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## **FMT-LITE**

Basic Fork Manipulation Tool for centric Headshok



Content of the FMT-LITE set (in the picture above, from left to right)

- 1. A cup with a small hole in the middle, called **SHORT DRIVER**
- 2. Concave ring, called RING

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## **General information**

#### Purpose of the FMT-LITE set

FMT-LITE can manage all types of Headshok Centric suspension forks (Fatty), regardless if there is a damper in it or removed. FMT-LITE can do two jobs:

- 1. Extract fork from the bike frame/headtube.
- 2. Insert fork into prepared headtube (bike frame).

#### **Material**

This Tool set is produced by fuse deposition technology on FDM 3Dprinter. Material is bioplastic/thermoplastic -Polylactic Acid, with additives to improve strength and resistance to crack - the "Plus" version. It's a strong material, more resistant to impact than standard PLA thermoplastic. PLA plastic is safer for environment than any other plastic material, can be composted by industrial process.

#### Usage of the FMT-LITE set

- For good performance of the Tool, mount your bike/frame firmly on a good bike stand. Flimsy bike stand could deteriorate Tool's efficiency.
- Fork and related bike parts should be completely cleaned before any work.
- Always use hammer with plastic head. Rubber or wooden head can do too, but do not use metal hammer. When hitting/hammering the Tool, always aim vertically to the centre of the Tool top.
- Safe operational temperature is between +10°C and +40°C. Usage beyond this compromises the structural integrity of the
- If you have doubts about any aspect related to this Tool, ask Tool manufacturer for advice without hesitation.
- This Tool is designed to be used only for the jobs described in the beginning of this page "Purpose of the FMT-LITE set". Any other usage will immediately cancel the warranty.

## **Cleaning the Tool**

- Never use solvents of any kind.
- Never wash Tool in hot water. Wash in lukewarm water with hand soap. Rinse and dry with clean cloth.
- Never use hot air for drying. Pressurized air is acceptable, but not necessary.

### Storage

- Clean Tool should be stored in house environment at temperatures not higher than +45°C
- Store dry. Avoid direct sunlight.

#### Warranty

The warranty covers all production or material defects for one year after purchase. Warranty is valid only if all information and instructions in this document have been strictly followed. HeadShokExpert is not responsible for damage made by this tool. You use this Tool set at your own risk.

## How to assemble tools

- 1. How to assemble the **INSTALLER-1** 
  - 1) **RING** has a groove on one end, where **SHORT DRIVER** should be connected. Connect **RING** and **SHORT DRIVER** together.





# Steps to remove a centric Headshok fork from bike

- 1. Remove the upper assembly of your fork (controls such as lock-out knob/lever). In case of DLR damper, always remove complete lock-out lever, even if it's two piece lever. It always requires a 10mm hex socket for a nut that holds it. Various models have different designs ask if in doubt.
- 2. If you want to leave damper in the fork, continue to the step 3. If you want to remove the damper, undo the upper clamp bolt of the stem on the fork side and remove the damper.
- 3. Hang the bike on a bike stand and remove front brake calliper (disc brakes) or extend the cable of rim brake, so brake pads open wide. Or remove rim brake completely. Remove front wheel.
- 4. Undo clamp bolt(s) of the stem on the fork side and pull the stem up to remove it from fork's steerer tube. Then try to somehow immobilize handlebar, so you don't scratch your frame, or damage cockpit components.
- 5. Place **SHORT DRIVER** on top of the steerer tube and push it firmly by hand all the way down until it stops. This is the position where you will hammer it.
- 6. Hold the fork leg with one hand, while hitting the **SHORT DRIVER** with a hammer. If you don't hold the leg, fork could fall on the ground.
- 7. Usually 4-5 hits are enough for full extraction. <u>Full extraction equals fork movement of 1cm downwards</u>. You'll feel then it is loose in your hand that holds the fork leg. Don't pull the fork down. Not yet.
- 8. While still holding the fork with one hand, remove **SHORT DRIVER** and place it somewhere safe. Put your palm on top of the steerer tube and follow the fork as it goes down by pulling down with lower hand. When upper hand reaches the frame, grasp the rubber bearing seal (the one with metal collar on the inside) and place it somewhere safe.
- 9. Pull the fork further down until you have it free in your hand. It doesn't go out? That means the lower headset bearing didn't move along with the fork (steerer). The bearing remained firmly in its cup (bike frame). Find a piece of plastic pipe that doesn't sit on fork controls and hit it with hammer until steerer pass the lower bearing.

## Steps to insert a centric Headshok fork (Fatty) into a bike frame

- 1. Make sure that lower headset bearing sits evenly at the very bottom of the steerer tube of your fork. Put some grease to cover the "bearing-cup" contact surfaces on bottom side, as well as on the outer steerer tube where upper bearing will sit.
- 2. Make sure both (upper and lower) headset cups sit flush with the frame.
- 3. Make sure the upper headset bearing is sitting flush within its cup.
- 4. Make sure the top assembly of the fork (fork action controls) is removed, as you've already done in first step of fork extraction.
- 5. Push fork with your hand from below into prepared headtube of your bike. Try to push it harder, so it doesn't fall back by itself. Keep holding the fork with your hand until the end of the process.
- 6. Put the INSTALLER-1 on top of fork and push it all the way down until it stops by itself.
- 7. Hit the top of **INSTALLER-1** with a hammer, while holding the leg of the fork with another hand, gently pushing it upwards. Usually 5-6 hits are enough for full insertion.
- 8. The fork is fully inserted when lower headset bearing is completely inserted into its lower bearing cup, not exposed at all. So keep hitting until you can confirm this.
- 9. Pull up the **INSTALLER-1** and remove it.
- 10. Your fork is installed now properly and you can continue with replacing bearing seal, stem and finally the fork controls.