
DVO
DEVELOPED SUSPENSION
AIR SPRING
SERVICE
DVO | DIAMOND

FOR RIDERS BY RIDERS

This manual will guide you step by step performing an air spring service on a DVO Diamond. 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.

Tools needed:

Allen key- 2.5mm/3mm
32mm thin wall socket
18mm thin wall socket
Rubber Mallet
Oil Measuring Container
Suspension Cleaner
7.5 wt Oil
Adjustable Wrench/16mm Wrench
Vice



WEAR SAFETY GEAR!

IMPORTANT!

USE A THIN WALL SOCKET
OR DAMAGE MAY OCCUR

// Intro

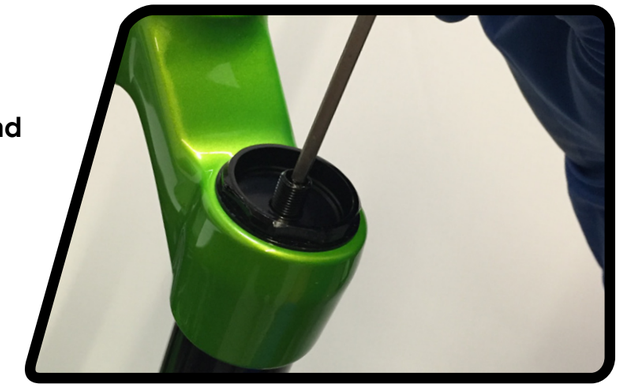
1.

Remove air cap.



2.

Use a small allen key (2.5-3mm) and release air pressure from the cartridge.



3.

Use the 32mm thin wall socket to loosen air cartridge top cap. Do not completely remove.



4.

Flip the fork upside-down and use the 18mm socket and loosen the OTT adjuster.



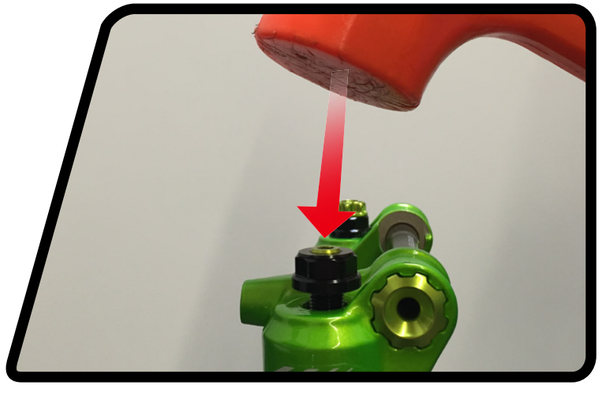
5.

Loosen the OTT adjuster until there is a 5mm gap as shown.



6.

Use the rubber mallet and tap on the OTT adjuster to free the air cartridge from the casting.



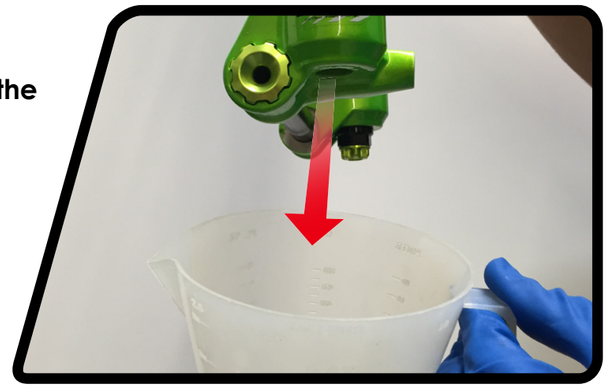
7.

Remove the OTT adjuster from the casting.



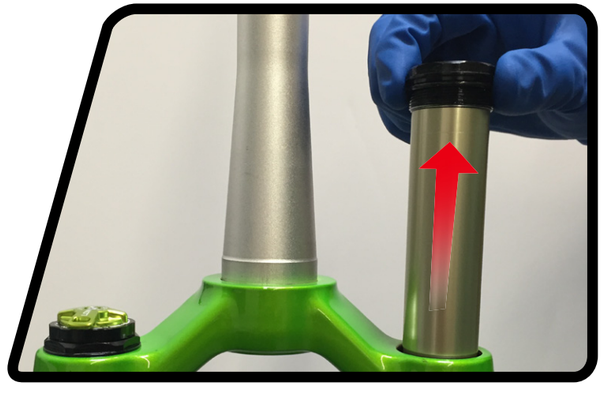
8.

Flip the fork right-side up and drain the 25cc's of oil from the casting.



9.

Remove the air cartridge.



10.

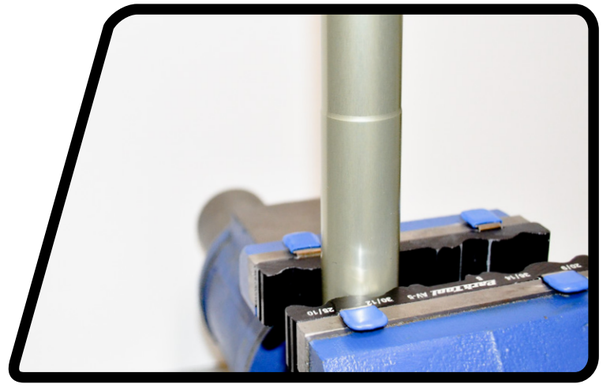
Flip the cartridge upside-down and you are going to clamp the cartridge body in a vice. It's extremely important to clamp the cartridge in the area shown.



11.

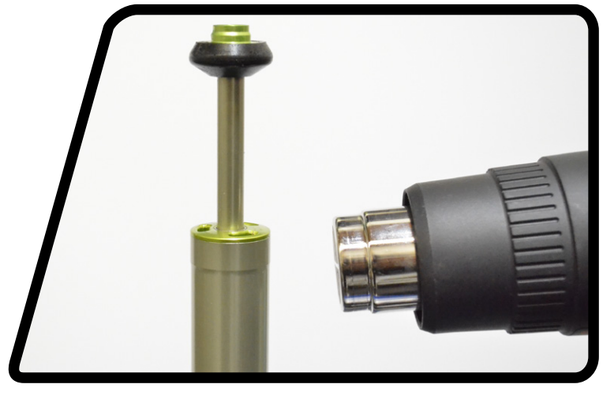
Clamp the cartridge in the vice.

Make sure to use 30mm shaft clamps to prevent any damage from occuring.



12.

Use a heat gun to loosen the Loc Tite holding the end cap in the cartridge body.



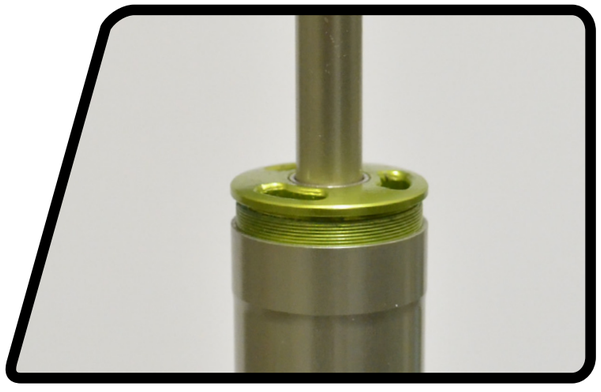
13.

Use pin spanners to unthread the cap from the cartridge body.



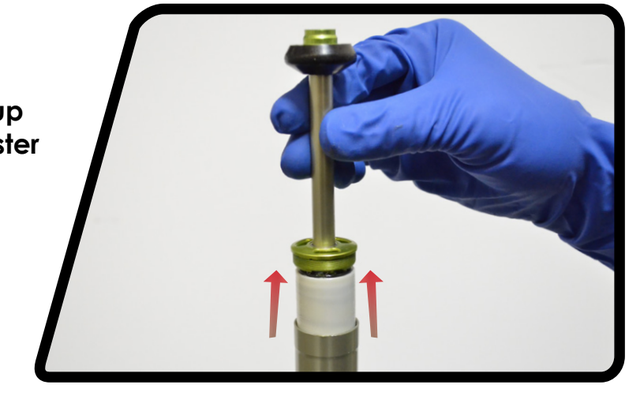
14.

Unthread as shown.



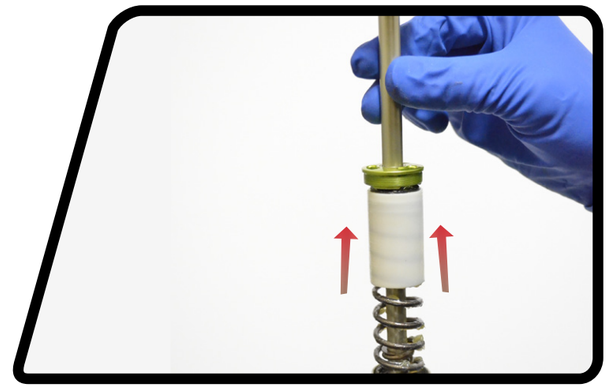
15.

Once the cap is unthreaded, pull up on the shaft to reveal the OTT adjuster unit/negative spring.



16.

Reveal the OTT adjuster unit and remove from the cartridge body.



17.

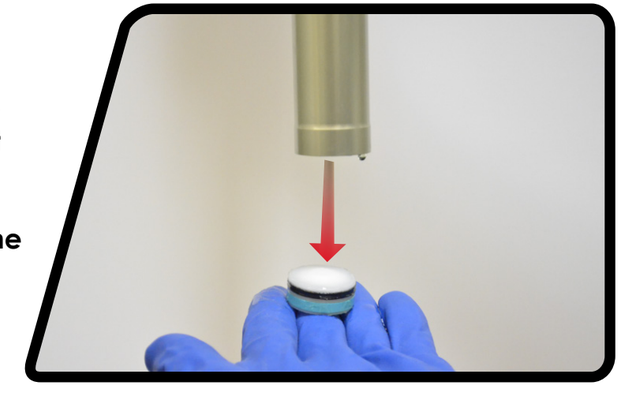
Use a suspension pump and thread it on the air valve at the top of the cartridge body.



18.

Adding a small amount of air to the cartridge will push the air piston out the bottom.

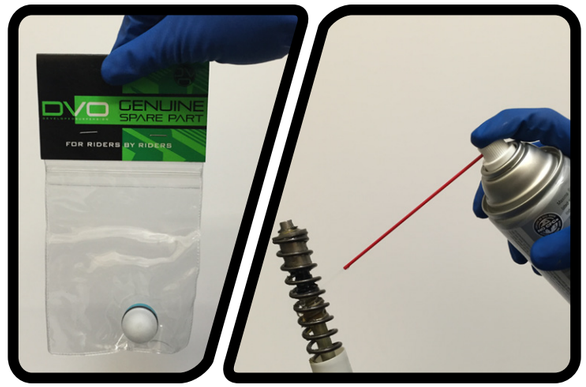
Note: a small amount of oil will come out.



19.

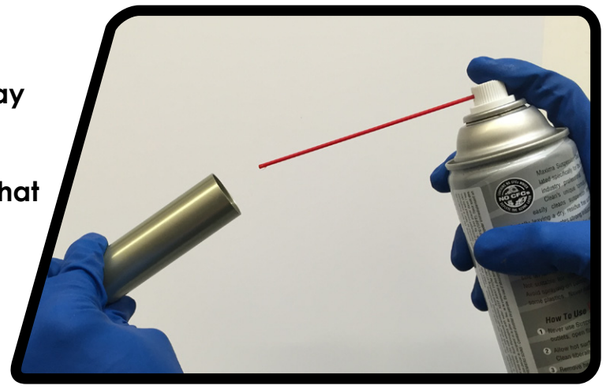
Get your new air piston kit ready.
part # 1439015

Use Suspension Cleaner
(we recommend Maxima) and clean the OTT adjuster unit. Make sure it is free of all dirt and debris.



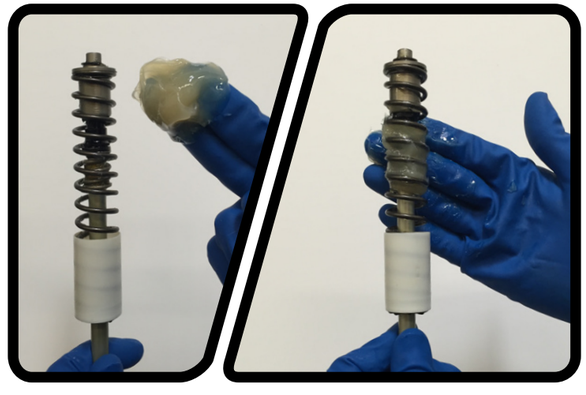
20.

Use the suspension cleaner and spray the inside of the cartridge body. Make sure to remove all the Loctite from threads and any dirt or debris that may have accumulated inside.



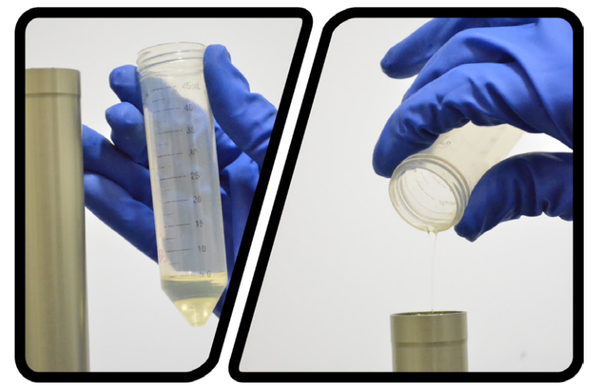
21.

Use suspension specific grease (we recommend Slikoleum) and apply a generous amount to the negative spring as shown.



22.

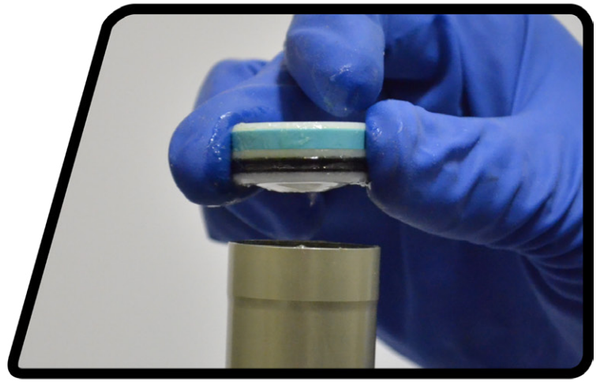
Use a graduated cylinder and measure 5cc's of oil. Pour into the bottom of the cartridge body.



23.

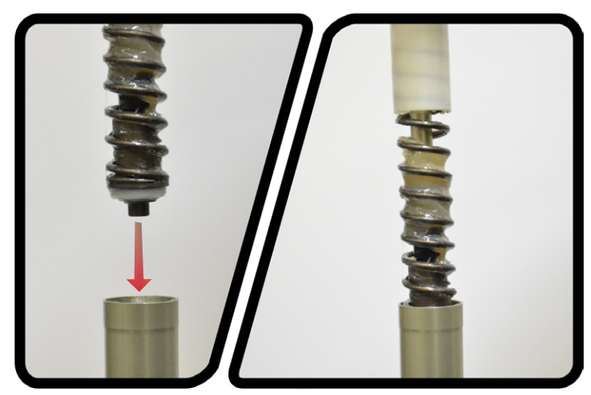
Insert the new air piston. Note that the air piston is directional.

Make sure the blue seal is on the top and the black seal is on the bottom.



24.

Reinsert the OTT adjuster unit into the top of the cartridge body.



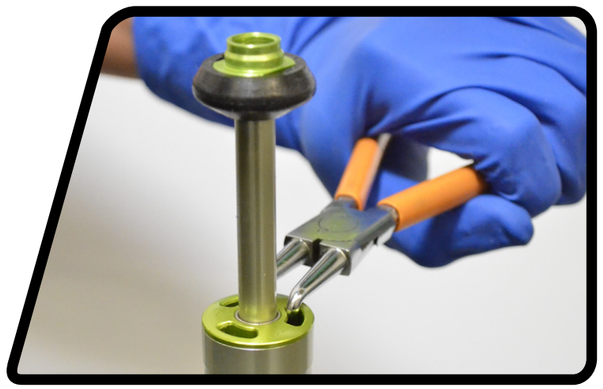
25.

Apply blue Loc Tite to the end cap.



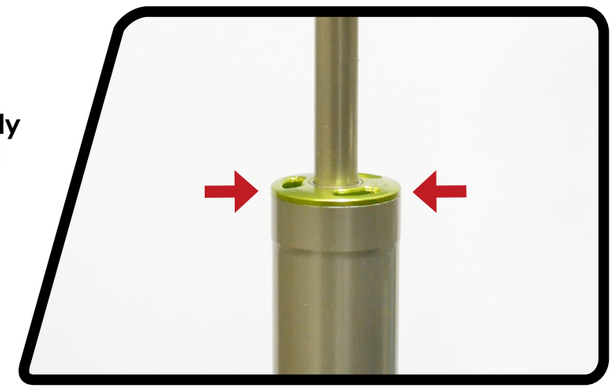
26.

Use the pin spanners to securely tighten the end cap to the cartridge body.



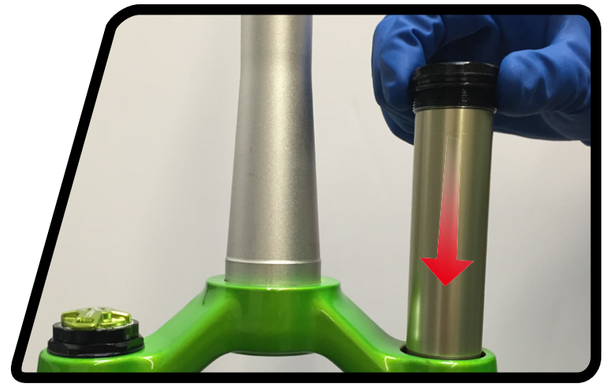
27.

Make sure the end cap is completely tightened in the cartridge body and no gap is present. (as shown)



28.

Insert the air cartridge into the fork.



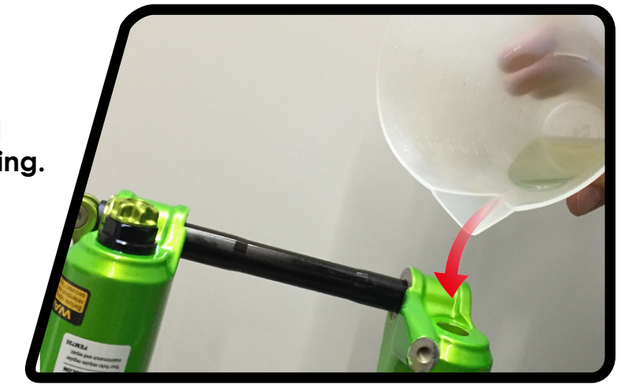
29.

Use the 32mm socket and tighten the top cap to 20nm.



30.

Use a graduated cylinder and add 25cc's of suspension fluid into casting.



31.

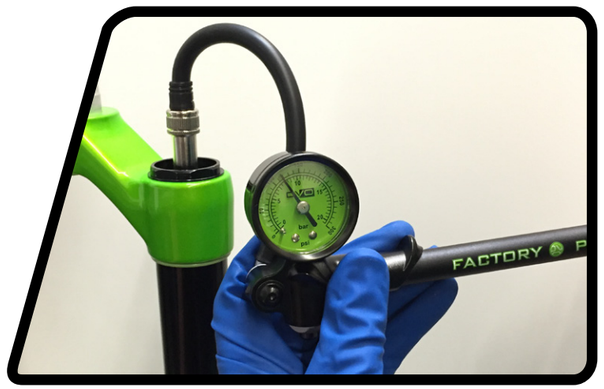
Insert the OTT adjuster and tighten with a 18mm socket to 25nm.



32.

Air up the cartridge to the rider's preffered PSI.

Thread on the air cap and you are ready to ride!



DEVELOPED SUSPENSION

FOR RIDERS BY RIDERS

Thank you for choosing DVO Suspension!

If you have any further questions please email **support@dvosuspension.com**

For all other technical information please visit **www.tech.dvosuspension.com**

www.DVOSUSPENSION.COM