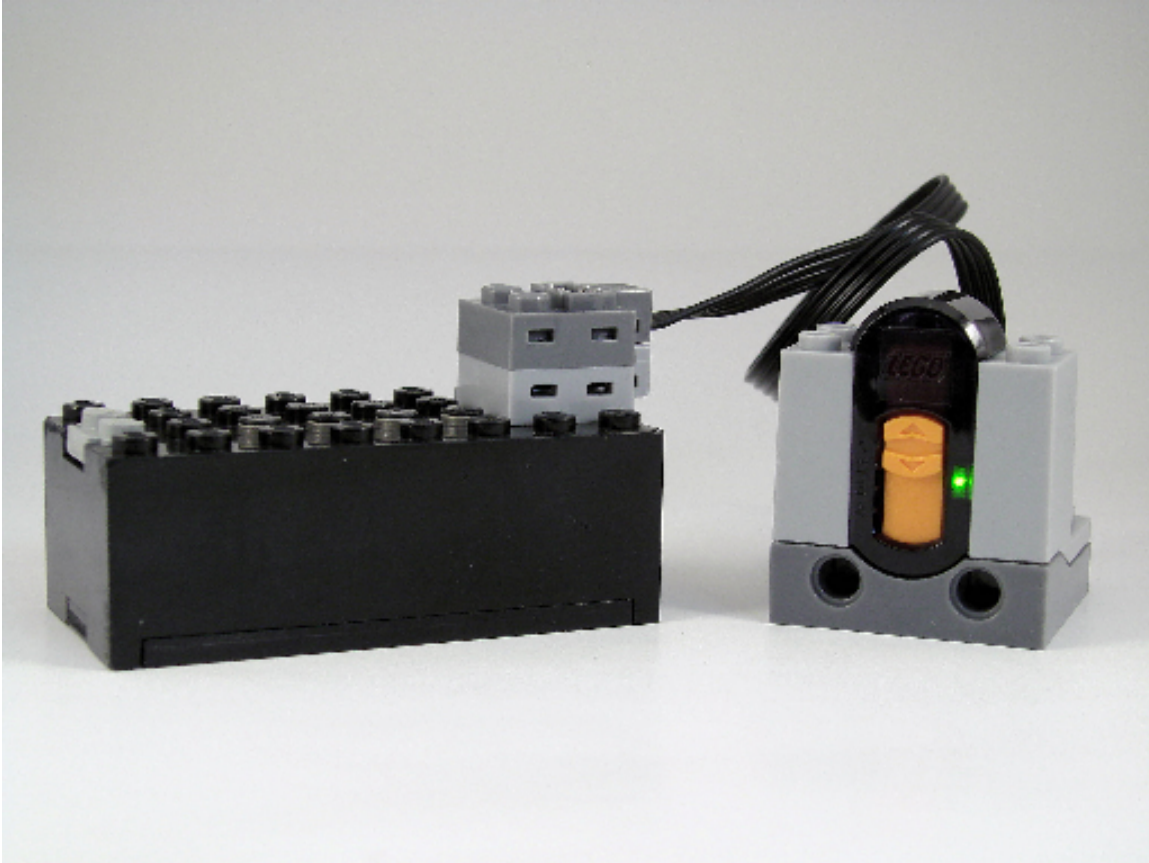


# Brickmodder Labs DIY Tutorial:

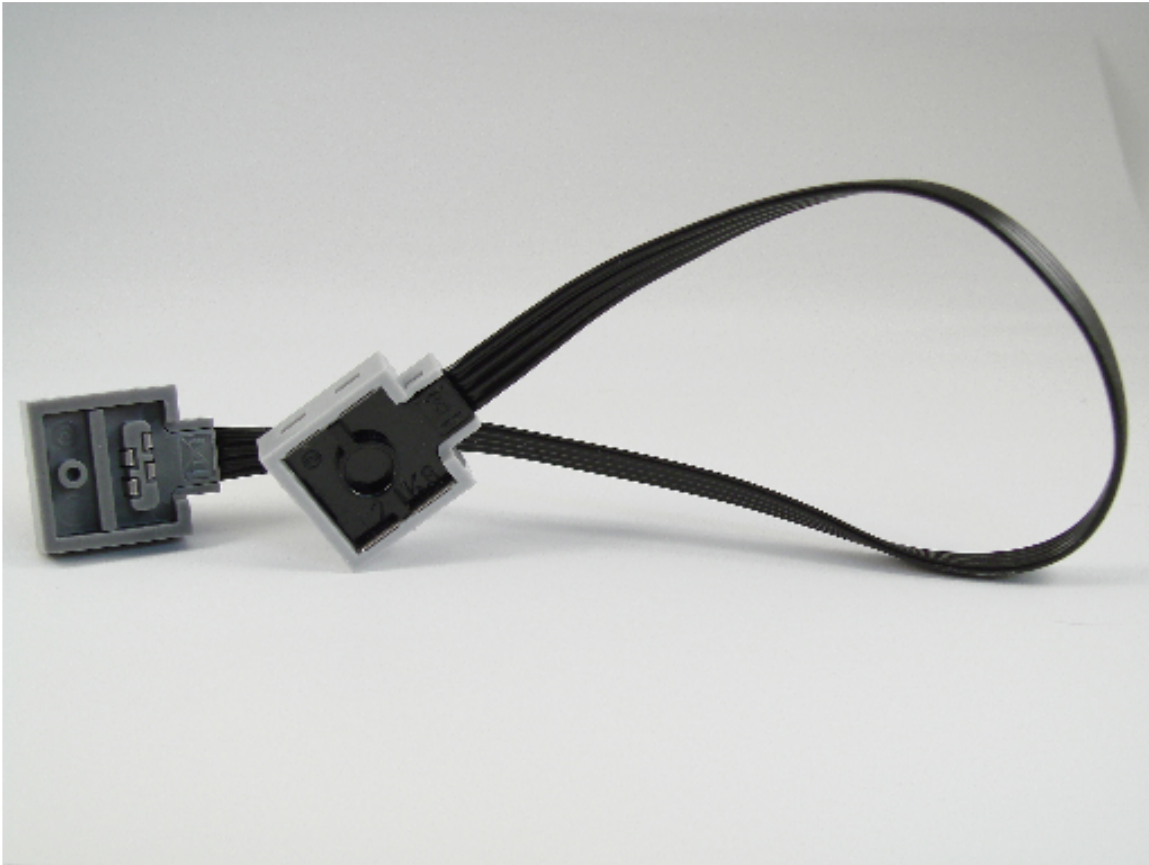
## *How to make a “Legacy” 9v to Power Functions Adapter*



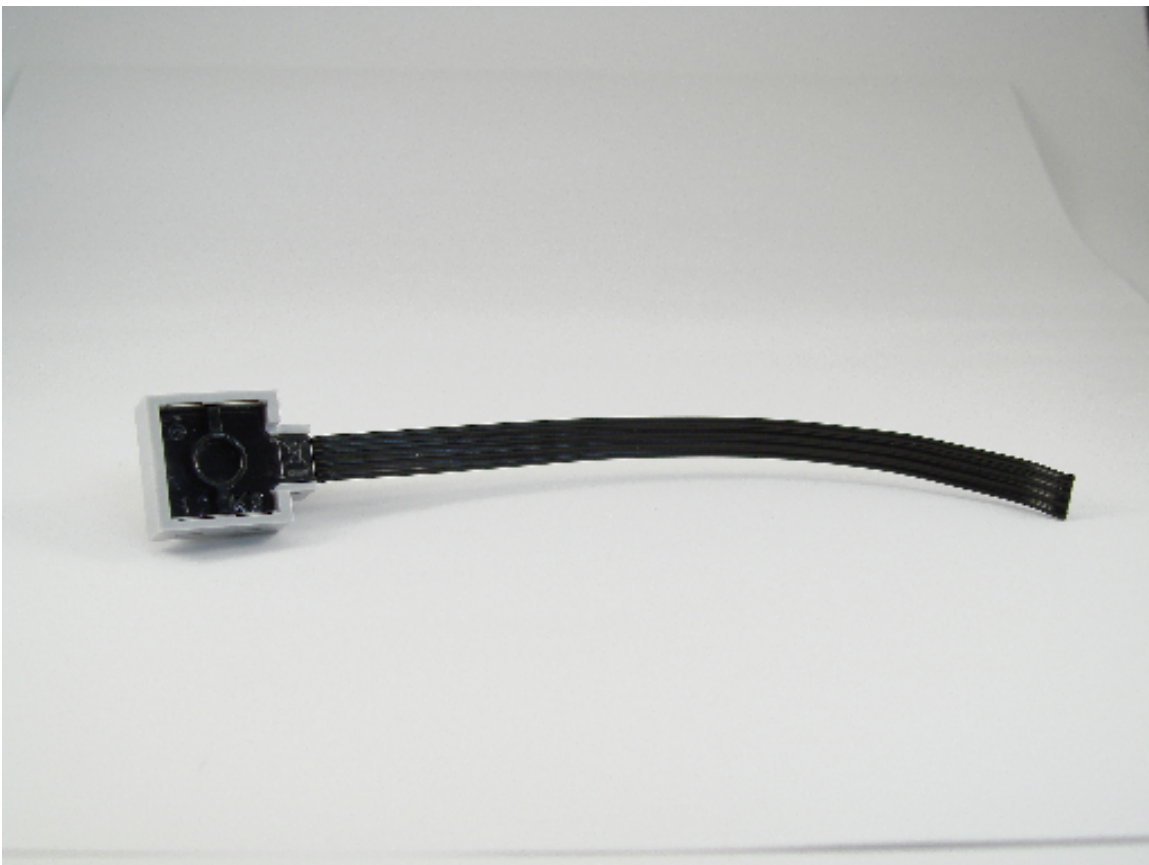
This tutorial will show you how to modify an 8886 Power Functions Extension Wire to allow you to use your 8884 Power Functions IR Receiver with the now “older” style 9v battery box, the 9v train speed regulator, RCX, etc. This could come in very handy in some space-constrained models (1x9v battery box) or in places where mains power was more suitable (train speed regulator).

Some minor tool usage is shown in this tutorial. Small sharp tools can be very dangerous when using them as a prying mechanism as shown here. Please use extreme caution and always wear the proper safety equipment where needed. Use common sense and keep your eyes and fingers from getting cut or gouged!

## Step 1: Modifying the 8886 Power Functions Extension Wire

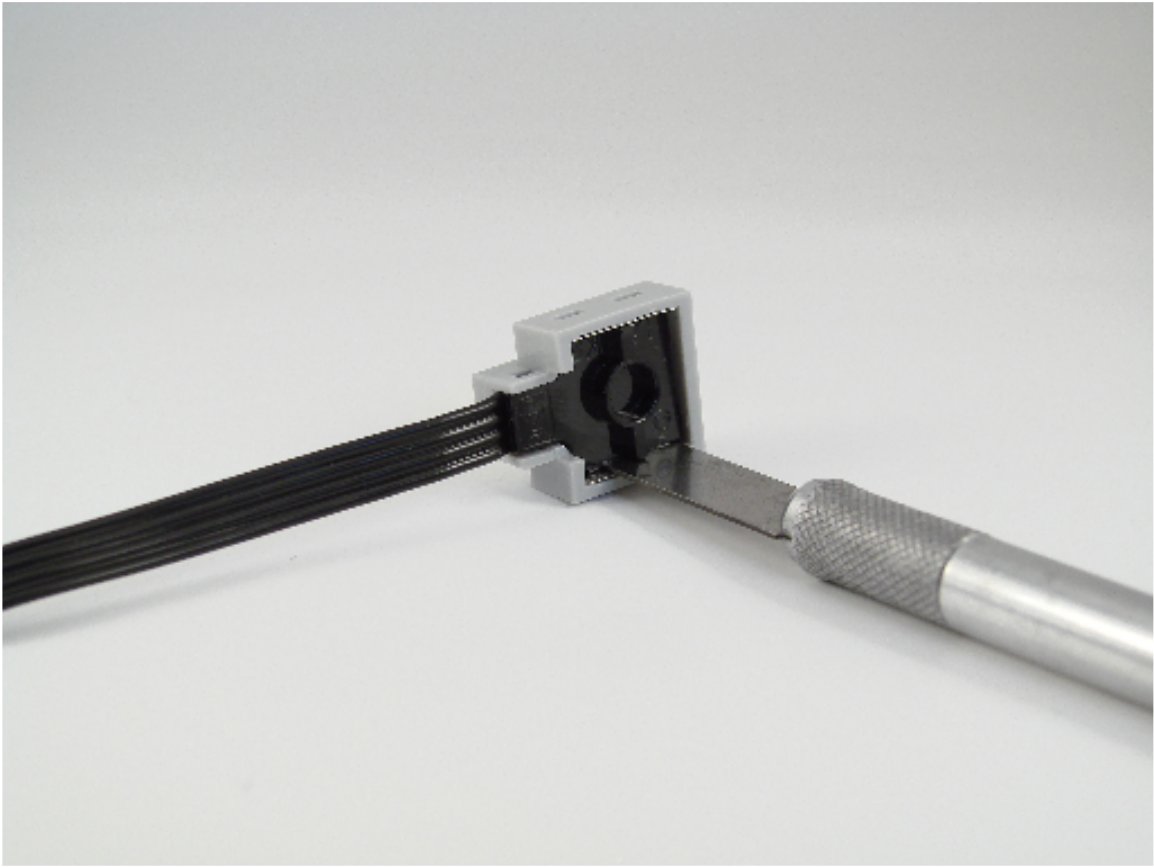


We'll be cutting this perfectly good piece of modern technology, so purists beware!



Cut the cable in half. We'll be using the half with the light gray end.

## Step 2: The Hard Part (Taking the Connector Apart)



Using a small flat tool, pry both sides of the gray housing away from the black insert.



This is what you should end up with after prying the two pieces apart.

### Step 3: Preparing the Wire



Remove the wire from the gray housing and cut a one-inch section from the other end.

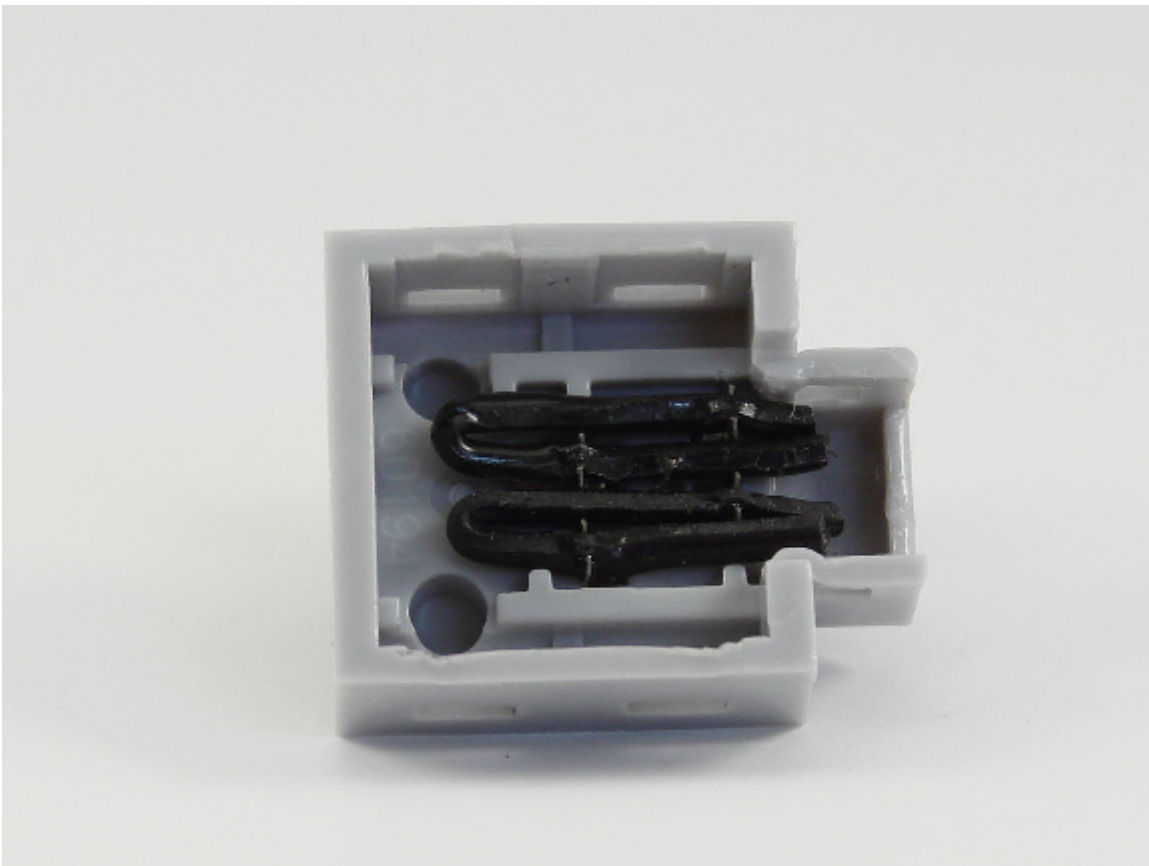


Using a knife, split two of the wires from the four wires in the piece you just cut.

#### Step 4: Inserting the Wire into the Connector

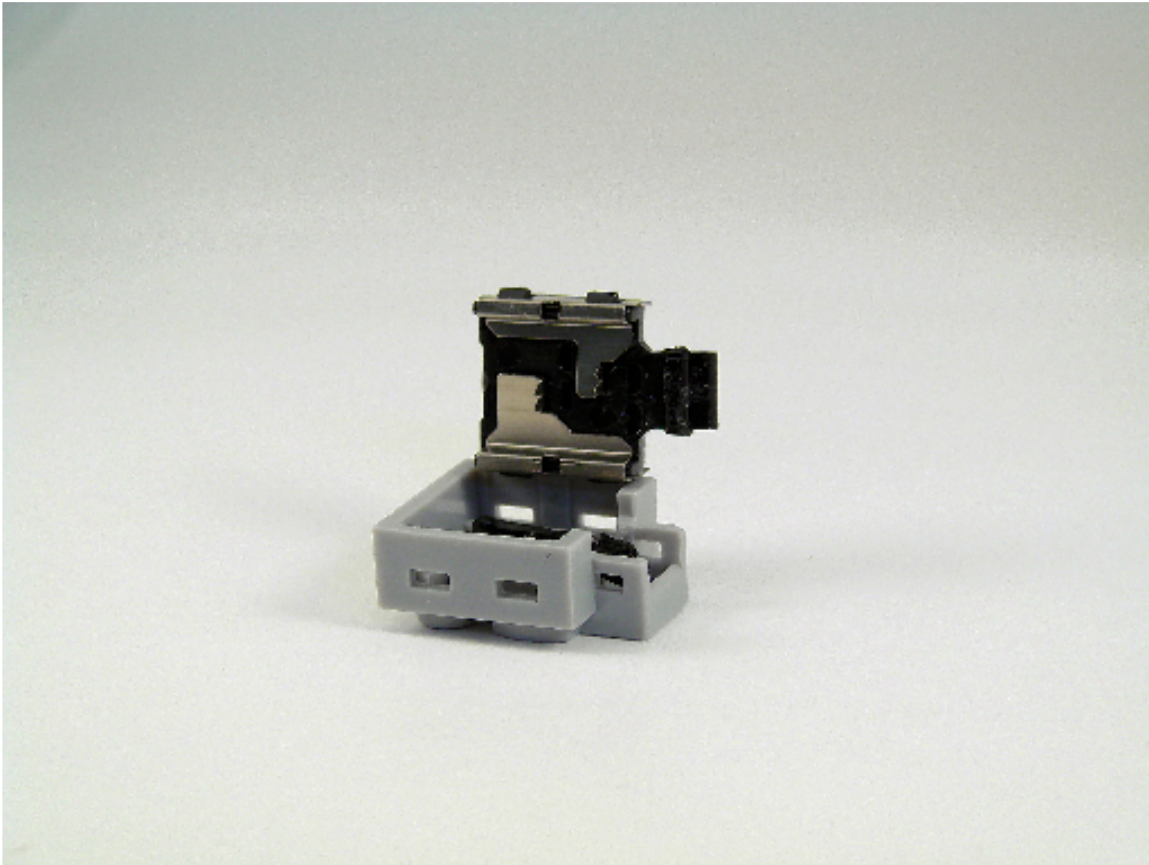


Bend the two pieces of wire in half as shown.



Press the two bent pieces of wire onto the “V” notched contacts making sure the metal contacts pierce the wire jacketing. Insert the wires exactly as shown above.

## Step 5: Putting it Back Together

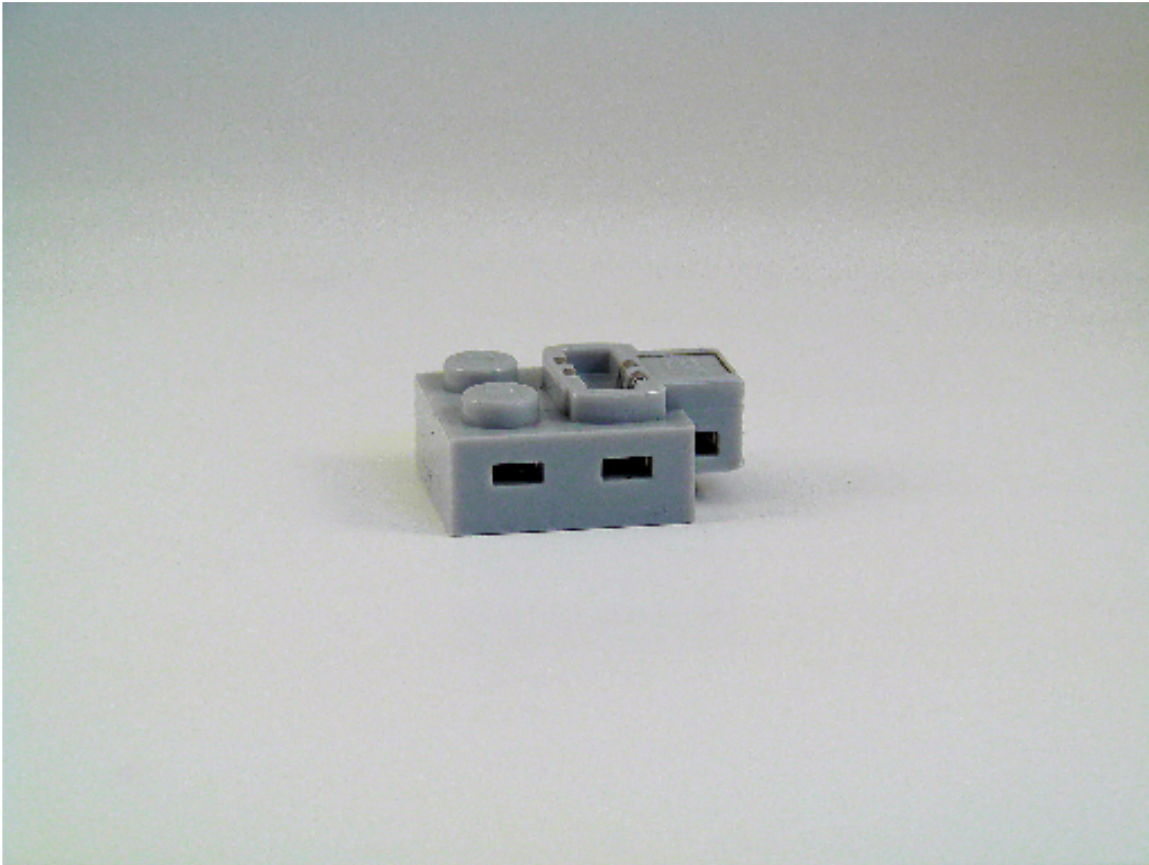


The black insert also has “V” notches that need to pierce the wires.

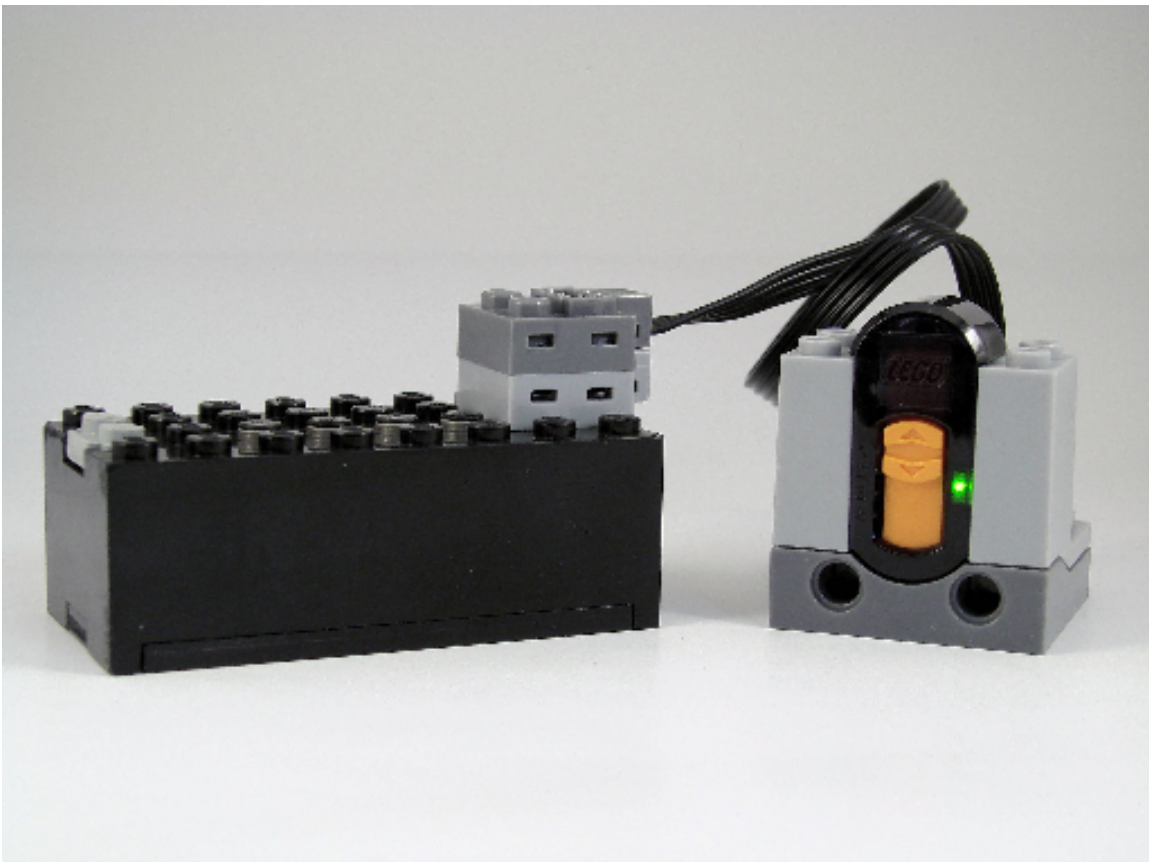


Line up the wires in the gray housing to the notches on the black insert and snap the insert back into place.

## Step 6: Finishing up and Testing



Make sure the tabs on the black insert are snapped into the holes on the gray housing.



Test by connecting the modified piece between a 9v battery box and an 8884 Power Functions IR Receiver and powering the unit up. Green light = good. No light = bad.