



# Barreto Tillers E1320HTRLR 2016 Wheel Drive Motor Replacement

Guide to remove and replace the wheel drive motor on the Barreto Tiller E1320 2016.

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# INTRODUCTION

This guide shows how to remove and replace the wheel drive motor on the Barreto Tiller E1320 2016.



## TOOLS:

- [14mm Hex key](#) (1)
- [Fluid Extractor](#) (1)
- [9/16" socket](#) (1)
- [3/8" Drive Ratchet](#) (1)
- [3/8" Socket](#) (1)
- [Shop Towels or Rags](#) (1)
- [Chisel Scraper](#) (1)
- [Oil Drain Pan](#) (1)
- [Adjustable Wrench](#) (1)
- [Paper Towels](#) (1)
- [7/16" Wrench](#) (1)
- [3/8" Breaker Bar](#) (1)
- [Jack Stands](#) (1)

*Optional*

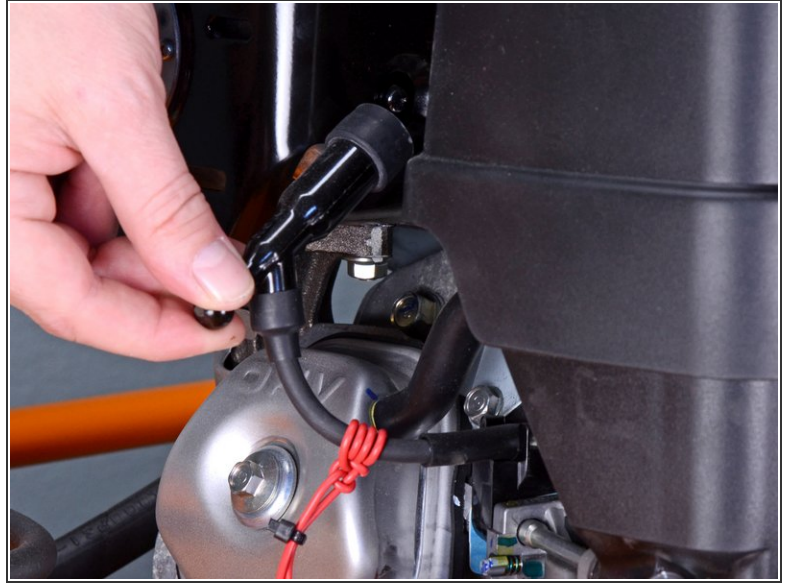
- [5/32 Hex Key](#) (1)




## PARTS:

- [Barreto Wheel Drive Motor With Key 04003-F](#) (1)
- [Barreto Sprocket, #50 10 Tooth 02014](#) (1)
- [Barreto Wheel Motor Spacer 02004](#) (1)

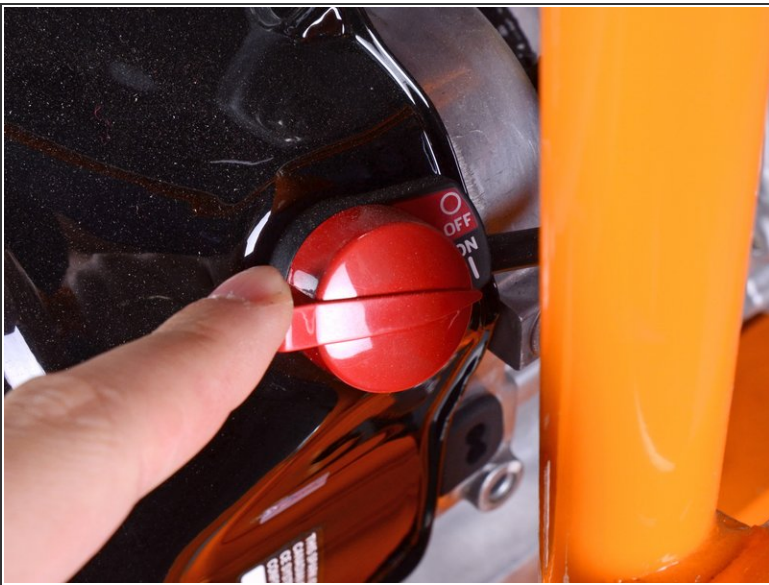
## Step 1 — Disconnect the spark plug wire



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

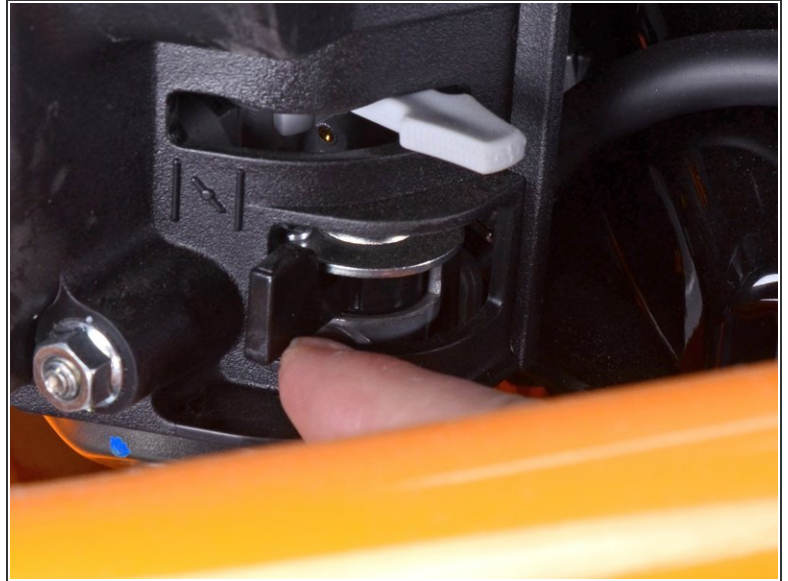
- Grab the plastic housing at the end of the spark plug wire and pull firmly to disconnect it.

## Step 2 — Flip the engine switch to the off position



- Flip the red engine ON/OFF switch to the **OFF** position.

### Step 3 — Close the fuel valve



- Flip the fuel valve lever to the **OFF** position.

### Step 4 — Turn off the ignition



- Flip the ignition switch to the **OFF** position.
- Ensure the wheel drive control lever is set to the **neutral** position.

## Step 5 — Allow the wheels to freewheel



- Pull the locking pin out and rotate it 90° to unlock the right wheel from the hub.
- Repeat for the left wheel.

## Step 6 — Add wheel chocks



- Insert wheel chocks underneath each wheel to keep the device stationary during disassembly.

## Step 7 — Remove the fill plug



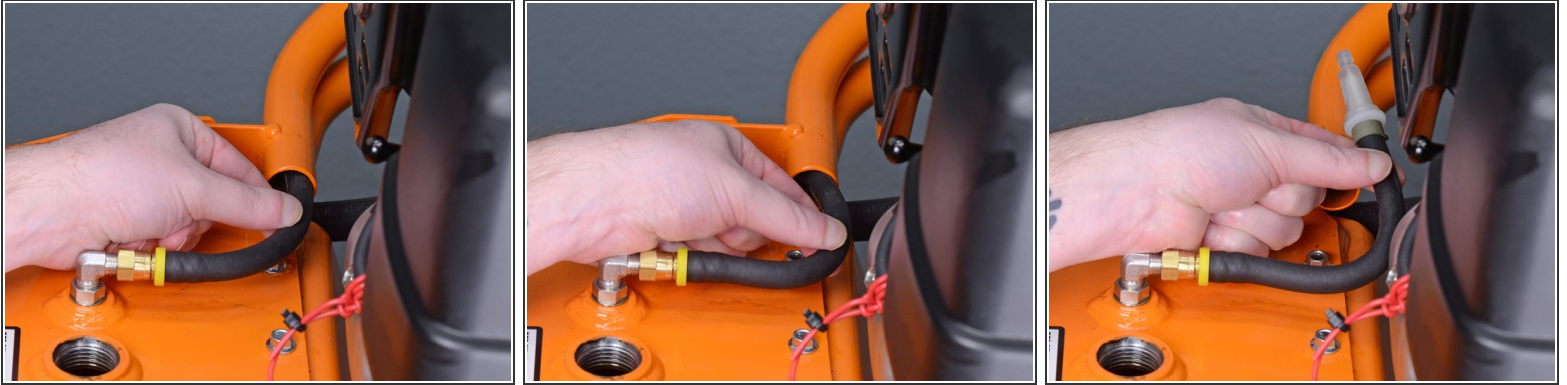
- Use a 14 mm hex key to remove the tank fill plug.

## Step 8 — Remove the fluid



- Use a siphon to pump out as much fluid as you're able to, totaling about 14 gallons.

## Step 9 — Remove the breather tube from the engine guard



- Remove the end of the tank breather tube from inside the engine guard structural pipe.

## Step 10 — Tilt up the engine guard



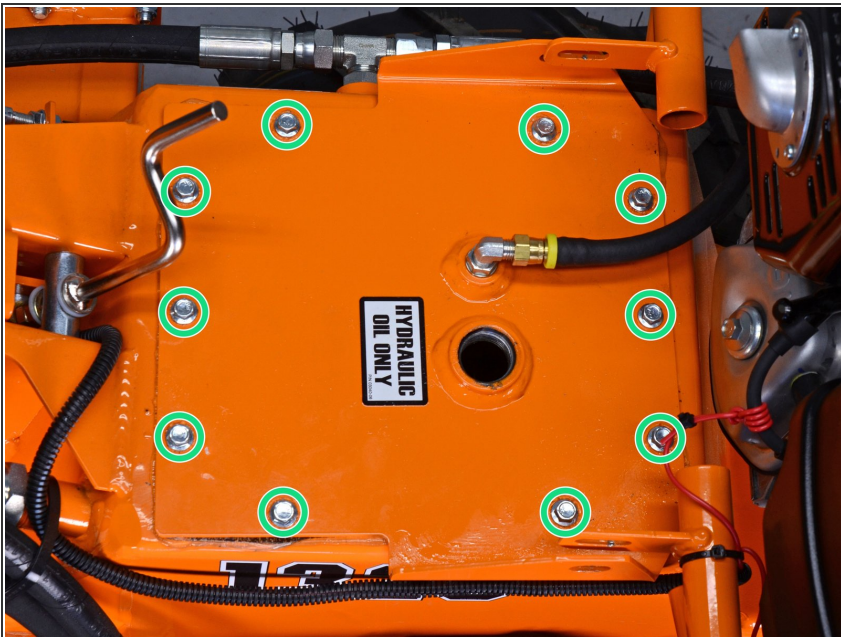
- Use a 9/16 inch socket and wrench to remove the two bolts and accompanying nuts securing the engine guard to the tank lid, one on each side.

## Step 11



- Lift the engine guard up above the tank lid flanges.

## Step 12 — Remove the tank lid bolts



- Use a 3/8 inch socket to remove the ten bolts securing the tank lid.

### Step 13 — Clean the lid



- Use a shop towel to clean and remove any remnants of silicone gasket material from the top of the lid and surrounding areas.
- ⓘ Try to prevent any silicone remnants from falling into the hydraulic fluid tank.

### Step 14 — Remove the tank lid



- Lift up on the lid to break the seal around the perimeter of the gasket.

## Step 15



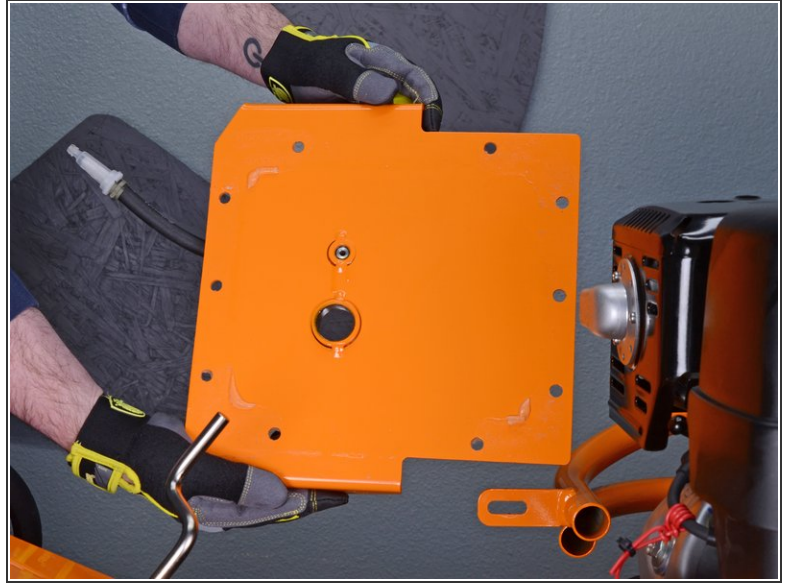
- Lift the tank lid out and around the engine guard mounting tabs to remove it.

## Step 16 — Remove the old gasket



- ⓘ When peeling up the gasket, hold a shop towel underneath the lip of the tank to prevent any silicone remnants from falling in.
- Peel the gasket up from around the perimeter of the tank.
- Remove the gasket.

## Step 17 — Reinstallation tip



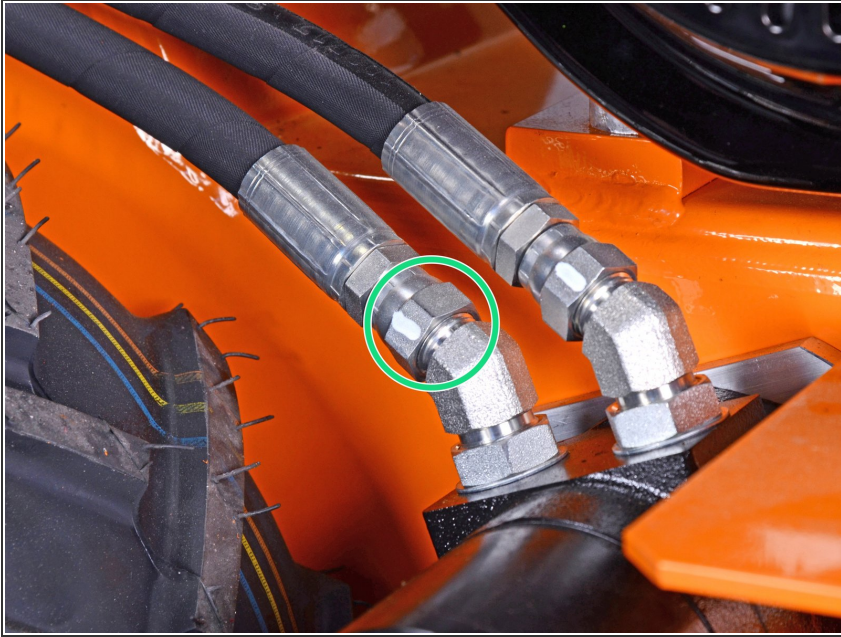
- ☑ Before reinstallation, remove all remnants of old silicone gasket from both the rim of the fluid tank as well as the tank's lid.

## Step 18 — Place down an oil drain pan



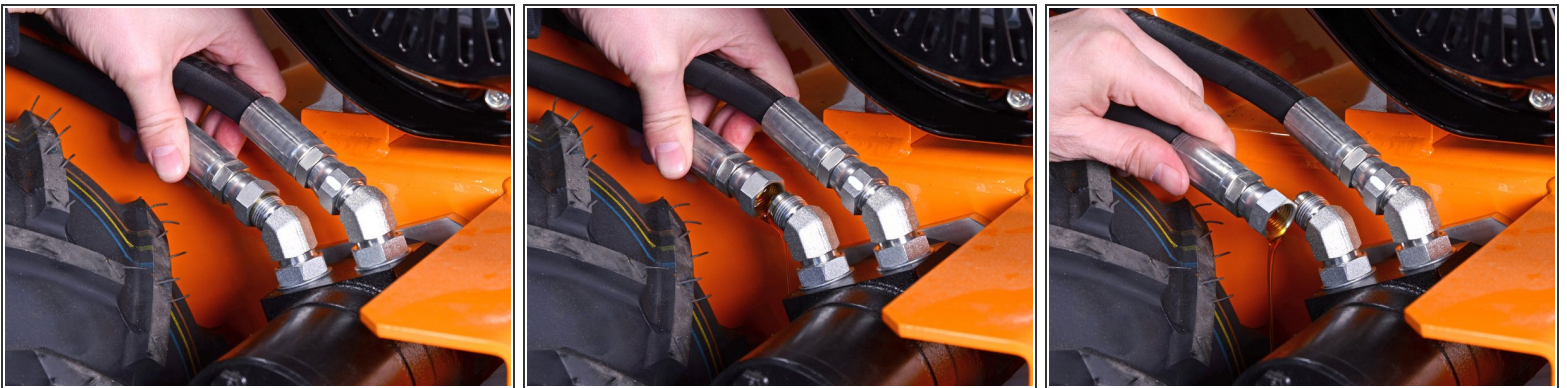
- Place an oil drain pan underneath the wheel drive motor to catch hydraulic fluid that will spill out during this procedure.

## Step 19 — Remove the fluid hoses



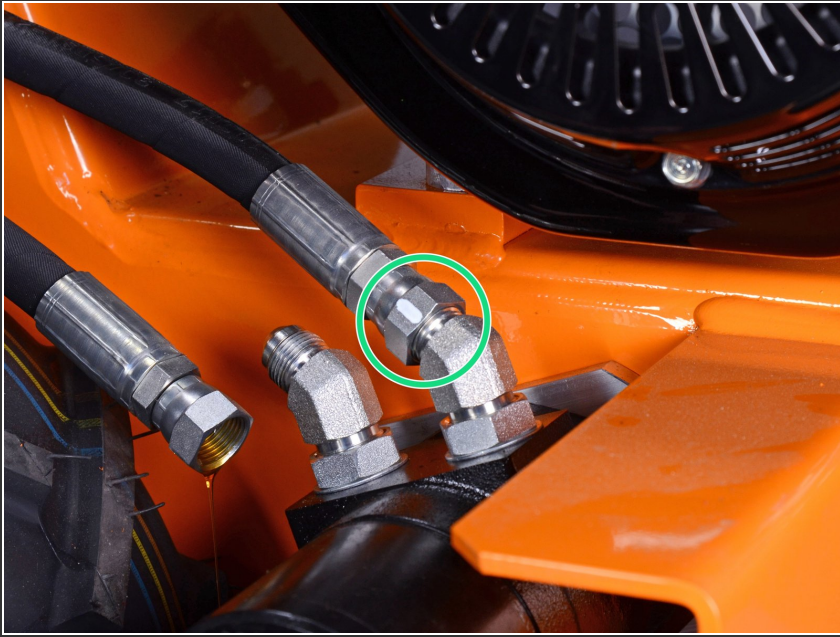
- Use an adjustable wrench to loosen the nut securing the lower fluid hose to the fitting on the wheel motor.

## Step 20



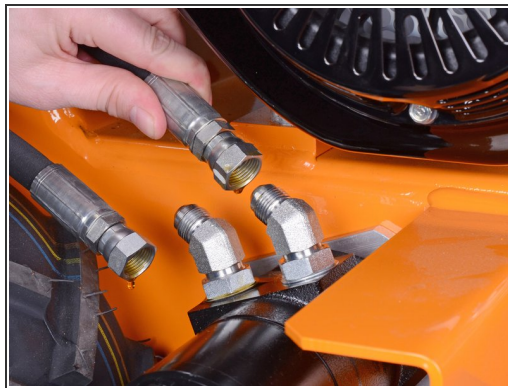
- Remove the lower fluid hose from the wheel motor.
- Allow residual fluid in the hose to drip into the drain pan underneath the motor.

## Step 21



- Use an adjustable wrench to loosen the nut securing the upper fluid hose to the fitting on the wheel motor.

## Step 22



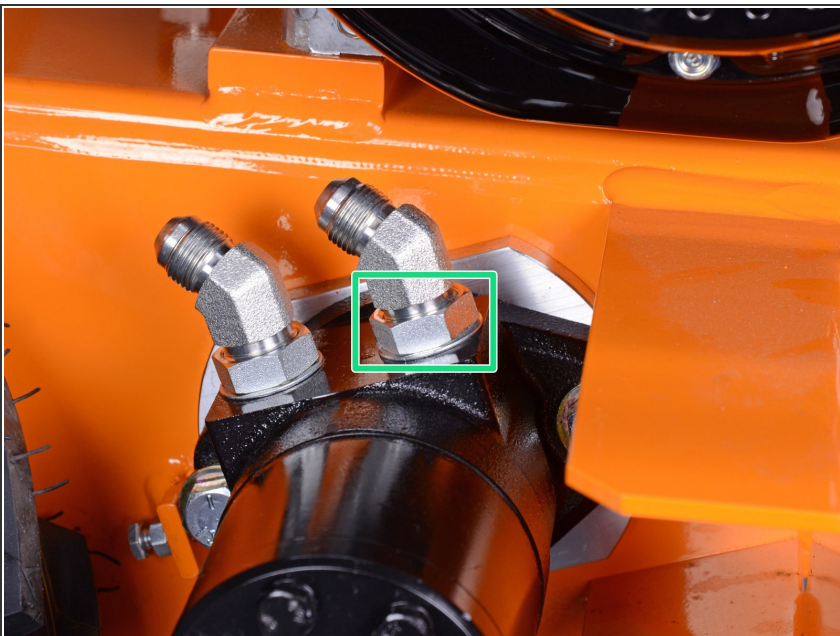
- Remove the upper fluid hose from the wheel motor.
- Allow residual fluid in the hose to drip into the drain pan underneath the motor.

## Step 23



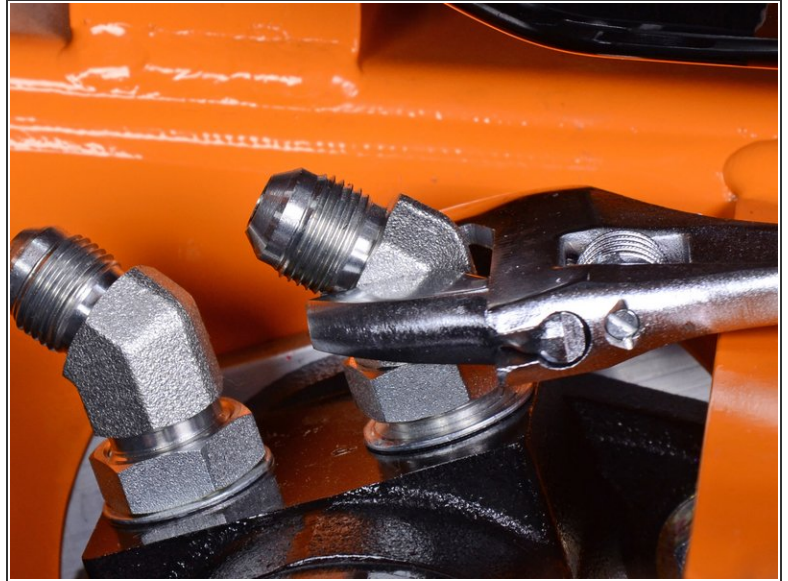
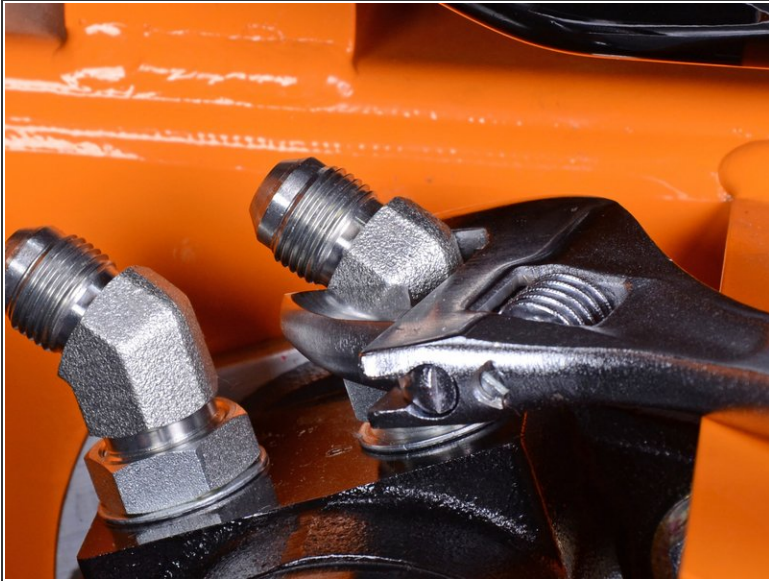
- Place paper towels into the hose openings to block residual fluid from dripping as you continue the procedure.

## Step 24 — Remove the fittings



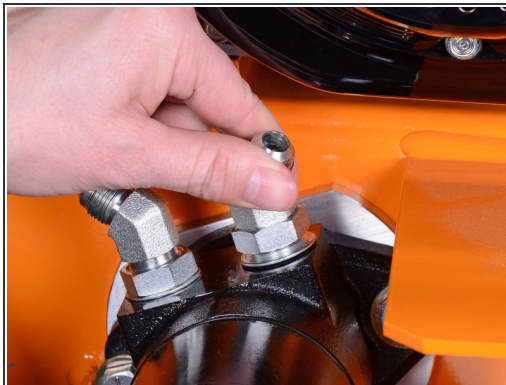
- Use an adjustable wrench to loosen the nut locking the upper hose fitting to the wheel motor.

## Step 25



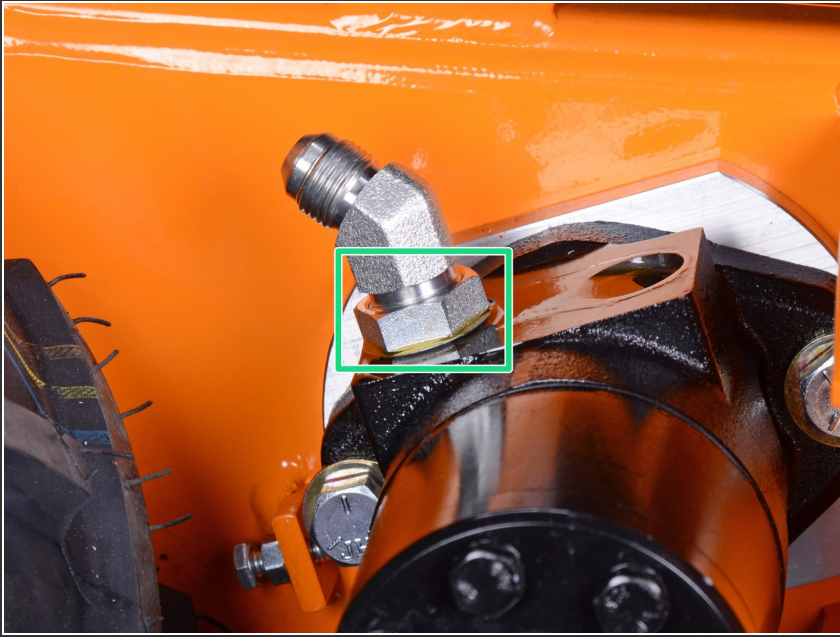
- Use an adjustable wrench on the fitting body to unthread it from the wheel motor.

## Step 26



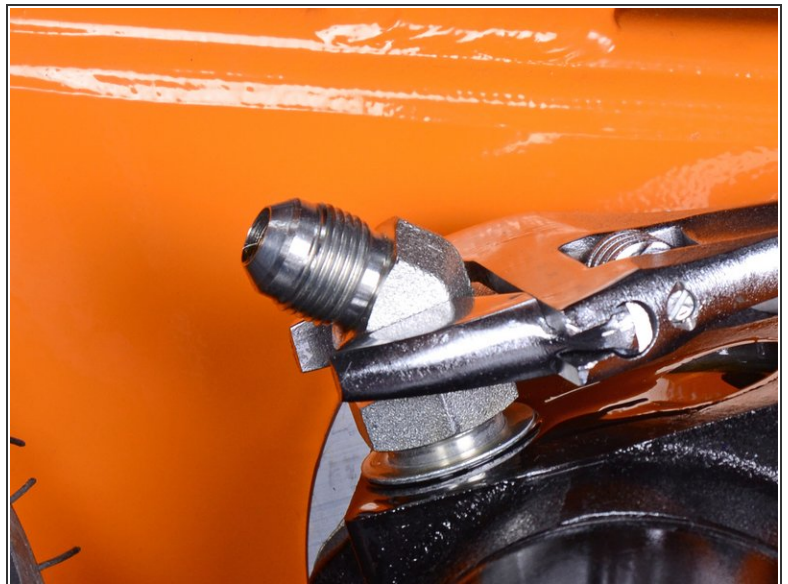
- Remove the upper fitting.

## Step 27



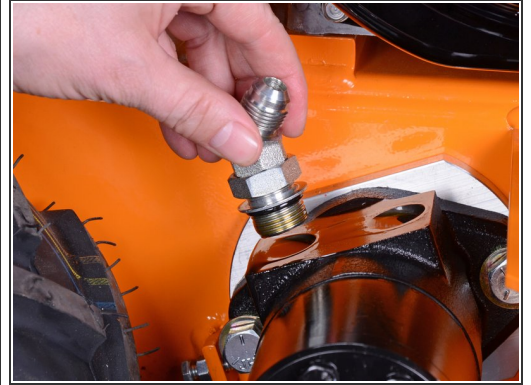
- Use an adjustable wrench to loosen the nut locking the lower hose fitting to the wheel motor.

## Step 28



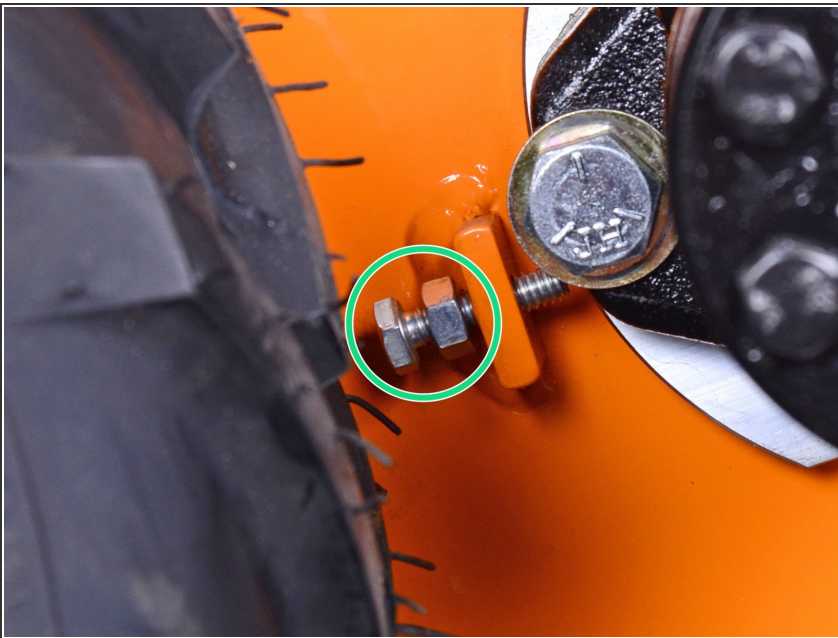
- Use an adjustable wrench on the fitting body to unthread it from the wheel motor.

## Step 29



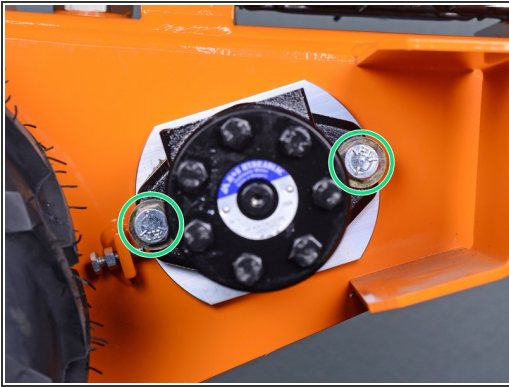
- Remove the lower fitting.

## Step 30 — Loosen the tensioner bolt



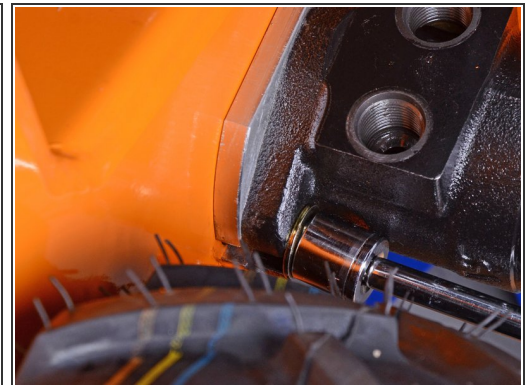
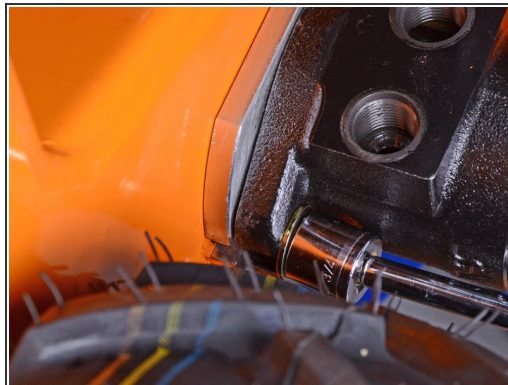
- Use a 7/16 inch wrench to loosen the tensioner bolt's lock nut.
- Back the tensioner bolt out about 1/2 inch.
- ⓘ Don't fully remove the tensioner bolt.

## Step 31 — Remove the motor bolts



- Use a 3/4 inch socket and breaker bar to remove the two bolts securing the wheel drive motor to the frame.

## Step 32 — Reinstallation tip



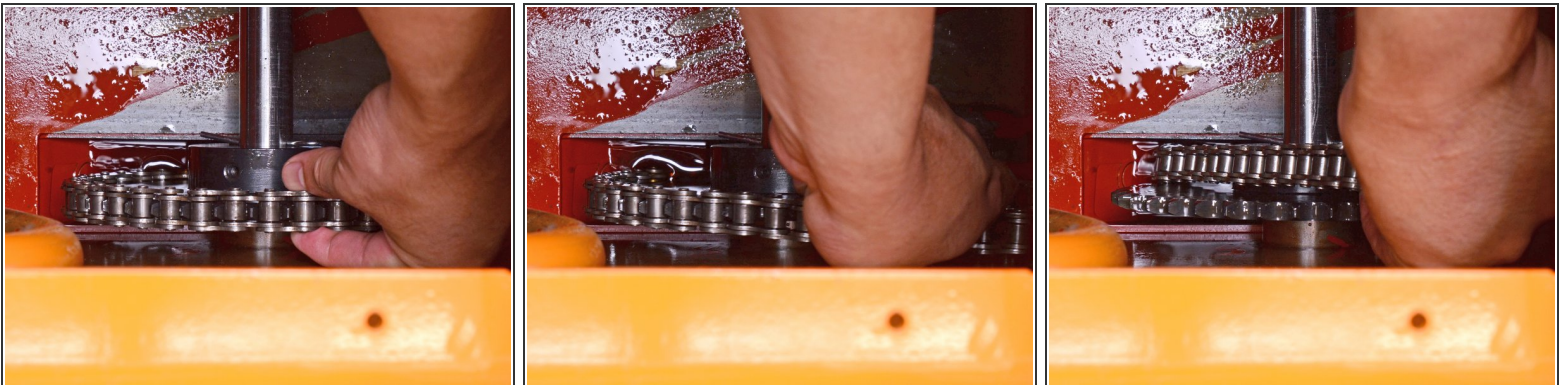
- ☑ During reinstallation, tighten the tensioner bolt down onto the motor housing to help align the motor with the spacer.
  - Tighten down both motor mounting bolts until there is no gap between the spacer and the frame or between the motor and the spacer.
- ⓘ Ensure the motor is aligned with the spacer before tightening.

### Step 33 — Give the chain slack



- With the motor loose, rotate it 90° counterclockwise and push it as far left as it will go to give the drive chain some slack.

### Step 34 — Remove the chain from both gears



- Reaching in from the top of the tank, lift the drive chain up and off of the axle gear.
  - ❗ If necessary, have another person hold the motor [against the left side of the housing](#) while the chain is being removed.
- Remove the chain from the wheel drive motor sprocket.

## Step 35 — Remove the motor assembly



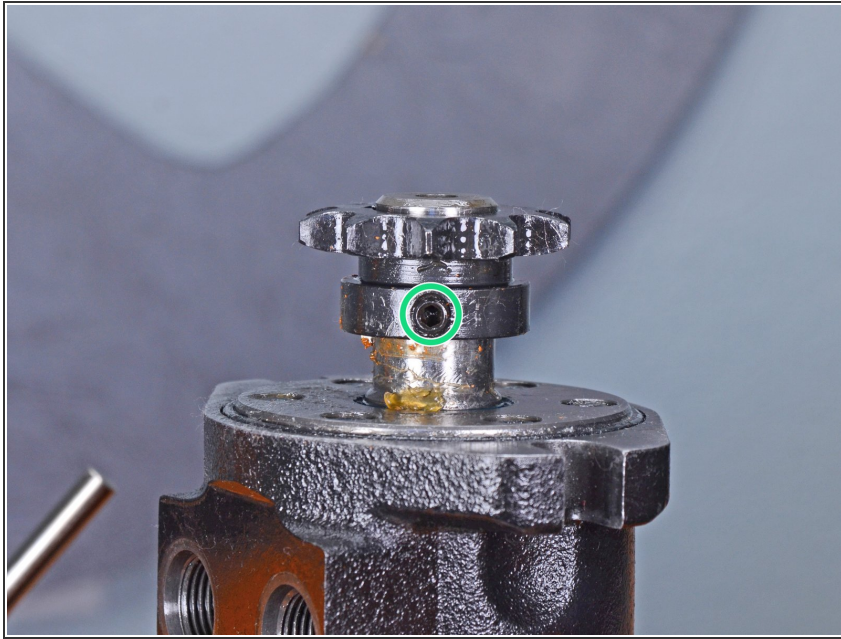
- Remove the wheel drive motor, spacer, and sprocket assembly.

## Step 36 — Remove the spacer



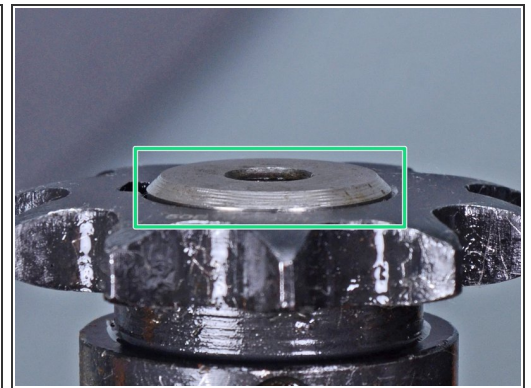
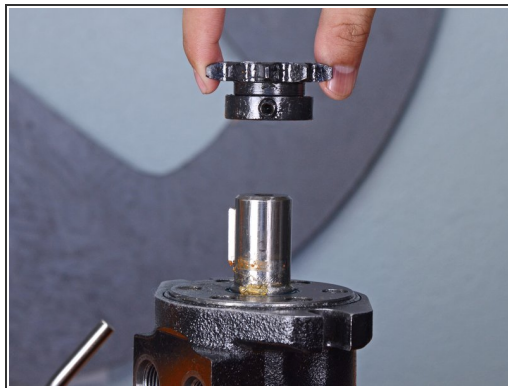
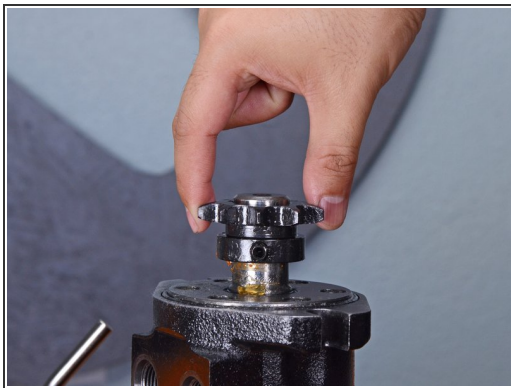
- Remove the wheel motor spacer.

## Step 37 — Loosen the sprocket set screw



- Use a 5/32 inch hex key to loosen the set screw securing the sprocket to the wheel motor shaft.

## Step 38 — Remove the sprocket



- Remove the sprocket from the wheel motor shaft.
- ☑ Reinstallation tip:
  - Align the top face of the sprocket with the end of the shaft's chamfer.
- Only the motor remains.

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