**Standard Work Instruction: 635160 Assembly Rev: B**

**PPE Needed:**

Gloves may be worn if the heat from the solder pot becomes uncomfortable.

**Material Needed:**

941728- Cable Shielded Wire **Location: Work Station** Qty: 1 Length: 36.5 inches

941730- Plug Molex 3 Pin **Location: Work Table** Qty: 1

941732- Pin Female Molex **Location: Work Table** Qty: 3

941736- Heat Shrink **Location: Work Table** Qty: 2 Length: 3 inches & 1 inch

928526- Heat Shrink **Location: Work Table** Qty: 1 Length: 2 inches

928524- 5K resistor **Location: Work Table** Qty: 1

**Tools needed:**

Molex contact crimper

Heat gun

Wire stripper (Klein Tools)

Solder station

Side cutters

Ruler

Permanent/Paint marker

Wire cutters

Solder pot

**NOTE: Item numbers reference the DWG bill of material.**

**Assembly Steps:**

**1.)** Measure and cut 36.5 inches of cable shielded wire (941728 Item: 10).

**2.)** On one end of the wire measure and strip 3.25 inches of the outer jacket. Remove and discard any filler material using side cutters.

**3.)** Trim the black conductor wire to 1 1/8 inches in length and then strip .25 inches of insulation from the wire.

**4.)** Trim one end of the resistor 928524 (Item: 50) to 1 inch in length. **See (Note A)**

**5.)** Solder the 1 inch end of the resistor to the trimmed black wire. Once soldered, trim the ends of the conductor wires and the resistor so they are of equal length.

**6.)** Install heat shrink (928526 Item: 60) onto the resistor/black wire. Be certain to cover the solder joint and the resistor. Apply heat to shrink.

**7.)** Use the Molex contact crimper to crimp (941732 Item: 30) to each wire including the resistor. Install into Molex 3 Pin connector (941730 Item: 20) according to DWG. 635160.

**8.)** Install the 3 inch piece of heat shrink (941736 Item: 40) over the cable jacket strip and with the resistor nearest the center of the heat shrink as possible. Apply heat to shrink. Apply enough heat for adhesive to protrude slightly from each end.

**9.)** Strip 2.25 inches of the outer jacket from the opposite end of the cable. Remove and discard any filler material using the side cutters.

**10.)** Strip .25 inches of insulation from each of the conductor wires.

**11.)** Install the 1 inch piece of 941736 (Item: 40) onto the cable. Do not apply heat.

**12.)** Tin the stripped wire ends in the solder pot. Be certain to put flux on each wire before attempting to tin.

**13.)** Move the heat shrink to cover the cable jacket strip and the conductor wires. Apply enough heat for adhesive to protrude slightly from each end.

**Note A:** Trimming the resistor keeps it away from the contact crimp area of the stripped wire ends.

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**Revision Record**

Rev: -

Date First Issued: 2018-JUL-25

Rev: A

Date Revised: 2018-JUL-30

Change log: Revised Step 5 for clarity.

**Rev: B**

**Date Revised 2018-AUG-08**

**Change log: Added location to all items in the Material Needed list.**