RIDE CONCEPTS INC.

SHOCK T6 VALVE INSTALLATION PROCEDURE

-Place shock upside down in a bench vice, holding it from the shock's upper eyelet. Aluminum soft jaws are recommended to not mark the shock body.



-Remove the shock spring by loosening the preload rings.

-Remove nitrogen cap, and press the valve to release the nitrogen pressure from the bladder.



-Using a Schrader valve tool, remove the air valve from the bladder cap.


-Using a small punch with a rounded end and a small hammer, tap the shock cap upwards to loosen it. Once loosened, hold it up out of the way with a clothes pin.

-Press the sealhead downwards into the shock slightly using a sealhead driver.


-Remove the sealhead circlip with a pick tool.

-Using a socket or driver tool, press the nitrogen cap into the shock slightly.

-Remove nitrogen cap circlip with a pick tool.

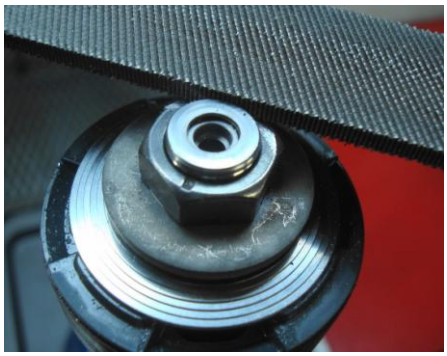
-Using a nitrogen cap removal tool or equivalent, remove nitrogen cap/bladder assy.


-Remove shock from vice, and remount in vice hanging from the lower shock eyelet as shown.

-Using a rubber hammer, gently tap the outer shock body downwards, until the sealhead starts to come out of the shock.

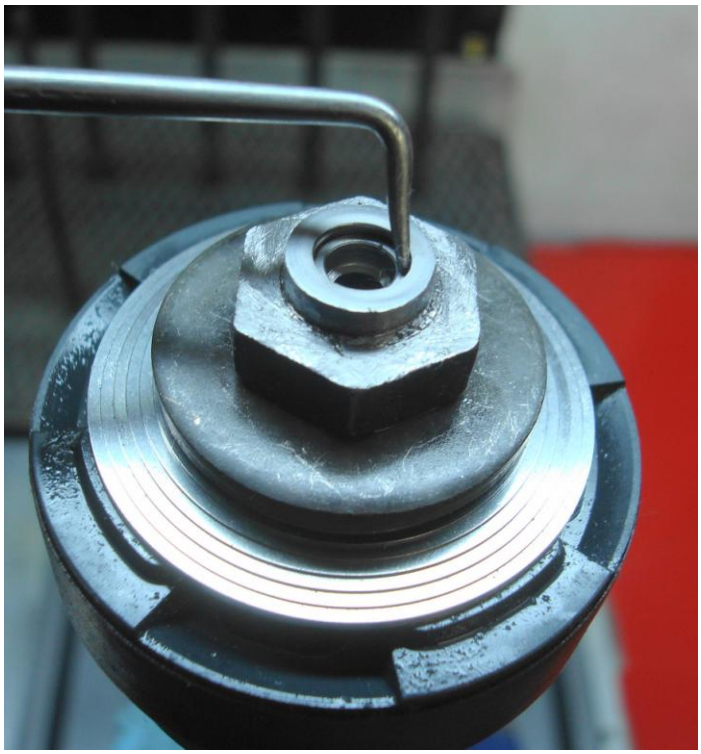
-Place shock on top of an oil drain container, and pull the shock shaft assy the rest of the way out by hand.

-Pour out the oil from the shock body and reservoir.



-Place shock shaft into vice with the piston side facing upwards as shown.

You will now be using a file to remove the peening that holds this shock nut in place. On some shocks there is a small jet pressed into the end of the shock shaft that is also peened into place. DO NOT remove this peening, or you will ruin the shock shaft and it will need replacing.



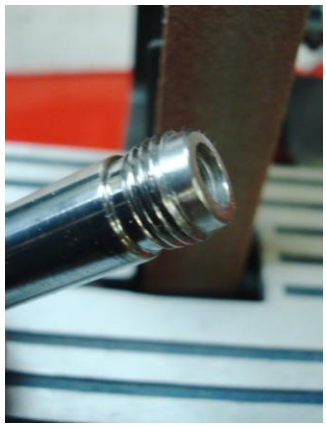
-Carefully file the peening away EXACTLY AS SHOWN using extreme caution to not ruin the jet and peening on the shaft (if the shaft is this type).

I always use this method, and I NEVER use a bench grinder for this.

Carefully remove the nut with a wrench. If the nut does not come off easily as shown, then there is more filing needed. It must come off relatively easily.

If the nut does not come off easily at this time you run the risk of ruining the nut's threads during removal.

-Remove all parts from shock shaft. All parts will be reused except for the stock piston and valving shims.



-The end of the shock shaft, and the nut will now by polished with a bench sander. I use the one pictured. They don't cost very much, and do an incredibly good job.

The picture shows exactly what I do and what it looks like when completed.

-Clean the shock shaft, spring retainer, rubber bumper, shock cap, and seal head in a parts washer.

-Brakleen and blow dry with compressed air.

-Reassemble the shock shaft components in the opposite order that they were removed, as shown in the pictures.

-Re-grease the inside of the sealhead seals with a small amount of good quality seal grease.

-Install the appropriate sealhead installation bullet tool onto the shock shaft. This will prevent the shock seals from tearing, and it makes it a lot easier to install the sealhead.

-Carefully install the sealhead as shown, and remove the bullet tool.

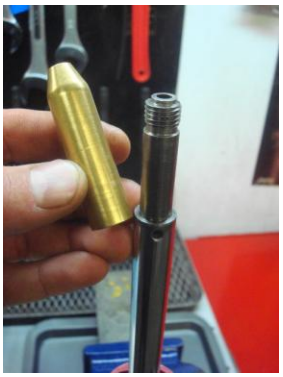
-Reinstall the original top out plate.

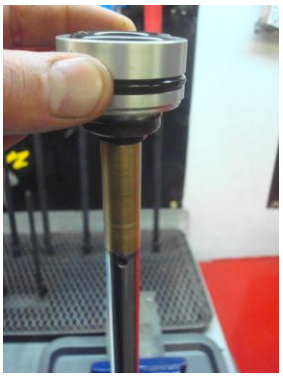
-Assemble the compression shims onto the shockshaft as shown. They will be installed in the exact physical layout given on your spec sheet.

Measure each valving shim with a digital calliper to ensure you are installing them correctly.

-Check to see if the piston has a bleed hole. Your spec sheet will say if a bleed hole is used or not. If so, a bleed hole will be drilled in the side of the compression port as shown.

If a bleed hole is NOT drilled, and your spec sheet recommends it, drill a bleed hole into the existing pilot hole.








If a shock piston is sent out ahead of time, I pre-drill the bleed hole if required, and I permanently engrave the size of the hole on the side of the piston, underneath the wear band.

-Assemble the rebound valving as required in the same manner as the compression valving, following the instructions exactly. Measure each valving shim with a digital calliper to ensure the proper installation.

-Reinstall the original rebound base plate washer.

-Using good quality steel 12mm ID washers, shim as required to ensure the nut will be mounted in the original location as shown.

The nut needs to be installed so that ALL the threads are properly utilized, and so that the nut will properly tighten down the piston and valving assembly.

-Put permanent red loctite thread lock onto the threads of the shaft and shaft nut as shown.

-Tighten down nut to approx 35ft/lbs.

-Wipe off any excess loctite with a shop towel.

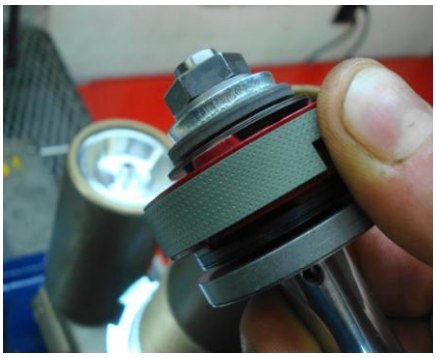
-Let loctite dry for a MINIMUM of 1 hour prior to assembling shock. This will ensure that the shock nut will never come loose.

-Place the cleaned shock body in the bench vice by the upper eyelet.

-Fill the shock with the appropriate shock oil until the reservoir is ½ full of shock oil.

-Wrap shop rags around the reservoir to help catch oil overflow.

-Install the bladder onto the bladder cap, and insert into the reservoir. Oil must overflow out of the reservoir when doing this. If oil does not overflow, add oil until it does. This helps remove air from the reservoir.



-Install circlip and pull bladder cap up back into place.

-Install the Schrader valve back into the bladder cap and pressurize bladder to approx 60 psi. This will force oil and air bubbles from the reservoir and compression adjuster into the main tube.

-Fill the main shock tube up with oil so that it is approx ½" from the top of the shock tube. Wrap shop rags around the main tube in the same manner as you did with the reservoir.

-Carefully wrap the supplied piston wear band around the shock piston, and carefully insert the piston into the shock. Moving the shock shaft back and forth slightly will help. You will see oil and air bubbles come out of the rebound bleed holes. Slowly push piston into the oil a few times to ensure there are no air bubbles present.

-Fill shock tube up with oil so that it is almost to the top.

-Slowly pull shock shaft up so that the piston is lined up with the circlip grove.

-Ensure the shock tube is almost filled to the top with shock oil.

-Carefully push shock sealhead down the shockshaft into the top of the shock tube. Keep pushing down on the sealhead until the sealhead o-ring is flush with the top of the shock body. Oil must overflow at this time.

-Remove Schrader valve from bladder cap.

-Using the sealhead driver, push the sealhead down the rest of the way into the shock body until the circlip grove is visible.

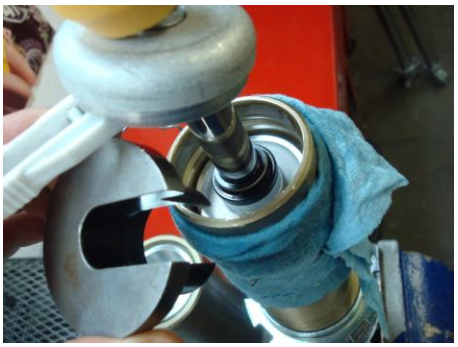
-Reinstall the sealhead retaining circlip.

-Reinstall the Schrader valve, and pressurize the bladder to the recommend pressure using a nitrogen system.
The sealhead and shock shaft will pop out and into place.

-Reinstall the air valve cap, and remove shock from vice. Spray down shock with brakleen and blow dry with compressed air. Repeat as required until no shock oil is visible outside of the shock.

-Tap shock cap back into place with a soft faced hammer.

-Set all the adjusters as recommended.



-Reinstall the correct rate shock spring the same way you removed it leaving the second spring preload ring loose.

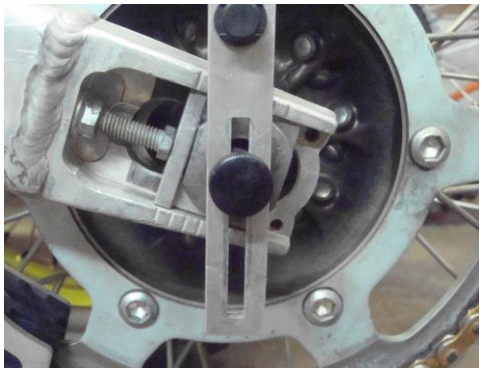
-Reinstall shock back onto bike.

-With bike on the stand and rear wheel completely off the ground, install a sag scale and zero it at a piece of tape directly above the rear axle as shown.

-Remove bike from stand.

-With the rider on the bike the rider sag should be 100mm. This is the best starting point overall.

The usable range of adjustment is between 98mm-105mm of sag. This sag setting can be changed to suit track conditions. If the correct spring rates are installed as recommended, the bike's free sag will be correct when the rider sag is within this range.



-Adjust spring preload by hand until the correct sag is attained.

-Tighten spring preload jam nut with a suitable punch and hammer.