



# Barreto Tillers E1320HTRLR 2016 Outboard

## Internal Bearings Replacement

Guide to remove and replace the two internal ball bearings housed inside the outboard bearing assembly on the Barreto Tiller E1320 2016.

Written By: Carsten Frauenheim



# INTRODUCTION

This guide shows how to remove and replace the two internal ball bearings housed inside the outboard bearing assembly on the Barreto Tiller E1320 2016.

If the entire outboard bearing assembly needs to be replaced, use [this guide](#).



## 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)
- [Paper Towels](#) (1)
- [Shop Towels or Rags](#) (1)

### *Optional*

- [3/8-Inch Drive Extension Bar](#) (1)
- [Snap Ring Pliers](#) (1)
- [Pick Tool](#) (1)
- [Bearing Removal Tool](#) (1)
- [Dead Blow Hammer](#) (1)

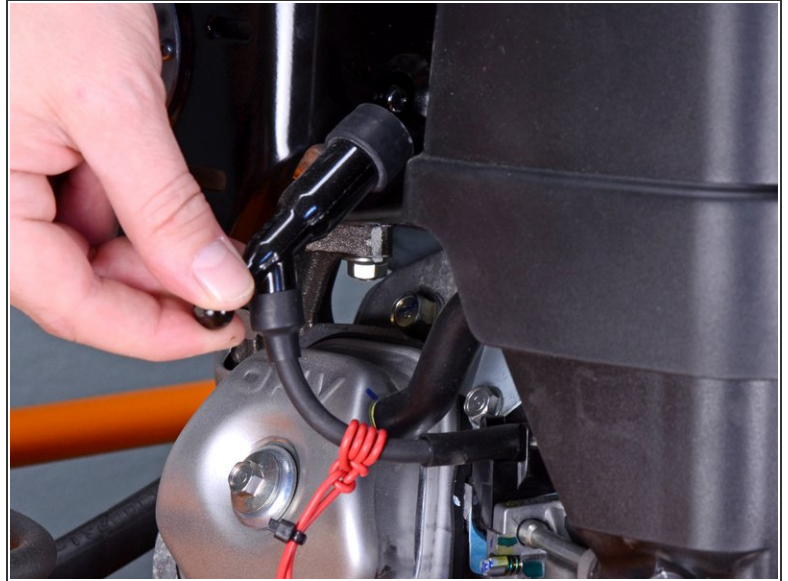



## PARTS:

- [Barreto Ball Bearing, 6205 03043](#) (2)
- [Barreto Outboard Brg Dust Shield 01039](#) (1)
- [Barreto Snap Ring, Ho-200, 2 05024](#) (1)
- [Barreto O-Ring, 2-035, 2-3/8 Od X 1/16 Section 03904](#) (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.

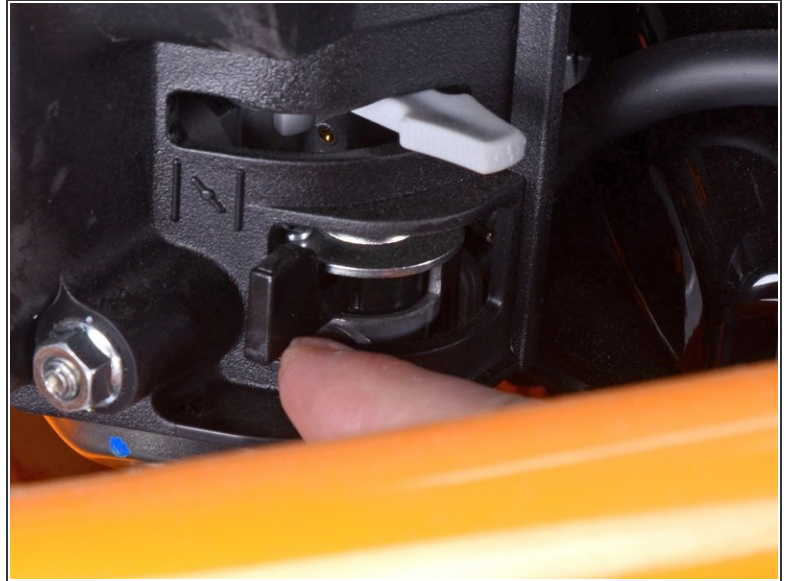
## Step 2 — Flip the engine switch to the off position



- 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.

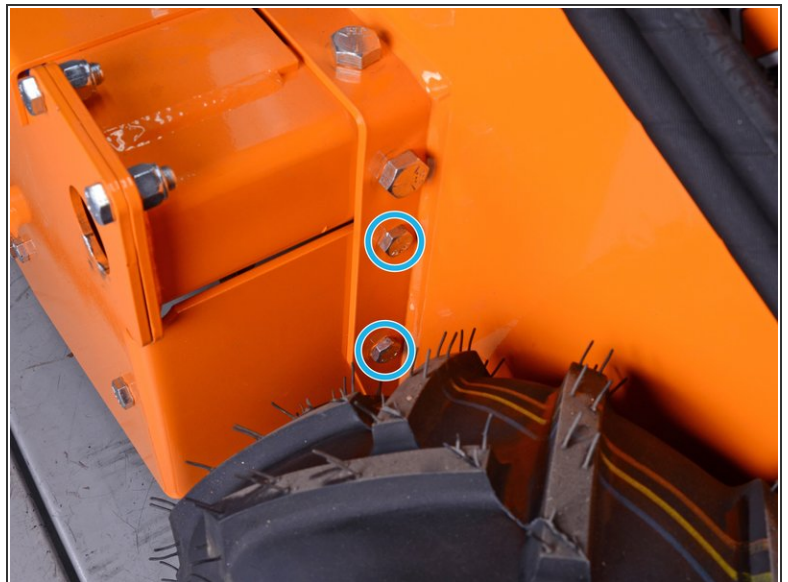


## Step 7 — Remove the grease fitting



- 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.

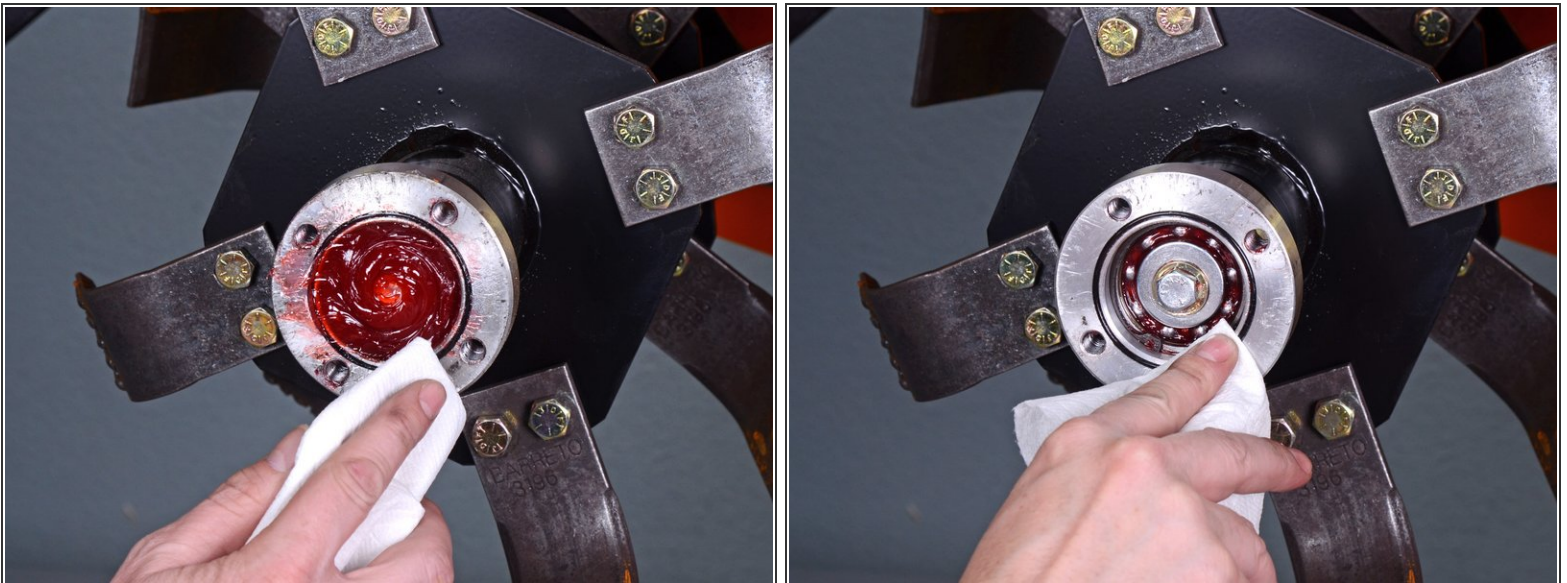


## Step 11 — Remove the side plate



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

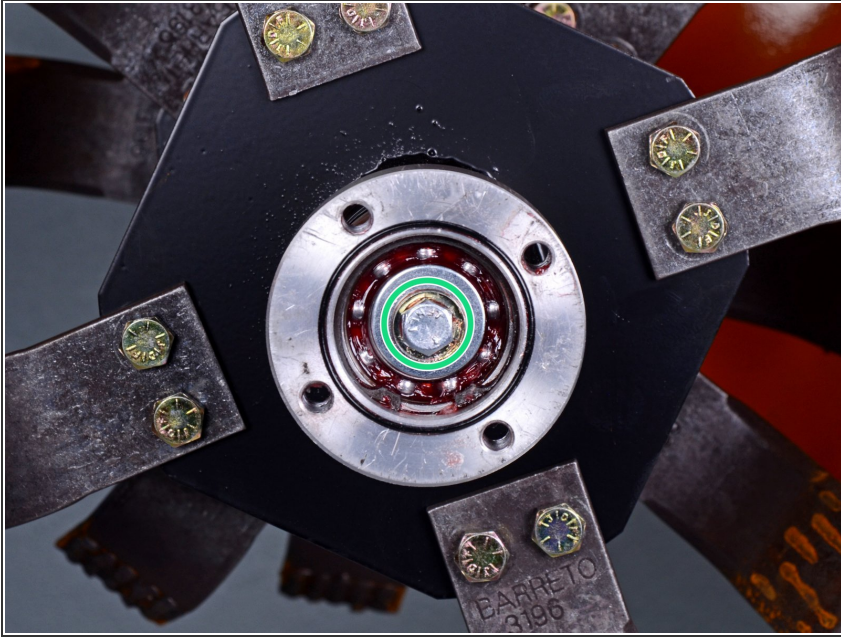
## Step 12 — Clean the assembly



- Use a clean paper towel or shop rag to remove the grease from the outboard bearing assembly.

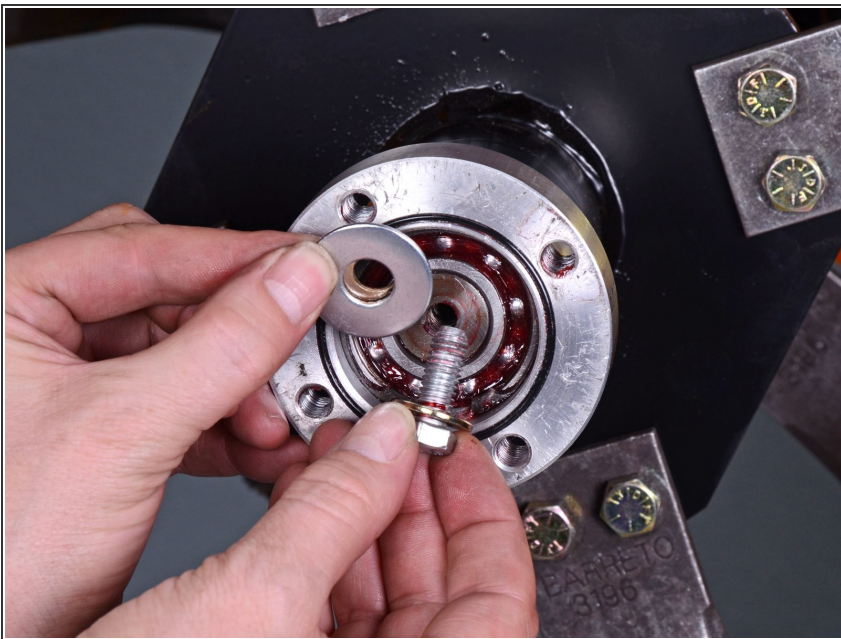


### Step 13 — Remove the outboard bearing assembly bolt



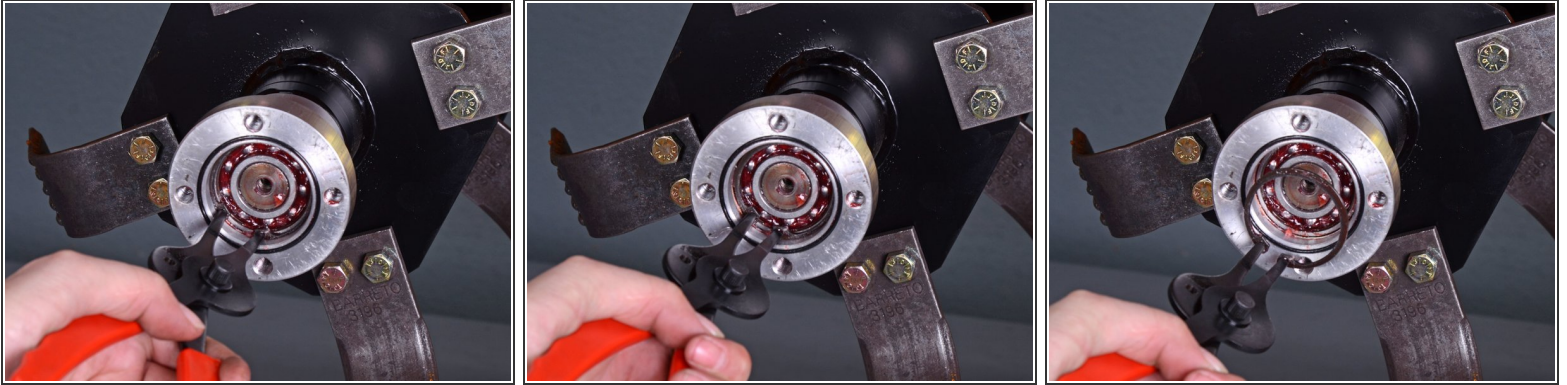
- Use a 9/16 inch socket to remove the bolt securing the outboard bearing assembly to the tine shaft.

### Step 14 — Remove the washers



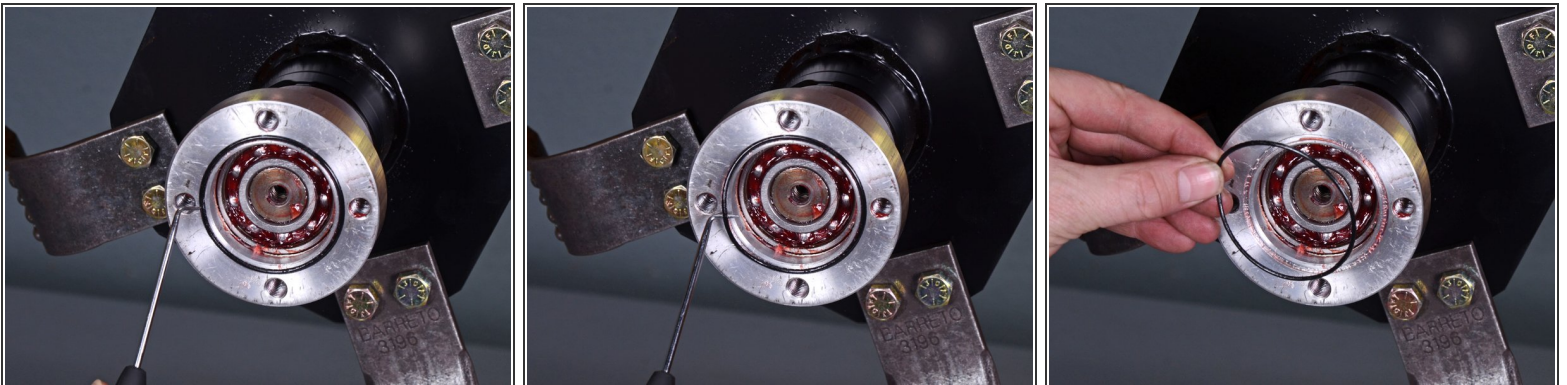
- Remove the three washers, held in place by the bolt, from the outboard bearing assembly.

## Step 15 — Remove the snap ring



- Use a pair of snap ring pliers to remove the snap ring from the outboard bearing assembly.

## Step 16 — Remove the O-ring



- Use a pick tool to remove the O-ring from its recess on the outer edge of the assembly.

☒ During reassembly, install a new O-ring.



## Step 17 — Remove the outboard bearing assembly from the tine shaft



- Pull the assembly off of the tine shaft to remove it.

## Step 18 — Remove the internal ball bearings



- Set the assembly flange-down onto the work surface.
- Use a bearing removal tool or bearing press to remove the ball bearings 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.

## Step 19 — Remove the dust shield



- With the bearings removed from the housing, remove the dust shield.
- ✦ During reassembly, install the dust shield after both bearings are pressed into place.

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