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# ChargePoint<sup>®</sup> Home Flex 16A-50A Flexible Amperage Charger

# Installation Guide



ATTENTION: Installers, please read this guide thoroughly.

Return the guide to the owner after installation.

## **Important Safety Instructions**

## SAVE THESE INSTRUCTIONS

**WARNING:** This manual contains important instructions for Home Flex. When using electric products, always follow basic precautions, including the following.

**1. Read and follow all warnings and instructions before installing and operating the ChargePoint® charging station.** 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® charging station and adhere to all national and local building codes and standards. Before installing the ChargePoint® charging station, 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 charging station for proper installation before use.

**3.** Always ground the ChargePoint<sup>®</sup> charging station. Failure to ground the charging station can lead to risk of electrocution or fire. The charging station 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 shall comply with all applicable codes and ordinances.

**4. Install the ChargePoint**<sup>®</sup> charging station using a ChargePoint approved method. Failure to install on a surface that can support the weight of the charging station can result in death, personal injury, or property damage. Inspect the charging station for proper installation before use.

**5.** This charging station is not suitable for use in hazardous locations. Do not install Home Flex near flammable, explosive, or combustible materials.

6. This device should be supervised when used around children.

7. Do not put fingers into the electric vehicle connector.

**8.** Do not use this product if the flexible input power cable or EV charging cable is frayed, has broken insulation, or any other signs of damage. Call ChargePoint customer support immediately at 1.888.758.4389.

9. Do not use this product if the enclosure or the EV connector is broken, cracked, open, or shows any other indication of damage. Call

ChargePoint customer support immediately at 1.888.758.4389.

10. Use 90°C wire copper conductors only.

**11.** Do not operate Home Flex in temperatures outside its operating **range.** For charging stations set to 16-48 A, the range is  $-40^{\circ}$ F to  $122^{\circ}$ F ( $-40^{\circ}$ C to  $50^{\circ}$ C). For charging stations set to 50 A, the range is  $-40^{\circ}$  to  $113^{\circ}$ F (-40 to  $45^{\circ}$ C).

- Other than the charging cable, Home Flex contains no field serviceable parts. Do not attempt to repair or service any other part of the unit yourself. If the unit requires servicing, contact ChargePoint, Inc.
- Ensure that Home Flex charging cable is positioned so it is not stepped on, tripped over, or subjected to damage or stress. Do not close a garage door on the charging cable.

Important: Under no circumstances will compliance with the information in this manual relieve the user of his/her responsibility to comply with all applicable codes or safety standards. This document describes the most commonly used installation and mounting scenarios. If situations arise in which it is not possible to perform an installation following the procedures provided in this document, contact ChargePoint, Inc. ChargePoint, Inc. is not responsible for any damages that may occur resulting from custom installations that are not described in this document or for any failure to adhere to installation recommendations.

#### **Product Disposal**

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ChargePoint Home Flex is electronic and therefore may not be disposed of as part of unsorted domestic waste. Inquire with local authorities regarding proper disposal. Product materials are recyclable as marked.

#### No Accuracy Guarantee

Commercially reasonable efforts were made to ensure that the specifications and other information in this manual are accurate and complete at the time of its publication. However, the specifications and other information in this manual are subject to change at any time without prior notice.

#### **Copyright and Trademarks**

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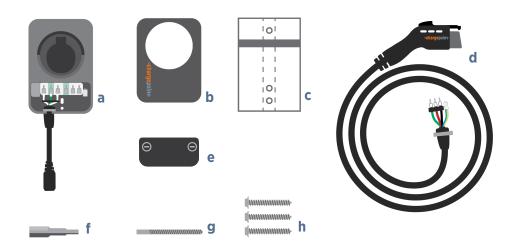
## **Verify Contents**



**CAUTION:** The ChargePoint Home Flex charging station must be installed by a licensed electrician. If you do not know where to find one, refer to the *ChargePoint Home Flex Quick Start Guide* or chargepoint.com/homeinstall for help.

Check the box to ensure you have the Quick Start guide, this installation guide, and these parts:

- a. Charging station (with attached input power cable)
- b. Faceplate (pre-installed on charging station)
- c. Installation template
- d. Charging cable with cable clip
- e. Wire cover (pre-installed on charging station)
- f. 10 mm (3/8 in) driver bit
- g. 4 mm (3/16 in) drill bit
- **h.** Three 6 mm (1/4 in) x 51 mm (2 in) lag screws



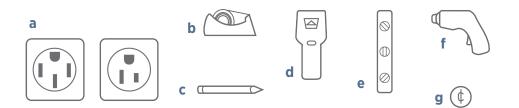
Note: If you are missing any of these parts, please call 1-888-758-4389.

## **Gather Tools**

You also need:

a. One NEMA 6-50 outlet, NEMA 14-50 outlet, or supplies to install a hardwired circuit.

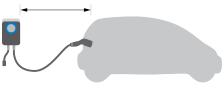
- b. Tape
- c. Pencil
- d. Stud finder
- e. Level
- f. Drill
- g. Coin



## **Plan the Location**

Before beginning work, check the site for appropriate mounting location and electrical capacity.

 Ensure the homeowner has chosen an installation location that allows the charging cable to reach the car's charging port while still providing slack. Ensure there is a stud available at the desired location for mounting



the charging station. Ensure there is WiFi signal available.

**Note:** Outdoor installation is an option, but requires an outdoor-rated, weather-resistant electrical outlet or hardwired installation.

**WARNING:** In areas with frequent thunderstorms, add surge protection at the service panel for all circuits. Ensure all power and ground connections, especially those at the breaker and bus bar, are clean and tight. Remove all oxide from all conductors and terminals before connecting wiring.

2. Determine the desired charging amperage with the homeowner. Home Flex can be installed at a variety of amperages. Choose based on the availability of space or electrical capacity in the panel, the desired speed of charging, and whether the homeowner prefers a hardwired or plug-in installation.

**CAUTION:** Home Flex is a continuous load device. The circuit must be rated for 125% of the maximum load.

Circuit Rating	Max Load	Estimated Range per Hour	Plug-in	Hardwire
50 A	40 A	30 miles/48 km	yes	yes
40 A	32 A	25 miles/40 km	yes	yes
30 A	24 A	18 miles/29 km	no	yes
20 A	16 A	12 miles/19 km	no	yes



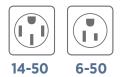
**Important:** In Canada, a plug-in installation is only allowed with a 50 amp circuit.

Home Flex can also be wired for higher amperages. Consult all applicable codes for breaker and wire sizing requirements. The field-

wiring terminal is rated to 105  $^\circ\text{C}$  and accepts a maximum of 16 mm² (6 AWG) wire.

Circuit Rating	Max Load	Estimated Range per Hour	Plug-in	Hardwire
80 A	50 A	37 miles/60 km	no	yes
70 A	50 A	37 miles/60 km	no	yes
60 A	48 A	36 miles/58 km	no	yes

 Determine the plug type purchased by the homeowner. It is either a NEMA 6-50 or 14-50 type plug.



- 4. Determine if the desired circuit rating requires a hardwired circuit.
- 5. Ensure the electrical panel supports a 240 V dedicated circuit with a new, dedicated, non-GFCI two-pole circuit breaker, in accordance with local codes and ordinances.

**Note:** If local codes require a GFCI breaker for plug-in installation, ChargePoint recommends a hardwire installation. We do not recommend using a GFCI breaker as the Home Flex has charging circuit interrupting device (CCID) protection. Using a GFCI breaker in the panel can cause nuisance tripping.

 For plug-in installations, the NEMA outlet should be located 500-660 mm (20-26 in) from the ground adjacent to the stud where the charging station will be mounted.

**Note:** The input power cable is 300 mm (12 in) long (as per the National Electric Code for EV chargers). Ensure the outlet is installed close enough to the stud for the input power cable to plug in.

 Follow all applicable codes and ordinances and pull a permit for completing the electrical work as required.



## Wire the Circuit



**DANGER:** RISK OF SHOCK. Turn off the circuit breaker to the 240 V outlet. Do not restore power to the outlet until installation is complete. Failure to follow these instructions could result in shock or electrocution.

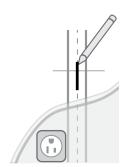
- 1. Install a plug-in or hardwired circuit:
  - For a 40 or 50 amp plug-in installation, wire the circuit with the appropriate 6-50 or 14-50 outlet. Install the outlet with the ground facing up.
  - For a hardwired installation, provide a listed conduit with wiring to the bottom or rear 19 mm (3/4 in) knockout for AC input. Seal the unused knockout with the plug provided. Return the original input power cable to the box.
- 2. Affix the label with the appropriate rating to the circuit in the panel.
- 3. Turn off power to the circuit at the panel before proceeding.

## **Mount the Charging Station**

Note: For Hardwired Installation, proceed to page 13.

#### **Plug-In Installation**

- 1. Remove the faceplate and the wire cover from the charging station. Set them aside.
- Mark the center of the stud with a line approximately 1000-1100 mm (39-43 in) above the finished floor.



**3.** To find the charging station's ideal mounting height, plug the charging station's input power cable into the outlet.



**DANGER:** If the front status light turns on when the charging station is plugged in, the circuit is not off. STOP IMMEDIATELY. Unplug the charging station and turn off the power to the outlet at the circuit breaker until the installation is complete.

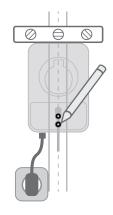
4. Place the charging station against the wall. Line up the charging station's two mounting holes with the marked stud line.

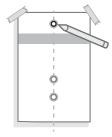
**Note:** Ensure the input power cable has a slight curve, and is not stretched.

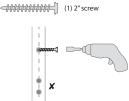
- 5. Ensure the charging station is level. Mark the two lower mounting holes.
- 6. Unplug the charging station.

- Line up the lower mounting holes on the installation template with the marks you made. Tape the template to the wall.
- 8. Mark the top mounting hole on the wall with the installation template.
- 9. Remove the template from the wall.
- **10.** Drill the three mounting holes with the included drill bit.
- Use the driver bit to drive a lag screw into the top-most mounting hole, leaving a 3 mm (1/8 in) gap to hang the charging station on. Keep the remaining two screws for later use.
- **12.** Hang the charging station on the protruding screw using the notch on the back of the charging station.









Note: Do not plug in the charging station yet.

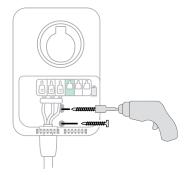
**13.** Drive the remaining two lag screws into the bottom mounting holes to secure the charging station. Be careful not to damage the electrical wires.

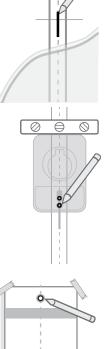
**Note:** Ensure the input wire does not make contact with the screw.

14. Proceed to the **Install the Charging Cable** section on page 15.

#### **Hardwired Installation**

- 1. Remove the faceplate and the wire cover from the charging station. Set them aside.
- 2. Remove the cable clip and lift the white levers on the field-wiring terminal block to remove the input power cable.
- 3. Mark the center of the stud with a line between 1000-1100 mm (39-43 in) above the finished floor.
- 4. Hold the station against the wall stud, with the top of the station approximately 1270 mm (50 in) above ground level.
- 5. Ensure the charging station is level. Mark the two lower mounting holes.
- 6. Line up the lower mounting holes on the installation template with the marks you made. Tape the template to the wall.
- 7. Mark the top mounting hole on the wall with the installation template.
- 8. Remove the template from the wall.
- 9. Drill the three mounting holes with the included drill bit.





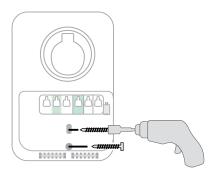
- Use the driver bit to drive a lag screw into the top-most mounting hole, leaving a 3 mm (1/8 in) gap to hang the charging station on. Keep the remaining two screws for later use.
- Hang the charging station on the protruding screw using the notch on the back of the charging station.
- **12.** Drive the remaining two lag screws into the bottom mounting holes to secure the charging station.
- Insert the exposed wires from the hardwire circuit installation into the corresponding holes, pushing the cables up until the silver conductors are no longer visible.

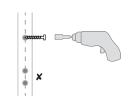
Note: If mounting on an exterior wall

and bringing power through the rear knockout, apply sealant around the rear knockout to prevent water ingress.

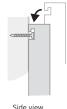
- 14. Bring power through the bottom or rear knockout.
- **15.** Ensure the service wiring can easily reach the connectors on the charging station's input terminal block.
- **16.** Strip each wire 12 mm (1/2 in).
- Ensure the white levers on the terminal block are open. Fully insert the wires into the connectors on the left side of the terminal block with the ground wire in the center.
- **18.** Press the three levers down until they snap into place.

**Note:** The white levers are a pinch point. Be careful of fingers while handling them.





(1) 2" screw



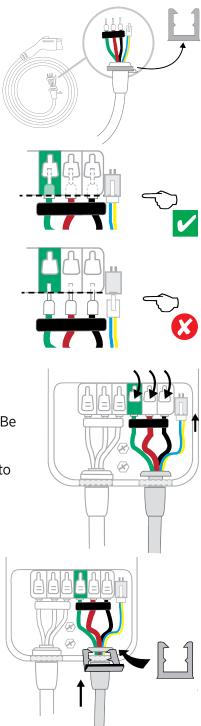
## **Install the Charging Cable**

- 1. Remove the cable clip from the wire end of the cable, but do not discard it.
- 2. Fold the wire ends and insert them into the bottom hole of the charging station.
- Match the green wire to the ground on the left terminal of the output block.
- Insert the exposed wires into the corresponding holes, pushing the cables up until the silver conductors are no longer visible.

5. Snap the white levers all the way down on each wire.

**Note:** The white levers are a pinch point. Be careful of fingers while handling them.

- 6. Insert the 4-pin plug into the connector to the right of the output supply wiring.
- 7. While pushing the cable up, slide the cable clip into the slot. This secures the cable and acts as strain relief.

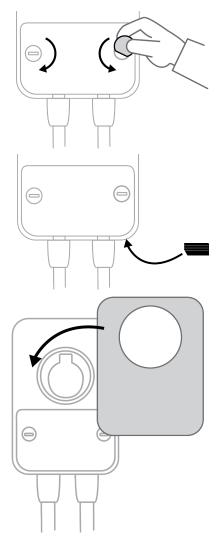


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8. Place the wire cover over the exposed wiring. Use a coin to lock the wire cover in place.

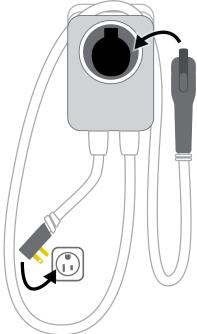
**Note:** To avoid damage to the wire cover, do not use a screwdriver.

- 9. Apply the rating label to match the circuit feeding the charging station on the bottom of the station over the default rating displayed.
- **10.** Snap the faceplate onto the charging station.



## **Complete the Installation**

- 1. Extend the cable to its full length to remove any kinks or tension.
- 2. Drape the charging cable over the top of the charging station and dock the connector in its holster.
- **3.** Ensure labels specifying circuit amperage are applied to the bottom of the charging station and to the circuit in the electrical panel.
- 4. Restore power to the circuit at the electrical panel.
- 5. Plug the charging station into the outlet (if applicable).
- 6. Watch to ensure that the front status light glows yellow, then blinks white.
- Give the Quick Start Guide, the drill bit, the driver bit, and this Installation Guide to the homeowner.
- 8. Return all packaging materials to the box and give the box to the homeowner.



- **9.** Advise the homeowner that the charging station is ready for activation via the mobile application.
- **10.** Tell the homeowner the final amperage of the circuit and the expected charging rate available after activation. (Refer to the table in the Plan the Location section.)

Important: The Quick Start Guide contains information that the owner needs to activate their charging station. Without activation, the charging station charge current is limited to 16 amps.

## **Questions?**

- chargepoint.com/homeinstall
- U.S. and Canada toll-free: +1-888-758-4389 (24 hours)

## **Limited Warranty**

Limited Warranty for ChargePoint Home Electric Vehicle charging station

## **Our Promise**

This Limited Warranty for ChargePoint Home Electric Vehicle charging station ("Warranty") applies to you, the original purchaser of a new CHARGEPOINT HOME charging station (the "charging station") from CHARGEPOINT solely for use by you at your residence. This warranty is not transferrable and is valid for purchasers located in the U.S.A. and Canada only.

LIMITED THREE-YEAR PARTS EXCHANGE WARRANTY: Subject to the exclusions from Warranty coverage set forth below, CHARGEPOINT warrants that, when used under normal operating conditions, your charging station will be free from any defects in materials or workmanship for a period (the "Warranty Period") of three (3) years from the date of original purchase. If, during the Warranty Period, your charging station becomes defective in breach of the Warranty, CHARGEPOINT will, upon written notice of the defect received during the Warranty Period, either repair or replace, at CHARGEPOINT's election, the charging station. The Warranty covers both parts and factory labor necessary to repair your charging station, but does not include any on-site labor costs related to un-installing or reinstalling the repaired or replacement charging station.

Follow These Easy Steps to Obtain Warranty Service

- If at any time during the term of your Warranty you believe you have a defective charging station, contact Customer Service at 1.888.758.4389 or support@chargepoint.com and request a Return Material Authorization ("RMA") number from ChargePoint.
- 2. In connection with your RMA request, you will be asked for each of the following:
  - A detailed description of the problems you are experiencing with the charging station;
  - The model number and serial number of the charging station;
  - Proof of purchase; and
  - Shipping information.
- **3.** If ChargePoint determines that the defect appears to be covered by your Warranty and your Warranty is still in effect you will be provided a Returned Material Authorization number (RMA number) to reference when returning the defective charging station for repair or replacement.
- **4.** Ship the defective charging station to CHARGEPOINT and reference the RMA number in the shipping documentation. The charging station must be returned in its original shipping container or in another shipping container designed to prevent damage to the charging station.
- If your charging station is covered by your Warranty, CHARGEPOINT will either repair or replace the defective charging station at no charge to you and ship the repaired or replaced charging station back to you at CHARGEPOINT's expense.

#### Important

1. You are responsible for the proper installation and maintenance of the charging station including the un-installing of any defective charging station and the installation of the repaired or replacement charging station returned to you.

- Any service or repairs beyond the scope of the Warranty above will be performed upon customer approval at CHARGEPOINT's then prevailing labor rates and other applicable charges.
- Any charging station that is found by CHARGEPOINT to be out-of-warranty or otherwise ineligible for warranty service will be returned, repaired or replaced upon your approval at CHARGEPOINT's standard charges at your expense.
- 4. Please read carefully through the detailed descriptions of the WARRANTY, the EXCLUSIONS FROM LIMITED PRODUCT WARRANTY, and the LIMITATIONS ON WARRANTY AND LIABILITY on the following pages to assure that your charging station is eligible for warranty service without additional cost to you.

### **Replacement Parts Or Charging Stations**

You acknowledge that replacement parts or charging stations provided by CHARGEPOINT under the Warranty may be remanufactured or reconditioned parts or charging stations or, if the exact charging station is no longer manufactured by CHARGEPOINT, a charging station with substantially similar functionality ("Replacement Products"). All replaced parts, whether under warranty or not, become the property of CHARGEPOINT.

Any replacement parts or charging station so furnished will be warranted for the remainder of the original Warranty Period or ninety days from the date of delivery of such replacement parts or charging station, whichever is later. Should CHARGEPOINT be unable to repair or replace your charging station, CHARGEPOINT will refund the purchase price of the charging station to you.

#### **Exclusions from Limited Product Warranty**

IMPORTANT: The Warranty on your charging stations shall not apply to defects or service repairs resulting from the following:

- Improper site preparation or maintenance, improper installation, cosmetic damage such as scratches and dents, or normal aging.
- Abuse, vandalism, damage or other problems caused by accidents, misuse or negligence (including but not limited to physical damage from being struck by a vehicle), or use of the charging station in a way other than as specified in the applicable CHARGEPOINT documentation.
- Damage to the charging station caused by software, interfacing, parts, supplies or any other product not supplied by CHARGEPOINT.
- Installation, alteration, disassembly, modification, or relocation of the charging station that was not approved in writing or by ChargePoint or performed by ChargePoint or by a licensed electrician pursuant to this guide.
- Damage as a result of extreme power surge, extreme electromagnetic field or any acts of nature.
- Any other causes beyond the control of CHARGEPOINT.

IN ADDITION: The Warranty on your charging station shall not apply if the original identification markings (for example, serial numbers and trademarks) have been defaced, altered or removed or if the charging station is used or installed for any purpose other than for use at a single family residence.

CHARGEPOINT SPECIFICALLY DOES NOT WARRANT THAT ANY CHARGEPOINT SERVICES WILL BE ERROR FREE OR WILL OPERATE WITHOUT INTERRUPTION.

#### **Limitations on Warranty and Liability**

NO AGENT OF CHARGEPOINT IS AUTHORIZED TO ALTER OR EXCEED THE WARRANTY OBLIGATIONS OF CHARGEPOINT. THE REMEDIES IN THIS LIMITED PRODUCT WARRANTY ARE YOUR SOLE AND EXCLUSIVE REMEDIES. CHARGEPOINT MAKES NO OTHER EXPRESS OR IMPLIED WARRANTIES OTHER THAN THE WARRANTY SET FORTH ABOVE. ALL OTHER WARRANTIES, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF DESIGN, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE (EVEN IF CHARGEPOINT HAS BEEN INFORMED OF SUCH PURPOSE) OR AGAINST INFRINGEMENT, ARE EXCLUDED TO THE EXTENT PERMITTED BY LAW. IF ANY IMPLIED WARRANTY CANNOT BE DISCLAIMED UNDER APPLICABLE LAW, SUCH IMPLIED WARRANTY SHALL BE LIMITED IN DURATION TO THE WARRANTY PERIOD DESCRIBED ABOVE. NO WARRANTIES APPLY AFTER EXPIRATION OF THE WARRANTY PERIOD.

Some states or jurisdictions do not allow the exclusion of express or implied warranties or limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

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.

Some states or jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

### **Additional Information**

This Warranty shall be governed by and construed in accordance with the laws of the State of California, U.S.A., exclusive of its conflict of laws principles. The U.N. Convention on Contracts for the International Sale of Goods shall not apply.

This Warranty is the entire and exclusive agreement between you and CHARGEPOINT with respect to its subject matter, and any modification or waiver of any provision of this statement is not effective unless expressly set forth in writing by an authorized representative of CHARGEPOINT.



#### chargepoint.com/support

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