

# Switch Adapted Whale Bubble Blower

## ASSEMBLY GUIDE

### Required Components

<p>1.</p> 	<p>2.</p> 	<p><b>BOM</b></p> <ol style="list-style-type: none"> <li>1. Out 2 Play Bubble Machine</li> <li>2. 3.5 mm Mono Jack and Nut</li> <li>3. 22 AWG Wire</li> <li>4. 4 AA Batteries</li> </ol>
<p>3.</p> 	<p>4.</p> 	

### Required Tools

- Drill and ¼" drill bit
- Soldering iron
- Solder
- Phillips screwdriver (included with the bubble blower)
- Wire cutters
- Wire strippers
- Ruler

### Required Personal Protective Equipment (PPE)

- Safety glasses

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## Assembly Instructions

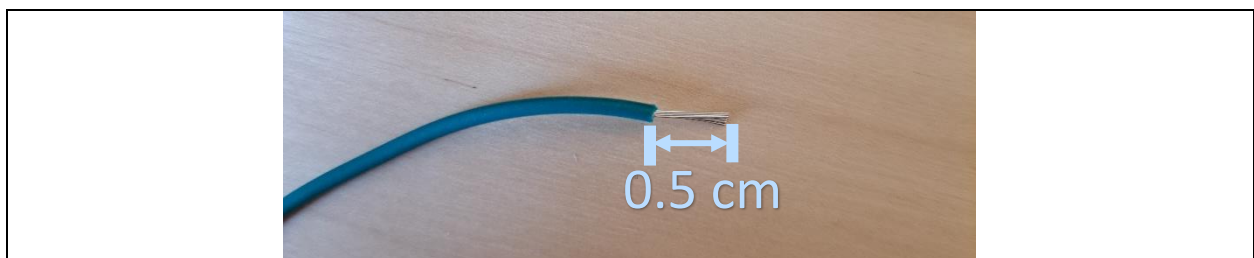
### Step 1

Cut two 8 cm lengths of wire.



### Step 2

Strip 0.5 cm of the insulation off each end of the wires.



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### Step 3

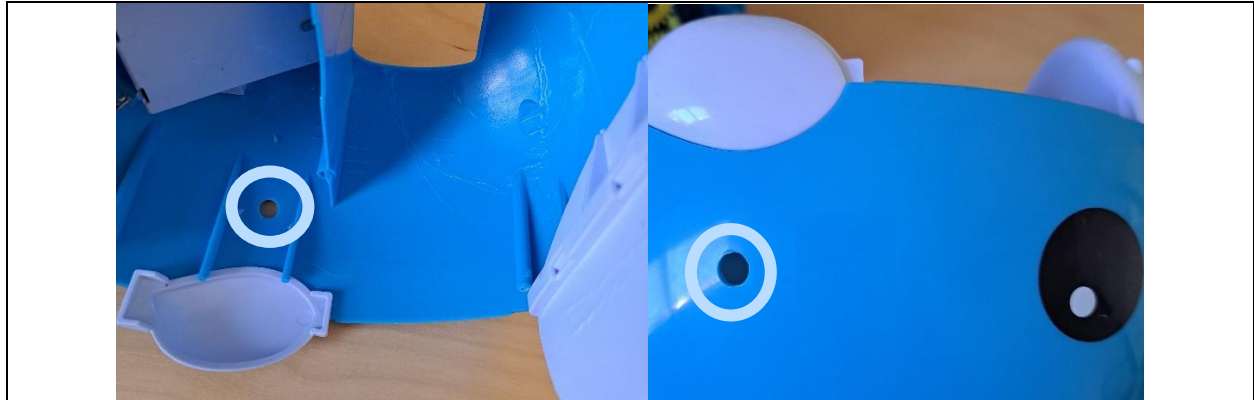
Unscrew the 6 screws in the whale and separate the top and bottom halves. The location of the 6 screws are circled in the picture. Note that the 2 screws in the tail are shorter than the other 4 in the body.



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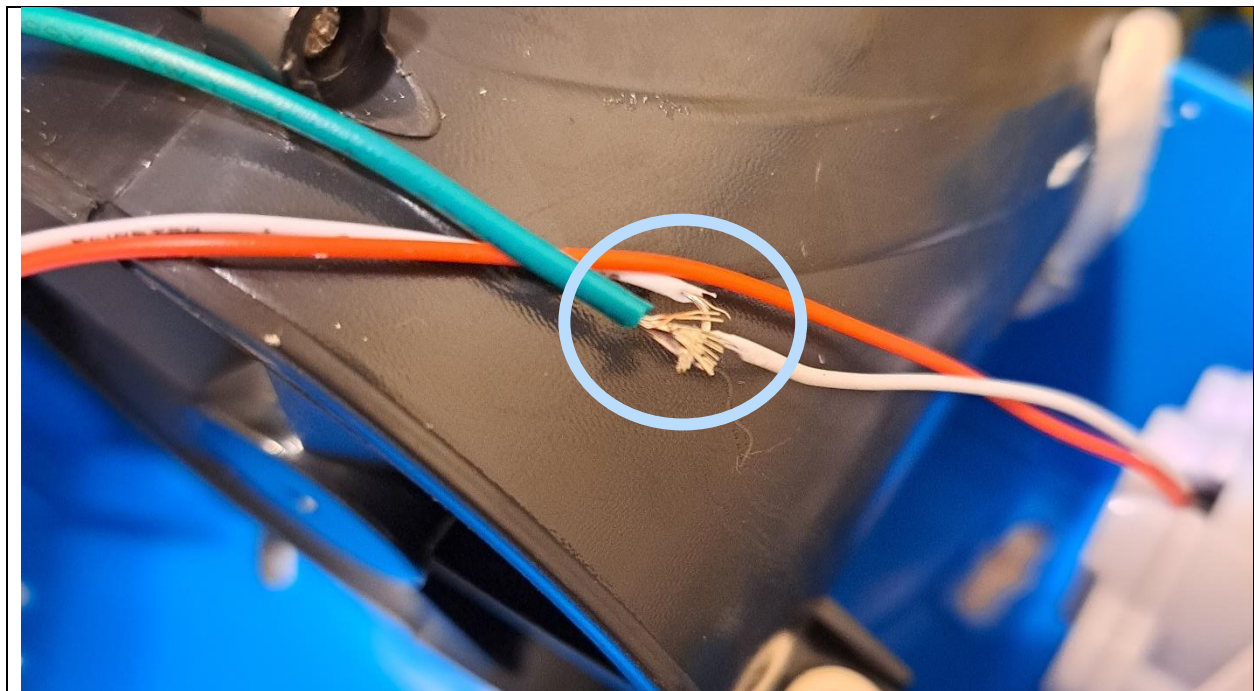
## Step 4

Drill a ¼" hole in the side of the top half of whale.



## Step 5

Strip a small section of insulation off the white wire connected to the toy's switch to expose the metal. Twist an end of one of the 8 cm long wires around the exposed section.

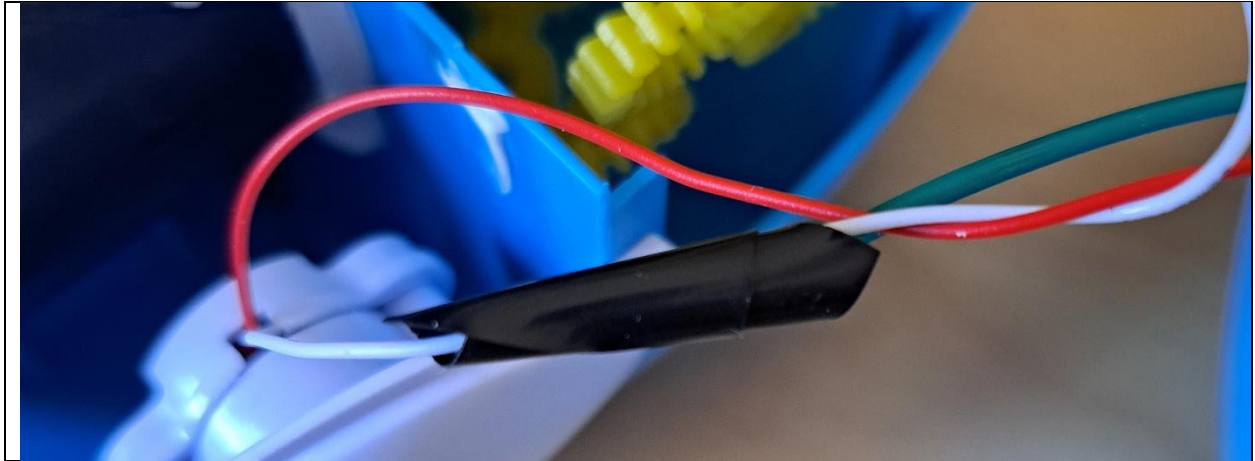




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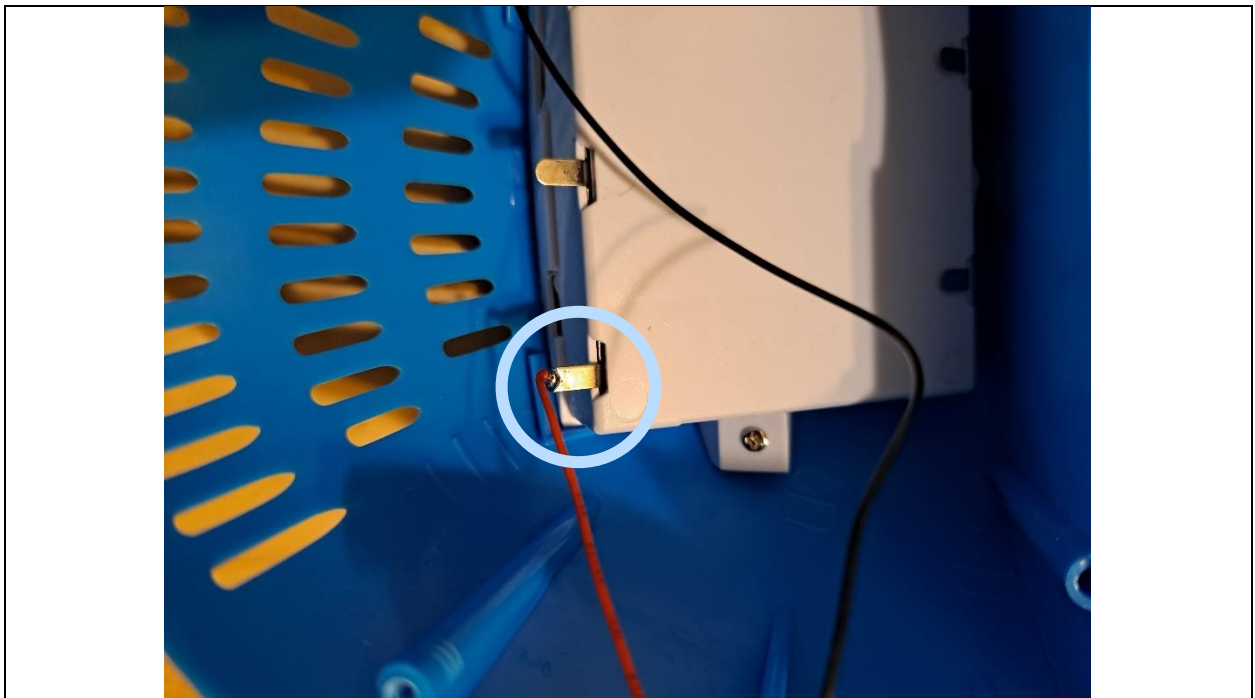
## Step 6

Solder the twisted together wires, then wrap the connection in electrical tape.



## Step 7

Solder the second 8 cm long wire to the battery power connection as shown.

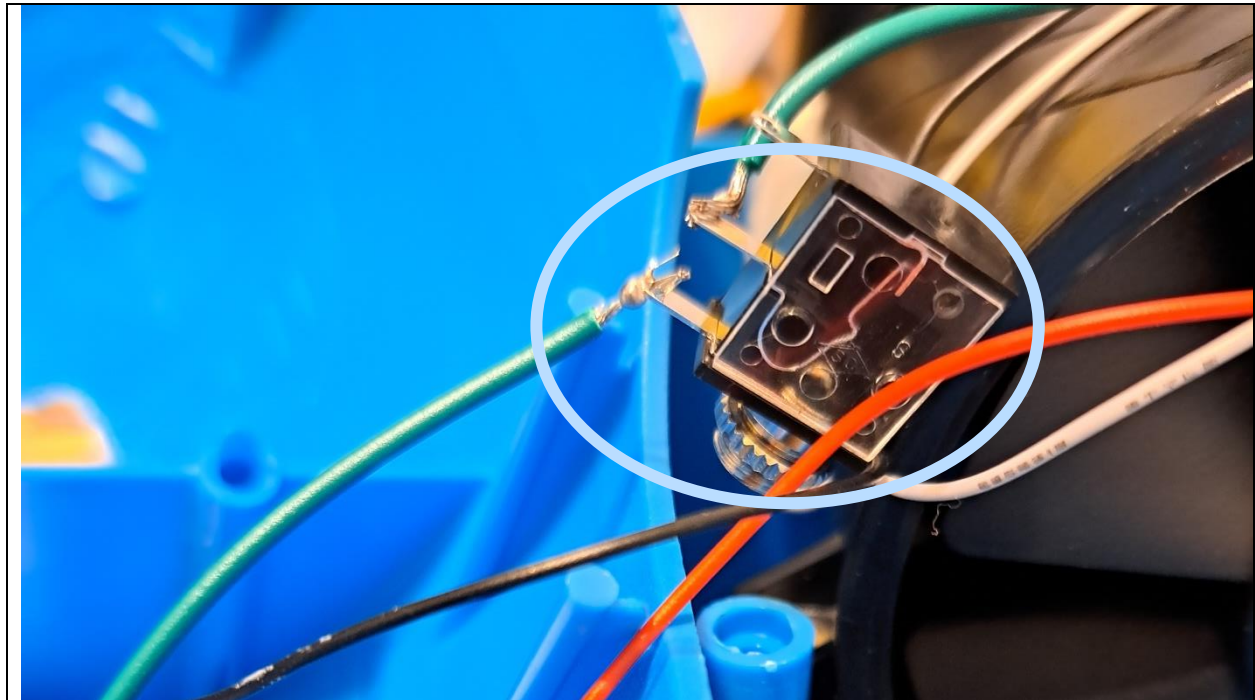


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### Step 8

Solder one of the 8 cm long wires to the first leg of the mono jack, then solder the second wire to the second leg of the mono jack.



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### Step 9

Remove the nut from the mono jack and push the mono jack through the hole from the inside. Reinstall the nut and tighten to secure the mono jack.



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### Step 10

Reassemble the whale and screw it back together with the 6 screws. The two shortest screws go into the tail.



### Step 11

Put the whale and the provided screwdriver back into the original packaging.





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### Testing

Put batteries into the whale. Press the original button to make sure it still works. The bubble wands should rotate when the button is pressed, then stop when it is pressed again. Plug a switch into the mono jack and press and hold the switch. The bubble wands should rotate while the switch is held and stop when it is released. Take the batteries out of the whale after testing so it does not turn on during shipping.