

### K30-KA1001-0 Spring Kit

If your Zbroz Racing product has a damaged or is missing parts, please contact customer service directly and a new replacement part will be sent to you immediately. Warranty inquiries, please supply photos and description that resulted in failure to customerservice@zbrozracing.com

(435) 753-7774

Mon-Fri 8am-5pm (MST)

# customerservice@zbrozracing.com www.zbrozracing.com

\*\*Please keep 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

This product warranty is voided if the vehicle is not aligned after kit installation and proper maintenance is routinely done.

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. Zbroz Racing is not responsible for 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 Racing 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 Racing 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 Racing Suspension 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.



#### Installation Instructions: K30-KA1001-0

Spring Kit For FOX IBP Shock
Application: Kawasaki KRX (2018-2021) \*2 Seater Models



BILL OF MATERIALS	QTY
Front Main Springs	2
Front Tender Springs	2
Rear Main Springs	2
Rear Tender Springs	2
Tuned By Reservoir Decals	4

TOOLS REQUIRED
Floor Jack Or Lift
18mm Wrench/Socket Set
3/32" Allen Wrench
Flathead Screwdriver
Rubber Mallet

This spring kit can be installed with shocks on your KRX 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 piggyback reservoirs positioning/clocking when reinstalling.
- 4. Clean shocks! Remove all dirt and mud.
- 5. Lift KRX using a floor jack or lift and remove tires.

## Rear Shocks Spring Kit Installation:

Disconnect lower shock bolt from trailing arm. Swing lower shock rearward and out.

Size: 17mm



Loosen the top preload nut by using a flathead screwdriver as shown and knocking it counterclockwise. Lossen enough so that the nut is out of the way.



Rotate OEM spring stack and preload ring counter clockwise to the top of the threaded shock body or until springs are loose & free.



Pull the lower bumpstop up out of the way and push up on spring stack to remove OEM lower spring retainer.



## Continued Rear Shocks Spring Kit Installation:

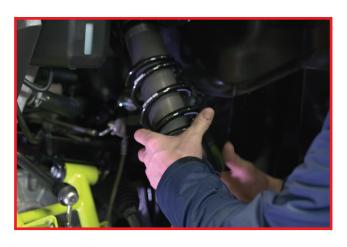
Remove OEM spring stack. Reuse OEM spring divider, OEM lower spring retainer.



Loosen the OEM Crossover Rings while the springs are removed. Take a flathead screwdriver or punch, knock the top ring loose by tapping it counterclockwise.



Install new Zbroz rear tender spring



Install OEM spring divider with long end pointing up.



### Continued Rear Shocks Spring Kit Install:

Install new main spring and OEM lower spring retainer.



Reconnect shock to trailing arm.

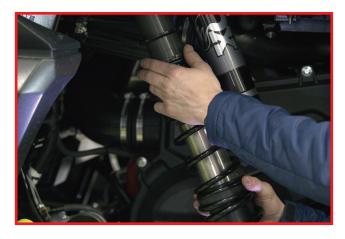
Size: 17mm

Torque shock bolt at 42ft-lbs.



Set "zero Preload" by pressing down on trailing arm and holding to fully extend internal bump stop spring. Rotate preload ring clockwise until spring stack contacts preload ring.

Rotate billet cross over ring clockwise to OEM spring divider at the same time keeping ring centerd in tender spring.



With a bright marker, mark your preload ring. This is your "zero preload" point. From here you can set additional preload by tightening the crossover rings. \*Additional Preload may be needed depending on after-market accessories (bumper, cage, tire carrier, stereo system). 4-6 turns from zero is a good starting point.



## Continued Rear Shocks Spring Kit Installation:

After you have set your preload, you will now set your crossover ring by measuring 4 3/4" from top of spring divider. \*Additional Adjustments may be needed after setting your preload and right height is checked and adjusted.



Dont forget to Install the new "Tuned by Zbroz" reservoir decals.

Repeat steps to install spring kit to other rear shock.



## Front Shocks Spring 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.

Disconnect lower shock bolt from upper a-arm.

Size: 17mm



Loosen OEM upper preload ring from OEM lower preload ring. Use flathead screwdriver and hammer.



Rotate OEM preload rings counter clockwise all the way to top of threaded shock body. or until OEM spring stack is now loose.



Move bump stop up 3 inches for removal of OEM lower spring retainer. Use flathead screwdriver.



## Continued Front Shocks Spring Kit Installation:

Push up on spring stack to remove OEM lower spring retainer.



Remove OEM spring stack. Discard OEM springs. Keep and reuse OEM spring divider and OEM lower spring retainer. Take note of the spring retainer orientation, this will be placed back on the exact same way.



Install new Zbroz 6" front tender spring along with the spring retainer.



Install front new main spring and spring retainer.



### Continued Front Shocks Spring Kit Installation:

Reconnect your lower shock bolt so that the shock is fully extended. This will allow you to set your preload adjustment.



Set "zero Preload" by pressing down on A-arm and holding to fully extend internal bump stop spring. Rotate preload ring clockwise until spring stack contacts preload ring.

Rotate billet cross over ring clockwise to OEM spring divider at the same time.



With a bright marker, mark your preload ring next to the reservoir. This is your "zero preload" point. From here you can set additional preload by tightening the crossover rings. \*Additional Preload may be needed depending on after-market accessories (bumper, cage, tire carrier, stereo system). 4-6 turns is a good starting point.



After you have set your preload, you will now set your crossover ring by measuring 3 1/4" from top of spring divider. Then tighten crossover ring screws. \*Additional Adjustments may be needed.



## Continued Front Shocks Spring Kit Installation:

Dont forget to Install the new "Tuned by Zbroz" reservoir decals.

Repeat steps to install spring kit to other front shock.



## Final Spring 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:

Steel Wheels: 30ft-lbs | Aluminum wheels: 27ft-lbs

Torque Wheels to OE specs as shown in your owners manual

### **Check Ride Height Setup:**

Drive RZR 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.

#### If Ride Height is too LOW:

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

#### Final Spring Kit Installation Continued:

### Check Rear Cross Over Ring Setup:

With Preload and ride height set, check measurement of rear cross over rings. The distance between the cross over ring and spring divider determines when the main spring in engaged.

How to Adjust:

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

General Recreation for Mountain Trail, Desert/Dune and Rock Crawling:

- Set cross over ring at 4  $^{1/2''}$  from spring divider. This will deliver increased control, plush ride feel, roll stability and bottoming resistance.

Low Speed Mountain Trail and Rock Crawling:

- Move cross over ring away from spring divider to engage main spring slower. This will deliver a plush ride feel and maximum articulation at slow speeds. Do not exceed 5 1/2".

High Speed Desert/Dune and Mountain Trail Driving:

 Move cross over ring closer to spring divider to engage main spring faster. This will deliver more increased bottoming resistance and G-Out control.

Check Ride Height and Cross Over Setup after the first 200 miles of use and adjust as needed.

## Results of Installing this Zbroz Racing 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

