



Gen 5 Coil Over Conversion



INTRODUCTION

PLEASE RETAIN THIS DOCUMENT FOR FUTURE REFERENCE

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 return to the place of installation and contact ZBROZ®.

Business hours are Monday through Friday 8AM-5PM MST.

PHONE: (435) 753-7774

EMAIL: customerservice@zbrozracing.com

WEBSITE: www.zbrozracing.com

LIMITED LIFETIME WARRANTY

ZBROZ® will warranty to the original purchaser any failed ZBROZ® suspension product in the event of failure due to construction or material failure of the product. You will be required to contact ZBROZ® customer service with descriptions and photos that resulted in failure.

ZBROZ® builds suspension products to meet and exceed your expectations in quality, performance and durability. All ZBROZ® 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® 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® 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® packaging. Please call (435) 753-7774 to get an RMA# for any return. Customer is responsible for shipping costs back to Zbroz Racing. Returns without RMA# will be refused. Contact ZBROZ® directly about any potentially defective parts prior to removal from vehicle.

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

FOLLOW INSTRUCTIONS TO ENSURE PROPER INSTALLATION

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.



TOOLS:

- [13mm Socket](#) (1)
- [13mm End Wrench](#) (1)
- [Snap Ring Pliers](#) (1)



PARTS:

- [Gen 5 Rear Shock](#) (1)
 - [Rear Shock Link Rods](#) (1)
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Step 1 — Gen 5 Coil Over Conversion



WARNING

- **MISUSE OF THIS PRODUCT COULD LEAD TO INJURY OR DEATH.** You should never operate your vehicle under the influence of alcohol or drugs. All raised vehicles have increased risk including blind spots; damage, injury and/or death can occur if these instructions are not followed.
- 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. You should never operate your vehicle under the influence of alcohol or drugs.
- 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.

- 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 to check their surrounding area for obstructions, people, and animals before moving the vehicle.

Step 2



WARNING

- Use caution during all disassembly and assembly steps to insure not to cause 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.

Step 3

- Begin by removing the skid/suspension from the snowmobile.
- **IMAGE 1** Once you have the skid removed use a pair of snap ring pliers to remove the snap ring and remove the tunnel mounting location and the upper track wheels.
- **IMAGES 2&3** With the upper track wheels out of the way remove the torsion springs from both sides.
- Once the torsion springs are removed. Replace the upper track wheels and the tunnel mount and secure using the snap ring.

Step 4



- **IMAGE 1** Using a 13mm, Remove the lower shock mount bolt.
- **IMAGE 2** To remove the lower shock mounting location, slide the brass sleeve/pin out of the eyelet and Hang on to it as it will be used in reinstallation.
- **IMAGE 3** Using a 13mm, remove the upper bolt holding the shock link rods in place. Set those aside.

Step 5



- **IMAGE 1** Remove the upper shock mount using a 13mm. Set the stock shock aside.
- **IMAGE 2** Place the new coil over bracket in place in the upper mounting location as shown.
- **IMAGE 3** Place the stock shock bolt through the old shock mount and the new coil over bracket and secure to the factory torque spec.

Step 6

- **IMAGE 1** Place the new shock into the shock mount and secure using the new provided nut and bolt. Torque to the factory shock mount spec.
 - **NOTE:** The new shock will mount with the reservoir up.
- **IMAGE 2** Place the lower shock mount into the mounting location and slide the stock pin back through. Do not place the bolt through at this time.
- **IMAGE 3** Install the new provided shock links and secure using the stock nuts and bolts and torque to spec.
- Once you have completed the install, place the rear skid back into the snowmobile to complete the install.

Step 7



- Exit shocks have a threaded spring pre-load adjustment. Spring pre-load is determined by measuring the total spring package length with no weight on the machine. Recommended starting spring pre-load is $\frac{1}{4}$ inch. Or two full revolutions of the spring pre-load ring.
- To Change Spring pre load. Take the weight off the sled. This allows the shock to be at full extension, and will make it easier to adjust. Loosen the Allen bolt that holds the pre-load ring tight to the shock body. Your center track shock spring pre-load will need to be set after your limiter strap position is chosen.
- Your first adjustment should always be spring pre load even if you have a compression knob or clicker (Found on X1 and X2 Exit models) 1 or 2 turns of the pre-load ring will make a big difference in how the shock performs. Once you find your desired spring pre load setting, you now fine tune for trail conditions with the compression clicker knob.
- To adjust your compression clicker knob, simply twist clockwise to increase dampening or counter clockwise to decrease dampening.

By installing this product, you acknowledge that the suspension of this vehicle has been modified. As a result, this vehicle may handle differently than that of factory-equipped vehicles. As with any vehicle, extreme care must be used to prevent loss of control or roll-over during sharp turns or abrupt maneuvers. Always wear seat belts, and drive safely, recognizing that reduced speeds and specialized driving techniques may be required. Failure to drive this vehicle safely may result in serious injury or death. Do not drive this vehicle unless you are familiar with its unique handling characteristics and are confident of your ability to maintain control under all driving conditions. Some modifications (and combinations of modifications) are not recommended and may not be permitted in your state. Consult your owner's manual, the instructions accompanying this product, and state laws before undertaking these modifications. You are responsible for the legality and safety of the vehicle you modify using these components.