

Express 250

ChargePoint® Networked Charging Station

Service: EU MID Meter Inspection



DANGER: RISK OF SHOCK. Before performing this procedure, disconnect the power to the Express 250 at the service panel. Follow standard practice and local code to de-energize the applicable circuit and lock out/tag out the disconnect before proceeding. Use a multimeter to test that power is off. Keep power off for this circuit until all cover panels are correctly reinstalled and the work scope is completed. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN SERIOUS INJURY OR LOSS OF LIFE.



Important: You must be a licensed electrician and complete an online training class to become a ChargePoint Certified Installer, and to get a login for ChargePoint. If you do not complete this training, you will be unable to complete the installation process.
Go to: chargepoint.com/installers



CAUTION: Do not use power tools during installation or servicing. Over-torquing can damage the equipment.



CAUTION: Do not install the charging station in inclement weather. If you must complete the installation in rain or wind, you must use a weather-proof shelter that covers all boxes and components.

Note: When replacing a part, ChargePoint recommends taking a photo before removing each part so you can refer to the photo when reassembling.

For assistance, go to chargepoint.com/support and find your region's technical support number.

You Will Need:

- Headlamp
 - PosiTorque or Phillips screwdriver
 - Small slot head screwdriver
 - T25 Torx security driver
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Access the Meter

If the charging station has already been fully installed, use the tool and procedure information in the *Express 250 Installation Guide* to remove:

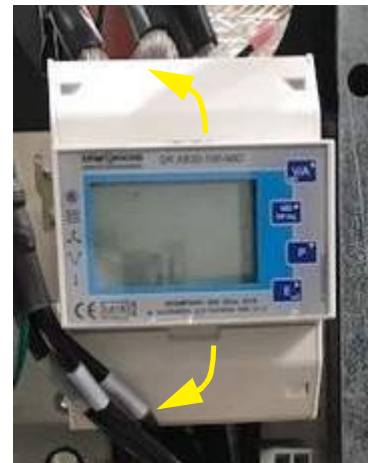
- Area light bar
- LED display
- Front cover panels (top, middle vent, and bottom)
- Rear cover panels (top, middle, and rear)
- Left extrusion

If the charging station is still in a warehouse, proceed to the section "Inspect the Meter".

Inspect the Meter

This inspection checks the eight top and bottom screws for correct installation of meter wiring.

1. On the left side of the charging station, just above the AC input terminals, identify the MID meter.
2. Flip open the top and bottom MID meter doors.



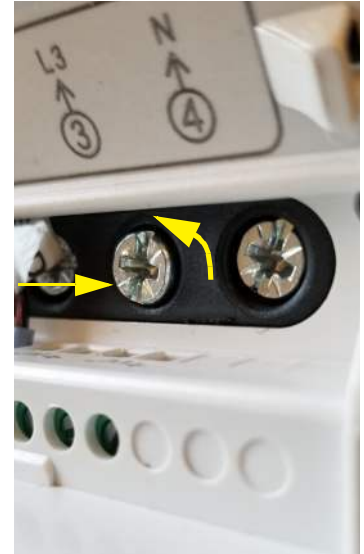
3. Use a small slot screwdriver to remove the three small sense wires (A, B, and Gnd) from the top terminals of the meter.



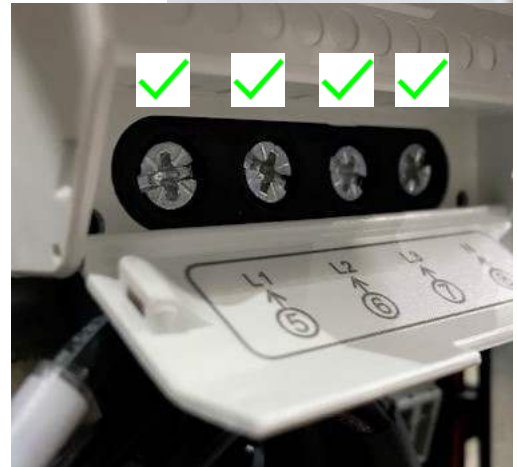
Important: Note the position of the wires before removal to ensure their correct order when re-installing.



4. For each of the eight main lug screws, use a PosiTorque or Phillips screwdriver to loosen the screw 5 turns counter-clockwise. Ensure you are pushing the screw head axially into the meter while turning.

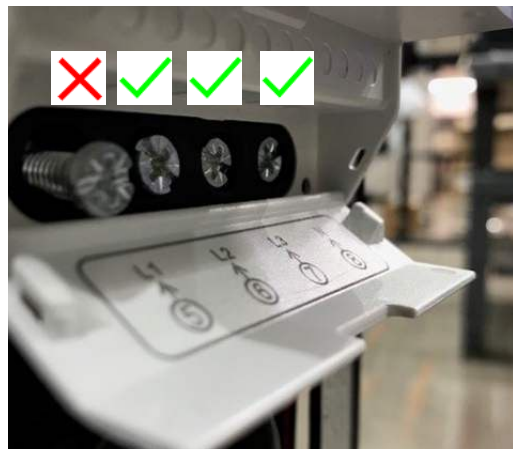


5. If the screw remains flush to the black plastic surface when loosened and pressed axially into the meter, it is properly installed. Re-torque to 60 in-lbs.



6. If the screw head backs out and raises when loosening the screw (10 mm or more) and emerges past the white plastic door hinge, the wire is improperly installed in the cage. Proceed to "Service Outcomes" on page 4 and follow the instructions for proper opening of the wire cage, insertion and torquing.

7. Repeat for each screw.



8. Inspect the meter housing for any evidence of thermal damage to the meter. Inspect both the top and bottom of the meter around all 8 wire locations. Look for:
 - Smoke evidence
 - Arcing evidence
 - Melted plastic
 - Any other thermal related abnormalities



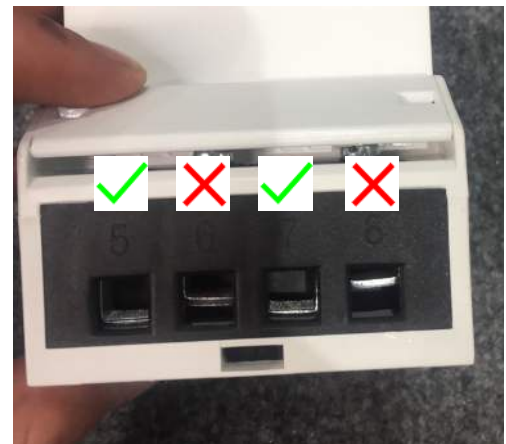
Service Outcomes

After inspecting the meter and its wires, determine which of the following solutions is needed:

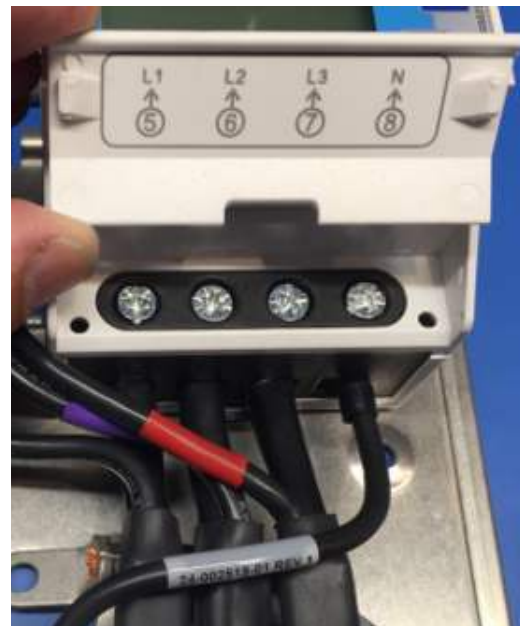
- Proper wire installation and no evidence of thermal damage on meter housing: Return the station to service after properly torquing all eight wire clamp screws to 60 in-lb.
- Proper wire installation WITH evidence of thermal damage on meter housing:
 - a. Remove the station from service and leave it powered off at the breaker panel, following all proper lockout / tag-out procedures.
 - b. Inform ChargePoint Engineering that meter replacement is required before re-commissioning the station.
- Improper wire installation WITHOUT evidence of thermal damage on meter housing:
 - a. Properly re-install any incorrect wiring following the procedure in "Secure the Meter".
 - b. Return the station to service.
- Improper wire installation WITH evidence of thermal damage on meter housing:
 - a. Remove the station from service and leave it powered off at the breaker panel, following all proper lockout / tag-out procedures.
 - b. Inform ChargePoint Engineering that meter replacement is required before re-commissioning the station.

Secure the Meter

1. With a PosiTorque bit (or Phillips), push on the screw head axially into the meter while unscrewing 5 turns. This ensures the cage is fully opened and ready to receive the wire. The image shows examples of cages that are correctly open and only partially open.



2. While keeping axial pressure on the screw head, insert the wire into the meter until no copper is exposed.
 3. Torque all meter screws to 60 in-lbs.
 4. Firmly tug on each wire to ensure it is tightly secured, and does not slip out of the meter when pulled.
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5. Perform a final check of all wires to ensure:
 - Each wire is fully inserted, showing no welded area
 - Each screw head is not proud of the plate
 - Each screw is torqued to 60 in-lbs
 - Each wire passes a pull test
 6. Inspection is now complete. Reassemble the left extrusion, rear panels, front panels, LED display, and area light bar.
 7. Power on the charging station as described in the *Express 250 Installation Guide* and verify that the station is operating correctly.





chargepoint.com/support

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