# Required Components

|  |  |  |
| --- | --- | --- |
|  | 1. A black pole with a white background     AI-generated content may be incorrect. | **BOM**   1. PlaySkool Explore ‘N Grow Busy Gears Toy 2. 3.5mm Female Mono Cable |

# Required Tools

* Small Phillips screwdriver
* Drill and 1/8” drill bit
* Wire strippers
* Soldering iron and solder
* File (optional)

# Required Personal Protective Equipment (PPE)

* Safety glasses

# Assembly Instructions

|  |  |
| --- | --- |
| 1. Turn over the Busy Gears and remove all 10 screws.   Remove the blue cover to reveal the inside compartment.  **Note**: The red and black wires connected to the battery pack are easy to accidentally disconnect. Disconnections require re-soldering. |  |
| 1. Remove the two screws holding the circuit board down (highlighted in red).   Flip the circuit board over. |  |
| 1. Remove the silicone button circled in red. You should be able to pull the two silicone legs out of the small holes. |  |
| 1. Strip 2 cm off of the cable using a wire stripper, revealing small wires inside. | Cable with 3.5 mm jack on one end. Other end has two smaller wires revealed. A red arrow shows that the length of these smaller wires is 2 cm.  **2 cm** |
| 1. Strip approximately 0.5cm off of the small wires.   Note: if there are 3 wires, strip all the wires first then twist the ends of the Tip and Ring wires together. | Close up of wire strippers stripping the end of the smaller wire. |
| 1. Prior to soldering to the device, tin your wire. The best way to do this is cover the exposed wire end in solder. |  |
| 1. Solder the two wires of the jack onto the circuit board as shown. Any wire of the two wires will work.   Note: It is easy to melt the board; use caution. |  |
| 1. Drill a small notch along the edge of the casing for the cable. Smooth out with a file if necessary.   Slot the cable into the notch with the female jack sticking out of the toy. |  |
| 1. Plug in an assistive switch and test.  If the toy doesn’t turn on when the switch is activated, open the toy back up and check all the solder connections. |  |