

# HC97

COMPRESSION SYSTEM



## Disassembly Instructions for the RockShox Charger II Damper.

## Safety Warnings

### Warning:

The front forks are an important part of your bike. Before installing and using your new HC97 Compression System, please visit <https://www.pushindustries.com/pages/hc97-support> to learn the correct installation and adjustment procedures of the forks. Improperly installed and/or adjusted forks can cause serious harm or death and may severely damage your bicycle. Broken or malfunctioning forks may cause loss of bicycle control and result in SERIOUS INJURY OR DEATH. If the fork ever loses oil, air or makes unusual noises, stop riding and have the fork inspected by PUSH or a PUSH Authorized Tuning Center. Modification, improper service or use of aftermarket replacement parts voids the warranty and may cause the fork to malfunction, resulting in loss of bicycle control and SERIOUS INJURY OR DEATH. Do not modify your bike frame or fork. Use only genuine PUSH HC97 parts. Follow service maintenance recommendations. Fork service should be performed by PUSH or a PUSH Authorized Tuning Center. Visit [pushindustries.com](https://www.pushindustries.com) or contact us at (970)-278-1110 to locate a PUSH Authorized Tuning Center. Never apply heat to any part of the fork. The PUSH HC97 is manufactured exclusively for the fork model for which it is ordered. Switching the fork between different bicycles may not only decrease the fork performance but might also cause damage to the bike and can result in SERIOUS INJURY OR DEATH. Always contact PUSH or a PUSH Authorized Tuning Center to verify compatibility before switching a fork from one bike to another.

### Warranty

#### PUSH Suspension Warranty

PUSH Industries Incorporated, hereafter referred to as PUSH, a Colorado corporation having offices at 1520 Taurus Ct., Loveland, CO 80537.

PUSH makes the following LIMITED WARRANTY with respect to its suspension products.

#### **PUSH LIMITED WARRANTY LIMITED ONE (1) YEAR WARRANTY ON SUSPENSION PRODUCTS.**

Subject to the limitations, terms and conditions hereof, PUSH warrants, to the original retail owner of each new PUSH suspension product, that the PUSH suspension product, when new, is free from defects in materials and workmanship. This warranty expires one (1) year from the date of the original PUSH suspension product retail purchase from PUSH Industries, any PUSH Authorized Dealer, PUSH Authorized Factory Tuning Center, or PUSH Authorized Distributor unless otherwise dictated by requirement of law.

#### **TERMS OF WARRANTY**

This warranty is conditioned on the PUSH suspension product being operated under normal conditions and properly maintained as specified by PUSH. This warranty is only applicable to PUSH suspension products purchased new from an authorized PUSH source and is made only to the original retail owner of the new PUSH suspension product and is not transferable to subsequent owners. This warranty is void if the PUSH suspension product is subjected to abuse, neglect, improper installation, improper or unauthorized repair, improper or unauthorized service, maintenance, alteration, or modification (to include, but not limited to, using any spring that is not PUSH authorized), accident or other abnormal excessive, or improper use. Should it be determined, by PUSH in its sole and final discretion, that a PUSH suspension product is covered by this warranty, it will be repaired or replaced, by a comparable model, at PUSH's sole option, which will be conclusive and binding. THIS IS THE EXCLUSIVE REMEDY UNDER THIS WARRANTY. ANY AND ALL OTHER REMEDIES AND DAMAGES THAT MAY OTHERWISE BE APPLICABLE ARE EXCLUDED, INCLUDING, BUT NOT LIMITED

TO, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR PUNITIVE DAMAGES.

This limited warranty gives the consumer specific legal rights. The consumer may also have other legal rights which vary from state to state or country to country. Some states and countries do not allow the exclusion or limitation of incidental or consequential damages or warranties, so the above limitations or exclusions may not apply to you. If it is determined by a court of competent jurisdiction that a certain provision of this limited warranty does not apply, such determination shall not affect any other provision of this limited warranty and all other provisions shall remain in effect.

THIS IS THE ONLY WARRANTY MADE BY PUSH ON ITS SUSPENSION PRODUCTS AND COMPONENTS, AND THERE ARE NO WARRANTIES THAT EXTEND BEYOND THE DESCRIPTION HEREIN. ANY WARRANTIES THAT MAY OTHERWISE BE IMPLIED BY LAW INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXCLUDED



## Safety First!

Proper safety gear should always be used when servicing or installing suspension components.

## **Tools Required**

- Bench Vise
- Soft Jaw Tube Clamps
- Plastic Mallet
- Adjustable Wrench
- 5mm Hex
- 2mm Hex
- 2.5mm Hex
- 10mm Socket
- 14mm Socket (RCT3 Only)
- HG Cassette Driver
- Socket Wrench
- 10" Socket Extension

## **Safety Equipment**

- Safety Glasses
- Nitrile Gloves
- Oil Pan
- Lint-Free Rags



## VISUAL



## INSTRUCTIONS

### STEP 1:

- a. Clean and wipe down the fork prior to disassembly. Mount the fork into a bike stand using the steering tube.
- b. Use a 2.5mm hex to remove the stock Rebound Knob.
- c. Use a 5mm hex to loosen the Damper Bolt 3-4 turns.

### STEP 2:

- a. Use the plastic mallet to strike the Damper Bolt.
- b. Strike the Damper Bolt until the Rebound Shaft is internally dislodged from the Lower Leg.
- c. Remove the Damper Bolt.

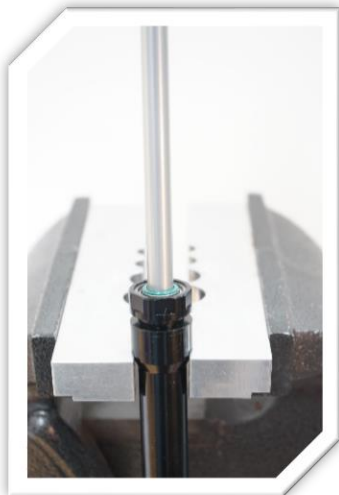
### STEP 3:

- a. Use a 2mm hex to remove the stock Damper Controls.
- b. Use an HG Cassette Driver to loosen the Damper in the Crown.
- c. Remove the Damper from the Fork.



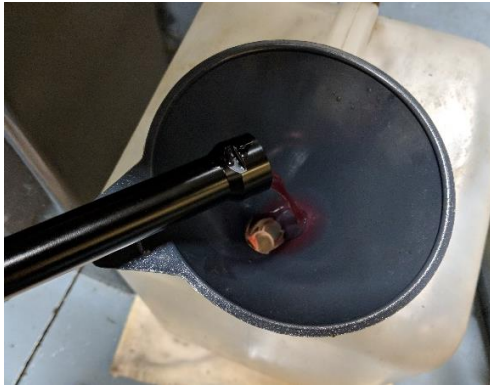
## STEP 4:

- a. Before any further disassembly, use the two identifiers below to confirm the HC-97 Kit is compatible with your Damper.
  1. The damper must have a Red Lock Ring retaining the Bladder
  2. Visually compare the threads of the stock Damper Top Cap to the threads of the HC-97 Top Cap. The threads must be a similar size and spacing.



## STEP 5:

- b. Using light pressure, clamp the Cartridge Tube into a soft jaw vise using the two flats on the Tube.
- c. Use a 21mm or adjustable wrench to loosen the seal head from the cartridge.



## STEP 6:

- a. Remove the Rebound Assembly and set it aside.
- b. Properly dispose of the used oil.



## STEP 7:

- a. Flip the Cartridge Tube in the soft jaw vise to access the Compression Assembly. Again, use light pressure to clamp the tube using the two flats on the tube.



## STEP 8:

- a. Use a 25mm or adjustable wrench to turn the Lock Ring **CLOCKWISE**.
- b. Use the palm of your hand to hold the Rubber Bladder and help reduce the twisting of the rubber.  
\*Some twisting is expected\*
- c. Slide the Lock Ring down the tube



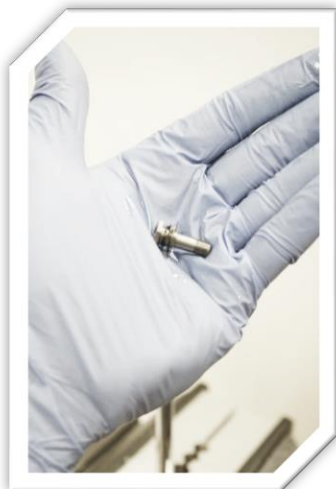
## STEP 9:

- Mount a 10" socket extension into a vise and place a 10mm socket onto the extension
- Slide the cartridge tube onto the extension
- Rotate the tube until the socket engages the bolt head.



## STEP 10:

- Insert an HG cassette driver into the Top Cap to remove the Compression Assembly.
- The Compression Assembly unthreads **Counter-Clockwise**.
- Remove the complete Compression Assembly, including any shims that remain on the valve.

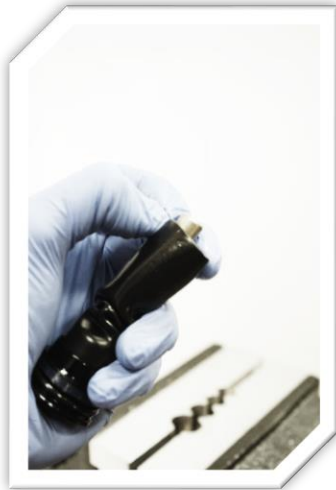


## STEP 11:

- Remove the Compression Bolt from the Cartridge Tube.
- The Compression Bolt, Check Shim and Spring will be reused. Ensure they are not lost during removal.
- Clean the threads of the Bolt, remove any thread locking compound remaining on the threads.

For Charger II RC2 Dampers (Hi & Low Speed Compression Knobs) continue to Step 12.

For Charger II RCT3 Dampers (Low Speed Compression + 3 Pos. Pedal Knobs) skip to Step 15



#### STEP 12:

- The Bladder must be removed from the Compression assembly.
- Compress the Bladder to expose the light brown Compression Housing.
- Clamp the Compression Housing into a 10mm soft jaw vise.

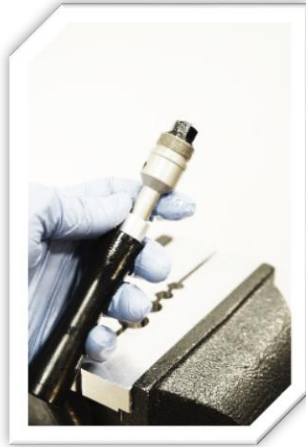
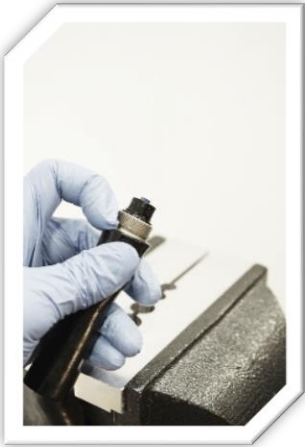
**Important: Ensure the bladder is not pinched in the vise.**



#### STEP 13:

- Insert the HG Cassette driver into the Top Cap to remove.
- Un-thread the Top Cap in a **Counter-Clockwise** direction.
- When the Cap is fully un-threaded, pull the Top Cap off.

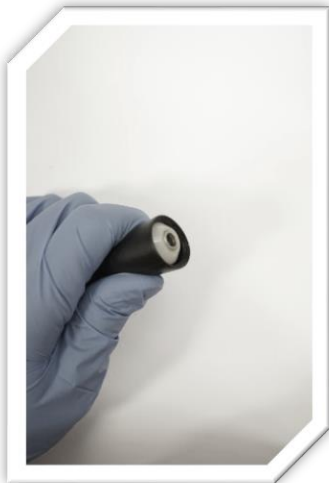




#### STEP 14:

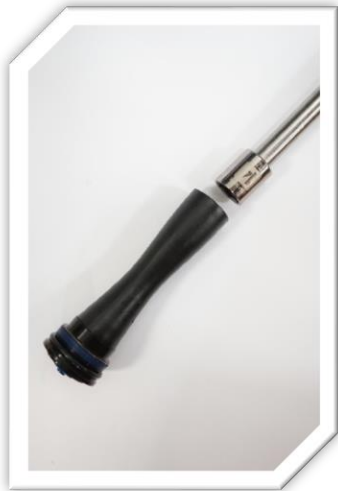
- a. Remove the Compression Assembly from the vise.
- b. Using your fingers, work the edge of the Bladder out of the gland on the Compression Housing.
- c. Slide the Bladder down the Compression housing as shown in the picture.

**Skip to Step 18**



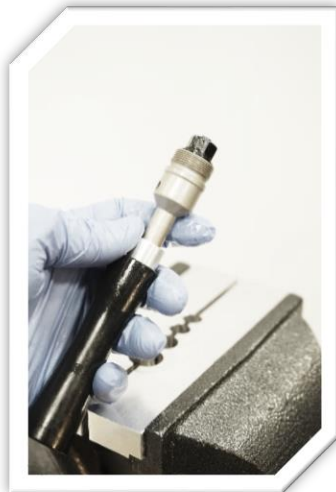
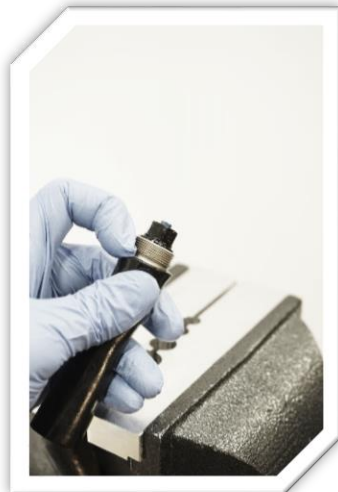
#### Step 15:

- a. Use your hand to compress the Bladder and expose the white plastic Preload Spacer.
- b. Slide the white Preload Spacer off the assembly along with the wave spring behind the Spacer.



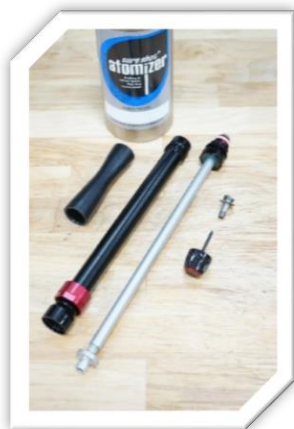
## Step 16:

- Use a 14mm socket to engage the Compression Housing inside the Bladder.
- Insert the HG Cassette driver into the Top Cap to remove.
- Un-thread the Top Cap in a **Counter-Clockwise** direction.
- When the Cap is fully un-threaded, pull the Top Cap off.



## STEP 17:

- Using your fingers, work the edge of the Bladder out of the gland in the Compression Housing.
- Slide the Bladder down the Compression housing as shown in the picture.



## STEP 18:

- The HC-97 kit will reuse the Bladder, Cartridge Tube, and Rebound assembly.
- Use some suspension contact cleaner to clean and wipe down the reused parts.