

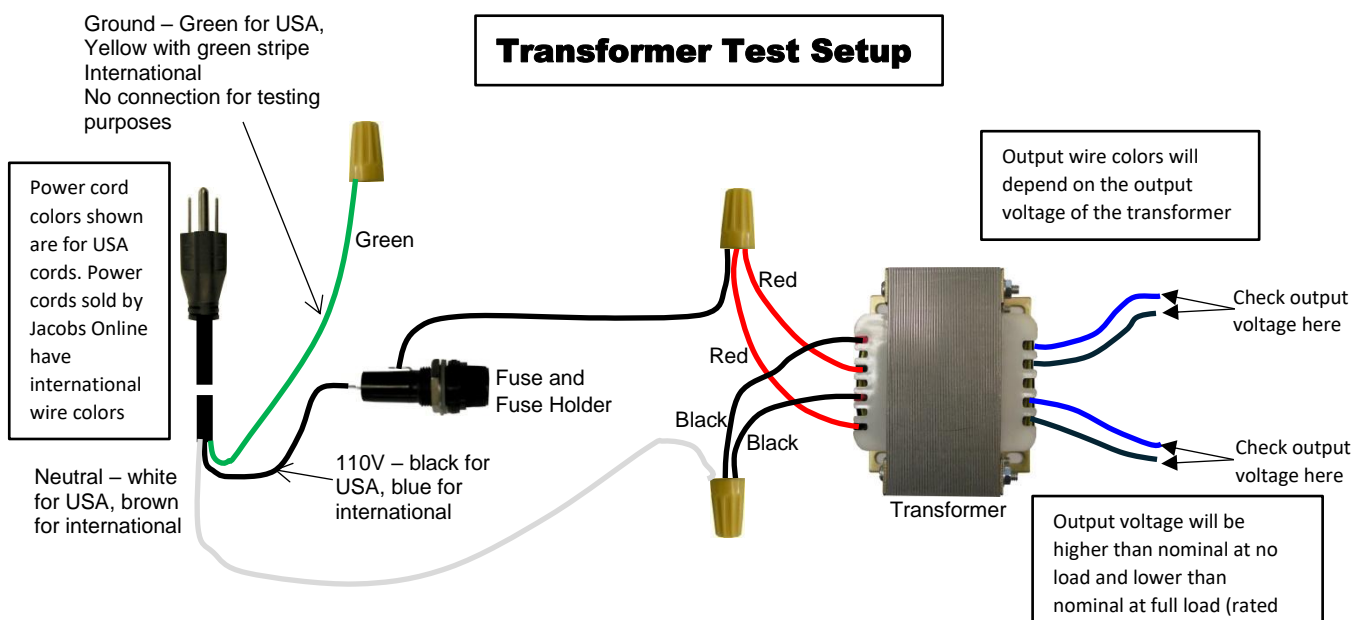
Trouble shooting Transformers or Transformers with Dimmer circuits.

PRELIMINARY

1. Each and every transformer is tested before shipping and is known to be in proper working condition so please do not assume the transformer is bad.
2. If you read BOTH sheets of instructions that came with your transformer, 90% of the time that will answer your questions.

MOST COMMON MISTAKES OR PROBLEMS

1. Multimeter not set to AC voltage – the symbol is a V with a single sideways “S” above it.
2. Dimmer attached to the transformer but either nothing attached to the output or the wrong thing attached to the output.
 - a. Current must be flowing through the entire circuit for the dimmer to work, this requires the proper resistance wire hooked up to the output.
 - i. Do not use light bulbs or other devices.
 - ii. Connect the same Nichrome wire gauge and length you calculated to use with that specific transformer.
 - iii. Do not use a shorter or longer length of Nichrome wire.
 - b. The dimmer does not turn on until the knob is turned about half way on.
 - c. If you use a push on/off dimmer, make sure it is turned more than half way and then try pushing it again.
3. Dead battery in meter or bad connection from meter to probe leads. Try checking AC line voltage to make sure it is reading AC.
4. No power in wall outlet (breaker tripped or bad outlet)
5. Switch in circuit off.
6. Bad connections in circuit
7. Wrong wiring connecting to or from transformer or dimmer
8. NO FUSE and wrong circuit, short circuiting output or too small a resistance on the output resulting in too many amps through transformer “burning up” the transformer (internal wires get too hot so melting the insulation shorting the windings).
9. On larger output wires the solder coated ends cut off and the enamel coating below that not scrapped off so no electrical contact.



TESTING THE TRANSFORMER

1. Remove the transformer completely from your circuit; especially do not have the dimmer in the circuit. Connect your transformer through a fuse and to the power cord as shown in the diagram above.
2. Turn your multimeter to AC voltage, plug in the power cord, and check the voltage where it comes out of the fuse holder and the hot neutral wire of the power cord. If you don't get any voltage, check the fuse and if it is OK, check the outlet for power.
3. When you are certain you have power going into the transformer, check the voltage on the two pairs of output wires.
4. If you have voltage showing at both pairs of output, connect the two center output wires together and check the voltage at the two outside wires and you should get about double the voltage. If you do, then the transformer is good and you have a wiring problem with your circuit, a switch is off, etc.
5. If you get no voltage at the output of the transformer and you are sure you have voltage at the input, check to make sure you have good electrical connections at all the ends of the transformer wires. Larger transformer output wires are tinned with solder but if those have been cut off, you must scrape off the enamel coating on the wires to make electrical contact again.
6. If you still have problems, have another person with good electrical knowledge check the transformer and your electrical circuit as above.

If you have wired up the transformer wrong or powered it up without a proper size fuse in the circuit and the transformer has gotten very hot and/or if you smell a burned smell in the transformer, you have likely ruined it and it will not be replaced.

You can return it to Jacobs Online for testing at your expense if you choose but because they are fully tested before being shipped, there are only two possibilities, 1) they are still in good working condition and you have not hooked them up right or have not tested them correctly, in which case you will also have to pay for return postage to get it back, or 2) you have damaged the transformer through incorrect usage most likely without a proper size fuse in the correct place in the circuit to protect the transformer. In that case it will be disposed of and there will be no compensation.

We do not refund returned transformers that have been hooked up since we do not sell used merchandise. You would not want to buy something new and find out it was actually used either.