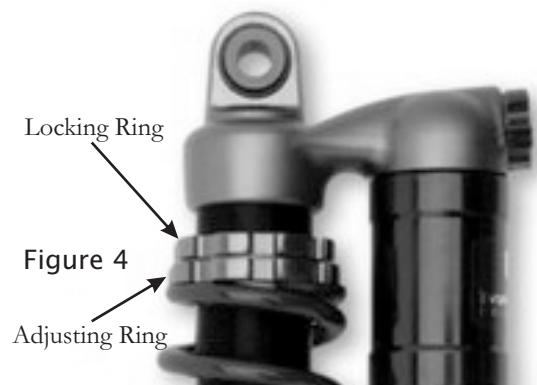


Figure 4



Figure 5