

IF your ZBROZ_® product has a damaged or missing part, please contact customer service directly and a new replacement part will be sent to you immediately. For warranty issues, please contact ZBROZ.

(435) 753-7774 MON-FRI 8AM-5PM PST

OR

EMAIL: customerservice@zbrozracing.com

WEBSITE: www.zbrozracing.com

Please retain these instructions for future reference.

Limited Lifetime Warranty

Zbroz Racing will warranty to the original purchaser any failed Zbroz Racing suspension product in the event of failure due to construction or material failure of the product. You will be required to contact Zbroz Racing customer service with description and photos that resulted in failure. Zbroz Racing builds suspension products to meet and exceed your expectations in quality, performance and durability. All Zbroz Racing suspension products are rigorously tested during development and prototype parts are pushed to the limit by professional industry athletes, backcountry athletes and race teams. Zbroz Racing Limited Lifetime Warranty excludes the following wear parts as these parts are considered defective when worn: Ball Joints, Bushings, Bump Stops, Tie Rod Ends, Heim Joints, Shock Absorbers Product purchased directly from Zbroz Racing has a 90 day return policy on uninstalled products from the date of purchase (may be subject to restocking fee). Uninstalled product returns must be in the original Zbroz Racing packaging. Please call (435) 753-7774 to get an RGA# for any return. Customer is responsible for shipping costs back to Zbroz Racing. Returns without RGA# will be refused. Contact Zbroz Racing directly about any potentially defective parts prior to removal from vehicle.

Zbroz Racing is NOT responsible for any subsequent damages to any related vehicle parts due to misuse, abuse, improper installation, or lack of maintenance. Furthermore, Zbroz Racing reserves the right to change, modify or cancel this warranty without prior notice.



READ INSTRUCTIONS THOROUGHLY AND COMPLETELY BEFORE BEGINNING INSTALLATION.

INSTALLATION BY A CERTIFIED PROFESSIONAL MECHANIC IS HIGHLY RECOMMENDED.

ZBROZ_® IS **NOT** RESPONSIBLE FOR ANY DAMAGE OR FAILURE RESULTING FROM IMPROPER INSTALLATION.

Safety Warning

MISUSE OF THIS PRODUCT COULD LEAD TO INJURY OR DEATH.

Suspension systems or components that enhance the on and off-road performance of your vehicle may cause it to handle differently than it did from the factory. Extreme care must be used to prevent loss of control or vehicle rollover during abrupt maneuvers.

Always operate your vehicle at reduced speeds to ensure your ability to control your vehicle under all driving conditions. Failure to drive safely may result in serious injury or death to driver and passengers.

Driver and passengers must ALWAYS wear your seat belts, avoid quick sharp turns and other sudden maneuvers. ZBROZ does not recommend the combined use of suspension lifts, body lifts, or other lifting devices.

You should never operate your vehicle under the influence of alcohol or drugs.

Constant maintenance is required to keep your vehicle safe. Thoroughly inspect your vehicle before and after every off-road use.

It is the responsibility of the retailer and/or the installer to review all state and local laws, with the end user of this product, related to bumper height laws and the lifting of their vehicle before the purchase and installation of any ZBROZ products.

It is the responsibility of the driver/s to check their surrounding area for obstructions, people, and animals before moving the vehicle.

All raised vehicles have increased blind spots; damage, injury and/or death can occur if these instructions are not followed.

Installation Warning

All steps and procedures described in these instructions were performed while the vehicle was properly supported on a two post vehicle lift with safety jacks.

Use caution during all disassembly and assembly steps to insure suspension components are not over extended causing damage to any vehicle components and parts included in this kit.

Included instructions are guidelines only for recommended procedures and are not meant to be definitive. Installer is responsible to insure a safe and controllable vehicle after performing modifications.

ZBROZ recommends the use of an OE Service Manual for model/year of vehicle when disassembly and assembly of factory and related components.

Unless otherwise specified, tighten all bolts and fasteners to standard torque specifications listed within the OE Service Manual.

Suspension components that use rubber or urethane bushings should be tightened with the vehicle at normal ride height. This will prevent premature wear or failure of the bushing and maintain ride comfort.

Larger tire and wheel combinations may increase leverage on suspension, steering, and related components.

Due to payload options and initial ride height variances, the amount of lift is a base figure. Final ride height dimensions may vary in accordance to original vehicle ride height. Always measure the vehicle ride height prior to beginning installation.

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Before starting installation: ZBROZ highly recommends that the installation of this product be performed by a professional mechanic with experience working on and installing suspension products. Professional knowledge and skill will typically yield the best installation results. If you need an installer in your area, please contact ZBROZ Customer Service to find one of our "Pro-Grade" Dealers.

INSTALLATION BY A PROFESSIONAL IS HIGHLY RECOMMENDED.

- A Factory Service Manual for your specific Year / Make / Model is highly recommended for reference during installation.
- All vehicles may require additional driveline modifications and / or balancing.
- A vehicle alignment is REQUIRED after installation of this product.
- A vehicle lift or hoist greatly reduces installation time. Installation time estimates are based on an available vehicle hoist.
- Vehicle must be in excellent operating condition. Repair or replace any and all worn or damaged components prior to installation.

Parts shown in red for picture clarification only

ZBROZ recommends all steps and procedures described in these instructions be performed while the vehicle is properly supported on a two post vehicle lift with safety jacks

Otherwise, park vehicle on a clean flat surface and block the rear wheels for safety. Engage the parking brake.

Lock the steering wheel in the straight forward position with the column lock or steering wheel locking device.

Raise the front of the vehicle and support with safety jack stands at each frame rail behind the lower control arms.



INSTALLATION INSTRUCTIONS

Spring Kit for Polaris General XP 1000/XP 4 1000 SKU: K25-PL1009-0/K25-PL1010-0



Bill of Materials	QTY
Front Main Spring	2
Front Tender Spring	2
Rear Main Spring	2
Rear Tender Springs	2
Tuned By Reservoir Decals	4

Tools Required	
Floor Jack or Lift	
15mm Wrench/Socket Set	
Flathead Screwdriver	
Hammer or Mallet	

This spring kit can be installed with shocks on your General by using a floor jack or lift. Select a flat install location. If using floor jack, always make sure to block tires - work safely!

If removing shocks for installation. Back OEM Preload rings on all shocks before removing.

Use a solid mounted vice for installation.

Follow These Steps First:

- 1. Measure current ride height at front center frame point and rear center frame point.
- 2. Write down these measurements for before and after installation notes.
- 3. If removing shocks, label each shock to eliminate installation problems with the piggy-back reservoirs positioning/clocking when reinstalling.
- 4. Clean shocks! Remove all dirt and mud.
- 5. Lift General using a floor jack or lift and remove tires.

FRONT Shocks Spring Kit Installation

Loosen lower shock bolt on the Trailing Arm. Do not disconnect it from the Trailing Arm at this time.

Size: 15mm

End Wrench & Ratchet



Using a flathead screwdriver raise the Bump Stop up above the retainer.



Next, loosen your pre-load all the way down until the collar is all the way to the top.



Remove the bottom retainer by lifting up on the spring stack with the help of another person or by using a Strut Compressor tool.

Once removed, set the retainer aside, you will reuse this.



Now remove the lower shock bolt and swing it away from the Trailing Arm. Slide the spring stack down to completely remove it from the shock body.

Set your springs aside and keep the OEM Spring Divider as you will reuse this.



You will now need to cut the OEM Spring Divider 1/4" down from the long end. Using a measuring device mark 1/4".

TIP: Make multiple marks around the Spring Divider and use electrical tap or masking tape to wrap around the marks to create a straight edge. A hack saw is best for cutting.



Install OEM Spring Divider with long end pointing up into the new ZBROZ Tender Spring.

NOTE: the Spring Divider is now installed the opposite direction than stock.



Now slide the Main Spring on with ZBROZ Logo facing right side up.

Next Place the lower Spring Retainer back on the same way it came off and then mount your shock back to the A-Arm with the lower shock bolt. Tightening the nut and bolt to factory torque specs.



Turn your pre-load nut down until it touches the top of the Tender Spring.

Now we will add pre-load.



Take a measurement from the top of the Tender Spring down to the bottom of the lower Main Spring. This should be about 13 3/4".

You will want this to be at 13" so we will need to add 3/4" of pre-load. You will do this by continuing to rotate the pre-load nut clockwise until your measurement is 13"



*Additional Preload may be needed depending on after-market accessories (bumper, cage, tire carrier, stereo system). You can put more pre-load on by repeating turning the pre-load nut more.



Finally, Install the "STAGE 1 Reservoir Decal.

Repeat these steps to install the spring kit to other front shock.

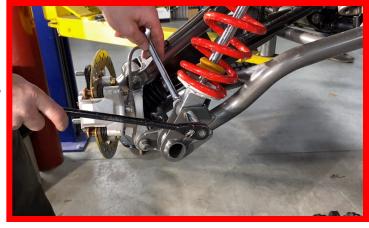


REAR Shocks Spring Kit Installation

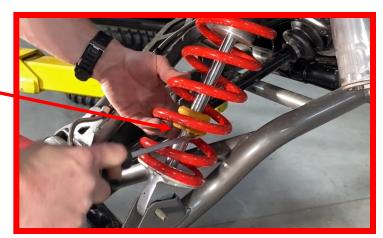
Loosen lower shock bolt on the rear Control Arm. Do not disconnect it from the Arm at this time.

Size: 15mm

End Wrench & Ratchet



Using a flathead screwdriver raise the Bump Stop out of the way.



Next, loosen your pre-load all the way down until the collar is all the way to the top.

NOTE: you may need a punch tool to use as leverage in loosing the collar



Remove the bottom retainer by lifting up on the spring stack with the help of another person or by using a Strut Compressor tool.

Once removed, set the retainer aside, you will reuse this.



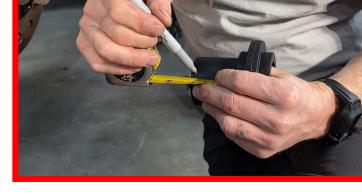
Now remove the lower shock bolt and swing it away from the Trailing Arm. Slide the spring stack down to completely remove it from the shock body.

Set your springs aside and keep the OEM Spring Divider as you will reuse this.



You will now need to cut the OEM Spring Divider 1/4" down from the long end. Using a measuring device mark 1/4".

TIP: Make multiple marks around the Spring Divider and use electrical tap or masking tape to wrap around the marks to create a straight edge. A hack saw is best for cutting.



Install OEM Spring Divider with long end pointing up into the new ZBROZ Tender Spring.

NOTE: the Spring Divider is now installed the opposite direction than stock.



Now slide the Main Spring on with ZBROZ Logo facing right side up.

Next Place the lower Spring Retainer back on the same way it came off and then mount your shock back to the Rear Control Arm with the lower shock bolt. Tightening the nut and bolt to factory torque specs.



Using the Strut Compressors again, clamp and compress your ZBROZ Main Spring enough to slide the OEM Spring Retainer back on. After the Spring Retainer is secure, remove the Strut Compressors.



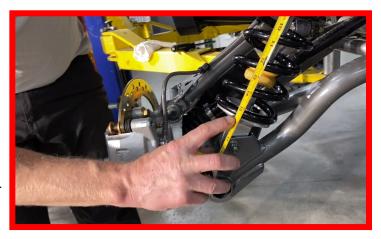
Turn your pre-load nut down until it touches the top of the Tender Spring.

Now we will add pre-load.



Take a measurement from the top of the Tender Spring down to the bottom of the lower Main Spring. This should be about 15 1/2".

You will want this to be at 15" so we will need to add 1/2" of pre-load so that you have a total of 3/4" of pre-load overall. You will do this by continuing to rotate the pre-load nut clockwise until your measurement is 15".



*Additional Preload may be needed depending on after-market accessories (bumper, cage, tire carrier, stereo system). You can put more pre-load on by turning the pre-load nut.



Finally, Install the "STAGE 1 Reservoir Decal.

Repeat these steps to install the spring kit to other rear shock.



Final Kit Installation

Optional: Disconnect and Remove Front Sway Bar

Due to this progressive dual rate spring setup, your front sway bar is no longer necessary for most riding terrain applications.

Install Tires and Torque Lug Bolts as Follows:

Torque Wheels to OE specs as shown in your owners manual

Check Ride Height Setup:

Drive your General around at slow speed, turning left and right to settle spring kit. Coast to stop, do not apply brakes to ensure spring kit is naturally settled. Measure and compare ride height measurements with pre-install measurements. Adjust by adding or removing Preload.

How to Adjust:

With tires on, use a floor jack or lift so that shocks are fully extended and adjust as follows:

If Ride Height is too TALL:

 Rotate OEM Preload ring 2 full counter clockwise rotations, settle spring kit and check.

Final Kit Installation

If Ride Height is too LOW:

 Rotate OEM Preload ring 2 full clockwise rotations, settle spring kit and check.

Results of Installing this ZBROZ Spring Kit

Ride Height Gain: average ride height increase is 2".

Aggressive Stance: allows fitment of larger tires.

Tune-able Progressive Spring Setup: soaks up small bumps better before initiating main springs.

Bottoming resistance: increased bottoming resistance with tune-able cross over rings.

Reduced body roll: tuned spring setup delivers increased control when turning and cornering.

Race inspired durability: premium quality / high tensile / light weight / springs that won't sag.



FAILURE TO PERFORM THE POST INSPECTION CHECKS MAY RESULT IN VEHICLE COMPONENT DAMAGE AND/OR PERSONAL INJURY OR DEATH TO THE DRIVER AND/OR OTHERS.

Final Checks & Adjustments

Once the vehicle is lowered to the ground, check all parts which have rubber or urethane components to ensure proper torque. Torque lug nuts to the wheel manufacturer specs. Move vehicle backwards and forwards a short distance to allow suspension components to adjust. Turn the front wheels completely left then right and verify adequate tire, wheel, brake line, and ABS wire clearance. Test and inspect steering, brake and suspension components for tightness and proper operation. Inspect brakes hoses and ABS lines for adequate slack at full extension, adjust as necessary.

RECHECK ALL HARDWARE FOR PROPER TORQUE VALUES AFTER 500 MILES, AND THEN PERIODICALLY AT EACH SERVICE INTERVAL THERAFTER.

Vehicle Handling Warning

Increasing the height of your vehicle raises the center of gravity and can affect stability and control. Use caution on turns and when making steering corrections.

Vehicles with larger tires and wheels will handle differently than stock vehicles. Take time to familiarize yourself with the handling of your vehicle.

Wheel Alignment/Headlamp Adjustment

It is necessary to have a proper and professional wheel alignment performed by a certified alignment technician. Align the vehicle to factory specifications. It is recommended that your vehicle alignment be checked after any off-road driving.

In addition to your vehicle alignment, for your safety and others, it is necessary to check and adjust your vehicle headlamps for proper aim and alignment. If the vehicle is equipped with active or passive safety/collision monitoring and/or avoidance systems including, but not limited to, camera- or radar-based systems, check and adjust your vehicle's systems for proper aim and function.