OpenEVSE

How to build an IEC - Type 2 Mennekes Cable

This guide provided assembly procedures for IEC Type 2 "Mennekes" EV charging cables built from parts available from OpenEVSE.

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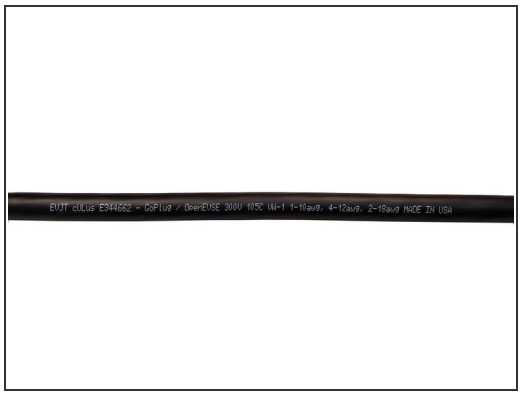
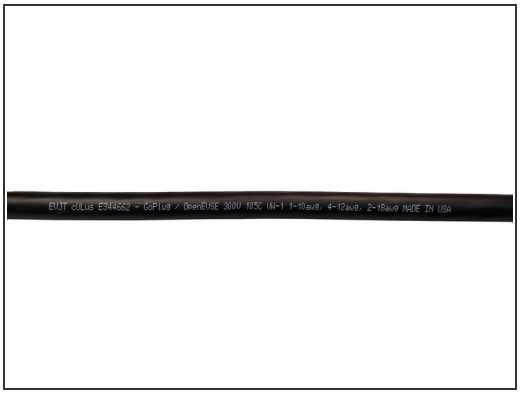
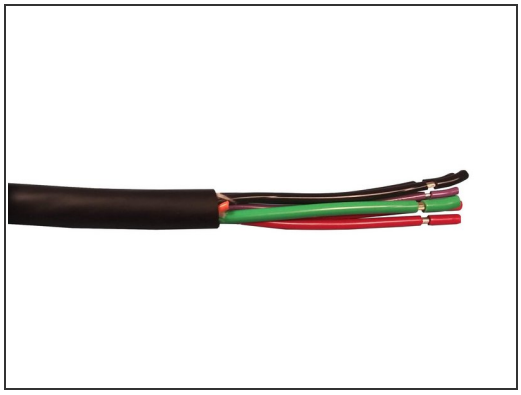
Step 1 — IEC Type 2 "Mennekes" Cable Assembly

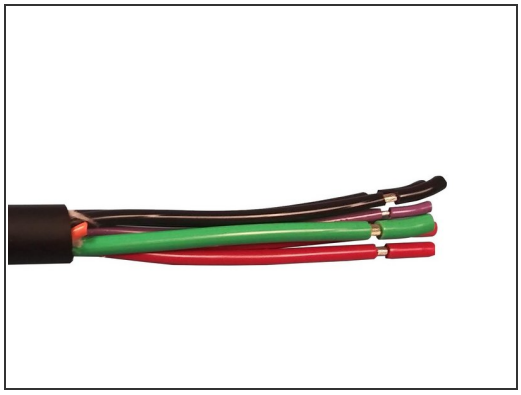


- This guide provides the assembly procedure for IEC Type 2 "Mennekes" cable from parts available from at OpenEVSE.

Step 2 — Prepare Cable

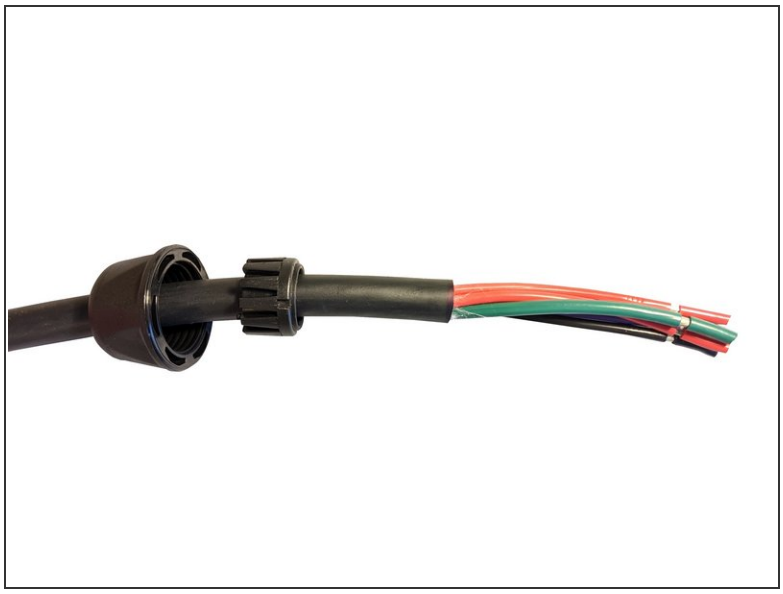


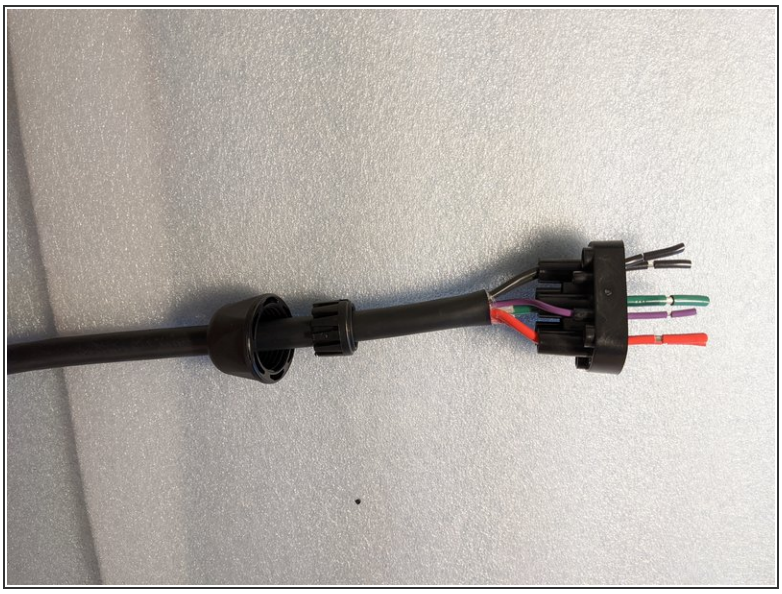




- This guide uses 40A EVJT cable available from OpenEVSE.
- Remove 3.25 inches of the outer jacket.
- Strip and retain insulation from RED, BLACK and GREEN wire 1/2 inch (0.50").
- Strip and retain insulation from Purple wire 3/8 inch (0.375")
- Strip and retain insulation from Purple wire 3/8 inch (0.375")

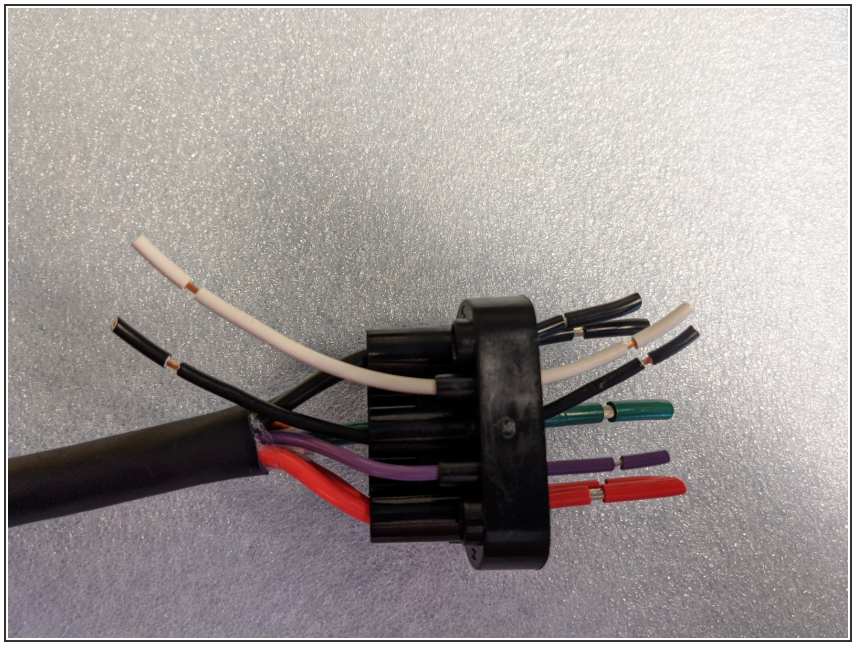
Step 3 — Prerequisites





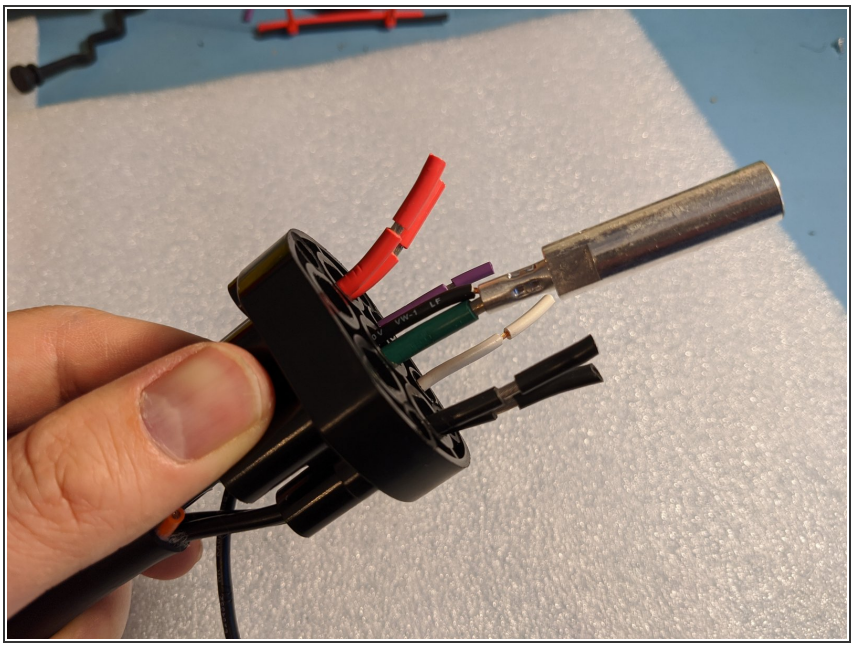
- Slide gland onto the cable. The notched end should face toward the stripped conductors.
- Insert conductors into the guide/seal, abbreviations are molded into the plastic part. PE = GREEN, CP = PURPLE, N - RED, L - BLACK

Step 4 — Proximity



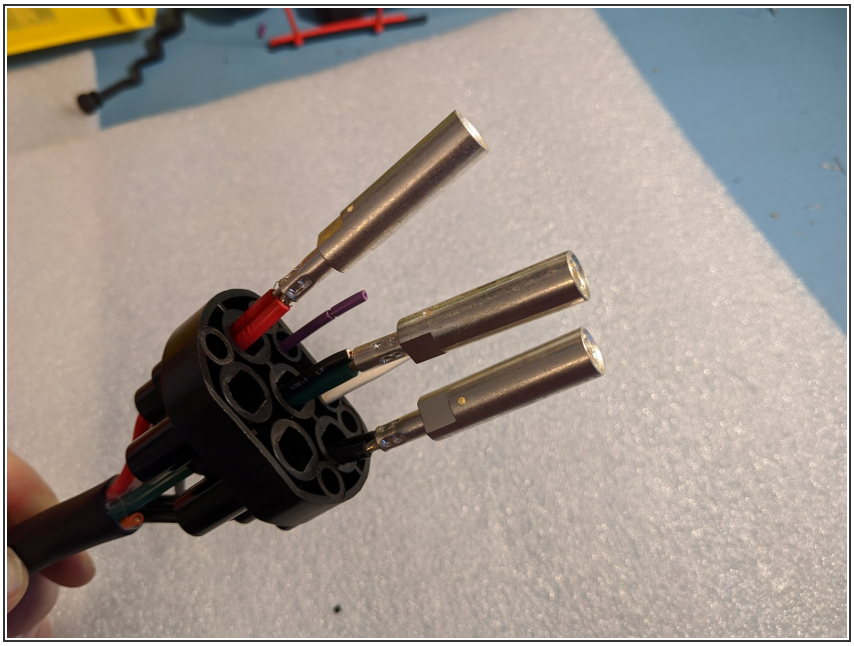
- Cut 6" each of BLACK and WHITE 18AWG stranded wire.
- Strip and retain 0.50" of insulation off both ends of the BLACK and WHITE wires.
- Insert the 18AWG BLACK wire in the PE position in addition to the GREEN wire.
- Insert a 18AWG WHITE wire in the hole labeled PP.

Step 5 — Crimp Ground pin



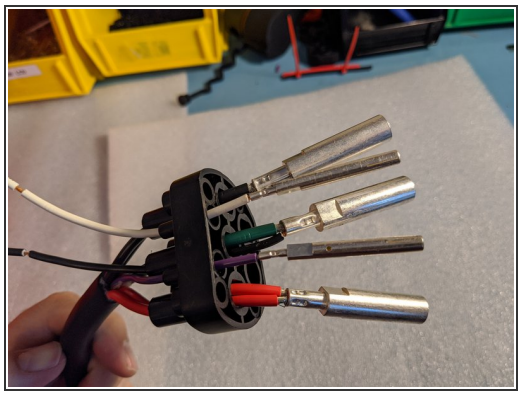
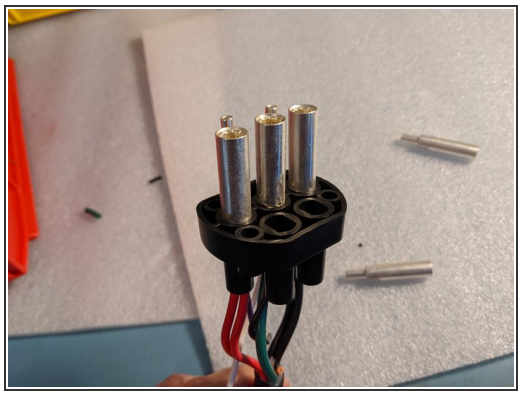
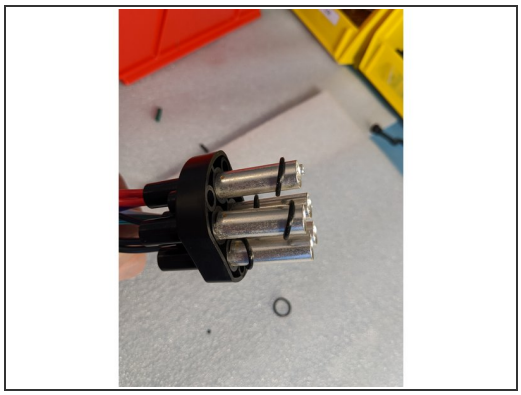
- Remove insulation from the GREEN and BLACK wire.
- Insert the ground pin on the 10AWG GREEN wire and the 18AWG BLACK Proximity wire.
- Crimp Ground pin with Pico Corporation 400B pneumatic crimping tool at 80PSI.
  - Required Die Pico 414DA-8N
  - Require locator - OpenEVSE IEC Power/Ground

Step 6 — Crimp Power Pins



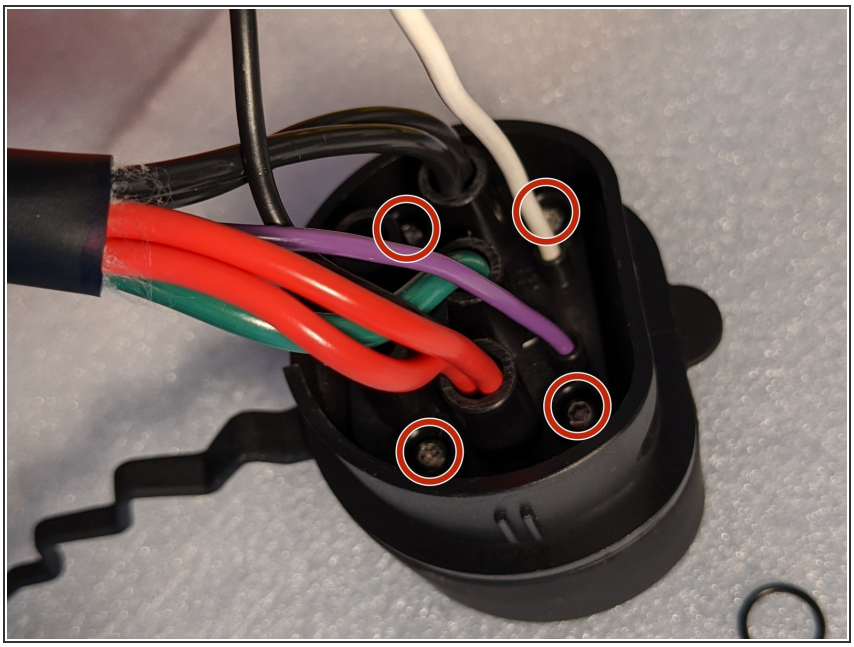
- Remove the insulation on all the RED and BLACK power wires.
- Insert the power pin on the BLACK wire(s) and crimp.
- Insert the power pin in the RED wire(s) and crimp.
- Crimp Power pins with Pico Corporation 400B pneumatic crimping tool at 80PSI.
  - Required Die Pico 414DA-8N
  - Require locator - OpenEVSE IEC Power/Ground

Step 7 — Crimp Signal Pins

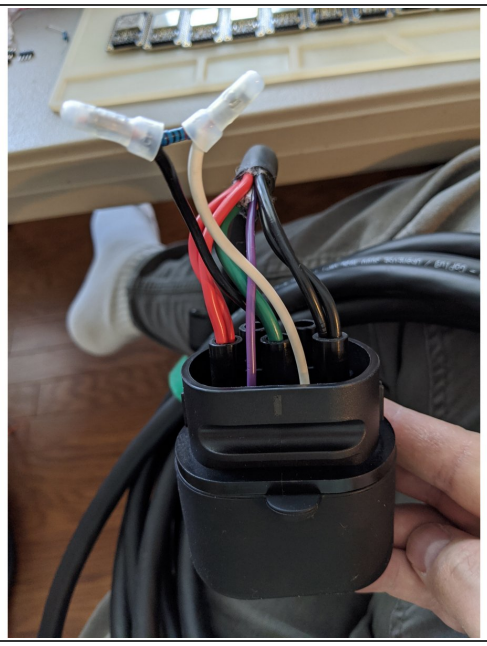
- Insert the signal pin on the PURPLE wire and crimp.
- Insert the signal pin on the WHITE wire and crimp.
- Crimp Ground pin with Pico Corporation 400B pneumatic crimping tool at 80PSI.
  - Required Die Pico 414DA-16N
  - Require locator - OpenEVSE J1772 Signal
  - Slide up the pin guide onto the pins.
  - Add power pins to the empty to positions marked **L2 and L3**
  - Slide O ring on each power pin.

Step 8 — Assemble housing



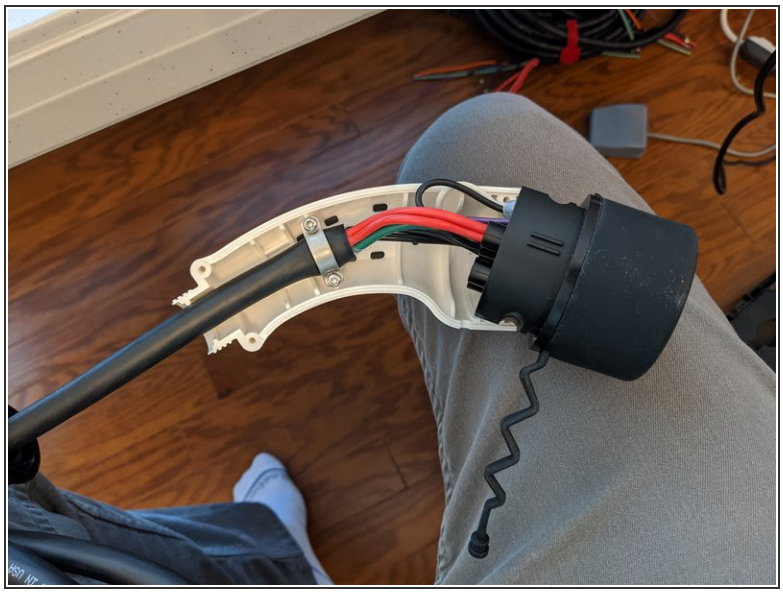
- Insert pins into the connector housing.
- Screw pin guide to the connector housing using 4 - 12 mm screws.

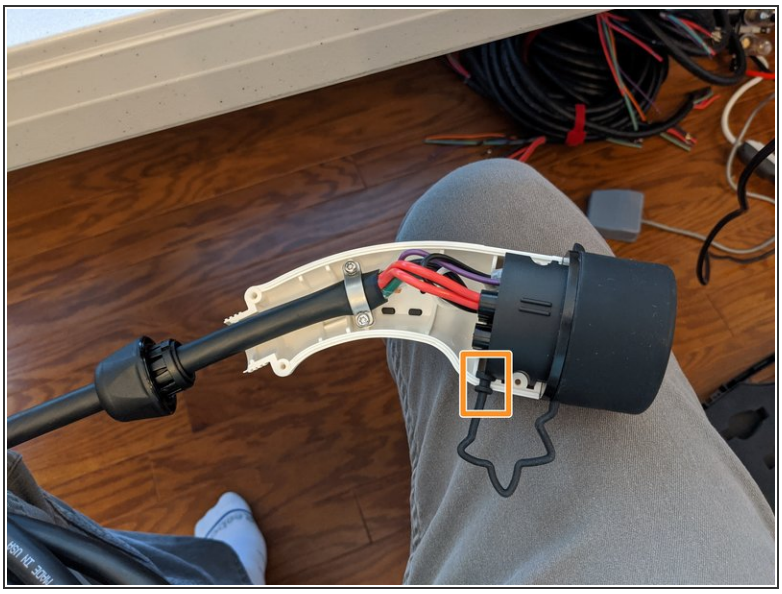
Step 9 — Resistor



- Remove the insulation off all BLACK and WHITE wires.
- Twist lead from resistor on both black and white wire from bottom to top and crimp.

Step 10 — Bottom Shell



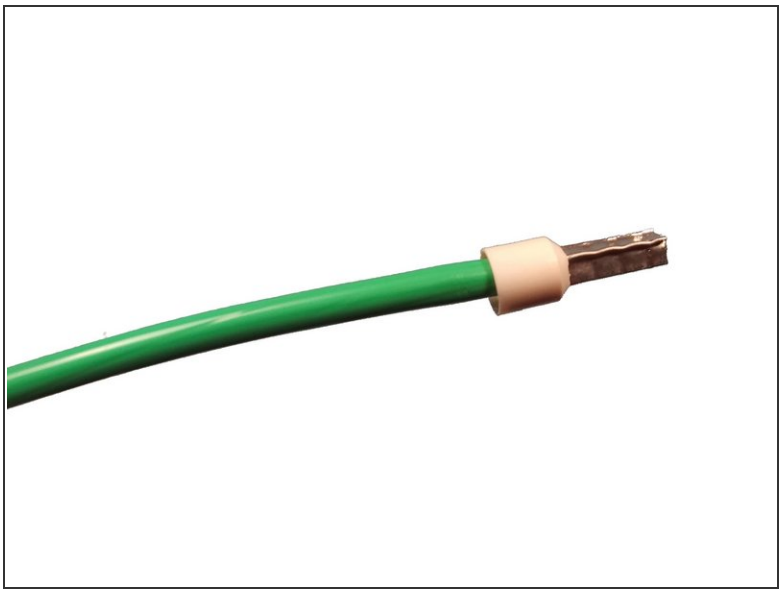


- Secure cable in the strain relief leaving at least 1/4" exposed.
- Insert nose in bottom shell.
- Position dust cover end in notch.

Step 11 — Closeout

- Insert dust cap end in shell halves.
- Insert and tighten 16 mm screws in holes marked in RED.
- Insert and tighten 12 mm screws in positions marked in BLUE.
- Tighten Cable Gland

Step 12 — Finish cable end



- Remove insulation and crimp ring terminal on BLACK wires.
- Remove insulation and crimp ring terminals on RED wires.
- Remove insulation and Crimp Sleeve ferrule on GREEN wire.