



Barreto Tillers E1320HTRLR 2016 Tine Drive Motor Bearing Replacement

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

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INTRODUCTION

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

TOOLS:

- [8 mm socket](#) (1)
 - [3/8" Drive Ratchet](#) (1)
 - [9/16" socket](#) (1)
 - [9/16" Wrench](#) (1)
 - [1/2" Socket](#) (1)
 - [1/2" Wrench](#) (1)
 - [5/8" Socket](#) (1)
 - [11/16" open-ended wrench](#) (1)
 - [3/8" Drive 3/8" Hex Socket](#) (1)
 - [Bearing Removal Tool](#) (1)
 - [Dead Blow Hammer](#) (1)
 - [Paper Towels](#) (1)
 - [Shop Towels or Rags](#) (1)
- Optional*
- [Snap Ring Pliers](#) (1)

PARTS:

- [Barreto Ball Bearing, Skf 6208 03943](#) (1)
- [Barreto Snap Ring, Sh-156, 1-9/16 05607](#) (1)
- [Barreto Snap Ring, Ho-315, 3-5/32 Internal 05603](#) (1)
- [Barreto O-Ring, 2-152, 3-7/16 Od X 3/32 Section 03001](#) (1)

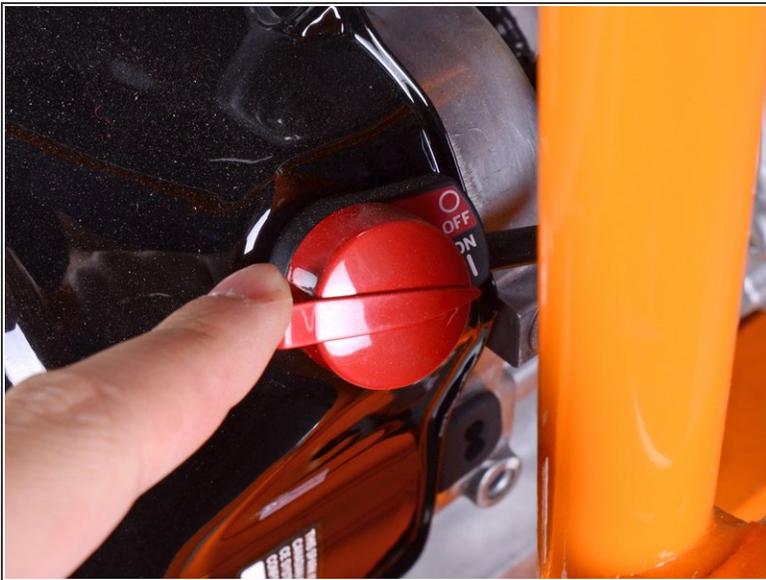
Step 1 — Disconnect the spark plug wire



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

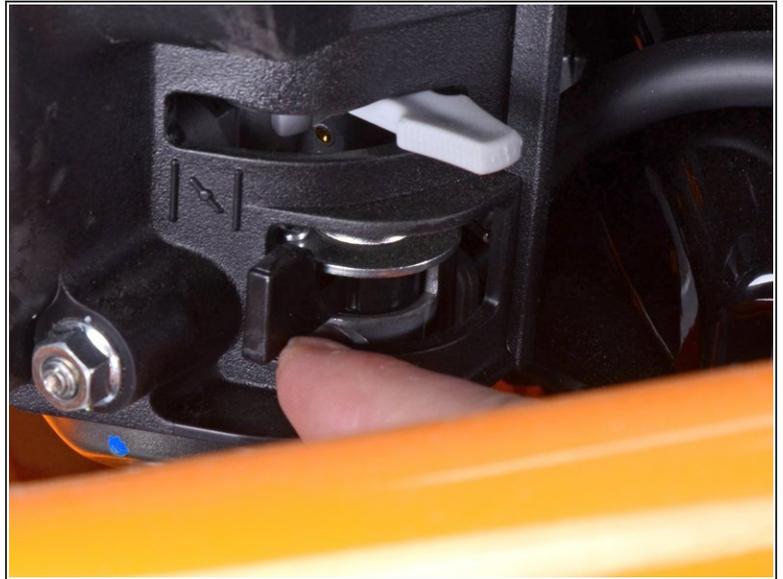
- Grab the plastic housing at the end of the spark plug wire and pull firmly to disconnect it.

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 grease fitting



- Use an 8 mm socket to remove the outboard bearing grease fitting.

Step 8 — Remove the side plate bolts



- Use a 9/16 inch socket to remove the four bolts securing the tine shaft to the side plate.
- Use a 9/16 socket and wrench to remove the five bolts and accompanying nuts securing the side plate to the frame, three on the outside and two in the wheel well.

Step 9 — Tilt the tiller



- Tilt the tiller up so the motor side is resting on the work surface with the tines raised.

Step 10 — Remove the tine cover bolts



- Use a 1/2 inch socket and wrench to remove the four bolts and accompanying nuts securing the side plate to the tine cover.

Step 11 — Remove the side plate



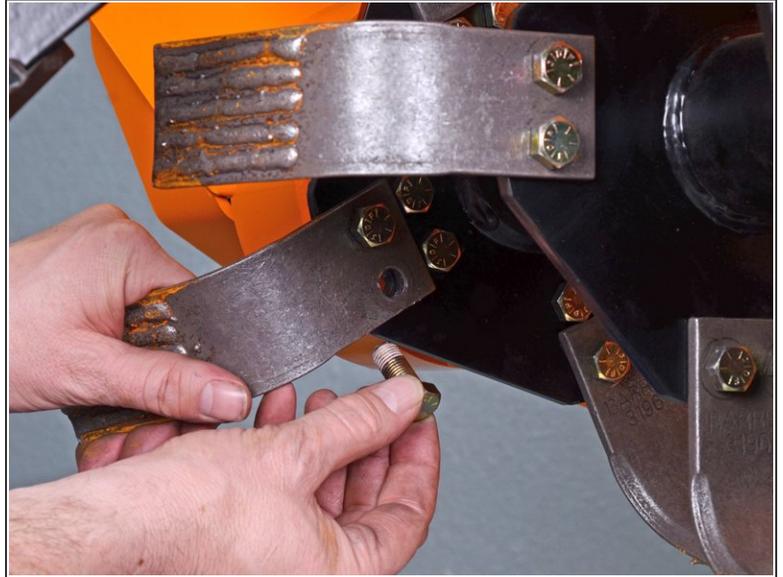
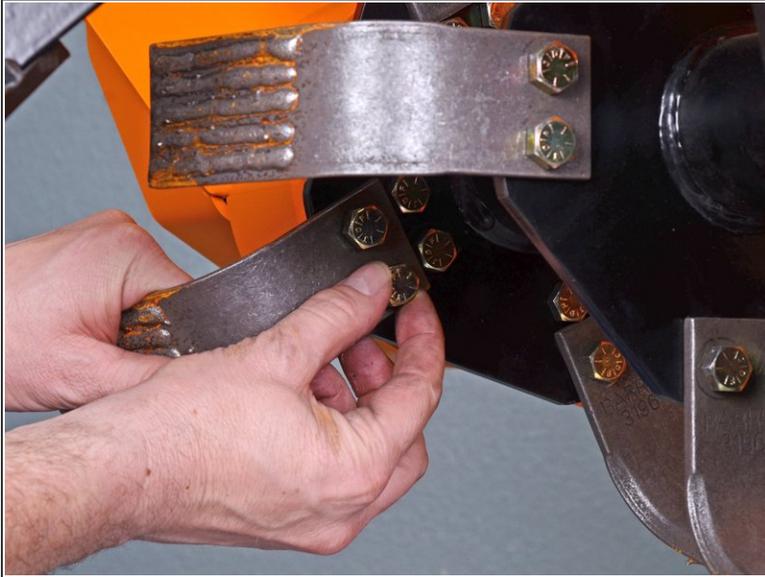
- Slide the side plate down and away from the device to remove it.

Step 12 — Remove the tine bolts



- ⓘ The tines closest to the tine drive motor need to be removed in order to allow access to the bolts securing the tine shaft to the hub.
- Use a 5/8 inch socket with an 11/16 inch wrench to loosen the two 5/8 inch bolts and two 11/16 inch nuts securing the tine to the tine shaft.
- Remove the two tine nuts.

Step 13



- Remove the two bolts holding the tine to the tine shaft.

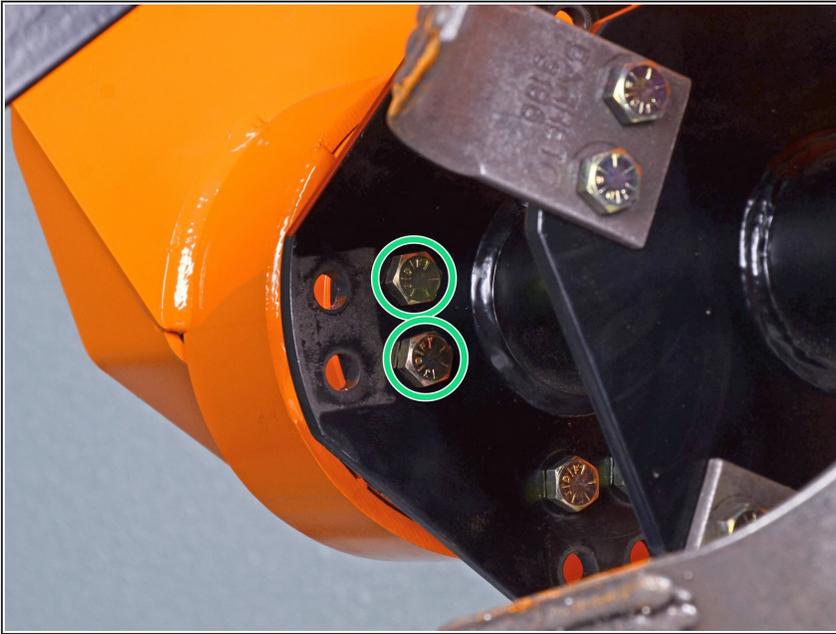
Step 14 — Remove the tines



- Remove the tine.
- Repeat this procedure for all four tines closest to the tine drive motor, opposite the outboard bearing assembly.
- ⓘ Keep track of each tine's orientation.

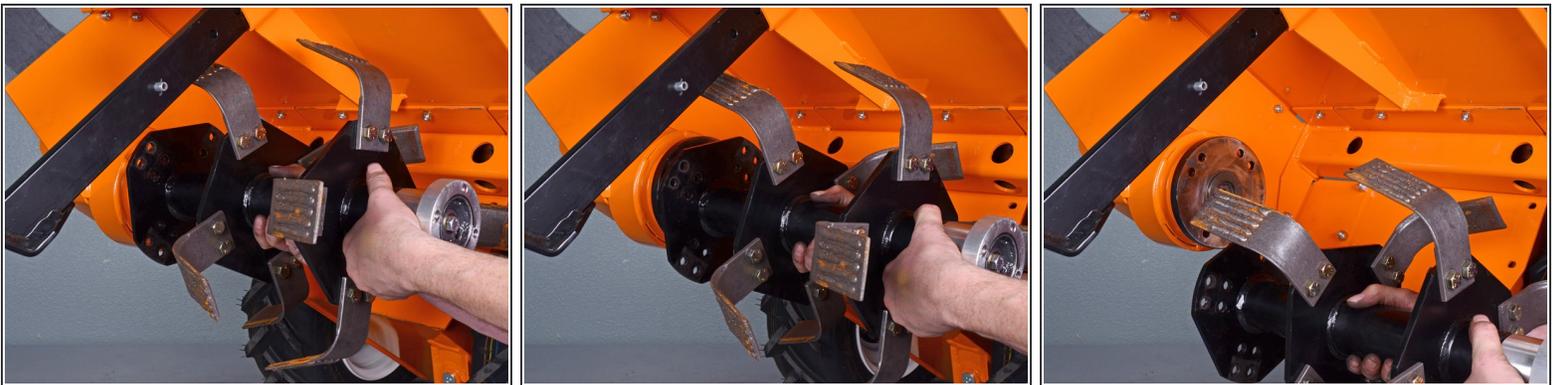
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Step 15 — Remove the tine shaft bolts



- Use a 5/8 inch socket with an 11/16 inch wrench to remove the two 5/8 inch bolts and two 11/16 inch nuts behind each removed tine.
- ⓘ Repeat this for each of the four tine locations; there are a total of eight bolts to remove.

Step 16 — Remove the tine shaft



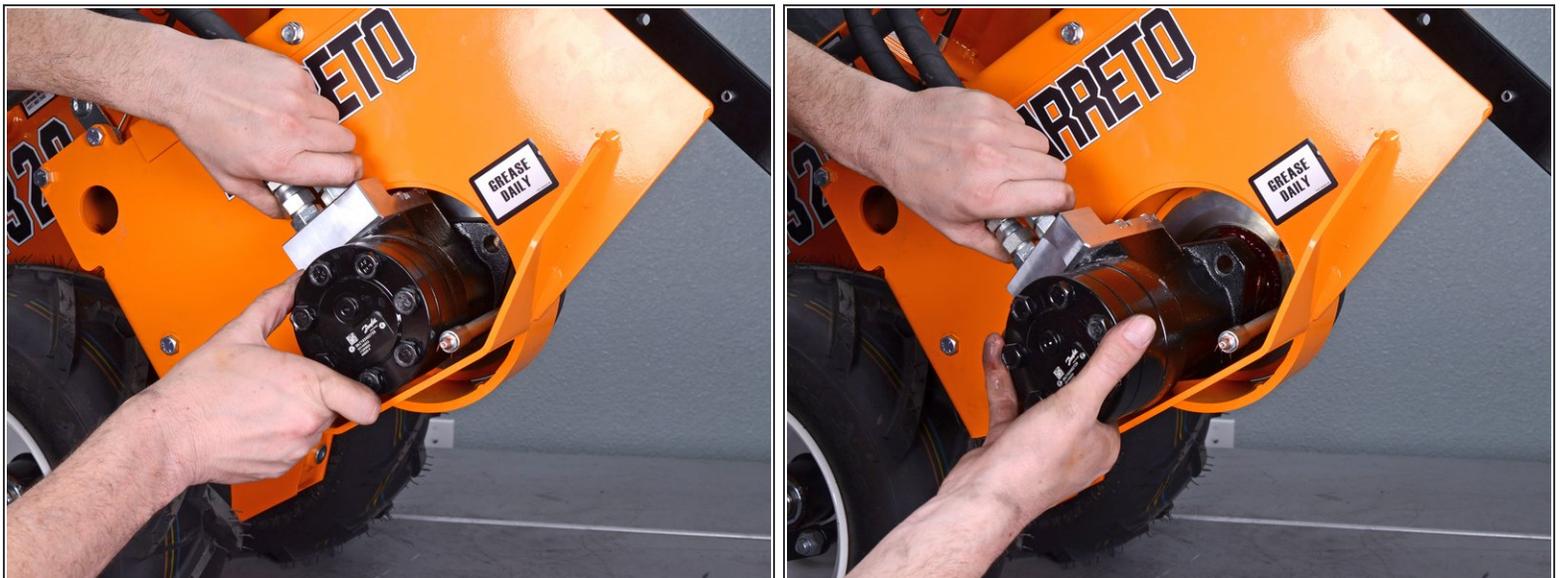
- Remove the tine shaft from the hub.

Step 17 — Remove the tine drive motor cap screws



- Use a 3/8 inch hex driver to remove the two cap screws securing the tine drive motor to the lefthand side plate.

Step 18 — Remove the tine drive motor



- Pull the motor away from the side plate to remove it.

Step 19 — Clean the bearing



- Use a clean paper towel or shop rag to remove the grease from the tine drive motor bearing.

Step 20 — Remove the O-ring



- Use a pick tool to remove the O-ring from its recess on the outer edge of the tine drive motor.
 During reassembly, install a new O-ring.

Step 21 — Remove the inner snap ring



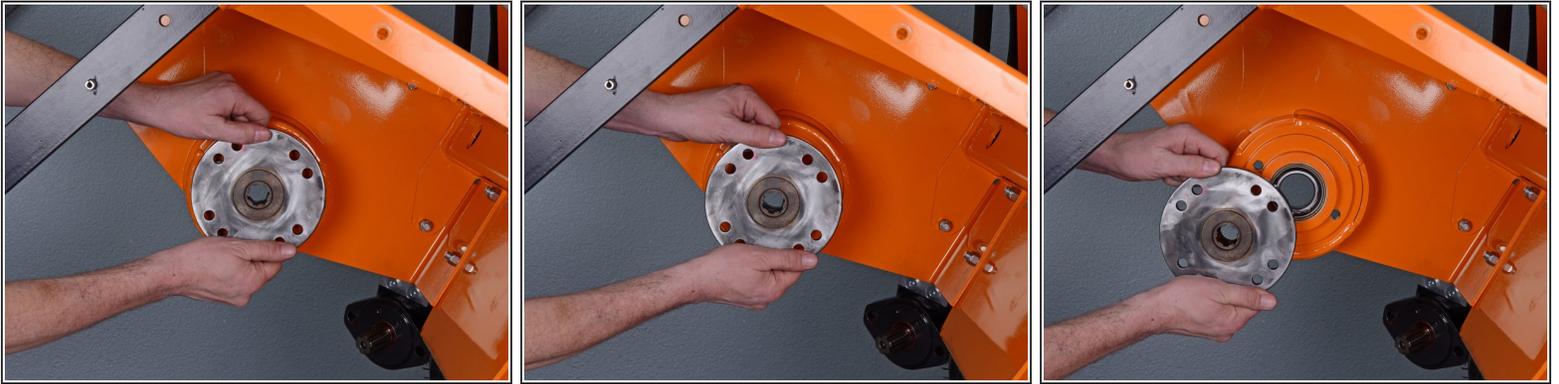
- Use a pair of snap ring pliers to remove the inner snap ring from the tine drive motor bearing.

Step 22 — Remove the outer snap ring



- Use a pair of snap ring pliers to remove the outer snap ring from the tine drive motor bearing.

Step 23 — Remove the hub



- Remove the tine drive motor hub.

Step 24 — Remove the internal bearing



- Use a bearing removal tool to remove the ball bearing from the housing.
 - ☑ Grease the internal walls of the outboard bearing housing before installing new bearings.
 - ☑ During reassembly, ensure the new bearings sit flush along the inner lip of the housing.

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