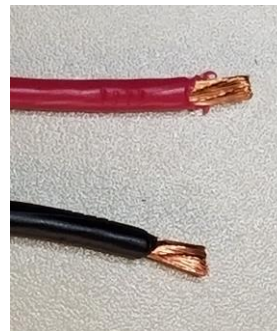


Modifications Required to Solder Cables to 80W Solar Panels

Background: Tycon's standard design is to use a no solder approach to solar panel connections but sometimes different solar panels will need to have the wires soldered to the junction box during installation. This will require that the customer cut off the existing connectors, strip the insulation from the wire and solder the wires inside the solar panel junction box.

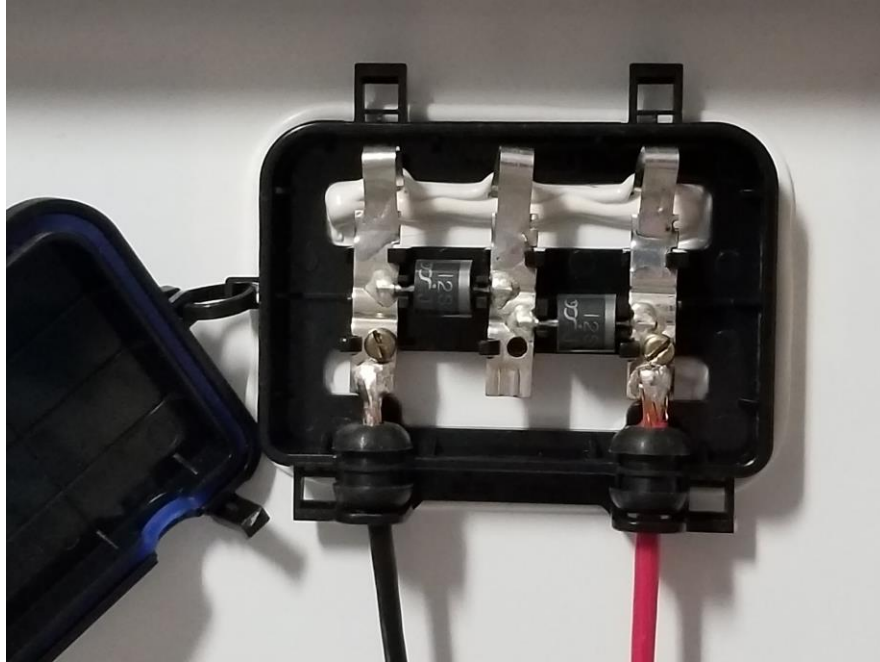
1. The cables supplied with Tycon 80W panels typically have a modified spade lug on the end of the wire. This modified spade lug is meant to attach to a screw terminal inside the solar panel junction box.
2. If the screw terminal does not exist inside the solar panel junction box, the cable will need to be modified as follows:
 - a. Cut off the existing modified spade lug
 - b. Strip the insulation from the wire (approx. ¼" stripped)



- c. Pre-tin the bare wire using a solder iron and flux core solder. This will make it easier to solder to the junction box later.
3. Open the junction box on the backside of the solar panel using a small flat blade screwdriver inserted in the locking tab slots and gently pry open.



4. Inside the solar panel junction box there are solder tabs that can be used to solder the cables. Be sure to observe the proper polarity. The polarity ("+" and "-") are molded in the junction box cover or inside the junction box.
5. Pre-tin the solder tabs using a soldering iron and flux core solder. This will make it easier to solder the cables and also will make a more reliable final solder joint.
6. Solder the wires to the junction box solder tabs.



7. Replace the cover and snap into place

