# **Express 250**

### **DC Fast Charging Station**

### Service Guide





### **IMPORTANT SAFETY INSTRUCTIONS**

#### SAVE THESE INSTRUCTIONS

This manual contains important instructions for ChargePoint® products that shall be followed during installation, operation and maintenance of each product.

#### **WARNING:**

- Read and follow all warnings and instructions before servicing, installing or operating the ChargePoint® product. Install and operate only as instructed. Failure to do so may lead to death, injury or property damage and will void the Limited Warranty.
- 2. Only use licensed professionals to install your ChargePoint product and adhere to all national and local building codes and standards. Before installing the ChargePoint product, consult with a licensed contractor, such as a licensed electrician, and use a trained installation expert to ensure compliance with local building and electrical codes and standards, climate conditions, safety standards, and all applicable codes and ordinances. Inspect the product for proper installation before use.
- 3. Always ground the ChargePoint product. A touch current of >3.5 mA AC RMS is possible in case of a fault condition of loss of electrical continuity of the earthing conductor. Failure to earth the product can lead to risk of electrocution or fire. The product must be connected to a grounded, metal, permanent wiring system, or an equipment grounding conductor shall be run with circuit conductors and connected to the equipment grounding terminal or lead on the Electric Vehicle Supply Equipment (EVSE). Connections to the EVSE must comply with all applicable codes and ordinances.



- 4. **Install the ChargePoint product using a ChargePoint-approved method.** Failure to install on a surface that can support the full weight of the product can result in death, personal injury or property damage. Inspect the product for proper installation before use.
- 5. The product is not suitable for use in Class 1 hazardous locations, such as near flammable, explosive, or combustible vapours or gases.
- 6. Supervise children near this device.
- 7. Do not put fingers into the electric vehicle connector or connector adapter. Do not touch fingers to charging rails.
- 8. Do not use this product if any cable is frayed, has broken insulation or shows any other signs of damage.
- 9. Do not use this product if the enclosure, the flexible output cable, the vehicle inlet, the electric vehicle connector, or the electric vehicle connector adapter is broken, cracked, open, or shows any other signs of damage. Do not use this product if internal parts are accessible, including wiring.
- 10. Wire and wire terminal information are provided in the ChargePoint product Site Design Guide and Installation Guide.
- 11. Torques for installation of wire terminals are provided in the ChargePoint product Installation Guide.

12. The ChargePoint product maximum operating temperature is 50°C (122°F).



13. Do not use an electric vehicle connector adapter with any charger or EV that is capable of exceeding the adapter's rated voltage of current capacity. Some EVs and EVSE combinations are capable of multiple voltages or limited durations of current overloading designed for normal EVSE-to-EV connections. Use of an electric vehicle connector adapter in these situations could result in unsafe conditions such as fire, burns, or exposure of high voltage.



IMPORTANT: Under no circumstances will compliance with the information in a ChargePoint guide such as this one relieve the user of the responsibility to comply with all applicable codes and safety standards. This document describes approved procedures. If it is not possible to perform the procedures as indicated, contact ChargePoint. ChargePoint is not responsible for any damages that may result from custom installations or procedures not described in this document or that fail to adhere to ChargePoint recommendations.

#### **Product Disposal**

**Applicable to NA** - Do not dispose of as part of unsorted domestic waste. Enquire with local authorities regarding proper disposal. Product materials are recyclable as marked.



Applicable to EU - To comply with Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE), devices marked with this symbol may not be disposed of as part of unsorted domestic waste inside the European Union. Enquire with local authorities regarding proper disposal. Product materials are recyclable as marked.

#### **Document Accuracy**

The specifications and other information in this document were verified to be accurate and complete at the time of its publication. However, due to ongoing product improvement, this information is subject to change at any time without prior notice. For the latest information, see our documentation online at <a href="https://example.com/charge-point">Charge-point</a> Product Reference Documentation.

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#### **Symbols**

This guide and product use the following symbols:



**DANGER:** Risk of electric shock



WARNING: Risk of personal harm or death



**CAUTION:** Risk of equipment or property damage



**IMPORTANT:** Crucial step for installation success



(missing or bad snippet) Helpful information to facilitate installation success



Read the manual for instructions



Ground/protective earth

#### **Illustrations Used in This Document**

The illustrations used in this document are for demonstration purposes only and may not be an exact representation of the product. However, unless otherwise specified, the underlying instructions are accurate for the product.

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# **Revision History**

This page provides a summary of revisions made, listing the month and year of each update along with a brief description of the changes made.

Month & Year	Version Number	Description
October 2025	v1	Consolidated FRUs into a single service guide.

# Introduction 1

Follow this guide to service and replace the Express 250 components.

### **Before You Begin**

**DANGER:** RISK OF SHOCK. Some Power Link 2000 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 Power Link 2000 stations at the service panel.



Whether Standalone or Paired, follow standard practice and local regulations to deenergise 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 have been correctly reinstalled and the work scope has been completed. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN SERIOUS INJURY OR LOSS OF LIFE.



**WARNING:** Do not install or service the charging station in inclement weather. If you work in snow, rain, or wind, you must use a weather-proof shelter that covers all boxes and components.



**CAUTION:** Keep components in original packaging, free of moisture, and protected from damage until you install or service them at the site. Store all deliveries of components in a dry covered location and protect from moisture.



**CAUTION:** Comply with these guidelines to prevent component damage.

 Use tools suitable to torque metric fasteners. All fasteners used on the Power Link 2000 are in metric sizes.



- · Use the given torque values to tighten the fasteners.
- Ensure that the tools such as torque tool, multimeter, and Ethernet tester are calibrated.

#### **CAUTION:** Warranty Limitation



- If the charging station is not installed, commissioned, or serviced by a ChargePoint Certified Technician using a ChargePoint-approved method, it is excluded from all ChargePoint and other warranties and ChargePoint is not responsible.
- You must be a licensed electrician and complete the training at <u>chargepoint.com/installers</u> to become ChargePoint certified and to access the ChargePoint web or app-based installer tools.



**IMPORTANT:** When you service a charging station, ChargePoint recommends taking a photo before removing each part, so you can refer to the photo when reassembling.



**IMPORTANT:** When removing a part, avoid damage to part by setting it gently on a padded surface.



**WARNING:** Follow Service Guide instructions *only*. Use only ChargePoint-authorized parts.



**NOTE:** ChargePoint charging stations are available in various product lines and configurations. Images in this document might not match your station exactly; however, the information is applicable unless otherwise noted.

#### **Additional Documentation**

For your safety and the safety of others, complete these steps before you begin:

- · Familiarise yourself with the instructions in the Service Guide.
- If you have not installed or serviced the Express 250 recently, orient yourself to the Express 250 by reviewing the <u>Site Design</u>, <u>Installation</u>, and <u>Datasheet</u>, as well as any other materials you find helpful.

Access ChargePoint documents at ChargePoint Product Reference Documentation.

Document	Content	Primary Audiences
Datasheet	Full station specifications	Site designer, installer and station owner
Site Design Guide	Civil, mechanical and electrical guidelines to scope and construct the site	Site designer or engineer of record
Concrete Mounting Template Guide	Instructions to embed the charging station template in a concrete pad with anchor bolts and conduit placement (these may also be included in the Site Design Guide)	Site construction contractor
Surface Conduit Entry Kit Guide	Instructions for sites where conduit cannot be run underground	Installer
Construction Signoff Form	Checklists used by contractors to ensure the site is correctly completed and ready for product installation	Site construction contractor
Installation Guide	Anchoring, wiring and powering on	Installer
Operation and Maintenance Guide	Operation and preventive maintenance information	Station owner, facility manager and technician
Service Guide	Component replacement procedures, including optional components	Service technician
Declaration of Conformity	Statement of conformity with directives	Purchasers and public

#### **Check and Protect Parts**

To ensure your safety, do the following:

- Use only authorised parts and accessories sold and supplied by ChargePoint for the unit and model.
- Keep components in original packaging, free of moisture and protected from damage until you install or service them at the site.
- Store all deliveries of components in a dry covered location and protect from moisture.
- Familiarise yourself with the contents of each delivery box.
- Ensure that you have all the parts for the work you plan to perform.
- Have more than one technician or qualified support person present if components are heavy.
- · Keep liquids (and objects containing liquid) away from the unit, never on or inside it.



**NOTE:** Do not discard the part you are replacing. Reuse the packaging from the new part to return all removed parts to ChargePoint.

### If Damaged, Do Not Service

Do not perform work or remove any signs or covers from the unit if you find any of the following:

- · The charging station housing shows mechanical damage.
- · The charging cables or connectors are visibly damaged.
- · The station is unstable or moves.

If you find such damage, turn off the station, advise the site manager to keep the unit(s) off, and contact ChargePoint immediately. Find your region's technical support number at chargepoint.com/support.

#### **Questions**

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

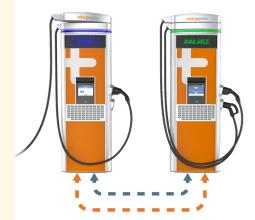
### **Field Replacement Unit**

This topic shows the names and locations of all Field Replaceable Units (FRUs) on the Express 250 charging station that can be serviced in the field by a trained and approved third party.

#### **FRU Service Policies**

These notes and cautions apply to any field service procedure for the Express 250 Charging Station.

**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 regulations to de-energise 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 have been correctly reinstalled and the work scope has been completed. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN SERIOUS INJURY OR LOSS OF LIFE.





**IMPORTANT:** You must be a licensed electrician and complete online training to become a ChargePoint certified installer. If you do not complete this training, you cannot access the ChargePoint network to complete the installation.



Find online training at: chargepoint.com/installers

If the charging station is not installed by a ChargePoint-certified installer, using a ChargePoint-approved method, it is not covered under warranty and ChargePoint is not responsible for any malfunctions.



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



**WARNING:** Do not install or service the charging station in inclement weather. If you work in snow, rain, or wind, you must use a weather-proof shelter that covers all boxes and components.



**IMPORTANT:** When you service a charging station, ChargePoint recommends taking a photo before removing each part, so you can refer to the photo when reassembling.

#### **Product Disposal**

**Applicable to NA** - Do not dispose of as part of unsorted domestic waste. Enquire with local authorities regarding proper disposal. Product materials are recyclable as marked.



**Applicable to EU** - To comply with Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE), devices marked with this symbol may not be disposed of as part of unsorted domestic waste inside the European Union. Enquire with local authorities regarding proper disposal. Product materials are recyclable as marked.

#### **Cover Panels**



Part	Product Name
a. Rear panels (3)	CPE250-REAR-PANELS-F
b. Left extrusion	CPE250-SIDEPANEL-LH-F
c. Right extrusion (available in single or dual cable)	CPE250-SIDEPANEL-RH1-F CPE250-SIDEPANEL-RH2-F
d. <u>Holsters</u> (available in CCS1, CCS2, and CHAdeMO)	CPE250-HOLS-CCS1-F

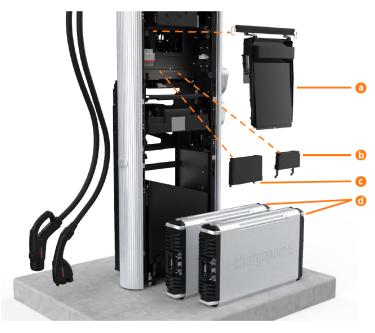
Part	Product Name
	CPE250-HOLS-CCS2-F CPE250-HOLS-CHD-F
e. Area light bar	CPE250-AREALIGHT-F
f. LED display	CPE250-LEDDISPLAY-F
g. Front panels (3)	CPE250-FRONT-PANELS-F
h. <u>Signs</u> (inserts for cover panels)	CPE250C-DEFAULT-SIGNAGE Custom signs available: name varies

#### Front Access, Top



Part	Product Name
a. Individual charging cable. CHAdeMO available in 125 A (CE marked) and 140 A (UL Listed). CCS1 (UL Listed) available in 174 A and 200 A CCS2 (CE marked) available in 200 A. Contact ChargePoint if you are unsure what amperage your station uses.	CPE250-CABLE-CHD-125A-F CPE250-CABLE-CHD-140A-F CPE250-CABLE-CCS1-174A-F CPE250-CABLE-CCS1-200A-F CPE250-CABLE-CCS2-200A-F
b. Full swing arm assembly. Available in single or dual cable. Dual cable available in CCS1/CHAdeMO, CCS2/CHAdeMO, or CCS1/CCS2.	CPE250-CABLE-CCS1-CHD-F CPE250-CABLE-CCS2-CHD-F CPE250-CABLE-CCS1-CCS2- F
c. <u>LED diffuser</u> , front	CPE250-LEDBAR-FT-F
d. Auxiliary power supply	CPE250-AUXPOWER-F
e. Contactor assembly	CPE250-CONTACTBOX-F

#### Front Access, Bottom



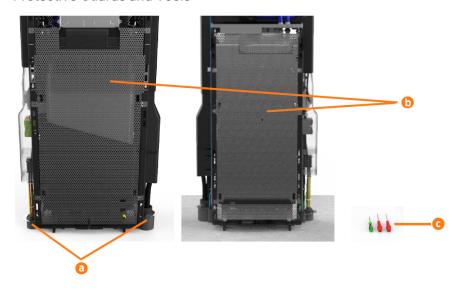
Part	Product Name
a. Touchscreen (CPNK), North America or International	CPE250-CCOM-NA-F CPE250-CCOM-INT-F
b. <u>I/O Expander</u> , mounted on rail behind touchscreen	CPE250-IOEXPANDER-F
c. Station Management Unit (DCC), mounted on rail behind touchscreen	CPE250-DCC-F
d. Power Modules (ship separately from charging station)	System-PM

#### Rear Access



Part	Product Name
a. <u>LED diffuser</u> , rear	CPE250- LEDBAR-RR-F
b. <u>Coolant</u> (jug for refills)	CPE250- COOLANT-F
c. Coolant reservoir	CPE250- RESERVOIR-F
d. Fan trays (2)	CPE250- FANTRAY-F
e. Heat exchanger assembly (behind fan trays)	CPE250- HEATEX-F
f. Cooling controller	CPE250- COOLING- CTRLR-F

#### **Protective Guards and Tools**



Part	Product Name
a. Rodent guard brackets, left and right (2)	CPE250-RODENT-GUARD-F
b. EMI shields, front and rear (2)	CPE250-EMISHIELDS-F
c. Express 250 tool kit (Torx and Wago drivers)	CPE250-TOOLKIT-F

# Replace the Area Light Bar 2

Follow these steps to replace the area light bar.

### **Bring These Tools and Materials**

To replace the area light bar, use these tools and materials:

- ChargePoint replacement part #CPE250-AREALIGHT-F
- · T25 Torx security driver
- Headlamp

#### **Power Off the Station**

Power off at the breaker panel and lock out/tag out before continuing work.



**DANGER:** RISK OF SHOCK. Before performing this procedure, disconnect the power to the Express 250 at the service panel. Keep power off for this circuit until all cover panels have been correctly reinstalled and the work scope has been completed. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

### Replace the Area Light Bar

Complete the following steps to replace the area light bar in a Express 250 charging station.

1. Using a T25 Security screwdriver, loosen the two captive screws on the area light bar.



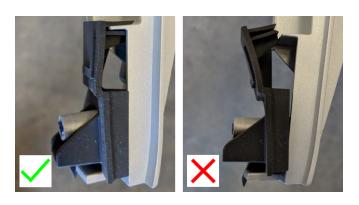
2. Disconnect the power cable that connects the area light bar to the LED display assembly. Remove the area light bar.



**NOTE:** When reinstalling, ensure the gasket on each end of the area light bar is properly seated around the plastic tab.



3. Ensure the gasket on each end of the new area light bar is properly seated around the plastic tab.



4. Connect the power cable from the LED display to the new area light bar.

5. Position the new area light bar above the LED display with the lights facing downwards. Align the area light bar and hold it in place with enough force to compress the gaskets.



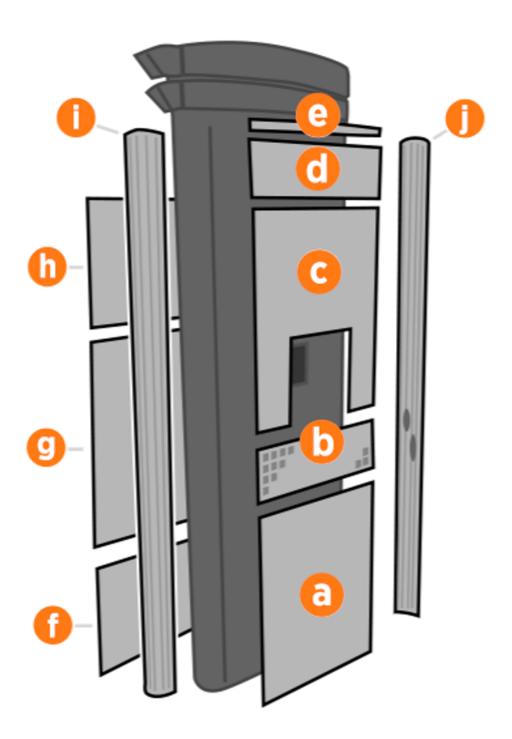
6. Use a T25 Torx security driver to tighten the two captive screws on the bottom edge of the area light bar.



### **Power On the Station**

Once all cover panels have been installed, power on the Express 250. The on-screen Installation Wizard walks you through any required tasks to set up the Express 250 and verify that it can operate properly.

An Installation Wizard test checks that all cover panels have been correctly installed and fully seated. Check the lower right corner of the screen for any error messages. If panel errors appear, match the panel letters to this illustration.



- a. Front bottom panel
- b. Middle vent panel
- c. Front top panel
- d. LED display
- e. Area Light Bar
- f. Rear bottom panel
- g. Rear middle panel
- h. Rear top panel

- i. Left Extrusion
- j. Right extrusion



**DANGER:** RISK OF SHOCK. If a fault exists, turn the power off at the service panel to BOTH Express 250 paired charging stations during work and keep it off until all panels are reinstalled. Internal components can present a shock hazard. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

If any panel needs reinstallation, review the procedures above to double-check that all panels have been fully seated and that the edges of all signs are captured fully by the panels around them. For further details, refer to the Express 250 Installation Guide.

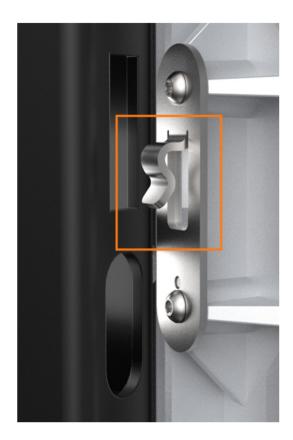
# Replace the Auxiliary Power Supply

Complete the following steps to replace the auxiliary power supply in a Express 250 charging station.

### **Bring These Tools and Materials**

- ChargePoint replacement part #CPE250-AUXPOWER-F
- T25 Security Torx driver
- Headlamp

#### **About Panels**



All Express 250 panels have guide tabs that align with corresponding slots on the Express 250's frame. When removing a panel, lift the panel upward to release these tabs from their slots.



**NOTE:** When installing a panel, align these tabs above their corresponding slots and press the panel downward.

#### **Power Off the Station**

Power off at the breaker panel and lock out/tag out before continuing work.



**DANGER:** RISK OF SHOCK. Before performing this procedure, disconnect the power to the Express 250 at the service panel. Keep power off for this circuit until all cover panels have been correctly reinstalled and the work scope has been completed. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

### Remove the Area Light Bar

1. Using a T25 Security screwdriver, loosen the two captive screws on the area light bar.



2. Disconnect the power cable that connects the area light bar to the LED display assembly. Remove the area light bar.



**NOTE:** When reinstalling, ensure the gasket on each end of the area light bar is properly seated around the plastic tab.



### **Remove the LED Display**

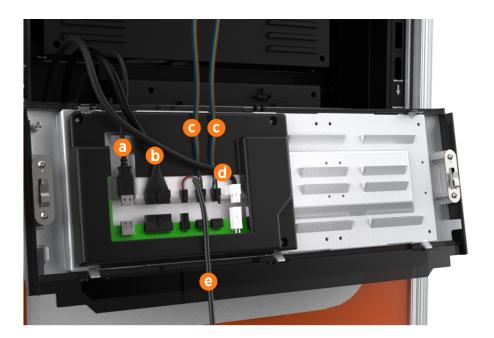
1. Push the LED display upwards to release its guide tabs from their corresponding slots on the Express 250's frame.



2. When the LED display assembly is released, disconnect the five cables from the back.



**NOTE:** When reinstalling, connect the five cables to their corresponding connectors on the back of the display. Leave the area light bar cable (e) loose.



- a. Communications cable (USB-A)
- b. Holster light cable
- c. Area light cable x 2 (interchangeable)
- d. Power cable (24 V)



**IMPORTANT:** Do not allow the LED display to hang from its cables.

### **Remove the Top Front Panel**



- 1. Using two hands, pull the top panel upwards to release its guide tabs from their corresponding slots on the Express 250's frame.
- 2. Place a protective cover, such as a lint-free cloth, over the touchscreen to prevent damage during service.



**IMPORTANT:**If you are replacing a charging cable, be sure to visit Replace a Holsterfor information on replacing the holster BEFORE reinstalling the panels.



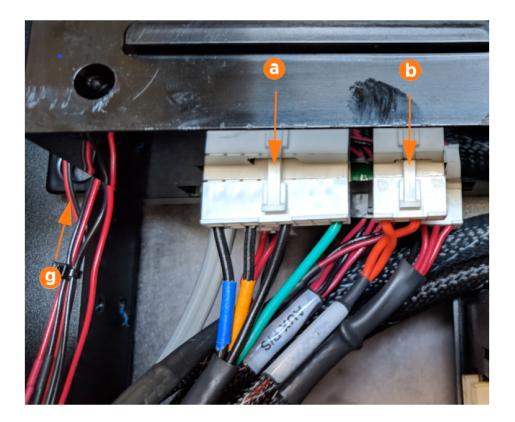
**IMPORTANT:** When reinstalling, push the bottom edge inward to position it inside the groove in the middle vent panel and engage the edge of the sign. Carefully push the panel down until it is firmly seated.



**IMPORTANT:** When reinstalling, ensure all five cables at the top of the panel are not captured by the front upper panel, and are easily accessible for reinstalling the LED display.

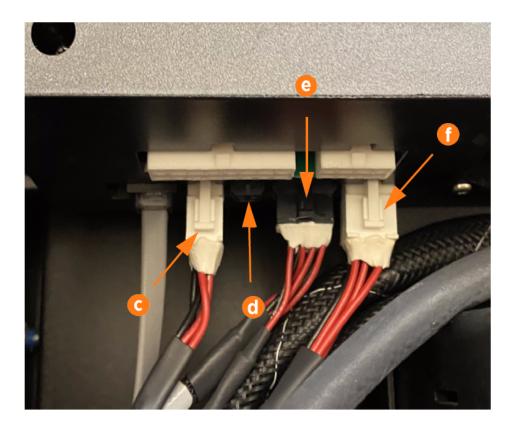
### **Remove the Auxiliary Power Supply**

1. Disconnect the five connectors from the auxiliary power supply:



- a. 480 V power in
- b. Shunt trip relay connector
- c. CAN bus in
- d. Cooling I/O
- e. 12 V power out to internal components
- f. LED display 5 V

2. Use a T25 Torx driver to loosen the four screws at the corners of the auxiliary power supply. Do not fully remove screws: leave the screws in the charging station and move the power supply sideways to release it from the keyhole mounting tabs (g).





NOTE: When reinstalling, torque the four screws hand-tight.

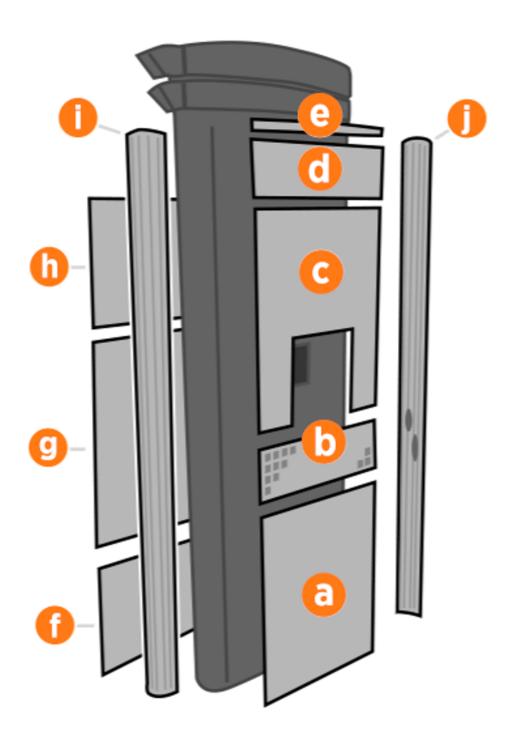
3. Slide the auxiliary power supply towards you to remove it.

REVERSE THE ABOVE STEPS TO REPLACE THE NEW AUXILIARY POWER SUPPLY, TOP FRONT PANEL, LED DISPLAY, AND AREA LIGHT BAR.

#### **Power On the Station**

Once all cover panels have been installed, power on the Express 250. The on-screen Installation Wizard walks you through any required tasks to set up the Express 250 and verify that it can operate properly.

An Installation Wizard test checks that all cover panels have been correctly installed and fully seated. Check the lower right corner of the screen for any error messages. If panel errors appear, match the panel letters to this illustration.



- a. Front bottom panel
- b. Middle vent panel
- c. Front top panel
- d. LED display
- e. Area Light Bar
- f. Rear bottom panel
- g. Rear middle panel
- h. Rear top panel

- i. Left Extrusion
- j. Right extrusion



**DANGER:** RISK OF SHOCK. If a fault exists, turn the power off at the service panel to BOTH Express 250 paired charging stations during work and keep it off until all panels are reinstalled. Internal components can present a shock hazard. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

If any panel needs reinstallation, review the procedures above to double-check that all panels have been fully seated and that the edges of all signs are captured fully by the panels around them. For further details, refer to the <a href="Express 250 Installation Guide">Express 250 Installation Guide</a>.

# -chargepoin+

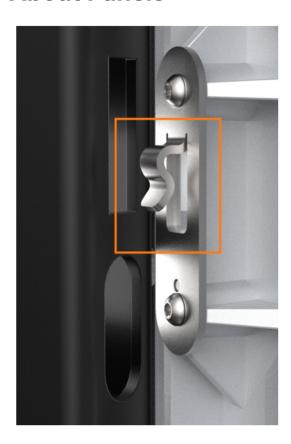
# Add Coolant 4

To add coolant, complete the following steps.

# **Bring These Tools and Materials**

- ChargePoint replacement part #CPE250-COOLANT-F
- Headlamp
- #2 Phillips screwdriver
- T25 Security Torx driver
- · Step ladder
- · Lint-free absorbent cloth
- Funnel

# **About Panels**



All Express 250 panels have guide tabs that align with corresponding slots on the Express 250's frame. When removing a panel, lift the panel upward to release these tabs from their slots.



**NOTE:** When installing a panel, align these tabs above their corresponding slots and press the panel downward.

### **Power off the Station**

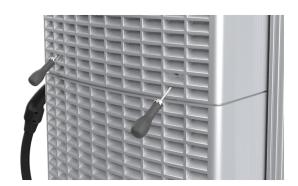
Power off at the breaker panel and lock out/tag out before continuing work.



**DANGER:** RISK OF SHOCK. Before performing this procedure, disconnect the power to the Express 250 at the service panel. Keep power off for this circuit until all cover panels have been correctly reinstalled and the work scope has been completed. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

# **Remove the Top Rear Panel**

1. Using a T25 Torx (or a Phillips #2 screwdriver for early charging stations), loosen the two hidden captive screws located in the top rear panel's vents, inset from each bottom corner.



2. Using a T25 Torx driver, loosen the two captive screws located at the top of the top rear panel. Using two hands, hold the top rear cover at an angle to remove, leading with the bottom edge.



**NOTE:** When reinstalling, squeeze the sides of the panel inward to fit the tabs into place in the C-channel, inside the watertight gasket.



# **Replace the Coolant**

1. Using a step ladder if needed, unscrew the reservoir fill cap (a).



**NOTE:** Do not unscrew the level sensor wiring (b) cap during coolant replacement. Observe the blue tubed connections and make sure there are no leaks before refilling the coolant reservoir.



2. Use a funnel to fill the reservoir to the marked MAX line with coolant.



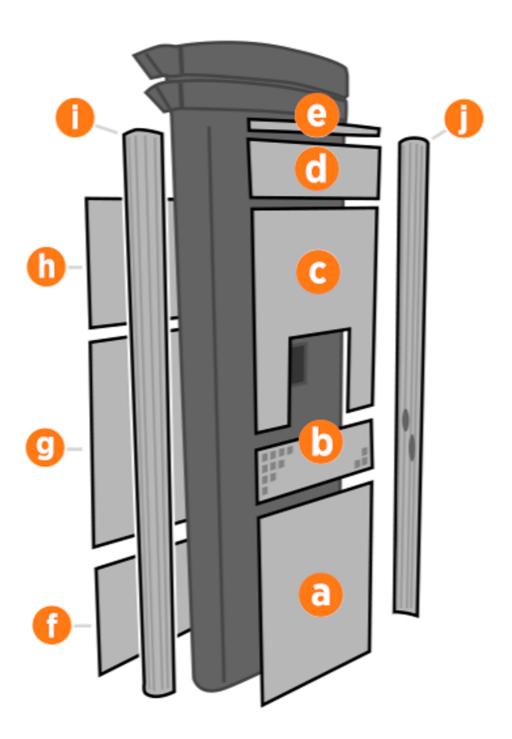
- 3. Replace the reservoir cap.
- 4. Use the cloth to wipe up any coolant spills.

#### REVERSE THE ABOVE STEPS TO REPLACE THE TOP REAR PANEL.

# **Power On the Station**

Once all cover panels have been installed, power on the Express 250. The on-screen Installation Wizard walks you through any required tasks to set up the Express 250 and verify that it can operate properly.

An Installation Wizard test checks that all cover panels have been correctly installed and fully seated. Check the lower right corner of the screen for any error messages. If panel errors appear, match the panel letters to this illustration.



- a. Front bottom panel
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- g. Rear middle panel
- h. Rear top panel

- i. Left Extrusion
- j. Right extrusion



**DANGER:** RISK OF SHOCK. If a fault exists, turn the power off at the service panel to BOTH Express 250 paired charging stations during work and keep it off until all panels are reinstalled. Internal components can present a shock hazard. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

If any panel needs reinstallation, review the procedures above to double-check that all panels have been fully seated and that the edges of all signs are captured fully by the panels around them. For further details, refer to the Express 250 Installation Guide.

# Clean coolant fluid leak from Power Modules

# **Bring These Tools and Materials**

- Power Module shipping crate (provided by ChargePoint)
- 90% isopropyl alcohol
- · Paper towel
- Screwdriver (or any tool able to push in the coolant valve)

# Open the Power Module crate

- 1. Open the Power Module delivery crate so that the pink plastic bag containing the Power Modules is visible.
- 2. Without opening the packaging, inspect the Power Modules for leaked glycol and/or signs of damage.
  - If damaged, contact ChargePoint.
  - If there are no signs of damage but a fluid leak is visible, continue to the next step.

### Clean the coolant leak

1. Open the Power Module packaging and wipe down all external surfaces of the module using 90% isopropyl alcohol and a paper towel.



**NOTE:** Take extra care when cleaning the bus clip, Power Module pin-out, coolant ports, black plastic cover. Visually inspect these components for any trapped debris.

- 2. After cleaning, check for additional leaks:
  - Insert a dry paper towel under the Power Module's cooling ports.
  - Lift up the module and have it placed so that it is oriented on a 45 degree incline (coolant ports closer to the ground).
  - · Gently shake the module vertically.
  - Remove the paper towel and check for signs of further fluid leaks.

3. If there are additional leaks, use a thin tool (such as a screwdriver) to compress the coolant valve to test for pressure. Follow the previous steps to check if the leak persists.



**NOTE:** You may need to repeat this step up to three tries before the leak subsides.





**IMPORTANT:** If the leak continues, follow the instructions to return the module to the factory. Do not continue with normal installation.

# **Test the Power Module**



**DANGER:** RISK OF SHOCK. Before performing this procedure, disconnect the power to the station at the service panel. Keep power off for this circuit until all cover panels have been correctly reinstalled and the work scope has been completed. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

After the clean-up procedure is done and the Power Module determined fit for use, the module must be separately validated before it can be used with other modules.

- 1. If present, remove the existing Power Modules from the station following the station's Service Guide.
- 2. Install the cleaned Power Module. Do not install modules that have not leaked in the same station.
- 3. With only the affected module installed, close up and energise the station.
- 4. If no faults are detected by the station, de-energise the station and proceed with normal installation.

# -chargepoin+

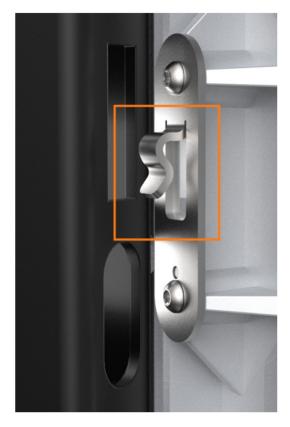
# Replace the Cooling Controller 6

To replace the cooling controller, complete the following steps:

# **Bring These Tools and Materials**

- ChargePoint replacement part #CPE250-COOLING-CTRLR-F
- Headlamp
- Coolant (included with replacement part)
- #2 Phillips screwdriver
- T20 Torx driver
- T25 Security Torx driver
- · Lint-free absorbent cloth
- · Step ladder

### **About Panels**



All Express 250 panels have guide tabs that align with corresponding slots on the Express 250's frame. When removing a panel, lift the panel upward to release these tabs from their slots.



**NOTE:** When installing a panel, align these tabs above their corresponding slots and press the panel downward.

# **Power off the Station**

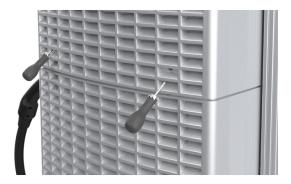
Power off at the breaker panel and lock out/tag out before continuing work.



**DANGER:** RISK OF SHOCK. Before performing this procedure, disconnect the power to the Express 250 at the service panel. Keep power off for this circuit until all cover panels have been correctly reinstalled and the work scope has been completed. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

# Remove the Top and Middle Rear Panels

1. Using a T25 Torx (or a Phillips #2 screwdriver for early charging stations), loosen the two hidden captive screws located in the top rear panel's vents, inset from each bottom corner.



2. Using a T25 Torx driver, loosen the two captive screws located at the top of the top rear panel. Using two hands, hold the top rear cover at an angle to remove, leading with the bottom edge.



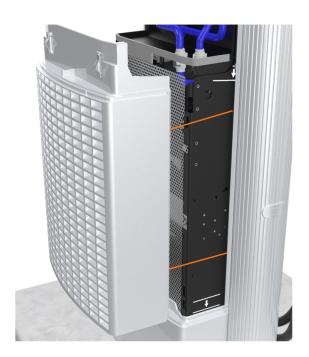
**NOTE:** When reinstalling, squeeze the sides of the panel inward to fit the tabs into place in the C-channel, inside the watertight gasket.



3. Using two hands, lift the middle rear panel straight up and out to disengage the guide tabs.



**NOTE:** When replacing the panel, squeeze the sides of the panel inwards to fit the tabs into place in the C-channel, inside the watertight gasket. Ensure the lower panel's sign is correctly captured under the middle panel's edge as you carefully push the panel down.





**IMPORTANT:** Small gauge wiring routed on the sides of the frame could be sheared if they are caught by panel tabs. Ensure wiring is cleared from guide holes when installing bottom and middle rear panels.

4. Determine whether the station has ground straps (a) or EMI shields (b). An Express 250 only needs one of these protection methods. If you're servicing a station with ground straps, skip to "Remove the Cooling Controller".





## Remove the Rear Bottom Panel and EMI Shield

1. Using two hands, carefully pull the panel upward to release the panel's guide tabs from their corresponding slots on the Express 250's frame.



**NOTE:** When reinstalling, squeeze the sides of the panel inward to fit the tabs into place in the C- channel, inside the watertight gasket. Carefully push the panel down.

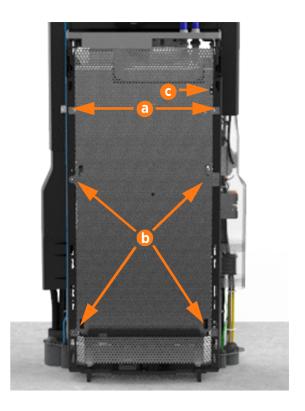


2. Use a T20 Torx to remove the top two screws and washers from the rear EMI shield (a).

3. Use a T25 Torx to remove the four middle and lower screws and washers from the rear EMI shield (b). The rear shield might be in one or two sections. Save all screws and washers for later reuse.

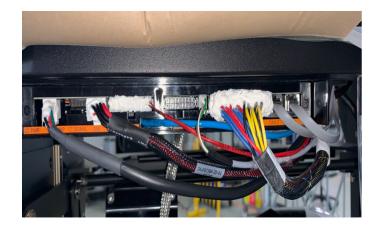


**NOTE:** When reinstalling, ensure that the cutout on the long edge is on the right side (c), leaving the sensor wire clear. When reinstalling, ensure the drain hose and cooling controller cover flap are inside the EMI shield.



# **Remove the Cooling Controller**

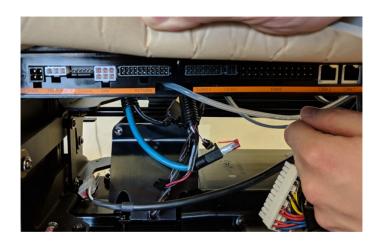
1. Identify the cooling controller, located behind the protective foam edging on the middle frame shelf.



2. Remove each cable attached to the front of the cooling controller by pressing in on its tab and pulling out by hand (listed left to right):



NOTE: The CAN cables are interchangeable.



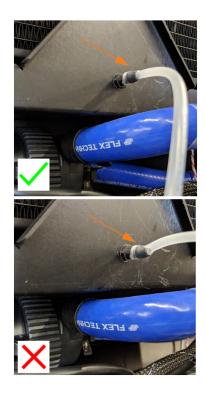
- a. Controller power
- b. Pump
- c. Controller signal
- d. 24 V power
- e. Return
- f. Supply
- g. Level
- h. Fans
- i. CAN 2
- j. CAN1
- 3. Remove the small pressure sensor tube (a) from the front of the heat exchanger by hand. Route the tube down through the grommet in the frame shelf. The tube remains attached to the controller.

4. Use a T20 Torx to remove the two screws attaching the controller to the frame shelf (b). Save the screws for reuse.



# **Replace the Cooling Controller**

1. Align the new cooling controller against the bottom of the frame shelf. Use a T20 Torx to replace the two screws attaching the controller to the frame. Fasten hand-tight.



2. Route the small pressure sensor tube up through the grommet in the frame and reattach it to the heat exchanger by hand.



**NOTE:** Ensure the pressure sensor tube is completely seated and centred on the mount point so that air flow is not constricted. Poor installation can result in a false error alert.

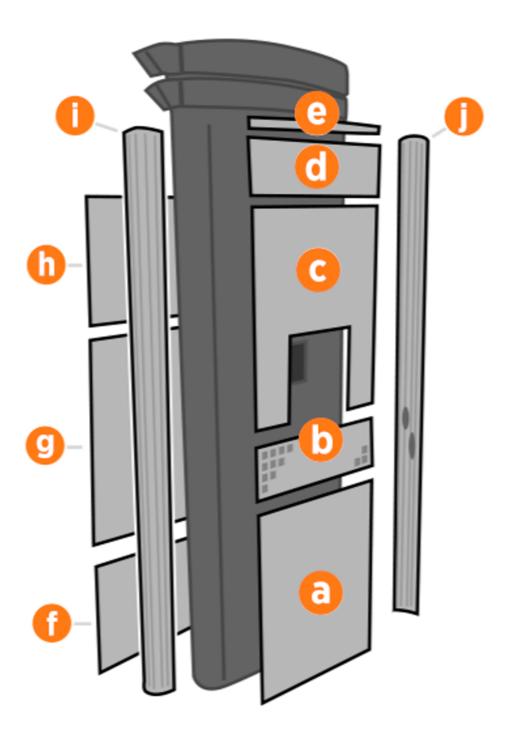
- 3. Reattach all cables to the front of the controller.
- 4. Gently route the slack of all cooling controller cables back up through the grommet in the frame shelf to keep them out of the way of the Power Modules.

#### REVERSE THE ABOVE STEPS TO REPLACE THE REAR EMI SHIELD (IF APPLICABLE) AND REAR PANELS.

### **Power On the Station**

Once all cover panels have been installed, power on the Express 250. The on-screen Installation Wizard walks you through any required tasks to set up the Express 250 and verify that it can operate properly.

An Installation Wizard test checks that all cover panels have been correctly installed and fully seated. Check the lower right corner of the screen for any error messages. If panel errors appear, match the panel letters to this illustration.



- a. Front bottom panel
- b. Middle vent panel
- c. Front top panel
- d. LED display
- e. Area Light Bar
- f. Rear bottom panel
- g. Rear middle panel
- h. Rear top panel

- i. Left Extrusion
- j. Right extrusion



**DANGER:** RISK OF SHOCK. If a fault exists, turn the power off at the service panel to BOTH Express 250 paired charging stations during work and keep it off until all panels are reinstalled. Internal components can present a shock hazard. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

If any panel needs reinstallation, review the procedures above to double-check that all panels have been fully seated and that the edges of all signs are captured fully by the panels around them. For further details, refer to the Express 250 Installation Guide.

# -chargepoin+

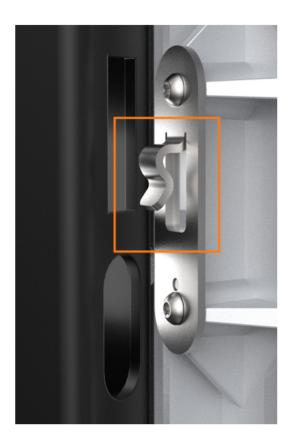
# Replace the Contractor Assembly 7

To replace the contractor assembly, complete the following steps.

# **Bring These Tools and Materials**

- ChargePoint replacement part #CPE250-CONTACTBOX-F
- T20 Torx driver
- T25 Security Torx driver
- Torque wrench capable of 2.8 Nm (25 in-lb)
- Step ladder
- · Isopropyl alcohol wipes
- Headlamp

### **About Panels**



All Express 250 panels have guide tabs that align with corresponding slots on the Express 250's frame. When removing a panel, lift the panel upward to release these tabs from their slots.



**NOTE:** When installing a panel, align these tabs above their corresponding slots and press the panel downward.

### **Power off the Station**

Power off at the breaker panel and lock out/tag out before continuing work.



**DANGER:** RISK OF SHOCK. Before performing this procedure, disconnect the power to the Express 250 at the service panel. Keep power off for this circuit until all cover panels have been correctly reinstalled and the work scope has been completed. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

# Remove the Area Light Bar

1. Using a T25 Security screwdriver, loosen the two captive screws on the area light bar.



2. Disconnect the power cable that connects the area light bar to the LED display assembly. Remove the area light bar.



**NOTE:** When reinstalling, ensure the gasket on each end of the area light bar is properly seated around the plastic tab.



# **Remove the LED Display**

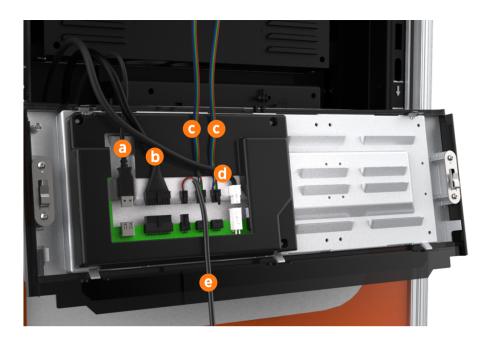
1. Push the LED display upwards to release its guide tabs from their corresponding slots on the Express 250's frame.



2. When the LED display assembly is released, disconnect the five cables from the back.



**NOTE:** When reinstalling, connect the five cables to their corresponding connectors on the back of the display. Leave the area light bar cable (e) loose.



- a. Communications cable (USB-A)
- b. Holster light cable
- c. Area light cable x 2 (interchangeable)
- d. Power cable (24 V)



**IMPORTANT:** Do not allow the LED display to hang from its cables.

# **Remove the Top Front Panel**



- 1. Using two hands, pull the top panel upwards to release its guide tabs from their corresponding slots on the Express 250's frame.
- 2. Place a protective cover, such as a lint-free cloth, over the touchscreen to prevent damage during service.



**IMPORTANT:**If you are replacing a charging cable, be sure to visit Replace a Holsterfor information on replacing the holster BEFORE reinstalling the panels.



**IMPORTANT:** When reinstalling, push the bottom edge inward to position it inside the groove in the middle vent panel and engage the edge of the sign. Carefully push the panel down until it is firmly seated.



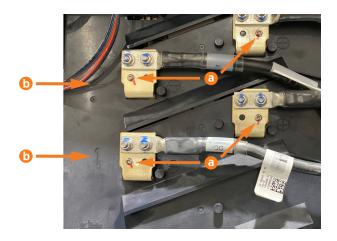
**IMPORTANT:** When reinstalling, ensure all five cables at the top of the panel are not captured by the front upper panel, and are easily accessible for reinstalling the LED display.

# **Remove the Contactor Assembly**



**IMPORTANT:**Before work, take a picture of which cable tab plugs into which slot on the contactor assembly. Cables are colour-coded (black is positive, red is negative). Colour codes are different for each installed charge connector type. It is critical that the cables are reattached to their original locations.

1. Using a T20 Torx driver, remove the screws (a) that attach the cable tabs to the front of the contactor assembly.



2. Remove the cable tabs by moving them slightly back and forth while pulling straight out to release.



**NOTE:** Avoid touching the tab contact area. Handle the cable tabs by their edges.

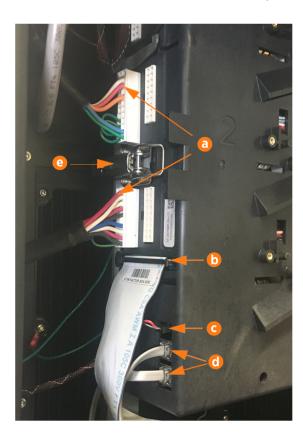


**IMPORTANT:** There are up to three possible charge connector slots shown as 1, 2, and 3 on the front plastic cover (b). Note the position of each communication connector before removal. Each cable must be reattached to its original connector slot on the contactor assembly. Failure to do so may damage the station or vehicle.

If the original connector location is unknown, the cable can be attached to the contactor assembly based on the connector type indicated by the label:

CCS1/CCS2: #2 or #3CHAdeMO: #1 or #3





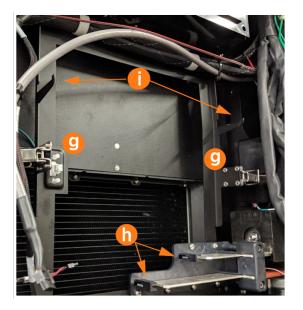
- a. Charge cable communications (a)
- b. DCC communication ribbon cable (b)
- c. 24 V DC power (c)
- d. CAN connectors (d)



**NOTE:** To remove the horizontal ribbon cable, push the tabs outward. Rock it gently from left to right as you pull out the cable. Each cable is keyed to its corresponding connector except the CAN cables, which are interchangeable.

- 4. Open the securing latches on the left and right sides of the contactor box assembly by pushing down on the lock tab and lifting the lever (e).
- 5. Disengage the contactor assembly from the large busbar connections at the bottom (f) by holding it with two hands near the bottom and rocking the assembly slightly as you pull outwards.

6. Once the bus bar connections release, pull the assembly forward along the support arms (g), then lift free from the station.





**NOTE**: Avoid touching the tab contact area. Handle the cable tabs by their edges. There are up to three possible charge connector slots (shown as 1, 2, and 3 on the front plastic cover). Note the position of each communication connector before removal.

# **Replace the Contactor Assembly**

- 1. Ensure latch clasps are open and not blocking the contactor assembly before installation.
- 2. Rest the alignment pegs of the contactor assembly on the support arm hooks.
- 3. Slide the contactor assembly back along the support arms. Push the assembly to engage the bus bars until fully seated.



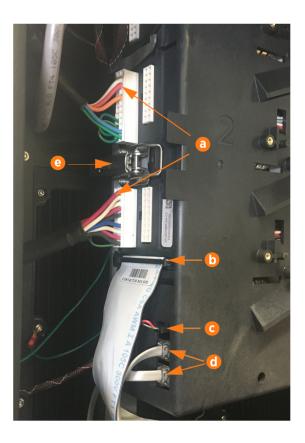
**IMPORTANT:** Ensure the connectors are aligned before pressing in. Do not apply excessive force. Doing so can damage the connectors. Once seated, gently pull the contactor assembly outwards as a push-pull test to confirm it is securely seated.



**NOTE:** Ensure all cables are accessible without being pinched or caught under the contactor assembly.

- 4. Fasten the latches on the right and left sides of the contactor assembly.
- 5. Reconnect each cable on the left side of the contactor assembly.
- 6. Wipe down the contact surface of each cable tab with isopropyl alcohol wipes.

- 7. After double-checking the photo of the cable order, push each cable tab into its corresponding slot. Ensure the plastic guide post is fully seated to be level with the surface of the cable tab.
- 8. Use a T20 Torx driver to re-fasten the screw on each cable tab. Torque to 2.8 Nm (25 in-lb).
- 9. Tuck the excess contactor cable down the side of the enclosure to avoid interfering with the cover panel in a later step.



- a. Charge cable communications
- b. DCC communication ribbon



**NOTE:** Ensure the key aligns with the notch in the socket.

- c. 24 V DC power
- d. CAN connectors (interchangeable)



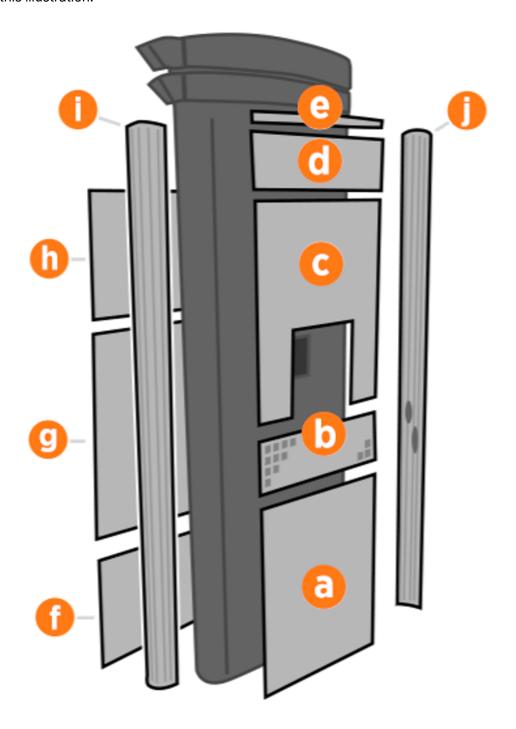
**NOTE:** Secure connector body to the mating connector on the contactor assembly and ensure the tabs are in the open position. During connection the insertion tabs will automatically close onto the connector housing.

REVERSE THE ABOVE STEPS TO REPLACE THE TOP FRONT PANEL, LED DISPLAY AND AREA LIGHT BAR.

### **Power On the Station**

Once all cover panels have been installed, power on the Express 250. The on-screen Installation Wizard walks you through any required tasks to set up the Express 250 and verify that it can operate properly.

An Installation Wizard test checks that all cover panels have been correctly installed and fully seated. Check the lower right corner of the screen for any error messages. If panel errors appear, match the panel letters to this illustration.



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- j. Right extrusion



**DANGER:** RISK OF SHOCK. If a fault exists, turn the power off at the service panel to BOTH Express 250 paired charging stations during work and keep it off until all panels are reinstalled. Internal components can present a shock hazard. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

If any panel needs reinstallation, review the procedures above to double-check that all panels have been fully seated and that the edges of all signs are captured fully by the panels around them. For further details, refer to the Express 250 Installation Guide.

# -chargepoin+

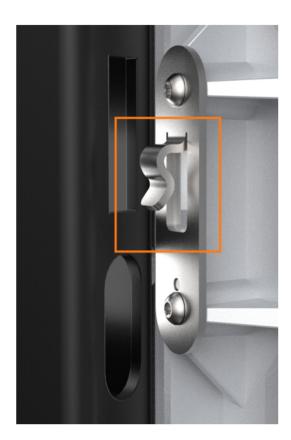
# Replace the Left Extrusion 8

To replace the left extrusion, complete the following steps:

# **Bring These Tools and Materials**

- ChargePoint replacement part #CPE250-SIDEPANEL-LH-F
- Headlamp
- #2 Phillips screwdriver
- T25 Security Torx driver

### **About Panels**



All Express 250 panels have guide tabs that align with corresponding slots on the Express 250's frame. When removing a panel, lift the panel upward to release these tabs from their slots.



**NOTE:** When installing a panel, align these tabs above their corresponding slots and press the panel downward.

# **Power off the Station**

Power off at the breaker panel and lock out/tag out before continuing work.



**DANGER:** RISK OF SHOCK. Before performing this procedure, disconnect the power to the Express 250 at the service panel. Keep power off for this circuit until all cover panels have been correctly reinstalled and the work scope has been completed. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

# Remove the Area Light Bar

1. Using a T25 Security screwdriver, loosen the two captive screws on the area light bar.



2. Disconnect the power cable that connects the area light bar to the LED display assembly. Remove the area light bar.



**NOTE:** When reinstalling, ensure the gasket on each end of the area light bar is properly seated around the plastic tab.



# **Remove the LED Display**

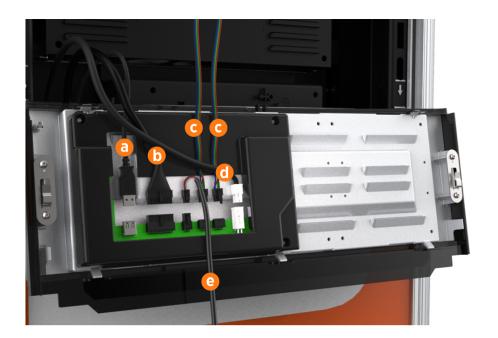
1. Push the LED display upwards to release its guide tabs from their corresponding slots on the Express 250's frame.



2. When the LED display assembly is released, disconnect the five cables from the back.



**NOTE:** When reinstalling, connect the five cables to their corresponding connectors on the back of the display. Leave the area light bar cable (e) loose.



- a. Communications cable (USB-A)
- b. Holster light cable
- c. Area light cable x 2 (interchangeable)
- d. Power cable (24 V)



**IMPORTANT:** Do not allow the LED display to hang from its cables.

## **Remove the Top Front Panel**



- 1. Using two hands, pull the top panel upwards to release its guide tabs from their corresponding slots on the Express 250's frame.
- 2. Place a protective cover, such as a lint-free cloth, over the touchscreen to prevent damage during service.



**IMPORTANT:**If you are replacing a charging cable, be sure to visit Replace a Holsterfor information on replacing the holster BEFORE reinstalling the panels.



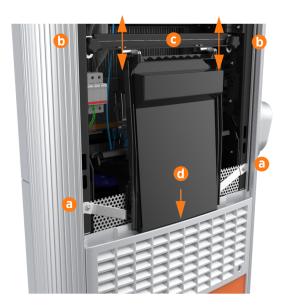
**IMPORTANT:** When reinstalling, push the bottom edge inward to position it inside the groove in the middle vent panel and engage the edge of the sign. Carefully push the panel down until it is firmly seated.



**IMPORTANT:** When reinstalling, ensure all five cables at the top of the panel are not captured by the front upper panel, and are easily accessible for reinstalling the LED display.

### Remove the Middle Vent Panel

1. Use a T25 Torx driver to remove the M5 screw and washer (a) that are attaching each touchscreen ground strap to the frame. Keep the screws and washers for reuse.



2. Loosen both retention knobs (b), allowing the touchscreen beam (c) to slide up vertically and the touchscreen's bottom edge to clear the middle vent panel's slot (d).

3. With hand pressure, tilt the touchscreen upward at a 45-degree angle.



4. Allow the touchscreen to return to its lowest position vertically. Rotate the retention knobs clockwise to re-tighten.



**CAUTION:** The bottom edge and corners of the touchscreen are sharp. Take care when moving underneath the raised screen.

1. Disconnect the two proximity sensor wires from the connectors on the bottom of the touchscreen and the wire management ring. Move the proximity wires to hang in front of the middle vent panel.



**NOTE:** When reinstalling, connect the proximity sensor wires to their corresponding connectors: left wire to left port and right wire to right port. Route any excess wiring through the right-side wire management ring under the touchscreen to prevent it being pinched in the panels.



2. Using two hands, remove the panel by firmly pulling it upward to release the guide tabs from the corresponding slots on the Express 250's frame.



**NOTE:** When reinstalling, route both proximity wires under the sheet metal edge, to hang in front of the panel on the right side (as you face the front of the charging station).





**CAUTION:** The fins on the back surface of the middle vent panel are sharp. Take care when handling the panel.

## **Remove the Bottom Front Panel**

Remove the bottom front panel by lifting upwards from the bottom of the panel to release the guide tabs from their corresponding slots on the Express 250's frame.

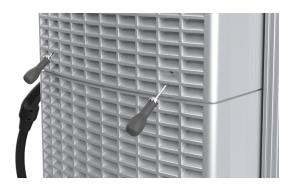


**NOTE:** When reinstalling, ensure the panel installation does not tear or break the gaskets on the inner edges of the side extrusions.



# **Remove the Top Rear Panel**

1. Using a T25 Torx (or a Phillips #2 screwdriver for early charging stations), loosen the two hidden captive screws located in the top rear panel's vents, inset from each bottom corner.



2. Using a T25 Torx driver, loosen the two captive screws located at the top of the top rear panel. Using two hands, hold the top rear cover at an angle to remove, leading with the bottom edge.



**NOTE:** When reinstalling, squeeze the sides of the panel inward to fit the tabs into place in the C-channel, inside the watertight gasket.



## **Remove the Middle Rear Panel**

Using two hands, lift the middle rear panel straight up and out to disengage the guide tabs.



**NOTE:** When reinstalling, squeeze the sides of the panel inward to fit the tabs into place in the C-channel, inside the watertight gasket. For older stations, ensure the lower panel's sign is correctly captured under the middle panel's edge as you carefully push the panel down.





**IMPORTANT:** Small gauge wiring routed on the sides of the frame could be sheared if caught by panel tabs. Ensure wiring is cleared from guide holes when installing bottom and middle rear panels.

### **Remove the Bottom Rear Panel**

Using two hands, carefully pull the panel upward to release the panel's guide tabs from their corresponding slots on the Express 250's frame.



**NOTE:** When reinstalling, squeeze the sides of the panel inward to fit the tabs into place in the C-channel, inside the watertight gasket. Carefully push the panel down.





**IMPORTANT:** For installation or servicing, Surface Conduit Entry (SCE) extrusions can be removed without removing the SCE or rear bottom panel. However, if the rear bottom panel must be removed, first remove the SCE cover and loosen the box base side screws. For more details, refer to the Express 250 Surface Conduit Entry guide on ChargePoint University: <a href="mailto:chargepoint.com/installers">chargepoint.com/installers</a>.



# **Open the Power Module Holders (Ground Straps)**



**NOTE:** If the station has EMI shields instead of ground straps, refer to Open the Power Module Holders (EMI Shields) instead.

1. Use a T25 Torx to remove the front and rear M5 screws and washers attaching the Power Module holder (a) and Power Module (b) ground straps to the Express 250 frame (eight screws total). Keep the screws and washers for use in a later step.



2. Using two hands, squeeze the Power Module mechanism's release bar against the flange. Raise the bar to fully rotate the Power Module mechanism upward to the lock position. This ensures enough clearance for the Power Modules to slide under the mechanism.





3. At the bottom right of the Express 250, press and hold the yellow release latch while pulling the Power Module tray out of the station completely.

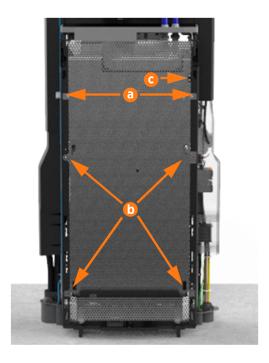


## **Open the Power Module Holders (EMI Shields)**



**NOTE:** If the station has ground straps instead of EMI shields, refer to Open the Power Module Holders (Ground Straps) instead.

1. Use a T20 Torx to remove the top two screws and washers from the rear EMI shield (a).



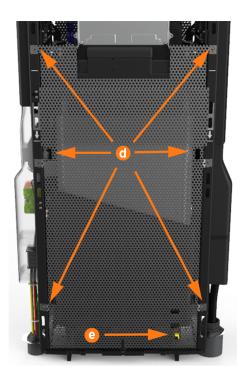
2. Use a T25 Torx to remove the four middle and lower screws and washers from the rear EMI shield (b). The rear shield might be in one or two sections. Save all screws and washers for later reuse.

NOTE: When reinstalling, ensure:



- The cutout on the long edge is on the right side (c), leaving the sensor wire clear.
- The drain hose and cooling controller cover flap are inside the EMI shield.

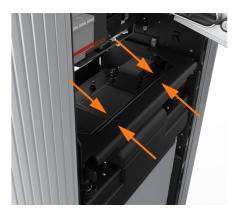
3. Use a T25 Torx to remove the six T25 screws and washers from the front EMI shield (d).





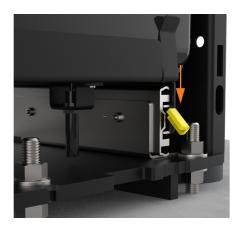
**NOTE:** When reinstalling, position the bottom cutout over the yellow release latch (e).

4. Using two hands, squeeze the Power Module mechanism's release bar against the flange. Raise the bar to fully rotate the Power Module mechanism upward to the lock position. This ensures enough clearance for the Power Modules to slide under the mechanism.





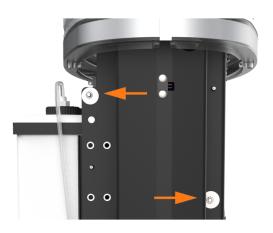
5. At the bottom right of the Express 250, press and hold the yellow release latch while pulling the Power Module tray out of the station completely.



# **Remove the Left Extrusion**

1. Using a step ladder, hold the extrusion with one hand and loosen the top two captive screws using the supplied T25 Torx driver.



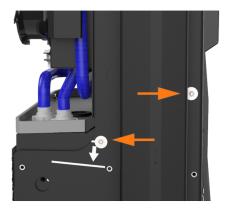


#### **NOTE:**

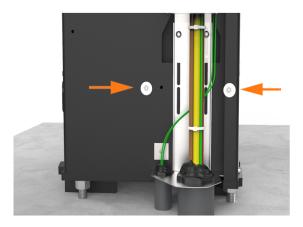


- Images show screw locations from the outside. Fasteners are accessed inside the frame.
- The top and middle screws are asymmetrical.

2. Use a T25 Torx driver to loosen the middle two captive screws while the Power Module mechanism is still in the closed position.



3. Use a T25 Torx driver to loosen the bottom two captive screws.



4. Slightly tilt the bottom of the extrusion out to extract its top edge from under the bottom edge of the area light bar. Lift the extrusion off the guide pins on each side of the frame that hold the extrusion in place.



5. Remove the existing extrusion from the station.

## **Replace the Left Extrusion**

- Slightly tilt the left extrusion and slide its top edge under the bottom edge of the area light bar. Align
  the holes in the extrusion with the guide pins on each side of the Express 250's frame. This
  temporarily holds the extrusion in place.
- 2. Using a stepladder, hold the extrusion with one hand and loosely secure the top two captive screws using the supplied T25 Torx driver.



**NOTE:** The top and middle screws are asymmetrical.

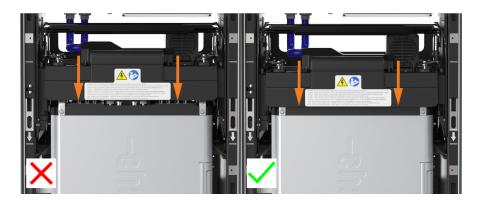
- 3. Use a T25 Torx driver to loosely secure the bottom two screws next. The Power Module holders must not be inside the charging station to have access to the bottom screws.
- 4. Use a T25 Torx driver to loosely secure the middle two screws, just above the Power Module mechanism. Access to the middle screws is easier with the Power Module mechanism handle in the closed (down) position.
- 5. Tighten all left extrusion screws.
- 6. At the bottom right of the Express 250, press and hold the yellow release latch while pushing the Power Module tray into the station until it locks into place.



7. Using two hands, squeeze the Power Module mechanism's release bar and lower it halfway to check alignment with the ports and guide posts.



8. Lower the Power Module mechanism until you hear a click as the mechanism locks into place. Ensure the mechanism is fully engaged with all Power Module connectors. The Power Module mechanism should fully cover the ridges on the Power Module's top edge.





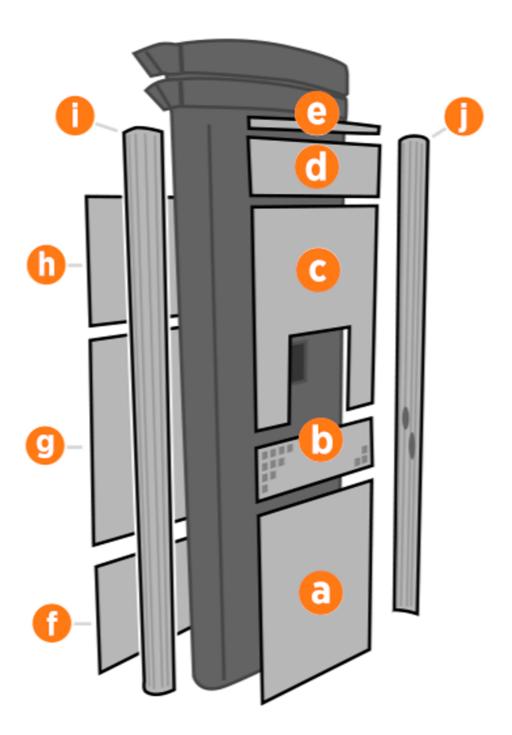
If the mechanism does not engage, raise it again and push the Power Modules to the back of the station to realign, then try again. Do not apply excessive force.

REVERSE THE ABOVE STEPS TO REPLACE THE EMI SHIELD (IF APPLICABLE), REAR PANELS, FRONT PANELS, LED DISPLAY, AND AREA LIGHT BAR.

#### **Power On the Station**

Once all cover panels have been installed, power on the Express 250. The on-screen Installation Wizard walks you through any required tasks to set up the Express 250 and verify that it can operate properly.

An Installation Wizard test checks that all cover panels have been correctly installed and fully seated. Check the lower right corner of the screen for any error messages. If panel errors appear, match the panel letters to this illustration.



- a. Front bottom panel
- b. Middle vent panel
- c. Front top panel
- d. LED display
- e. Area Light Bar
- f. Rear bottom panel
- g. Rear middle panel
- h. Rear top panel

- i. Left Extrusion
- j. Right extrusion



**DANGER:** RISK OF SHOCK. If a fault exists, turn the power off at the service panel to BOTH Express 250 paired charging stations during work and keep it off until all panels are reinstalled. Internal components can present a shock hazard. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

If any panel needs reinstallation, review the procedures above to double-check that all panels have been fully seated and that the edges of all signs are captured fully by the panels around them. For further details, refer to the Express 250 Installation Guide.

# -chargepoin+

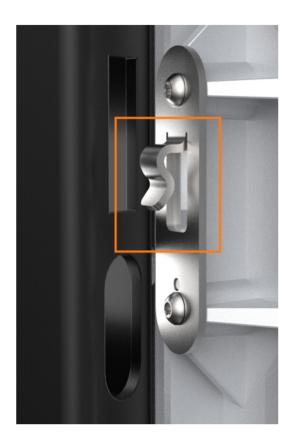
# Replace the Right Extrusion 9

To replace the right extrusion, complete the following steps:

## **Bring These Tools and Materials**

- ChargePoint replacement part #CPE250-SIDEPANEL-RH2-F
- Headlamp
- #2 Phillips screwdriver
- T25 Security Torx driver
- 8 mm (5/16 in) nut driver
- · Small flathead screwdriver

### **About Panels**



All Express 250 panels have guide tabs that align with corresponding slots on the Express 250's frame. When removing a panel, lift the panel upward to release these tabs from their slots.



**NOTE:** When installing a panel, align these tabs above their corresponding slots and press the panel downward.

#### **Power off the Station**

Power off at the breaker panel and lock out/tag out before continuing work.



**DANGER:** RISK OF SHOCK. Before performing this procedure, disconnect the power to the Express 250 at the service panel. Keep power off for this circuit until all cover panels have been correctly reinstalled and the work scope has been completed. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

## Remove the Area Light Bar

1. Using a T25 Security screwdriver, loosen the two captive screws on the area light bar.



2. Disconnect the power cable that connects the area light bar to the LED display assembly. Remove the area light bar.



**NOTE:** When reinstalling, ensure the gasket on each end of the area light bar is properly seated around the plastic tab.



# **Remove the LED Display**

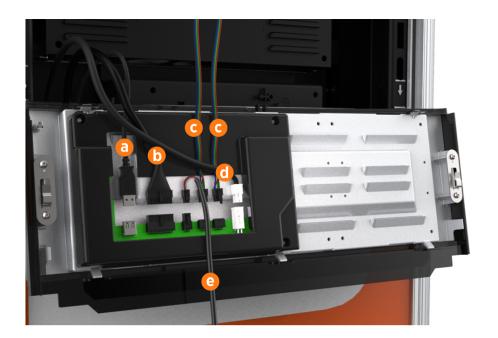
1. Push the LED display upwards to release its guide tabs from their corresponding slots on the Express 250's frame.



2. When the LED display assembly is released, disconnect the five cables from the back.



**NOTE:** When reinstalling, connect the five cables to their corresponding connectors on the back of the display. Leave the area light bar cable (e) loose.



- a. Communications cable (USB-A)
- b. Holster light cable
- c. Area light cable x 2 (interchangeable)
- d. Power cable (24 V)



**IMPORTANT:** Do not allow the LED display to hang from its cables.

## **Remove the Top Front Panel**



- 1. Using two hands, pull the top panel upwards to release its guide tabs from their corresponding slots on the Express 250's frame.
- 2. Place a protective cover, such as a lint-free cloth, over the touchscreen to prevent damage during service.



**IMPORTANT:**If you are replacing a charging cable, be sure to visit Replace a Holsterfor information on replacing the holster BEFORE reinstalling the panels.



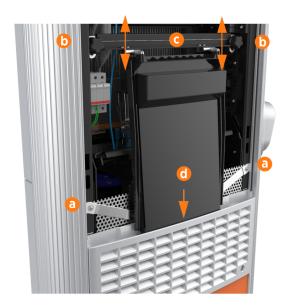
**IMPORTANT:** When reinstalling, push the bottom edge inward to position it inside the groove in the middle vent panel and engage the edge of the sign. Carefully push the panel down until it is firmly seated.



**IMPORTANT:** When reinstalling, ensure all five cables at the top of the panel are not captured by the front upper panel, and are easily accessible for reinstalling the LED display.

### Remove the Middle Vent Panel

1. Use a T25 Torx driver to remove the M5 screw and washer (a) that are attaching each touchscreen ground strap to the frame. Keep the screws and washers for reuse.



2. Loosen both retention knobs (b), allowing the touchscreen beam (c) to slide up vertically and the touchscreen's bottom edge to clear the middle vent panel's slot (d).

3. With hand pressure, tilt the touchscreen upward at a 45-degree angle.



4. Allow the touchscreen to return to its lowest position vertically. Rotate the retention knobs clockwise to re-tighten.



**CAUTION:** The bottom edge and corners of the touchscreen are sharp. Take care when moving underneath the raised screen.

1. Disconnect the two proximity sensor wires from the connectors on the bottom of the touchscreen and the wire management ring. Move the proximity wires to hang in front of the middle vent panel.



**NOTE:** When reinstalling, connect the proximity sensor wires to their corresponding connectors: left wire to left port and right wire to right port. Route any excess wiring through the right-side wire management ring under the touchscreen to prevent it being pinched in the panels.



2. Using two hands, remove the panel by firmly pulling it upward to release the guide tabs from the corresponding slots on the Express 250's frame.



**NOTE:** When reinstalling, route both proximity wires under the sheet metal edge, to hang in front of the panel on the right side (as you face the front of the charging station).





**CAUTION:** The fins on the back surface of the middle vent panel are sharp. Take care when handling the panel.

## **Remove the Bottom Front Panel**

Remove the bottom front panel by lifting upwards from the bottom of the panel to release the guide tabs from their corresponding slots on the Express 250's frame.

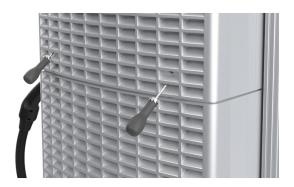


**NOTE:** When reinstalling, ensure the panel installation does not tear or break the gaskets on the inner edges of the side extrusions.



# **Remove the Top Rear Panel**

1. Using a T25 Torx (or a Phillips #2 screwdriver for early charging stations), loosen the two hidden captive screws located in the top rear panel's vents, inset from each bottom corner.



2. Using a T25 Torx driver, loosen the two captive screws located at the top of the top rear panel. Using two hands, hold the top rear cover at an angle to remove, leading with the bottom edge.



**NOTE:** When reinstalling, squeeze the sides of the panel inward to fit the tabs into place in the C-channel, inside the watertight gasket.



## **Remove the Middle Rear Panel**

Using two hands, lift the middle rear panel straight up and out to disengage the guide tabs.



**NOTE:** When reinstalling, squeeze the sides of the panel inward to fit the tabs into place in the C-channel, inside the watertight gasket. For older stations, ensure the lower panel's sign is correctly captured under the middle panel's edge as you carefully push the panel down.





**IMPORTANT:** Small gauge wiring routed on the sides of the frame could be sheared if caught by panel tabs. Ensure wiring is cleared from guide holes when installing bottom and middle rear panels.

### **Remove the Bottom Rear Panel**

Using two hands, carefully pull the panel upward to release the panel's guide tabs from their corresponding slots on the Express 250's frame.



**NOTE:** When reinstalling, squeeze the sides of the panel inward to fit the tabs into place in the C-channel, inside the watertight gasket. Carefully push the panel down.





**IMPORTANT:** For installation or servicing, Surface Conduit Entry (SCE) extrusions can be removed without removing the SCE or rear bottom panel. However, if the rear bottom panel must be removed, first remove the SCE cover and loosen the box base side screws. For more details, refer to the Express 250 Surface Conduit Entry guide on ChargePoint University: <a href="mailto:chargepoint.com/installers">chargepoint.com/installers</a>.



# **Open the Power Module Holders (Ground Straps)**



**NOTE:** If the station has EMI shields instead of ground straps, refer to Open the Power Module Holders (EMI Shields) instead.

1. Use a T25 Torx to remove the front and rear M5 screws and washers attaching the Power Module holder (a) and Power Module (b) ground straps to the Express 250 frame (eight screws total). Keep the screws and washers for use in a later step.



2. Using two hands, squeeze the Power Module mechanism's release bar against the flange. Raise the bar to fully rotate the Power Module mechanism upward to the lock position. This ensures enough clearance for the Power Modules to slide under the mechanism.





3. At the bottom right of the Express 250, press and hold the yellow release latch while pulling the Power Module tray out of the station completely.

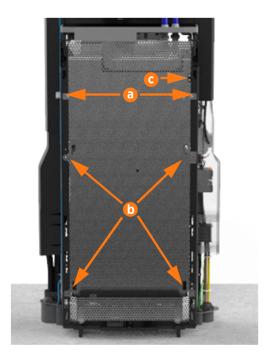


## **Open the Power Module Holders (EMI Shields)**



**NOTE:** If the station has ground straps instead of EMI shields, refer to Open the Power Module Holders (Ground Straps) instead.

1. Use a T20 Torx to remove the top two screws and washers from the rear EMI shield (a).



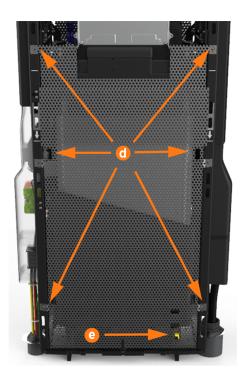
2. Use a T25 Torx to remove the four middle and lower screws and washers from the rear EMI shield (b). The rear shield might be in one or two sections. Save all screws and washers for later reuse.

NOTE: When reinstalling, ensure:



- The cutout on the long edge is on the right side (c), leaving the sensor wire clear.
- The drain hose and cooling controller cover flap are inside the EMI shield.

3. Use a T25 Torx to remove the six T25 screws and washers from the front EMI shield (d).





**NOTE:** When reinstalling, position the bottom cutout over the yellow release latch (e).

4. Using two hands, squeeze the Power Module mechanism's release bar against the flange. Raise the bar to fully rotate the Power Module mechanism upward to the lock position. This ensures enough clearance for the Power Modules to slide under the mechanism.





5. At the bottom right of the Express 250, press and hold the yellow release latch while pulling the Power Module tray out of the station completely.



## **Remove the Right Extrusion**

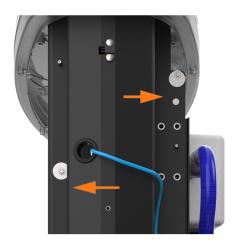
1. Remove the charging cables from their holsters and rest them gently on a padded surface out of the way.

- 2. Insert a small flat head screwdriver into the notch on each plastic cap to remove it from the holster screw opening.
- 3. Use a T25 Torx to remove the rubberised washer and M5 shoulder screw. Set them aside for reuse.



4. Using a stepladder, hold the extrusion with one hand and loosen the top two captive screws using the supplied T25 Torx driver.





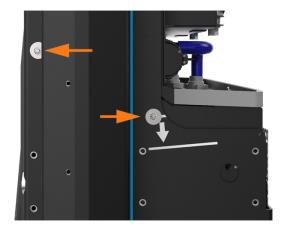


**NOTE:** Images show screw locations from the outside. Fasteners are accessed inside the frame.

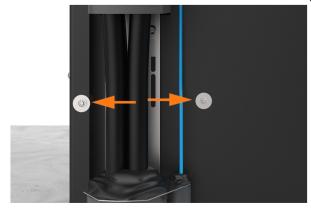


**NOTE:** The top and middle screws are asymmetrical.

5. Use a T25 Torx driver to loosen the middle two captive screws while the Power Module mechanism is still in the closed position.



6. Use a T25 Torx driver to loosen the bottom two captive screws.



7. Slightly tilt the bottom of the extrusion out to extract its top edge from under the bottom edge of the area light bar. Lift the extrusion off the guide pins on each side of the frame that hold the extrusion in place.



- 8. Disconnect the shortest cable from the top holster.
- 9. Disconnect the next-longest cable from the bottom holster.





**IMPORTANT:** When reinstalling, check that these connections are correctly seated, or the system will not operate.

- 10. Locate the P-clip mounted to one of the holsters (top or bottom holster varies by product version).
- 11. Remove the P-clip hardware from the extrusion holster:
  - Generation 1, attached with screw: use a T25 Torx driver to remove the screw and all its components. Carefully note the order of the components.
  - Generation 2, attached with nut (a): Use an 8 mm (5/16 in) nut driver to remove only the nut and the P-clip.
- 12. Remove the shielded holster cable from the opening in the P-clip (b).
- 13. Remove the existing extrusion from the station.



## **Replace the Right Extrusion**

- 1. Slightly tilt the right extrusion and slide its top edge under the bottom edge of the area light bar. Align the holes in the extrusion with the guide pins on each side of the Express 250's frame. This temporarily holds the extrusion in place.
- 2. Install the shielded holster cable and P-clip hardware to the extrusion holsters using either a T25 Torx Driver (Generation 1) or an 8 mm (5/16 in) nut driver (Generation 2).
- 3. Connect the longest cable to the bottom holster and the shortest cable to the top holster.



**NOTE:** Ensure the connections are correctly seated, or the system will not operate.

4. Using a stepladder, hold the extrusion with one hand and loosely secure the top two captive screws using the supplied T25 Torx driver.



NOTE: The top and middle screws are asymmetrical.

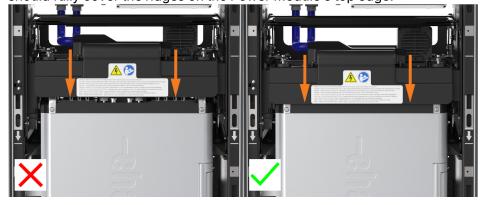
- 5. Use a T25 Torx driver to loosely secure the bottom two screws next. The Power Module holders must not be inside the charging station to have access to the bottom screws.
- 6. Use a T25 Torx driver to loosely secure the middle two screws, just above the Power Module mechanism. Access to the middle screws is easier with the Power Module mechanism handle in the closed (down) position.
- 7. Tighten all right extrusion screws.
- 8. At the bottom right of the Express 250, press and hold the yellow release latch while pushing the Power Module tray into the station until it locks into place.



9. Using two hands, squeeze the Power Module mechanism's release bar and lower it halfway to check alignment with the ports and guide posts.



10. Lower the Power Module mechanism until you hear a click as the mechanism locks into place. Ensure the mechanism is fully engaged with all Power Module connectors. The Power Module mechanism should fully cover the ridges on the Power Module's top edge.





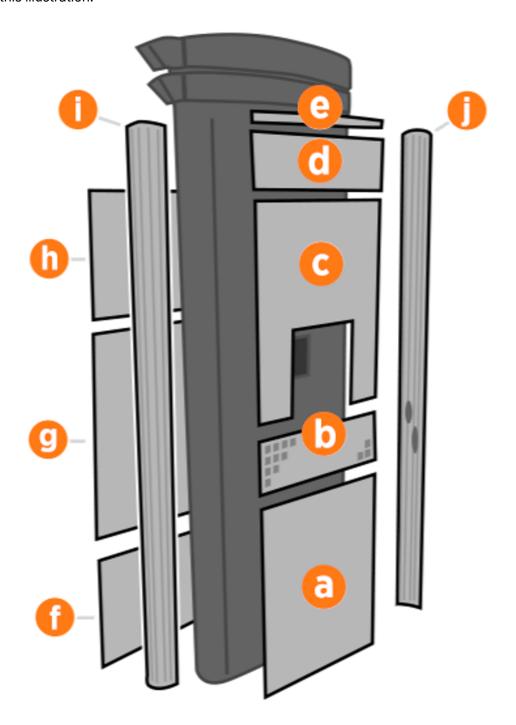
If the mechanism does not engage, raise it again and push the Power Modules to the back of the station to realign, then try again. Do not apply excessive force.

REVERSE THE ABOVE STEPS TO REPLACE THE EMI SHIELD (IF APPLICABLE), REAR PANELS, FRONT PANELS, LED DISPLAY, AND AREA LIGHT BAR.

## **Power On the Station**

Once all cover panels have been installed, power on the Express 250. The on-screen Installation Wizard walks you through any required tasks to set up the Express 250 and verify that it can operate properly.

An Installation Wizard test checks that all cover panels have been correctly installed and fully seated. Check the lower right corner of the screen for any error messages. If panel errors appear, match the panel letters to this illustration.



- a. Front bottom panel
- b. Middle vent panel
- c. Front top panel
- d. LED display

- e. Area Light Bar
- f. Rear bottom panel
- g. Rear middle panel
- h. Rear top panel
- i. Left Extrusion
- j. Right extrusion



**DANGER:** RISK OF SHOCK. If a fault exists, turn the power off at the service panel to BOTH Express 250 paired charging stations during work and keep it off until all panels are reinstalled. Internal components can present a shock hazard. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

If any panel needs reinstallation, review the procedures above to double-check that all panels have been fully seated and that the edges of all signs are captured fully by the panels around them. For further details, refer to the Express 250 Installation Guide.

## -chargepoin+

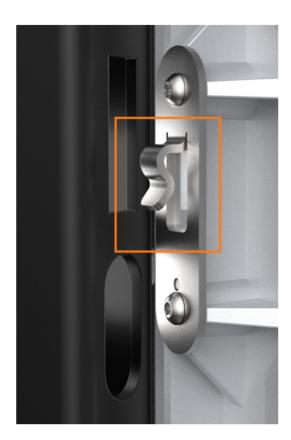
## Replace the Front Cover Panel 10

To replace the front cover panel, complete the following steps:

## **Bring These Tools and Materials**

- ChargePoint replacement part #CPE250-FRONT-PANELS-F
- T25 Security Torx driver
- · Step ladder
- Headlamp

#### **About Panels**



All Express 250 panels have guide tabs that align with corresponding slots on the Express 250's frame. When removing a panel, lift the panel upward to release these tabs from their slots.



**NOTE:** When installing a panel, align these tabs above their corresponding slots and press the panel downward.

## **Power off the Station**

Power off at the breaker panel and lock out/tag out before continuing work.



**DANGER:** RISK OF SHOCK. Before performing this procedure, disconnect the power to the Express 250 at the service panel. Keep power off for this circuit until all cover panels have been correctly reinstalled and the work scope has been completed. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

## Remove the Area Light Bar

1. Using a T25 Security screwdriver, loosen the two captive screws on the area light bar.



2. Disconnect the power cable that connects the area light bar to the LED display assembly. Remove the area light bar.



**NOTE:** When reinstalling, ensure the gasket on each end of the area light bar is properly seated around the plastic tab.



## **Remove the LED Display**

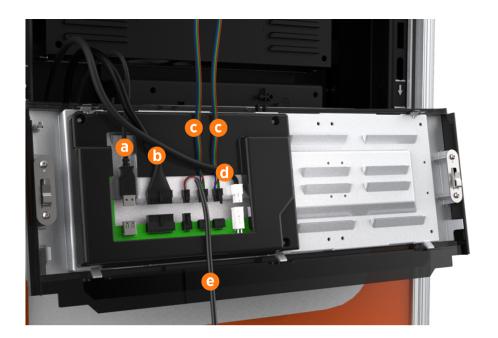
1. Push the LED display upwards to release its guide tabs from their corresponding slots on the Express 250's frame.



2. When the LED display assembly is released, disconnect the five cables from the back.



**NOTE:** When reinstalling, connect the five cables to their corresponding connectors on the back of the display. Leave the area light bar cable (e) loose.



- a. Communications cable (USB-A)
- b. Holster light cable
- c. Area light cable x 2 (interchangeable)
- d. Power cable (24 V)



**IMPORTANT:** Do not allow the LED display to hang from its cables.

## **Remove the Top Front Panel**



- 1. Using two hands, pull the top panel upwards to release its guide tabs from their corresponding slots on the Express 250's frame.
- 2. Place a protective cover, such as a lint-free cloth, over the touchscreen to prevent damage during service.



**IMPORTANT:**If you are replacing a charging cable, be sure to visit Replace a Holsterfor information on replacing the holster BEFORE reinstalling the panels.



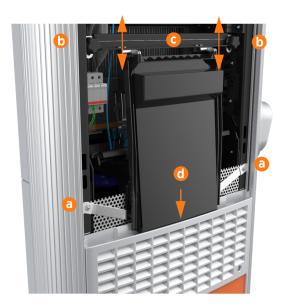
**IMPORTANT:** When reinstalling, push the bottom edge inward to position it inside the groove in the middle vent panel and engage the edge of the sign. Carefully push the panel down until it is firmly seated.



**IMPORTANT:** When reinstalling, ensure all five cables at the top of the panel are not captured by the front upper panel, and are easily accessible for reinstalling the LED display.

### Remove the Middle Vent Panel

1. Use a T25 Torx driver to remove the M5 screw and washer (a) that are attaching each touchscreen ground strap to the frame. Keep the screws and washers for reuse.



2. Loosen both retention knobs (b), allowing the touchscreen beam (c) to slide up vertically and the touchscreen's bottom edge to clear the middle vent panel's slot (d).

3. With hand pressure, tilt the touchscreen upward at a 45-degree angle.



4. Allow the touchscreen to return to its lowest position vertically. Rotate the retention knobs clockwise to re-tighten.



**CAUTION:** The bottom edge and corners of the touchscreen are sharp. Take care when moving underneath the raised screen.

1. Disconnect the two proximity sensor wires from the connectors on the bottom of the touchscreen and the wire management ring. Move the proximity wires to hang in front of the middle vent panel.



**NOTE:** When reinstalling, connect the proximity sensor wires to their corresponding connectors: left wire to left port and right wire to right port. Route any excess wiring through the right-side wire management ring under the touchscreen to prevent it being pinched in the panels.



2. Using two hands, remove the panel by firmly pulling it upward to release the guide tabs from the corresponding slots on the Express 250's frame.



**NOTE:** When reinstalling, route both proximity wires under the sheet metal edge, to hang in front of the panel on the right side (as you face the front of the charging station).





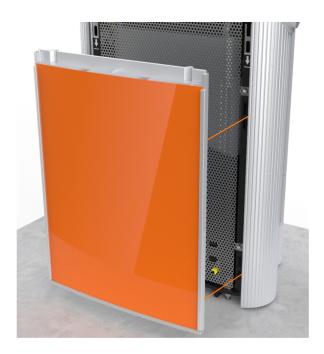
**CAUTION:** The fins on the back surface of the middle vent panel are sharp. Take care when handling the panel.

## **Remove the Bottom Front Panel**

Remove the bottom front panel by lifting upwards from the bottom of the panel to release the guide tabs from their corresponding slots on the Express 250's frame.



**NOTE:** When reinstalling, ensure the panel installation does not tear or break the gaskets on the inner edges of the side extrusions.

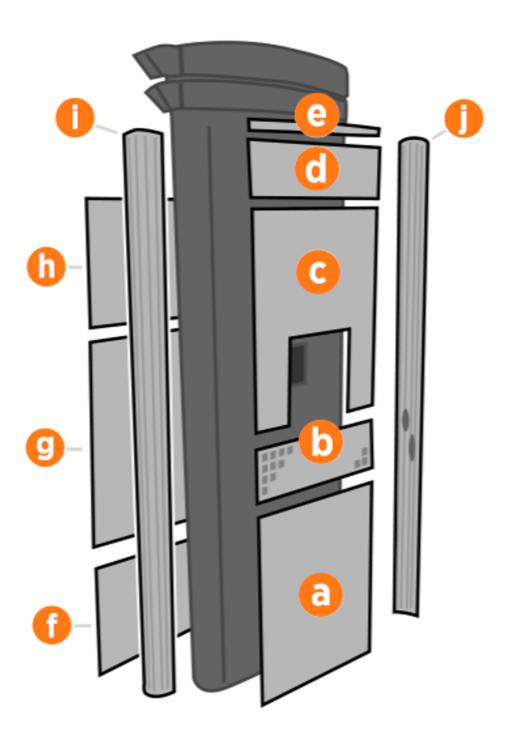


REVERSE THE ABOVE STEPS TO REPLACE THE BOTTOM FRONT PANEL, MIDDLE VENT PANEL, TOP FRONT PANEL, LED DISPLAY AND AREA LIGHT BAR.

### **Power On the Station**

Once all cover panels have been installed, power on the Express 250. The on-screen Installation Wizard walks you through any required tasks to set up the Express 250 and verify that it can operate properly.

An Installation Wizard test checks that all cover panels have been correctly installed and fully seated. Check the lower right corner of the screen for any error messages. If panel errors appear, match the panel letters to this illustration.



- a. Front bottom panel
- b. Middle vent panel
- c. Front top panel
- d. LED display
- e. Area Light Bar
- f. Rear bottom panel
- g. Rear middle panel
- h. Rear top panel

- i. Left Extrusion
- j. Right extrusion



**DANGER:** RISK OF SHOCK. If a fault exists, turn the power off at the service panel to BOTH Express 250 paired charging stations during work and keep it off until all panels are reinstalled. Internal components can present a shock hazard. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

If any panel needs reinstallation, review the procedures above to double-check that all panels have been fully seated and that the edges of all signs are captured fully by the panels around them. For further details, refer to the Express 250 Installation Guide.

## -chargepoin+

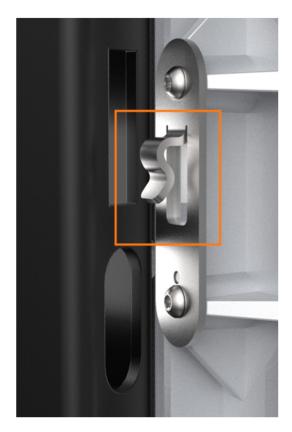
# Replace the Heat Exchanger 11 Assembly

To replace the heat exchanger assembly, complete the following steps:

## **Bring These Tools and Materials**

- ChargePoint replacement part #CPE250-HEATEX-F
- Coolant (included with replacement part)
- #2 Phillips screwdriver
- T10 Torx driver
- T20 Torx driver
- · T25 Security Torx driver
- T27 Security Torx driver
- · Lint-free absorbent cloth
- · Step ladder
- Headlamp

## **About Panels**



All Express 250 panels have guide tabs that align with corresponding slots on the Express 250's frame. When removing a panel, lift the panel upward to release these tabs from their slots.



**NOTE:** When installing a panel, align these tabs above their corresponding slots and press the panel downward.

## **Power off the Station**

Power off at the breaker panel and lock out/tag out before continuing work.



**DANGER:** RISK OF SHOCK. Before performing this procedure, disconnect the power to the Express 250 at the service panel. Keep power off for this circuit until all cover panels have been correctly reinstalled and the work scope has been completed. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

## **Remove the Area Light Bar**

1. Using a T25 Security screwdriver, loosen the two captive screws on the area light bar.



2. Disconnect the power cable that connects the area light bar to the LED display assembly. Remove the area light bar.



**NOTE:** When reinstalling, ensure the gasket on each end of the area light bar is properly seated around the plastic tab.



## **Remove the LED Display**

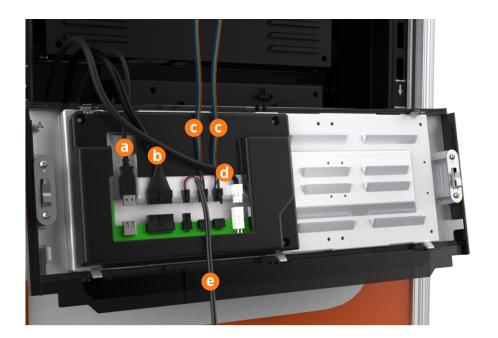
1. Push the LED display upwards to release its guide tabs from their corresponding slots on the Express 250's frame.



2. When the LED display assembly is released, disconnect the five cables from the back.



**NOTE:** When reinstalling, connect the five cables to their corresponding connectors on the back of the display. Leave the area light bar cable (e) loose.



- a. Communications cable (USB-A)
- b. Holster light cable
- c. Area light cable x 2 (interchangeable)
- d. Power cable (24 V)



**IMPORTANT:** Do not allow the LED display to hang from its cables.

## **Remove the Top Front Panel**



- 1. Using two hands, pull the top panel upwards to release its guide tabs from their corresponding slots on the Express 250's frame.
- 2. Place a protective cover, such as a lint-free cloth, over the touchscreen to prevent damage during service.



**IMPORTANT:**If you are replacing a charging cable, be sure to visit Replace a Holsterfor information on replacing the holster BEFORE reinstalling the panels.



**IMPORTANT:** When reinstalling, push the bottom edge inward to position it inside the groove in the middle vent panel and engage the edge of the sign. Carefully push the panel down until it is firmly seated.



**IMPORTANT:**When reinstalling, ensure all five cables at the top of the panel are not captured by the front upper panel, and are easily accessible for reinstalling the LED display.

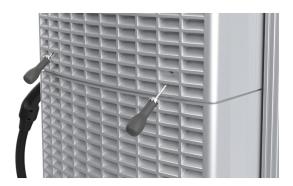
#### **Remove the Ground Screw**

- 1. From the front of the charging station, look to the left of the contactor assembly. Identify the heat exchanger ground wire.
- 2. Using a T10 Torx, remove the heat exchanger ground screw from the radiator and save it for later use.



## **Remove Top and Middle Rear Panels**

1. Using a T25 Torx (or a Phillips #2 screwdriver for early charging stations), loosen the two hidden captive screws located in the top rear panel's vents, inset from each bottom corner.



2. Using a T25 Torx driver, loosen the two captive screws located at the top of the top rear panel. Using two hands, hold the top rear cover at an angle to remove, leading with the bottom edge.



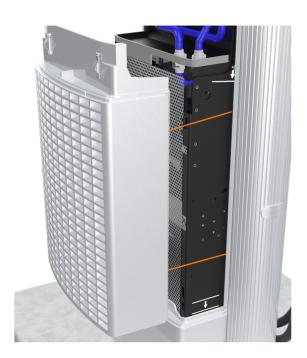
**NOTE:** When reinstalling, squeeze the sides of the panel inward to fit the tabs into place in the C-channel, inside the watertight gasket.



3. Using two hands, lift the middle rear panel straight up and out to disengage the guide tabs.



**NOTE:** When replacing the panel, squeeze the sides of the panel inwards to fit the tabs into place in the C-channel, inside the watertight gasket. Ensure the lower panel's sign is correctly captured under the middle panel's edge as you carefully push the panel down.





**IMPORTANT:** Small gauge wiring routed on the sides of the frame could be sheared if they are caught by panel tabs. Ensure wiring is cleared from guide holes when installing bottom and middle rear panels.

5. Determine whether the station has ground straps (a) or EMI shields (b). An Express 250 only needs one of these protection methods. If you're servicing a station with ground straps, skip to "Remove the Fan Tray Assemblies".





### Remove the Rear Bottom Panel and EMI Shield

1. Using two hands, carefully pull the panel upward to release the panel's guide tabs from their corresponding slots on the Express 250's frame.



**NOTE:** When reinstalling, squeeze the sides of the panel inward to fit the tabs into place in the C- channel, inside the watertight gasket. Carefully push the panel down.

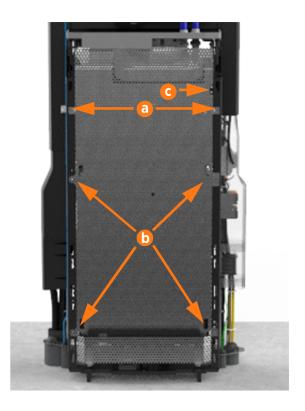


2. Use a T20 Torx to remove the top two screws and washers from the rear EMI shield (a).

3. Use a T25 Torx to remove the four middle and lower screws and washers from the rear EMI shield (b). The rear shield might be in one or two sections. Save all screws and washers for later reuse.



**NOTE:** When reinstalling, ensure that the cutout on the long edge is on the right side (c), leaving the sensor wire clear. When reinstalling, ensure the drain hose and cooling controller cover flap are inside the EMI shield.



## **Remove the Fan Tray Assemblies**

1. The system has two fan trays (left and right). On each tray, pull the tab (a) at the top of the fan tray assembly forward to disengage it.



**NOTE**: Zip ties on the fan tray must be cut off to remove the fan tray assembly.

2. Using two hands, slide the tray upward until the mounting tabs (b) on the fan tray assembly are positioned above their corresponding slots.





**NOTE:** Check that the power connector at the base of the fan assembly easily disengages as the fan tray is lifted.



- 3. Pull the fan tray assembly towards you to remove it.
- 4. Repeat for the other fan tray.
- 5. When replacing the fan tray:
  - Ensure all four tabs on the fan tray assembly are positioned above their corresponding slots.
  - Press the fan tray assembly against the Express 250, then slide the fan tray downward.
  - Ensure each tab on the fan tray is located under, and not over, its corresponding slot.
  - Ensure the top tabs are engaged into the metal housing behind them.
  - Ensure the fan's power connector at the bottom seats correctly.



NOTE: Fan tray zip ties do not need to be replaced.

## **Remove the Cooling Controller**

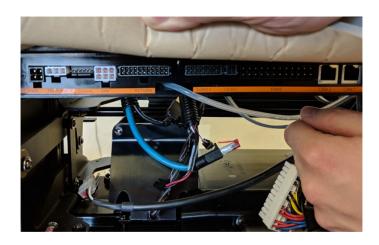
1. Identify the cooling controller, located behind the protective foam edging on the middle frame shelf.



2. Remove each cable attached to the front of the cooling controller by pressing in on its tab and pulling out by hand (listed left to right):



NOTE: The CAN cables are interchangeable.



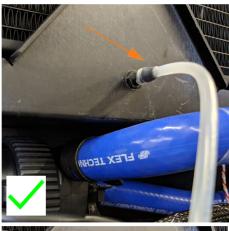
- a. Controller power
- b. Pump
- c. Controller signal
- d. 24 V power
- e. Return
- f. Supply
- g. Level
- h. Fans
- i. CAN 2
- j. CAN1
- 3. Remove the small pressure sensor tube (a) from the front of the heat exchanger by hand. Route the tube down through the grommet in the frame shelf. The tube remains attached to the controller.

4. Use a T20 Torx to remove the two screws attaching the controller to the frame shelf (b). Save the screws for reuse.





**NOTE:** Ensure the pressure sensor tube is completely seated and centred on the mount point so that air flow is not constricted. Poor installation can result in a false error alert.





## **Remove the Heat Exchanger Assembly**



**IMPORTANT:** Before removing the heat exchanger, hold a clean, lint-free absorbent cloth below the Quick Connect coolant lines to prevent the liquid from spilling onto the Express 250's other components.

- 1. For each of the two coolant lines (a), push the button on the Quick Connect at the bottom of the heat exchanger assembly and pull to disconnect the coolant line from the heat exchanger assembly.
- 2. Pull the overflow hose (b) out of its corresponding retaining clip.



- 3. Using a T27 Torx driver, remove the five screws from the heat exchanger assembly. Three screws are located along the top edge behind a gasket (a), one is located at the bottom right (b), and one at the bottom left (c).
- 4. Pull the overflow hose (b) out of its corresponding retaining clip.





**NOTE:** For easy of assembly, the heat exchanger is self-supported with all five screws removed.



**NOTE:** Ensure the gasket is not torn or damaged during removal and replacement of the heat exchanger.

- 5. Pull the heat exchanger assembly away from the Express 250.
- 6. Drain all coolant from the heat exchanger assembly to prepare for return delivery.



## Replace the Heat Exchanger Assembly

- 1. Hang the new assembly onto the two pins on the frame to support it.
- 2. Slightly move the assembly left to right a few millimetres until the top screw holes align. Fasten the five T27 screws, beginning with the three screws across the top edge.
- 3. Fasten the ground wire screw.
- 4. Fill the heat exchanger assembly's reservoir to the marked fill line with coolant.



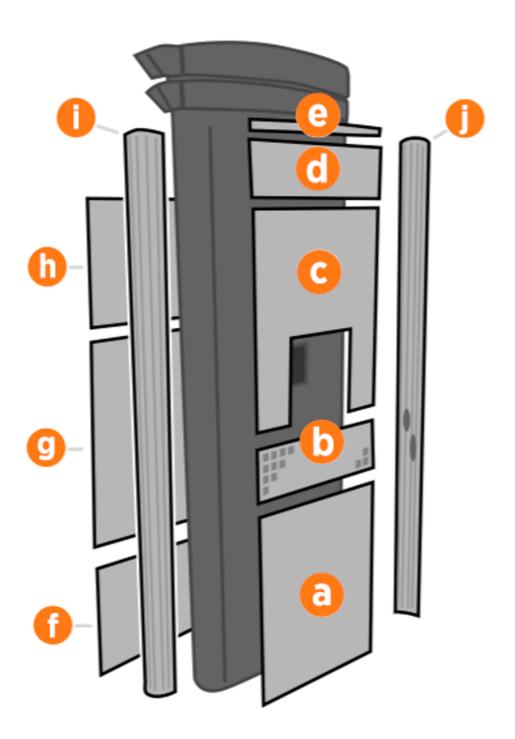
**IMPORTANT:** Ensure that wires are not pinched when reinstalling the heat exchanger assembly.

REVERSE THE ABOVE STEPS TO REPLACE THE COOLING CONTROLLER, FAN TRAY, EMI SHIELD (IF APPLICABLE), REAR PANELS, TOP FRONT PANEL, LED DISPLAY, AND AREA LIGHT BAR.

#### **Power On the Station**

Once all cover panels have been installed, power on the Express 250. The on-screen Installation Wizard walks you through any required tasks to set up the Express 250 and verify that it can operate properly.

An Installation Wizard test checks that all cover panels have been correctly installed and fully seated. Check the lower right corner of the screen for any error messages. If panel errors appear, match the panel letters to this illustration.



- a. Front bottom panel
- b. Middle vent panel
- c. Front top panel
- d. LED display
- e. Area Light Bar
- f. Rear bottom panel
- g. Rear middle panel
- h. Rear top panel

- i. Left Extrusion
- j. Right extrusion



**DANGER:** RISK OF SHOCK. If a fault exists, turn the power off at the service panel to BOTH Express 250 paired charging stations during work and keep it off until all panels are reinstalled. Internal components can present a shock hazard. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

If any panel needs reinstallation, review the procedures above to double-check that all panels have been fully seated and that the edges of all signs are captured fully by the panels around them. For further details, refer to the Express 250 Installation Guide.

# -chargepoin+

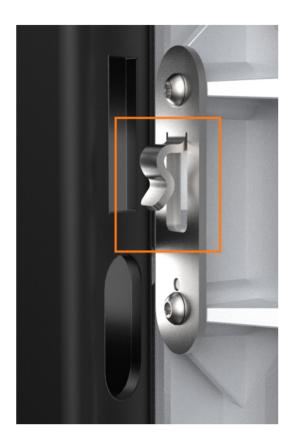
# Replace a Holster 12

To replace a holster, complete the following steps:

## **Bring These Tools and Materials**

- ChargePoint replacement part for your charging connector type: CCS1, CCS2, CHAdeMO, or NACS
- Headlamp
- #2 Phillips screwdriver
- T10, T20 and T25 Security Torx drivers
- 8 mm (5/16 mm) nut driver
- · Small flathead screwdriver

#### **About Panels**



All Express 250 panels have guide tabs that align with corresponding slots on the Express 250's frame. When removing a panel, lift the panel upward to release these tabs from their slots.



**NOTE:** When installing a panel, align these tabs above their corresponding slots and press the panel downward.

#### **Power off the Station**

Power off at the breaker panel and lock out/tag out before continuing work.



**DANGER:** RISK OF SHOCK. Before performing this procedure, disconnect the power to the Express 250 at the service panel. Keep power off for this circuit until all cover panels have been correctly reinstalled and the work scope has been completed. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

## Remove the Area Light Bar

1. Using a T25 Security screwdriver, loosen the two captive screws on the area light bar.



2. Disconnect the power cable that connects the area light bar to the LED display assembly. Remove the area light bar.



**NOTE:** When reinstalling, ensure the gasket on each end of the area light bar is properly seated around the plastic tab.



## **Remove the LED Display**

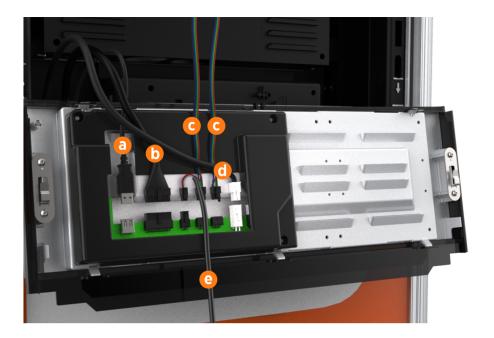
1. Push the LED display upwards to release its guide tabs from their corresponding slots on the Express 250's frame.



2. When the LED display assembly is released, disconnect the five cables from the back.



**NOTE:** When reinstalling, connect the five cables to their corresponding connectors on the back of the display. Leave the area light bar cable (e) loose.



- a. Communications cable (USB-A)
- b. Holster light cable
- c. Area light cable x 2 (interchangeable)
- d. Power cable (24 V)



**IMPORTANT:** Do not allow the LED display to hang from its cables.

## **Remove the Top Front Panel**



- 1. Using two hands, pull the top panel upwards to release its guide tabs from their corresponding slots on the Express 250's frame.
- 2. Place a protective cover, such as a lint-free cloth, over the touchscreen to prevent damage during service.



**IMPORTANT:**If you are replacing a charging cable, be sure to visit Replace a Holsterfor information on replacing the holster BEFORE reinstalling the panels.



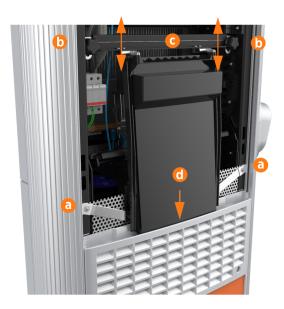
**IMPORTANT:** When reinstalling, push the bottom edge inward to position it inside the groove in the middle vent panel and engage the edge of the sign. Carefully push the panel down until it is firmly seated.



**IMPORTANT:** When reinstalling, ensure all five cables at the top of the panel are not captured by the front upper panel, and are easily accessible for reinstalling the LED display.

#### Remove the Middle Vent Panel

1. Use a T25 Torx driver to remove the M5 screw and washer (a) that are attaching each touchscreen ground strap to the frame. Keep the screws and washers for reuse.



2. Loosen both retention knobs (b), allowing the touchscreen beam (c) to slide up vertically and the touchscreen's bottom edge to clear the middle vent panel's slot (d).

3. With hand pressure, tilt the touchscreen upward at a 45-degree angle.



4. Allow the touchscreen to return to its lowest position vertically. Rotate the retention knobs clockwise to re-tighten.



**CAUTION:** The bottom edge and corners of the touchscreen are sharp. Take care when moving underneath the raised screen.

1. Disconnect the two proximity sensor wires from the connectors on the bottom of the touchscreen and the wire management ring. Move the proximity wires to hang in front of the middle vent panel.



**NOTE:** When reinstalling, connect the proximity sensor wires to their corresponding connectors: left wire to left port and right wire to right port. Route any excess wiring through the right-side wire management ring under the touchscreen to prevent it being pinched in the panels.



2. Using two hands, remove the panel by firmly pulling it upward to release the guide tabs from the corresponding slots on the Express 250's frame.



**NOTE:** When reinstalling, route both proximity wires under the sheet metal edge, to hang in front of the panel on the right side (as you face the front of the charging station).





**CAUTION:** The fins on the back surface of the middle vent panel are sharp. Take care when handling the panel.

#### **Remove the Bottom Front Panel**

Remove the bottom front panel by lifting upwards from the bottom of the panel to release the guide tabs from their corresponding slots on the Express 250's frame.

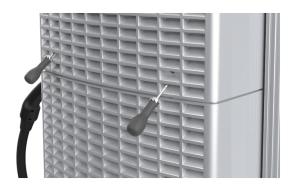


**NOTE:** When reinstalling, ensure the panel installation does not tear or break the gaskets on the inner edges of the side extrusions.



## **Remove the Top Rear Panel**

1. Using a T25 Torx (or a Phillips #2 screwdriver for early charging stations), loosen the two hidden captive screws located in the top rear panel's vents, inset from each bottom corner.



2. Using a T25 Torx driver, loosen the two captive screws located at the top of the top rear panel. Using two hands, hold the top rear cover at an angle to remove, leading with the bottom edge.



**NOTE:** When reinstalling, squeeze the sides of the panel inward to fit the tabs into place in the C-channel, inside the watertight gasket.



#### **Remove the Middle Rear Panel**

Using two hands, lift the middle rear panel straight up and out to disengage the guide tabs.



**NOTE:** When reinstalling, squeeze the sides of the panel inward to fit the tabs into place in the C-channel, inside the watertight gasket. For older stations, ensure the lower panel's sign is correctly captured under the middle panel's edge as you carefully push the panel down.





**IMPORTANT:** Small gauge wiring routed on the sides of the frame could be sheared if caught by panel tabs. Ensure wiring is cleared from guide holes when installing bottom and middle rear panels.

#### **Remove the Bottom Rear Panel**

Using two hands, carefully pull the panel upward to release the panel's guide tabs from their corresponding slots on the Express 250's frame.



**NOTE:** When reinstalling, squeeze the sides of the panel inward to fit the tabs into place in the C-channel, inside the watertight gasket. Carefully push the panel down.





**IMPORTANT:** For installation or servicing, Surface Conduit Entry (SCE) extrusions can be removed without removing the SCE or rear bottom panel. However, if the rear bottom panel must be removed, first remove the SCE cover and loosen the box base side screws. For more details, refer to the Express 250 Surface Conduit Entry guide on ChargePoint University: <a href="mailto:chargepoint.com/installers">chargepoint.com/installers</a>.



## **Open the Power Module Holders (Ground Straps)**



**NOTE:** If the station has EMI shields instead of ground straps, refer to Open the Power Module Holders (EMI Shields) instead.

1. Use a T25 Torx to remove the front and rear M5 screws and washers attaching the Power Module holder (a) and Power Module (b) ground straps to the Express 250 frame (eight screws total). Keep the screws and washers for use in a later step.



2. Using two hands, squeeze the Power Module mechanism's release bar against the flange. Raise the bar to fully rotate the Power Module mechanism upward to the lock position. This ensures enough clearance for the Power Modules to slide under the mechanism.





3. At the bottom right of the Express 250, press and hold the yellow release latch while pulling the Power Module tray out of the station completely.

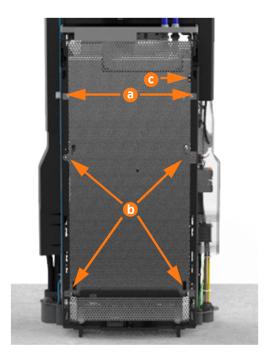


## **Open the Power Module Holders (EMI Shields)**



**NOTE:** If the station has ground straps instead of EMI shields, refer to Open the Power Module Holders (Ground Straps) instead.

1. Use a T20 Torx to remove the top two screws and washers from the rear EMI shield (a).



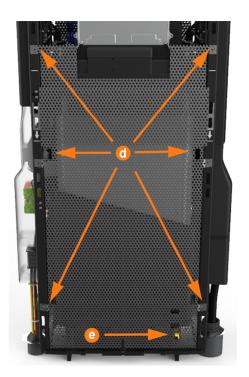
2. Use a T25 Torx to remove the four middle and lower screws and washers from the rear EMI shield (b). The rear shield might be in one or two sections. Save all screws and washers for later reuse.

NOTE: When reinstalling, ensure:



- The cutout on the long edge is on the right side (c), leaving the sensor wire clear.
- The drain hose and cooling controller cover flap are inside the EMI shield.

3. Use a T25 Torx to remove the six T25 screws and washers from the front EMI shield (d).





**NOTE:** When reinstalling, position the bottom cutout over the yellow release latch (e).

4. Using two hands, squeeze the Power Module mechanism's release bar against the flange. Raise the bar to fully rotate the Power Module mechanism upward to the lock position. This ensures enough clearance for the Power Modules to slide under the mechanism.





5. At the bottom right of the Express 250, press and hold the yellow release latch while pulling the Power Module tray out of the station completely.



## **Remove the Right Extrusion**

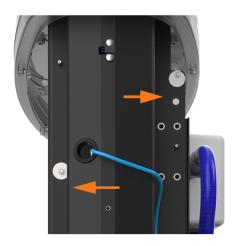
1. Remove the charging cables from their holsters and rest them gently on a padded surface out of the way.

- 2. Insert a small flat head screwdriver into the notch on each plastic cap to remove it from the holster screw opening.
- 3. Use a T25 Torx to remove the rubberised washer and M5 shoulder screw. Set them aside for reuse.



4. Using a stepladder, hold the extrusion with one hand and loosen the top two captive screws using the supplied T25 Torx driver.





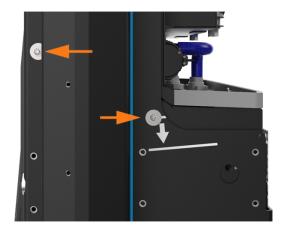


**NOTE:** Images show screw locations from the outside. Fasteners are accessed inside the frame.

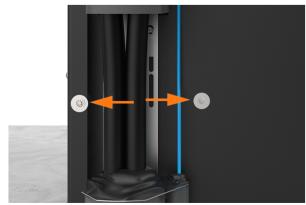


**NOTE:** The top and middle screws are asymmetrical.

5. Use a T25 Torx driver to loosen the middle two captive screws while the Power Module mechanism is still in the closed position.



6. Use a T25 Torx driver to loosen the bottom two captive screws.



7. Slightly tilt the bottom of the extrusion out to extract its top edge from under the bottom edge of the area light bar. Lift the extrusion off the guide pins on each side of the frame that hold the extrusion in place.



- 8. Disconnect the shortest cable from the top holster.
- 9. Disconnect the next-longest cable from the bottom holster.





**IMPORTANT:** When reinstalling, check that these connections are correctly seated, or the system will not operate.

- 10. Locate the P-clip mounted to one of the holsters (top or bottom holster varies by product version).
- 11. Remove the P-clip hardware from the extrusion holster:
  - Generation 1, attached with screw: use a T25 Torx driver to remove the screw and all its components. Carefully note the order of the components.
  - Generation 2, attached with nut (a): Use an 8 mm (5/16 in) nut driver to remove only the nut and the P-clip.
- 12. Remove the shielded holster cable from the opening in the P-clip (b).
- 13. Remove the existing extrusion from the station.

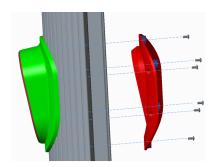


## **Replace the Holster**

1. Lay the right extrusion down on a protected surface, with the inside facing up.



- 2. Use a T20 Torx to remove the six holster housing screws from the holster backing (a). Set them aside for reuse.
- 3. Use a T10 Torx to remove the four holster body screws from the holster backing (b). Set them aside for reuse.
- 4. Remove the old holster backing from the inside of the extrusion.
- 5. Remove the old holster body and housing from the outside of the extrusion.
- 6. Position the new holster body and housing on the front of the extrusion together.



- 7. Install the new holster housing onto the extrusion and holster backing, using the six T20 screws.
- 8. Fasten the new holster body to the extrusion and backing, using the four T10 screws.
- 9. Re-connect the ground cable and LED board cable connector.

### **Replace the Right Extrusion**

- Slightly tilt the right extrusion and slide its top edge under the bottom edge of the area light bar. Align
  the holes in the extrusion with the guide pins on each side of the Express 250's frame. This
  temporarily holds the extrusion in place.
- 2. Install the shielded holster cable and P-clip hardware to the extrusion holsters using either a T25 Torx Driver (Generation 1) or an 8 mm (5/16 in) nut driver (Generation 2).
- 3. Connect the longest cable to the bottom holster and the shortest cable to the top holster.



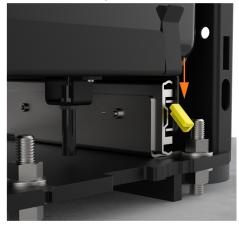
**NOTE:** Ensure the connections are correctly seated, or the system will not operate.

4. Using a stepladder, hold the extrusion with one hand and loosely secure the top two captive screws using the supplied T25 Torx driver.



NOTE: The top and middle screws are asymmetrical.

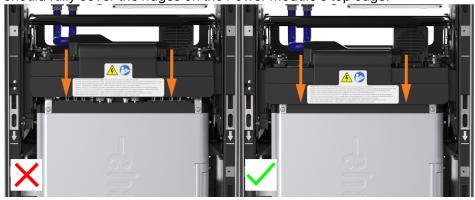
- 5. Use a T25 Torx driver to loosely secure the bottom two screws next. The Power Module holders must not be inside the charging station to have access to the bottom screws.
- 6. Use a T25 Torx driver to loosely secure the middle two screws, just above the Power Module mechanism. Access to the middle screws is easier with the Power Module mechanism handle in the closed (down) position.
- 7. Tighten all right extrusion screws.
- 8. At the bottom right of the Express 250, press and hold the yellow release latch while pushing the Power Module tray into the station until it locks into place.



9. Using two hands, squeeze the Power Module mechanism's release bar and lower it halfway to check alignment with the ports and guide posts.



10. Lower the Power Module mechanism until you hear a click as the mechanism locks into place. Ensure the mechanism is fully engaged with all Power Module connectors. The Power Module mechanism should fully cover the ridges on the Power Module's top edge.





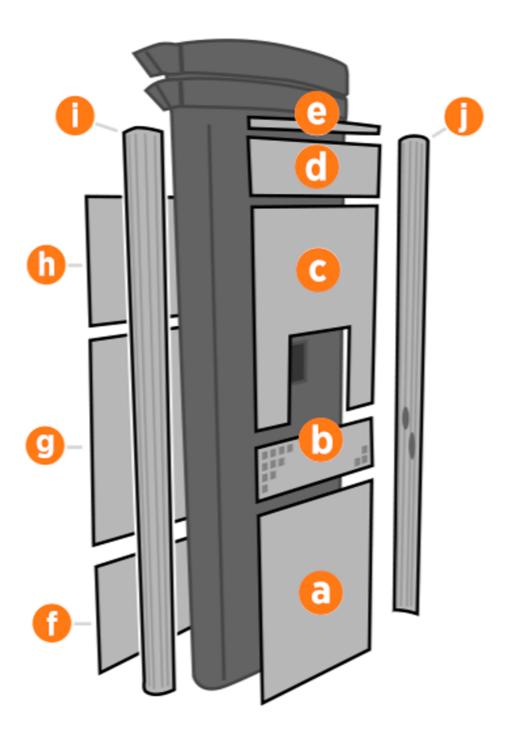
If the mechanism does not engage, raise it again and push the Power Modules to the back of the station to realign, then try again. Do not apply excessive force.

REVERSE THE ABOVE STEPS TO REPLACE THE EMI SHIELD (IF APPLICABLE), REAR PANELS, FRONT PANELS, LED DISPLAY, AND AREA LIGHT BAR.

#### **Power On the Station**

Once all cover panels have been installed, power on the Express 250. The on-screen Installation Wizard walks you through any required tasks to set up the Express 250 and verify that it can operate properly.

An Installation Wizard test checks that all cover panels have been correctly installed and fully seated. Check the lower right corner of the screen for any error messages. If panel errors appear, match the panel letters to this illustration.



- a. Front bottom panel
- b. Middle vent panel
- c. Front top panel
- d. LED display
- e. Area Light Bar
- f. Rear bottom panel
- g. Rear middle panel
- h. Rear top panel

- i. Left Extrusion
- j. Right extrusion



**DANGER:** RISK OF SHOCK. If a fault exists, turn the power off at the service panel to BOTH Express 250 paired charging stations during work and keep it off until all panels are reinstalled. Internal components can present a shock hazard. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

If any panel needs reinstallation, review the procedures above to double-check that all panels have been fully seated and that the edges of all signs are captured fully by the panels around them. For further details, refer to the Express 250 Installation Guide.

# -chargepoin+

# Replace the Holster Shroud, CCS1 13

To replace the holster shroud, CCS1, complete the following steps:

### **Bring These Tools and Materials**

- Headlamp
- · Safety glasses
- · Blanket or other padding
- · Paper towel or clean cloth
- · CCS1 holster shroud FRU kit:
  - Shroud
  - · Isopropyl wipe

#### Install the CCS1 Holster Shroud



**IMPORTANT:** When using the Express 250, some drivers lift straight up on the CCS1 charging handle to disengage it from the station. This can break the locking clip, which is not repairable. Add a shroud to the front of the holster to prevent movement upwards and require the driver to pull the handle straight out.

1. Identify the CCS1 handle — usually the handle in the top position. Remove the handle and set it down on a padded surface.



2. Before removing the shroud's backing, hold the shroud up to the station to test fit its alignment. Ensure that:

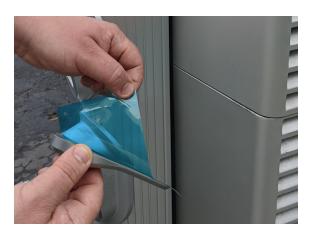


- a. The shroud's flat edge rests against the holster's vertical face all the way around, with the thicker edge at the top (a).
- b. The shroud's outer edge does not obscure the light ring (b).
- c. The shroud's inner edge does not interfere with the holster's inner bevel (c).

3. Clean the front surface and inside edges of the CCS1 holster with a paper towel or clean cloth, then with an isopropyl wipe, to remove all dust and dirt. Dry with a clean cloth or paper towel.



4. Peel off the shroud's adhesive backing.



5. Carefully align the shroud as described above and seat it on the holster. Push down firmly on the shroud (15 PSI of force) for at least 15 seconds to set the adhesive.



6. Replace the CCS1 charging handle in the holster. Test that the CCS1 charging handle is easily removed and replaced.



## -chargepoin+

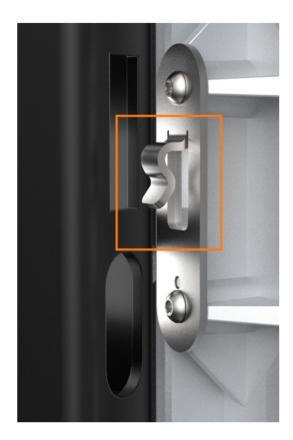
# Replace the I/O Expander 14

To replace the I/O expander, complete the following steps:

#### **Bring These Tools and Materials**

- ChargePoint replacement part #CPE250-FRONT-PANELS-F
- T25 Security Torx driver
- Headlamp

#### **About Panels**



All Express 250 panels have guide tabs that align with corresponding slots on the Express 250's frame. When removing a panel, lift the panel upward to release these tabs from their slots.



**NOTE:** When installing a panel, align these tabs above their corresponding slots and press the panel downward.

#### **Power off the Station**

Power off at the breaker panel and lock out/tag out before continuing work.



**DANGER:** RISK OF SHOCK. Before performing this procedure, disconnect the power to the Express 250 at the service panel. Keep power off for this circuit until all cover panels have been correctly reinstalled and the work scope has been completed. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

## Remove the Area Light Bar

1. Using a T25 Security screwdriver, loosen the two captive screws on the area light bar.



2. Disconnect the power cable that connects the area light bar to the LED display assembly. Remove the area light bar.



**NOTE:** When reinstalling, ensure the gasket on each end of the area light bar is properly seated around the plastic tab.



## **Remove the LED Display**

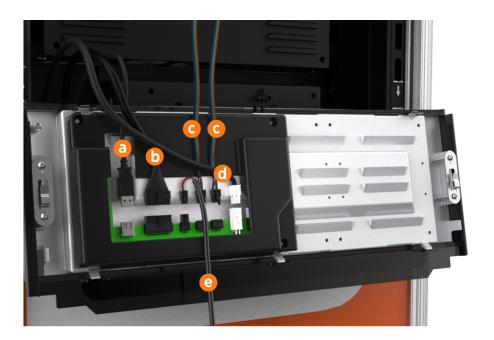
1. Push the LED display upwards to release its guide tabs from their corresponding slots on the Express 250's frame.



2. When the LED display assembly is released, disconnect the five cables from the back.



**NOTE:** When reinstalling, connect the five cables to their corresponding connectors on the back of the display. Leave the area light bar cable (e) loose.



- a. Communications cable (USB-A)
- b. Holster light cable
- c. Area light cable x 2 (interchangeable)
- d. Power cable (24 V)



**IMPORTANT:** Do not allow the LED display to hang from its cables.

## **Remove the Top Front Panel**



- 1. Using two hands, pull the top panel upwards to release its guide tabs from their corresponding slots on the Express 250's frame.
- 2. Place a protective cover, such as a lint-free cloth, over the touchscreen to prevent damage during service.



**IMPORTANT:**If you are replacing a charging cable, be sure to visit Replace a Holsterfor information on replacing the holster BEFORE reinstalling the panels.



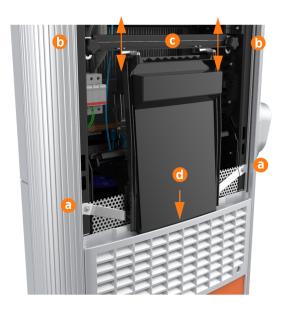
**IMPORTANT:** When reinstalling, push the bottom edge inward to position it inside the groove in the middle vent panel and engage the edge of the sign. Carefully push the panel down until it is firmly seated.



**IMPORTANT:** When reinstalling, ensure all five cables at the top of the panel are not captured by the front upper panel, and are easily accessible for reinstalling the LED display.

#### Remove the I/O Expander Unit

1. Use a T25 Torx driver to remove the M5 screw and washer (a) that are attaching each touchscreen ground strap to the frame. Keep the screws and washers for reuse.



2. Loosen both retention knobs (b), allowing the touchscreen beam (c) to slide up vertically and the touchscreen's bottom edge to clear the middle vent panel's slot (d).

3. With hand pressure, tilt the touchscreen upward at a 45-degree angle.



4. Allow the touchscreen to return to its lowest position vertically. Rotate the retention knobs clockwise to re-tighten.



**CAUTION:** The bottom edge and corners of the touchscreen are sharp. Take care when moving underneath the raised screen.

1. Locate the I/O expander under the touchscreen on the right side of the mount rail (a).



NOTE: Observe the wire routing before removing the unit.



2. Each cable on the unit has a tab that locks it into position. Disconnect each of the cables by pushing its tab to release:



- CAN A
- CAN B
- 24 V
- Hall Effects Sensors
- Surge
- Temp
- E-Stop
- 3. Pull the two plastic tabs below the I/O expander unit to release the unit.



4. Pull the I/O expander unit upwards to release it from the top rail, then towards you to remove it.

#### Replace the I/O Expander Unit

- 1. Hang the I/O expander unit temporarily on the top rail.
- 2. Reconnect its cables according to the labels on the unit cover.
- 3. Align cable routing behind the unit to ensure it can be pushed from the bottom of the unit on each side. Push until it snaps into place on the bottom rail.



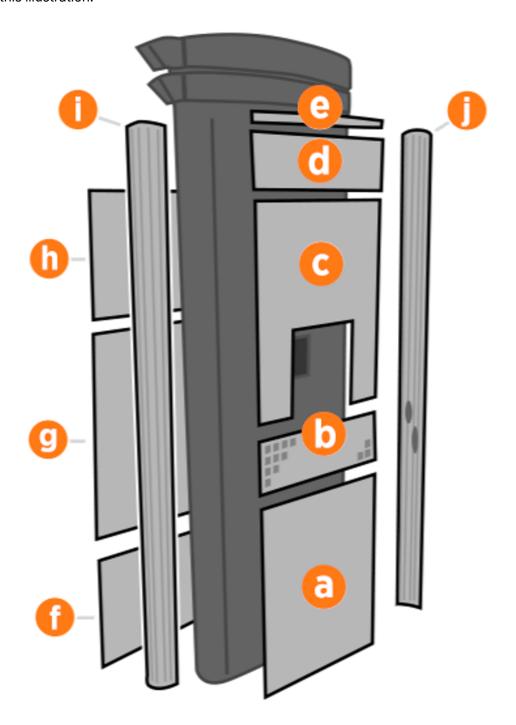
NOTE: Ensure all cables are flat against the rail bar and are not being pinched.

REVERSE THE ABOVE STEPS TO REPLACE THE TOP FRONT PANEL, LED DISPLAY AND AREA LIGHT BAR.

#### **Power On the Station**

Once all cover panels have been installed, power on the Express 250. The on-screen Installation Wizard walks you through any required tasks to set up the Express 250 and verify that it can operate properly.

An Installation Wizard test checks that all cover panels have been correctly installed and fully seated. Check the lower right corner of the screen for any error messages. If panel errors appear, match the panel letters to this illustration.



- a. Front bottom panel
- b. Middle vent panel
- c. Front top panel
- d. LED display

- e. Area Light Bar
- f. Rear bottom panel
- g. Rear middle panel
- h. Rear top panel
- i. Left Extrusion
- j. Right extrusion



**DANGER:** RISK OF SHOCK. If a fault exists, turn the power off at the service panel to BOTH Express 250 paired charging stations during work and keep it off until all panels are reinstalled. Internal components can present a shock hazard. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

If any panel needs reinstallation, review the procedures above to double-check that all panels have been fully seated and that the edges of all signs are captured fully by the panels around them. For further details, refer to the Express 250 Installation Guide.

## -chargepoin+

## Replace the LED Display 15

To replace the LED display, complete the following steps:

#### **Bring These Tools and Materials**

- ChargePoint replacement part #CPE250-LEDDISPLAY-F
- T25 Security Torx driver
- Headlamp

#### **Power off the Station**

Power off at the breaker panel and lock out/tag out before continuing work.



**DANGER:** RISK OF SHOCK. Before performing this procedure, disconnect the power to the Express 250 at the service panel. Keep power off for this circuit until all cover panels have been correctly reinstalled and the work scope has been completed. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

## Remove the Area Light Bar and LED Display

1. Using a T25 Security screwdriver, loosen the two captive screws on the area light bar.



2. Disconnect the power cable that connects the area light bar to the LED display assembly. Remove the area light bar.



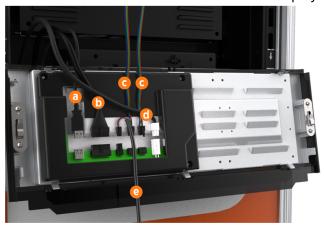
**NOTE:** When reinstalling, ensure the gasket on each end of the area light bar is properly seated around the plastic tab.



- 3. Push the LED display upwards to release its guide tabs from their corresponding slots on the Express 250's frame.
- 4. When the LED display assembly is released, disconnect the five cables from the back.

## Install the LED Display and Area Light Bar

1. While holding the new LED display near the opening at the top of the Express 250, connect its five cables to their connectors on the back of the display. Leave the area light bar cable (e) loose.



- a. Communications cable (USB-A)
- b. Holster light cable
- c. Area light cable x 2 (interchangeable)
- d. Power cable (24 V)



**IMPORTANT:** Before continuing, ensure all five cables are properly connected. Do not allow the LED display to hang from the cables once they are connected.

- 2. Angle the top edge of the LED display under the light bar on the Express 250.
- 3. Starting at the top, align and slide the LED display guide tabs into the corresponding slots. Ensure the lower sign is correctly captured by the bottom edge of the LED display.
- 4. Push the bottom into place until firmly seated.



NOTE: Keep the area light cable routed out the top of the display.

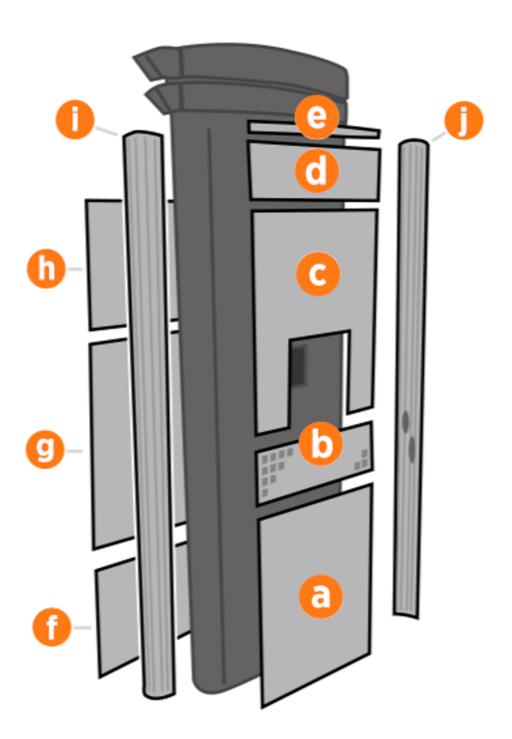


#### REVERSE THE ABOVE STEPS TO REPLACE THE AREA LIGHT BAR.

#### **Power On the Station**

Once all cover panels have been installed, power on the Express 250. The on-screen Installation Wizard walks you through any required tasks to set up the Express 250 and verify that it can operate properly.

An Installation Wizard test checks that all cover panels have been correctly installed and fully seated. Check the lower right corner of the screen for any error messages. If panel errors appear, match the panel letters to this illustration.



- a. Front bottom panel
- b. Middle vent panel
- c. Front top panel
- d. LED display
- e. Area Light Bar
- f. Rear bottom panel
- g. Rear middle panel
- h. Rear top panel

- i. Left Extrusion
- j. Right extrusion



**DANGER:** RISK OF SHOCK. If a fault exists, turn the power off at the service panel to BOTH Express 250 paired charging stations during work and keep it off until all panels are reinstalled. Internal components can present a shock hazard. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

If any panel needs reinstallation, review the procedures above to double-check that all panels have been fully seated and that the edges of all signs are captured fully by the panels around them. For further details, refer to the Express 250 Installation Guide.

## -chargepoin+

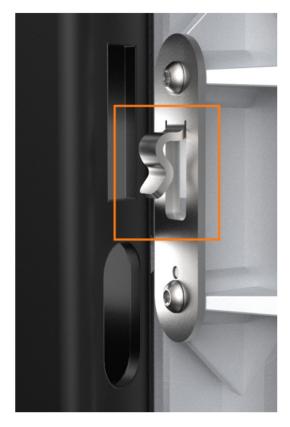
# Replace the Front or Rear LED 16 Diffuser

To replace the front or rear LED diffuser, complete the following steps:

#### **Bring These Tools and Materials**

- Front diffuser: ChargePoint replacement part #CPE250-LEDBAR-FT-F
- Rear diffuser: ChargePoint replacement part #CPE250-LEDBAR-RR-F
- #2 Phillips screwdriver
- · T25 Security Torx driver
- For the rear diffuser: T25 Allen wrench or short multi-tool
- 8 mm (5/16 in) nut driver
- · Small flathead screwdriver
- Headlamp
- · Step ladder

#### **About Panels**



All Express 250 panels have guide tabs that align with corresponding slots on the Express 250's frame. When removing a panel, lift the panel upward to release these tabs from their slots.



**NOTE:** When installing a panel, align these tabs above their corresponding slots and press the panel downward.

#### **Power off the Station**

Power off at the breaker panel and lock out/tag out before continuing work.



**DANGER:** RISK OF SHOCK. Before performing this procedure, disconnect the power to the Express 250 at the service panel. Keep power off for this circuit until all cover panels have been correctly reinstalled and the work scope has been completed. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

#### **Remove the Area Light Bar**

1. Using a T25 Security screwdriver, loosen the two captive screws on the area light bar.



2. Disconnect the power cable that connects the area light bar to the LED display assembly. Remove the area light bar.



**NOTE:** When reinstalling, ensure the gasket on each end of the area light bar is properly seated around the plastic tab.



## **Remove the LED Display**

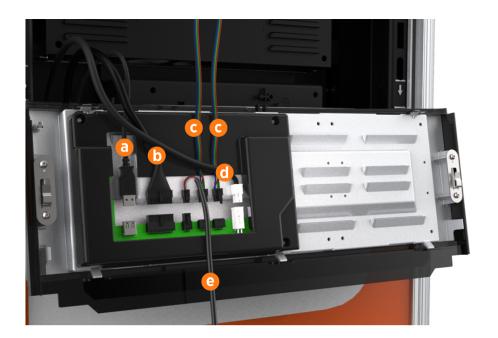
1. Push the LED display upwards to release its guide tabs from their corresponding slots on the Express 250's frame.



2. When the LED display assembly is released, disconnect the five cables from the back.



**NOTE:** When reinstalling, connect the five cables to their corresponding connectors on the back of the display. Leave the area light bar cable (e) loose.



- a. Communications cable (USB-A)
- b. Holster light cable
- c. Area light cable x 2 (interchangeable)
- d. Power cable (24 V)



**IMPORTANT:** Do not allow the LED display to hang from its cables.

## **Remove the Top Front Panel**



- 1. Using two hands, pull the top panel upwards to release its guide tabs from their corresponding slots on the Express 250's frame.
- 2. Place a protective cover, such as a lint-free cloth, over the touchscreen to prevent damage during service.



**IMPORTANT:**If you are replacing a charging cable, be sure to visit Replace a Holsterfor information on replacing the holster BEFORE reinstalling the panels.



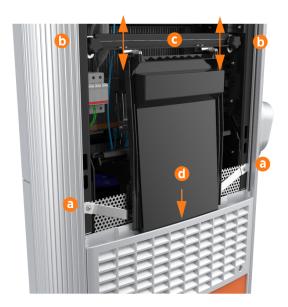
**IMPORTANT:** When reinstalling, push the bottom edge inward to position it inside the groove in the middle vent panel and engage the edge of the sign. Carefully push the panel down until it is firmly seated.



**IMPORTANT:** When reinstalling, ensure all five cables at the top of the panel are not captured by the front upper panel, and are easily accessible for reinstalling the LED display.

#### Remove the Middle Vent Panel

1. Use a T25 Torx driver to remove the M5 screw and washer (a) that are attaching each touchscreen ground strap to the frame. Keep the screws and washers for reuse.



2. Loosen both retention knobs (b), allowing the touchscreen beam (c) to slide up vertically and the touchscreen's bottom edge to clear the middle vent panel's slot (d).

3. With hand pressure, tilt the touchscreen upward at a 45-degree angle.



4. Allow the touchscreen to return to its lowest position vertically. Rotate the retention knobs clockwise to re-tighten.



**CAUTION:** The bottom edge and corners of the touchscreen are sharp. Take care when moving underneath the raised screen.

1. Disconnect the two proximity sensor wires from the connectors on the bottom of the touchscreen and the wire management ring. Move the proximity wires to hang in front of the middle vent panel.



**NOTE:** When reinstalling, connect the proximity sensor wires to their corresponding connectors: left wire to left port and right wire to right port. Route any excess wiring through the right-side wire management ring under the touchscreen to prevent it being pinched in the panels.



2. Using two hands, remove the panel by firmly pulling it upward to release the guide tabs from the corresponding slots on the Express 250's frame.



**NOTE:** When reinstalling, route both proximity wires under the sheet metal edge, to hang in front of the panel on the right side (as you face the front of the charging station).





**CAUTION:** The fins on the back surface of the middle vent panel are sharp. Take care when handling the panel.

#### **Remove the Bottom Front Panel**

1. Remove the bottom front panel by lifting upwards from the bottom of the panel to release the guide tabs from their corresponding slots on the Express 250's frame.



**NOTE:** When reinstalling, ensure the panel installation does not tear or break the gaskets on the inner edges of the side extrusions.



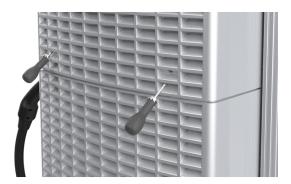
2. Determine whether the station has ground straps (a) or EMI shields (b). An Express 250 only needs one of these protection methods. If you're servicing a station with ground straps, skip to "Remove the Cooling Controller".





**Remove the Top Rear Panel** 

1. Using a T25 Torx (or a Phillips #2 screwdriver for early charging stations), loosen the two hidden captive screws located in the top rear panel's vents, inset from each bottom corner.



2. Using a T25 Torx driver, loosen the two captive screws located at the top of the top rear panel. Using two hands, hold the top rear cover at an angle to remove, leading with the bottom edge.



**NOTE:** When reinstalling, squeeze the sides of the panel inward to fit the tabs into place in the C-channel, inside the watertight gasket.



#### Remove the Middle Rear Panel

Using two hands, lift the middle rear panel straight up and out to disengage the guide tabs.



**NOTE:** When reinstalling, squeeze the sides of the panel inward to fit the tabs into place in the C-channel, inside the watertight gasket. For older stations, ensure the lower panel's sign is correctly captured under the middle panel's edge as you carefully push the panel down.





**IMPORTANT:** Small gauge wiring routed on the sides of the frame could be sheared if caught by panel tabs. Ensure wiring is cleared from guide holes when installing bottom and middle rear panels.

#### **Remove the Bottom Rear Panel**

Using two hands, carefully pull the panel upward to release the panel's guide tabs from their corresponding slots on the Express 250's frame.



**NOTE:** When reinstalling, squeeze the sides of the panel inward to fit the tabs into place in the C-channel, inside the watertight gasket. Carefully push the panel down.





**IMPORTANT:** For installation or servicing, Surface Conduit Entry (SCE) extrusions can be removed without removing the SCE or rear bottom panel. However, if the rear bottom panel must be removed, first remove the SCE cover and loosen the box base side screws. For more details, refer to the Express 250 Surface Conduit Entry guide on ChargePoint University: chargepoint.com/installers.



## **Open the Power Module Holders (Ground Straps)**



**NOTE:** If the station has EMI shields instead of ground straps, refer to Open the Power Module Holders (EMI Shields) instead.

1. Use a T25 Torx to remove the front and rear M5 screws and washers attaching the Power Module holder (a) and Power Module (b) ground straps to the Express 250 frame (eight screws total). Keep the screws and washers for use in a later step.



2. Using two hands, squeeze the Power Module mechanism's release bar against the flange. Raise the bar to fully rotate the Power Module mechanism upward to the lock position. This ensures enough clearance for the Power Modules to slide under the mechanism.





3. At the bottom right of the Express 250, press and hold the yellow release latch while pulling the Power Module tray out of the station completely.

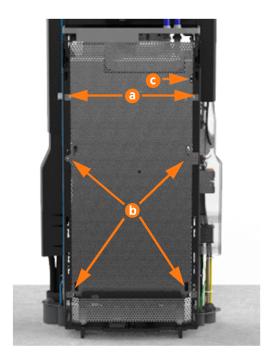


## **Open the Power Module Holders (EMI Shields)**



**NOTE:** If the station has ground straps instead of EMI shields, refer to Open the Power Module Holders (Ground Straps) instead.

1. Use a T20 Torx to remove the top two screws and washers from the rear EMI shield (a).



2. Use a T25 Torx to remove the four middle and lower screws and washers from the rear EMI shield (b). The rear shield might be in one or two sections. Save all screws and washers for later reuse.

**NOTE:** When reinstalling, ensure:



- The cutout on the long edge is on the right side (c), leaving the sensor wire clear.
- The drain hose and cooling controller cover flap are inside the EMI shield.
- 3. Use a T25 Torx to remove the six T25 screws and washers from the front EMI shield (d).





**NOTE:** When reinstalling, position the bottom cutout over the yellow release latch (e).

4. Using two hands, squeeze the Power Module mechanism's release bar against the flange. Raise the bar to fully rotate the Power Module mechanism upward to the lock position. This ensures enough clearance for the Power Modules to slide under the mechanism.





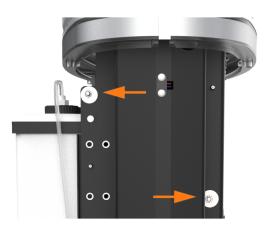
5. At the bottom right of the Express 250, press and hold the yellow release latch while pulling the Power Module tray out of the station completely.



## **Remove the Left Extrusion**

1. Using a step ladder, hold the extrusion with one hand and loosen the top two captive screws using the supplied T25 Torx driver.



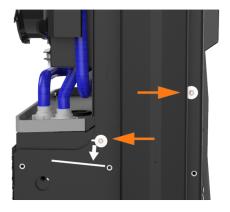


#### NOTE:

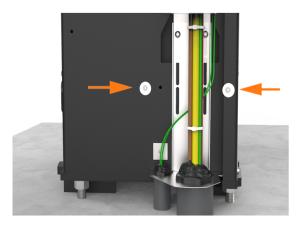


- Images show screw locations from the outside. Fasteners are accessed inside the frame.
- The top and middle screws are asymmetrical.

2. Use a T25 Torx driver to loosen the middle two captive screws while the Power Module mechanism is still in the closed position.



3. Use a T25 Torx driver to loosen the bottom two captive screws.



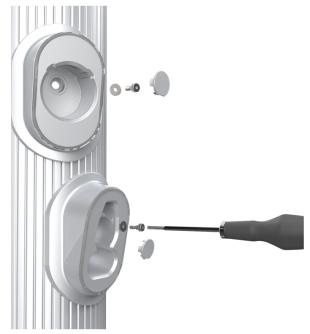
4. Slightly tilt the bottom of the extrusion out to extract its top edge from under the bottom edge of the area light bar. Lift the extrusion off the guide pins on each side of the frame that hold the extrusion in place.



5. Remove the existing extrusion from the station.

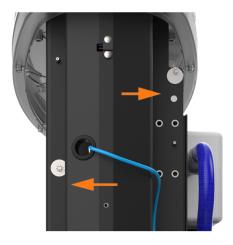
## **Remove the Right Extrusion**

- 1. Remove the charging cables from their holsters and rest them gently on a padded surface out of the way.
- 2. Insert a small flat head screwdriver into the notch on each plastic cap to remove it from the holster screw opening.
- 3. Use a T25 Torx to remove the rubberised washer and M5 shoulder screw. Set them aside for reuse.



4. Using a stepladder, hold the extrusion with one hand and loosen the top two captive screws using the supplied T25 Torx driver.





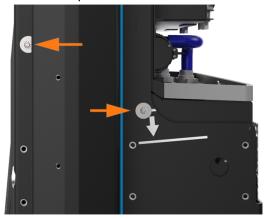


**NOTE:** Images show screw locations from the outside. Fasteners are accessed inside the frame.



NOTE: The top and middle screws are asymmetrical.

5. Use a T25 Torx driver to loosen the middle two captive screws while the Power Module mechanism is still in the closed position.



6. Use a T25 Torx driver to loosen the bottom two captive screws.



7. Slightly tilt the bottom of the extrusion out to extract its top edge from under the bottom edge of the area light bar. Lift the extrusion off the guide pins on each side of the frame that hold the extrusion in place.



- 8. Disconnect the shortest cable from the top holster.
- 9. Disconnect the next-longest cable from the bottom holster.





**IMPORTANT:** When reinstalling, check that these connections are correctly seated, or the system will not operate.

- 10. Locate the P-clip mounted to one of the holsters (top or bottom holster varies by product version).
- 11. Remove the P-clip hardware from the extrusion holster:
  - Generation 1, attached with screw: use a T25 Torx driver to remove the screw and all its components. Carefully note the order of the components.
  - Generation 2, attached with nut (a): Use an 8 mm (5/16 in) nut driver to remove only the nut and the P-clip.
- 12. Remove the shielded holster cable from the opening in the P-clip (b).
- 13. Remove the existing extrusion from the station.



## **Replace the LED Diffuser**



NOTE: These steps are the same for either the front or the rear LED diffuser.

1. Use a T25 Torx to remove the three screws holding the LED diffuser (front or rear) to the top of the frame: two screws located in the left and right corners of the frame rail (a), one screw in the middle (b).





**NOTE:** For the rear diffuser, clearance is tight between the top frame and the top of the coolant reservoir. Use an Allen wrench or short multi-tool for easier access.

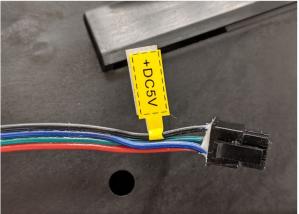




**IMPORTANT:** Do not remove the swing arm plate screws (fastened with flat washers) behind the diffuser screws.

2. Gently route the attached "+DC5V" cable out of the hole in the left frame rail (when viewing the station from the front). Remove the old diffuser.





- 3. Route the cable of the new diffuser through the left frame rail. Leave it unplugged until the LED display is reinstalled in a later step.
- 4. Hold the new diffuser firmly in place against the gasket.



**NOTE:** Make sure that the new diffuser is the same (front or back) as the old diffuser. When installed correctly, the cable exits on the left side of the dispense (when viewing the station from the front).

5. Replace the three T25 screws to fasten the LED diffuser to the top frame. Torque to 2.5 Nm (22 in-lb).



**NOTE:** When reinstalling, keep the brass inserts on the diffuser faced down to ensure correct orientation.

### **Replace the Left Extrusion**

- Slightly tilt the left extrusion and slide its top edge under the bottom edge of the area light bar. Align
  the holes in the extrusion with the guide pins on each side of the Express 250's frame. This
  temporarily holds the extrusion in place.
- 2. Using a stepladder, hold the extrusion with one hand and loosely secure the top two captive screws using the supplied T25 Torx driver.



**NOTE:** The top and middle screws are asymmetrical.

- 3. Use a T25 Torx driver to loosely secure the bottom two screws next. The Power Module holders must not be inside the charging station to have access to the bottom screws.
- 4. Use a T25 Torx driver to loosely secure the middle two screws, just above the Power Module mechanism. Access to the middle screws is easier with the Power Module mechanism handle in the closed (down) position.
- 5. Tighten all left extrusion screws.

## **Replace the Right Extrusion**

- 1. Slightly tilt the right extrusion and slide its top edge under the bottom edge of the area light bar. Align the holes in the extrusion with the guide pins on each side of the Express 250's frame. This temporarily holds the extrusion in place.
- 2. Install the shielded holster cable and P-clip hardware to the extrusion holsters using either a T25 Torx Driver (Generation 1) or an 8 mm (5/16 in) nut driver (Generation 2).
- 3. Connect the longest cable to the bottom holster and the shortest cable to the top holster.



**NOTE:** Ensure the connections are correctly seated, or the system will not operate.

4. Using a stepladder, hold the extrusion with one hand and loosely secure the top two captive screws using the supplied T25 Torx driver.



**NOTE:** The top and middle screws are asymmetrical.

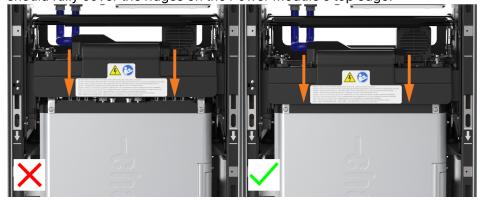
- Use a T25 Torx driver to loosely secure the bottom two screws next. The Power Module holders must not be inside the charging station to have access to the bottom screws.
- 6. Use a T25 Torx driver to loosely secure the middle two screws, just above the Power Module mechanism. Access to the middle screws is easier with the Power Module mechanism handle in the closed (down) position.
- 7. Tighten all right extrusion screws.
- 8. At the bottom right of the Express 250, press and hold the yellow release latch while pushing the Power Module tray into the station until it locks into place.



9. Using two hands, squeeze the Power Module mechanism's release bar and lower it halfway to check alignment with the ports and guide posts.



10. Lower the Power Module mechanism until you hear a click as the mechanism locks into place. Ensure the mechanism is fully engaged with all Power Module connectors. The Power Module mechanism should fully cover the ridges on the Power Module's top edge.





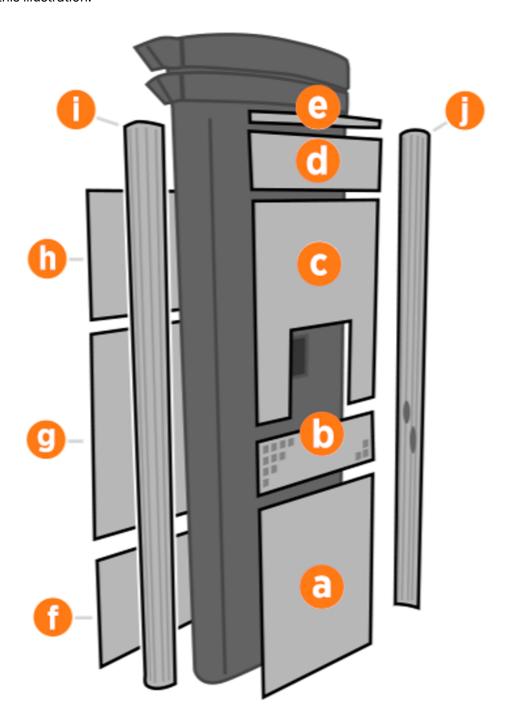
If the mechanism does not engage, raise it again and push the Power Modules to the back of the station to realign, then try again. Do not apply excessive force.

REVERSE THE ABOVE STEPS TO REPLACE THE EMI SHIELD (IF APPLICABLE), REAR PANELS, FRONT PANELS, LED DISPLAY, AND AREA LIGHT BAR.

#### **Power On the Station**

Once all cover panels have been installed, power on the Express 250. The on-screen Installation Wizard walks you through any required tasks to set up the Express 250 and verify that it can operate properly.

An Installation Wizard test checks that all cover panels have been correctly installed and fully seated. Check the lower right corner of the screen for any error messages. If panel errors appear, match the panel letters to this illustration.



- a. Front bottom panel
- b. Middle vent panel
- c. Front top panel
- d. LED display

- e. Area Light Bar
- f. Rear bottom panel
- g. Rear middle panel
- h. Rear top panel
- i. Left Extrusion
- j. Right extrusion



**DANGER:** RISK OF SHOCK. If a fault exists, turn the power off at the service panel to BOTH Express 250 paired charging stations during work and keep it off until all panels are reinstalled. Internal components can present a shock hazard. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

If any panel needs reinstallation, review the procedures above to double-check that all panels have been fully seated and that the edges of all signs are captured fully by the panels around them. For further details, refer to the Express 250 Installation Guide.

# Replace a Power Module 17

To replace a power module, complete the following steps:



**NOTE:** This document describes the complete removal and replacement procedure for a Power Module field replacement. To install a Power Module into a new Express 250 charging station, refer to the *Express 250 Installation Guide* instead.

## **Bring These Tools and Materials**

- · ChargePoint replacement part #System-PM
- #2 Phillips screwdriver
- T25 Security Torx driver
- 8 mm (5/16 in) nut drivers
- · Step ladder
- Headlamp



NOTE: The Express 250 supports one or two Power Modules.

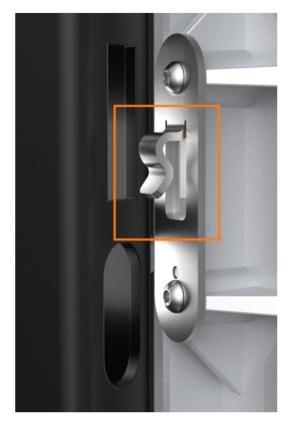


**IMPORTANT:** Power Modules are 45 kg (98.5 lbs) each. Installing or replacing Power Modules requires two people.



**IMPORTANT:** Always rest a Power Module flat on the ground until it is being installed. Power Modules are not stable in any other position. Images of Power Modules standing up with the handles on top are only to illustrate the proper installation position.

#### **About Panels**



All Express 250 panels have guide tabs that align with corresponding slots on the Express 250's frame. When removing a panel, lift the panel upward to release these tabs from their slots.



**NOTE:** When installing a panel, align these tabs above their corresponding slots and press the panel downward.

#### **Power off the Station**

Power off at the breaker panel and lock out/tag out before continuing work.



**DANGER:** RISK OF SHOCK. Before performing this procedure, disconnect the power to the Express 250 at the service panel. Keep power off for this circuit until all cover panels have been correctly reinstalled and the work scope has been completed. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

## **Remove the Area Light Bar**

1. Using a T25 Security screwdriver, loosen the two captive screws on the area light bar.



2. Disconnect the power cable that connects the area light bar to the LED display assembly. Remove the area light bar.



**NOTE:** When reinstalling, ensure the gasket on each end of the area light bar is properly seated around the plastic tab.



## **Remove the LED Display**

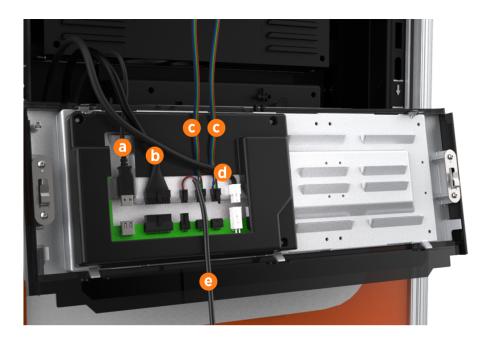
1. Push the LED display upwards to release its guide tabs from their corresponding slots on the Express 250's frame.



2. When the LED display assembly is released, disconnect the five cables from the back.



**NOTE:** When reinstalling, connect the five cables to their corresponding connectors on the back of the display. Leave the area light bar cable (e) loose.



- a. Communications cable (USB-A)
- b. Holster light cable
- c. Area light cable x 2 (interchangeable)
- d. Power cable (24 V)



**IMPORTANT:** Do not allow the LED display to hang from its cables.

## **Remove the Top Front Panel**



- 1. Using two hands, pull the top panel upwards to release its guide tabs from their corresponding slots on the Express 250's frame.
- 2. Place a protective cover, such as a lint-free cloth, over the touchscreen to prevent damage during service.



**IMPORTANT:**If you are replacing a charging cable, be sure to visit Replace a Holsterfor information on replacing the holster BEFORE reinstalling the panels.



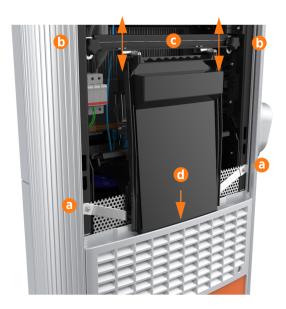
**IMPORTANT:** When reinstalling, push the bottom edge inward to position it inside the groove in the middle vent panel and engage the edge of the sign. Carefully push the panel down until it is firmly seated.



**IMPORTANT:** When reinstalling, ensure all five cables at the top of the panel are not captured by the front upper panel, and are easily accessible for reinstalling the LED display.

#### Remove the Middle Vent Panel

1. Use a T25 Torx driver to remove the M5 screw and washer (a) that are attaching each touchscreen ground strap to the frame. Keep the screws and washers for reuse.



2. Loosen both retention knobs (b), allowing the touchscreen beam (c) to slide up vertically and the touchscreen's bottom edge to clear the middle vent panel's slot (d).

3. With hand pressure, tilt the touchscreen upward at a 45-degree angle.



4. Allow the touchscreen to return to its lowest position vertically. Rotate the retention knobs clockwise to re-tighten.



**CAUTION:** The bottom edge and corners of the touchscreen are sharp. Take care when moving underneath the raised screen.

1. Disconnect the two proximity sensor wires from the connectors on the bottom of the touchscreen and the wire management ring. Move the proximity wires to hang in front of the middle vent panel.



**NOTE:** When reinstalling, connect the proximity sensor wires to their corresponding connectors: left wire to left port and right wire to right port. Route any excess wiring through the right-side wire management ring under the touchscreen to prevent it being pinched in the panels.



2. Using two hands, remove the panel by firmly pulling it upward to release the guide tabs from the corresponding slots on the Express 250's frame.



**NOTE:** When reinstalling, route both proximity wires under the sheet metal edge, to hang in front of the panel on the right side (as you face the front of the charging station).





**CAUTION:** The fins on the back surface of the middle vent panel are sharp. Take care when handling the panel.

#### **Remove the Bottom Front Panel**

1. Remove the bottom front panel by lifting upwards from the bottom of the panel to release the guide tabs from their corresponding slots on the Express 250's frame.



**NOTE:** When reinstalling, ensure the panel installation does not tear or break the gaskets on the inner edges of the side extrusions.



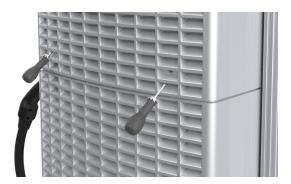
2. Determine whether the station has ground straps (a) or EMI shields (b). An Express 250 only needs one of these protection methods. If you're servicing a station with ground straps, skip to "Remove the Cooling Controller".





**Remove the Top Rear Panel** 

1. Using a T25 Torx (or a Phillips #2 screwdriver for early charging stations), loosen the two hidden captive screws located in the top rear panel's vents, inset from each bottom corner.



2. Using a T25 Torx driver, loosen the two captive screws located at the top of the top rear panel. Using two hands, hold the top rear cover at an angle to remove, leading with the bottom edge.



**NOTE:** When reinstalling, squeeze the sides of the panel inward to fit the tabs into place in the C-channel, inside the watertight gasket.



#### **Remove the Middle Rear Panel**

Using two hands, lift the middle rear panel straight up and out to disengage the guide tabs.



**NOTE:** When reinstalling, squeeze the sides of the panel inward to fit the tabs into place in the C-channel, inside the watertight gasket. For older stations, ensure the lower panel's sign is correctly captured under the middle panel's edge as you carefully push the panel down.





**IMPORTANT:** Small gauge wiring routed on the sides of the frame could be sheared if caught by panel tabs. Ensure wiring is cleared from guide holes when installing bottom and middle rear panels.

## **Remove the Bottom Rear Panel**

Using two hands, carefully pull the panel upward to release the panel's guide tabs from their corresponding slots on the Express 250's frame.



**NOTE:** When reinstalling, squeeze the sides of the panel inward to fit the tabs into place in the C-channel, inside the watertight gasket. Carefully push the panel down.



# **Open the Power Module Holders (Ground Straps)**



**NOTE:** If the station has EMI shields instead of ground straps, refer to Open the Power Module Holders (EMI Shields) instead.

1. Use a T25 Torx to remove the front and rear M5 screws and washers attaching the Power Module holder (a) and Power Module (b) ground straps to the Express 250 frame (eight screws total). Keep the screws and washers for use in a later step.



2. Using two hands, squeeze the Power Module mechanism's release bar against the flange. Raise the bar to fully rotate the Power Module mechanism upward to the lock position. This ensures enough clearance for the Power Modules to slide under the mechanism.





3. At the bottom right of the Express 250, press and hold the yellow release latch while pulling the Power Module tray out of the station completely.



## **Open the Power Module Holders (EMI Shields)**



**NOTE:** If the station has ground straps instead of EMI shields, refer to "Open the Power Module Holders (Ground Straps)" instead.

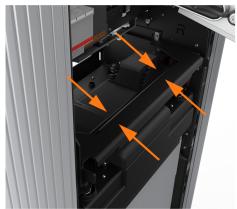
1. Use a T25 Torx to remove the six T25 screws and washers from the front EMI shield (d).



**NOTE:** When reinstalling, position the bottom cutout over the yellow release latch (e).



2. Using two hands, squeeze the Power Module mechanism's release bar against the flange. Raise the bar to fully rotate the Power Module mechanism upward to the lock position. This ensures enough clearance for the Power Modules to slide under the mechanism.





3. At the bottom right of the Express 250, press and hold the yellow release latch while pulling the Power Module tray out of the station completely.



## **Remove the Power Module**

1. Tilt both Power Module holders down to the ground and rest them on their kickstands (highlighted).



**NOTE:** The kickstands must rest on a surface that is level with the bottom of the station.



2. To remove a Power Module, slide it partially out of its holder until it can be lifted by its handles and removed completely.

#### **Install the Power Module**

1. Install the rear Power Module first. Using two people, lift the Power Module by its top handles and gently slide it into its holder with its connections facing outward (a).





**NOTE:** If only one Power Module is being installed, it must be installed in the rear holder (b).



- 2. Once the Power Module is positioned partially inside its holder, fold the handles down to slide it in completely.
- 3. Repeat the step for the second Power Module if applicable.
- 4. Lift each Power Module to the upright position one at a time.

- 5. If ground straps are present:
  - a. Use a T25 Torx and four M5 screws to attach a ground stud bracket to each side of each Power Module (two brackets and eight screws per Power Module).



b. Use an 8-mm (5/16-in) nut driver, two M5 nuts and two M5 washers to reattach each ground strap to the ground studs on the sides of both Power Modules.



6. If not already done, remove the safety caps from the coolant ports.



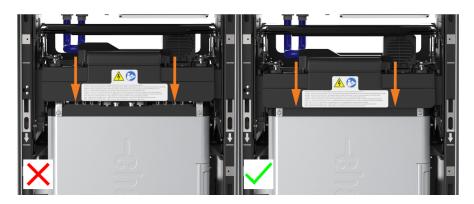
7. At the bottom right of the Express 250, press and hold the yellow release latch while pushing the Power Module tray into the station until it locks into place.



8. Using two hands, squeeze the Power Module mechanism's release bar and lower it halfway to check alignment with the ports and guide posts.



9. Lower the Power Module mechanism until you hear a click as the mechanism locks into place. Ensure the mechanism is fully engaged with all Power Module connectors. The Power Module mechanism should fully cover the ridges on the Power Module's top edge.





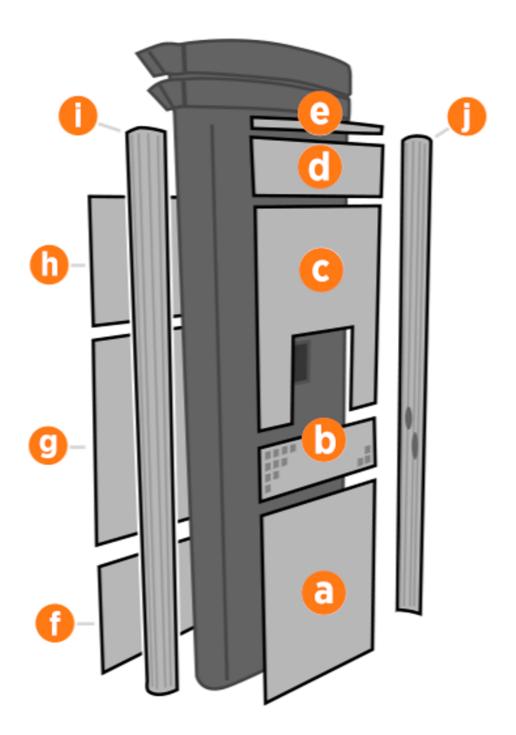
If the mechanism does not engage, raise it again and push the Power Modules to the back of the station to realign, then try again. Do not apply excessive force.

REVERSE THE ABOVE STEPS TO REPLACE THE EMI SHIELD (IF APPLICABLE), REAR PANELS, FRONT PANELS, LED DISPLAY, AND AREA LIGHT BAR.

#### **Power On the Station**

Once all cover panels have been installed, power on the Express 250. The on-screen Installation Wizard walks you through any required tasks to set up the Express 250 and verify that it can operate properly.

An Installation Wizard test checks that all cover panels have been correctly installed and fully seated. Check the lower right corner of the screen for any error messages. If panel errors appear, match the panel letters to this illustration.



- a. Front bottom panel
- b. Middle vent panel
- c. Front top panel
- d. LED display
- e. Area Light Bar
- f. Rear bottom panel
- g. Rear middle panel
- h. Rear top panel

- i. Left Extrusion
- j. Right extrusion



**DANGER:** RISK OF SHOCK. If a fault exists, turn the power off at the service panel to BOTH Express 250 paired charging stations during work and keep it off until all panels are reinstalled. Internal components can present a shock hazard. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

If any panel needs reinstallation, review the procedures above to double-check that all panels have been fully seated and that the edges of all signs are captured fully by the panels around them. For further details, refer to the Express 250 Installation Guide.

# -chargepoin+

# Replace the Wago Label 18

The ChargePoint Wago label is applied to the upper AC Wago terminals, to discourage servicing or tampering of factory-assembled conductors that should not be adjusted in the field. Newer Express 250 stations have this sticker already applied. Previous stations may need it retrofitted during installation or service.

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

Complete the following steps to replace the Wago label in a Express 250 charging station.

#### You Will Need

- ChargePoint Wago label replacement kit CPE250-WAGO TAMPER LABEL-F:
  - · Sheet of Wago labels
  - · Isopropyl wipes



- Headlamp
- Step ladder
- · T25 Security Torx driver
- · T20 Torx driver
- Phillips #2 screwdriver
- · Paper towel or clean cloth
- · Permanent ink felt tip pen

## **Access the AC Wiring Terminals**

- 1. Complete the Express 250 installation or service action according to ChargePoint instructions. STOP before replacing the AC wiring cover.
- 2. If the service action did not involve accessing the AC input wiring, refer to ChargePoint University guides at <a href="mailto:chargepoint.com/installers">chargepoint.com/installers</a> or <a href="mailto:chargepoint.com/eu/installers">chargepoint.com/eu/installers</a> as needed to remove cover panels:
  - a. Remove the area light bar, LED display, and three front cover panels.
  - b. Remove the three back cover panels.
  - c. Remove the left extrusion. Leave the right extrusion in place.



#### 3. Remove the AC wiring cover.

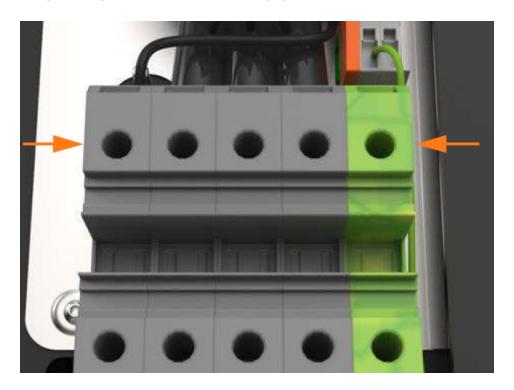


## **Install the Wago Label**

1. Perform a pull-push test on all shunt trip wires and conductors above the AC terminals. Ensure that all orange buttons are in the up (flush) position as shown.



2. Wipe down the outer sides of the AC terminal block with isopropyl wipes in line with the upper Wago tool ports. Dry the terminal block with a paper towel or clean cloth.



3. Remove the label's back liner to expose the adhesive.

4. Affix the Wago label onto the station ONLY in the location shown. Use a permanent felt tip pen to mark the label with the installer or service technician's initials and the date that work was performed.

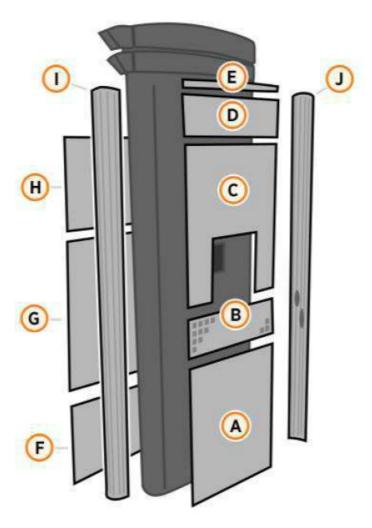


- 5. Reverse the above steps to reinstall all cover panels:
  - · AC wiring cover
  - · Left Extrusion
  - Three rear cover panels
  - · Three front cover panels
  - LED display
  - · Area Light Bar

## **Power the System**

Once all cover panels have been installed, power on the Express 250. The on-screen Installation Wizard walks you through any required tasks to set up the Express 250 and verify that it can operate properly.

An Installation Wizard test checks that all cover panels have been correctly installed and fully seated. Check the lower right corner of the screen for any error messages. If panel errors appear, match the panel letters to this illustration:



Α	Front bottom panel
В	Middle vent panel
С	Front top panel
D	Secondary display
Е	Area Light Bar
F	Rear bottom panel
G	Rear middle panel
Н	Rear top panel
I	Left Extrusion
J	Right extrusion



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

If any panel needs reinstallation, review the procedures above to double-check that all panels have been fully seated and that the edges of all signs are captured fully by the panels around them. For further detail refer to the Express 250 Installation Guide.

## -chargepoin+

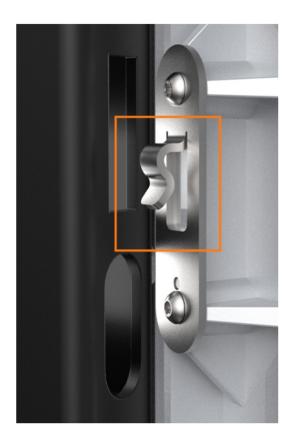
## Replace the Rear Cover Panel 19

To replace the rear cover panel, complete the following steps:

## **Bring These Tools and Materials**

- ChargePoint replacement part #CPE250-REAR-PANELS-F
- #2 Phillips screwdriver
- T25 Security Torx driver
- · Step ladder
- Headlamp

## **About Panels**



All Express 250 panels have guide tabs that align with corresponding slots on the Express 250's frame. When removing a panel, lift the panel upward to release these tabs from their slots.



**NOTE:** When installing a panel, align these tabs above their corresponding slots and press the panel downward.

## **Power Off the Station**

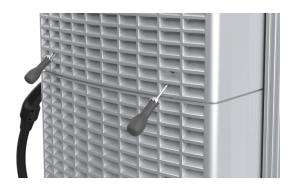
Power off at the breaker panel and lock out/tag out before continuing work.



**DANGER:** RISK OF SHOCK. Before performing this procedure, disconnect the power to the Express 250 at the service panel. Keep power off for this circuit until all cover panels have been correctly reinstalled and the work scope has been completed. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

## **Remove the Top Rear Panel**

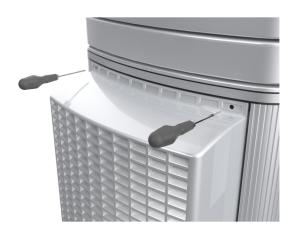
1. Using a T25 Torx (or a Phillips #2 screwdriver for early charging stations), loosen the two hidden captive screws located in the top rear panel's vents, inset from each bottom corner.



2. Using a T25 Torx driver, loosen the two captive screws located at the top of the top rear panel. Using two hands, hold the top rear cover at an angle to remove, leading with the bottom edge.



**NOTE:** When reinstalling, squeeze the sides of the panel inward to fit the tabs into place in the C-channel, inside the watertight gasket.



## **Remove the Middle Rear Panel**

Using two hands, lift the middle rear panel straight up and out to disengage the guide tabs.



**NOTE:** When reinstalling, squeeze the sides of the panel inward to fit the tabs into place in the C-channel, inside the watertight gasket. For older stations, ensure the lower panel's sign is correctly captured under the middle panel's edge as you carefully push the panel down.





**IMPORTANT:** Small gauge wiring routed on the sides of the frame could be sheared if caught by panel tabs. Ensure wiring is cleared from guide holes when installing bottom and middle rear panels.

#### **Remove the Bottom Rear Panel**

Using two hands, carefully pull the panel upward to release the panel's guide tabs from their corresponding slots on the Express 250's frame.



**NOTE:** When reinstalling, squeeze the sides of the panel inward to fit the tabs into place in the C-channel, inside the watertight gasket. Carefully push the panel down.

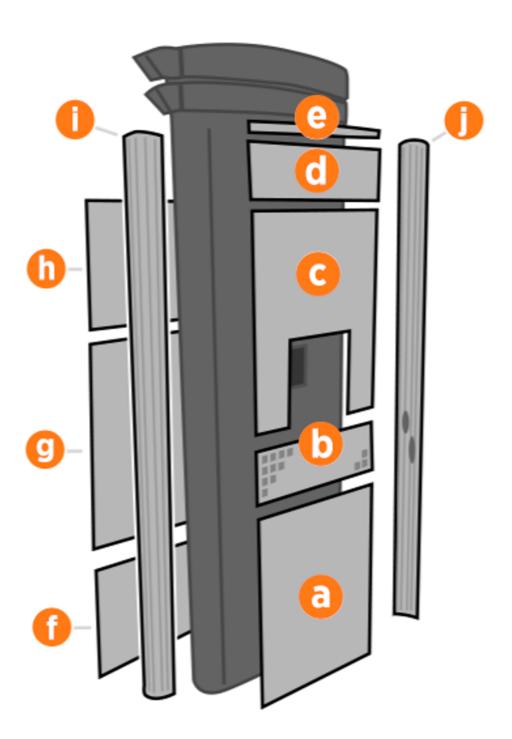


#### REVERSE THE ABOVE STEPS TO REPLACE THE BOTTOM, MIDDLE AND TOP REAR PANELS.

## **Power On the Station**

Once all cover panels have been installed, power on the Express 250. The on-screen Installation Wizard walks you through any required tasks to set up the Express 250 and verify that it can operate properly.

An Installation Wizard test checks that all cover panels have been correctly installed and fully seated. Check the lower right corner of the screen for any error messages. If panel errors appear, match the panel letters to this illustration.



- a. Front bottom panel
- b. Middle vent panel
- c. Front top panel
- d. LED display
- e. Area Light Bar
- f. Rear bottom panel
- g. Rear middle panel
- h. Rear top panel

- i. Left Extrusion
- j. Right extrusion



**DANGER:** RISK OF SHOCK. If a fault exists, turn the power off at the service panel to BOTH Express 250 paired charging stations during work and keep it off until all panels are reinstalled. Internal components can present a shock hazard. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

If any panel needs reinstallation, review the procedures above to double-check that all panels have been fully seated and that the edges of all signs are captured fully by the panels around them. For further details, refer to the Express 250 Installation Guide.

## -chargepoin+

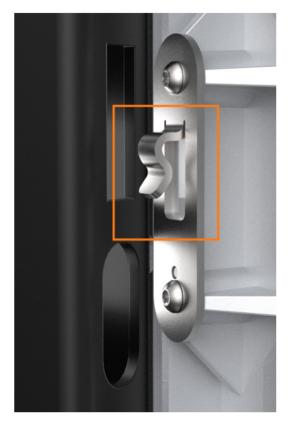
# Replace Coolant Reservoir 20

To replace the coolant reservoir, complete the following steps:

## **Bring These Tools and Materials**

- ChargePoint replacement part CPE250-RESERVOIR-F
- ChargePoint replacement part CPE250-COOLANT-F
- #2 Phillips screwdriver
- · T25 Security Torx driver
- T27 Security Torx driver
- Headlamp
- · Lock out/tag out equipment
- · Safety glasses
- Funnel
- 5 6 lint-free absorbent cloths
- · Step ladder

## **About Panels**



All Express 250 panels have guide tabs that align with corresponding slots on the Express 250's frame. When removing a panel, lift the panel upward to release these tabs from their slots.



**NOTE:** When installing a panel, align these tabs above their corresponding slots and press the panel downward.

## **Power off the Station**

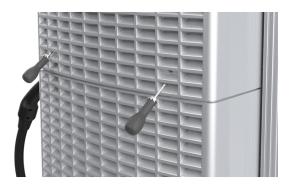
Power off at the breaker panel and lock out/tag out before continuing work.



**DANGER:** RISK OF SHOCK. Before performing this procedure, disconnect the power to the Express 250 at the service panel. Keep power off for this circuit until all cover panels have been correctly reinstalled and the work scope has been completed. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

## **Remove the Top Rear Panel**

1. Using a T25 Torx (or a Phillips #2 screwdriver for early charging stations), loosen the two hidden captive screws located in the top rear panel's vents, inset from each bottom corner.



2. Using a T25 Torx driver, loosen the two captive screws located at the top of the top rear panel. Using two hands, hold the top rear cover at an angle to remove, leading with the bottom edge.

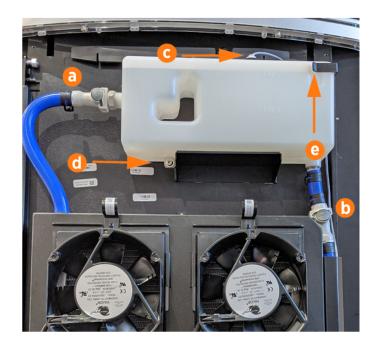


**NOTE:** When reinstalling, squeeze the sides of the panel inward to fit the tabs into place in the C-channel, inside the watertight gasket.



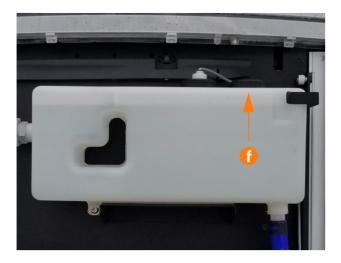
## **Replace the Reservoir**

1. Using absorbent cloths to guard against coolant spills, disconnect the two quick disconnect valves found on either side of the coolant reservoir (a and b).



- 2. Using absorbent cloths to guard against coolant spills, unscrew the level sensor cap (c) from the top of the reservoir. Dry the sensor line components and set them gently aside for later reinstallation.
- 3. Use a Torx T27 driver to remove the bottom reservoir screw (d). Keep the screw for later reinstallation.
- 4. Gently slide the coolant reservoir to the left and up, to release it from the right side bracket (e) and its
- 5. Place the new reservoir on the shelf and slide it to the right and down until it is seated in the bracket.
- 6. Use a Torx T27 driver to fasten the bottom reservoir screw. Torque to 0.6 Nm (5 in-lb).
- 7. Reinstall the level sensor line and fasten the top cap.
- 8. Connect both quick disconnects (a and b) on the sides. Hold a cloth around each valve and perform a push-pull test to ensure it is firmly seated.

9. Using a step ladder if needed, unscrew the reservoir cap (f). Use a funnel to fill the reservoir to the marked MAX line with coolant. Replace the reservoir cap.



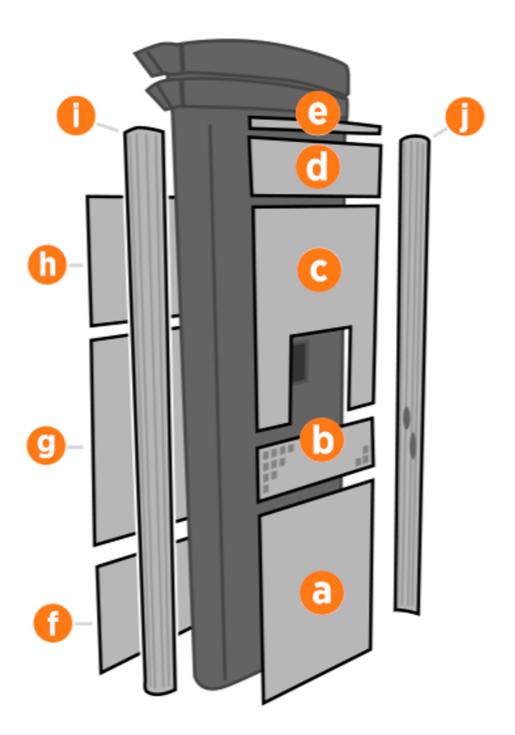
10. Discard the old reservoir once it is empty of coolant.

#### REVERSE THE ABOVE STEPS TO REPLACE THE TOP REAR PANEL.

#### **Power On the Station**

Once all cover panels have been installed, power on the Express 250. The on-screen Installation Wizard walks you through any required tasks to set up the Express 250 and verify that it can operate properly.

An Installation Wizard test checks that all cover panels have been correctly installed and fully seated. Check the lower right corner of the screen for any error messages. If panel errors appear, match the panel letters to this illustration.



- a. Front bottom panel
- b. Middle vent panel
- c. Front top panel
- d. LED display
- e. Area Light Bar
- f. Rear bottom panel
- g. Rear middle panel
- h. Rear top panel

- i. Left Extrusion
- j. Right extrusion



**DANGER:** RISK OF SHOCK. If a fault exists, turn the power off at the service panel to BOTH Express 250 paired charging stations during work and keep it off until all panels are reinstalled. Internal components can present a shock hazard. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

If any panel needs reinstallation, review the procedures above to double-check that all panels have been fully seated and that the edges of all signs are captured fully by the panels around them. For further details, refer to the Express 250 Installation Guide.

## -chargepoin+

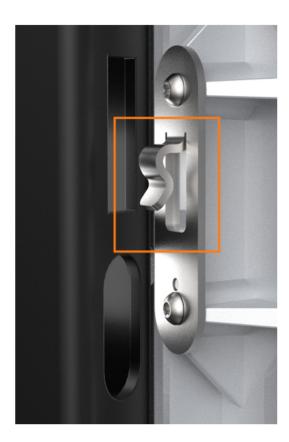
# Replace the Coolant Level Sensor 21 Wire

To replace the coolant level sensor wire, complete the following steps:

## **Bring These Tools and Materials**

- ChargePoint replacement part: Coolant level sensor wire (provided by ChargePoint)
- Headlamp
- #2 Phillips screwdriver
- T20 Torx driver
- T25 Security Torx driver
- · Lint-free absorbent cloth
- Step ladder

#### **About Panels**



All Express 250 panels have guide tabs that align with corresponding slots on the Express 250's frame. When removing a panel, lift the panel upward to release these tabs from their slots.



**NOTE:** When installing a panel, align these tabs above their corresponding slots and press the panel downward.

## **Power off the Station**

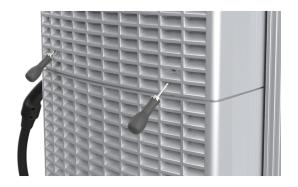
Power off at the breaker panel and lock out/tag out before continuing work.



**DANGER:** RISK OF SHOCK. Before performing this procedure, disconnect the power to the Express 250 at the service panel. Keep power off for this circuit until all cover panels have been correctly reinstalled and the work scope has been completed. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

## Remove the Top and Middle Rear Panels

1. Using a T25 Torx (or a Phillips #2 screwdriver for early charging stations), loosen the two hidden captive screws located in the top rear panel's vents, inset from each bottom corner.



2. Using a T25 Torx driver, loosen the two captive screws located at the top of the top rear panel. Using two hands, hold the top rear cover at an angle to remove, leading with the bottom edge.



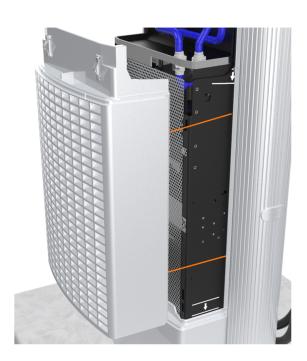
**NOTE:** When reinstalling, squeeze the sides of the panel inward to fit the tabs into place in the C-channel, inside the watertight gasket.



3. Using two hands, lift the middle rear panel straight up and out to disengage the guide tabs.



**NOTE:** When replacing the panel, squeeze the sides of the panel inwards to fit the tabs into place in the C-channel, inside the watertight gasket. Ensure the lower panel's sign is correctly captured under the middle panel's edge as you carefully push the panel down.





**IMPORTANT:** Small gauge wiring routed on the sides of the frame could be sheared if they are caught by panel tabs. Ensure wiring is cleared from guide holes when installing bottom and middle rear panels.

5. Determine whether the station has ground straps (a) or EMI shields (b). An Express 250 only needs one of these protection methods. If you're servicing a station with ground straps, skip to "Remove the Coolant Level Sensor Wire".





## Remove the Rear Bottom Panel and EMI Shield

1. Using two hands, carefully pull the panel upward to release the panel's guide tabs from their corresponding slots on the Express 250's frame.



**NOTE:** When reinstalling, squeeze the sides of the panel inward to fit the tabs into place in the C- channel, inside the watertight gasket. Carefully push the panel down.

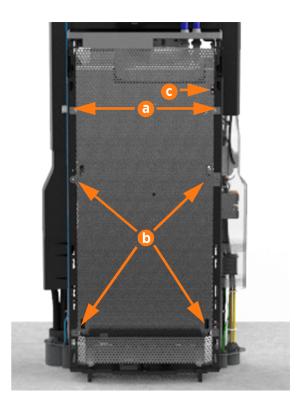


2. Use a T20 Torx to remove the top two screws and washers from the rear EMI shield (a).

3. Use a T25 Torx to remove the four middle and lower screws and washers from the rear EMI shield (b). The rear shield might be in one or two sections. Save all screws and washers for later reuse.

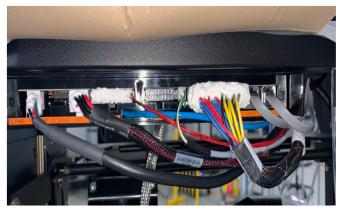


**NOTE:** When reinstalling, ensure that the cutout on the long edge is on the right side (c), leaving the sensor wire clear. When reinstalling, ensure the drain hose and cooling controller cover flap are inside the EMI shield.

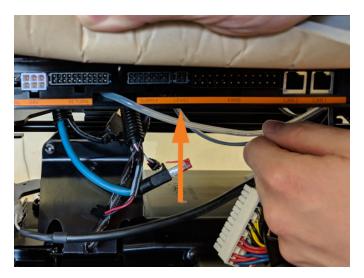


## Remove the Coolant Level Sensor Wire

1. Identify the cooling controller, located behind the protective foam edging on the rear middle frame shelf.



2. Remove the coolant level sensor wire plugged into the LEVEL port from the cooling controller.



- 3. Route the wiring up the access hole and through the clips securing the wire to the system.
- 4. Using absorbent cloths to guard against coolant spills, unscrew the level sensor cap from the top of the reservoir.



5. Remove the wire and cap assembly from the station.



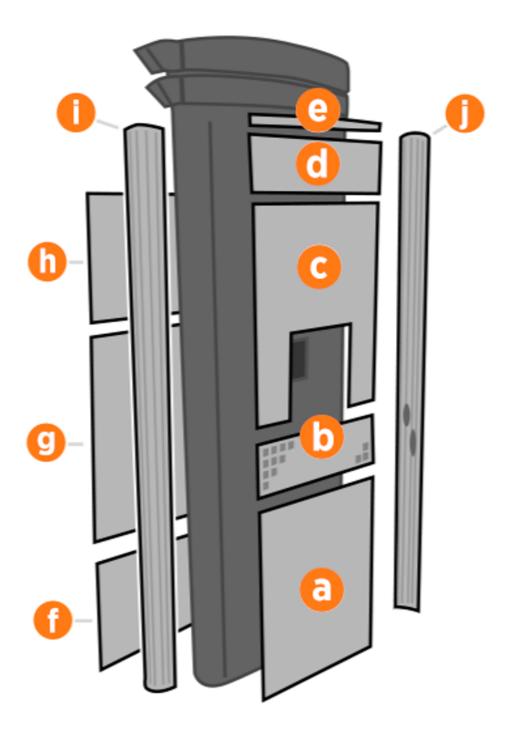
**NOTE:** When reinstalling, perform a push-pull test to ensure the wire is secure.

REVERSE THE ABOVE STEPS TO REPLACE THE COOLANT LEVEL SENSOR WIRE, REAR EMI SHIELD (IF APPLICABLE) AND REAR PANELS.

## **Power On the Station**

Once all cover panels have been installed, power on the Express 250. The on-screen Installation Wizard walks you through any required tasks to set up the Express 250 and verify that it can operate properly.

An Installation Wizard test checks that all cover panels have been correctly installed and fully seated. Check the lower right corner of the screen for any error messages. If panel errors appear, match the panel letters to this illustration.



- a. Front bottom panel
- b. Middle vent panel
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- i. Left Extrusion
- j. Right extrusion



**DANGER:** RISK OF SHOCK. If a fault exists, turn the power off at the service panel to BOTH Express 250 paired charging stations during work and keep it off until all panels are reinstalled. Internal components can present a shock hazard. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

If any panel needs reinstallation, review the procedures above to double-check that all panels have been fully seated and that the edges of all signs are captured fully by the panels around them. For further details, refer to the Express 250 Installation Guide.

## -chargepoin+

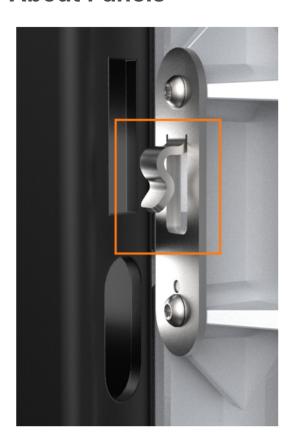
# Replace the Cover Panel Sign 22

To replace the cover panel sign, complete the following steps:

## **Bring These Tools and Materials**

- · ChargePoint replacement signs
- #2 Phillips screwdriver
- T20 Security Torx driver
- T25 Security Torx driver
- · Isopropyl cleaning pads
- Step ladder
- Headlamp

## **About Panels**



All Express 250 panels have guide tabs that align with corresponding slots on the Express 250's frame. When removing a panel, lift the panel upward to release these tabs from their slots.



**NOTE:** When installing a panel, align these tabs above their corresponding slots and press the panel downward.

#### **Power off the Station**

Power off at the breaker panel and lock out/tag out before continuing work.



**DANGER:** RISK OF SHOCK. Before performing this procedure, disconnect the power to the Express 250 at the service panel. Keep power off for this circuit until all cover panels have been correctly reinstalled and the work scope has been completed. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

## Remove the Area Light Bar

1. Using a T25 Security screwdriver, loosen the two captive screws on the area light bar.



2. Disconnect the power cable that connects the area light bar to the LED display assembly. Remove the area light bar.



**NOTE:** When reinstalling, ensure the gasket on each end of the area light bar is properly seated around the plastic tab.



## **Remove the LED Display**

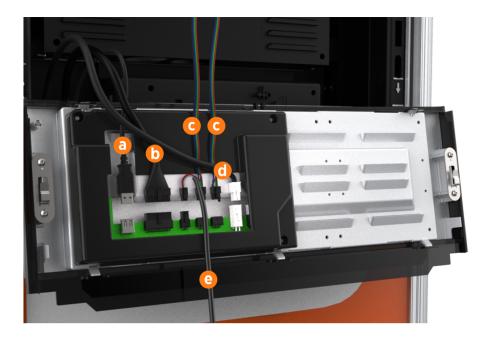
1. Push the LED display upwards to release its guide tabs from their corresponding slots on the Express 250's frame.



2. When the LED display assembly is released, disconnect the five cables from the back.



**NOTE:** When reinstalling, connect the five cables to their corresponding connectors on the back of the display. Leave the area light bar cable (e) loose.



- a. Communications cable (USB-A)
- b. Holster light cable
- c. Area light cable x 2 (interchangeable)
- d. Power cable (24 V)



**IMPORTANT:** Do not allow the LED display to hang from its cables.

## **Remove the Top Front Panel**



- 1. Using two hands, pull the top panel upwards to release its guide tabs from their corresponding slots on the Express 250's frame.
- 2. Place a protective cover, such as a lint-free cloth, over the touchscreen to prevent damage during service.



**IMPORTANT:**If you are replacing a charging cable, be sure to visit Replace a Holsterfor information on replacing the holster BEFORE reinstalling the panels.



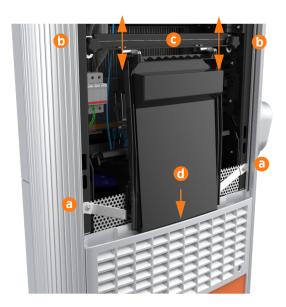
**IMPORTANT:** When reinstalling, push the bottom edge inward to position it inside the groove in the middle vent panel and engage the edge of the sign. Carefully push the panel down until it is firmly seated.



**IMPORTANT:** When reinstalling, ensure all five cables at the top of the panel are not captured by the front upper panel, and are easily accessible for reinstalling the LED display.

## Remove the Middle Vent Panel

1. Use a T25 Torx driver to remove the M5 screw and washer (a) that are attaching each touchscreen ground strap to the frame. Keep the screws and washers for reuse.



2. Loosen both retention knobs (b), allowing the touchscreen beam (c) to slide up vertically and the touchscreen's bottom edge to clear the middle vent panel's slot (d).

3. With hand pressure, tilt the touchscreen upward at a 45-degree angle.



4. Allow the touchscreen to return to its lowest position vertically. Rotate the retention knobs clockwise to re-tighten.



**CAUTION:** The bottom edge and corners of the touchscreen are sharp. Take care when moving underneath the raised screen.

1. Disconnect the two proximity sensor wires from the connectors on the bottom of the touchscreen and the wire management ring. Move the proximity wires to hang in front of the middle vent panel.



**NOTE:** When reinstalling, connect the proximity sensor wires to their corresponding connectors: left wire to left port and right wire to right port. Route any excess wiring through the right-side wire management ring under the touchscreen to prevent it being pinched in the panels.



2. Using two hands, remove the panel by firmly pulling it upward to release the guide tabs from the corresponding slots on the Express 250's frame.



**NOTE:** When reinstalling, route both proximity wires under the sheet metal edge, to hang in front of the panel on the right side (as you face the front of the charging station).





**CAUTION:** The fins on the back surface of the middle vent panel are sharp. Take care when handling the panel.

## **Remove the Bottom Front Panel**

Remove the bottom front panel by lifting upwards from the bottom of the panel to release the guide tabs from their corresponding slots on the Express 250's frame.

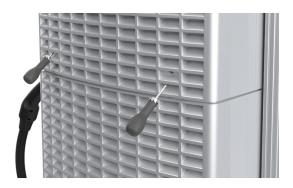


**NOTE:** When reinstalling, ensure the panel installation does not tear or break the gaskets on the inner edges of the side extrusions.



# **Remove the Top Rear Panel**

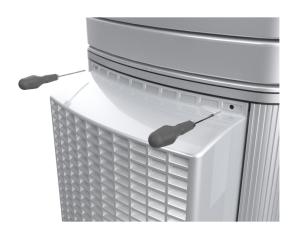
1. Using a T25 Torx (or a Phillips #2 screwdriver for early charging stations), loosen the two hidden captive screws located in the top rear panel's vents, inset from each bottom corner.



2. Using a T25 Torx driver, loosen the two captive screws located at the top of the top rear panel. Using two hands, hold the top rear cover at an angle to remove, leading with the bottom edge.



**NOTE:** When reinstalling, squeeze the sides of the panel inward to fit the tabs into place in the C-channel, inside the watertight gasket.



#### **Remove the Middle Rear Panel**

Using two hands, lift the middle rear panel straight up and out to disengage the guide tabs.



**NOTE:** When reinstalling, squeeze the sides of the panel inward to fit the tabs into place in the C-channel, inside the watertight gasket. For older stations, ensure the lower panel's sign is correctly captured under the middle panel's edge as you carefully push the panel down.





**IMPORTANT:** Small gauge wiring routed on the sides of the frame could be sheared if caught by panel tabs. Ensure wiring is cleared from guide holes when installing bottom and middle rear panels.

#### **Remove the Bottom Rear Panel**

Using two hands, carefully pull the panel upward to release the panel's guide tabs from their corresponding slots on the Express 250's frame.



**NOTE:** When reinstalling, squeeze the sides of the panel inward to fit the tabs into place in the C-channel, inside the watertight gasket. Carefully push the panel down.



#### **Replace the Front Top Panel Sign**

- 1. By hand, bow the sign outwards to release the adhesive holding it to the cover panel.
- 2. Slide the existing sign upwards out of the panel's side grooves.
- 3. Use an isopropyl pad to clean adhesive residue and dust off the cover panel surfaces.
- 4. Remove the liner strips covering the adhesive strips on the new sign.
- 5. Seat the sign first around the U-shaped touchscreen cutout, on the top and both sides.
- 6. Gently bow each of the sign's long edges into the panel's side groove.
- 7. Ensuring the sign is still firmly seated around the top of the U-shaped cutout, gently press down on the sign to attach the adhesive to the cover panel.

#### **Replace the Front Bottom Panel Sign**

- 1. Use a T20 Torx driver to remove the two screws from the bottom edge trim. Set the trim aside for reuse.
- 2. By hand, bow the sign outwards in the middle to release the adhesive holding it to the cover panel.
- 3. Slide the existing sign upwards out of the panel's side grooves.
- 4. Use an isopropyl pad to clean adhesive residue and dust off the cover panel surfaces.
- 5. Remove the liner strips covering the adhesive strips on the new sign.
- 6. Insert one of the sign's side edges into the panel's side groove. Align the bottom edges of the sign and the cover panel.
- 7. Bow the sign slightly to insert the other side edge.
- 8. Gently press down on the sign to attach the adhesive to the cover panel.
- 9. Align the bottom edge trim in place. Use a T20 Torx driver to reinstall the two screws.

#### **Replace the Rear Bottom Panel Sign**



**NOTE:** Newer stations have solid rear bottom cover panels that cannot have signs installed.

- Use a T20 Torx driver to remove the two screws from the bottom edge trim. Set the trim aside for reuse.
- 2. By hand, bow the sign outwards in the middle to release the adhesive holding it to the cover panel.
- 3. Slide the existing sign upwards out of the panel's side grooves.
- 4. Use an isopropyl pad to clean adhesive residue and dust off the cover panel surfaces.
- 5. Remove the liner strips covering the adhesive strips on the new sign.
- 6. Insert one of the sign's side edges into the panel's side groove. Align the bottom edges of the sign and the cover panel.
- 7. Bow the sign slightly to insert the other side edge.
- 8. Gently press down on the sign to attach the adhesive to the cover panel.
- 9. Align the bottom edge trim in place. Use a T20 Torx driver to reinstall the two screws.



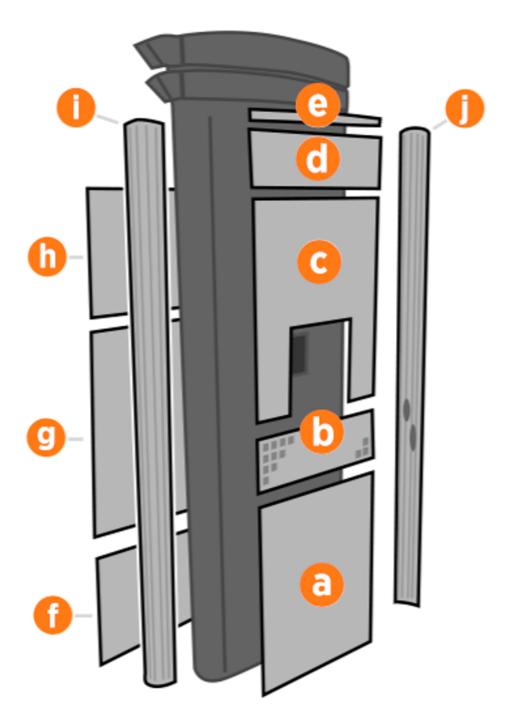
**IMPORTANT:** When reinstalling cover panels, edges of signs can get caught or bent. Ensure each sign is fully seated in its cover panel and does not stick up past the panel's top edge.

REVERSE THE ABOVE STEPS TO REPLACE THE REAR PANELS, FRONT PANELS, LED DISPLAY AND AREA LIGHT BAR.

#### **Power On the Station**

Once all cover panels have been installed, power on the Express 250. The on-screen Installation Wizard walks you through any required tasks to set up the Express 250 and verify that it can operate properly.

An Installation Wizard test checks that all cover panels have been correctly installed and fully seated. Check the lower right corner of the screen for any error messages. If panel errors appear, match the panel letters to this illustration.



- a. Front bottom panel
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**DANGER:** RISK OF SHOCK. If a fault exists, turn the power off at the service panel to BOTH Express 250 paired charging stations during work and keep it off until all panels are reinstalled. Internal components can present a shock hazard. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

If any panel needs reinstallation, review the procedures above to double-check that all panels have been fully seated and that the edges of all signs are captured fully by the panels around them. For further details, refer to the Express 250 Installation Guide.

# -chargepoin+

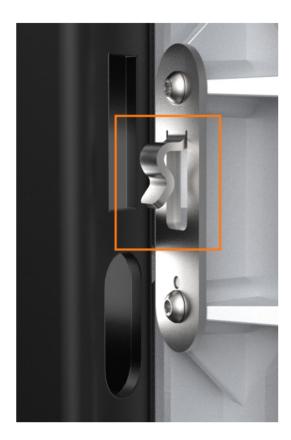
# Replace the Station Management 23 Unit (DCC)

To replace the station management unit, complete the following steps:

#### **Bring These Tools and Materials**

- ChargePoint replacement part #CPE250-DCC-F
- T25 Security Torx driver
- Headlamp

#### **About Panels**



All Express 250 panels have guide tabs that align with corresponding slots on the Express 250's frame. When removing a panel, lift the panel upward to release these tabs from their slots.



**NOTE:** When installing a panel, align these tabs above their corresponding slots and press the panel downward.

#### **Power off the Station**

Power off at the breaker panel and lock out/tag out before continuing work.



**DANGER:** RISK OF SHOCK. Before performing this procedure, disconnect the power to the Express 250 at the service panel. Keep power off for this circuit until all cover panels have been correctly reinstalled and the work scope has been completed. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

#### Remove the Area Light Bar

1. Using a T25 Security screwdriver, loosen the two captive screws on the area light bar.



2. Disconnect the power cable that connects the area light bar to the LED display assembly. Remove the area light bar.



**NOTE:** When reinstalling, ensure the gasket on each end of the area light bar is properly seated around the plastic tab.



# **Remove the LED Display**

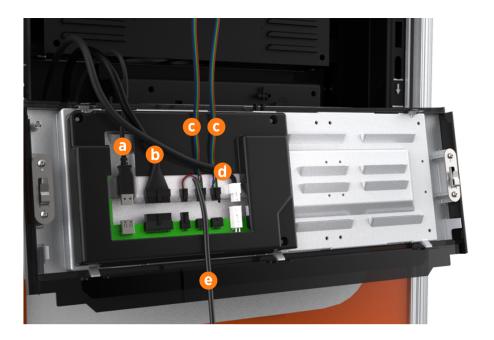
1. Push the LED display upwards to release its guide tabs from their corresponding slots on the Express 250's frame.



2. When the LED display assembly is released, disconnect the five cables from the back.



**NOTE:** When reinstalling, connect the five cables to their corresponding connectors on the back of the display. Leave the area light bar cable (e) loose.



- a. Communications cable (USB-A)
- b. Holster light cable
- c. Area light cable x 2 (interchangeable)
- d. Power cable (24 V)



**IMPORTANT:** Do not allow the LED display to hang from its cables.

#### **Remove the Top Front Panel**



- 1. Using two hands, pull the top panel upwards to release its guide tabs from their corresponding slots on the Express 250's frame.
- 2. Place a protective cover, such as a lint-free cloth, over the touchscreen to prevent damage during service.



**IMPORTANT:**If you are replacing a charging cable, be sure to visit Replace a Holsterfor information on replacing the holster BEFORE reinstalling the panels.



**IMPORTANT:** When reinstalling, push the bottom edge inward to position it inside the groove in the middle vent panel and engage the edge of the sign. Carefully push the panel down until it is firmly seated.



**IMPORTANT:**When reinstalling, ensure all five cables at the top of the panel are not captured by the front upper panel, and are easily accessible for reinstalling the LED display.

#### **Remove the Station Management Unit**

1. Use a T25 Torx driver to remove the M5 screw and washer (a) that are attaching each touchscreen ground strap to the frame. Keep the screws and washers for reuse.



2. Loosen both retention knobs (b), allowing the touchscreen beam (c) to slide up vertically and the touchscreen's bottom edge to clear the middle vent panel's slot (d).

3. With hand pressure, tilt the touchscreen upward at a 45-degree angle.



4. Allow the touchscreen to return to its lowest position vertically. Rotate the retention knobs clockwise to re-tighten.



**CAUTION:** The bottom edge and corners of the touchscreen are sharp. Take care when moving underneath the raised screen.

5. Locate the station management unit under the touchscreen on the left side of the mount rail (a).



NOTE: Observe the wire routing before removing the unit.



6. Each cable on the unit has a tab that locks it into position. Disconnect each of the six cables by pushing its tab to release:



- CPNK
- Contactor Ribbon
- LEM Current Sensor
- · Power Module
- CAN Bus
- 24 V
- 7. Pull the two plastic tabs below the station management unit to release the unit.
- Pull the station management unit upwards to release it from the top rail, then towards you to remove it.

#### **Replace the Station Management Unit**

- 1. Hang the station management unit temporarily on the top rail.
- 2. Reconnect its six cables according to the labels on the unit cover.
- 3. Align cable routing behind the unit to ensure it can be pushed from the bottom of the unit on each side. Push until it snaps into place on the bottom rail.



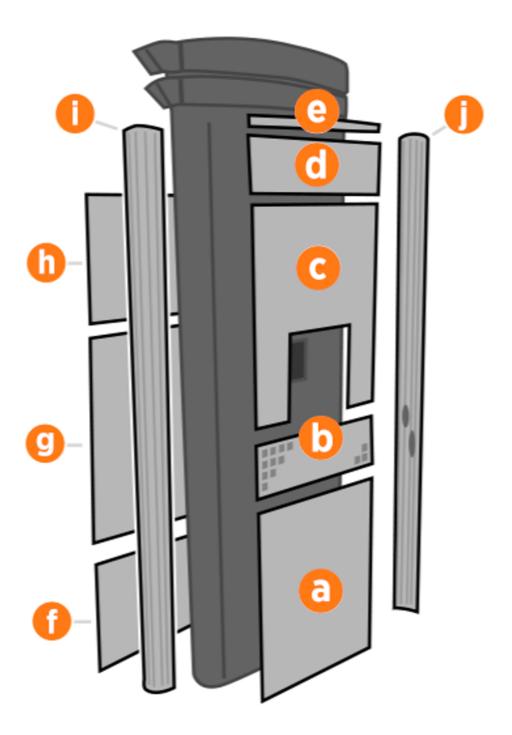
NOTE: Ensure all cables are flat against the rail bar and are not being pinched.

# REVERSE THE ABOVE STEPS TO REPLACE THE TOP FRONT PANEL, LED DISPLAY AND AREA LIGHT BAR.

#### **Power On the Station**

Once all cover panels have been installed, power on the Express 250. The on-screen Installation Wizard walks you through any required tasks to set up the Express 250 and verify that it can operate properly.

An Installation Wizard test checks that all cover panels have been correctly installed and fully seated. Check the lower right corner of the screen for any error messages. If panel errors appear, match the panel letters to this illustration.



- a. Front bottom panel
- b. Middle vent panel
- c. Front top panel
- d. LED display
- e. Area Light Bar
- f. Rear bottom panel
- g. Rear middle panel
- h. Rear top panel

- i. Left Extrusion
- j. Right extrusion



**DANGER:** RISK OF SHOCK. If a fault exists, turn the power off at the service panel to BOTH Express 250 paired charging stations during work and keep it off until all panels are reinstalled. Internal components can present a shock hazard. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

If any panel needs reinstallation, review the procedures above to double-check that all panels have been fully seated and that the edges of all signs are captured fully by the panels around them. For further details, refer to the Express 250 Installation Guide.

# -chargepoin+

# Replace Charging Cable 24

To replace the charging cable, complete the following steps.

#### **Bring These Tools and Materials**

ChargePoint replacement part for your charging connector type: CCS1, CCS2, CHAdeMO, or NACS

#### **Tools**

Torx screwdriver set



- T20
- T25
- T40
- T60



Hex nut driver, 10 mm (3/8 in)



Torque paint pen



Stepladder



Torx Security screwdriver

• T25



Dielectric grease



Head lamp

#### **Check the Cable Replacement Kit Contents**

- 1. Inspect the new part:
  - Is this the correct charge cable type to replace the cable on the charging station? (CCS1, CCS2, CHAdeMO, or NACS)



- Is the part free from delivery damage (damaged insulation, bent or broken pins etc.)? If the part has any defects, call ChargePoint Support before beginning work.
- 2. Place the outer cable clamp surface on a padded surface to protect it from scratches until installed.

## **Installation Sequence**

Inspect the serial number (a) located below the swing arms and above the rear panels on the back of the station.



Follow the installation sequence listed below based on the serial number.

Serial Numbers 2133xxxx and Higher	Serial Numbers 1932xxxx to 2132xxxx	Serial Numbers Prior to 1932xxxx	
1. Power Off the Station	1. Power Off the Station	1. Power Off the Station	
2. Remove the Area Light Bar	2. Remove the Area Light Bar	2. Remove the Area Light Bar	
3. Remove the LED Display	3. Remove the LED Display	3. Remove the LED Display	
4. Remove the Top Front Panel	4. Remove the Top Front Panel	4. Remove the Top Front Panel	
5. Access the Charging Cables	5. Access the Charging Cables	5. Access the Charging Cables	
6. Update the Contactor	6. Replace the Top Cable or	6. Replace the Top Cable	
Assembly (Advanced)	Replace the Bottom Cable	7. Reassemble the Station	
7. Replace the Top Cable	7. Reassemble the Station	8. Power On the Station	
8. Reassemble the Station	8. Power On the Station		
9. Power On the Station			

#### Be aware of these important considerations:

- Any station with a serial number less than 1932 is capable of replacing the top cable, but not the
  bottom cable. If you need to replace the bottom cable on an older station, call ChargePoint Support to
  request the full swing arm assembly kit.
- If the station has a serial number 2133xxxx or higher, you need to remove the contactor box and move the connectors.

#### **Power Off the Station**

Power off at the breaker panel and lock out/tag out before continuing work.



**DANGER:** RISK OF SHOCK. Before performing this procedure, disconnect the power to the Express 250 at the service panel. Keep power off for this circuit until all cover panels have been correctly reinstalled and the work scope has been completed. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

#### Remove the Area Light Bar

1. Using a T25 Security screwdriver, loosen the two captive screws on the area light bar.



2. Disconnect the power cable that connects the area light bar to the LED display assembly. Remove the area light bar.



**NOTE:** When reinstalling, ensure the gasket on each end of the area light bar is properly seated around the plastic tab.



# **Remove the LED Display**

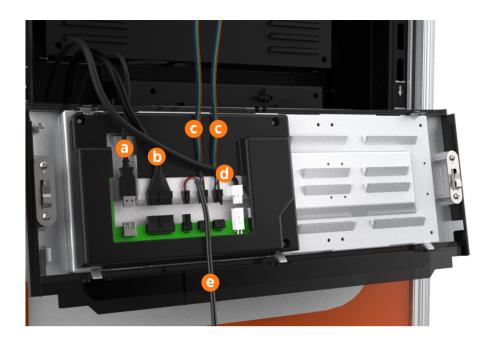
1. Push the LED display upwards to release its guide tabs from their corresponding slots on the Express 250's frame.



2. When the LED display assembly is released, disconnect the five cables from the back.



**NOTE:** When reinstalling, connect the five cables to their corresponding connectors on the back of the display. Leave the area light bar cable (e) loose.

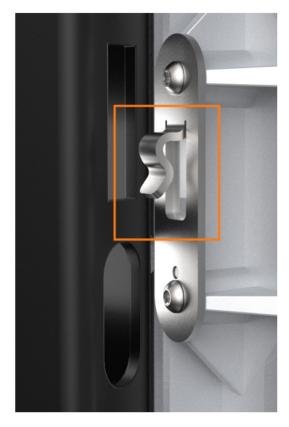


- a. Communications cable (USB-A)
- b. Holster light cable
- c. Area light cable x 2 (interchangeable)
- d. Power cable (24 V)



**IMPORTANT:** Do not allow the LED display to hang from its cables.

#### **Remove the Top Front Panel**



All Express 250 panels have guide tabs that align with corresponding slots on the Express 250's frame. When removing a panel, lift the panel upward to release these tabs from their slots.



**NOTE:** When installing a panel, align these tabs above their corresponding slots and press the panel downward.



- 1. Using two hands, pull the top panel upwards to release its guide tabs from their corresponding slots on the Express 250's frame.
- 2. Place a protective cover, such as a lint-free cloth, over the touchscreen to prevent damage during service.



**IMPORTANT:**If you are replacing a charging cable, be sure to visit Replace a Holsterfor information on replacing the holster BEFORE reinstalling the panels.



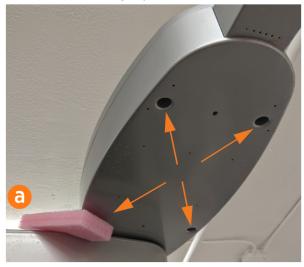
**IMPORTANT:** When reinstalling, push the bottom edge inward to position it inside the groove in the middle vent panel and engage the edge of the sign. Carefully push the panel down until it is firmly seated.



**IMPORTANT:**When reinstalling, ensure all five cables at the top of the panel are not captured by the front upper panel, and are easily accessible for reinstalling the LED display.

#### **Access the Charging Cables**

- 1. Unholster both cables and put them on a padded surface.
- 2. Swing the top arm out for access. Use the provided foam block (a) to hold the arm in place.
- 3. Use a T25 Torx screwdriver to loosen the four M5 captive screws that hold the top lid to the station from below. Set the top lid on a padded surface. The top lid must be removed whether the top or bottom cable is being replaced.



4. Before continuing, take a picture of which cable lug plugs into which lug landing on the contactor assembly.

Cables are colour-coded. Colour codes are different for each installed charge connector type.

If the first four digits of the serial number are less than 2133, it is critical that the cables are reattached to their original locations.



**NOTE:** CHAdeMO has white and black colour codes. NACS, CCS1, and CCS2 have red and black colour codes. It is easiest to unfasten all cables for better access, even if only one cable is being replaced.

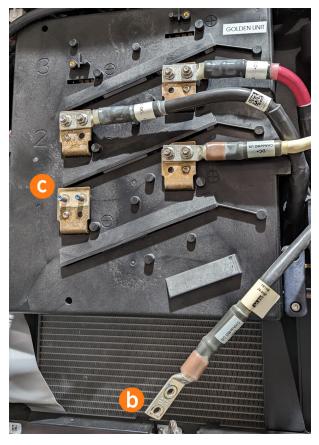


	CHAdeMo	ccs	NACS
Positive	white	red	red
Negative	black	black	black

5. Use a 10 mm (3/8 in) nut driver to remove all 8 contactor nuts. Save the nuts for later reinstallation. Remove all contactor cable lugs (b) from the lug landings (c).



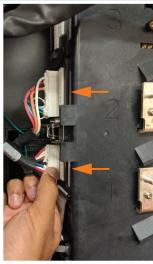
**NOTE:** Avoid touching the lug contact area. Handle the cable lugs by their edges.



- 6. Take a picture of the position of the two communication cables on the left side of the contactor assembly.
- 7. Press the retention tab (d) on the back of each communication cable and remove it from the contactor assembly.



**NOTE:** There are three possible charge connector slots (shown as 1, 2 and 3 on the front contactor plastic cover). Note the position of each communication connector before removing the cable.





8. Gently remove the communication cables from the P-clips mounted between the auxiliary power supply and the contactor assembly. The P-clips open at the top.



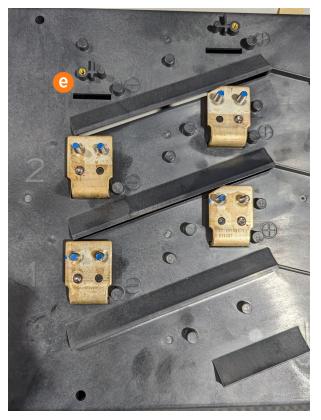
- 9. Pull all cables (communication and conductor) to hang down at the right side of the charging station in a bundle.
- 10. Remove the DC ferrite from the cable bundle.

**IMPORTANT:** Save the DC ferrite. It must be reinstalled later.

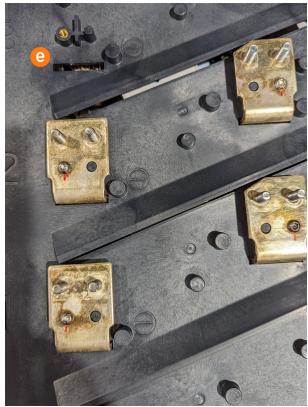


11. If you are replacing a CHAdeMo cable with a NACS cable, look closely at the upper slot, position 3, on the contactor box (e).

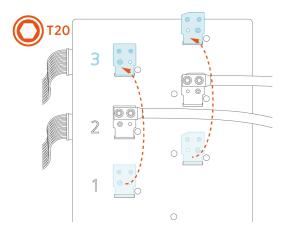
If you do not see a relay through position 3, the station has a 2-relay contactor box and you must remove the contactor box and move the connectors. Complete the steps in <a href="Update the Contactor Assembly - Advanced">Update the Contactor Assembly - Advanced</a> before continuing.



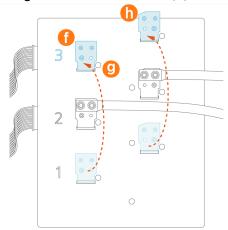
12. If you can see a relay through slot number three, the station has a 3-relay contactor box and you do not need to remove the contactor box. Continue with the steps in this section.



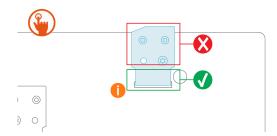
13. Use a T20 Torx screwdriver to remove the two M4 screws on each of the lower set of lug landings.



- 14. Move the lug landings to position 3.
  - a. Align the each lug landing (f) with the correct guide pin (g) on the contactor box. The positive lug has a notched corner (h).



b. To seat lug landing on the contactor box, press the base (i) of the lug landing down.



- c. Use a T20 Torx screwdriver to secure the lug landings on the contactor box.

  Torque the M4 screws to 1.69 Nm (15 in-lb).
- 15. Choose the charging cable to be replaced.
  - a. To replace the top cable, continue to the next section.
  - b. To replace the bottom cable, skip to Replace the Bottom Cable.

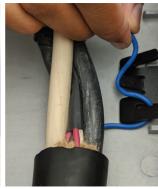
## **Replace the Top Cable**

1. Identify the small data wire attached to the top cable. Unthread it from the tension tab.



**NOTE**: The data wire is a different colour depending on the type of cable.

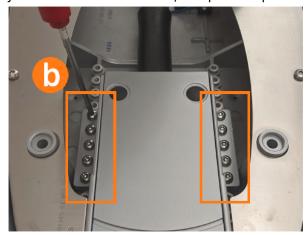




2. If the gasket is installed over the top of the cable clamp as shown, cut the gasket away on the top so that it sits in the channel on either side.



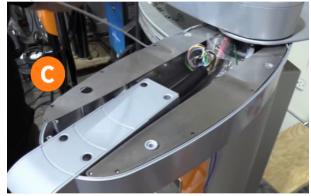
3. If you can see the screws (a) holding the cable clamp to the station, skip to step 6. If you cannot see the screws, complete steps 4 and 5.



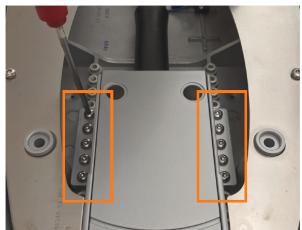
4. Use a T25 Torx screwdriver to remove the ten M5 screws securing the cover.



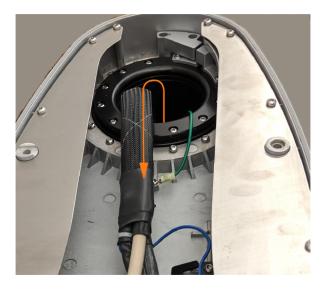
5. Gently lift the cover (b).



6. Use a T25 Torx screwdriver to remove the ten M5 screws holding the cable clamp to the station.



7. Gently move the top cable's wires to identify them in the overall bundle below. Pulling from inside the top arm, thread the three top cable wires (conductors and communications) up through the body of the station and out through the circular opening at the top of the station.



- 8. Remove the entire cable from the station.
- 9. Remove the protective wrapping from the new cable clamp and lift the cable clamp up to the top arm. Insert the cable clamp into the arm so that the screw mounting tabs hold it in place to take the weight of the cable.



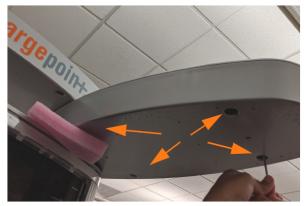
- 10. Use a T25 Torx screwdriver and ten M5 screws to secure the cable clamp assembly to the top arm. **Torque to 4.5 Nm (40 in-lbs).**
- 11. Route the three wires (positive, negative and communications) through the top arm opening. Reach through the top circular opening in the top arm to assist threading the wires through. Once all three connectors are through the circular gasket at the bottom of the bearing stack, continue routing the wires through from below the arms.
- 12. Position the cable clamp in the arm. For the top arm, align the cable clamp so that the second semicircle in the housing (b) matches the gasket line in the arm.



13. After replacing the top cable, skip to Reassemble the Station.

## **Replace the Bottom Cable**

- 1. Swing the bottom arm out for access. Use the provided foam block to hold the arm in place.
- 2. Use a T25 Torx screwdriver to loosen the four M5 captive screws that hold the bottom lid to the station from below.



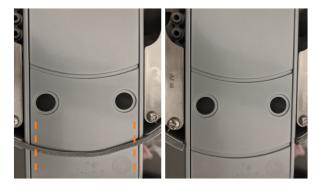
3. Swing the bottom lid to the outside of the station, to expose the inside of the bottom arm.



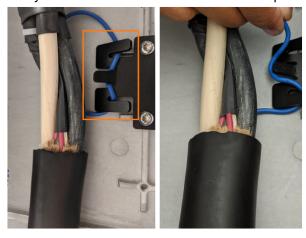


NOTE: Lift up slightly on the bottom lid to help it clear the arm and gasket.

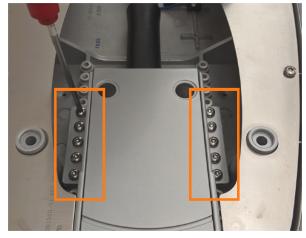
4. If the gasket is installed over the top of the cable clamp as shown, cut the gasket away only on the top so that it sits in the channel on either side.



5. Identify the small data wire attached to the top cable. Unthread it from the tensioner tab.



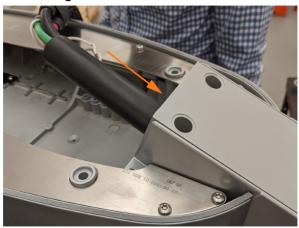
6. Use a T25 Torx screwdriver to remove the ten M5 screws holding the cable clamp to the station.



- 7. Reposition the bottom arm to extend only 45 degrees out from the station. This maximises the size of the wiring opening. Re-block with the foam block.
- 8. Gently move the bottom cable's wires to identify them in the overall bundle below. Pulling from inside the bottom arm, thread the three bottom cable wires (conductors and communications) up through the body of the station and out. Remove the entire cable from the station.



9. Remove the protective wrapping from the new cable clamp and lift the cable clamp up to the bottom arm. Insert the cable clamp into the slot in the arm so that the screw mounting tabs hold it in place to take the weight of the cable.



- 10. Use a T25 Torx screwdriver and ten M5 screws to secure the cable clamp assembly to the bottom arm. **Torque to 4.5 Nm (40 in-lb).**
- 11. Route the three wires (positive, negative and communications) through the bottom arm opening where it meets the station. Reach through the top circular opening in the top arm to assist threading the wires through. Once all three connectors are through the circular gasket at the bottom of the bearing stack, continue routing the wires through from below the arms.



12. Position the cable clamp in the arm. For the bottom arm, align the cable clamp so that the first semicircle in the housing (a) matches the gasket line in the arm.



13. Proceed to the next section to reassemble the station.

### **Reassemble the Station**

Refer to the images in the procedures above while replacing the station components:

- 1. Reinstall the ten screws that hold the cable clamp to its arm. Torque to 4.5 Nm (40 in-lb).
- 2. Gently route the data wire through the tensioner, being careful not to overstress or cut the wire.
- 3. If you removed the cover to access the cable clamp screws, replace the ten screws that hold the cover in place. **Torque to 5.3 Nm (47 In-Ib).**
- 4. Check gasket placement to ensure it sits inside the channel all around the arm.
- 5. Replace the lid on top of its arm. From below, use a T25 Torx screwdriver to fasten the four captive screws. **Torque to 2.6 Nm (20 in-lb)**.



**NOTE:** For the bottom lid, lift up slightly on the lid to help it clear the arm and gasket.

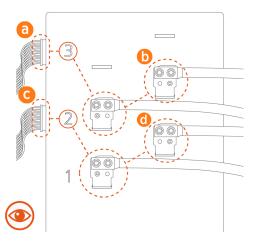
- 6. Remove the foam block used to hold the swing arm open and allow the arm to swing back to home position.
- 7. Replace the top lid.
- 8. Route the communication cables through the plastic P-clips above the contactor box.

Plug communication cables in on the left side of the contactor assembly, paying attention to which cable belongs in positions 1, 2, and 3.



**IMPORTANT:** 2-relay contactor boxes (boxes where the connectors were moved) have two active slots. Route the power connectors through slots 1 and 2. Connect the communications cables into slots 2 and 3 respectively.

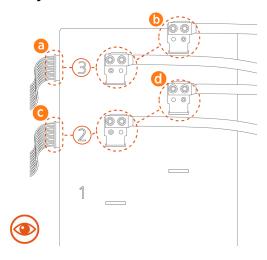
#### 2-relay contactor box



9.

- a. NACS communication cable
- b. NACS DC charging cable
- c. CCS communication cable
- d. CCS DC charging cable

#### 3-relay contactor box



- a. NACS communication cable
- b. NACS DC charging cable

- c. CCS communication cable
- d. CCS DC charging cable
- 10. Apply a thin layer of dielectric grease to the face of each lug on the contact surface.



**IMPORTANT:** Ensure that the DC ferrite is reinstalled before replacing the contactor lugs.



- 11. Replace contactor lugs with two nuts each, according to the previously taken pictures.
- 12. Match positive and negative signs on the conductor labels to the signs imprinted on the plastic face of the contactor assembly. CHAdeMO is always in position 1 (lowest) when present. **Torque to 6.8 Nm (60 in-lb)** and mark with a paint pen.



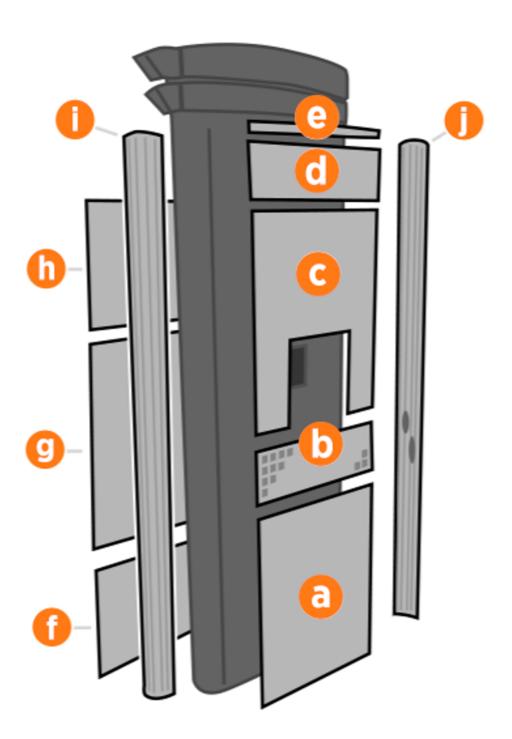
**CAUTION:** Do not install the contactor lugs with reversed positive/negative polarity. Incorrect polarity could damage the station or the vehicle charging from the station.

# REVERSE THE ABOVE STEPS TO REPLACE THE TOP FRONT PANEL, LED DISPLAY AND AREA LIGHT BAR.

## **Power On the Station**

Once all cover panels have been installed, power on the Express 250. The on-screen Installation Wizard walks you through any required tasks to set up the Express 250 and verify that it can operate properly.

An Installation Wizard test checks that all cover panels have been correctly installed and fully seated. Check the lower right corner of the screen for any error messages. If panel errors appear, match the panel letters to this illustration.



- a. Front bottom panel
- b. Middle vent panel
- c. Front top panel
- d. LED display
- e. Area Light Bar
- f. Rear bottom panel
- g. Rear middle panel
- h. Rear top panel

- i. Left Extrusion
- j. Right extrusion



DANGER: RISK OF SHOCK. If a fault exists, turn the power off at the service panel to BOTH Express 250 paired charging stations during work and keep it off until all panels are reinstalled. Internal components can present a shock hazard. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

If any panel needs reinstallation, review the procedures above to double-check that all panels have been fully seated and that the edges of all signs are captured fully by the panels around them. For further details, refer to the Express 250 Installation Guide.

## **Update the Contactor Assembly - Advanced**



**IMPORTANT:** You only need to remove the contactor box and move the connectors if you are replacing a charging cable on a station with a 2-relay contactor box. If the station has a 3-relay contactor box, you do not need to complete the procedure in this section.

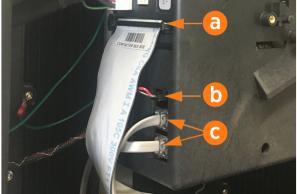
**IMPORTANT:** You must be a licensed electrician and complete online training to become a ChargePoint certified installer. If you do not complete this training, you cannot access the ChargePoint network to complete the installation.



Find online training at: chargepoint.com/installers

If the charging station is not installed by a ChargePoint-certified installer, using a ChargePoint-approved method, it is not covered under warranty and ChargePoint is not responsible for any malfunctions.

1. Remove the horizontal 50-pin ribbon cable (a). Push the tabs outward. Rock it gently from left to right as you pull out the cable.

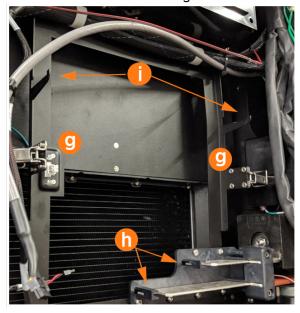


2. Remove the remaining two cables connected to the left side of the contactor assembly: 24 V DC power (b), and CAN connectors (c).



**NOTE:** Each cable is keyed to its corresponding connector except the CAN cables, which are interchangeable.

3. Open the securing latches (d) on the left and right sides of the contactor box assembly by pushing down on the lock tab and lifting the lever.



- 4. Disengage the contactor assembly from the large bus bar connections at the bottom (e) by holding it with two hands near the bottom and rocking the assembly slightly as you pull outward.
- 5. Once the bus bar connections release, pull the assembly forward along the support arms (f), then lift it away from the station.



**NOTE:** Avoid touching the tab contact area. Handle the cable tabs by their edges.

## **Move the Connectors**

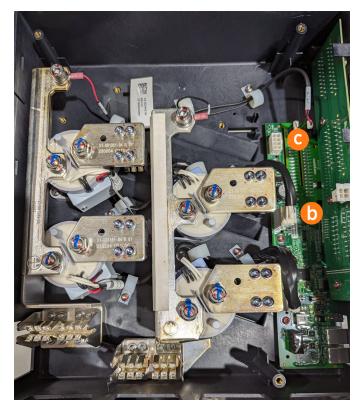
1. <u>Use a T25 Torx screwdriver to remove the three screws</u> (a) securing the cover.



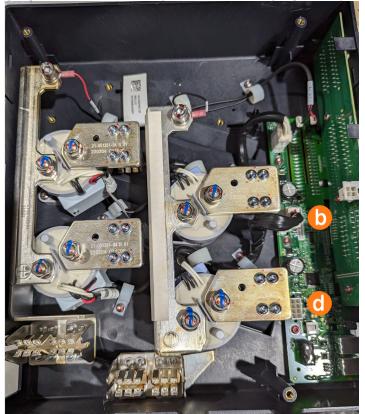
2. Remove the cover.



3. Unplug the connector from position 2 (b) and plug it into position 3 (c).

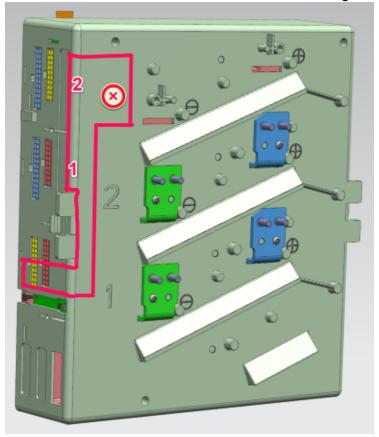


4. Unplug the connector from position 1 (d) and plug it into position 2 (b).



5. Replace the cover. Use a T25 Torx screwdriver and three screws to secure the cover.





# **Replace the Contactor Assembly**

- 1. Ensure latch clasps are open and not blocking the contactor assembly before installation.
- 2. Rest the alignment pegs of the contactor assembly on the support arm hooks.
- 3. Slide the contactor assembly back along the support arms. Push the assembly to engage the bus bars until fully seated.

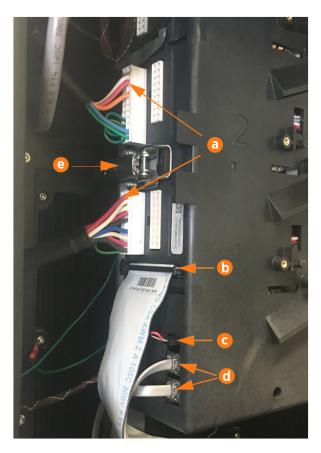


**IMPORTANT:** Ensure the connectors are aligned before pressing in. Do not apply excessive force. Doing so can damage the connectors. Once seated, gently pull the contactor assembly outwards as a push-pull test to confirm it is securely seated.



**NOTE:** Ensure all cables are accessible without being pinched or caught under the contactor assembly.

- 4. Fasten the latches on the right and left sides of the contactor assembly.
- 5. Reconnect each cable on the left side of the contactor assembly.



- a. Charge cable communications
- b. DCC communication ribbon



NOTE: Ensure the key aligns with the notch in the socket.

- c. 24 V DC power
- d. CAN connectors (interchangeable)



**NOTE:** Secure connector body to the mating connector on the contactor assembly and ensure the tabs are in the open position. During connection the insertion tabs will automatically close onto the connector housing.

6. Apply a thin layer of dielectric grease to the face of each lug on the contact surface.



**IMPORTANT:** Ensure that the DC ferrite is reinstalled before replacing the contactor lugs.



- 7. Replace contactor lugs with two nuts each, according to the previously taken pictures.
- 8. Match positive and negative signs on the conductor labels to the signs imprinted on the plastic face of the contactor assembly. **Torque to 6.8 Nm (60 in-lb)** and mark with a paint pen.



**CAUTION:** Do not install the contactor lugs with reversed positive/negative polarity. Incorrect polarity could damage the station or the vehicle charging from the station.

9. Tuck the excess contactor cable down the side of the enclosure to avoid interfering with the cover panel in a later step.

Go to Choose the charging cable to be replaced. Continue with the steps to replace the charging cable.

# -chargepoin+

# Replace Charging Cable with a 25 NACS Cable

To replace the charging cable with a NACS cable, complete the following steps.

## **Bring these tools**

Torx screwdriver set



- T20
- T25
- T40
- T60



Hex nut driver, 10 mm (3/8 in)



Torque paint pen



Stepladder



Torx Security screwdriver

• T25



Dielectric grease



Head lamp

# **Check the Cable Replacement Kit Contents**





- 1. Inspect the new part. Is the part free from delivery damage (damaged insulation, bent or broken pins etc.)? If the part has any defects, call ChargePoint Support before beginning work.
- 2. Place the outer cable clamp surface on a padded surface to protect it from scratches until installed.

## **Installation Sequence**

Inspect the serial number (a) located below the swing arms and above the rear panels on the back of the station.



Follow the installation sequence listed below based on the serial number.

Serial Numbers 2133xxxx and Higher	Serial Numbers Prior to 2132xxxx
1. Power Off the Station	1. Power Off the Station
2. Remove the Area Light Bar	2. Remove the Area Light Bar
3. Remove the LED Display	3. Remove the LED Display
4. Remove the Top Front Panel	4. Remove the Top Front Panel
5. Access the Charging Cables	5. Access the Charging Cables
6. Update the Contactor Assembly (Advanced)	6. Replace the Top Cable
7. Replace the Top Cable	7. Reassemble the Station
8. Reassemble the Station	8. Power On the Station
9. Power On the Station	

#### Be aware of these important considerations:

- This guide describes how to replace a CHAdeMO cable with a NACS cable. For details on replacing a CCS cable, visit <a href="Service Guide: Replace Charging Cable">Service Guide: Replace Charging Cable</a> (https://docs.chargepoint.com/ref-docs-sec/content/pdfs/3-dc/express250/exp250\_charge\_cable-sg.pdf).
- If the station has a serial number 2133xxxx or higher, you might need to remove the contactor box and move the connectors.

## **Power Off the Station**

Power off at the breaker panel and lock out/tag out before continuing work.



**DANGER:** RISK OF SHOCK. Before performing this procedure, disconnect the power to the Express 250 at the service panel. Keep power off for this circuit until



all cover panels have been correctly reinstalled and the work scope has been completed. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

# **Remove the Area Light Bar**

1. Using a T25 Security screwdriver, loosen the two captive screws on the area light bar.



2. Disconnect the power cable that connects the area light bar to the LED display assembly. Remove the area light bar.



**NOTE:** When reinstalling, ensure the gasket on each end of the area light bar is properly seated around the plastic tab.



# **Remove the LED Display**

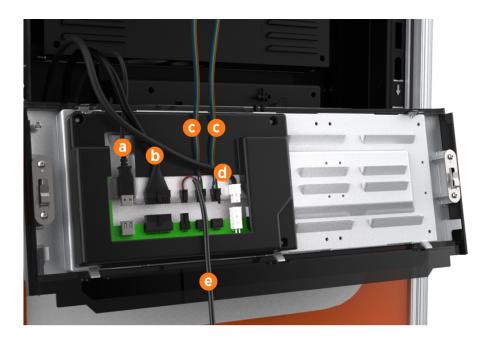
1. Push the LED display upwards to release its guide tabs from their corresponding slots on the Express 250's frame.



2. When the LED display assembly is released, disconnect the five cables from the back.



**NOTE:** When reinstalling, connect the five cables to their corresponding connectors on the back of the display. Leave the area light bar cable (e) loose.

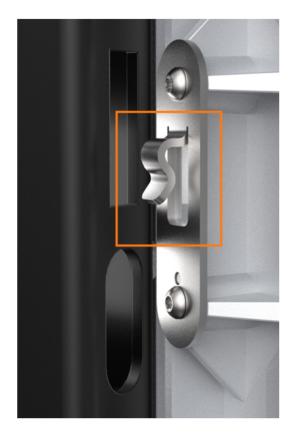


- a. Communications cable (USB-A)
- b. Holster light cable
- c. Area light cable x 2 (interchangeable)
- d. Power cable (24 V)



**IMPORTANT:** Do not allow the LED display to hang from its cables.

# **Remove the Top Front Panel**



All Express 250 panels have guide tabs that align with corresponding slots on the Express 250's frame. When removing a panel, lift the panel upward to release these tabs from their slots.



**NOTE:** When installing a panel, align these tabs above their corresponding slots and press the panel downward.



- 1. Using two hands, pull the top panel upwards to release its guide tabs from their corresponding slots on the Express 250's frame.
- 2. Place a protective cover, such as a lint-free cloth, over the touchscreen to prevent damage during service.



**IMPORTANT:**If you are replacing a charging cable, be sure to visit Replace a Holsterfor information on replacing the holster BEFORE reinstalling the panels.



**IMPORTANT:** When reinstalling, push the bottom edge inward to position it inside the groove in the middle vent panel and engage the edge of the sign. Carefully push the panel down until it is firmly seated.



**IMPORTANT:** When reinstalling, ensure all five cables at the top of the panel are not captured by the front upper panel, and are easily accessible for reinstalling the LED display.

## **Access the Charging Cables**

1. Cables are colour-coded. Colour codes are different for each installed charge connector type.



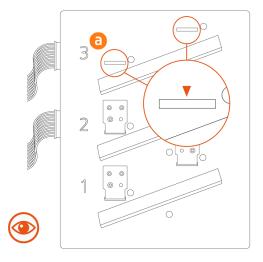
**NOTE:** CHAdeMO has white and black colour codes. NACS, CCS1, and CCS2 have red and black colour codes. It is easiest to unfasten all cables for better access, even if only one cable is being replaced.



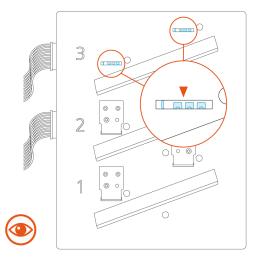
	CHAdeMo	ccs	NACS
Positive	white	red	red
Negative	black	black	black

2. Look closely at the upper slot, position 3, on the contactor box (a).

If you do not see a relay through position 3, the station has a 2-relay contactor box and you must remove the contactor box and move the connectors. Complete the steps in <a href="Update the Contactor">Update the Contactor</a> Assembly - Advanced before continuing.



3. If you can see a relay through slot number three, the station has a 3-relay contactor box and you do not need to remove the contactor box. Continue with the steps in this section.



4. Use a 10 mm (3/8 in) nut driver to remove the four CHAdeMO contactor nuts. Save the nuts for later reinstallation.

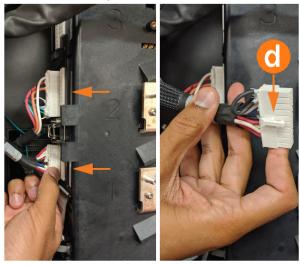
Remove the CHAdeMO contactor cable lugs (b) from the lug landings (c).



**NOTE:** Avoid touching the lug contact area. Handle the cable lugs by their edges.



5. Press the retention tab (d) on the back of the CHAdeMO communication cable and remove it from the contactor assembly.



6. Gently remove the CHAdeMO communication cable from the P-clips mounted between the auxiliary power supply and the contactor assembly. The P-clips open at the top.



- 7. Pull both CHAdeMO cables (communication and conductor) so they hang down at the right side of the charging station in a bundle.
- 8. Remove the DC ferrite from the cable bundle.

**IMPORTANT:** Save the DC ferrite. It must be reinstalled later.

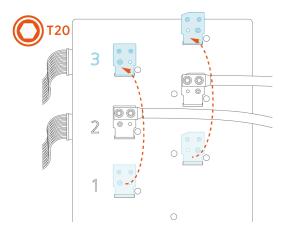


**IMPORTANT:** If you have a 2-relay contactor box (determined in step 2 above), complete the procedure in Update the Contactor Assembly. After updating the contactor assembly, go to Remove and Replace the Cable in the Swing Arm.

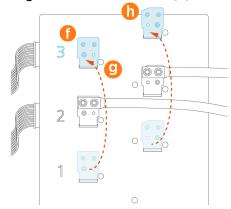
If you have a 3-relay contactor box (determined in step 3 above), continue with steps 9 and 10.



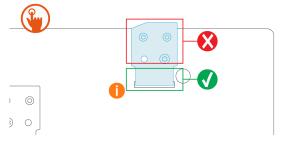
9. Use a T20 Torx screwdriver to remove the two M4 screws on each of the lower set of lug landings.



- 10. Move the lug landings to position 3.
  - a. Align the each lug landing (f) with the correct guide pin (g) on the contactor box. The positive lug landing has a notched corner (h).



b. To seat lug landing on the contactor box, press the base (i) of the lug landing down.



c. Use a T20 Torx screwdriver to secure the lug landings on the contactor box. Torque the M4 screws to 1.69 Nm (15 in-lb).

# Remove and Replace Cable in Swing Arm

1. Unholster both cables and put them on a padded surface.



2. Swing the top arm out for access. Use the provided foam block (a) to hold the arm in place.



- 3. Use a T25 Torx screwdriver to loosen the four M5 captive screws that hold the top lid to the station from below. Set the top lid on a padded surface. The top lid must be removed whether the top or bottom cable is being replaced.
- 4. Identify the small data wire attached to the top cable. Unthread it from the tension tab.



**NOTE:** The data wire is a different colour depending on the type of cable.

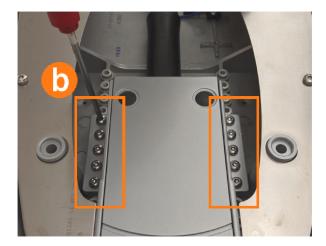




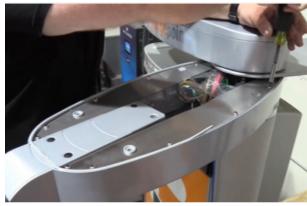
5. If the gasket is installed over the top of the cable clamp as shown, cut the gasket away on the top so that it sits in the channel on either side.



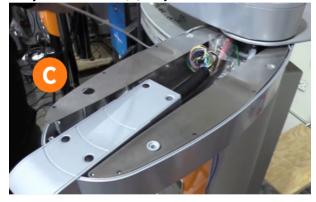
6. If you can see the screws (b) holding the cable clamp to the station, skip to step 9. If you cannot see the screws, complete steps 7 and 8.



7. Use a T25 Torx screwdriver to remove the ten M5 screws securing the cover.



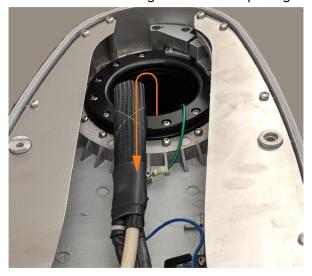
8. Gently lift the cover (c) so you can access the screws in step 9.



9. Use a T25 Torx screwdriver to remove the ten M5 screws holding the cable clamp to the station.



10. Gently move the top cable's wires to identify them in the overall bundle below. Pulling from inside the top arm, thread the three top cable wires (conductors and communications) up through the body of the station and out through the circular opening at the top of the station.



- 11. Remove the entire cable from the station.
  - Follow recommended product disposal guidelines when discarding the cable.
- 12. Remove the protective wrapping from the new cable clamp and lift the cable clamp up to the top arm. Insert the cable clamp into the arm so that the screw mounting tabs hold it in place to take the weight of the cable.



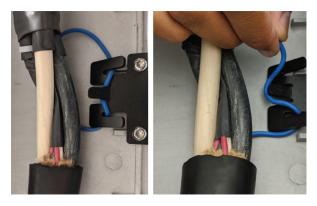
13. Position the cable clamp in the arm. For the top arm, align the cable clamp so that the second semicircle in the housing (b) matches the gasket line in the arm.



- 14. Use a T25 Torx screwdriver and ten M5 screws to secure the cable clamp assembly to the top arm. Torque to 4.5 Nm (40 in-lbs).
- 15. Route the three wires (positive, negative and communications) through the top arm opening. Reach through the top circular opening in the top arm to assist threading the wires through. Once all three connectors are through the circular gasket at the bottom of the bearing stack, continue routing the wires through from below the arms inside the station.
- 16. Ensure that the DC ferrite is reinstalled before replacing the contactor lugs.



17. Gently route the data wire through the tensioner, being careful not to overstress or cut the wire.



- 18. If you removed the cover to access the cable clamp screws, replace the ten screws that hold the cover in place. **Torque to 4.5 Nm (40 in-lb).**
- 19. Check gasket placement to ensure it sits inside the channel all around the arm.
- 20. Replace the lid on top of its arm. From below, use a T25 Torx screwdriver to fasten the four captive screws. **Torque to 2.6 Nm (20 in-lb).**



**NOTE:** For the bottom lid, lift up slightly on the lid to help it clear the arm and gasket.

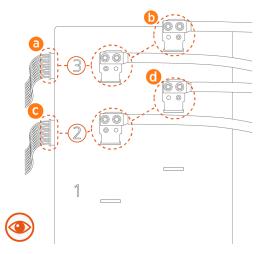
## **Reinstall the Cables**

Refer to the images in the procedures above while replacing the station components:

1. Route the communication cables through the plastic P-clips above the contactor box.				

2. Plug communication cables in on the left side of the contactor assembly, paying attention to which cable belongs in positions 1, 2, and 3.

#### 3-relay contactor box



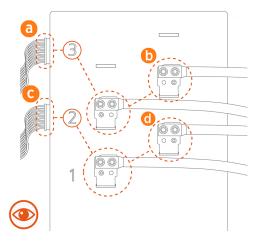
- a. NACS communication cable
- b. NACS DC charging cable
- c. CCS communication cable
- d. CCS DC charging cable

#### 2-relay contactor box



**IMPORTANT:** Ensure the 2-relay contactor box has been updated as described in <u>Update the Contactor Assembly - Advanced</u> on page <u>346</u> before completing this step.

2-relay contactor boxes (boxes where the connectors were moved) have two active slots. Route the power connectors through slots 1 and 2.



- a. NACS communication cable
- b. NACS DC charging cable
- c. CCS communication cable
- d. CCS DC charging cable
- 3. Apply a thin layer of dielectric grease to the face of each lug on the contact surface.
- 4. Match positive and negative signs on the conductor labels to the signs imprinted on the plastic face of the contactor assembly. **Torque to 6.8 Nm (60 in-lb)** and mark with a paint pen.



**CAUTION:** Do not install the contactor lugs with reversed positive/negative polarity. Incorrect polarity could damage the station or the vehicle charging from the station.

- 5. Replace contactor lugs with two nuts each, according to the images.
- 6. Tuck the excess contactor cable down the side of the enclosure to avoid interfering with the cover panel in a later step.
- 7. Visit Replace a Holster for instructions on replacing the holster.

REVERSE THE ABOVE STEPS TO REPLACE THE TOP FRONT PANEL, LED DISPLAY AND AREA LIGHT BAR.

## **Installation Complete - Power On the Station**

Once all cover panels have been installed, power on the Express 250. Run a test charge. If you have questions, or if you want to ensure the cable is being detected correctly, contact ChargePoint Support.

## **Update the Contactor Assembly - Advanced**



**IMPORTANT:** Do not complete the procedure in this section if the station has a 3-relay contactor box. You only need to remove the contactor box and move the



connectors if you are replacing a charging cable on a station with a 2-relay contactor box.

**IMPORTANT:** You must be a licensed electrician and complete online training to become a ChargePoint certified installer. If you do not complete this training, you cannot access the ChargePoint network to complete the installation.



Find online training at: <a href="mailto:chargepoint.com/installers">chargepoint.com/installers</a>

If the charging station is not installed by a ChargePoint-certified installer, using a ChargePoint-approved method, it is not covered under warranty and ChargePoint is not responsible for any malfunctions.

#### **Remove the Contactor Box**

1. Use a 10 mm (3/8 in) nut driver to remove the four CCS contactor nuts. Save the nuts for later reinstallation.

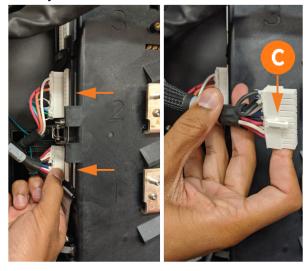


2. Remove the CCS contactor cable lugs (a) from the lug landings (b).

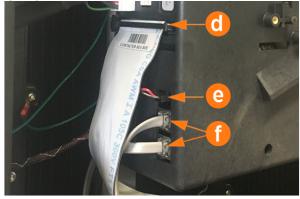


**NOTE:** Avoid touching the lug contact area. Handle the cable lugs by their edges.

3. Press the retention tab (c) on the back of the communication cable and remove it from the contactor assembly.



4. Remove the horizontal 50-pin ribbon cable (d). Push the tabs outward. Rock it gently from left to right as you pull out the cable.

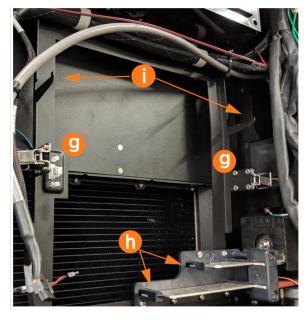


5. Remove the remaining three CCS cables connected to the left side of the contactor assembly: 24 V DC power (e), and CAN connectors (f).



**NOTE:** Each cable is keyed to its corresponding connector except the CAN cables, which are interchangeable.

6. Open the securing latches (g) on the left and right sides of the contactor box assembly by pushing down on the lock tab and lifting the lever.



- 7. Disengage the contactor assembly from the large bus bar connections at the bottom (h) by holding it with two hands near the bottom and rocking the assembly slightly as you pull outward.
- 8. Once the bus bar connections release, pull the assembly forward along the support arms (i), then lift it away from the station.



**NOTE:** Avoid touching the tab contact area. Handle the cable tabs by their edges.

#### **Move the Connectors**

1. Use a T25 Torx screwdriver to remove the three screws (a) securing the cover.



2. Remove the cover.



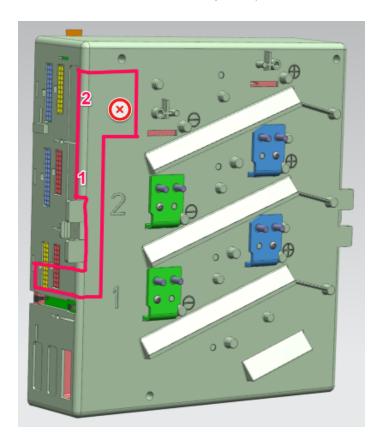
3. Unplug the 8-pin contactor connector from position 2 (b) and plug it into position 3 (c).



4. Unplug the 8-pin contactor connector from position 1 (d) and plug it into position 2 (b).



- 5. Replace the cover. Use a T25 Torx screwdriver and three screws to secure the cover.
- 6. Place the included label on the contactor box indicating the updated slot numbers.



## **Replace the Contactor Assembly**

- 1. Ensure latch clasps are open and not blocking the contactor assembly before installation.
- 2. Rest the alignment pegs of the contactor assembly on the support arm hooks.

3. Slide the contactor assembly back along the support arms. Push the assembly to engage the bus bars until fully seated.



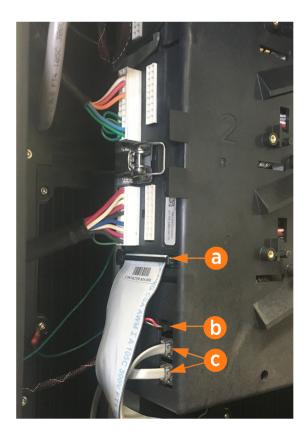
**IMPORTANT:**Ensure the connectors are aligned before pressing in. Do not apply excessive force. Doing so can damage the connectors. Once seated, gently pull the contactor assembly outwards as a push-pull test to confirm it is securely seated.



**NOTE:** Ensure all cables are accessible without being pinched or caught under the contactor assembly.

4. Fasten the latches on the right and left sides of the contactor assembly.

5. Reconnect each cable on the left side of the contactor assembly.



a. DCC communication ribbon



NOTE: Ensure the key aligns with the notch in the socket.

- b. 24 V DC power
- c. CAN connectors (interchangeable)



**NOTE:** Secure connector body to the mating connector on the contactor assembly and ensure the tabs are in the open position. During connection the insertion tabs automatically click into place.

6. Go to Replace the Swing Arm Assembly. Continue with the steps to replace the charging cable.

# -chargepoin+

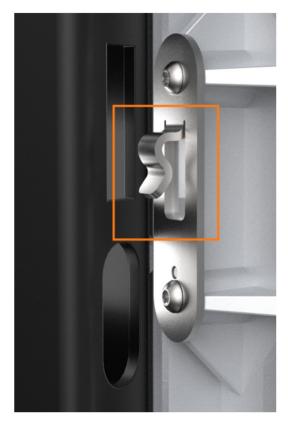
# Replace the Swing Arm Assembly 26

To replace the swing arm assembly, complete the following steps.

## **Bring These Tools and Materials**

- CCS1/CHAdeMO: ChargePoint replacement part #CPE250-CABLE-CCS1-CHD-FCPE250
- CCS2/CHAdeMO: ChargePoint replacement part #CPE250-CABLE-CCS2-CHD-FCPE250
- CCS1/CCS2: ChargePoint replacement part #CPE250-CABLE-CCS1-CCS2-FCPE250
- #2 Phillips screwdriver
- · T20 Security Torx driver
- · T25 Security Torx driver
- · Small flathead screwdriver
- 8 mm (5/16 in) nut driver
- 10 mm (3/8 in) hex wrench
- · Dielectric grease
- · Paint pen
- Thin piece of cardboard, about 25 mm (1 in) long x 12 mm (0.5 in) wide x 3 mm (0.1 in) thick
- · C-clamp
- Headlamp
- Forklift
- · Step ladder

#### **About Panels**



All Express 250 panels have guide tabs that align with corresponding slots on the Express 250's frame. When removing a panel, lift the panel upward to release these tabs from their slots.



**NOTE:** When installing a panel, align these tabs above their corresponding slots and press the panel downward.

#### **Power off the Station**

Power off at the breaker panel and lock out/tag out before continuing work.



**DANGER:** RISK OF SHOCK. Before performing this procedure, disconnect the power to the Express 250 at the service panel. Keep power off for this circuit until all cover panels have been correctly reinstalled and the work scope has been completed. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

## **Remove the Area Light Bar**

1. Using a T25 Security screwdriver, loosen the two captive screws on the area light bar.



2. Disconnect the power cable that connects the area light bar to the LED display assembly. Remove the area light bar.



**NOTE:** When reinstalling, ensure the gasket on each end of the area light bar is properly seated around the plastic tab.



# **Remove the LED Display**

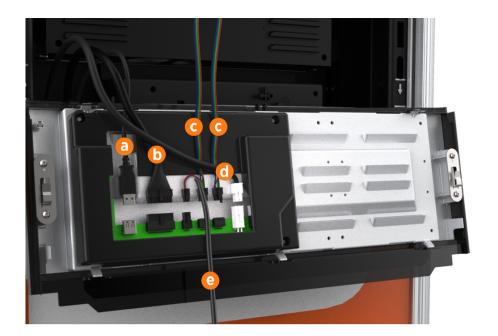
1. Push the LED display upwards to release its guide tabs from their corresponding slots on the Express 250's frame.



2. When the LED display assembly is released, disconnect the five cables from the back.



**NOTE:** When reinstalling, connect the five cables to their corresponding connectors on the back of the display. Leave the area light bar cable (e) loose.



- a. Communications cable (USB-A)
- b. Holster light cable
- c. Area light cable x 2 (interchangeable)
- d. Power cable (24 V)



**IMPORTANT:** Do not allow the LED display to hang from its cables.

## **Remove the Top Front Panel**



- 1. Using two hands, pull the top panel upwards to release its guide tabs from their corresponding slots on the Express 250's frame.
- 2. Place a protective cover, such as a lint-free cloth, over the touchscreen to prevent damage during service.



**IMPORTANT:**If you are replacing a charging cable, be sure to visit Replace a Holsterfor information on replacing the holster BEFORE reinstalling the panels.



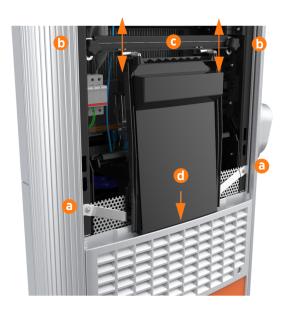
**IMPORTANT:** When reinstalling, push the bottom edge inward to position it inside the groove in the middle vent panel and engage the edge of the sign. Carefully push the panel down until it is firmly seated.



**IMPORTANT:** When reinstalling, ensure all five cables at the top of the panel are not captured by the front upper panel, and are easily accessible for reinstalling the LED display.

#### Remove the Middle Vent Panel

1. Use a T25 Torx driver to remove the M5 screw and washer (a) that are attaching each touchscreen ground strap to the frame. Keep the screws and washers for reuse.



2. Loosen both retention knobs (b), allowing the touchscreen beam (c) to slide up vertically and the touchscreen's bottom edge to clear the middle vent panel's slot (d).

3. With hand pressure, tilt the touchscreen upward at a 45-degree angle.



4. Allow the touchscreen to return to its lowest position vertically. Rotate the retention knobs clockwise to re-tighten.



**CAUTION:** The bottom edge and corners of the touchscreen are sharp. Take care when moving underneath the raised screen.

1. Disconnect the two proximity sensor wires from the connectors on the bottom of the touchscreen and the wire management ring. Move the proximity wires to hang in front of the middle vent panel.



**NOTE:** When reinstalling, connect the proximity sensor wires to their corresponding connectors: left wire to left port and right wire to right port. Route any excess wiring through the right-side wire management ring under the touchscreen to prevent it being pinched in the panels.



2. Using two hands, remove the panel by firmly pulling it upward to release the guide tabs from the corresponding slots on the Express 250's frame.



**NOTE:** When reinstalling, route both proximity wires under the sheet metal edge, to hang in front of the panel on the right side (as you face the front of the charging station).





**CAUTION:** The fins on the back surface of the middle vent panel are sharp. Take care when handling the panel.

#### **Remove the Bottom Front Panel**

Remove the bottom front panel by lifting upwards from the bottom of the panel to release the guide tabs from their corresponding slots on the Express 250's frame.

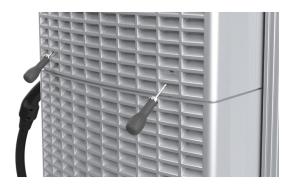


**NOTE:** When reinstalling, ensure the panel installation does not tear or break the gaskets on the inner edges of the side extrusions.



# **Remove the Top Rear Panel**

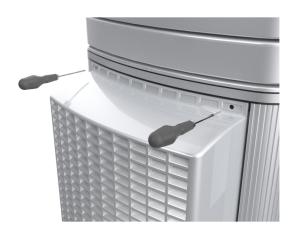
1. Using a T25 Torx (or a Phillips #2 screwdriver for early charging stations), loosen the two hidden captive screws located in the top rear panel's vents, inset from each bottom corner.



2. Using a T25 Torx driver, loosen the two captive screws located at the top of the top rear panel. Using two hands, hold the top rear cover at an angle to remove, leading with the bottom edge.



**NOTE:** When reinstalling, squeeze the sides of the panel inward to fit the tabs into place in the C-channel, inside the watertight gasket.



#### Remove the Middle Rear Panel

Using two hands, lift the middle rear panel straight up and out to disengage the guide tabs.



**NOTE:** When reinstalling, squeeze the sides of the panel inward to fit the tabs into place in the C-channel, inside the watertight gasket. For older stations, ensure the lower panel's sign is correctly captured under the middle panel's edge as you carefully push the panel down.





**IMPORTANT:** Small gauge wiring routed on the sides of the frame could be sheared if caught by panel tabs. Ensure wiring is cleared from guide holes when installing bottom and middle rear panels.

#### **Remove the Bottom Rear Panel**

Using two hands, carefully pull the panel upward to release the panel's guide tabs from their corresponding slots on the Express 250's frame.



**NOTE:** When reinstalling, squeeze the sides of the panel inward to fit the tabs into place in the C-channel, inside the watertight gasket. Carefully push the panel down.





**IMPORTANT:** For installation or servicing, Surface Conduit Entry (SCE) extrusions can be removed without removing the SCE or rear bottom panel. However, if the rear bottom panel must be removed, first remove the SCE cover and loosen the box base side screws. For more details, refer to the Express 250 Surface Conduit Entry guide on ChargePoint University: <a href="mailto:chargepoint.com/installers">chargepoint.com/installers</a>.



# **Open the Power Module Holders (Ground Straps)**



**NOTE:** If the station has EMI shields instead of ground straps, refer to Open the Power Module Holders (EMI Shields) instead.

1. Use a T25 Torx to remove the front and rear M5 screws and washers attaching the Power Module holder (a) and Power Module (b) ground straps to the Express 250 frame (eight screws total). Keep the screws and washers for use in a later step.



2. Using two hands, squeeze the Power Module mechanism's release bar against the flange. Raise the bar to fully rotate the Power Module mechanism upward to the lock position. This ensures enough clearance for the Power Modules to slide under the mechanism.





3. At the bottom right of the Express 250, press and hold the yellow release latch while pulling the Power Module tray out of the station completely.

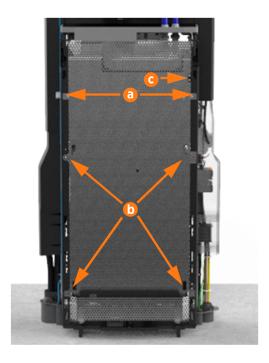


## **Open the Power Module Holders (EMI Shields)**



**NOTE:** If the station has ground straps instead of EMI shields, refer to Open the Power Module Holders (Ground Straps) instead.

1. Use a T20 Torx to remove the top two screws and washers from the rear EMI shield (a).



2. Use a T25 Torx to remove the four middle and lower screws and washers from the rear EMI shield (b). The rear shield might be in one or two sections. Save all screws and washers for later reuse.

NOTE: When reinstalling, ensure:



- The cutout on the long edge is on the right side (c), leaving the sensor wire clear.
- The drain hose and cooling controller cover flap are inside the EMI shield.

3. Use a T25 Torx to remove the six T25 screws and washers from the front EMI shield (d).





**NOTE:** When reinstalling, position the bottom cutout over the yellow release latch (e).

4. Using two hands, squeeze the Power Module mechanism's release bar against the flange. Raise the bar to fully rotate the Power Module mechanism upward to the lock position. This ensures enough clearance for the Power Modules to slide under the mechanism.





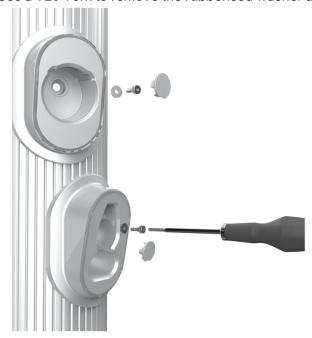
5. At the bottom right of the Express 250, press and hold the yellow release latch while pulling the Power Module tray out of the station completely.



## **Remove the Right Extrusion**

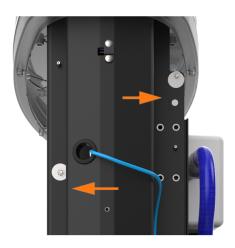
1. Remove the charging cables from their holsters and rest them gently on a padded surface out of the way.

- 2. Insert a small flat head screwdriver into the notch on each plastic cap to remove it from the holster screw opening.
- 3. Use a T25 Torx to remove the rubberised washer and M5 shoulder screw. Set them aside for reuse.



4. Using a stepladder, hold the extrusion with one hand and loosen the top two captive screws using the supplied T25 Torx driver.





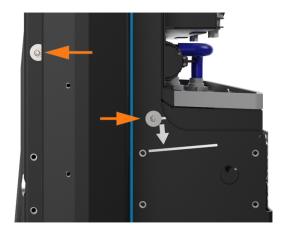


**NOTE:** Images show screw locations from the outside. Fasteners are accessed inside the frame.

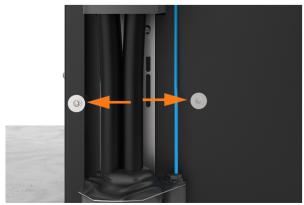


NOTE: The top and middle screws are asymmetrical.

5. Use a T25 Torx driver to loosen the middle two captive screws while the Power Module mechanism is still in the closed position.



6. Use a T25 Torx driver to loosen the bottom two captive screws.



7. Slightly tilt the bottom of the extrusion out to extract its top edge from under the bottom edge of the area light bar. Lift the extrusion off the guide pins on each side of the frame that hold the extrusion in place.



- 8. Disconnect the shortest cable from the top holster.
- 9. Disconnect the next-longest cable from the bottom holster.





**IMPORTANT:** When reinstalling, check that these connections are correctly seated, or the system will not operate.

- 10. Locate the P-clip mounted to one of the holsters (top or bottom holster varies by product version).
- 11. Remove the P-clip hardware from the extrusion holster:
  - Generation 1, attached with screw: use a T25 Torx driver to remove the screw and all its components. Carefully note the order of the components.
  - Generation 2, attached with nut (a): Use an 8 mm (5/16 in) nut driver to remove only the nut and the P-clip.
- 12. Remove the shielded holster cable from the opening in the P-clip (b).
- 13. Remove the existing extrusion from the station.

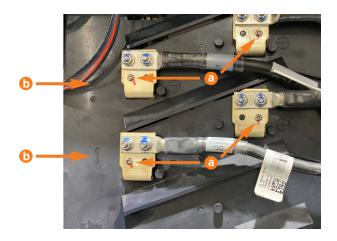


## **Remove the Contactor Assembly**



**IMPORTANT:**Before work, take a picture of which cable tab plugs into which slot on the contactor assembly. Cables are colour-coded (black is positive, red is negative). Colour codes are different for each installed charge connector type. It is critical that the cables are reattached to their original locations.

1. Using a T20 Torx driver, remove the screws (a) that attach the cable tabs to the front of the contactor assembly.



2. Remove the cable tabs by moving them slightly back and forth while pulling straight out to release.



**NOTE:** Avoid touching the tab contact area. Handle the cable tabs by their edges.

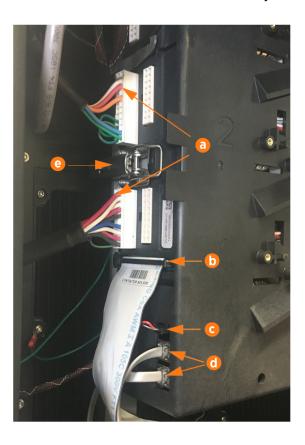


**IMPORTANT:** There are up to three possible charge connector slots shown as 1, 2, and 3 on the front plastic cover (b). Note the position of each communication connector before removal. Each cable must be reattached to its original connector slot on the contactor assembly. Failure to do so may damage the station or vehicle.

If the original connector location is unknown, the cable can be attached to the contactor assembly based on the connector type indicated by the label:

CCS1/CCS2: #2 or #3CHAdeMO: #1 or #3

3. Remove all cables connected to the left side of the contactor assembly:



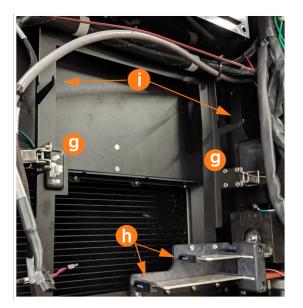
- a. Charge cable communications (a)
- b. DCC communication ribbon cable (b)
- c. 24 V DC power (c)
- d. CAN connectors (d)



**NOTE:** To remove the horizontal ribbon cable, push the tabs outward. Rock it gently from left to right as you pull out the cable. Each cable is keyed to its corresponding connector except the CAN cables, which are interchangeable.

- 4. Open the securing latches on the left and right sides of the contactor box assembly by pushing down on the lock tab and lifting the lever (e).
- 5. Disengage the contactor assembly from the large busbar connections at the bottom (f) by holding it with two hands near the bottom and rocking the assembly slightly as you pull outwards.

6. Once the bus bar connections release, pull the assembly forward along the support arms (g), then lift free from the station.

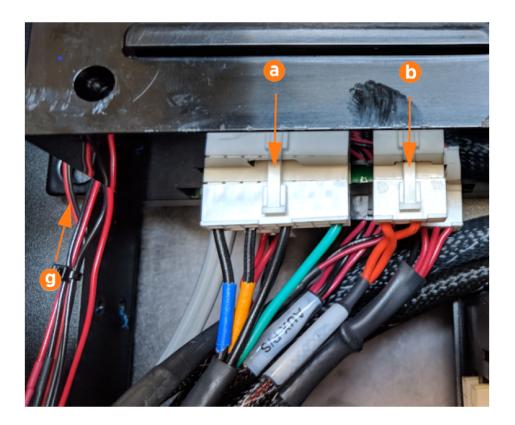




**NOTE:** Avoid touching the tab contact area. Handle the cable tabs by their edges. There are up to three possible charge connector slots (shown as 1, 2, and 3 on the front plastic cover). Note the position of each communication connector before removal.

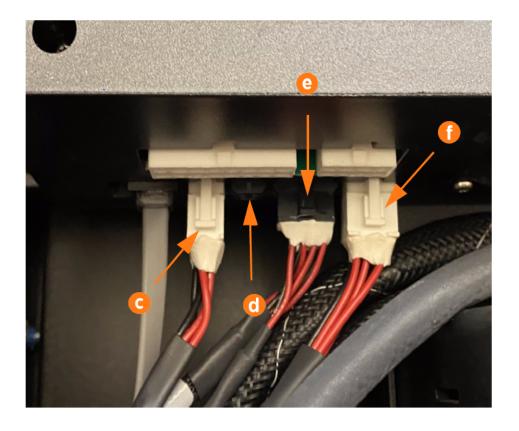
# **Remove the Auxiliary Power Supply**

1. Disconnect the five connectors from the auxiliary power supply:



- a. 480 V power in
- b. Shunt trip relay connector
- c. CAN bus in
- d. Cooling I/O
- e. 12 V power out to internal components
- f. LED display 5 V

2. Use a T25 Torx driver to loosen the four screws at the corners of the auxiliary power supply. Do not fully remove screws: leave the screws in the charging station and move the power supply sideways to release it from the keyhole mounting tabs (g).





NOTE: When reinstalling, torque the four screws hand-tight.

3. Slide the auxiliary power supply towards you to remove it.

# **Remove the Swing Arm Assembly**

1. Use an 10 mm (3/8 in) hex wrench to remove the two swing arm ground wires from the frame in the upper right corner.



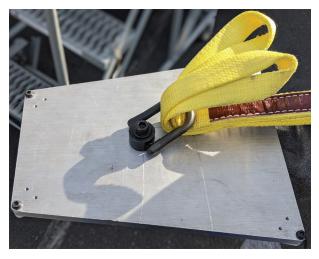
2. Swing the top swing arm open and use cardboard or other non-scratching material to shim it in place. Use a T25 Torx to loosen the four M5 captive screws that hold the top lid to the station from below. Set the top lid aside on a padded surface.



3. Using a step ladder, use a T25 Torx to remove the second and fourth screws from the left, along both the front and back edges (four screws in total).



4. Loop the lifting strap through the top ring of the lifting plate so that all loops can be picked up by a forklift fork.



5. Use a T25 to attach the lifting plate to the left side of the swing arm assembly. Hand-tighten all four screws.



6. As a safety measure, position the forklift to secure the lifting plate straps. Ensure the straps are secured at least 300 mm (12 in) from the end of the fork.



- 7. Secure a C-clamp on the outside of the strap to secure it to the fork.
- 8. Use foam, a shop cloth or other non-damaging object to block the hole in the right side of the frame and prevent screws from dropping into the station (white foam shown).



9. Remove the toroid ferrite from each pair of charge cables.



**NOTE:** When reinstalling, the narrow part of the sleeve faces downwards.



10. Use a T25 Security Torx to remove one external screw next to the right extrusion, under the edge of the LED diffuser.



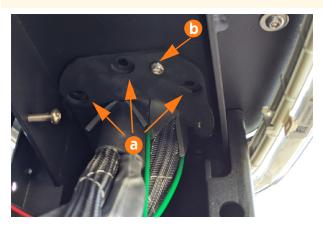
11. Use a T25 Security Torx to remove six screws from the circular housing under the swing arm (a, three of the six screws shown). Bundle the cables and move them to the left to access the back screws. Save the screws for later reuse.



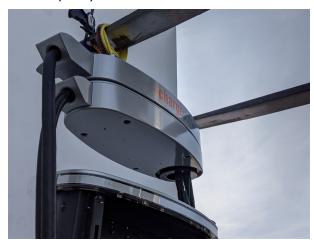
**NOTE:** Do not remove the two screws that hold the gasket to the frame (b). The gasket screws look different because they are not recessed into the gasket.



**CAUTION:** Do not drop any screws into the station. Fasteners can drop into the busbars and cause electrical malfunction or damage.



12. Position one person to the side, holding the bundle of cables. Slowly lift the forklift forks a minimum of 254 m (10 in) above the frame.



13. Have the person on the ground carefully feed the conductor, communication cables and ground wires up through the station's circular bushing opening while the forklift continues to lift the swing arm assembly free of the station.



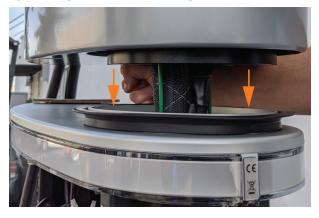
- 14. Set the old swing arm assembly and its cables aside for later repackaging in the FRU kit crate.
- 15. Transfer the lifting plate from the old swing arm assembly to the new one. Hand-tighten all four screws.

### **Replace the Swing Arm Assembly**

- 1. Use the forklift to position the new swing arm assembly a minimum of 254 mm (10 in) above the station.
- 2. While the assembly is suspended, carefully feed the conductors, communication cables and ground wires down through the top of the station into the circular bushing opening.
- 3. Position a piece of thin cardboard as a shim on the left side of the frame's top skid pad to help level the swing arms.



4. Align the right side of the swing arm so that the circular housing fits inside the bushing.





5. Use the forklift to slowly lower the swing arm assembly into place. Do not remove the forklift yet.



6. Use a T25 Security Torx to replace the one external screw next to the right extrusion. Torque to 4.5 Nm (40 in-lb).



**CAUTION:** Do not drop any screws into the station. Fasteners can drop into the station busbars and cause electrical malfunction or damage. Account for all fasteners before completing the procedure.

- 7. Use a T25 Security Torx to replace the six screws in the circular housing under the swing arm: the three bushing screws on the left (interior side) of the cables first, then the three screws on the right (exterior side) of the cables. Torque to 4.5 Nm (40 in-lb).
- 8. Remove the C-clamp and the forklift.
- 9. Use an 10 mm (3/8 in) hex wrench to reattach the swing arm ground wires to the frame in the upper right corner, both on same stud. Torque to 2.9 Nm (25 in-lb).
- 10. Remove the lifting plate. Attach it to the old swing arm that is being returned to ChargePoint.
- 11. Replace the top swing arm plate as per previous instructions. Torque to 2.9 Nm (25 in-lb).
- 12. Replace the ferrites on each pair of charge cable conductors.

#### Replace the Contactor Assembly

- 1. Ensure latch clasps are open and not blocking the contactor assembly before installation.
- 2. Rest the alignment pegs of the contactor assembly on the support arm hooks.

3. Slide the contactor assembly back along the support arms. Push the assembly to engage the bus bars until fully seated.



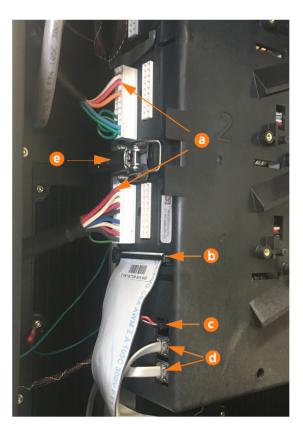
**IMPORTANT:** Ensure the connectors are aligned before pressing in. Do not apply excessive force. Doing so can damage the connectors. Once seated, gently pull the contactor assembly outwards as a push-pull test to confirm it is securely seated.



**NOTE:** Ensure all cables are accessible without being pinched or caught under the contactor assembly.

- 4. Fasten the latches on the right and left sides of the contactor assembly.
- 5. Reconnect each cable on the left side of the contactor assembly.
- 6. Wipe down the contact surface of each cable tab with isopropyl alcohol wipes.
- 7. After double-checking the photo of the cable order, push each cable tab into its corresponding slot. Ensure the plastic guide post is fully seated to be level with the surface of the cable tab.
- 8. Use a T20 Torx driver to re-fasten the screw on each cable tab. Torque to 2.8 Nm (25 in-lb).

9. Tuck the excess contactor cable down the side of the enclosure to avoid interfering with the cover panel in a later step.



- a. Charge cable communications
- b. DCC communication ribbon



NOTE: Ensure the key aligns with the notch in the socket.

- c. 24 V DC power
- d. CAN connectors (interchangeable)



**NOTE:** Secure connector body to the mating connector on the contactor assembly and ensure the tabs are in the open position. During connection the insertion tabs will automatically close onto the connector housing.

# **Replace the Auxiliary Power Supply**

- 1. Slide the auxiliary power supply into the station above the contactor assembly.
- 2. Ensure the keyhole mounting tabs at the corners of the auxiliary power supply are aligned with the loose screws on the station. Torque the screws hand-tight.

- 3. Connect the five connectors from the auxiliary power supply:
  - a. 480 V power in
  - b. Shunt trip relay connector
  - c. CAN bus in
  - d. Cooling I/O
  - e. 12 V power out to internal components
  - f. LED display 5 V

### **Replace the Right Extrusion**

- 1. Slightly tilt the right extrusion and slide its top edge under the bottom edge of the area light bar. Align the holes in the extrusion with the guide pins on each side of the Express 250's frame. This temporarily holds the extrusion in place.
- 2. Install the shielded holster cable and P-clip hardware to the extrusion holsters using either a T25 Torx Driver (Generation 1) or an 8 mm (5/16 in) nut driver (Generation 2).
- 3. Connect the longest cable to the bottom holster and the shortest cable to the top holster.



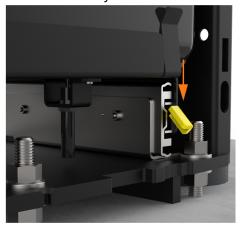
**NOTE:** Ensure the connections are correctly seated, or the system will not operate.

4. Using a stepladder, hold the extrusion with one hand and loosely secure the top two captive screws using the supplied T25 Torx driver.



NOTE: The top and middle screws are asymmetrical.

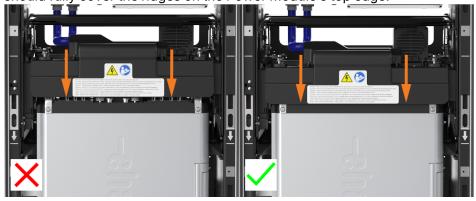
- 5. Use a T25 Torx driver to loosely secure the bottom two screws next. The Power Module holders must not be inside the charging station to have access to the bottom screws.
- 6. Use a T25 Torx driver to loosely secure the middle two screws, just above the Power Module mechanism. Access to the middle screws is easier with the Power Module mechanism handle in the closed (down) position.
- 7. Tighten all right extrusion screws.
- 8. At the bottom right of the Express 250, press and hold the yellow release latch while pushing the Power Module tray into the station until it locks into place.



9. Using two hands, squeeze the Power Module mechanism's release bar and lower it halfway to check alignment with the ports and guide posts.



10. Lower the Power Module mechanism until you hear a click as the mechanism locks into place. Ensure the mechanism is fully engaged with all Power Module connectors. The Power Module mechanism should fully cover the ridges on the Power Module's top edge.





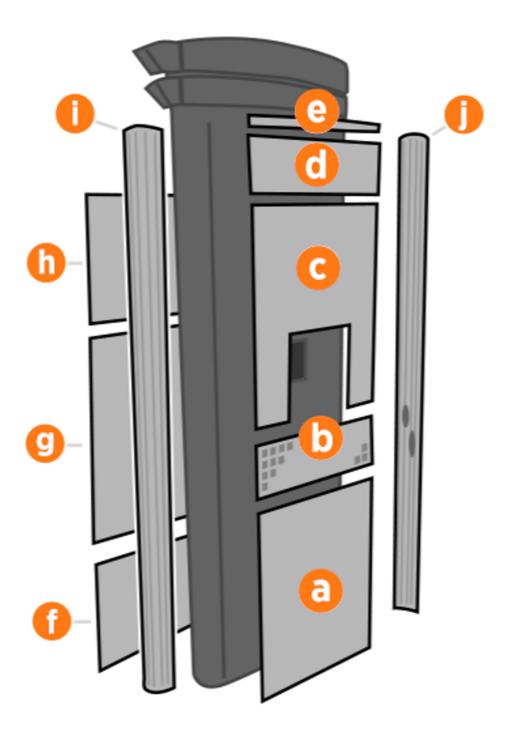
If the mechanism does not engage, raise it again and push the Power Modules to the back of the station to realign, then try again. Do not apply excessive force.

REVERSE THE ABOVE STEPS TO REPLACE THE EMI SHIELD (IF APPLICABLE), REAR PANELS, FRONT PANELS, LED DISPLAY, AND AREA LIGHT BAR.

#### **Power On the Station**

Once all cover panels have been installed, power on the Express 250. The on-screen Installation Wizard walks you through any required tasks to set up the Express 250 and verify that it can operate properly.

An Installation Wizard test checks that all cover panels have been correctly installed and fully seated. Check the lower right corner of the screen for any error messages. If panel errors appear, match the panel letters to this illustration.



- a. Front bottom panel
- b. Middle vent panel
- c. Front top panel
- d. LED display
- e. Area Light Bar
- f. Rear bottom panel
- g. Rear middle panel
- h. Rear top panel

- i. Left Extrusion
- j. Right extrusion



**DANGER:** RISK OF SHOCK. If a fault exists, turn the power off at the service panel to BOTH Express 250 paired charging stations during work and keep it off until all panels are reinstalled. Internal components can present a shock hazard. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

If any panel needs reinstallation, review the procedures above to double-check that all panels have been fully seated and that the edges of all signs are captured fully by the panels around them. For further details, refer to the Express 250 Installation Guide.

# -chargepoin+

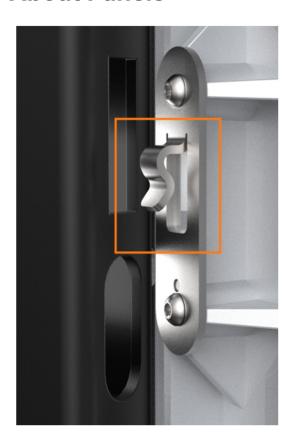
# Replace the Touchscreen (CPNK) 27

To replace the touchscreen (CPNK), complete the following steps:

### **Bring These Tools and Materials**

- ChargePoint replacement part for your region:
  - North America: #CPE250-CCOM-NA-F
  - Europe: #CPE250-CCOM-INT-F
- The packing slip from the replacement part package (contains configuration information)
- T25 Security Torx driver
- Step ladder
- Headlamp

#### **About Panels**



All Express 250 panels have guide tabs that align with corresponding slots on the Express 250's frame. When removing a panel, lift the panel upward to release these tabs from their slots.



**NOTE:** When installing a panel, align these tabs above their corresponding slots and press the panel downward.

#### **Power off the Station**

Power off at the breaker panel and lock out/tag out before continuing work.



**DANGER:** RISK OF SHOCK. Before performing this procedure, disconnect the power to the Express 250 at the service panel. Keep power off for this circuit until all cover panels have been correctly reinstalled and the work scope has been completed. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

## Remove the Area Light Bar

1. Using a T25 Security screwdriver, loosen the two captive screws on the area light bar.



2. Disconnect the power cable that connects the area light bar to the LED display assembly. Remove the area light bar.



**NOTE:** When reinstalling, ensure the gasket on each end of the area light bar is properly seated around the plastic tab.



# **Remove the LED Display**

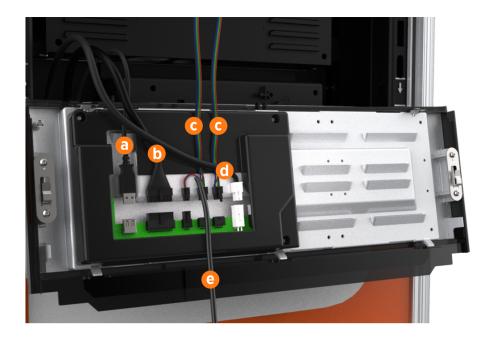
1. Push the LED display upwards to release its guide tabs from their corresponding slots on the Express 250's frame.



2. When the LED display assembly is released, disconnect the five cables from the back.



**NOTE:** When reinstalling, connect the five cables to their corresponding connectors on the back of the display. Leave the area light bar cable (e) loose.



- a. Communications cable (USB-A)
- b. Holster light cable
- c. Area light cable x 2 (interchangeable)
- d. Power cable (24 V)



**IMPORTANT:** Do not allow the LED display to hang from its cables.

## **Remove the Top Front Panel**



- 1. Using two hands, pull the top panel upwards to release its guide tabs from their corresponding slots on the Express 250's frame.
- 2. Place a protective cover, such as a lint-free cloth, over the touchscreen to prevent damage during service.



**IMPORTANT:**If you are replacing a charging cable, be sure to visit Replace a Holsterfor information on replacing the holster BEFORE reinstalling the panels.



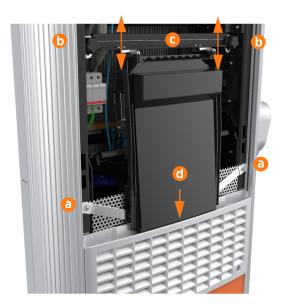
**IMPORTANT:** When reinstalling, push the bottom edge inward to position it inside the groove in the middle vent panel and engage the edge of the sign. Carefully push the panel down until it is firmly seated.



**IMPORTANT:** When reinstalling, ensure all five cables at the top of the panel are not captured by the front upper panel, and are easily accessible for reinstalling the LED display.

#### Remove the Touchscreen

1. Use a T25 Torx driver to remove the M5 screw and washer (a) that are attaching each touchscreen ground strap to the frame. Keep the screws and washers for reuse.



2. Loosen both retention knobs (b), allowing the touchscreen beam (c) to slide up vertically and the touchscreen's bottom edge to clear the middle vent panel's slot (d).

3. With hand pressure, tilt the touchscreen upward at a 45-degree angle.



4. Allow the touchscreen to return to its lowest position vertically. Rotate the retention knobs clockwise to re-tighten.



**CAUTION:** The bottom edge and corners of the touchscreen are sharp. Take care when moving underneath the raised screen.

- 5. Disconnect all cables from the connectors on the bottom of the touchscreen and remove them from the wire management rings.
- 6. While supporting the touchscreen, continuously rotate the touchscreen's knobs counter-clockwise until they are completely removed. Remove the touchscreen from the station.



# Replace the Touchscreen

1. Align the hooks of the new touchscreen's mounting bracket over the retention knob supports. Tighten the knobs enough to secure the touchscreen.

- 2. Connect all cables to the underside of the touchscreen:
  - a. Proximity sensor cables x 2 (connect left wire to left port, right wire to right port)
  - b. Speaker cable
  - c. Europe only: meter cable (if applicable)
  - d. 24 V DC cable
  - e. CAT CPNK to DCC (Station Management Unit)
  - f. LED Display cable (USB-A)



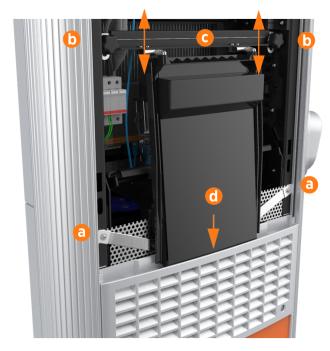
**IMPORTANT:** Perform a pull-push test to ensure that each cable is correctly seated. Failure to connect these correctly could prevent the system from powering on.

- 3. Connect the proximity sensor wires on the middle vent panel to the corresponding connectors on the bottom of the touchscreen: left wire to left port and right wire to right port.
- 4. Route any excess wiring through the right-side wire management ring under the touchscreen to prevent it being pinched in the panels.
- 5. Route all other cables through the wire management rings on the underside of the touchscreen.



**IMPORTANT:** Ensure all wires are neatly organised and pressed towards the back of the Express 250 to allow the touchscreen to be easily lowered into the slot on the middle vent panel. Ensure the wires are not pinched between the touchscreen and the vent panel.

6. With hand pressure, swing the touchscreen down. Loosen both retention knobs (b), allowing the touchscreen beam (c) to slide up vertically. Re-tighten the knobs at the highest position. Tilt the bottom of the touchscreen inside the slot in the middle vent panel, aligning the notch in the centre of the bottom edge (d) to the guide ridge inside the panel slot.



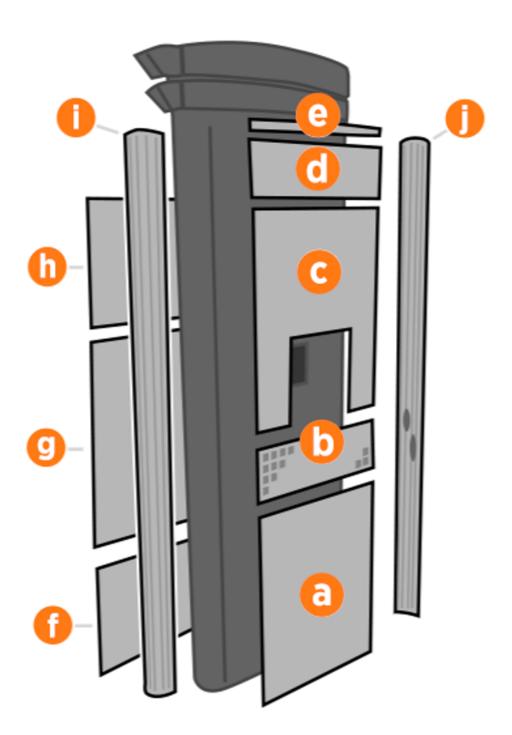
- 7. Keeping pressure on the edge of the touchscreen to properly seat it inside the panel, loosen the knobs to lower the screen again.
- 8. With both hands, hold the beam (c) and rotate the top of the bar away from you to relieve stress at the retention knobs. Re-tighten the knobs to secure it.
- 9. Use a T25 Torx driver to replace the M5 screw and washer (a), attaching each touchscreen ground strap to the frame. Torque to 4 Nm (35 in-lb).

REVERSE THE ABOVE STEPS TO REPLACE THE TOP FRONT PANEL, LED DISPLAY AND AREA LIGHT BAR.

#### **Power On the Station**

Once all cover panels have been installed, power on the Express 250. The on-screen Installation Wizard walks you through any required tasks to set up the Express 250 and verify that it can operate properly.

An Installation Wizard test checks that all cover panels have been correctly installed and fully seated. Check the lower right corner of the screen for any error messages. If panel errors appear, match the panel letters to this illustration.



- a. Front bottom panel
- b. Middle vent panel
- c. Front top panel
- d. LED display
- e. Area Light Bar
- f. Rear bottom panel
- g. Rear middle panel
- h. Rear top panel

- i. Left Extrusion
- j. Right extrusion



**DANGER:** RISK OF SHOCK. If a fault exists, turn the power off at the service panel to BOTH Express 250 paired charging stations during work and keep it off until all panels are reinstalled. Internal components can present a shock hazard. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN SERIOUS INJURY OR LOSS OF LIFE.

If any panel needs reinstallation, review the procedures above to double-check that all panels have been fully seated and that the edges of all signs are captured fully by the panels around them. For further details, refer to the Express 250 Installation Guide.

#### **Limited Warranty Information and Disclaimer**

The Limited Warranty you received with your charging station is subject to certain exceptions and exclusions. For example, your use of, installation of or modification to the ChargePoint® charging station in a manner in which the ChargePoint® charging station is not intended to be used or modified will void the limited warranty. You should review your limited warranty and become familiar with the terms thereof. Other than any such limited warranty, the ChargePoint products are provided "AS IS", and ChargePoint, Inc. and its distributors expressly disclaim all implied warranties, including any warranty of design, merchantability, fitness for a particular purposes and non-infringement to the maximum extent permitted by law.

#### **Limitation of Liability**

CHARGEPOINT IS NOT LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, PUNITIVE OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION LOST PROFITS, LOST BUSINESS, LOST DATA, LOSS OF USE, OR COST OF COVER INCURRED BY YOU ARISING OUT OF OR RELATED TO YOUR PURCHASE OR USE OF, OR INABILITY TO USE, THE CHARGING STATION, UNDER ANY THEORY OF LIABILITY, WHETHER IN AN ACTION IN CONTRACT, STRICT LIABILITY, TORT (INCLUDING NEGLIGENCE) OR OTHER LEGAL OR EQUITABLE THEORY, EVEN IF CHARGEPOINT KNEW OR SHOULD HAVE KNOWN OF THE POSSIBILITY OF SUCH DAMAGES. IN ANY EVENT, THE CUMULATIVE LIABILITY OF CHARGEPOINT FOR ALL CLAIMS WHATSOEVER RELATED TO THE CHARGING STATION WILL NOT EXCEED THE PRICE YOU PAID FOR THE CHARGING STATION. THE LIMITATIONS SET FORTH HEREIN ARE INTENDED TO LIMIT THE LIABILITY OF CHARGEPOINT AND SHALL APPLY NOTWITHSTANDING ANY FAILURE OF ESSENTIAL PURPOSE OF ANY LIMITED REMEDY.

#### **FCC Compliance Statement**

This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the manufacturer's instruction manual, may cause harmful interference with radio communications. Operation of this equipment in a residential area is likely to cause harmful interference; in which case, you will be required to correct the interference at your own expense.

Important: Changes or modifications to this product not authorised by ChargePoint, inc., could affect the EMC compliance and revoke your authority to operate this product.

Exposure to Radio Frequency Energy: The radiated power output of the 802.11 b/g/n radio and cellular modem (optional) in this device is below the FCC radio frequency exposure limits for uncontrolled equipment. The aerial of this product, used under normal conditions, is at least 20 cm away from the body of the user. This device must not be co-located or operated with any other aerial or transmitter by the manufacturer, subject to the conditions of the FCC Grant.

#### **ISED (formerly Industry Canada)**

This device complies with the licence-exempt RSS standard(s) of Innovation, Science and Economic Development Canada (ISED). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil est conforme aux flux RSS exemptés de licence d'Innovation, Sciences et Développement économique Canada (ISDE). L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter.

Radiation Exposure Statement: This equipment complies with the IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body.

Énoncé d'exposition aux rayonnements: Cet équipement est conforme aux limites d'exposition aux rayonnements ioniques RSS-102 Pour un environnement incontrôlé. Cet équipement doit être installé et utilisé avec un Distance minimale de 20 cm entre le radiateur et votre corps.

#### See FCC/ISED.

### **FCC/IC Compliance Labels**

Visit chargepoint.com/labels