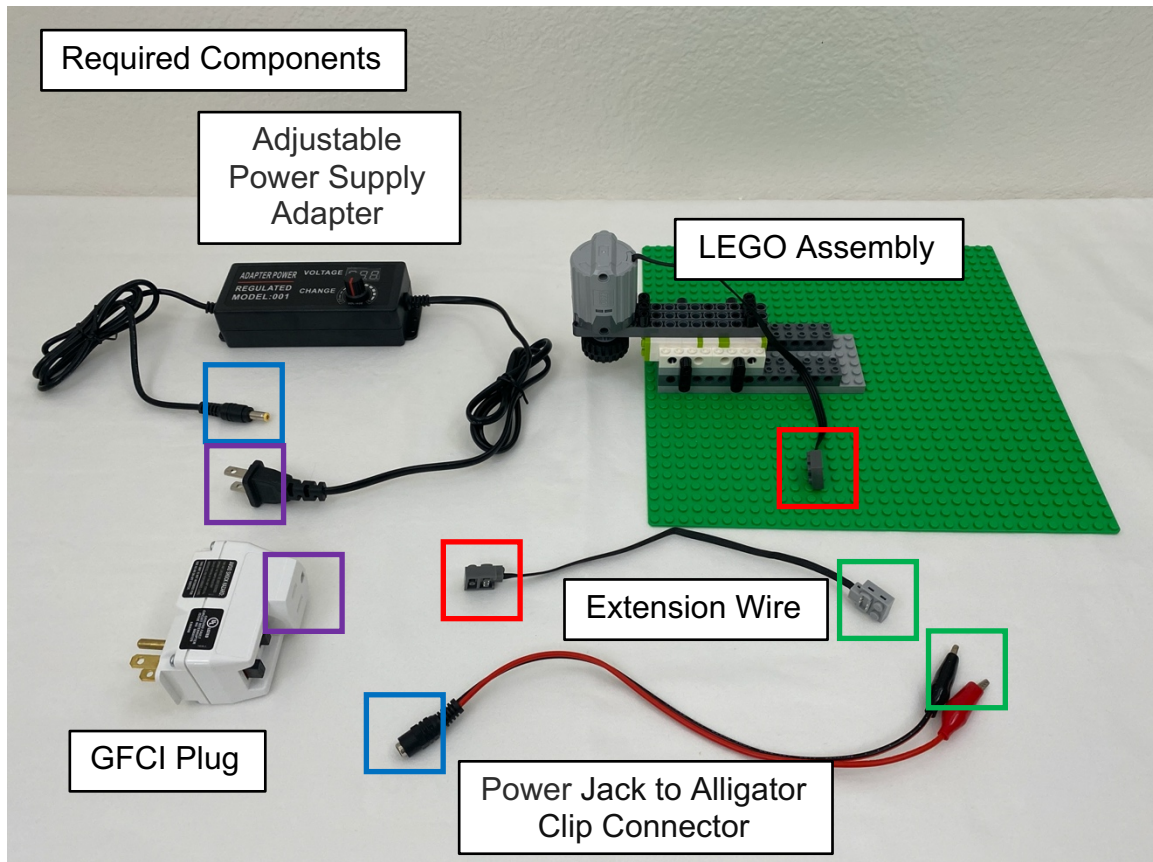


# Operating the External Power Supply

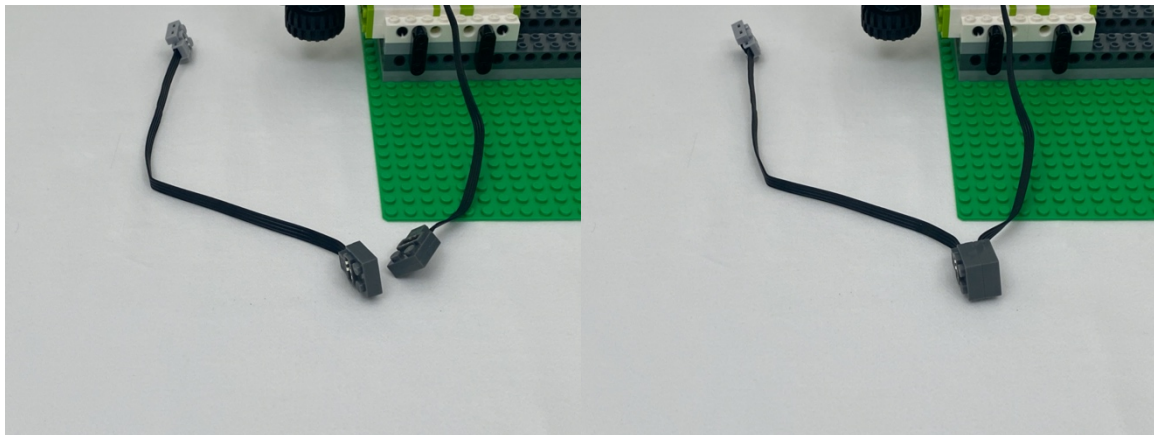
Method developed by Alex Gonzalez (<https://tad.ge-at.iastate.edu/>).

This document describes setting up and use an external power supply. The DIYdynamics Technics Table utilizes LEGO Power Function components powered by batteries to rotate its drive wheel at a fixed rate. Experiments in fluid dynamics can benefit from both 1) setting a lower fixed rate and 2) using a variable rate. The external power supply approach allows the DIYdynamics Technics Table to be powered via a wall outlet. With the help of an adjustable voltage power adapter, the drive wheel's rotation rate can be adjusted.

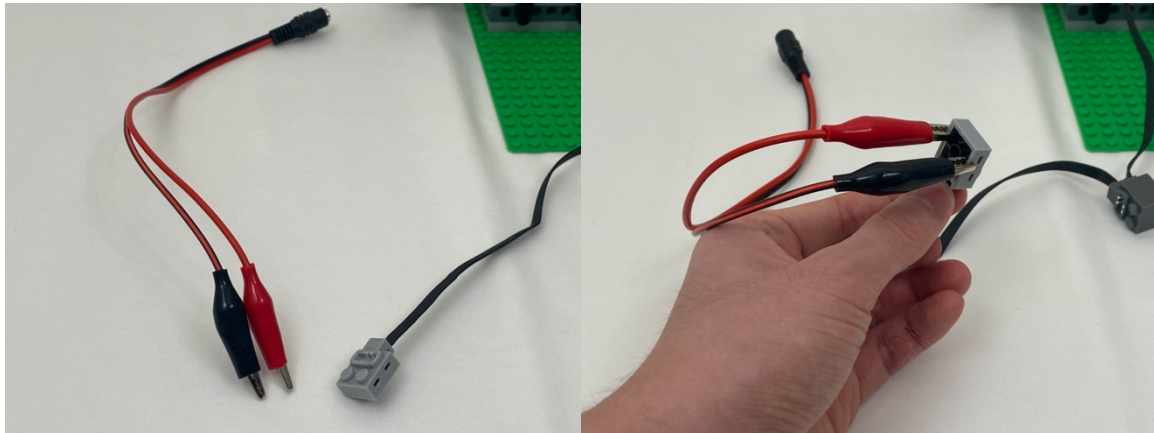




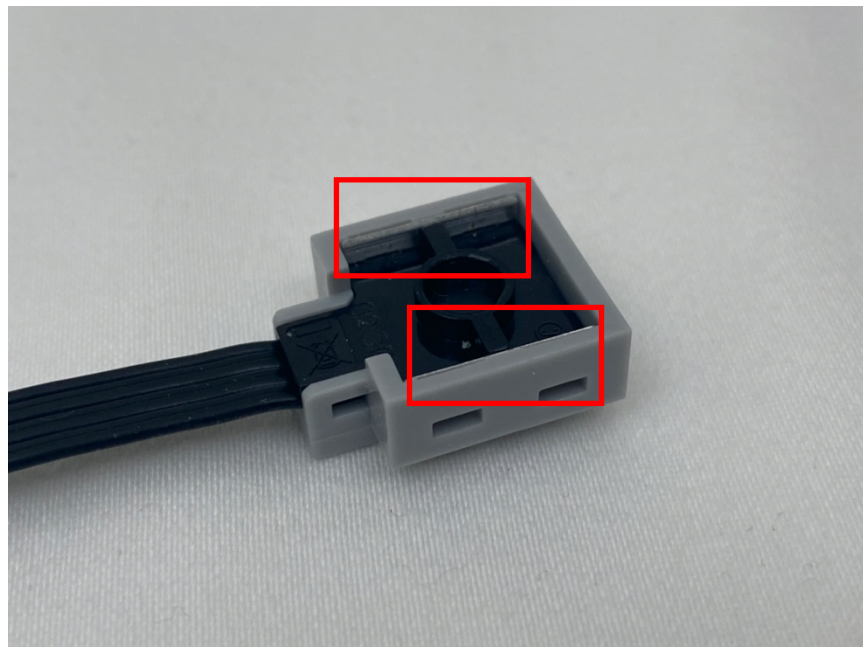
Step 1: Connect the LEGO Assembly's wire to the Extension Wire's dark grey end (highlighted in red).



Step 2: Attach the Power Jack to Alligator Clip Connector's alligator clips to the Extension Wire's light gray end (highlighted in green).

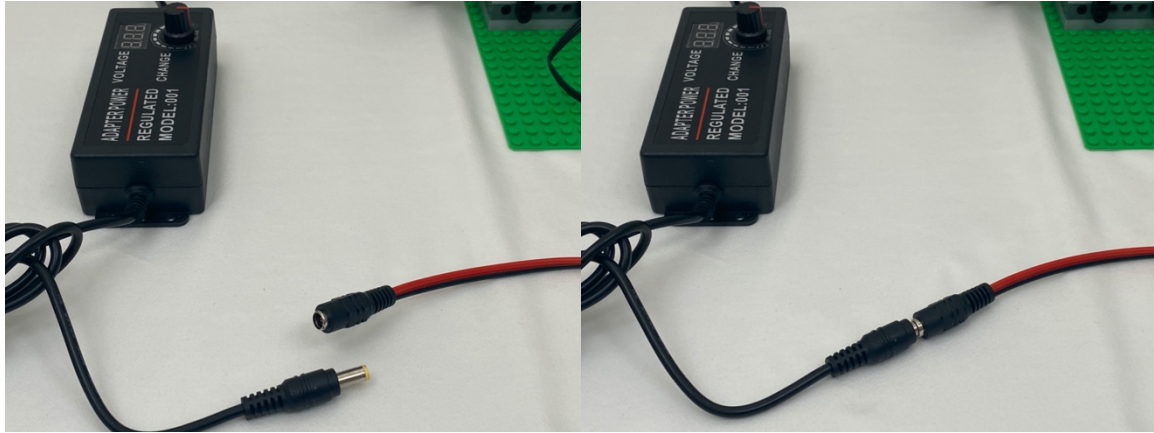


Ensure that the alligator clips contact the light gray end's metallic strips on its interior.



Step 3: Connect the Power Jack to Alligator Clip Connector's power jack to the Adjustable Power Supply Adapter power jack (highlighted in blue).





Step 4: Connect the Adjustable Power Supply Adapter's plug to the GFCI (highlighted in purple). The GFCI halts power in the event of a fault and is a vital safety measure in situations involving water and electricity.



Step 5: Rotate the Adjustable Power Supply Adapter's dial to adjust the voltage provided to the LEGO Assembly's motor. The motor is rated for 9V; proceed above 9V at your own risk.

