

# INSTALLATION GUIDE

## ROLLER KIT & AMACHETE PRESS TOOL

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Roller Kit installation can only be performed with any specific tool. Amachete offers several extractors that allows you to remove the original bushing and install the Roller Kit ease. Before beginning let's clarify some concepts and tools we will need:

### SPACERS



Aluminum pieces that reduce the diameter of the eye shock to the diameter of the supporting axle or screw that fastens the shock to the bicycle.

### DU BUSHING



Pieces of steel and/or Teflon that are compressed into both eye shock and where reducers are inserted under pressure.

### THE TOOLS AND MATERIALS YOU WILL NEED:



- Amachete press tool.
- Pliers (preferably duckbill).
- Allen wrench.
- Open end wrench.
- Grease or vaseline (without lithium).
- Small Worden stick (toothpick, mach, etc).
- Liquid screw lock.

## INSTALLATION

**1.** Disassemble the shock spacers using pliers. If the reducers are really tight, it might be necessary to use a vise to remove them.



2. Thoroughly grease all pieces of the extractor and insert it in the DU bushing. Check to see that it is properly aligned in relation to the shock eye and then press firmly until the entire assembly comes out the other side. Clean the shock eye and check to make sure it doesn't have any deformations that could impede the installation of the Roller Kit.



- **WARNING:** It's essential that you thoroughly grease all support points of the extractor, (including the thread), so that when these components are pushed the extractor is loose and slides without scratching them. Another option when using the extractor is to keep the Allen wrench fixed, and turn the nut instead. This way, the nut is rotating over the washer instead of having the extractor moving over the DU bushing or needle bearing. As a result, no components are damaged. Note that there are different types of press tool but all share a very similar performance, just check fit in a DU bushing or Roller kit.

3. Use the Amachete Press Tool again and insert it into the bearing, checking to see that it is PROPERLY ALIGNED. Next, push it until both sides are hanging out of the shock eye. In other words, until it's centered, as shown in the figure. If it is hard to insert, it might be crooked. If that's the case, stop and repeat the step, this time properly aligning the bearing in relation to the shock eye.



- **FOR 14 mm shock eyelets (Manitou, Specialized, Boss, etc):** The bushing has a different mechanism on each side, one to extract the DU bushing, and the other to assemble the Roller kit bearing. Therefore, you have to turn it according to the operation you want to perform. These shock absorbers are mounted directly to the bearing without using a bushing adapter, although they must also be centered equally when being inserted into the shock eye.

4. Thoroughly lubricate the bearing, using a toothpick to rotate the needles to ensure that the grease penetrates behind them. The grease that remains isn't necessary and will be removed when the inner ring is inserted.



**5.** Position the inner ring (already lubricated) and place the O-rings on top as shown in the photos. Next completely coat both sides of the assembly with grease.



**6.** Next attach the aluminum spacers, having previously compressed them by hand so that they compress the o-rings and fit on the inner ring. While compressing, proceed to reposition the shock into the bicycle.



**7.** Insert the screw or supporting axle attached to the shock and compress the suspension at the same time as you firmly tighten the screw. **Stop when you reach 8 Nm for M6 screws or 12 Nm for M8 screws ( 6 and 10 Nm with aluminum screws).**

- **ATTENTION:** The use of liquid screw lock is recommended to prevent excessive tightness that could drive the inner ring into the aluminum. If this happens, it might be difficult to remove the screw later (This can occur with tightness greater than 15 Nm).
- **NOTE:** Periodically lubricate the O-rings to prevent water entering into the bearing and maintain optimal performance.

## WARNINGS

- Always use water-resistant grease (marine grease is the best) that is compatible with O-rings.
- Use caution with pressure washings. Maintain the stream of water as far away as possible from the Roller kit.
- Before each competition, check the tightness of all screws. Do not surpass the recommended level of tightness.
- Perform a couple of inspections each year, cleaning and lubricating the kit if necessary. If wear is evident on the steel inner ring (clearance) we recommended that you exchange it for a new one before it leads to deterioration of the needle bearing.
- Any errors made while assembling this kit that are the result of not following the instructions exactly as stated in this manual, can cause a malfunction or deterioration of some parts. This, in turn, may cause a failure of the system, which could lead to an accident with serious injuries or even death.

**ATTENTION:** Amachete will not be held responsible for any damage or harm caused to you or third parties as a result of inadequate handling, transportation, or installation of the kit.