

### MATERIALS INCLUDED

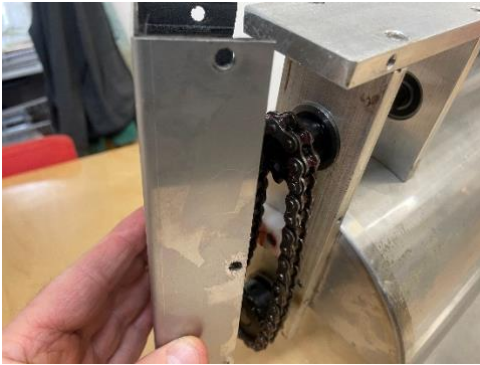
Two 5/8" ball bearings (one for the inner tine shaft and one for the outer tine shaft)

### TOOLS REQUIRED

4mm Allen wrench  
 Needle-nose pliers  
 Pin driver

Hammer  
 Standard screwdriver

1. Remove gear box cover by using a 4mm Allen wrench to remove the six screws that hold it in place, then slipping the cover off. (Figure 1).



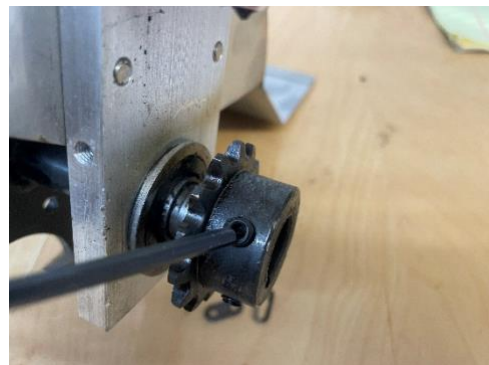
3. Remove gear sprocket locking pin. Heat both sides of the pin to break the lock tight, then drive out the pin with a hammer and pin driver tool. (Figure 3.)



2. Remove chain from sprocket. This is accomplished by popping off the split link and removing its outer plate with needle-nose pliers (Figure 2a).



4. Remove gear sprocket by loosening the set screws, removing the two set screws, and sliding the sprocket off of the shaft (Figure 4).



The inner plate with bearing pins will slide out (Figure 2b).



5. Remove old bearings by gently and evenly prying them out with a screwdriver (Figure 5).



6. Install new bearing over shaft and carefully tap new bearing into place (*Figure 6*).



7. Slide the sprocket back over the shaft line up holes and insert locking pin back through the sprocket and shaft. Reinsert the two set screws.
8. Reinstall chain onto sprockets and replace cover.

**NOTE:** This is a perfect time to clean and lubricate the chain on your Tilther. Any type of multipurpose grease formulated for bike chains will suffice.

### Tilther Bearing Replacement (Outside Bearing)

1. Remove collar by loosening set screw and sliding collar from shaft (*Figure 1*).



3. Install new bearing by sliding it over the shaft and carefully tapping it back into hole (*Figure 3*).



2. Remove bearing by prying evenly with a standard screwdriver (*Figure 2*).



4. Reinstall lock collar by sliding it over the shaft and tightening the set screw (*Figure 4*).

