

AN-1 Tips for Splicing Wires

BEST - Twist and solder wires together. Slide a piece of heat shrink tube over the exposed wires after being soldered together. The heat shrink tube should extend about 1/4" or more, past each end of the exposed wire so it will be secured to the insulation of the un-stripped portion of the wire. Use a heat shrink gun to shrink the tubing around the spliced connection.

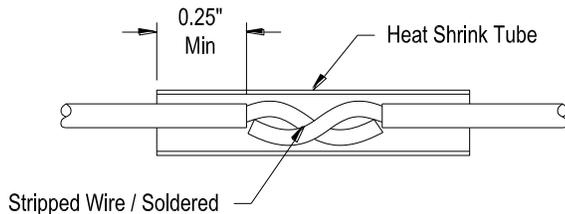


Figure 1.

OKAY – Use an industry standard electrical in-line splice connector or butt splice connector. An in-line splice connector does not require the wires to be exposed.

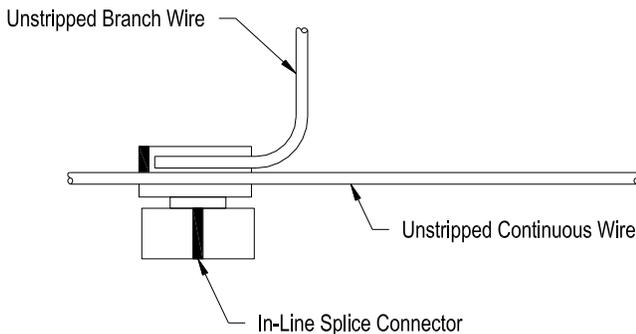


Figure 2.A

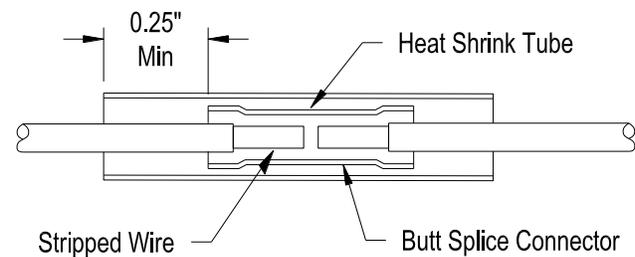


Figure 2.B

For butt splice connectors, expose one end of the wire by stripping off about 3/16" of insulation. Test fit the exposed wire into one end of the butt splice – making sure the wire goes in far enough for crimping and yet not allowing any exposed wire to extend beyond the butt connector. Crimp the wire in one end of the butt connector and repeat the process on the other end. Slide a piece of heat shrink tubing over the butt connector. The heat shrink tube should extend about 1/4" past each end of the exposed wire so it will be secured to the insulation of the un-stripped portion of the wire. Use a heat shrink gun to shrink the tubing around the spliced connection.

UNACCEPTABLE – Twisting the wires together and wrapping the splice with electrical tape for a permanent solution should never be standard practice. The electrical tape is not a good solution for providing strength to the joint. Vibration and the environment could cause the electrical tape to weaken and allow the twisted wires to disconnect or pull apart and potentially cause a short.



Figure 3