SHOCK ABSORBERS OWNER'S MANUAL

SPORTS-UTILITY QUAD

SIDE-BY-SIDE

SNOWMOBILE

SPORTS & RACING ATV

Elka® suspension

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 install, 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 3mm 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 occuring 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.

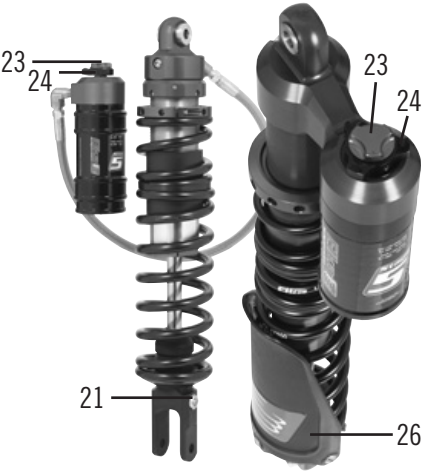
INSTALLATION PROCEDURES

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.

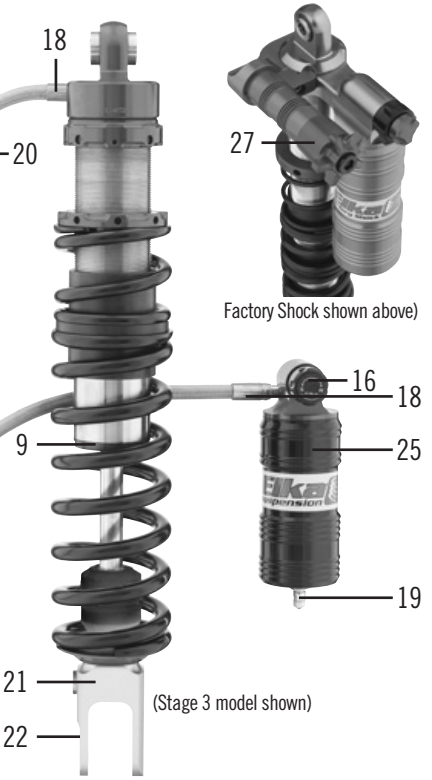
LOCATION OF THE ADJUSTMENTS AND COMPONENTS

(Stage 4 model shown)



(Stage 5 models shown above)

Factory Shock shown above)



(Stage 3 model shown)

LOCATION OF THE ADJUSTMENTS AND COMPONENTS

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

RIDE HEIGHT - SPORTS & RACING ATV

MEASURING THE RIDE HEIGHT (GROUND CLEARANCE)

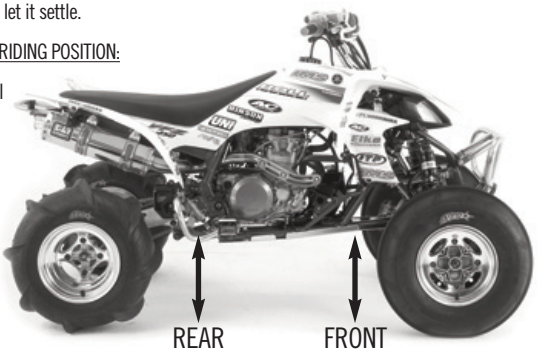
The ride height, or frame clearance, is the distance between the ground and the chassis with the rider sitting on the vehicle in riding position. The ride height is measured in inches, the front and rear measurements being taken according to the following procedures:

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.

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.

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 chassisin 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.

RIDE HEIGHT - SNOWMOBILE

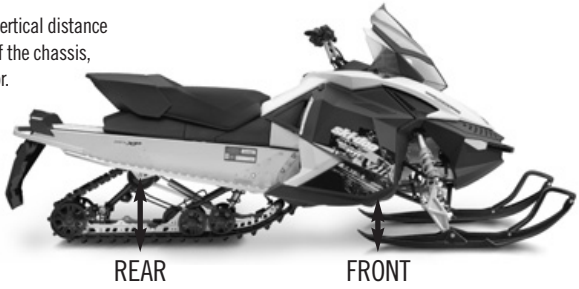
MEASURING THE RIDE HEIGHT (GROUND CLEARANCE)

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 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.

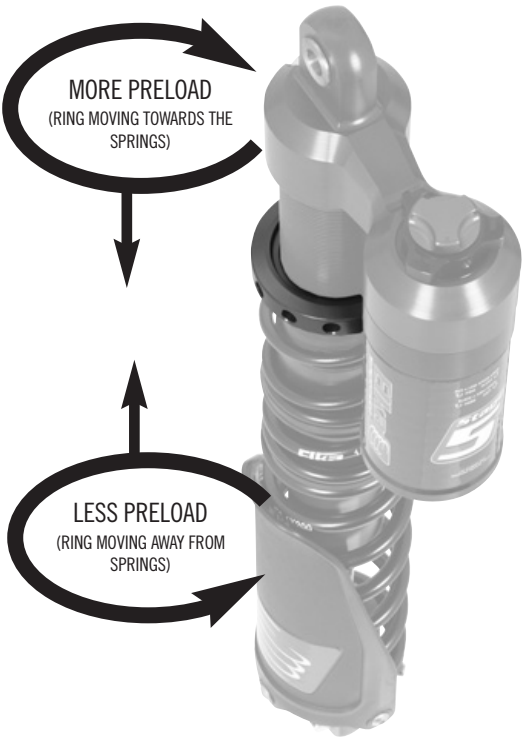
SPRING PRELOAD

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.



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.

COMPRESSION (STAGE 3 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.

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 strenght 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.

LOW-SPEED COMPRESSION (STAGE 4, STAGE 5 AND FACTORY 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.

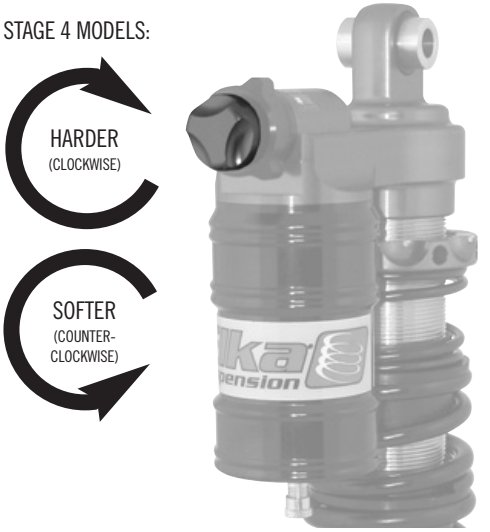
IMPORTANT NOTE:
Riding speed and compression speed are different. A small obstacle hit when riding at high speed will make the shock's shaft move very fast and will be managed by the high-speed compression damping circuit (black knob).

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.

ON STAGE 5 MODELS:

ON STAGE 4 MODELS:



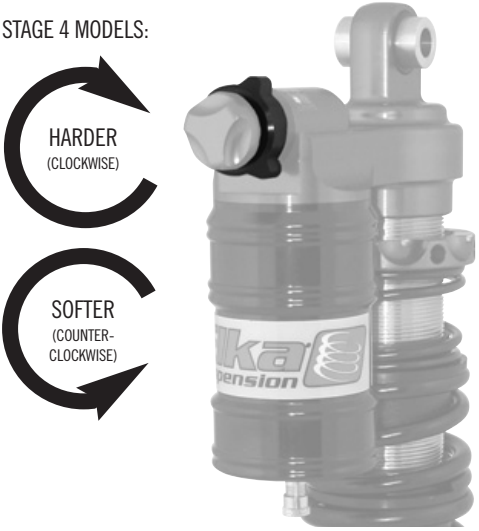
HIGH-SPEED COMPRESSION (STAGE 4, STAGE 5 AND FACTORY MODELS)

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.).

ON STAGE 5 MODELS:

ON STAGE 4 MODELS:



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.

REBOUND (STAGE 1+, 2+, 3, 4, 5 AND FACTORY MODELS)

ABOUT REBOUND ADJUSTMENT

The rebound adjustment is located at the bottom of the shock absorber (see page 4-5). This adustment 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.

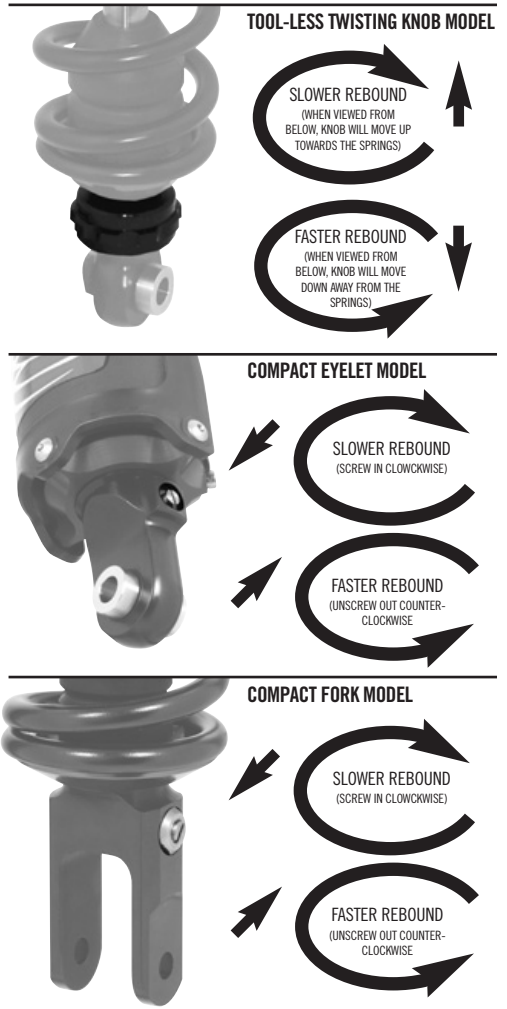
- To **INCREASE (slow down)** the rebound damping, turn the knob **CLOCKWISE**. The adjuster will move UP on tool-less twisting knob models and move IN on compact models.
- To **REDUCE (speed up)** the rebound damping, turn the knob **COUNTER-LOCKWISE**. The adjuster will move DOWN on tool-less twisting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



TRACK SYSTEM™ (FACTORY SHOCK MODELS ONLY)

ABOUT THE PATENTED TRACK SYSTEM™

The purpose of the TRACK System™ is to increase shock performance over high-speed square edge bumps. It increases traction and control, by ensuring constant contact between the tire rubber and the track surface. It also reduces feedback through the handlebars, reducing the dreaded "arm-pump" and increases rider endurance.

The TRACK System™ momentarily reduces the hydraulic resistance of the shock absorber under extra high speed blows. The pressure threshold at which the TRACK System™ operates and the duration of the pressure relief can be controlled with the TRACK System™ star shaped knob. A spring loaded floating piston inside the TRACK System™ controls the threshold pressure and the travel of the floating piston will dictate the duration of the pressure relief. By turning in the TRACK System™ knob (clockwise), the spring preload is increased thus increasing the threshold pressure. Subsequently, turning in the knob will also reduce the floating piston travel and the pressure relief duration.

The TRACK System™ can provide an advantage in various track conditions and on different surface types: MX (braking bumps, sharp edge woops, high speed ripples), XC (uneven terrain in corners, tree roots, holes) and DESERT (high speed ripples, rocks, holes).

SET-UP PROCEDURE

Below are the steps to take to ensure the TRACK System™ is always performing at it highest potential.

1 – Set correct Ride Height (sag)

2 – Turn the TRACK System™ knob **CLOCKWISE** until it stops, this **CLOSES (disengages)** the system

3 – Ride the vehicle to set the High-Speed Compression, Low-Speed Compression and Rebound adjustments (pages 12-14). Those adjustments must be set properly before using and/or setting the TRACK System™. Adjustments should be made in small increments (2-3 click)

4 – Open the TRACK System™ one or two clicks at a time by turning it **COUNTER-CLOCKWISE (OPEN)**

5 – The TRACK System™ is properly set when it provides additional plushness upon harsh impacts without causing excessive diving in turns or causing bottoming-out

TYPICAL SETTINGS

Typical ride height:	MX: Front: 7 to 7.5 inches - Rear: 6.75 to 7.25 inches XC: Front 7.25 to 7.75 inches - Rear: 7 to 7.5 inches

Adjustment settings (all counts from closed or "fully in position"):

Front:	Low-Speed Compression (red knob): 5-20 clicks High-Speed Compression (black knob): 5-15 clicks TRACK System™ (star-shaped knob): 2-5 clicks
Rear:	Low-Speed Compression (red knob): 5-20 clicks High-Speed Compression (black knob): 3-15 clicks TRACK System™ (star-shaped knob): 1-4 clicks

IMPORTANT: The TRACK System™ must be serviced exclusively by the ELKA Factory Service Dept. to ensure optimum performance and longer oil life.

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.

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	Each 6 months or each year, depending on useage (must be done by the Elka Factory Service Department or an Authorized Service Center)		

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

MAINTENANCE & SERVICING LOGBOOK

USE THE FOLLOWING SPACE TO LOG THE MAINTENANCE MADE TO YOUR SHOCK ABSORBERS

DATE	MAINTENANCE OPERATION

RETURN PROCEDURES FOR SERVICE WORK OR WARRANTY

HOW TO PROCEED

To ship your shock absorbers to our Factory Service Department for servicing or warranty issues, simply follow these easy steps:

1. Call our Customer Service Department to get a Return Goods Authorization Number (RGA Number) at 1-800-557-0552 or 450-655-4855. This RGA number is mandatory for all incoming packages. Without this return number, the service can be delayed.
2. Print and fill out completely the **SERVICE WORK ORDER** form from our web site at **www.elkasuspension.com** (servicing section, PDF file format) or use the one provided on page 20.
3. Download, print and fill a **COMMERCIAL INVOICE FORM** from our web site at **www.elkasuspension.com** (servicing section, PDF file format) or use the one provided on page 21. This form is mandatory for customs purposes. Include the form along your shipment's paperwork. Our representatives can assist you to fill out the commercial invoice.
4. Clean your shocks thoroughly using gentle detergent. Wrap your shocks individually before placing them in a box to avoid damage during shipping. Any damage occuring during shipping is your responsability. Full shipping insurance is recommended. Place your completed form on top inside your package.
5. Include a copy of your original invoice on top inside your package.
6. Ship your package at the address below:
   ELKA SUSPENSION INC. - Factory Service Department
   1585-M De Coulomb, Boucherville, Quebec, Canada J4B 8J7
7. Wait for a call from our technicians to confirm reception. Turn-around time is usually between 7 to 10 days from the moment we receive your package.

ELKA AUTHORIZED SERVICE CENTERS IN THE UNITED STATES

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

ELKA SERVICE CENTER - EAST COAST
985 Harris Hwy, Parkersburg, WV 26101
Phone: 304-863-0025
www.ImpactSolutionsATV.com

CATALYST REACTION - MOTO SPECIALIST
15401 Redhill Ave., Suite F
Phone: 714-258-7501
www.catalystsuspension.com

SERVICE WORK ORDER

IMPORTANT! READ FIRST: SHIPPING INSTRUCTIONS

1) Call our Customer Service Department at 1-800-557-0552 or 450-655-4855 to get a Returned Goods Authorization number (RGA#).
2) Clean your shocks thoroughly. Use gentle detergent and pay attention to areas where debris can become lodged.
3) Wrap each shock individually before placing them in a box to avoid damage during shipping. Any damage during shipping is your responsability.
4) Fill out this form completely and put it on top inside your package. An incomplete form will cause additional delay.
5) One of our representatives will call you to confirm when we receive your package.

CUSTOMER INFORMATION

CUSTOMER NAME: _____

ADDRESS: _____ CITY: _____

STATE: _____ COUNTRY: _____ POSTAL / ZIPCODE: _____

PHONE: _____ FAX: _____ AGE: _____ WEIGHT: _____

RIDING TYPE: ❑ MX ❑ XC ❑ DZ ❑ DUNE ❑ TT ❑ RECREATIONAL CLASS: _____

PAYMENT: ❑ VISA ❑ AMEX ❑ MASTERCARD NUMBER: _____ EXP: _____/_____

SOCIAL SECURITY NUMBER (REQUIRED BY UPS TO ALLOW CUSTOMS CLEARANCE): _____

VEHICLE INFORMATION

MAKE: _____ MODEL: _____ YEAR: _____

SWINGARM: _____ A-ARMS: _____

RETURN SHIPPING INFORMATION

❑ CHECK HERE IF SAME AS BILLING INFORMATION

NAME: _____

ADDRESS: _____ CITY: _____

STATE: _____ COUNTRY: _____ POSTAL / ZIPCODE: _____

PHONE: _____ FAX: _____

DESCRIPTION OF THE PROBLEM(S)

_____

_____

_____

_____

_____

_____

COMMERCIAL INVOICE

INVOICE INFORMATION:			
DATE:		RGA NUMBER (MANDATORY):	
ULTIMATE DESTINATION:	CANADA	CURRENCY OF SALE:	USD (US DOLLARS)
COUNTRY OF ORIGIN:	CANADA	COUNTRY OF EXPORTATION:	
TERMS OF SALE:	NOT A SALE	RELATED PARTIES:	NO
REASON FOR EXPORT:	CANADIAN GOODS RETURNED TO THE MANUFACTURER FOR SERVICE / WARRANTY		
SHIPPER / EXPORTER:			
TAX ID / VAT No / SSN:			
CONTACT NAME:		PHONE:	
COMPANY NAME:			
ADDRESS:			
CITY:		STATE / PROVINCE:	
COUNTRY:		ZIPCODE / POSTAL CODE:	
SHIP TO / CONSIGNEE:			
TAX ID / VAT No / SSN:	865124564		
CONTACT NAME:	KELLY BARRANQUEIRO		
COMPANY NAME:	ELKA SUSPENSION INC.		
ADDRESS:	1585-M, DE COULOMB		
CITY:	BOUCHERVILLE	STATE / PROVINCE:	QUEBEC
COUNTRY:	CANADA	ZIPCODE / POSTAL CODE:	J4B 8J7
PHONE:	(450) 655-4855	FAX:	(450) 655-2821
IMPORTER OF RECORD:			
TAX ID / VAT No / SSN:	865124564		
CONTACT NAME:	KELLY BARRANQUEIRO		
COMPANY NAME:	ELKA SUSPENSION INC.		
ADDRESS:	1585-M, DE COULOMB		
CITY:	BOUCHERVILLE	STATE / PROVINCE:	QUEBEC
COUNTRY:	CANADA	ZIPCODE / POSTAL CODE:	J4B 8J7
PHONE:	(450) 655-4855	FAX:	(450) 655-2821

DESCRIPTION OF GOODS:	ORIGIN	QUANTITY	WEIGHT	UNIT VALUE	TOTAL VALUE
HS 9813.00.00 - ATV Front suspension shock absorbers	CANADA				
HS 9813.00.00 - ATV Rear suspension shock absorbers	CANADA				

Goods originating from Canada, having been exported therefrom, to be processed by manufacturer for service or warranty.

DECLARATION STATEMENT:	TOTAL WEIGHT:		TOTAL:	
It is hereby certified that this invoice shows the actual price of the goods described, that no other invoice has been issued, and that all particulars are true and correct.	PACKING COSTS:			
	FREIGHT COSTS:			
	INSURANCE COSTS:			
SIGNATURE AND DATE:	TOTAL INVOICE VALUE:			

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE(S)	CORRECTIVE MEASURES
The front of the vehicle dives when cornering and braking	1. The auxialiary spring has too much stroke. 2. Not enough low-speed compression damping.	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.	1. The auxialiary spring has not enough stroke. 2. Too much compression damping.	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 bouces from side to side continually.	1. Vehicle is unbalanced. 2. Incorrect rebound damping. 3. Too much compression damping.	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.	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.	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
The vehicle shoots up and dances about when going over a series of small bumps.	1. Too much rebound damping. The compression accumulates and prevents the shock absorber from returning to proper extension before hitting the next bump.	1. Reduce the rebound damping (see p.14).
	2. Too much compression damping. The shock absorber is not using its full stroke (travel).	2. Reduce the compression damping (see p.11).
	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.	3. Increase the ride height (see p.9).
	4. Spring rate is too high for the weight of the rider and the vehicle.	4. Contact Elka Suspension.
The shock absorber does not return to their fully extended position.	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.	1. To get more extension, increase the preload using the preload adjustment (see p.10).
The vehicle is not stable when taking curves.	1. The ride height of the vehicle is too high.	1. Verify and adjust the ride height (see p.9).
	2. The suspension is too soft overall for the track or terrain.	2. Change crossover length (call for instructions) or increase the compression damping (see p.11).

Elka suspension

1585-M De Coulomb, Boucherville, Quebec, Canada J4B 8J7
Phone: 1-800-557-0552 or +1-450-655-4855
www.elkasuspension.com

PART # OWNERS MANUAL