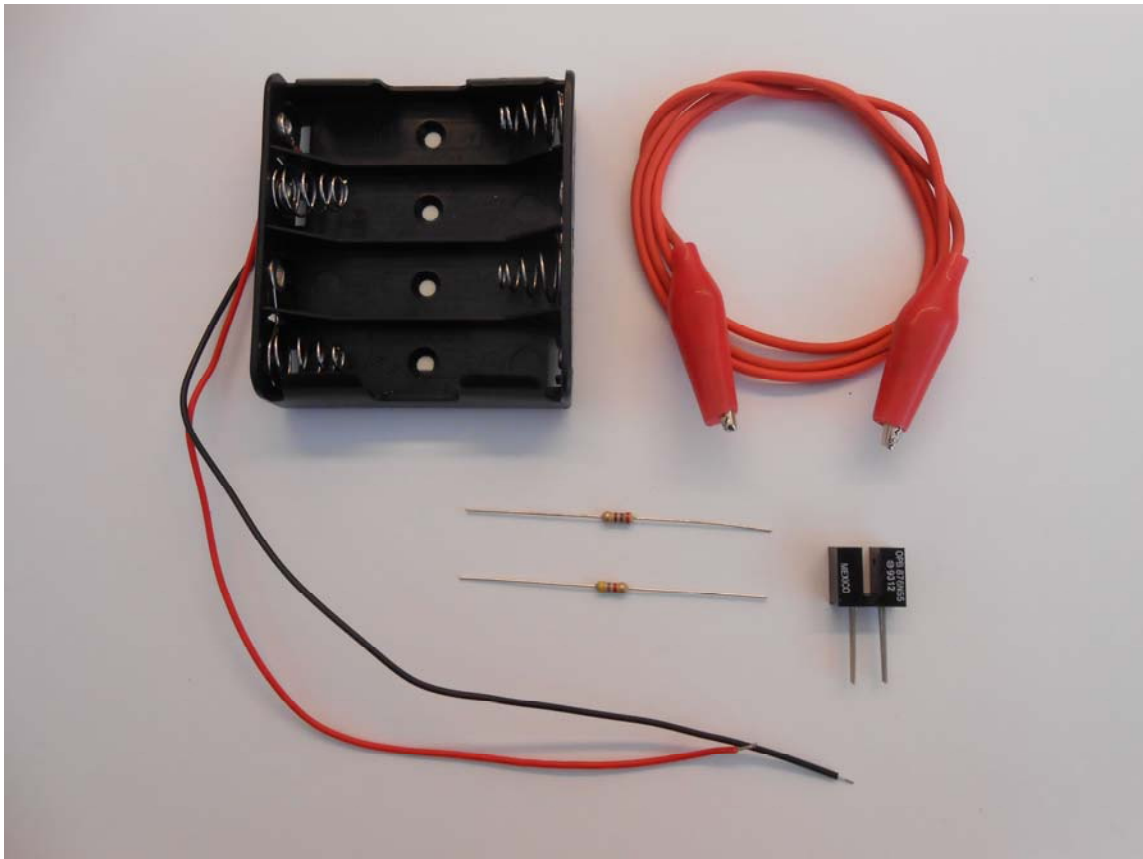


Assembly Instructions for RPM Measurement Attachment #2



RPM Measurement Attachment comes unassembled and contains a slotted optointerrupter, two resistors, AA battery holder, and a test lead with alligator clips at the ends. You will need wire stripper (or just a knife) and some tape. Electrical tape, which is available at most hardware stores for less than a dollar, is advised but duct tape, masking tape or even scotch tape may work too.

We are trying to keep these instructions as simple as possible so we will skip the details on optical interrupter pin layout, resistors coding, principles of operation etc. You may find relevant information on our site in [Motor Speed Measurement](#) and [How It Works: Motor with Optical Control](#).

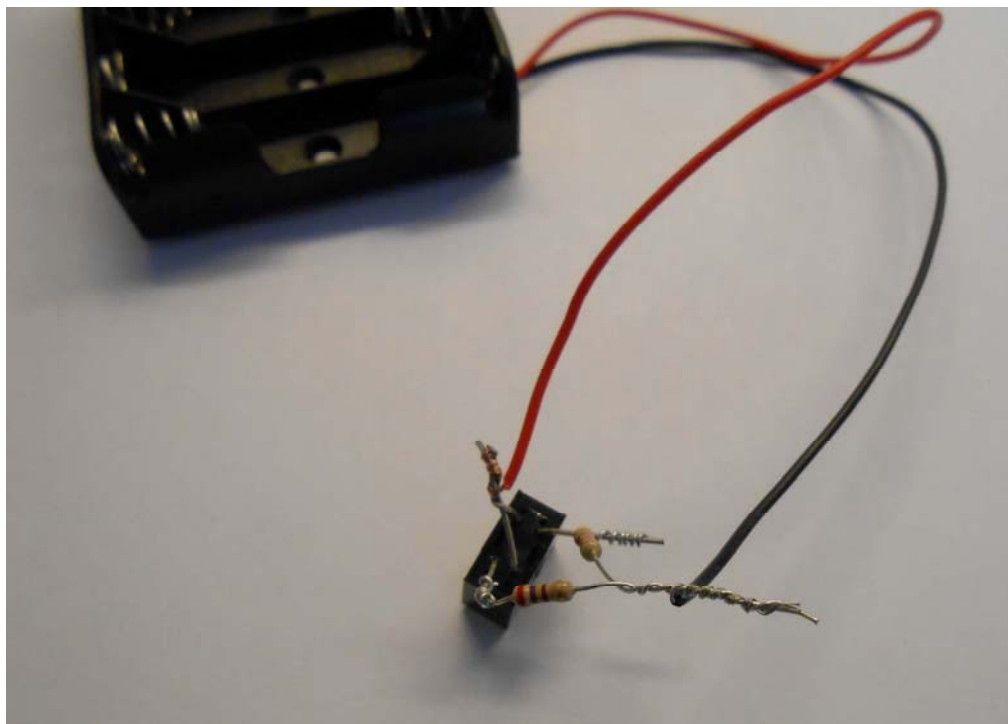
1. Twist the resistors and optointerrupter pins as shown below. Make sure that if you view the optointerrupter from branded (marked) side your connections are identical. Note and match the color bands on the resistors – you cannot mix them.

IMPORTANT: if your connections are not correct the tool will not work and you may even fry the optointerrupter!



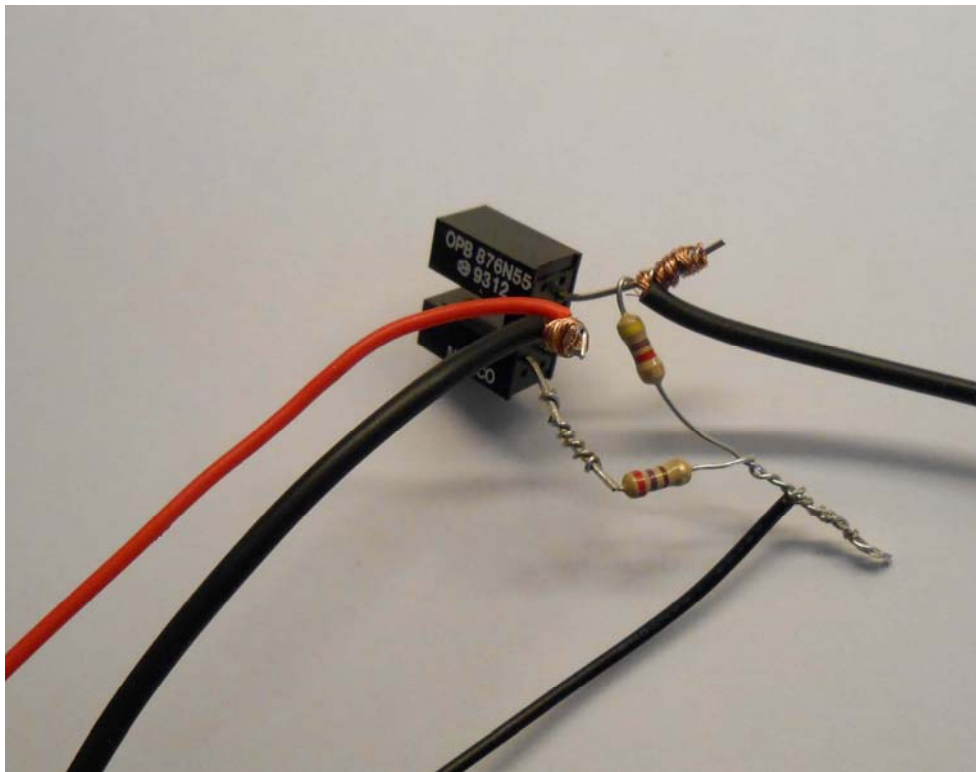
- Strip about 3/4" (20 mm) of plastic insulation from the wire ends of the battery holder using wire stripper or a sharp knife.

Connect battery holder wires as shown. Do not mix positive (red) and negative (black) wires!

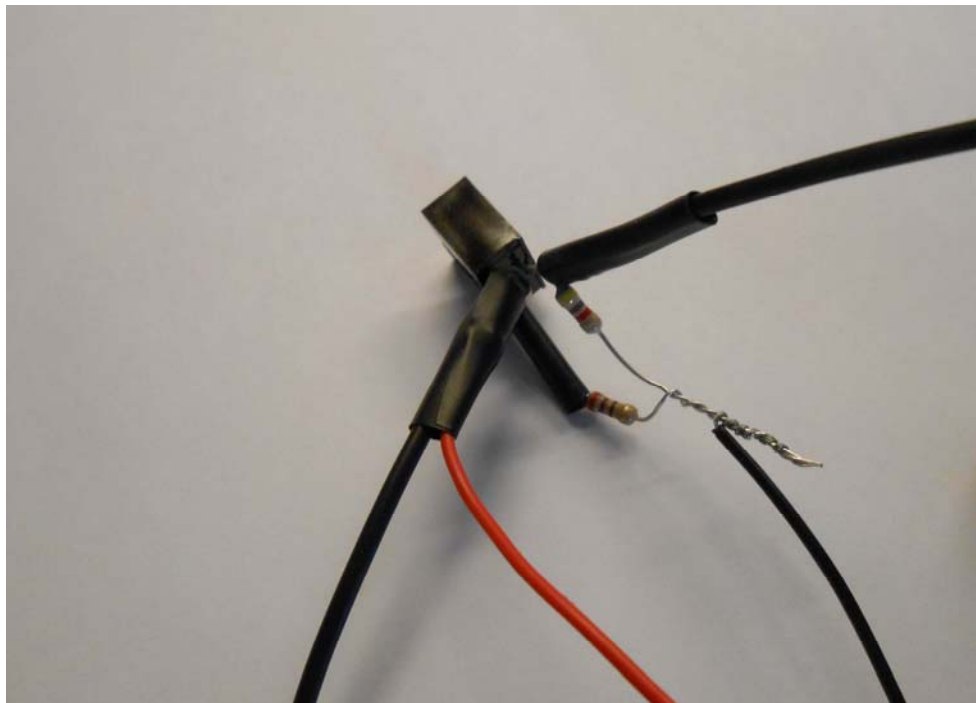


- Cut test lead in half and strip about 3/4" (20 mm) from the ends.

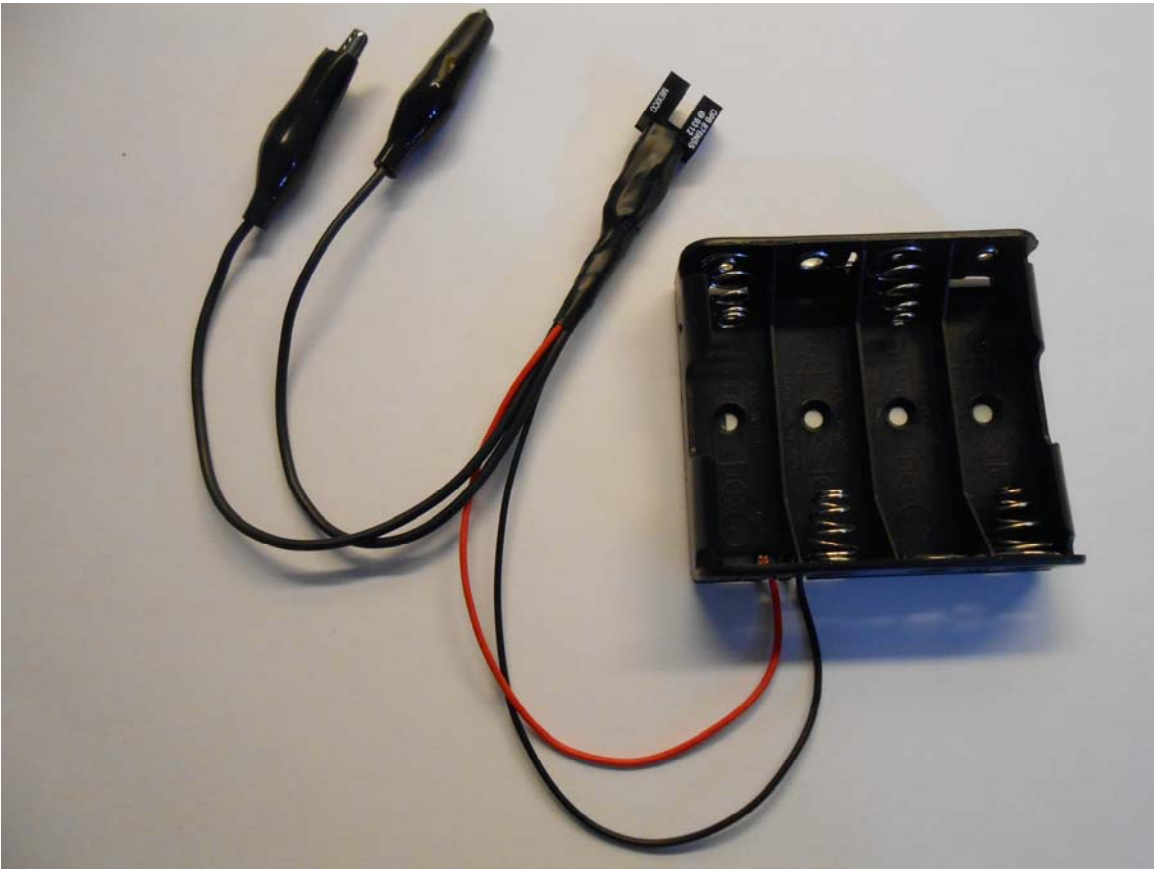
Connect these leads as shown. They are shown as thicker black wires but in your kit the color could be different.



- Use tape as shown to isolate the wires and prevent any short circuit.



5. Wrap everything with the tape. Your RPM Measurement Attachment is ready to use!



Insert four AA batteries and connect the alligator clips to the multimeter set for the frequency measurement. Yes, you need a multimeter that is capable of measuring frequency in Hertz (Hz). Not all the multimeters have this mode; if you did not order one from our site make sure that your device has it.

Please visit our web site at www.simplemotor.com/motor-speed-measurement/ for instructions on how to use this tool for the Kit #15 or any other conventional motor with rotating coil.