

INTERNAL
GARNET



Fluid Change Guide

Oil Change for Internal Garnet Post



PRODUCT FEATURES

This manual will guide you step by step performing a service to your Garnet Seat Post. Please follow each instruction carefully to achieve the best and safest results.

*Always wear your safety gear while working on suspension products.
We care about you, make sure you wear your safety glasses and protective gloves while servicing DVO Suspension Products.



WEAR SAFETY GEAR!

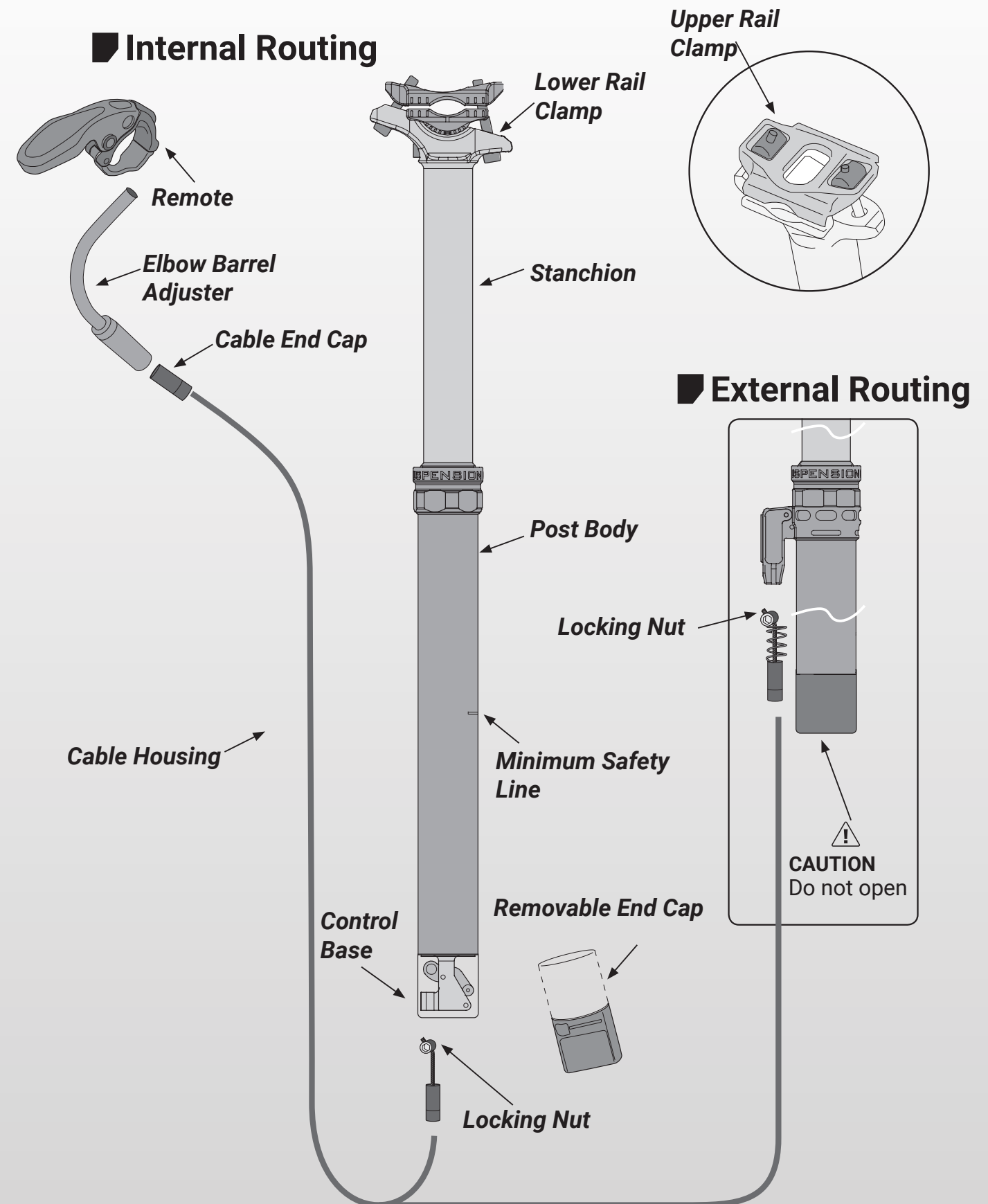
Tools Needed For Service:

- Safety Glasses
- Clean, Lint Free Rag
- Shaft Clamps
- Lithium Grease
- Loctite 242 BLUE
- Vice
- Adjustable Wrench
- 2.5 Wt. Suspension Oil
- Suspension Cleaner or Alchohol

Recommended Service Interval:

- Full Service 100 Hours of Ride Time

Internal Routing



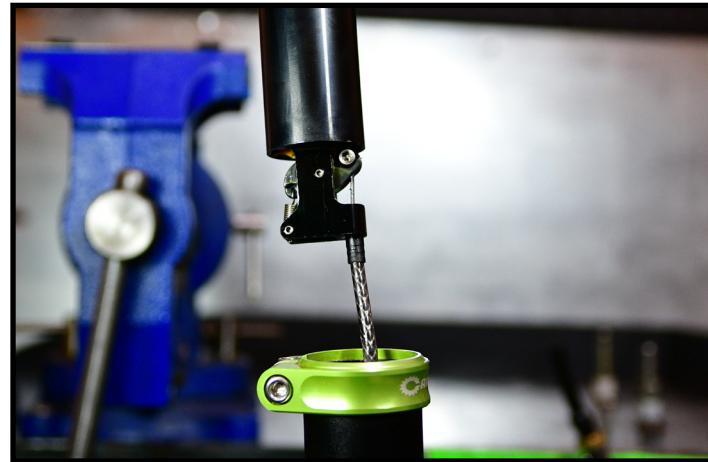
External Routing

A Disassembly



1.

Remove post from the bike. If you have an internal routed post, remove the lever from the handlebar.



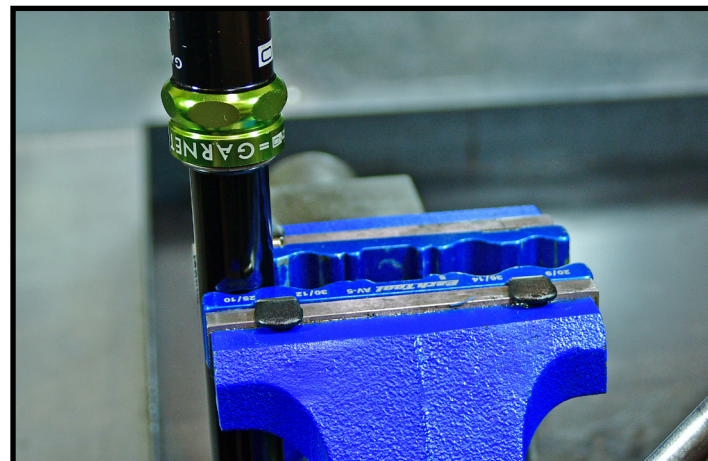
2.

Remove the seat clamps from the head of the post. **RELEASE AIR PRESSURE from the valve in the circled area!**



3.

Turn the post upside-down and clamp the stanchion tube with a shaft clamp.



4.

Use an adjustable wrench to un-thread the control base at the bottom of the post.



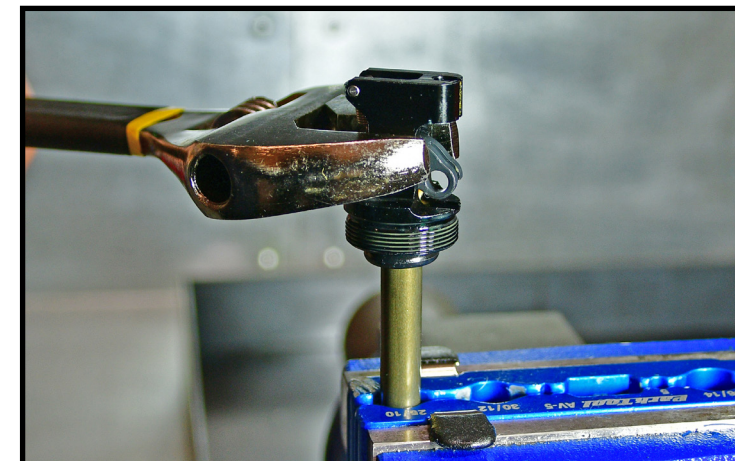
5.

Separate the control base from the lower post body by pulling up vertically.



6.

Use the shaft clamps to clamp the shaft as shown. Once secured, use an adjustable wrench to remove the control base. Rotate counter-clockwise to remove.





7.

Remove the control base from the shaft as shown. Remove the O-ring and washer and set aside.



8.

Turn the post right-side up and clamp the body of the post into the shaft clamps.



9.

Use the adjustable wrench to un-thread the collar from the post body.



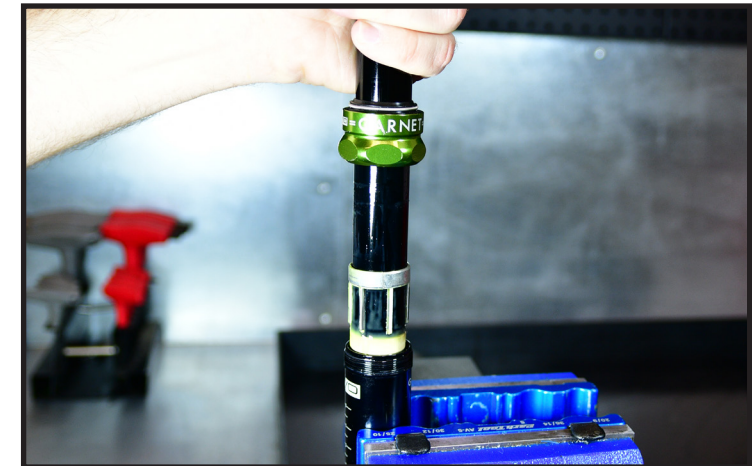
10.

Pull up on the collar and move it to the center of the stanchion.



11.

Get a firm grasp on the stanchion tube and pull upwards to separate the upper post from the lower post. This should dislodge the bushing. **NOTE: Pay attention to the location of the pins. You will need to put them back in the same grooves later on.**



12.

Your disassembled post should look like this.

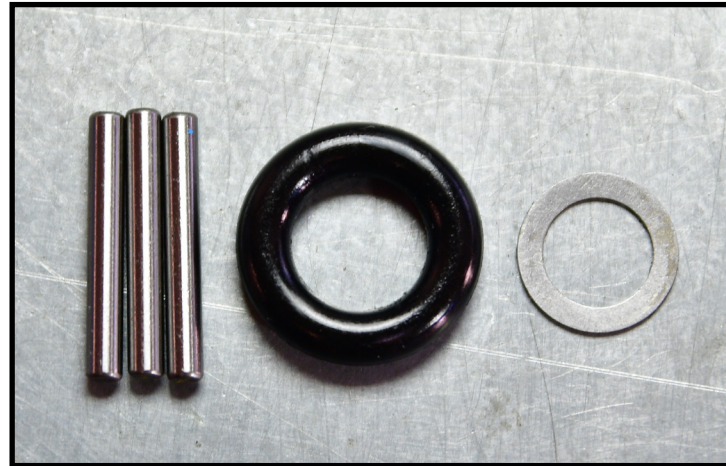


B Rebuild & Fluid Change



13.

Make sure to clean the pins, O-ring, and washer thoroughly. Set aside for re-installation later. **NOTE:** If any of these parts are damaged, please replace.



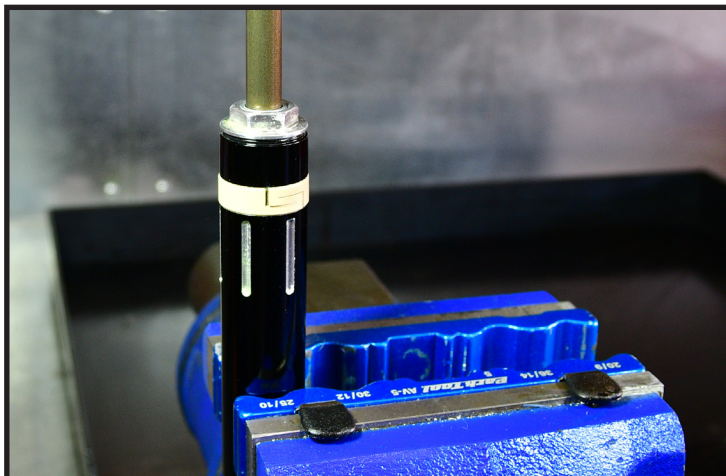
14.

Clean and inspect the inner post body for dirt, debris, wear and damage. Apply lithium grease to the inner post for reassembly.



15.

Clamp the stanchion tube in the direction shown. Use the shaft clamps to secure the post in place.



16.

Use the adjustable wrench to un-thread the seal head in a counter-clockwise direction.



17.

With the seal head un-threaded, pull up on the shaft to remove the inner assembly as shown.



18.

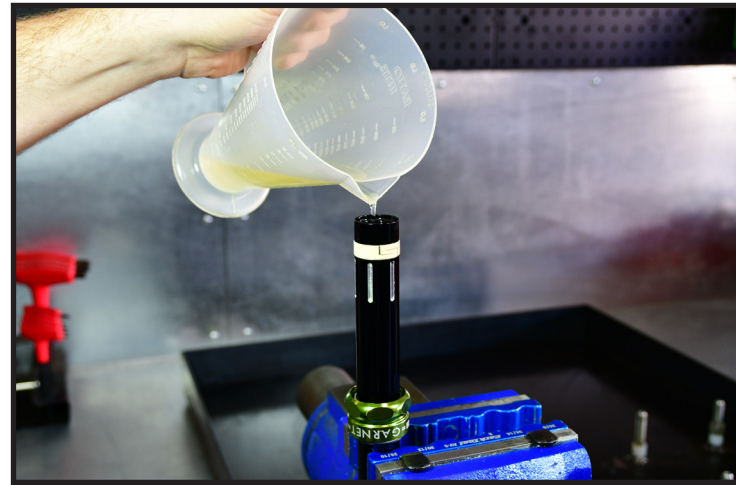
With the inner assembly removed, tip the seat post stanchion downwards to drain the oil into a catch cylinder.





19.

Clamp the stanchion in the shaft clamps and refill with fresh oil. Refer to the chart below for the correct oil heights.

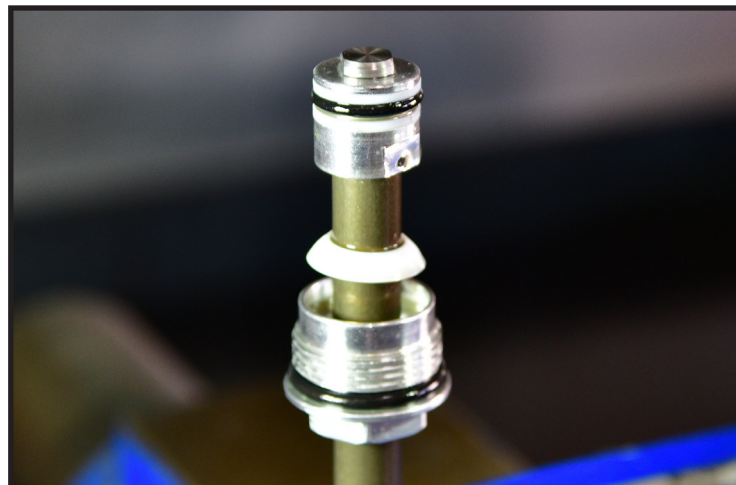


Oil Height Chart

Post Travel	Oil Heights (ml)	Oil Weight
125mm	42mL	2.5
150mm	43mL	2.5

20.

Inspect the inner parts and white glide ring for any wear or damage.



21.

Re-install the inner assembly into the seat post stanchion tube in the direction shown.



22.

While installing the inner assembly, firmly push down on the actuation pin to allow oil flow back into the damper shaft & push all the way down.



23.

Make sure the shaft is at full extension then tighten the seal head and torque to 15Nm.





24.
Apply a generous amount grease to the pin grooves on the seat post stanchion to fix the pins into the grooves on the upper post.



25.
Install the pins in the same location you removed them. The first pin location should line up with the front of the post. Then you place a pin in every other slot.



26.
Apply lithium grease to the inner body of the lower post.



27.
Slide the lower post down onto the seat post stanchion. Make sure the front of the lower and upper post line up together as shown. This will allow the pins locations to fit in properly.



28.
After flipping the post upright, it's time to re-install the bushing. Using your hand, clamp the steel bushing installation tool onto the seat post stanchion & gently hammer the bushing into place.



29.
After a few firm hits, the bushing will completely seat into the lower post.





30.

Tighten seat collar with an adjustable wrench. This doesn't need to be crazy tight, just snugged up!



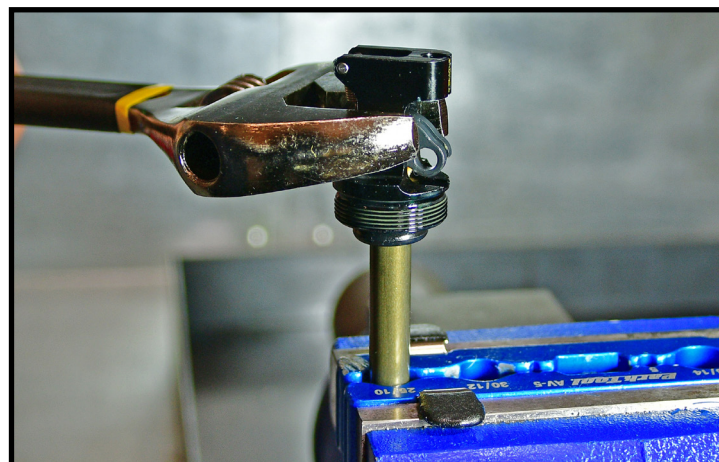
31.

Apply a thin layer of **242 Loctite** to the damper shaft threads.



32.

Fix the shaft in the 10mm clamps and re-install the control head.



33.

Apply a thin layer of **242 Loctite** to the threads of the control head.



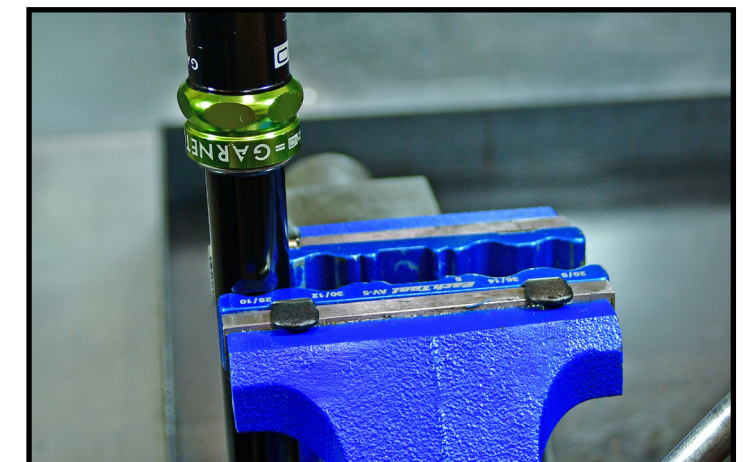
34.

Push down on the control head to lower the inner assembly down into the lower post. Tighten in a clockwise direction to 10Nm.



35.

Fix the seat post stanchion into the shaft clamps.





36.
Use the adjustable wrench to tighten the control head back into the lower post. Tighten clock-wise to 10Nm.

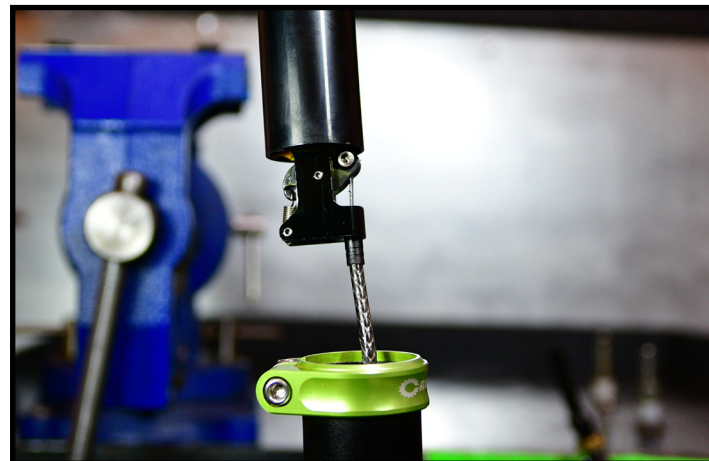
Reinflate the post to the riders desired pressure.

Air Pressure Range: **200-250 PSI**



37.
Install your seat post back on your bike. Tighten seat clamp to your bike manufacturer's recommended torque.

Note: You can also use fiber grip to keep your post from slipping.



LIMITED TWO (2) YEAR WARRANTY

If any component of your DVO Suspension product is found to be defective in materials or workmanship within the term of this Limited Two Year Warranty (the "Agreement"), the defective component will be repaired or replaced, at the option of DVO Suspension free of charge, within thirty (30) days after receipt of the Suspension product by an authorized DVO Suspension dealer, freight prepaid, together with the original retail invoice or other evidence of the date of purchase.

NOT COVERED: This warranty does not cover damage resulting from accidents, alteration, neglect, misuse, abuse, or improper use, lack of reasonable or proper maintenance, improper assembly, repairs improperly performed or replacement parts or accessories not conforming to DVO Suspension's specifications, modifications not recommended or approved in writing by DVO Suspension activities such as acrobatics, stunt jumping, ramp riding, racing, commercial use, and / or normal wear or deterioration occasioned by the use of the product. Items subject to normal wear or deterioration include but are not limited to oil, dust seals, oil seals, and bushings. In addition, this warranty is void in the event that the forks are used with any rental bicycles, unless DVO Suspension provided prior approval in writing for such use. This warranty also does not include any expenses related to the transportation of the DVO Suspension product to or from an authorized DVO Suspension dealer, labor costs to remove the DVO Suspension product from the bicycle, or compensation for inconvenience or loss of use while the DVO Suspension product is being repaired. This warranty will be automatically void if serial number of the DVO Suspension product is altered, erased, defaced or otherwise subject to any tampering.

PURCHASER. This warranty is made by DVO Suspension with only the original purchaser of the DVO Suspension product and does not extend to any third parties. The rights of the original purchaser under this warranty may not be assigned.

TERM. The term of this warranty shall commence on the date of purchase and shall continue for a period of two (2) years from the date of the original purchase.

PROCEDURE. In event of a defect covered by this warranty, the purchaser should contact an authorized DVO Suspension dealer or a DVO Suspension Service Center.

ENTIRE AGREEMENT. This warranty supersedes any and all oral or express warranties, statements or undertakings that may previously have been made, and contains the entire agreement between the parties with respect to the warranty of this DVO Suspension product. Any and all warranties not contained in this warranty are specifically excluded.

DAMAGES. Except as expressly provided by this warranty, DVO Suspension SHALL NOT BE RESPONSIBLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES ASSOCIATED WITH THE USE OF THE DVO SUSPENSION PRODUCT OR A CLAIM UNDER THIS AGREEMENT, WHETHER THE CLAIM IS BASED ON CONTRACT, TORT OR OTHERWISE. The foregoing statements of warranty are exclusive and lieu of all other remedies. Some states do not allow the exclusion or limitation of incidental or consequential damages, so this limitation or exclusion may not apply to you.

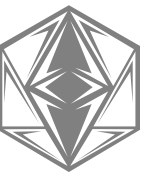
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WARNING. Always install, repair and use your DVO Suspension product in strict compliance with it's owner's manual. **OTHER RIGHTS.** This warranty gives you the specific legal rights, and you have also other rights which vary from state to state (USA only).

APPLICABLE LAW. Any disputes arising out of this agreement or the use of this DVO Suspension product will be governed by the laws of the country of United States and will be decided by the Courts of California.

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D G R A O R P N P E E T R



We hope this manual assisted you and got you back out there riding!

If you have any further questions, please send an email to:

info@dvosuspension.com

Thank you for choosing DVO Suspension Products