

SHOCK ABSORBERS OWNER'S MANUAL



Elka® 

INTRODUCTION

Congratulations on your purchase of these shock absorbers and thank you for choosing Elka Suspension.

This owner's manual is your complete guide to use, adjust and fine-tune your shock absorbers to get the maximum performance out of your purchase. It also offers important information about maintenance, warranty and servicing of these products. Carefully read this manual before installing your new shock absorbers.

Elka Suspension shock absorbers are intended to improve your comfort and maintain control of your vehicle over obstacles and choppy terrain when properly adjusted. **Without proper adjustment, these shock absorbers could render the vehicle harder to control and/or to steer.** It is mandatory to read carefully this manual and make sure you understand well the adjustment procedures before operating your vehicle once the shock absorbers are installed.

Your package should contain:

- Shock absorber(s)
- Reservoir mounting kit (on remote reservoir models)
- Preload tool and hex key
- Installation procedures (specific for your vehicle model)
- Service Work Order Form
- Shipping Label (for returning products for service/warranty)

If anything is missing, please contact our Customer Service Department at 1 800 557-0552 or (450) 655-4855.

Before installing your shock absorbers, carefully read this owner's manual and the installation procedure provided for your vehicle to learn the correct installation procedures and avoid the consequences of an incorrect installation.

LIMITED WARRANTY

Elka Suspension products are guaranteed against any manufacturing defects for a period of one (1) year from the purchase date. This warranty does not cover damages resulting from any of the following situations: abuse of the products, racing accidents, improper installation, disassembly or modifications, unauthorized oil changes and damage occurring during transportation (the purchase of full insurance coverage for shipping is recommended).

A copy of the original invoice is necessary for any claim or service shipment. Elka Suspension Inc. reserves the right to make the final decision in all matters pertaining to its warranty.

Because Elka Suspension products are designed for use in racing and extreme driving conditions, Elka Suspension cannot guarantee any of its suspension products, other than from manufacturing defects, because we have no control over how our products are used after installation. In addition, the purchaser assumes full responsibility to the extent legally permitted for the risks of personal injury, death and/or damage to the purchaser's vehicle or to any third party that may be involved directly or indirectly in an incident with the purchaser.

WHAT YOU NEED TO KNOW BEFORE INSTALLATION AND RIDING

IMPORTANT SAFETY INFORMATION

Shock absorbers are an important component that can noticeably alter the handling of your vehicle, and this owner's manual explains how to use and adjust them properly. If you are uncomfortable installing your shock absorbers or are unsure of the method, have a qualified mechanic install them for you. Improper installation and adjustment could potentially lead to injuries, death and/or damage to your vehicle or other vehicles. You should never take any chances with your own safety.

Before installing your shock absorbers, carefully read this owner's manual and the installation procedure provided for your vehicle to learn the correct installation procedures and avoid the consequences of an incorrect installation.

Always wear the appropriate protective equipment and follow your region's regulations when riding your vehicle. Elka Suspension is constantly introducing new products and improving existing ones. For this reason, Elka Suspension reserves the rights to modify products and add accessories with no obligations to make such changes to earlier models.

When your shock absorbers require an oil change or other internal maintenance, the Elka Factory Service Department or an Elka Authorized Service Center are the only qualified to provide the necessary service or repairs without voiding your warranty.

Elka Suspension shock absorbers are manufactured exclusively for the vehicle that they were ordered for. Switching units between different vehicles may not only affect the performance but might also cause damage to the vehicle and could seriously harm or be lethal to the rider. Always call Elka Suspension to verify compatibility or get the appropriate parts before switching a unit from one vehicle to another.

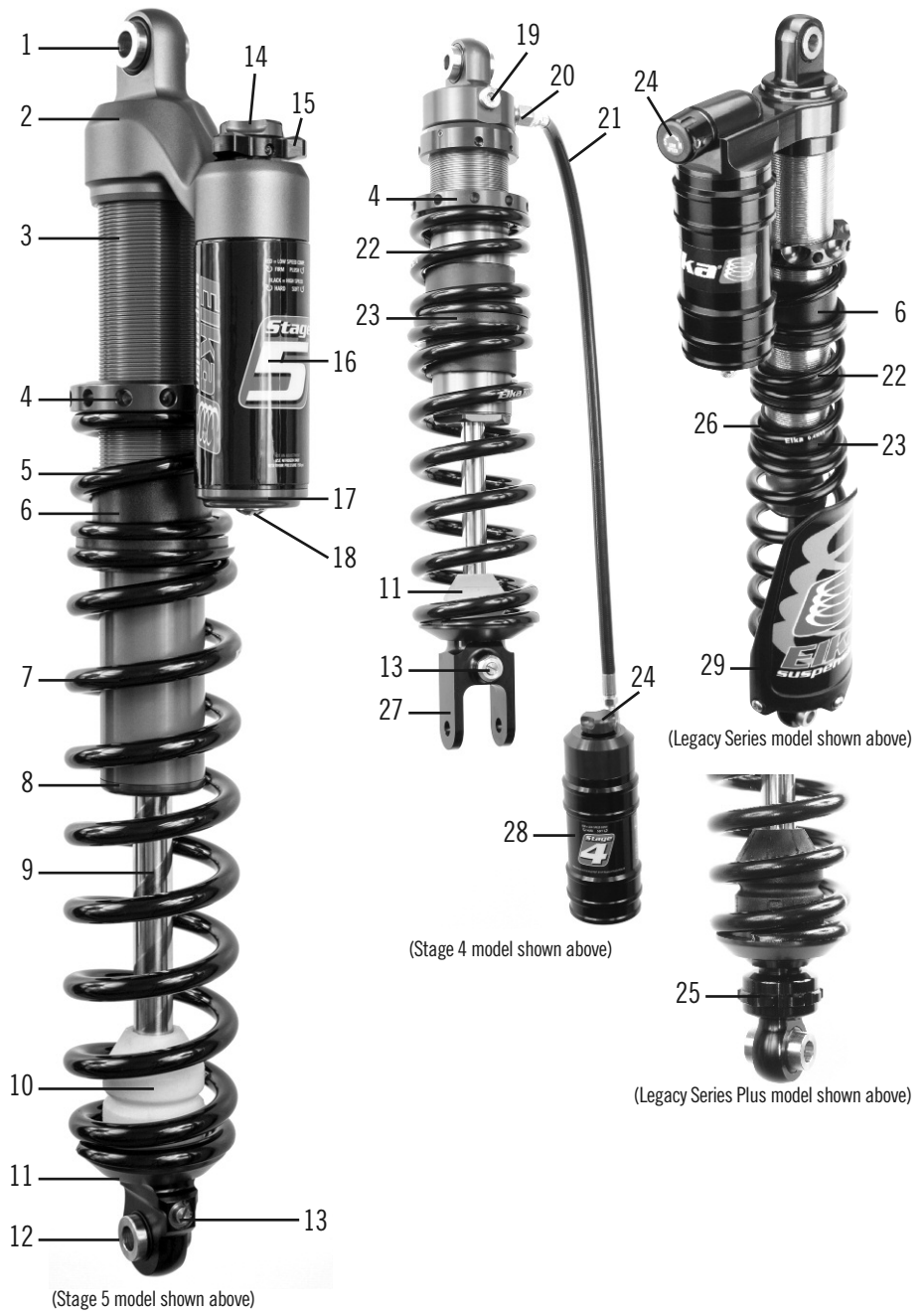
INSTALLATION PROCEDURES OVERVIEW

Please refer to the vehicle-specific installation sheet provided in the package for detailed installation procedures. Elka Suspension recommends the following for all installations:

1. Set your vehicle on a bench or use a jack to take the vehicle's weight off the wheels.
2. Remove the existing shock absorbers (refer to the vehicle's owner manual if needed).
3. Place the reservoir(s) in position and route the hose according to the provided reservoir installation sheet specific to your vehicle model (if applicable).
4. Install your new Elka shock absorbers on your vehicle.
5. Tighten the nuts on the upper bolts in accordance with the information and specifications provided by the vehicle manufacturer and refer to the vehicle's owner manual if needed.
6. Tighten the nuts on the lower bolts in accordance with the information and specifications provided by the vehicle manufacturer and refer to the vehicle's owner manual if needed.
7. For remote reservoir models, attach the rubber mounts and tighten the collars on the reservoirs to a pressure of 6 lb.in using a torque wrench.

All documentation is also available online at: <https://elkasuspension.dozuki.com/>

LOCATION OF THE ADJUSTMENTS AND COMPONENTS



LOCATION OF THE ADJUSTMENTS AND COMPONENTS

1. Top mounting eyelet, featuring spherical bearing
2. Head of the shock absorber
3. Body of the shock absorber
4. PRELOAD adjustment ring (see p.10 for adjustment procedures)
5. Self-sagging spring (no-preload), will normally compress from the weight of the vehicle
6. Top crossover spacer, prevents coil binding of the self-sagging spring
7. Main spring, specific for the rider's weight
8. Triple-seal seal head of the shock absorber
9. Shaft
10. MCU Bottom-out bumper
11. Spring retaining clip
12. Lower mounting eyelet, featuring spherical bearing
13. REBOUND adjuster (compact type, see p.14 for adjustment procedures)
14. LOW-SPEED COMPRESSION adjuster (red knob, see p.12 for adjustment procedures)
15. HIGH-SPEED COMPRESSION adjuster (black knob, see p.13 for adjustment procedures)
16. Reservoir (piggyback type)
17. Reservoir cap
18. Nitrogen valve (concealed type), NOT AN ADJUSTMENT
19. Bleeding plug, NOT AN ADJUSTMENT, DO NOT OPEN
20. Banjo bolt fitting, do not loosen
21. Reservoir hose
22. Top / Auxilliary Spring
23. CROSSOVER SPACER, controls the initial firmness or softness
24. COMPRESSION adjuster (see p.11 for adjustment procedures)
25. REBOUND adjuster (twist-knob type, see p.14 for adjustment procedures)
26. Middle spring, vehicle-specific to control body roll
27. Lower mounting fork
28. Reservoir (remote type), length may vary from one vehicle to another
29. Composite Shock Protector (optional on some models)

ADJUSTMENT PROCEDURES

RIDE HEIGHT - SPORTS & RACING ATV

MEASURING THE RIDE HEIGHT (GROUND CLEARANCE)

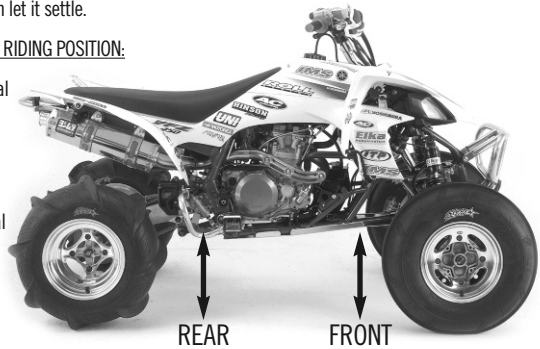
The ride height, or frame clearance, is the distance between the ground and the chassis with the rider sitting on the vehicle in riding position. The ride height is measured in inches, the front and rear measurements being taken according to the following procedures:

Have the rider sit on the bike in a racing position. Then have the rider bounce on the pegs a few times to compress the suspension then let it settle.

WITH THE RIDER SITTING ON THE VEHICLE IN RIDING POSITION:

Front Ride Height Measurement = the vertical distance from the ground to the chassis in front of the engine mounts.

Rear Ride Height Measurement = the vertical distance from the ground to the chassis, right behind the foot pegs.



HOW TO ADJUST THE RIDE HEIGHT

A preload adjustment ring is located under the head of the shock absorber. This ring is used to increase or decrease the tension in the springs as well as for adjusting the ride height of the vehicle (frame or ground clearance). See p.10 for detailed instructions on how to use the preload adjustment. While the ride height of the vehicle is a matter of vehicle model and driver preference, the front and rear heights need to be in balance.

RECOMMENDATIONS TO ADJUST THE RIDE HEIGHT

Whatever ride height setting you choose, the height must be similar at the front and rear of the vehicle, with the front slightly higher (from 1/4 to 3/4 inch maximum).

A higher ride height will provide more ground clearance with less chances to bottom out but will make the suspension stiffer.

A lower ride height will reduce the ground clearance and make the suspension softer, but will make the vehicle more prone to bottoming out.

IMPORTANT NOTE: The size of the tires used can affect the ride height. When using tires that are higher or lower than the stock tires, you might need to adjust the ride height accordingly.

ADJUSTMENT PROCEDURES

RIDE HEIGHT - SPORTS-UTILITY QUAD

MEASURING THE RIDE HEIGHT (GROUND CLEARANCE)

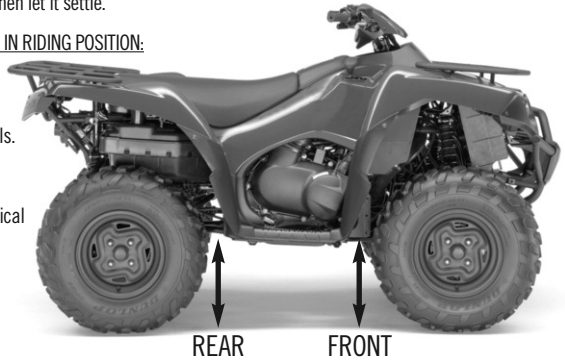
The ride height, or frame clearance, is the distance between the ground and the chassis with the rider sitting on the vehicle in riding position. The ride height is measured in inches, the front and rear measurements being taken according to the following procedures:

Have the rider sit on the bike in a racing position. Then have the rider bounce on the pegs a few times to compress the suspension then let it settle.

WITH THE RIDER SITTING ON THE VEHICLE IN RIDING POSITION:

Front Ride Height Measurement = the vertical distance from the ground to the chassis right behind the front wheels.

Rear Ride Height Measurement = the vertical distance from the ground to the chassis, right behind the foot pegs or in front of the rear wheels



HOW TO ADJUST THE RIDE HEIGHT

A preload adjustment ring is located under the head of the shock absorber. This ring is used to increase or decrease the tension in the springs as well as for adjusting the ride height of the vehicle (frame or ground clearance). See p.10 for detailed instructions on how to use the preload adjustment. While the ride height of the vehicle is a matter of vehicle model and driver preference, the front and rear heights need to be in balance.

RECOMMENDATIONS TO ADJUST THE RIDE HEIGHT

Whatever ride height setting you choose, the height must be similar at the front and rear of the vehicle, with the front slightly higher (from 1/4 to 3/4 inch maximum).

A higher ride height will provide more ground clearance with less chances to bottom out but will make the suspension stiffer.

A lower ride height will reduce the ground clearance and make the suspension softer, but will make the vehicle more prone to bottoming out.

IMPORTANT NOTE: The size of the tires used can affect the ride height. When using tires that are higher or lower than the stock tires, you might need to adjust the ride height accordingly.

ADJUSTMENT PROCEDURES

RIDE HEIGHT - SIDE-BY-SIDE VEHICLE

MEASURING THE RIDE HEIGHT (GROUND CLEARANCE)

The ride height, or frame clearance, is the distance between the ground and the chassis with the rider sitting on the vehicle in riding position. The ride height is measured in inches, the front and rear measurements being taken according to the following procedures:

WITH THE RIDER SITTING ON THE VEHICLE IN RIDING POSITION:

Front Ride Height Measurement = the vertical distance from the ground to the chassis behind the front wheels

Rear Ride Height Measurement = the vertical distance from the ground to the chassis in front of the rear wheels



HOW TO ADJUST THE RIDE HEIGHT

A preload adjustment ring is located under the head of the shock absorber. This ring is used to increase or decrease the tension in the springs as well as for adjusting the ride height of the vehicle (frame or ground clearance). See p.10 for detailed instructions on how to use the preload adjustment. While the ride height of the vehicle is a matter of vehicle model and driver preference, the front and rear heights need to be in balance.

RECOMMENDATIONS TO ADJUST THE RIDE HEIGHT

Whatever ride height setting you choose, the height must be similar at the front and rear of the vehicle, with the front slightly higher (from 1/4 to 3/4 inch maximum).

A higher ride height will provide more ground clearance with less chances to bottom out but will make the suspension stiffer.

A lower ride height will reduce the ground clearance and make the suspension softer, but will make the vehicle more prone to bottoming out.

IMPORTANT NOTE: The size of the tires used can affect the ride height. When using tires that are higher or lower than the stock tires, you might need to adjust the ride height accordingly.

ADJUSTMENT PROCEDURES

RIDE HEIGHT - SNOWMOBILE

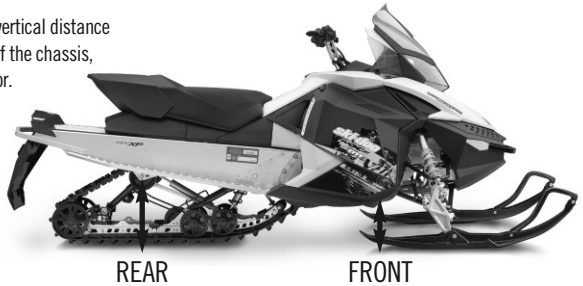
MEASURING THE RIDE HEIGHT (GROUND CLEARANCE)

The ride height, or frame clearance, is the distance between the ground and the chassis with the rider sitting on the vehicle in riding position. The ride height is measured in inches, the front and rear measurements being taken according to the following procedures:

WITH THE RIDER SITTING ON THE VEHICLE IN RIDING POSITION:

Front Ride Height Measurement = the vertical distance from the ground to the frontmost part of the chassis, behind the ski and in line with the motor.

Rear Ride Height Measurement = the vertical distance from the ground to the middle of the axle on the upper wheel of the track's suspension system



HOW TO ADJUST THE RIDE HEIGHT

A preload adjustment ring is located under the head of the shock absorber. This ring is used to increase or decrease the tension in the springs as well as for adjusting the ride height of the vehicle (frame or ground clearance). See p.10 for detailed instructions on how to use the preload adjustment. While the ride height of the vehicle is a matter of vehicle model and driver preference, the front and rear heights need to be in balance.

RECOMMENDATIONS TO ADJUST THE RIDE HEIGHT

Whatever ride height setting you choose, the height must be similar at the front and rear of the vehicle to ensure the snowmobile will ride properly leveled and balanced.

A higher ride height will provide more ground clearance with less chances to bottom out but will make the suspension stiffer.

A lower ride height will reduce the ground clearance and make the suspension softer, but will make the vehicle more prone to bottoming out.

IMPORTANT NOTE: The size of the track lug used can affect the ride height. When using tracks with lugs that are high the ride height will be lower once on the snow. You might need to adjust the ride height accordingly.

ADJUSTMENT PROCEDURES

SPRING PRELOAD

ABOUT SPRING PRELOAD ADJUSTMENT

A preload adjustment ring is located under the head of the shock (see p.4-5 for location). This ring is used to increase or decrease the initial tension on the spring and therefore, the ride-height of the vehicle, also referred to as frame clearance. Frame clearance is the distance between the ground and the chassis. While the height of the vehicle is a matter of personal driver preference, the vehicle needs to be as level as possible to be in balance.

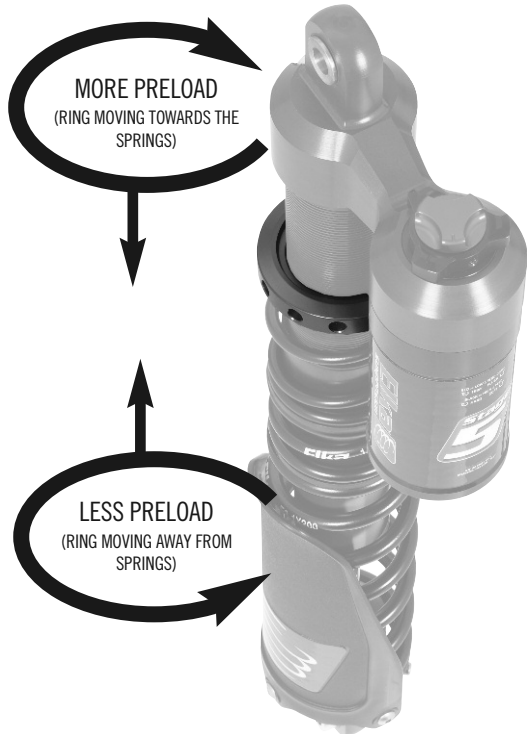
HOW TO ADJUST THE PRELOAD

- Remove the seat if needed (on some vehicle models) to access the spring preload adjustment ring
- Loosen the screw on the preload ring using the provided 3mm Allen key
- Turn the preload ring **CLOCKWISE** (viewed from the top) to screw it in towards the springs **TO INCREASE THE PRELOAD** (raise the vehicle) using the provided tool
- Turn the preload ring **COUNTER-CLOCKWISE** (viewed from the top) to unscrew it away from the springs **TO REDUCE THE PRELOAD** (lower the vehicle) using the provided tool.
- When the adjustment is complete, tighten back the screw to lock the preload ring to 35 lbs.in. for 36mm or 46mm shocks or 90 lbs.in. for 56mm or 66mm shocks.

Increasing the preload will raise the vehicle and increase frame clearance. This will result in a more responsive ride. Be careful not to apply too much preload. This can cause “coil binding”, which is when the coils of the spring rub against each other under compression. This can damage the spring, the shock and can be dangerous for the rider.

Reducing the preload will lower the vehicle and decrease frame clearance. This will result in a smoother ride but the bike might come in contact with the ground more often. The preload should always be enough to keep the spring strongly in place.

IMPORTANT NOTE: Be careful when adjusting the preload after the engine has been running. The exhaust pipe and shock body can be hot and may cause severe injuries. Be careful and use gloves or proper protection equipment.



ADJUSTMENT PROCEDURES

COMPRESSION (LEGACY SERIES MODELS)

ABOUT THE COMPRESSION ADJUSTMENT

The black knob located on the remote reservoir is the compression adjustment. This adjustment controls the hydraulic resistance to high-speed impacts. A harder compression damping will offer more resistance to impacts but will provide a stiffer rider. A softer compression damping will provide a smoother ride but less resistance on impacts.

If the compression adjustment is correct, the wheels can achieve maximum travel. When the compression damping is too hard, the ride will be stiff and will not be able to absorb average to major impacts. It is preferable to start with a softer damping and add compression until the bike barely bottoms out on major impacts. This will prevent the rider from getting tired and will increase comfort and performance.



(Stage 3 model shown above)



(Legacy Series model shown)

HOW TO ADJUST THE COMPRESSION :

- To INCREASE the compression damping (making the suspension HARDER), you need to turn the knob clockwise. There is a sticker on the knob indicating S and H (soft, hard). Turn towards the H.
- To REDUCE the compression damping (making the suspension SOFTER), you need to turn the knob counterclockwise. There is a sticker on the knob indicating S and H (soft, hard). Turn towards the S.

You should start in the middle of the adjustment. There are about 30 clicks of adjustment. To adjust properly, turn the knob 2-3 clicks at a time and take a test ride. The adjustment is more sensitive towards the H than the S.

IMPORTANT NOTE: It is not possible to check the compression adjustment by only compressing the suspension on the vehicle manually. You must take a test ride to assess the setting. The feeling might be right when bouncing on the seat but it could be very different on the track. Never compensate for a lack of spring strength by boosting the compression or leaving the knob all the way towards the H setting. If your suspension is too soft with the adjustment above 25 clicks in, you should replace your springs with a higher rate. If the knob appears to be blocked, do not force it. If necessary, contact our customer service for advice or repairs.

ADJUSTMENT PROCEDURES

LOW-SPEED COMPRESSION (STAGE 4 AND STAGE 5 MODELS)

ABOUT LOW-SPEED COMPRESSION ADJUSTMENT

The dual compression knobs located on the reservoir controls the high- and low-speed damping of the shock absorber. Functioning independently, the small red-coloured knob controls the low-speed setting, which is when the shaft's movement is normal to slower like on g-outs, over small undulations, when cornering and accelerating, etc.

HOW TO ADJUST THE LOW-SPEED COMPRESSION

Use the SMALL RED KNOB to adjust the low-speed compression damping.

- To **INCREASE (make stiffer)** the compression damping, you need to turn the knob **CLOCKWISE**. There is a sticker on the shock's head indicating S and H (soft, hard). **TURN TOWARDS THE H.**
- To **REDUCE (make softer)** the compression damping, you need to turn the knob **COUNTERCLOCKWISE**. There is a sticker on the knob indicating S and H (soft, hard). **TURN TOWARDS THE S.**

You should start in the middle of the adjustment. There are about 35 clicks of low-speed compression adjustment. To adjust properly, turn the knob 2-3 clicks at a time and take a test ride. The adjustment is more sensitive towards the H than the S.

IMPORTANT NOTE:

Riding speed and compression speed are different. A small obstacle hit when riding at high speed will make the shock's shaft move very fast and will be managed by the high-speed compression damping circuit (black knob).

The low-speed compression mainly affects the feeling of the suspension in such situations as when cornering, riding over smooth undulations, in g-outs, under hard acceleration or braking.

When the high-speed knob (large black knob) is turned, the small gold-coloured knob follows its movement without going out of adjustment and vice versa.



ADJUSTMENT PROCEDURES

HIGH-SPEED COMPRESSION (STAGE 5 MODEL)

ABOUT HIGH-SPEED COMPRESSION ADJUSTMENT

The dual compression knobs located on the reservoir controls the high- and low-speed damping of the shock absorber. Functioning independently, the larger black knob controls the high-speed setting (when the shaft's movement is faster like when landing jumps, holes, etc.).

HOW TO ADJUST THE HIGH-SPEED COMPRESSION

Use the BIGGER BLACK KNOB to adjust the high-speed compression damping.

- To **INCREASE (make stiffer)** the compression damping, you need to turn the knob **CLOCKWISE**. There is a sticker on the shock's head indicating S and H (soft, hard). **TURN TOWARDS THE H.**

- To **REDUCE (make softer)** the compression damping, you need to turn the knob **COUNTERCLOCKWISE**. There is a sticker on the knob indicating S and H (soft, hard). **TURN TOWARDS THE S.**

You should start in the middle of the adjustment. There are about 20 clicks of high-speed compression adjustment. To adjust properly, turn the knob 2-3 clicks at a time and take a test ride. The adjustment is more sensitive towards the H than the S.

IMPORTANT NOTE:

Riding speed and compression speed are different. A small obstacle hit when riding at high speed will make the shock's shaft move very fast and will be managed by the high-speed compression damping circuit (black knob).

The low-speed compression mainly affects the feeling of the suspension in such situations as when cornering, riding over smooth undulations, in g-outs, under hard acceleration or braking.

When the high-speed knob (large black knob) is turned, the small gold-coloured knob follows its movement without going out of adjustment and vice versa.



ADJUSTMENT PROCEDURES

REBOUND (STAGE 2, STAGE 4, STAGE 5 AND LEGACY SERIES MODELS)

ABOUT REBOUND ADJUSTMENT

The rebound adjustment is located at the bottom of the shock absorber (see page 4-5). This adjustment controls the speed the shock will return to its initial extended state after being compressed from an impact. When the rebound adjustment is set properly, the rear wheel should keep maximum traction by tracking the ground without catapulting the rider off the bike.

HOW TO ADJUST THE REBOUND :

Use a flat screwdriver or the tool-less twisting knob to adjust the REBOUND damping.

- To **INCREASE (slow down)** the rebound damping, turn the knob **CLOCKWISE**. The adjuster will move **UP** on tool-less twisting knob models and move **IN** on compact models.

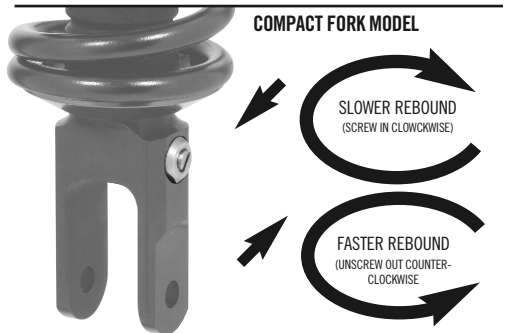
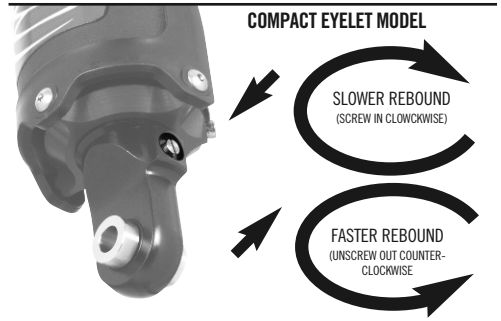
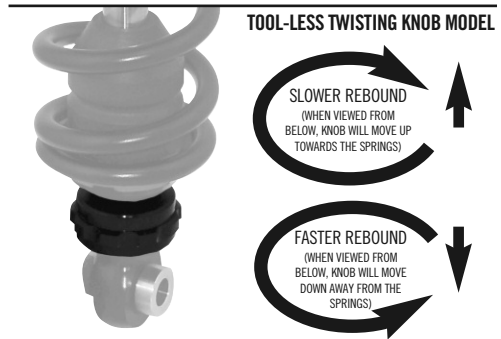
- To **REDUCE (speed up)** the rebound damping, turn the knob **COUNTER-LOCKWISE**. The adjuster will move **DOWN** on tool-less twisting knob models and move **OUT** on compact models.

There is about 50 clicks of rebound adjustment. You should start in the full fast position of the adjustment. To adjust properly, turn the adjuster 2-3 clicks at a time and take a test ride. The adjustment is more sensitive towards the Slower side than the Faster side.

When the rebound setting gets too slow, the shock absorber will not have time to resume to its initial position when a series of close bumps is encountered. In this case, the vehicle will run out of travel (packing) and may give the impression of a too soft compression adjustment.

When the rebound adjustment is too fast, the rear end of the bike will kick and move from side to side after hitting a series of close bumps and the rider will feel catapulted by the vehicle.

IMPORTANT NOTE: If the rebound adjuster knob appears to be blocked, do not force it. If necessary, contact Elka's Service Department for advice or repairs.



ADJUSTMENT PROCEDURES

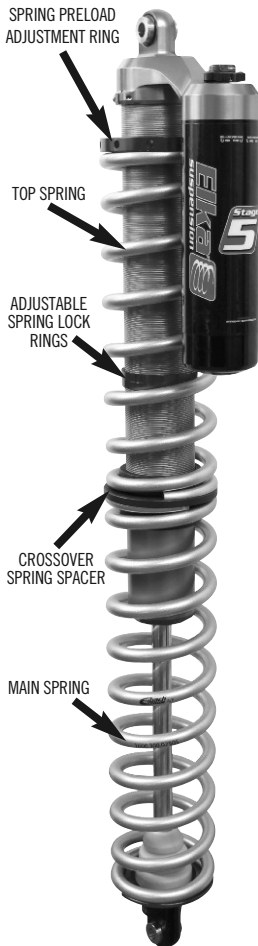
ADJUSTABLE SPRING LOCK RINGS (SELECT UTV APPLICATIONS ONLY)

ABOUT THE ADJUSTABLE LOCK RINGS

The adjustable spring lock rings are designed to help control the transition point where the top spring is "locked", therefore switching to the main spring only to help control bottom-out resistance.

When stacked and working together, multi-spring setups provide a softer and smoother ride as the force is divided amongst the springs. When the composite crossover spring spacer reaches the lock rings during compression, it prevents the top spring to compress any further therefore transferring all force to the main spring. By varying the position of the lock rings on the shock's threaded boy, the driver can fine-tune the point within the wheel travel at which the springs will become harder to prevent bottoming out.

The factory default setting for the lock ring has been carefully optimized to provide the best compromise between a plush comfortable ride and good bottoming-out protection. Only use the lock rings if you encounter bottoming-out issues during use. Major changes to the lock ring position can dramatically change the handling, be cautious and only adjust in small increments.



ADJUSTMENT PROCEDURE

IMPORTANT NOTE: As a general rule, when adjusting the spring preload by ONE complete turn (1mm), you should adjust the lock rings in the same direction by a half-turn (0.5mm) to maintain similar spring characteristics and prevent coil binding of the springs. Always adjust the lock rings in small increment to prevent dramatic effects on the suspension and potential damage to the springs, shock or vehicle

- 1 – Following installation of the shocks on the vehicle, start by adjusting the ride height of your vehicle (sag) before using the adjustable lock rings.
- 2 – If the composite crossover spring spacer is touching the lock rings before desired ride height is achieved, you should move the lock rings UP on the body threads (towards the top of the shock) until the crossover spacer is free to move at the desired ride height.
- 3 – To move the lock rings, you might need to lift the vehicle so the wheel is off the ground. You might also need to remove the springs in order to reach the lock rings.
- 4 – To move the rings up, loosen the top ring first by turning it COUNTER-CLOCKWISE (when viewed from the top of the shock). Set this ring then back the other ring to it to lock the rings.
- 5 – To move the rings down, loosen the lower ring first by turning CLOCKWISE. Set this ring then back the other ring to it to lock the rings.
- 6 – Once ride height is adjusted, you can adjust the lock rings UP to cancel out the top spring earlier in the wheel travel, therefore increasing bottoming-out resistance.
- 7 – Adjust the lock rings DOWN to cancel out the top spring later in the wheel travel, therefore reducing the bottoming-out resistance.

MAINTENANCE CLEANING PROCEDURES

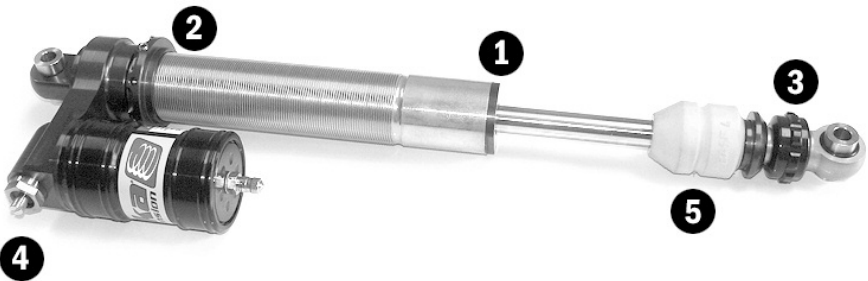
GENERAL MAINTENANCE

A well-maintained shock absorber will last longer and perform better. The best way to protect your shock absorbers from the elements is to use Elka Suspension shock absorber protectors. For cleaning, use a gentle detergent and pay particular attention to areas where debris can become lodged. Do not use any abrasive cleaning products.

Maintenance frequency may vary depending on the number of hours the vehicle is driven and the conditions under which it is ridden. Heat, violent impacts, dust, mud and adjustment settings are all factors that need to be taken into consideration in determining the frequency of basic maintenance and oil changes.

HOW TO CLEAN YOUR SHOCK ABSORBERS:

- 1) Do not use compressed air when cleaning the seal head as this can damage the seals.
- 2) Clean the threads under the preload ring using a soft brush.
- 3) Clean around the rebound adjustment knob so that no foreign particles damage the adjustment mechanism.
- 4) Remove the compression adjustment knob by unscrewing the Allen type setscrew and pulling on the knob carefully then clean delicately.
- 5) Use compressed air to clean beneath the bottom out bumper.



MAINTENANCE CARE & SERVICING SCHEDULE

OPERATION	AFTER EACH USE	END OF EACH SEASON	ANNUALLY
Clean under the bottom-out bumper	Yes	Yes	Yes
Clean shock absorber's exterior	Yes	Yes	Yes
Check the hoses for leaks or loosening	Inspect	Inspect	Inspect
Check the shaft for damage or rust	Inspect	Inspect	Inspect
Check the seal head for leaks or loosening	Inspect	Inspect / Replace	Inspect / Replace
Check all mounting nuts for loosening	Inspect	Inspect	Inspect
Check spherical bearings	Inspect	Inspect	Inspect
Check spring spacers (crossovers)	Inspect	Inspect	Inspect
Change oil, piston and wear-band, clean interior parts, check nitrogen pressure	<p>Each 6 months or each year, depending on useage (must be done by the Elka Factory Service Department or an Authorized Service Center)</p>		

IMPORTANT NOTE: Elka Suspension recommends that you inspect your shock absorbers before and after each use in order to detect any problems.

MAINTENANCE

RETURN PROCEDURES FOR SERVICE WORK OR WARRANTY

IMPORTANT NOTE: NEVER SHIP YOUR SHOCKS without first contacting a service center and obtaining an authorization to ship, otherwise your shipment may get refused or stuck at customs and may occur extra charges.

HOW TO PROCEED

1. **OPTION 1 - BY PHONE:** Contact the appropriate service center listed below. They will provide you instructions on how to proceed and where to ship your shock.

OPTION 2 - ONLINE: For regular servicing, fill out completely the **SERVICE WORK ORDER** form from our web site at <https://ca.elkasuspension.com/support/servicework/>
For warranty claims, fill out completely the **WARRANTY CLAIM FORM** from our web site at <https://ca.elkasuspension.com/support/warranty/>

2. Clean your shocks thoroughly using gentle detergent. Wrap your shocks individually before placing them in a box to avoid damage during shipping. Any damage occurring during shipping is your responsibility. Full shipping insurance is recommended.

3. Ship in accordance with the instructions provided by the service center.

ELKA AUTHORIZED SERVICE CENTERS IN THE UNITED STATES

For warranty claims or regular service/maintenance/modifications:

ELKA SERVICE CENTER - EAST COAST: Impact Solutions LLC
655 Hocking Rd., Little Hocking, OH 45742
Phone: 740-989-2026 www.ImpactSolutionsATV.com

For regular service/maintenance/modifications & pro racers:

ELKA SERVICE CENTER - WEST COAST - Roll Design Inc.
1191 Mission Blvd, Fallbrook, CA 92028
Phone: 760-731-5920 www.elkaservicecenter.com

ELKA AUTHORIZED SERVICE CENTERS IN CANADA

For warranty claims or regular service/maintenance/modifications:

ELKA SUSPENSION INC. - Factory Service Department
1585-M De Coulomb, Boucherville, Quebec, Canada J4B 8J7
Phone: 1-800-557-0552 <https://ca.elkasuspension.com/support/servicework/>

ACCELERATED TECHNOLOGIES

3621 Cty Rd. 36, Buckhorn, Ontario, Canada K0L 1J0
Phone: 705-567-9490 <https://acceleratedtechnologies.ca>

MAINTENANCE

FINDING THE SERIAL NUMBER OF A SHOCK ABSORBER

ABOUT THE SERIAL NUMBERS

The serial number is an alpha-numeric sequence engraved on the head, located at the top of the shock absorber. The first two (2) characters are letters, followed by four (4) digits.

The letters represent the year and month of manufacturing, the remaining digits are serialized.

Please note that prototypes, pro racer units and demo units might have different engraving or even no engraving at all.

The serial number is linked in our system with the complete pedigree of the shock, including build specs and service work performed through our factory service department.



CUSTOMER SUPPORT FOR ADDITIONAL INFORMATION OR QUESTIONS

DOCUMENTATION CENTER

<http://elkasuspension.dozuki.com/>

FACTORY CUSTOMER SERVICE

ELKA SUSPENSION INC. - Customer Support
1585-M De Coulomb, Boucherville, Quebec, Canada J4B 8J7
Phone: 1-800-557-0552 or +1 (450) 655-4855
Email: info@elkasuspension.com
www.elkasuspension.com

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE(S)	CORRECTIVE MEASURES
The front of the vehicle dives when cornering and braking	<ol style="list-style-type: none"> 1. The auxiliary spring has too much stroke. 2. Not enough low-speed compression damping. 	<ol style="list-style-type: none"> 1. Change crossover length (call for instructions) or contact Elka for substitute parts. 2. Increase the low-speed compression damping (see p.12) 3. Close TRACK System™ if such equipped
The front of the vehicle is stiff. Handling is hard on your arms and the vehicle is hard to control at high speeds.	<ol style="list-style-type: none"> 1. The auxiliary spring has not enough stroke. 2. Too much compression damping. 	<ol style="list-style-type: none"> 1. Reverse the crossover (see p.15) or contact Elka for substitute parts. 2. Reduce the compression damping (see p.11) 3. Open TRACK System™ if such equipped
The rear of the vehicle wants to kick to the front and bounces from side to side continually.	<ol style="list-style-type: none"> 1. Vehicle is unbalanced. 2. Incorrect rebound damping. 3. Too much compression damping. 	<ol style="list-style-type: none"> 1. Verify and adjust the ride height (see p.9). 2. Adjust the rebound damping (see p.14). 3. Reduce the compression damping (see p.11).
The rear of the vehicle shoots up on large jumps or bumps.	<ol style="list-style-type: none"> 1. The ride height is too low and the chassis is too close to the ground. There is not enough stroke before the bottom-out bumper engages. 2. Not enough rebound damping to prevent the vehicle from being thrown by the force of the springs. 3. Spring pressure is too high to allow sufficient stroke. 4. Spring pressure is too low. The vehicle bottoms out. 	<ol style="list-style-type: none"> 1. Increase the ride height (see p.9). 2. Increase the rebound damping (see p.14). 3. Reduce the spring pressure using the preload adjustment (see p.10). 4. Increase the spring pressure using the preload adjustment (see p.10).

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE(S)	CORRECTIVE MEASURES
<p>The vehicle shoots up and dances about when going over a series of small bumps.</p>	<ol style="list-style-type: none"> 1. Too much rebound damping. The compression accumulates and prevents the shock absorber from returning to proper extension before hitting the next bump. 2. Too much compression damping. The shock absorber is not using its full stroke (travel). 3. The ride height is too low and the chassis is too close to the ground. There is not enough stroke before the bottom-out bumper engages. 4. Spring rate is too high for the weight of the rider and the vehicle. 	<ol style="list-style-type: none"> 1. Reduce the rebound damping (see p.14). 2. Reduce the compression damping (see p.11). 3. Increase the ride height (see p.9). 4. Contact Elka Suspension.
<p>The shock absorber does not return to their fully extended position.</p>	<ol style="list-style-type: none"> 1. This is normal. The weight of the vehicle will not let the shock absorbers return to their fully extended position when there is not much preload. 	<ol style="list-style-type: none"> 1. To get more extension, increase the preload using the preload adjustment (see p.10).
<p>The vehicle is not stable when taking curves.</p>	<ol style="list-style-type: none"> 1. The ride height of the vehicle is too high. 2. The suspension is too soft overall for the track or terrain. 	<ol style="list-style-type: none"> 1. Verify and adjust the ride height (see p.9). 2. Change crossover length (call for instructions) or increase the compression damping (see p.11).



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