



Windsor Willow Bottom Bracket Replacement

How to remove and replace the bottom bracket on a Windsor Willow

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INTRODUCTION

This is a guide to removing and replacing the bottom bracket on the Windsor Willow. The bottom bracket is a self-contained bearing surface on which the crank arms and drive gears rotate. Note that the rear wheel is missing in the photos, but does not necessarily need to be removed for this guide.

TOOLS:

- Park Tool Crank Arm Allen Wrench (1)
- Park Tool Crank Puller (1)
- Park Tool BBT-22 bottom bracket removal tool (1)
- Adjustable Wrench (1)

PARTS:

- Shimano UN55 Bottom Bracket (1)

Step 1 — Chain



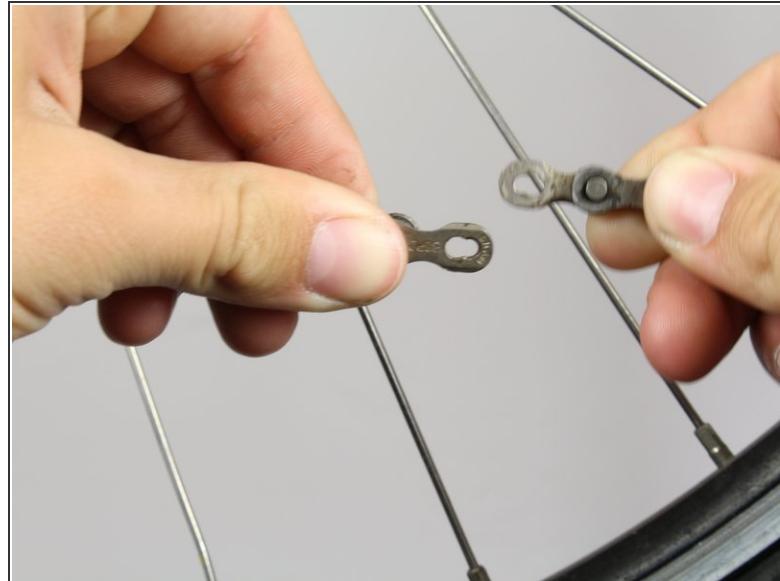
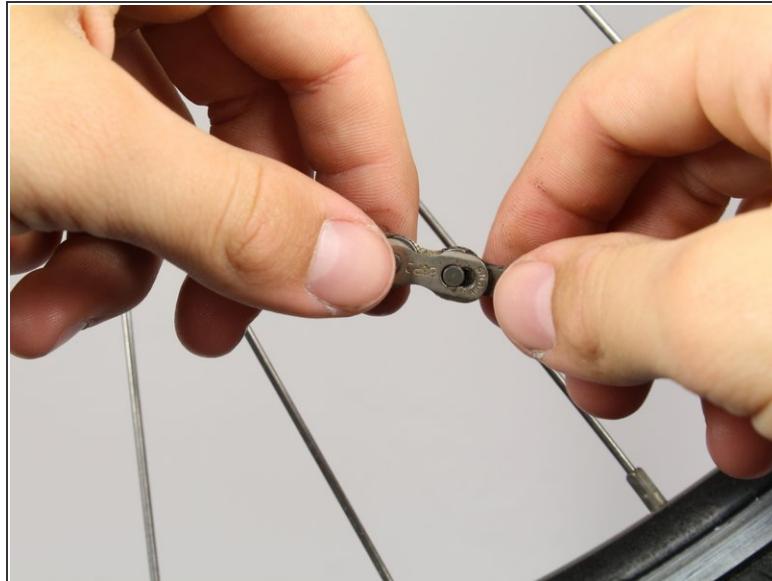
- The chain connects the crank arm to the gear cluster on the back wheel.

Step 2



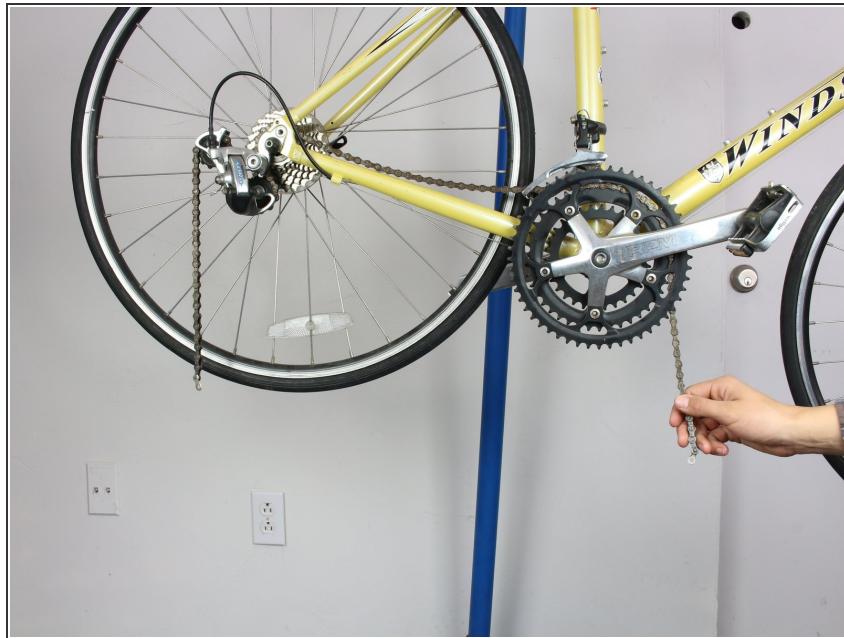
- On the chain, locate the master link. It is a lighter gray than the other links of the chain. This is how you can break the chain for easier removal.

Step 3



- To separate the Master Link, hold the left side of the link in your left hand and the link to the right in your right hand. Push the two links together to enable the release. Pull the links apart, one hand moving towards yourself and the other away from you. This will separate the links of the chain.

Step 4



- Once you have separated the links of the chain, pull down on the right side of the chain as shown. Pull until the chain has been fully removed from the gears. Place the chain on a paper towel or cloth to prevent getting grease anywhere.

Step 5 — Crankshaft



- The crank arms can be located between the front and rear tire, directly below the seat.

Step 6



- To remove the crank arm, place a proper fitting Allen wrench into the slot at the center of the crank arm as shown. Turn the wrench counterclockwise to loosen the bolt that keeps the crank arm on the bike until it spins easily. Hold the other crank arm in place to ensure that the bolt loosens instead of spinning the crank arm.

Step 7



- Once the bolt spins easily, keep the Allen wrench in the bolt slot and turn the crank arms to speed up the removal process.

Step 8



- Remove the bolt from the crank arm. The crank arm will remain in place. Do not try to pull off the crank arm, as a special tool is required for this task.

Step 9



- Repeat steps 2-4 on the other crank arm. Remember, do not try to pull off the crank arms.

Step 10



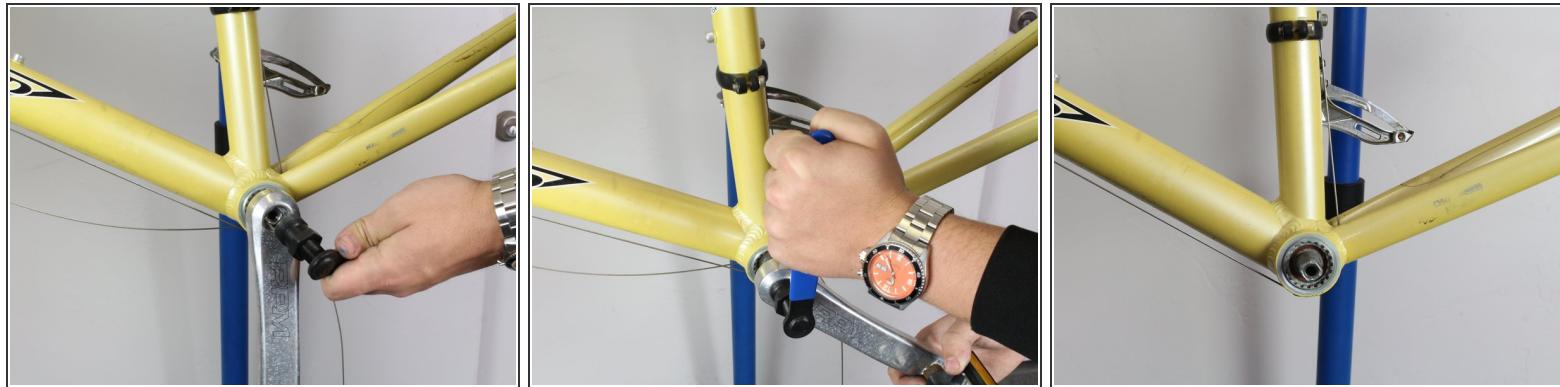
- Obtain a crank puller tool. This tool has two parts, a movable threaded insert and the push bolt. Screw the crank puller into the hole left by the bolt.

Step 11



- Once the movable piece is tightened firmly inside the hole, turn the tool clockwise. This will pull the crank arm away from the bike and remove it completely.

Step 12



- Repeat steps 6-7 with the remaining crank arm. Both arms have been successfully removed.

Step 13 — Bottom Bracket



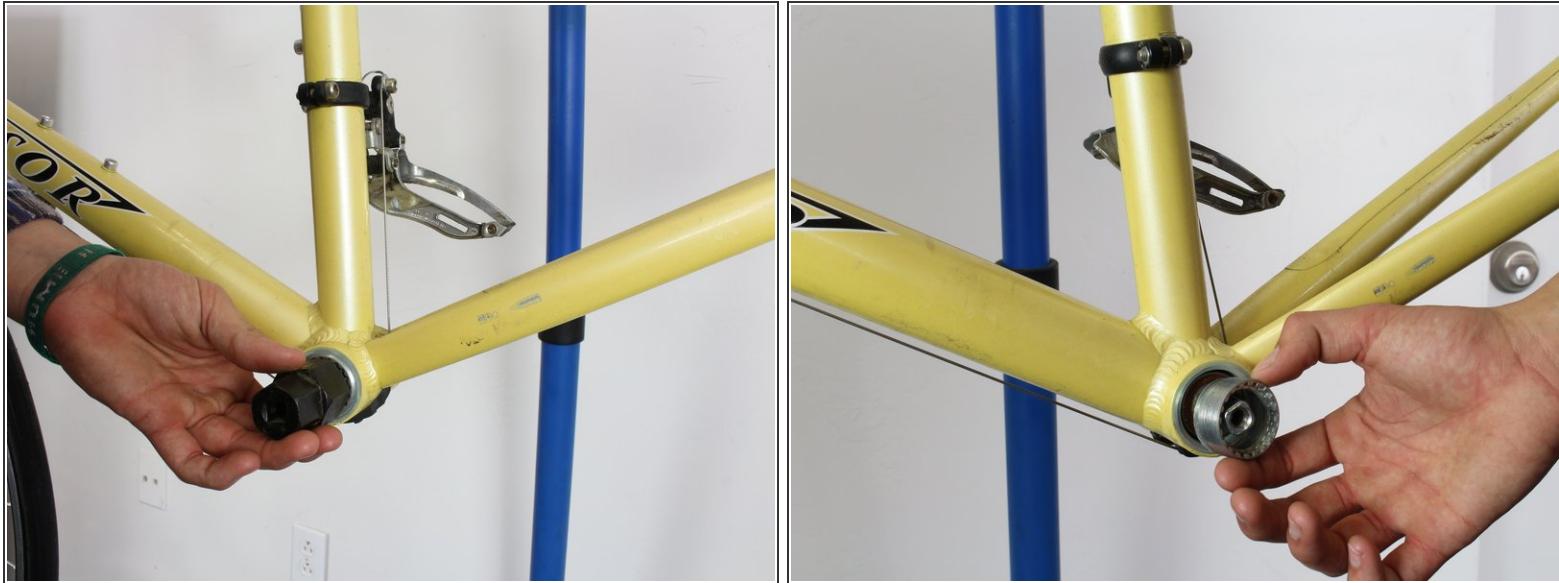
- The Bottom Bracket is located at the bottom of the frame, directly underneath the saddle.

Step 14



- On the non-drive side, insert the bottom bracket removal tool into the splines on the inside of the bottom bracket mounting ring.
- Fit the crescent wrench onto the bottom bracket removal tool.
- Use the crescent wrench to turn the mounting ring counterclockwise until it is loose enough to turn by hand.

Step 15



- Turn the bottom bracket removal tool counterclockwise by hand until the mounting ring is free of the bicycle frame

Step 16



- Fit the bottom bracket removal tool into the splines on the drive-side of the bottom bracket.
- Use the crescent wrench to turn the bottom bracket removal tool clockwise until the bottom bracket is loose enough to turn by hand.

Step 17



- Turn the bottom bracket removal tool clockwise by hand until its threads are no longer in contact with those of the frame.
- Pull the bottom bracket out of the bike frame.

To reassemble your device, follow these instructions in reverse order, keeping in mind that the drive-side threads are reverse threads, meaning counterclockwise turning tightens the piece and clockwise turning loosens the piece.