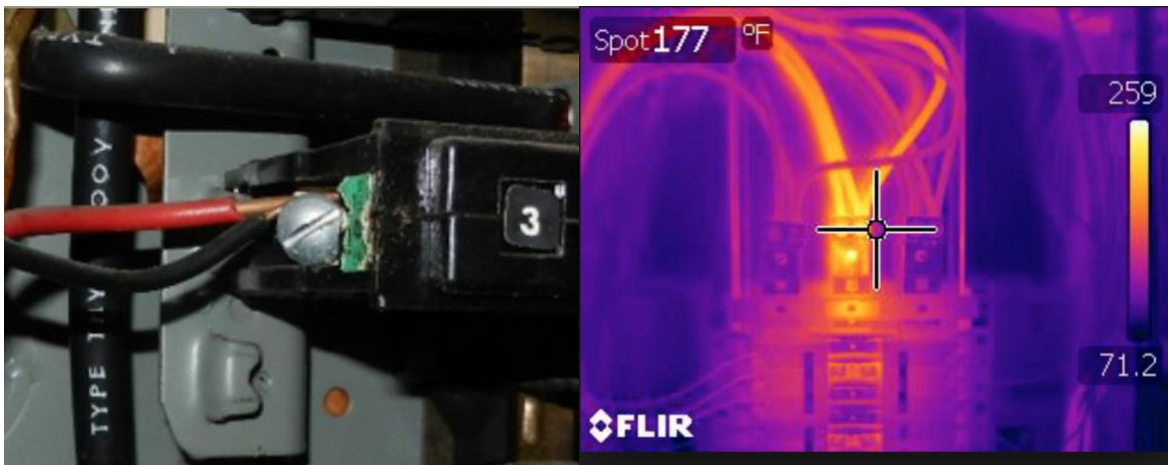


Double Tapped Breaker by Finn Home Inspectors

A double tapped breaker is a breaker with two wires off one lug/screw. Most breakers are not rated for two wires. If two wires are attached, it is a defect and could cause a fire. Some of the Square-D and Cutler Hammer breakers are rated for two wires. However, even if rated for two wires, the wires must be installed correctly (i.e. never on the same side of the lug/screw).

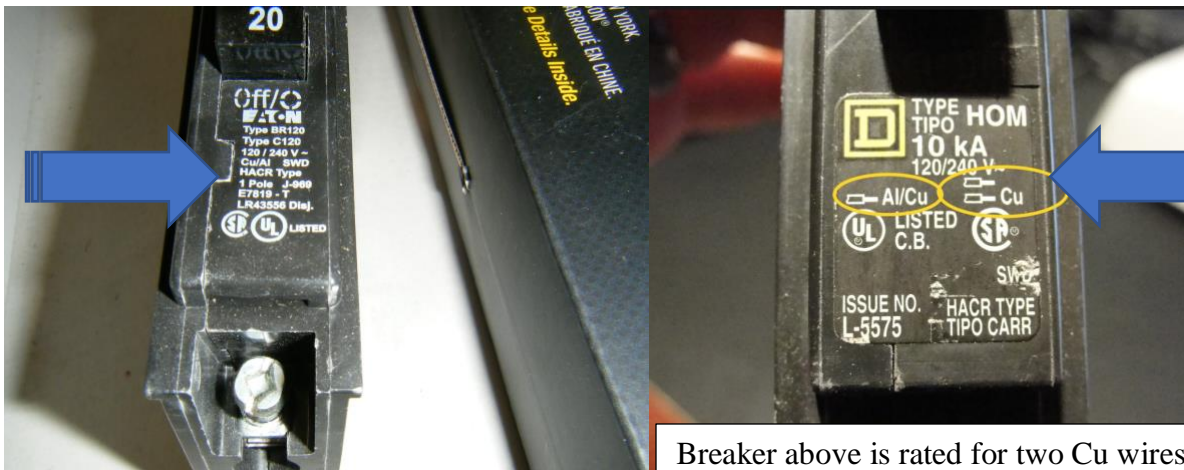
An improper electrical connection is a fire hazard. It can create an overload which causes an elevated temperature and possible fire. The Infrared photo shows an improper, overheated, double tap with the infrared measured temperature of 259 degrees F., which is much too high and can lead to a fire.

If there is evidence of an overheated wire, usually seen as melted insulation on the wire, an electrician must evaluate and determine why the overheating occurred. Often times, overheating is caused by a poor connection. If the connection is at a circuit breaker the breaker **MUST** be replaced no matter what reason for the overheating.



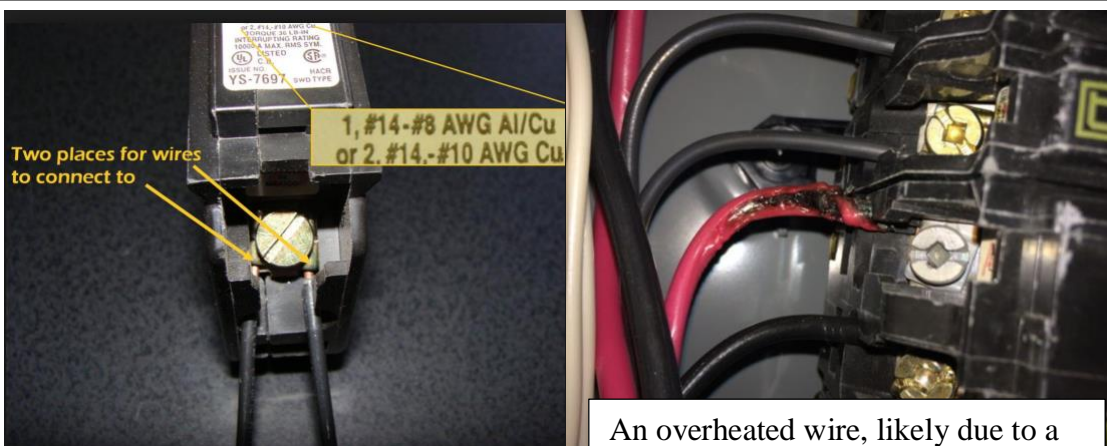
Above is a double tapped breaker, two wires off one lug/screw. Even if rated for two wires they can never be on the same side of the screw.

Above is an Infrared photo showing an overheated connection likely due to the double tap. The temperature is 259 degree F.



Breaker above only rated for one wire:
Note labeling "1-Pole" (only on wire)

Breaker above is rated for two Cu wires
At arrow, see label--2 wires next to Cu
and -1 wire to Al/Cu(Aluminum/Copper).



A properly tapped Square D breaker

An overheated wire, likely due to a loose connection. Note the color change of the breaker screw.
Breaker must be replaced.