

# Express 250 Commissioning Guide

Complete the steps listed here for each ChargePoint Express Plus to ensure it is commissioned as specified. The detailed datasheets, site design guides, and installation guides defining ChargePoint specifications and procedures are available online at: [chargepoint.com/guides](https://chargepoint.com/guides).



**CAUTION:** Use low torque settings when working with power tools during installation or servicing. Over-torquing can damage the equipment.



**IMPORTANT:** You must be a ChargePoint qualified commissioning partner, technician, or engineer (“commissioner”) to perform this work. If you do not complete ChargePoint training, you are unable to complete the commissioning process.



**IMPORTANT:** Before you begin commissioning, you must read and understand the Installation Guide.

**Note:** An electric vehicle or approved vehicle load simulator is recommended onsite to demonstrate charging ability.

## Tools and Equipment

Bring these materials to the commissioning:

- Multimeter (Fluke 1630 or equivalent, capable of ground impedance measurements)
- Phase rotation meter
- Ethernet cable tester
- Ethernet cable crimper
- Lock out/tag out equipment
- Inspection mirror
- Torque meter
- Smart phone or tablet with QR code reader
- Snyder™ cellular signal tester or similar
- All tools listed in the Express 250 Installation Guide

## Prerequisites for Commissioning

The customer shall submit a fully completed commissioning request to ChargePoint at least 2 weeks in advance of the desired date onsite. Allocate sufficient time for the total number of stations and related

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Balance of Plant (BOP) equipment to be commissioned. Contact your existing ChargePoint activation specialist for the commissioning request form and sample email.

The following items must already be completed before commissioning can be scheduled:

- Engineering drawings, Single Line Diagrams (SLDs), electrical sheets, and Construction Signoff Form have been emailed to ChargePoint and delivered to Commissioning
- Tokens are verified for activation
- Rate structure is verified with the customer where applicable
- Construction adherence to all required regional codes is verified, and Authority Having Jurisdiction (AHJ) signoff is completed, or conditional approval is secured pending EVSE commissioning where applicable
- ChargePoint has been given any special instructions or induction for site and site access
- A qualified worker is scheduled onsite to perform lock out/tag out for all affected equipment
- Union fees are passed through to the customer for site access, lock out/tag out, and re-energization where applicable
- Commissioner/Installer account setup is complete for the entity performing pinpointing
- Installer contact information, site address, and client representative contact information have been provided
- Megger test results have been provided to confirm appropriate insulation integrity and wire sequence on:
  - Wires external to and terminating at the charging station
  - Cables interconnecting Paired charging stations if applicable (labeled A vs B and + vs - for clarity)

## Before Beginning Work

ChargePoint charging stations must be installed and serviced by qualified personnel only, equipped with appropriate personal protective equipment and following proper electrical and work practices.



**DANGER: RISK OF SHOCK.** If a fault exists, turn the power off during work and keep it off until all cover panels are reinstalled. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

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Before removing any cover panels:

- Consult with site personnel for access to site and equipment.
- Verify de-energization and lock out/tag out of all power sources to the station as stated in the shock danger warning above.
- Wearing appropriate PPE, verify the station is de-energized.
- If any panel needs re-installation, review the procedures in the Installation Guide to double-check that all panels are fully seated and that the edges of all signs are captured fully by the panels around them.



**CAUTION:** For all sections below, items marked as [Critical] must be inspected in order to prevent hazard or equipment damage.

- If a [Critical] item does not pass, complete the entire inspection but DO NOT energize the site. Contact ChargePoint for the next steps.
- If all [Critical] items do pass, complete the entire inspection and energize the site according to site authorization.


## Site Information

All checks must be completed. Items with an asterisk might not fail commissioning if they are not applicable or separate action can be taken. If an asterisked item is incomplete, describe the reason in its Comments field.

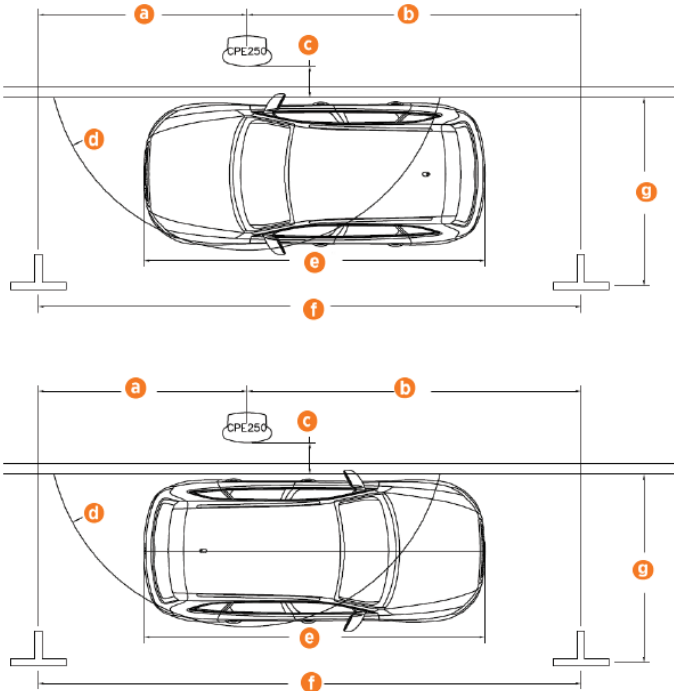
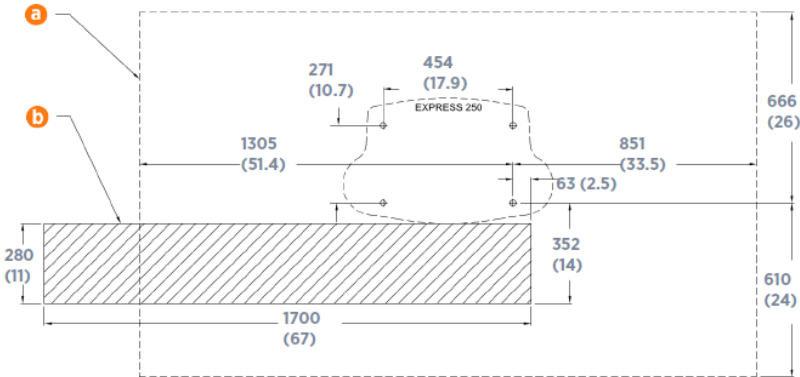
Site Information	Commissioner Information
Fill out all fields in this section for the first station on a site. If the site has multiple stations, just fill out the SO# with the number of stations and leave the rest of this section blank on all other forms.	
Station Sales Order (SO#):	Activation case #:
Additional SO# if applicable:	ChargePoint commissioner name:
Date commissioning request was received from customer:	Commissioning start date: (MM-DD-YY)
Customer expected onsite date:	Commissioning end date: (MM-DD-YY)
Customer name:	Commissioning lead name: (Performing work onsite)
Project name:	Lead phone number:
Site address:	Lead company email:
	Arrival time:
Site contact name:	Departure time:
Site contact phone:	Total travel hours:
Site contact email:	Serial Number (SN) and its MAC ID:
Number of charging stations to be commissioned:	Paired SN and MAC ID if applicable:
Location of product:	Number of Paired stations (count each station, not # of pairs):
Customer designation onscreen:	Number of associated Balance of Plant components in commissioning:

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## Site Readiness Inspection

Complete the following checks on all site construction components. Use the comments field to describe any issues. Add required pictures next to the example photos throughout. To upload, click the  icon and browse to the correct photo.

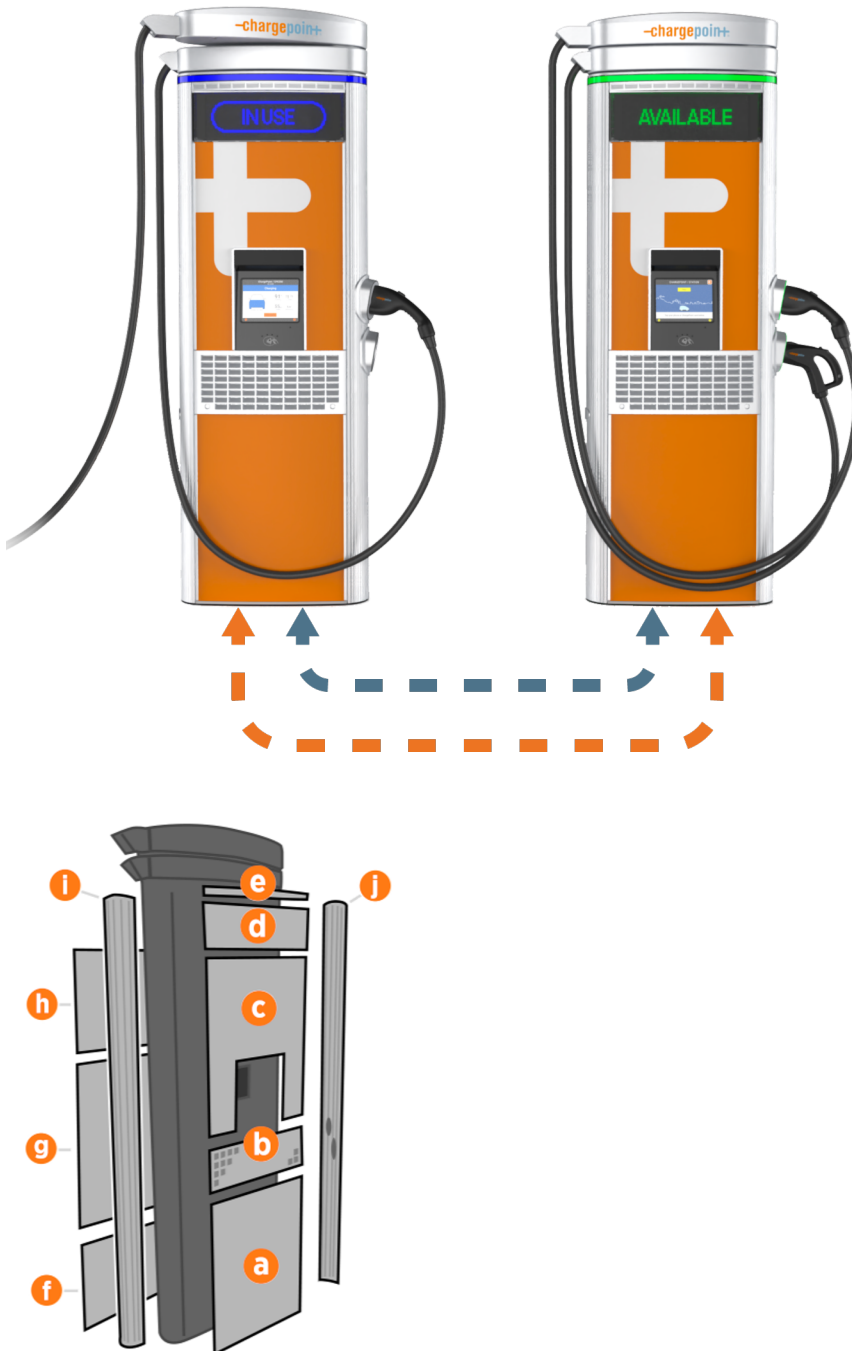
Description	Status
1. Concrete pad edges are smooth.	
2. Pad slope does not exceed 2%.	
3. If ADA requirements must be met, the touchscreen and charging cables are not at a height above grade greater than 1219 mm (48 in), or the equivalent in other regions.	
4. The concrete pad is at least 305 mm (12 in) deep, or deep enough to be 305 mm (12 in) below the frost line.	
5. Site conditions CONFORM to nominal pad design (no more than: 170 mph wind speed, Wind Risk Category I, Wind Exposure D, Seismic Importance Factor 1.0), and therefore the pad meets these minimal specifications: <ul style="list-style-type: none"><li>• At least 1296 mm (51 in) per side</li><li>• Contains #4 rebar or larger, top and bottom, 305 mm (12 in) on center</li><li>• Concrete rating is minimum 2500 PSI (18-20 Mpa in Europe)</li></ul>	
6. Site conditions DO NOT CONFORM to nominal pad design, and therefore the pad has been approved by a structural engineer for this site.	
7. Any site slopes, walls, or fencing do not trap water around the charging station installation. (The system is only built to withstand 457 mm (18 in) of standing water.)	

Description	Status
<p>8. If the station is installed on a curb, these measurements are met:</p>  <ul style="list-style-type: none"> <li>a. Distance from left space marking: 3048 mm (120 in) maximum</li> <li>b. Distance from right space marking: 4876.8 mm (192 in)</li> <li>c. Distance from curb: 457.2 mm (18 in)</li> <li>d. Cable reach radius: 3.76 m (148 in)</li> <li>e. Example EV length: 4978.4 mm (196 in)</li> <li>f. Recommended parking space length: 7924.8 mm (312 in) (min 4.5 m in Europe)</li> <li>g. Recommended parking space width: 2743.2 mm (108 in) (min 2 m in Europe)</li> </ul>	
<p>9. All station clearances for service and use are met. (Shaded area dimensions must be at grade level.)</p> 	


Description	Status
<p>10. [Critical] Ventilation needs are met:</p> <ul style="list-style-type: none"> <li>• Each station has adequate airflow, especially for any indoor or partially indoor site</li> <li>• No station is exposed to air heated above ambient temperatures</li> <li>• Each station is at least 305 mm (12 in) away from any wall behind it</li> <li>• Any two stations back to back have at least 1930 mm (76 in) of shared rear clearance</li> </ul>	
<p>11. Any wheel stop for a passenger vehicle is at least 1371 mm (54 in) from the station.</p>	
<p>12. Any bollards do not interfere with station use or service:</p> <ul style="list-style-type: none"> <li>• Bollards are no taller than 914 mm (36 in), to prevent cable interference</li> <li>• Bollards are no closer than 457 mm (18 in) of the station as measured on-center</li> </ul>	
<p>13. All conduit stub-ups or armored cable service loops are placed correctly according to the Concrete Mounting Template (CMT) or Surface Mount Plate.</p>	
<p>14. Conduit stub-ups are no taller above grade than 76 mm (3 in).</p> <p>Record the stub-up height: _____</p>	
<p>15. Conduits do not exceed maximum allowed size:</p> <ul style="list-style-type: none"> <li>• Shunt trip (if used): 19 mm (3/4 in trade size)</li> <li>• AC conductors: 51 mm (2 in trade size)</li> <li>• Ethernet (if Paired): 19 mm (3/4 in trade size)</li> <li>• DC conductors (if Paired): 76 mm (3 in trade size)</li> </ul>	
<p><b>Site Readiness comments:</b></p>	



**DANGER: RISK OF SHOCK.** Some Express 250 stations share DC power (“paired” configuration). Pairing should be marked on the AC disconnect or breaker panel. Before performing this procedure, check for pairing and, if present, disconnect the power to BOTH Express 250 stations at the service panel. Whether Standalone or Paired, 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.




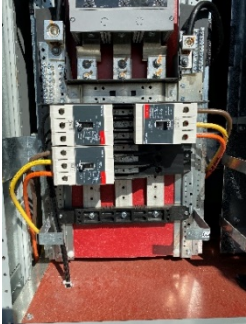

## Balance of Plant Inspection and Site Walk

Complete the following checks on all Balance of Plant (BoP) components. Use the comments field to describe any issues. Add required pictures next to the example photos throughout. To upload, click the  icon and browse to the correct photo.


Description	Status												
<b>1.</b> Is solar installed onsite? If so, record installed power (kWp): _____	Yes No												
<b>2.</b> Record maximum installed power available for chargers (kVa): _____													
<b>3.</b> <b>[Critical]</b> North America installations: The transformer nameplate shows that wiring is 480/277 VAC, Wye (Y) connected, 3-phase with bonded neutral plus Ground, and matches regional code requirements for conductor colors. Correct with tape if incorrect. <b>Note:</b> Delta (floating or grounded) configuration is not supported.													
<b>4.</b> <b>[Critical]</b> European installations: Record grid type (earthing system): <div style="text-align: center;">             TN-C              TN-S              TN-C-S              TT           </div> <b>Note:</b> IT grid/delta configuration is not supported.													
<b>5.</b> <b>[Critical]</b> The switchgear has been fully commissioned and energized. If it is currently powered off, a qualified worker with PPE is available to access and power on the switchgear relevant to the EVSE.													
<b>6.</b> <b>[Critical]</b> Record the master circuit breaker specifications for the switchgear. <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Make</th> <th>Breaker Curve Type</th> <th>Breaker Delay</th> <th>Breaker Rating</th> </tr> </thead> <tbody> <tr> <td>(i.e. ABB, Schneider)</td> <td>(A, B, C, D, K, Z)</td> <td>(ms)</td> <td>(A)</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Make	Breaker Curve Type	Breaker Delay	Breaker Rating	(i.e. ABB, Schneider)	(A, B, C, D, K, Z)	(ms)	(A)					
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(i.e. ABB, Schneider)	(A, B, C, D, K, Z)	(ms)	(A)										
<b>7.</b> <b>[Critical]</b> Record the charger circuit breaker specifications. <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Make</th> <th>Breaker Curve Type</th> <th>Breaker Delay</th> <th>Breaker Rating</th> </tr> </thead> <tbody> <tr> <td>(i.e. ABB, Schneider)</td> <td>(A, B, C, D, K, Z)</td> <td>(ms)</td> <td>(A)</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Make	Breaker Curve Type	Breaker Delay	Breaker Rating	(i.e. ABB, Schneider)	(A, B, C, D, K, Z)	(ms)	(A)					
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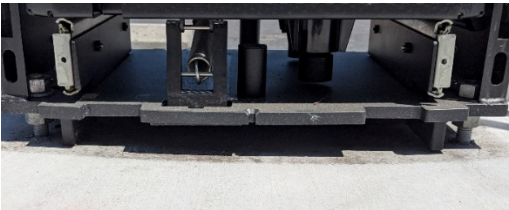




Description		Status									
<p>8. [Critical] A correctly rated, dedicated breaker is installed for each station, per this table:</p> <table border="1"> <thead> <tr> <th>Nominal Voltage</th><th>Max AC Current</th><th>Breaker Size</th></tr> </thead> <tbody> <tr> <td>400 V (EU)</td><td>96 A</td><td>125 A</td></tr> <tr> <td>480 V (NA)</td><td>80 A</td><td>100 A (125% continuous load required for N. America)</td></tr> </tbody> </table>		Nominal Voltage	Max AC Current	Breaker Size	400 V (EU)	96 A	125 A	480 V (NA)	80 A	100 A (125% continuous load required for N. America)	
Nominal Voltage	Max AC Current	Breaker Size									
400 V (EU)	96 A	125 A									
480 V (NA)	80 A	100 A (125% continuous load required for N. America)									
9. [Critical] The breaker feeding each station is three-pole and non-GFCI.											
10. [Critical] The breaker feeding each station is new and a voltmeter test at the station or AC disconnect proves that it correctly powers off and on.											
11. [Critical] The breaker ID card for each station breaker is correctly labeled.											
<p>12. [Critical] Each breaker has shunt trip capability if the site drawing or local code calls for shunt trip wiring.</p> <p>Record the voltage rating if installed: _____</p>											
13. [Critical] Supplemental surge protection is installed at the service panel if required for site needs, such as frequent thunderstorms.											
<p>14. [Critical] For Standalone stations where a Residual Current Device (RCD, RCCD, or RCBO) is required by code, it meets these specifications:</p> <ul style="list-style-type: none"> <li>• Type A, F, or B (B and F preferred)</li> <li>• Trip threshold of 500 mA required</li> <li>• Trip delay of 150 ms required</li> </ul>											
15. For Paired stations where an RCD is required, ChargePoint has signed a formal approval of installation.											
<p>16. Take a picture of the electrical panel specification label, showing total capacity, if accessible:</p> 											


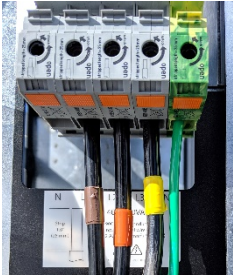
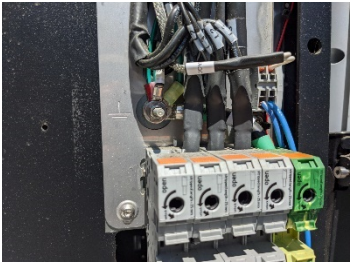
Description	Status
<p>17. Electrical panel, dead front off showing terminations, if accessible:</p> 	
<p>18. Electrical panel, dead front on, showing breaker ratings:</p> 	
19. The electrical enclosures are clean and free of wire strands and metal shavings.	
<p>20. [Critical] The switchboard (if applicable) is properly wired for Paired or Standalone stations and all breakers are properly labeled.</p>	
<p>21. [Critical] Disconnect switches are correctly wired to proper workmanship standards and color coding.</p>	
<p>22. [Critical] Distribution panels are correctly wired to proper workmanship standards and color coding.</p>	
<p>23. [Critical] Distribution panel exteriors are free of damage and show correct labels for Paired stations as applicable.</p>	
<p>Balance of Plant comments:</p>	

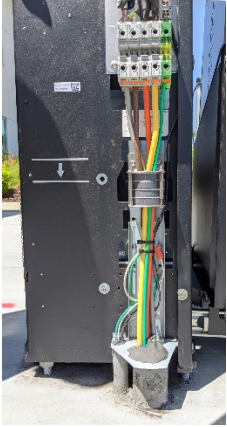
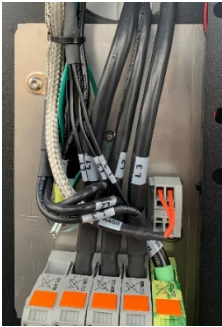
## Station Evaluation



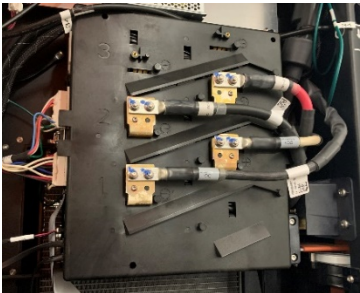
Complete the following checks on each Standalone or Paired Express 250 station. Remove all cover panels as described in the Express 250 Installation Guide. Use the comments field to describe any issues. Add required pictures next to the example photos throughout. To upload, click the  icon and browse to the correct photo.

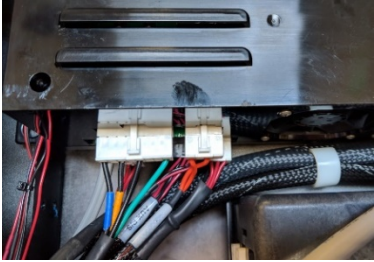


Description	Status								
1. [Critical] A multimeter test shows 0 volts on the AC surge suppressors, for each combination of line-to-line and line-to-ground.									
2. [Critical] AC disconnect switch exteriors are free of damage and show correct labels for Paired stations as applicable.									
3. All mounting hardware is tightly secured, and the station is level and stable. All four leveling nuts (shown with arrows) are present. All anchor bolt nuts are torqued to 94.9 Nm (70 ft-lbs.), for embedded or Surface Conduit Entry (SCE). Correct the leveling if needed, being careful not to change frame alignment. Record the torque for each anchor nut: <table border="1" data-bbox="157 823 1328 919"> <thead> <tr> <th>Rear Left</th> <th>Rear Right</th> <th>Front Left</th> <th>Front Right</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Rear Left	Rear Right	Front Left	Front Right					
Rear Left	Rear Right	Front Left	Front Right						
Station anchor bolts and nuts, front: 									
Station anchor bolts and nuts, back: 									

Description					Status
4. [Critical] All necessary electrical infrastructure has been completed per local codes and ChargePoint specifications for AC 3-phase power plus ground, with properly sized wire at the station. (Neutral is not required for system operation.)					
Voltage Rating		Temp Rating	Maximum Conductor Gauge for Terminals	Insulation	
EU non-armored: 600/1000 V		90°C	35 mm <sup>2</sup>	XLPE	
EU armored: 600/1000 V		90°C	35 mm <sup>2</sup> multi-core	XLPE	
NA: 600 V		90°C	2 AWG	XHHW-2	
Record the specifications of the AC conductors:					
Cu/Al	Voltage Rating	Temp Rating	Gauge	Insulation	
5. [Critical] If shunt trip wiring is used, it is sized between 0.08-2.5 mm2 (28-14 AWG), fine stranded or solid.					
6. The AC rodent guard has rubber grommets in place to prevent wire damage.					
7. Photo showing the conductor ratings specified above: (Attach letter of rating if different from actual cable markings)					
					
8. Europe installations where applicable: correct cable glands are installed on AC conductors.					
					




Description	Status
<p>9. [Critical] All input AC wires are stripped to the correct 25 mm (1 in) length.</p> 	
<p>10. [Critical] All AC conductor strands are fully inserted:</p>  <ul style="list-style-type: none"> <li>• Confirm with inspection mirror</li> <li>• No copper wire is exposed or cut</li> <li>• All strands are tightly bundled</li> <li>• Test with a pull-push test</li> <li>• Orange Wago buttons are flush and fully released on the bottom and top of the terminals</li> </ul>	
<p>11. A ground impedance measurement taken around the AC terminal ground wire passes.</p> <p>Record the impedance value: _____</p>	
<p>12. [Critical] The ground connection is tight and connected properly. The grounding cable and insulation show no damage.</p> 	

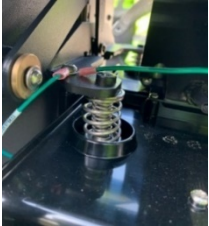
Description	Status
<p>13. AC rodent guard bracket is installed, rests on the top of the conduit, has conductors run through the ferrite stack, and duct seal is applied:</p>  <p><b>Note:</b> Rodent guard bracket and duct seal are not applicable for Surface Conduit Entry.</p>	
<p>14. <b>[Critical]</b> All shunt trip wires, and cables between the contactor box and the AC power supply, have been pull-push inspected to be fully seated with no exposed wiring.</p>  <p><b>Note:</b> Do not remove or reseal these wires. If they show defects, contact ChargePoint Support.</p>	

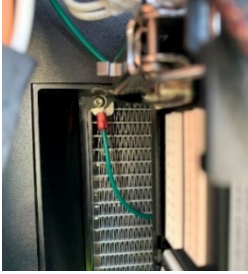


Description	Status
<p>15. [Critical] AC wiring cover is on:</p> 	
<p>16. [Critical] AC cables are properly seated in the surge protector block and tested with a push-pull inspection.</p> 	
<p>17. [Critical] All AC power cables and communication cables on the contactor box are fully seated and free from damage. Power connections are properly torque marked.</p> 	

Description	Status
<p>18. [Critical] All auxiliary power supply connectors are fully seated (push test) and free from damage.</p> 	
<p>19. [Critical] All DCC (Station Management Unit) wiring is fully seated and has been visually inspected. The Ethernet cable in the CPNK port is fully seated and free of damage. <b>Note:</b> The Ethernet port is only used for Paired stations.</p> 	
<p>20. [Critical] All I/O expander wiring is fully seated and has been visually inspected.</p> 	



Description	Status
<p>21. [Critical] All connections behind the touchscreen are fully seated and free of damage.</p> 	
<p>22. DC rodent guard bracket:</p> <ul style="list-style-type: none"><li>• Is installed with punch-outs intact, if Standalone</li><li>• Has completed wiring and duct seal is applied, if Paired</li></ul>  <p><b>Note:</b> Rodent guard bracket and duct seal are not applicable for Surface Conduit Entry.</p>	
<p>23. DC wiring cover is on, whether or not station is Paired:</p> 	

Description	Status
<p>A continuity test between the leftmost DC bus bar and the DC fuse output (to the right of the contactor box) passes with 0 ohms.</p> 	
<p>24. [Critical] All five ground wires are firmly secured:</p> <ul style="list-style-type: none"> <li>Above the PM mechanism on the left (x2, T25 Torx)</li> </ul>  <ul style="list-style-type: none"> <li>On the upper right frame edge beside the contactor box (x2, 8mm hex)</li> </ul> 	

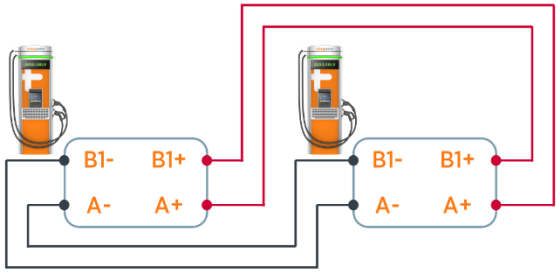

Description	Status
<ul style="list-style-type: none"><li>On the back of the heat exchanger, to the left of the contactor box (T10 Torx)</li></ul> 	
<p>25. [Critical] The coolant loop components are correctly installed with no signs of leakage:</p> <ul style="list-style-type: none"><li>The coolant reservoir is full.</li><li>Both quick connectors pass a pull-push test.</li><li>Both top coolant reservoir caps are fastened hand tight.</li><li>Both fan trays are firmly seated.</li><li>All coolant controller connections are fully seated (pass a push test).</li></ul> 	
<p>26. [Critical] The SIM card on the side of the touchscreen is present.</p> 	

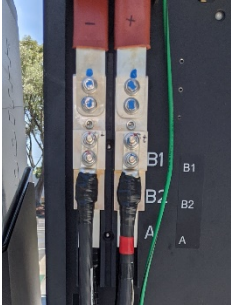

Description	Status
<p>27. [Critical] All Hall sensors and their wires on the frame, front and back, are free of damage. Sensor wires are not at risk of being cut by cover panel clips when panels are installed.</p>  	
<p>Station evaluation comments:</p>	

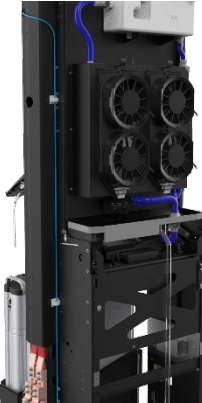

## Paired Station Evaluation

Complete these checks only if this is a Paired Express 250 station. If this station is not Paired, write "N/A" in the Comments field and skip to the next section. Click the  icon to upload each Paired-specific photo.


Description					Status																										
<p>1. <b>[Critical]</b> All four DC copper conductors are installed between stations as follows:</p> <table border="1"> <thead> <tr> <th>Voltage Rating</th> <th>Temp Rating</th> <th>Maximum Conductor Gauge for Terminals</th> <th>Insulation</th> </tr> </thead> <tbody> <tr> <td>EU non-armored: 600/1000 V</td> <td>90°C</td> <td>120 mm<sup>2</sup></td> <td>XLPE</td> </tr> <tr> <td>EU armored: 600/1000 V</td> <td>90°C</td> <td>120 mm<sup>2</sup> 4-core</td> <td>XLPE</td> </tr> <tr> <td>NA: 1000 V</td> <td>90°C</td> <td>4/0 AWG</td> <td>XHHW-2</td> </tr> </tbody> </table> <p>Record the specifications of the DC conductors:</p> <table border="1"> <thead> <tr> <th>Cu/Al</th> <th>Voltage Rating</th> <th>Temp Rating</th> <th>Gauge</th> <th>Insulation</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>					Voltage Rating	Temp Rating	Maximum Conductor Gauge for Terminals	Insulation	EU non-armored: 600/1000 V	90°C	120 mm <sup>2</sup>	XLPE	EU armored: 600/1000 V	90°C	120 mm <sup>2</sup> 4-core	XLPE	NA: 1000 V	90°C	4/0 AWG	XHHW-2	Cu/Al	Voltage Rating	Temp Rating	Gauge	Insulation						
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EU armored: 600/1000 V	90°C	120 mm <sup>2</sup> 4-core	XLPE																												
NA: 1000 V	90°C	4/0 AWG	XHHW-2																												
Cu/Al	Voltage Rating	Temp Rating	Gauge	Insulation																											
<p>2. Photo(s) showing the temperature ratings, size, and insulation type specified above. (Attach letter of rating if different from actual cable markings)</p>																															

Description	Status
<p>3. [Critical] DC cable connection order is correctly and permanently labeled per the below wiring diagram:</p> <ul style="list-style-type: none"> <li>• Station 1 A+” on one end and “Station 2 B1+” on the other end</li> <li>• Station 1 A-” on one end and “Station 2 B1-” on the other end</li> <li>• Station 1 B1+” on one end and “Station 2 A+” on the other end</li> <li>• Station 1 B1-” on one end and “Station 2 A-” on the other end</li> </ul> 	
<p>4. Europe installations where applicable: correct cable glands are installed on DC conductors.</p> 	
<p>5. [Critical] DC lugs meet these specifications:</p> <ul style="list-style-type: none"> <li>• Silver plated copper compression lug; tin plated is acceptable if used with dielectric grease</li> <li>• 2-hole specified for North America, single hole lug acceptable in Europe</li> <li>• Holes for an M6 (1/4 in) stud at 19 mm (3/4 in) stud hole spacing</li> <li>• Maximum width 30 mm (1.18 in)</li> </ul>	
<p>6. [Critical] DC fasteners are installed in this order: terminal block, lug, M6 flat washer, M6 Belleville washer with the cup facing the station, 10 mm M6 nut.</p>	


Description		Status
<p>7. [Critical] All four lugs at the DC terminal block are properly torqued to 5.5 Nm (48.7 in-lb), and are torque marked with a paint pen.</p> 		
<p>8. [Critical] Outdoor rated Ethernet Cat5e or Cat6 cable is installed between the two stations:</p> <ul style="list-style-type: none"><li>• Is field-crimped in a straight-through 568B pattern</li><li>• Passes functional testing</li><li>• Has no stray wires in the crimp</li><li>• Has a maximum run length of 100 m (328 ft)</li></ul> 		




Description	Status
<p>9. [Critical] The Ethernet cable is correctly installed:</p> <ul style="list-style-type: none"> <li>• Fastened with P-clips on the side of the station frame, without potential for pinching or damage</li> <li>• Is bundled above the contactor box</li> <li>• Is firmly seated in the DCC</li> </ul> 	
<p>10. The breaker or AC disconnect cover has the supplied Paired label installed in a visible place and is correctly filled in with the serial numbers of both stations, to help ensure both breakers are opened for safe service.</p> 	

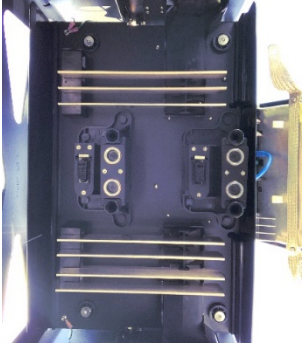




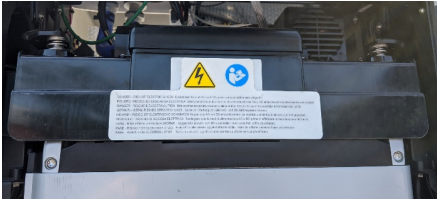

Description	Status
<p>11. DC rodent guard bracket is installed, rests on the top of the conduit, and duct seal is applied.</p> 	
<p>Paired station evaluation comments:</p>	





## Power Module and Cover Panel Evaluation



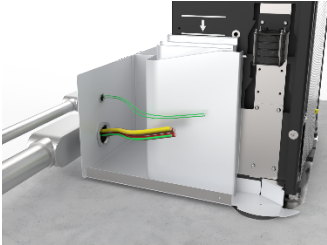
Complete the following checks for the Power Modules and cover panels for each Express 250 station. Use the comments field to describe any issues. Click the  icon to upload each Paired-specific photo.


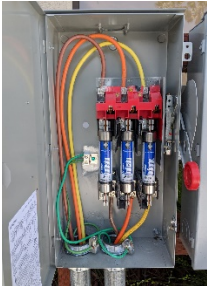
Description	Status
<p>1. [Critical] The front EMI shield and touchscreen ground straps are installed.</p> 	
<p>2. [Critical] The rear EMI shield is installed.</p> 	
<p>3. [Critical] The holster light cable is inserted in the right extrusion P-clip to complete grounding. All station side extrusions are properly mounted and tightened.</p> 	

Description	Status
<p>4. [Critical] The underside of the PM mechanism (communication and coolant connections) shows no damage or misalignment when visually inspected.</p> 	
<p>5. [Critical] Both Power Modules are inspected and show no damage to pins, coolant valves, or exteriors.</p> 	

Description		Status
<p>6. [Critical] Power Modules are installed and the mechanism fully covers Power Module plastic fins on both sides, with no gaps. Springs on both sides are equally compressed. The mechanism is pushed down in place.</p>  <p>A close-up photograph showing a metal cover plate being pushed down onto a power module. The cover plate has a yellow warning label with a lightning bolt symbol and a blue circular symbol. The cover is fully seated over the plastic fins of the power module.</p> <p>✓</p>  <p>A close-up photograph showing a metal cover plate that is not fully seated over the power module. There is a visible gap between the cover and the plastic fins. A red 'X' is placed below the image to indicate this is an incorrect installation.</p> <p>✗</p>		
<p>7. [Critical] All station rear panels are properly mounted and tightened.</p>  <p>A photograph of a tall, grey, cylindrical station rear panel. The panel has a series of horizontal slats or vents. It is mounted on a concrete base and is properly secured with a metal band at the top.</p>		

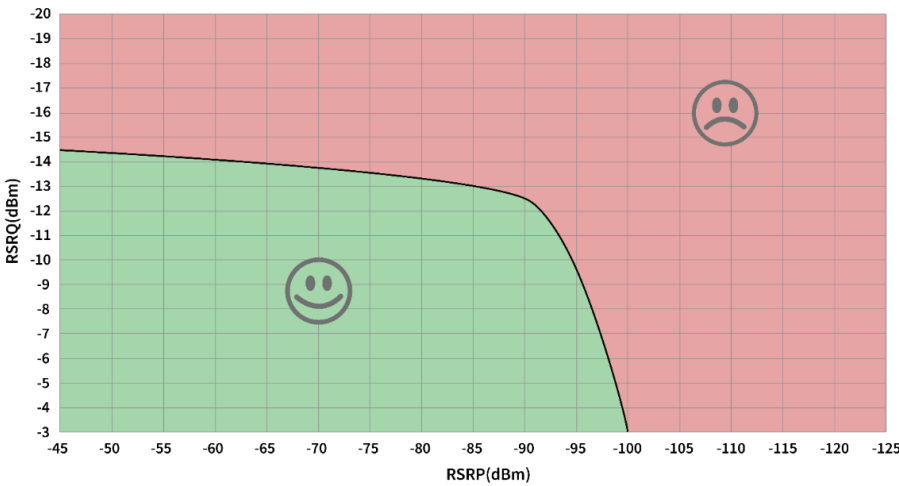
Description	Status
<p>8. [Critical] All three front station cover panels are replaced.</p> 	
<p>9. [Critical] All connectors to the secondary display are tight and free of damage.</p> 	
<p>10. [Critical] The area light bar is plugged in and its cable is free of damage.</p> 	
<p>11. All ratings labels are properly applied (if applicable, attach photo):</p> 	

Description	Status
<p>12. Both charging cables rest properly in their holsters.</p> 	
<p>13. Surface Conduit Entry (SCE) installations only:</p> <ul style="list-style-type: none"> <li>• The surface mount plate was used as a template</li> <li>• Anchor bolt locations correctly correspond to wiring conduit location</li> <li>• Proper epoxy was used on all drilled anchor holes</li> </ul> 	
<p>14. Surface Conduit Entry installations only: Wireway is sealed to the box base using a code-approved sealing method for all conduit openings.</p> 	

Description	Status
<p>15. SCE installations only: Box cover and SCE side extrusions with cutouts are properly installed to protect wiring.</p> 	
<p>16. The AC disconnect switch (if present) has a padlock to prevent unauthorized entry into the wiring area, if disconnect is applicable. (Note: No lock is permitted on the operating lever.) Picture of the AC disconnect interior:</p> 	
<p>17. [Critical] Lock out/tag out has been removed from all breakers and panels.</p>	
<p>18. [Critical] The station powers on. No error messages are displayed on the touchscreen. (Note any messages in the Comments field.) <b>IMPORTANT:</b> If any errors exist, refer to the Troubleshooting section at the end of this document before continuing to the Installation Wizard and pinpointing.</p>	
<p>19. [Critical] A voltage measurement at the AC disconnect (if present) or breaker shows 480 VAC (North America) or 400 VAC (Europe/UK), +/- 10% per phase.</p> <p>Record the measured voltage: _____</p>	
<p>20. Phase rotation is ABC counter-clockwise (Phase A, Phase B, Phase C). If phase rotation is incorrect, switch any two phases in the disconnect and retest.</p>	
<p>21. [Critical] The station displays a message clearly on the LED display.</p>	
<p>22. [Critical] All steps of the Installation Wizard are complete and the station has been pinpointed.</p>	

Description	Status
23. [Critical] The RFID reader is functional and responds when tapped with a ChargePoint card or ChargePoint app.	
24. [Critical] Call ChargePoint Support (chargepoint.com/support) to ensure: <ul style="list-style-type: none"> <li>The software revision is up to date (Note: updates can take up to 30 minutes)</li> <li>Support has activated the station, or has a ticket open to do so</li> </ul>	
25. The parking area is clean and free of all crate fasteners, packaging, and debris.	
Power Module and cover panel comments:	


## Cellular Coverage Evaluation

Description	Status / Comments
<p>Using a Snyder cellular signal detector or equivalent, test the location of every station and ensure it meets minimum RSRQ at -12.5 dB or better, for RSRP measured at -90 dBm or better. Refer to the graph for acceptable combinations. Note that these numbers are all negative, so -70 dBm is stronger than -85 dBm, and -90 dBm is weaker.</p> 	
1. MAC address for this station displayed on the touchscreen:	
2. Record the cellular carrier displayed on the touchscreen:	
3. [Critical] Record the dBm value displayed on the touchscreen:	
4. Number of 4G/LTE repeaters installed at the site (if none, enter "0"):	



Description	Status / Comments
<p>5. Make and model of repeaters installed at the site (if none, enter "n/a"):</p> <p>*For European installations, these should only be installed by mobile network carriers due to legal restrictions</p>	
<p><b>Cellular evaluation comments:</b></p>	

## Punch List Resolutions

Include pictures of any issues you find and provide an appropriate caption for each. To upload, click the  icon and browse to the correct photo. If this form is too large once all photos are added, try saving the completed file by selecting File > Save as Other > Reduced Size PDF.

Description	Photo
Issue: (provide caption)	
Issue: (provide caption)	
Issue: (provide caption)	
Issue: (provide caption)	
Issue: (provide caption)	

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I, \_\_\_\_\_, hereby certify that the scope of work in this form has been correctly completed.

Signature	Date



## Express 250 Troubleshooting


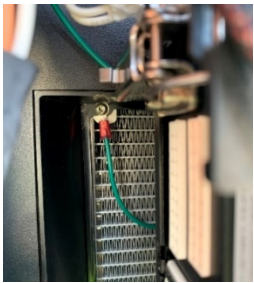
This section describes common installation errors, how to detect them, and possible remedies. If any of these faults still does not clear, contact ChargePoint Support.

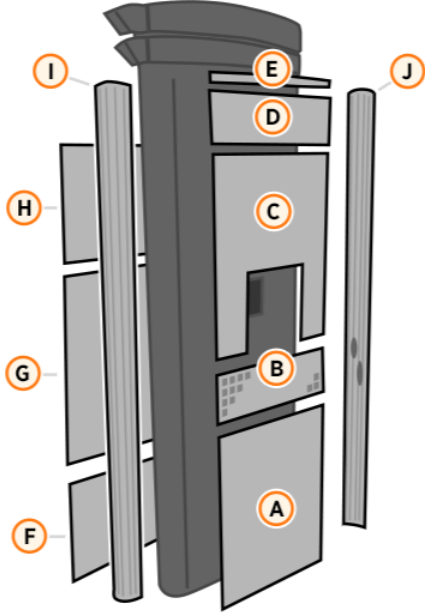
### Critical Faults

Critical faults can impact charging station service.

Fault Code or Name	Description	Resolution
31	Bottom corner of touchscreen displays the error "station unavailable".	<ul style="list-style-type: none"><li>• Power cycle the station (to reset the DCC) to clear the error.</li></ul>
217 - Pair Communication Lost	Unable to connect to the other Paired Express 250/ Paired peer station not responding.	<ul style="list-style-type: none"><li>• Check both stations are powered on.</li><li>• Reboot both paired stations in NOS (Soft Reboot).</li><li>• Check that the Ethernet cable is:<ul style="list-style-type: none"><li>• Fully plugged in at both ends.</li><li>• Has the correct straight-through, 568B crimp pattern with all wires fully seated. Cut and re-crimp RJ45 connectors if needed.</li></ul></li><li>• Performs correctly in an Ethernet tester.</li></ul>

Fault Code or Name	Description	Resolution
		<ul style="list-style-type: none"> <li>If all tests fail, re-pull the Ethernet cable.</li> </ul> 
333, or Node 16/Node 20 not detected	Power Module(s) not detected. (Station is dispensing fewer kW than expected when charging.)	<ul style="list-style-type: none"> <li>Ensure Power Module (PM) mechanism is fully pushed down, symmetrically on both sides.</li> <li>Ensure both PMs are installed.</li> <li>Check for damage to PM connectors (take pictures)</li> </ul>
801 - Isolation Fault	Correct grounding not detected.	<p>Remove top and middle cover panels. Ensure all ground wires are correctly secured:</p> <ul style="list-style-type: none"> <li>Above the PM mechanism on the left (x2, T25 Torx)</li> </ul> 

Fault Code or Name	Description	Resolution
		<ul style="list-style-type: none"> <li>On the upper right frame edge beside the contactor box (x2, 8 mm hex)</li> </ul>   <ul style="list-style-type: none"> <li>On the back of the heat exchanger, to the left of the contactor box (T10 Torx)</li> </ul> 

Fault Code or Name	Description	Resolution
1201-1210 - Skin Panel Fault	A cover panel is not installed properly on the station.	 <p>All Express 250 cover panels make a connection with a magnet. Verify all panels connect with magnets (are fully seated on all corners) to clear the alarm.</p> <ul style="list-style-type: none"> <li>See installation or service guides for front and rear cover panel replacement.</li> </ul>

## Non-Critical Faults

Non-critical faults display an issue on the station, but do not limit energy output. Non-critical faults must still be resolved or escalated, and can indicate more serious issues if they occur repeatedly.

Fault Code or Name	Description	Resolution
1001/1002 - Cooling Fan Fault	<p>A Power Module fan bank rotor is stuck. The station will not charge at full power because there is a problem with the cooling fan.</p> <ul style="list-style-type: none"> <li>1001: Right bank of fans (from back)</li> <li>1002: Left bank of fans (from back)</li> </ul>	<ul style="list-style-type: none"> <li>Check for fan obstructions, correct cable connections, and controller condition.</li> <li>If the fault is still showing after checking the above, replace the faulted fan bank with a fan FRU kit.</li> </ul>
1007 - Coolant very low level switch fault	Low coolant in station detected.	<ul style="list-style-type: none"> <li>Check coolant level.</li> <li>If low coolant is found, send coolant kit with next service.</li> </ul>

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## Non-Specific Faults

These faults might not show any error code, or can generate multiple different error codes.

Fault Code or Name	Description	Resolution
Lighting not on or not functional	Any lights not functioning as expected (holster, area light, secondary display, LED diffusers)	<ul style="list-style-type: none"><li>• All lights are controlled by the secondary display. Remove the display and confirm that all connections are secure.</li><li>• Check the USB connection from the secondary display to the CPNK (touchscreen). Ensure it is securely plugged in on both ends.</li></ul>