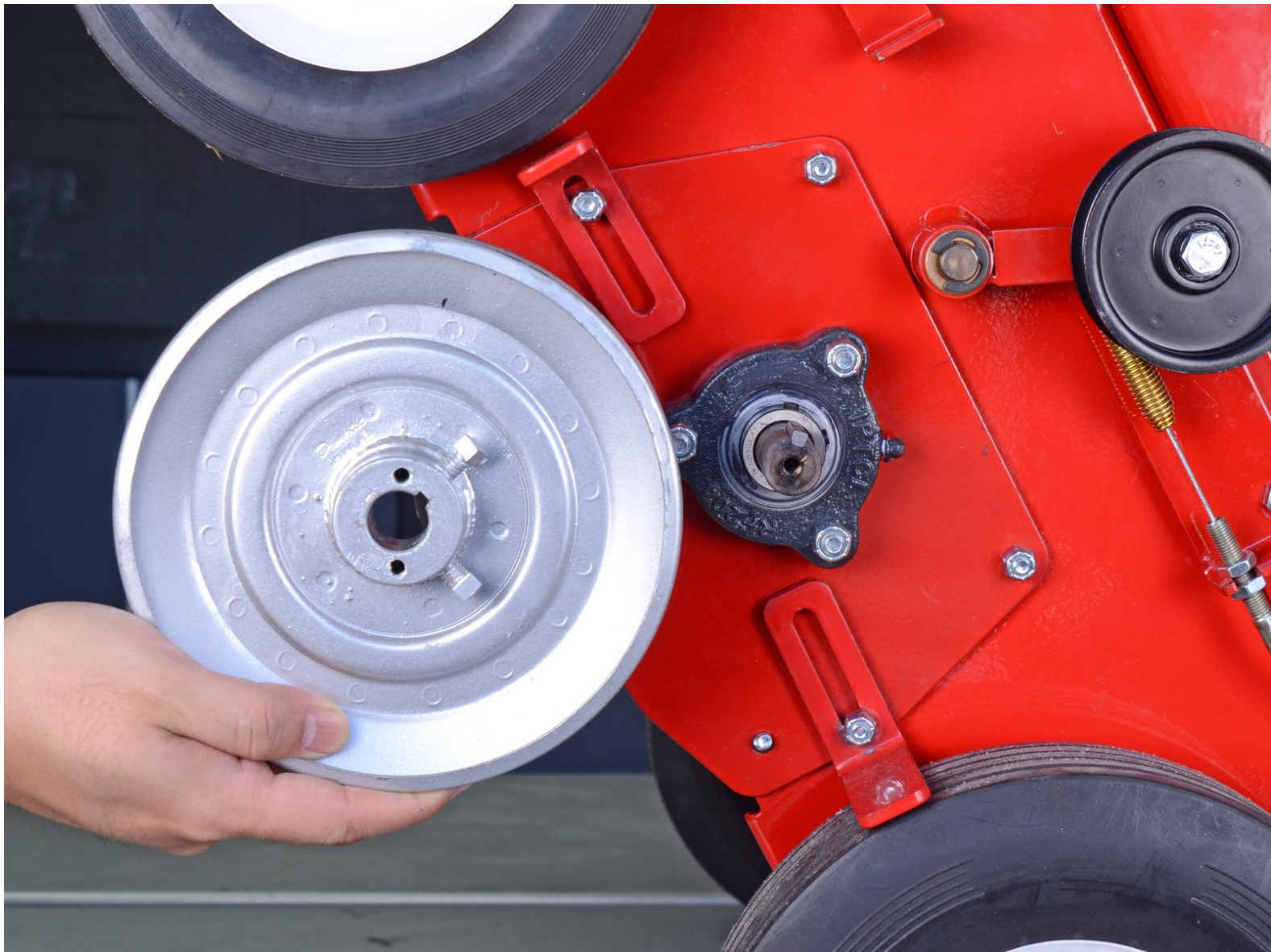




# Classen Over Seeder TS20HD 2012 Drive Pulley Replacement

Remove and replace the drive pulley for the Classen Over Seeder TS20HD.

Written By: Arthur Shi



# INTRODUCTION

This guide shows how to remove and replace the drive pulley.

**Note:** The pulley can be hard to remove and requires a suitably sized gear puller to extract it.

**Note:** The pulley bolt may be heavily seized on with thread-lock. You may need to use a blowtorch to heat up the bolt in order to soften the thread-lock.



## TOOLS:

- [Wheel Chocks](#) (1)
- [Wood Block](#) (1)
- [Socket Wrench](#) (1)
- [3/8-Inch Drive Extension Bar](#) (1)
- [1/2" Socket](#) (1)
- [7/16" Socket](#) (1)
- [1/2" Wrench](#) (1)
- [5/16" Wrench](#) (1)
- [7/16" Wrench](#) (1)
- [2-Jaw Gear Puller](#) (1)
- [Rubber Mallet](#) (1)
- [3-in-1 oil](#) (1)
- [High-Strength Threadlocker](#) (1)



## PARTS:

- [Classen PULLEY, DRIVE C100058](#) (1)
- [Classen WASHER, 1/4 HEAVY SPRING LOCK C500070](#) (1)

## Step 1 — Safety precautions



 Before you begin, ensure that the machine is powered down and cool to the touch.

- Disconnect the spark plug to prevent the engine from accidentally starting up during service:
  - Grab the plastic housing at the end of the spark plug wire.
  - Pull firmly to disconnect the wire from the spark plug.

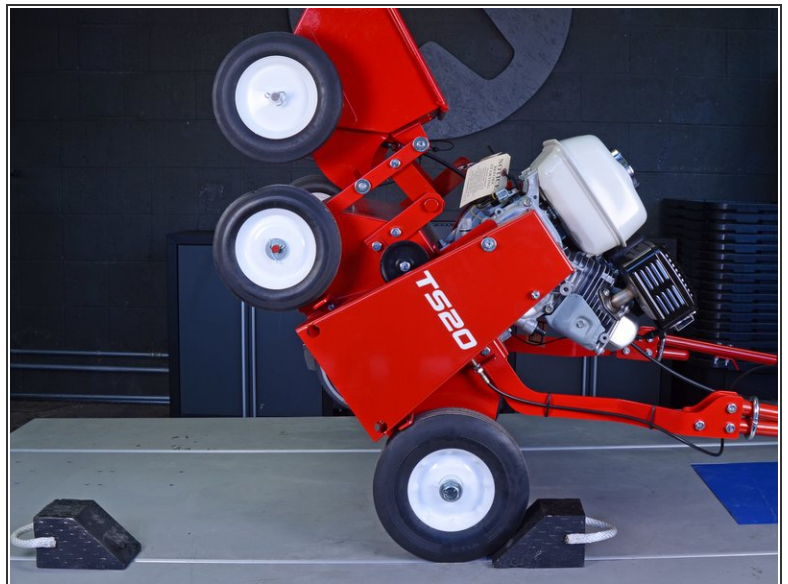


## Step 2



- To prevent the over seeder from rolling during service, place wheel chocks behind a rear wheel.

## Step 3 — Tilt the over seeder



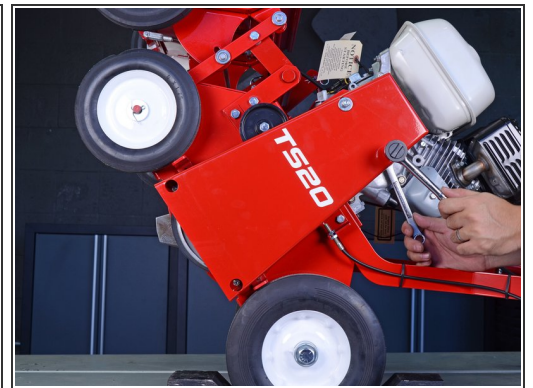
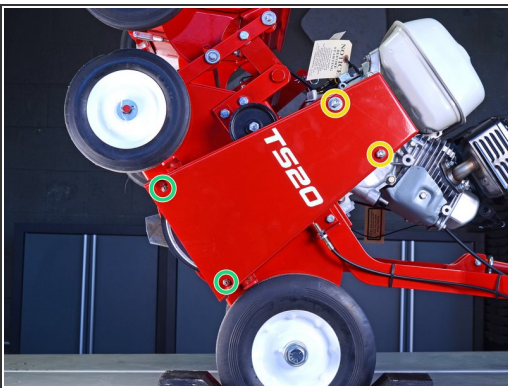
- Push down on the main handle to tilt the over seeder back on its rear wheels.
- Place some weights on the handle, or tie the handle down, to prevent the machine from falling forward.

## Step 4



- Place a wheel chock in front of a rear tire to keep the machine in place.

## Step 5 — Unscrew the belt guard



- Remove the four lock nuts securing the belt guard:
  - Two 1/2" lock nuts
  - Two 7/16" lock nuts
- ⓘ These lock nuts are recessed and require a socket extension to access.
- ⓘ Use box wrenches to hold the corresponding bolts in place as you loosen and remove the nuts.

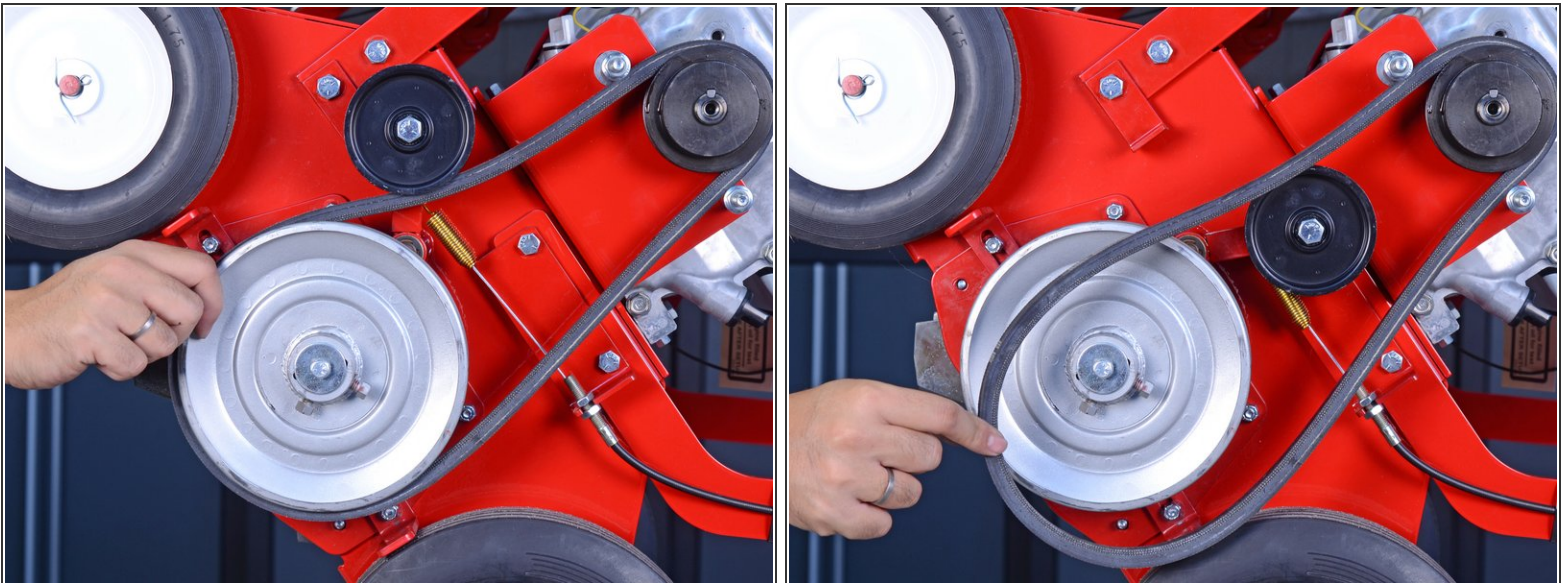


## Step 6 — Remove the belt guard



- Remove the belt guard.

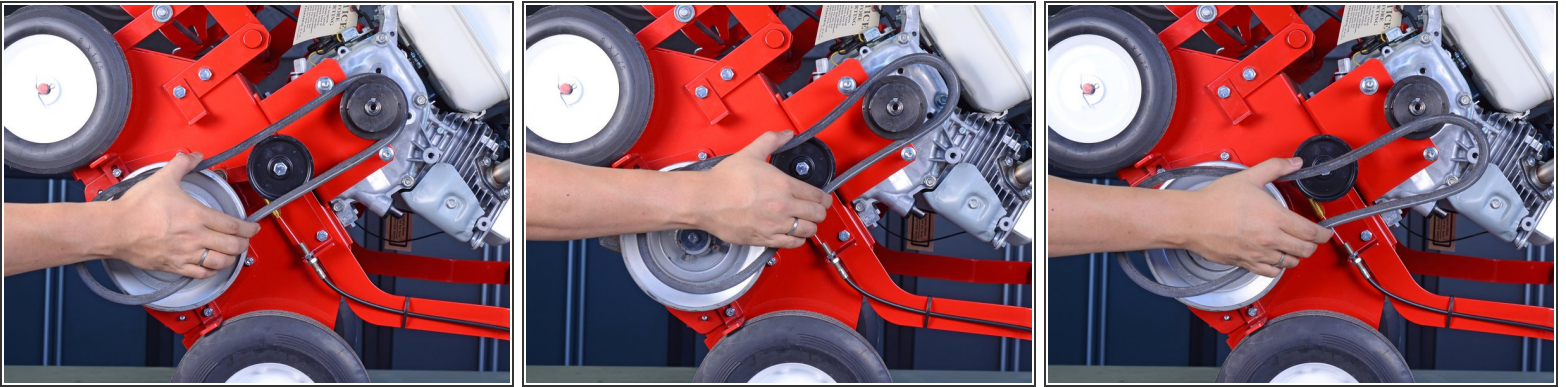
## Step 7 — Rake Belt



- Use your fingers to pry the belt off the drive pulley.

- ⓘ If you are having trouble, make sure that the machine is not resting on the bail bar up by the handlebars, which tightens the idler pulley.

## Step 8



- Squeeze the belt and unhook it from the engine pulley.
- Remove the rake belt.

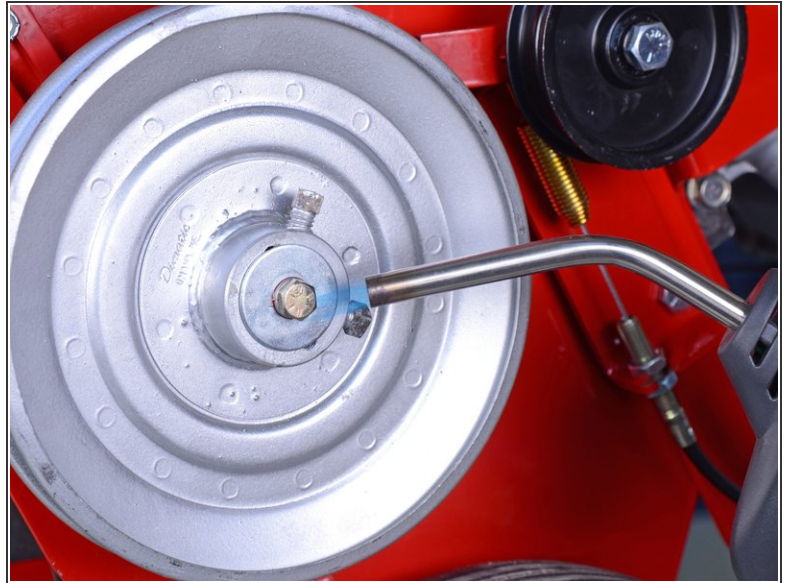
## Step 9 — Drive Pulley



- Place a block of wood to jam the blades so they don't rotate forward, allowing you to unscrew the pulley bolt.



## Step 10



- Use a 7/16" socket and socket wrench to remove the center pulley bolt.
- ⓘ The bolt can be heavily thread-locked in place, and the bolt head can shear off easily. To prevent breakage, use a torch and heat the bolt for two minutes to weaken the thread-lock.

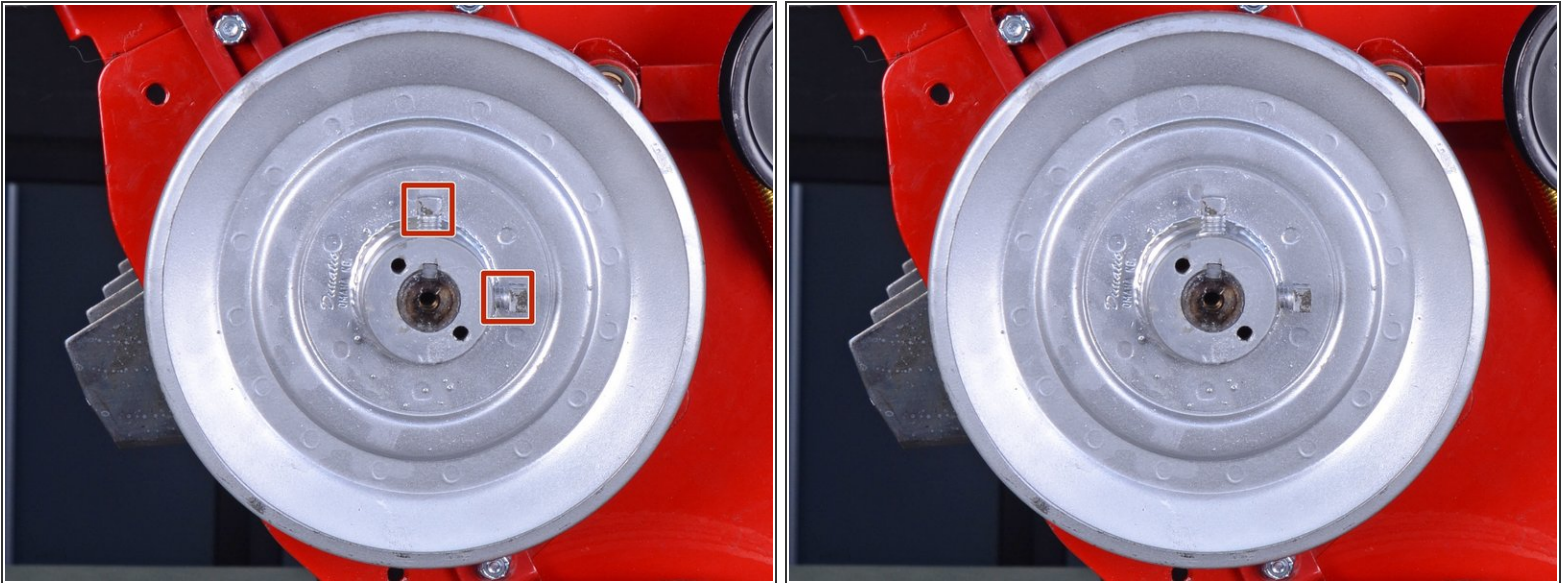
## Step 11



- Remove the bolt, along with the pulley retainer washer and crush washer.
- ★ **Re-assembly tip:** Replace the crush washer with a new one and apply red thread-locker to the bolt threads.

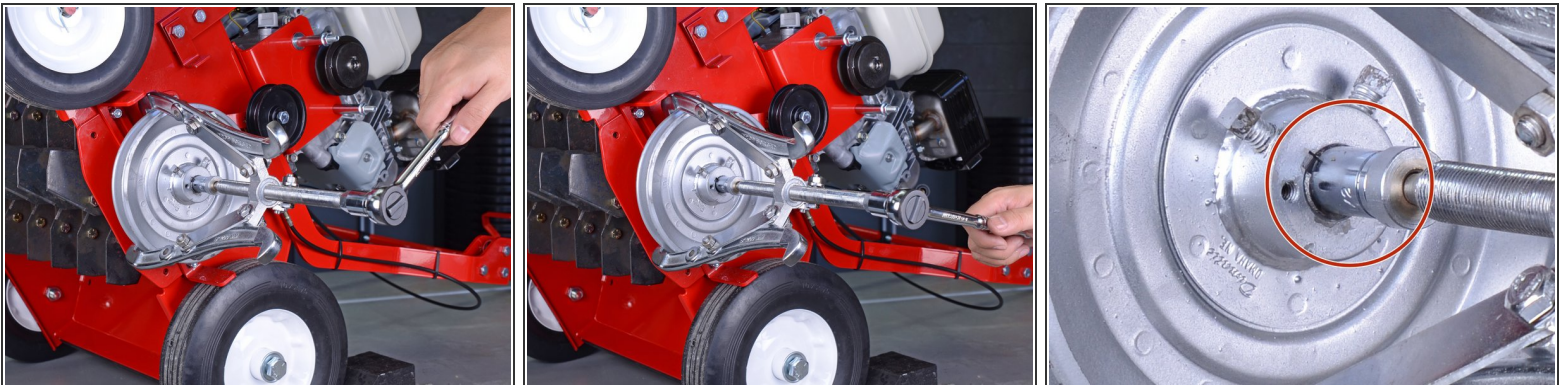


## Step 12



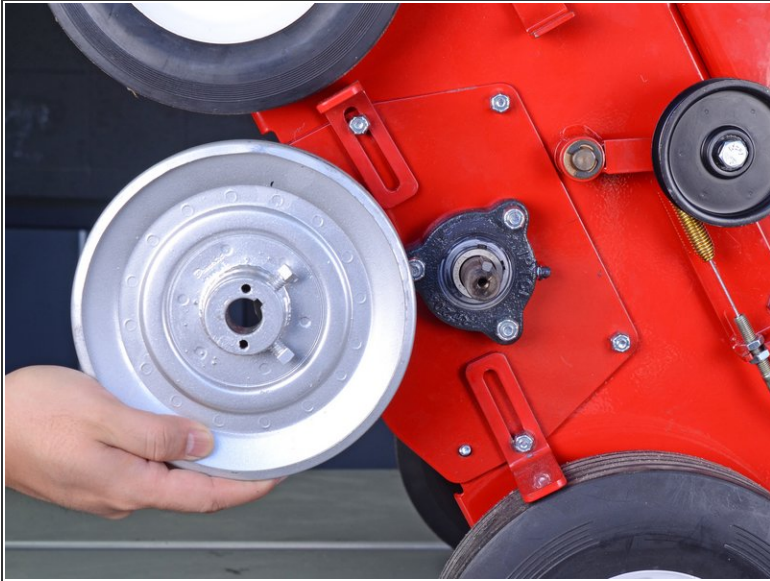
- Use a 5/16" box wrench to loosen the two set screws.
- ❗ You don't need to remove the set screws completely—two full turns sufficiently loosens each set screw.

## Step 13



- ❗ Your pulley may be loose enough to remove by hand. If not, follow this step to use the gear puller to remove the pulley.
- Attach a gear puller to the pulley.
  - If your gear puller's center pin is too thick for the pulley, use a 1/2" socket as a buffer.
- Crank on the gear puller with a wrench to remove the pulley.

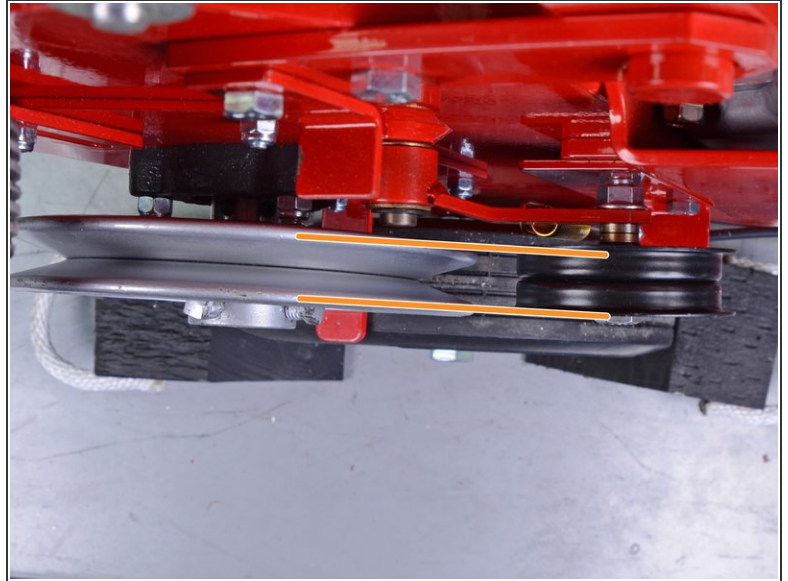
## Step 14



- Remove the drive pulley.
- Remove the square axle key.



## Step 15



### Re-assembly tips:

- Lubricate the axle and key with machine oil.
- Set the square key in the pulley first, then align the pulley onto the axle. This makes it slightly easier to hammer the pulley in place.
- Hammer the pulley in place with a rubber mallet.
- Before you tighten the set screws, make sure that the drive pulley's belt path aligns with the idler pulley.

To reassemble your device, follow these instructions in reverse order.