

Standard Work Instruction: 635160 Assembly Rev: C

PPE Needed:

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

Material Needed:

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| 941728- Cable Shielded Wire | Location: Workstation | Qty: 1 | Length: 36.5 inches (0.93 m) |
| 941730- Plug Molex 3 Pin | Location: Worktable | Qty: 1 | |
| 941732- Pin Female Molex | Location: Worktable | Qty: 3 | |
| 941736- Heat Shrink | Location: Worktable | Qty: 2 | Length: 3 inches (ca. 8 cm) & 1 inch (2.54 cm) |
| 928526- Heat Shrink | Location: Worktable | Qty: 1 | Length: 2 inches (ca. 5 cm) |
| 928524- 5K resistor | Location: Worktable | 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 (ca. 93 centimeters) of cable shielded wire (941728 Item: 10).
- 2.) On one end of the wire, measure and strip 3.25 inches (ca. 8 centimeters) of the outer jacket. Remove and discard any filler material using side cutters.
- 3.) Trim the black conductor wire to 1.175 inches (ca. 3 centimeters), and then strip .25 inches (ca. 64 centimeters) of insulation from the wire.
- 4.) Trim one end of the resistor 928524 (Item: 50) to 1 inch (2.54 centimeters). **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. Apply heat to shrink. Apply enough heat for the adhesive to protrude slightly from each end.
- 9.) Strip 2.25 inches (ca. 6 cm) of the outer jacket from the opposite end of the cable. Remove and discard any filler material using the side cutters.
- 10.) Strip 0.25 inches (6.35 mm) of insulation from each conductor wire.
- 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 the 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

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| Rev: - |
| Date First Issued: 2018-JUL-25 |
| Rev: A |
| Date Revised: 2018-JUL-30 |
| Changelog: |
| Revised Step 5 for clarity. |
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| Rev: B |
| Date Revised 2018-AUG-08 |
| Changelog: |
| Added location to all items in the Material Needed list. |
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| Rev: C |
| Date Revised: 30.May.2022 |
| Changelog: |
| Add metric equivalents to standard dimensions. |
| Corrected grammar and spelling errors. |