



India Mark II Axle and Handle Replacement

Replace the axle and/or handle of the India Mark II.

Written By: Andrew Optimus Goldheart



INTRODUCTION

Follow this guide to remove the handle and axle of the India Mark II. You can then replace or repair either or both.

TOOLS:

- [24mm Wrench \(1\)](#)
- [Angled Socket Wrench \(1\)](#)
- [Socket Wrench \(1\)](#)

Step 1 — Access Door



- Before performing any repairs, perform a water test on the pump by raising and lowering the handle a full 40 strokes. A properly performing pump will yield greater than 10 liters.
- Remove the hex head bolt from the top of the access door on the pump head.
- On reassembly, this bolt should be hand-tight.

Step 2



- Pull the access door straight up off the pump head.
- Store the access door in a sanitary place to prevent contamination.

Step 3



- ☞ The access door has a tongue that fits into the base of the pump head.
- ⓘ The access door makes a convenient tray to hold nuts and bolts during the disassembly.

Step 4 — Chain



- Place the spacer collar around the pump rod below the raised chain, with the beveled side down, and the flat side facing up.

Step 5



⚠ The following procedure requires two people. If you attempt to do this alone, you risk injuring yourself and damaging the pump.

- Lift the pump handle until the base of the chain comes to rest on the spacer collar, and the chain is slack. Hold the handle in this position while the chain is being detached.

Step 6



- Using the two access holes, place an angled socket wrench on the bolt and nut attaching the chain to the pump handle.

Step 7



- Hold the wrench on the bolt stationary.
- Loosen the nut.

Step 8



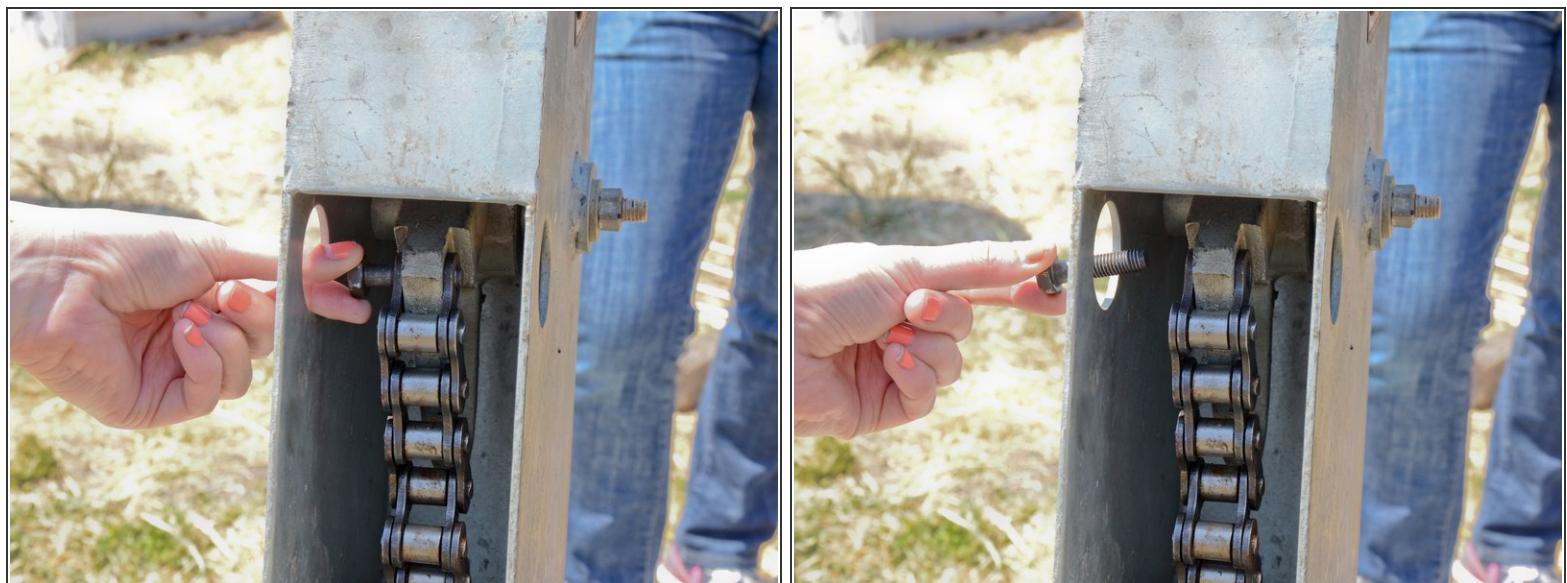
- Remove the nut from the chain bolt.

Step 9



- Remove the washer from the chain bolt.

Step 10



- Remove the chain bolt.

Step 11



- Pull the top of the chain straight off of the pump handle.

Step 12 — Axle and Handle



- Use a wrench to loosen the nut on the end of the handle axle.
- Remove the nut and washer from the end of the axle.

Step 13



- Set the axle punch over the exposed threaded section of the axle.

Step 14



! The following procedure requires two people. If you attempt to do this alone, you risk injuring yourself and damaging the pump.

- ① The first person will use a hammer to gently tap on the axle punch, to push the axle through the handle bearings and out of the pump head.
- ① At the same time, a second person will hold up the handle, supporting its weight, while twisting the axle with a wrench, to loosen it in the bearings and make it easier to dislodge.

Step 15



- Gently tap the axle punch to push the axle out of the pump head.

Step 16



- Once the axle is loose, push it through the pump head.

Step 17



- While supporting the pump handle, remove the axle.

Step 18



- Slide the pump handle out of the pump head.

Step 19



- At this point you can inspect the pump handle bearing for damage or excessive wear.

Step 20



(i) The following steps demonstrate reassembly.

- After sliding the pump handle back into the pump head, line up the pump handle bearing with the holes in the side of the pump head.

Step 21



- Insert the axle back into the pump head.
- Be sure to support the weight of the handle and line up the holes in the sides of the pump head with the pump handle bearing.

Step 22



- Use a block of wood and hammer to gently tap the axle back into place.
- ⚠** Do not hit the axle directly with a hammer, as you may damage it.

Step 23



- Replace the washer and nut on the axle.
- Tighten the nut with a wrench.

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