PEDESTAL EXTENSION KIT INSTALLATION GUIDE

PLEASE NOTE:

This installation guide includes the latest information at the time of printing. ClipperCreek, Inc. reserves the right to make changes to this product without further notice. Changes or modifications to this product by other than an authorized service facility may void the product warranty.

Before Beginning:

Read these instructions completely, including the Safety Instructions. If there are questions about the use of this product, please contact a Service Representative.

Note to the Installer:

Be sure to leave these instructions with the user.

Note to the User:

Keep these instructions for further reference.

Important Safety Instructions

ClipperCreek Electric Vehicle Supply Equipment (EVSE or "charger") is designed with the safety concerns of the end user as an utmost priority; however, the following safety precautions must be read and followed:

- The charger and electrical wiring should be installed by a qualified electrician in accordance with local electrical codes and ordinances.
- Grounding Instructions - The charger should be connected to a grounded, metal, permanent wiring system; or an equipment-grounding conductor should be run with circuit conductors and connected to a grounding terminal or lead on the charger. Connections to the charger should comply with all local electrical codes and ordinances.
- Call the local service provider anytime a procedural question arises; DO NOT attempt to perform a procedure you are unsure of.
- Read all installation instructions carefully before performing the pedestal and charger installation.

Installation Requirements

Required Equipment for a Single-Mount Pedestal and Extension with *one* Charging Station (One EVSE per Pedestal):

- One (1) ClipperCreek Single-Mount Pedestal Extension Kit.
- One (1) ClipperCreek Standard EVSE Pedestal Kit.
- One (1) ClipperCreek Charging Station (EVSE).
- One (1) dedicated 208 or 240 VAC branch circuit.
- One (1) circuit breaker appropriately sized for the EVSE charging capacity. [1]
- Two (2) Live Line conductors. [2]
- One (1) Ground Line conductor. [2]
- Conduit sized to fit all three conductors.
- Four (4) Anchor Bolts with Nuts and Washers

Required Equipment for a Dual-Mount Pedestal and Extension with *two* Charging Stations (Two EVSEs per Pedestal):

- One (1) ClipperCreek Dual-Mount Pedestal Extension Kit
- One (1) ClipperCreek Standard EVSE Pedestal Kit.
- Two (2) ClipperCreek Charging Stations (EVSEs).
- Two (2) dedicated 208 or 240 VAC branch circuits.
- Two (2) circuit breakers, appropriately sized with respect to the charging capacity of each EVSE. [1]
- Two pairs (2x2) Live Line conductors (one pair for each EVSE). [2]
- Two (2) Ground Line conductors (One for each EVSE) or a single bonded Ground Line.[2]
- Conduit sized to fit all Live Line and Ground Line conductors.
- Four (4) Anchor Bolts with Nuts and Washers.

[1] *Refer to the EVSE documentation to determine the appropriate circuit breaker current capacity.*

[2] *All conductors must be appropriately sized for the EVSE current capacity, in accordance with local and NEC electrical codes.*

Tools Required for Assembling the Pedestal

The following tools are required for the installation and assembly of the pedestal components.

- T27 Torx Driver
- #2 Phillips Head Screwdriver
- 1/4" Slotted Screwdriver
- 5/16" Allen Wrench
- Box Wrench (appropriately sized for the Anchor Nuts)
- Tube of Silicone Sealant

Tools Required for Wiring the EVSE

The following tools are required for wiring the service conductors to a charger rated for a branch circuit of *up to* 60A.

- T15 Torx Driver (for EVSE Door Access)
- 3/16" Flathead Screwdriver (for Ground Block Lug)
- ¼" Flathead Screwdriver (for Contactor Lugs)

The following tools are required for wiring the service conductors to a charger rated for a branch circuit *greater than* 60A.

- T15 Torx Driver (for EVSE Door Access)
- 5/16" Flathead Screwdriver (for Ground Block Lug)
- 5/32" Hex Head Wrench (for Contactor Lugs)

Figure 1: Pedestal Base Dimensions

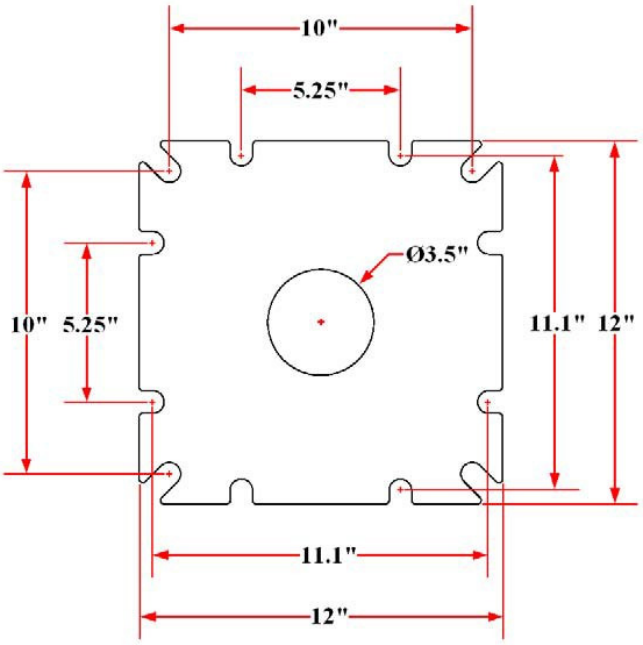
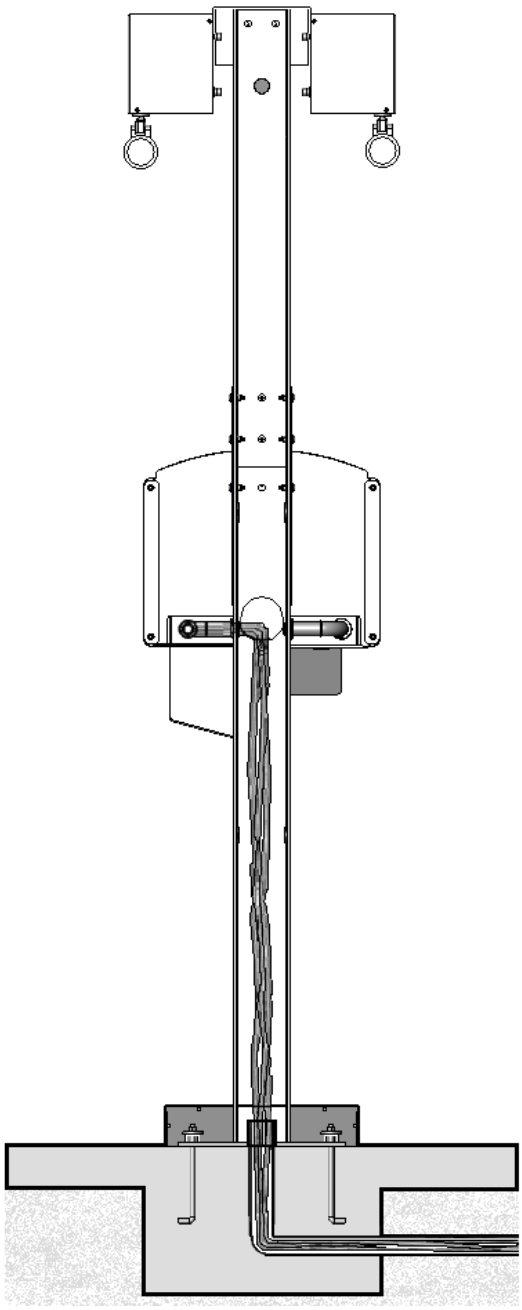


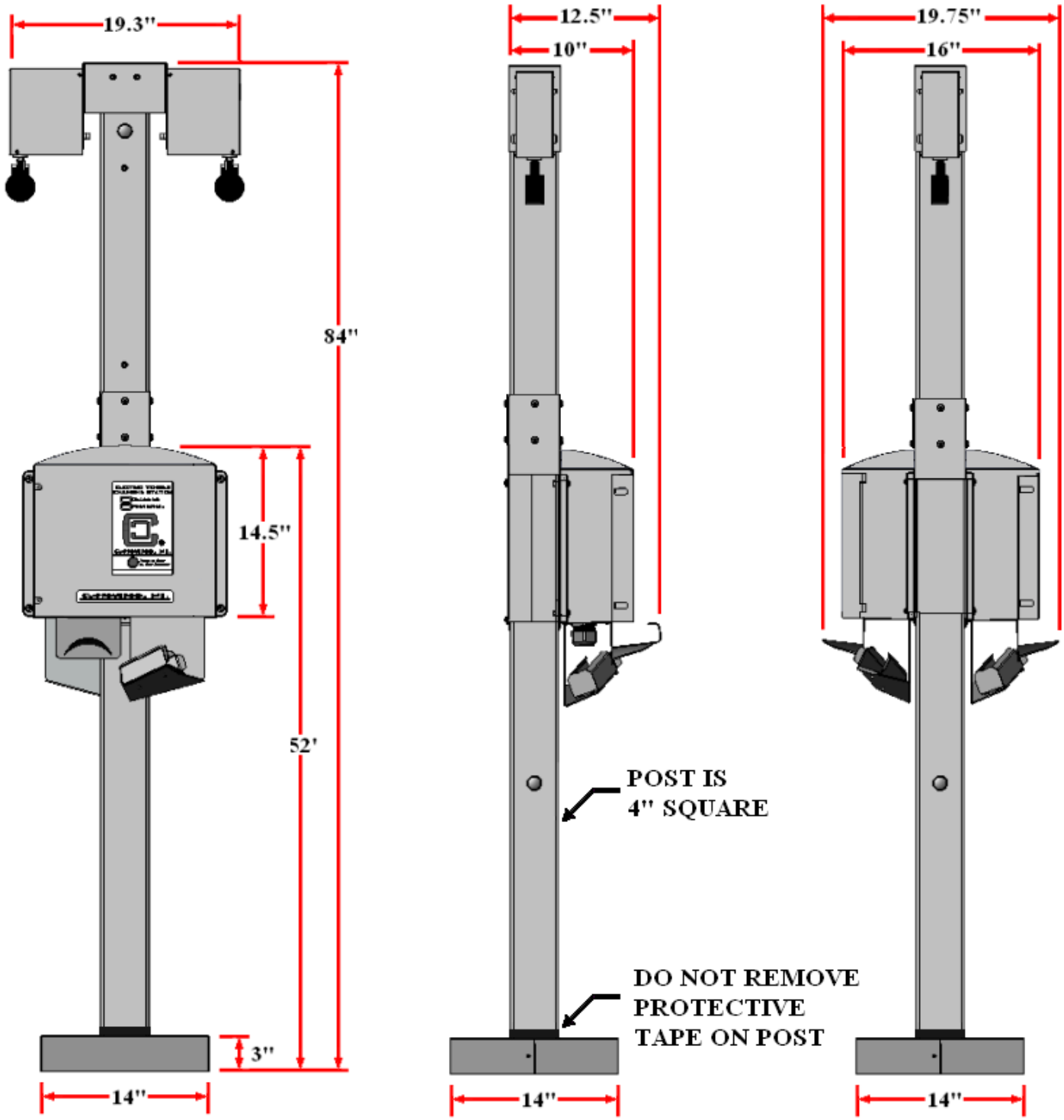
Figure 2: An Installation Cross-Section of a Dual-Mount Pedestal Extension



NOTES:

Pedestal Dimensions

Figure 3: Pedestal Dimensions for Single-Mount and Dual-Mount Installations



Packing Lists

0300-00-015 Pedestal Kit, Standard 4 Foot, Single-Mount

Part Number	QTY	Description
0300-06-001	1	Pedestal Conduit Assembly, Standard 3/4" Fitting
1003-0014	1	Pedestal Metalwork, Cap with Rear Flange
1003-0019	1	Pedestal Metalwork, Back Bracket
1003-0023	2	Pedestal Metalwork, Base Cover
1003-0030	1	Pedestal Metalwork, Charger Mounting Plate
1003-0031	1	Pedestal Metalwork, 4-Foot Post
4000-0010	4	Machine Screw, Tapered Flat Head, 6-32 Size, 3/8" Length, Phillips
4000-0011	2	Machine Screw, Tapered Flat Head, 1/4-20 Size, 3/4" Length, T27 Torx
4000-0012	8	Machine Screw, Button Head, 1/4-20 Size, 1" Length, T27 Torx
4002-0002	8	Washer, Galvanized Steel, Neoprene Bonded Seal, 1/4" ID, 5/8" OD
4015-0000	4	Plug, Plastic Push-In, 1-3/32" ID, 1-7/32" OD
4015-0001	2	Plug, Plastic Push-In, 1-3/8" ID, 1-1/2" OD

0300-00-016 Dual-Mount Kit for Standard 4 Foot Pedestal (optional)

Part Number	QTY	Description
0300-06-001	1	Pedestal Conduit Assembly, Standard 3/4" Fitting
1003-0015	1	Pedestal Metalwork, Cap without Rear Flange
1003-0017	2	Pedestal Metalwork, Side Bracket
1003-0030	1	Pedestal Metalwork, Charger Mounting Plate
4000-0011	2	Machine Screw, Tapered Flat Head, 1/4-20 Size, 3/4" Length, T27 Torx
4000-0012	4	Machine Screw, Button Head, 1/4-20 Size, 1" Length, T27 Torx
4002-0002	4	Washer, Galvanized Steel, Neoprene Bonded Seal, 1/4" ID, 5/8" OD

0300-00-017 Single-Mount Pedestal Extension Kit

Part Number	QTY	Description
1003-0002	1	Extension
1003-0003	2	Post Splice
1003-0004	4	Spacer Plate
1003-0005	2	Base Stiffener
1003-0006	1	Top Retractor Mount
4000-0011	4	Machine Screw, Tapered Flat Head, 1/4"-20 Thread, 3/4" Length, T27 Torx
4000-0012	10	Machine Screw, Button Head, 1/4-20 Size, 1" Length, T27 Torx
4000-0014	2	Hex Head Cap Screw 3/8"-16 Thread, 3/4" Length
4000-0015	4	Machine Screw, Button Head, 1/4-20 Size, 1-1/4" Length, T27 Torx
4002-0002	14	Washer, Galvanized Steel, Neoprene Bonded Seal, 1/4" ID, 5/8" OD
4002-0006	2	Split Lock Washer 3/8" Screw Size, .55" OD
4005-0002	1	Hose Clamp Package B with hardware for CS-50 and higher: includes one (1) Hose Clamp B, four (4) #5 Phillips screws 5/8” long, one (1) 10-32 x 1 ¼” long screw, and one (1) 10-32 nut
4015-0000	2	Plug, Black Plastic Push-In, 1-3/32” ID, 1-7/32”" OD
5609-0000	1	Cable Retractor Box with hose clamp package A for CS-40 and lower: includes one (1) Hose Clamp A, four (4) #5 Phillips screws 5/8” long, one (1) 10-32 x 1 ¼” long screw, and one (1) 10-32 nut

0300-00-018 Dual-Mount Kit Pedestal Extension Kit

Part Number	QTY	Description
1003-0002	1	Extension
1003-0003	2	Post Splice
1003-0004	4	Spacer Plate
1003-0005	2	Base Stiffener
1003-0006	1	Top Retractor Mount
4000-0011	4	Machine Screw, Tapered Flat Head, 1/4"-20 Thread, 3/4" Length, T27
4000-0012	10	Machine Screw, Button Head, 1/4-20 Size, 1" Length, T27 Torx
4000-0014	4	Hex Head Cap Screw 3/8"-16 Thread, 0.75" Length
4000-0015	8	Machine Screw, Button Head, 1/4-20 Size, 1-1/4" Length, T27 Torx
4002-0002	18	Washer, Galvanized Steel, Neoprene Bonded Seal, 1/4" ID, 5/8" OD
4002-0006	4	Split Lock Washer 3/8" Screw Size, .55" OD
4005-0002	2	Hose Clamps 5/8” with hardware package for CS-50 and higher
4015-0000	2	Plug, Black Plastic Push-In, 1-3/32” ID, 1-7/32”" OD
5609-0000	2	Cable Retractor Box with hose clamp package for CS-40 and lower

Optional Orderable Items:

0300-06-000 120V Ground Fault Receptacle Kit*

Part Number	QTY	Description
4015-0002	1	Plug, Knockout Bushing, 1.109" OD, 3/4" Trade Size Aperture
4301-0000	1	GFCI Ground Fault Receptacle, 15A, 125V, NEMA 5-15R, Single Socket with Switch
4301-0001	1	Gang Box, Single, Silver Metal
4301-0002	1	Weatherproof Receptacle Cover, Clear, Single Gang, 2-3/4" Depth

* The Ground Fault Receptacle Kit includes a 120VAC GFCI receptacle and housing. It may be installed at the knock-outs located 24 inches above the base on either side of the pedestal.

0300-06-002 Optional 1" Conduit Assembly

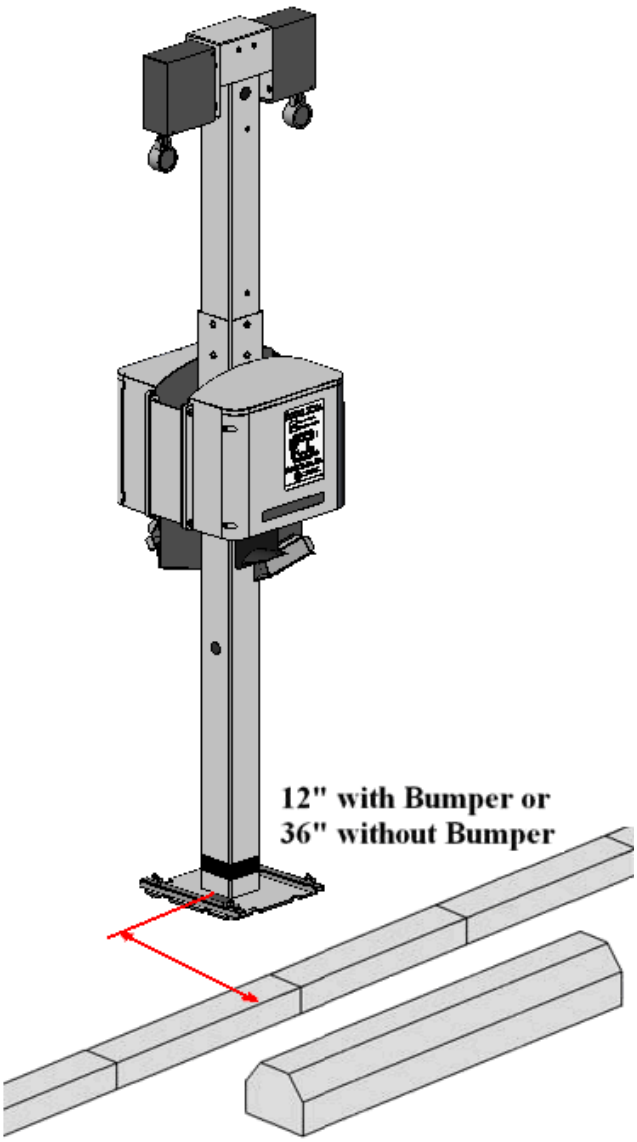
Part Number	QTY	Description
0300-06-002	1	Pedestal Conduit Assembly, Optional 1" Fitting

1. Concrete Pad Requirements

The location, dimensions, and composition of the concrete pad underlying the pedestal should always adhere to local building codes. The following dimensions are minimum recommended values. Always verify that installation plans adhere to local code requirements prior to proceeding.

- The pad area must be a minimum of 18” to a side.
- The concrete must be poured a minimum depth of 18”.
- If there is no bumper block, the center of the pedestal base should be situated 36” behind the curb.
- If a bumper block is in place, the center of the pedestal base should be situated 12” behind the curb.

Figure 4: Proper Distance to the Curb with Correct Base Stiffener Orientation



2. Anchor Bolt Placement

A minimum of four (4) anchor bolts must be embedded in the concrete pad for the purposes of securing the pedestal post. The pedestal base is designed to permit the anchor bolts to be arranged in a standard 10” by 10” pattern (recommended) or in an alternative 5.25” by 11.1” pattern.

For the Standard 10” Square Pattern:

- Arrange four (4) 1/2” or 3/8” anchor bolts in a 10” square pattern. This placement corresponds to the corner cutouts in the pedestal base.

For the Alternate 5.25” x 11.1” Rectangular Pattern:

- Arrange four (4) 3/8” anchor bolts in a 5.25” by 11.1” rectangular pattern. This placement corresponds to the inner cutouts in the pedestal base.

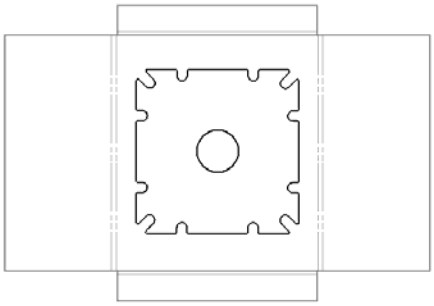
Maximum Anchor Bolt Height:

- The anchor bolts should not protrude more than 3” above the surface of the concrete pad and must be at least 1.5” above the surface of the concrete pad to compensate for the added height of the base stiffeners.

Use the Pedestal Base Pattern Template:

To better facilitate the installation of the anchor bolts, a cardboard template in the shape of the pedestal base is included in the pedestal kit. This template is provided as a knock-out piece on the back of the cardboard box in which the charger mounting plate is packaged.

Figure 5: Bolt Pattern Template Knockout



3. Mounting the Pedestal Post

Once the concrete pad with anchor bolts has been prepared and the three service conductors have been pulled through the underground conduit, the pedestal post may be put into place. **Note: DO NOT remove the tape at the bottom of the pedestal. This tape is provided for finish and weather protection of the pedestal post.**

- Feed the three service conductors up through the inside of the pedestal post. Ensure that the conductors are of sufficient length to reach up through the body of the post and into the charger.
- Align the pedestal post base notches with the four anchor bolts and ease it into place.
- Nuts and washers may be used under the pedestal base to adjust the vertical alignment of the pedestal should the concrete pad not be level.
- **IMPORTANT!** Orient the base stiffeners at opposite angles to the charging station as shown in Figure 4.
- Secure the pedestal post base and base stiffeners to the concrete anchor bolts using appropriately sized nuts and washers as shown in Figures 6 and 7.
- The anchor bolts, nuts and washers used for the installation of the pedestal base are not included in the pedestal kit and must be purchased separately.

Figure 6: Correct Orientation of Base Stiffeners

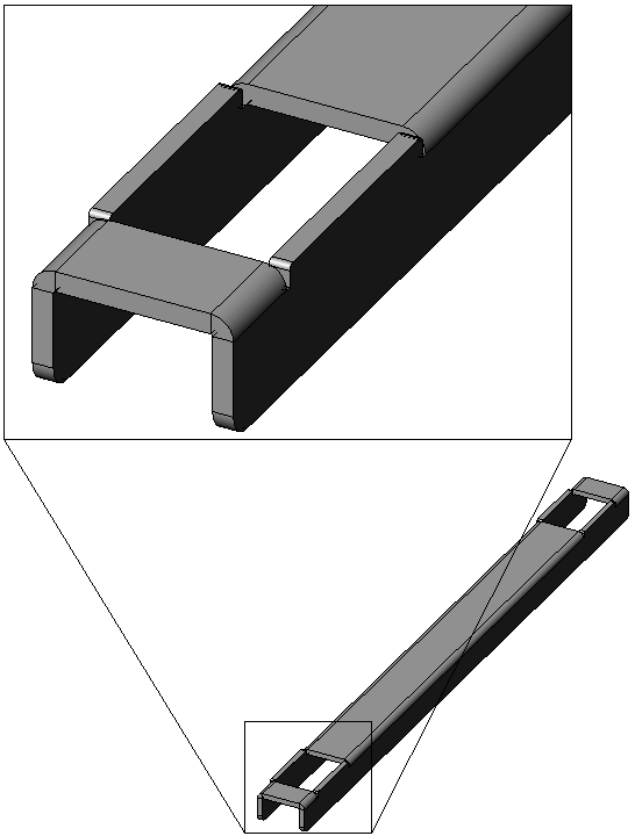
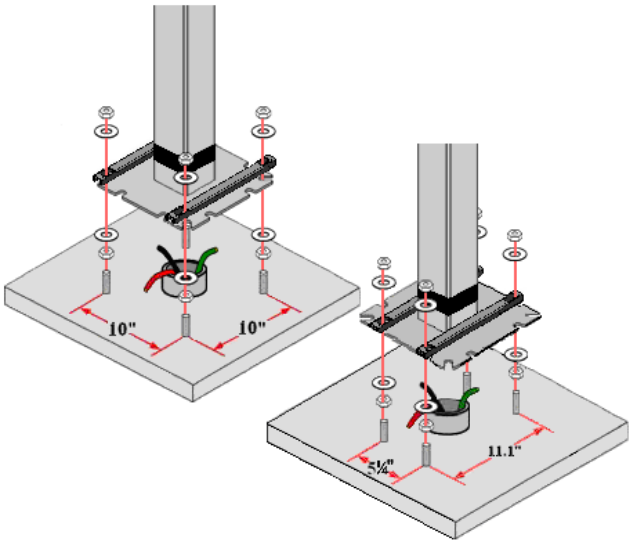


Figure 7: Pedestal Post Mounting by Pattern

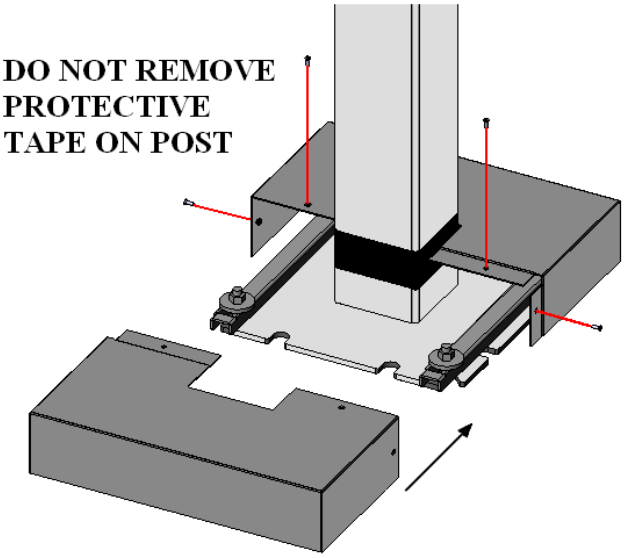


4. Install the Pedestal Base Cover

A two-piece pedestal base cover set is included in the pedestal kit. The purpose of the pedestal base cover is to beautify the installation and to protect against injury from protruding anchor bolts.

- The two covers are of an identical overlapping design.
- Slide one cover on the front side of the pedestal base until the center notch surrounds half of the pedestal post. Slide the other cover onto the rear side in the same manner. Ensure that the flanges of each cover piece are tucked inside of the opposite cover.
- Align the four screw holes of each cover piece with the corresponding screw holes on the opposite cover.
- Secure each cover piece to the other with four (4) #6- 32 x 3/8" flat-head taper screws using a #2 Phillips- head screwdriver.

Figure 8: The Pedestal Base Covers



5. Install the Conduit Assembly

The three conductors are routed through the side of the pedestal and into the back of the charger via an external conduit assembly.

For the Standard ¾" Conduit Assembly:

Follow these instructions to install the standard ¾" conduit assembly included in the pedestal kit.

- It is highly recommended that connection to the Ground Lug inside the Pedestal Post be completed at this time. **Access will be limited after this step.**
- Remove the Cap from the top of the Pedestal. It is not necessary to keep this piece for the Extension Kit configuration. See Figure 9.
- Knock-out the ¾" plastic plug located 12" down from the top of the pedestal on the left side.
- Unscrew the locknuts on either end of the conduit.
- Route the three conductors through the following:

  a) The first locknut (inside of the pedestal)

  b) The open pedestal hole

  c) The conduit assembly
- Push the threaded end of the straight conduit fitting into the open pedestal hole. Reach inside of the pedestal and hand-tighten the locknut onto the conduit threads.
- Face the open end of the 90 degree conduit fitting forward for later insertion into the back of the charger.

For the Optional 1" Conduit Assembly:

Some installations may require a conduit larger than the standard ¾" assembly. For this purpose, an optional 1" conduit assembly may be requested. Follow these instructions to install the optional 1" conduit.

- It is highly recommended that connection to the Ground Lugs inside the Pedestal Post be completed at this time. **Access will be limited after this step.**
- Remove the Cap from the top of the Pedestal. It is not necessary to keep this piece for this Extension Kit configuration.
- Knock-out the 1" plastic plug located 3" down from the top of the pedestal on the left side.
- Unscrew the locknuts on either end of the conduit.
- Route the three conductors through the following:

  a) The first locknut (inside of the pedestal)

  b) The open pedestal hole

  c) The conduit assembly

  The 1" conduit assembly may be disassembled to make it easier to pull the conduit through each fitting. Ensure the conduit is fully reassembled before proceeding.
- Push the threaded end of the straight conduit fitting into the open pedestal hole. Reach inside of the pedestal and hand-tighten the locknut onto the conduit threads.
- Face the open end of the 90 degree conduit fitting forward for later insertion into the back of the charger.

For Dual-Mount Charger Installations:

Install an appropriately-sized conduit assembly on *each* side of the pedestal post. The Dual-Mount Kit includes an additional ¾" conduit assembly. The 1" conduit assembly is not included in the Dual-Mount Kit and must be requested separately.

- Face the open end of each conduit assembly toward the side of the pedestal where the corresponding charger will be installed.
- Refer to the previous conduit assembly instructions for each side.

Figure 9: Cap Removal

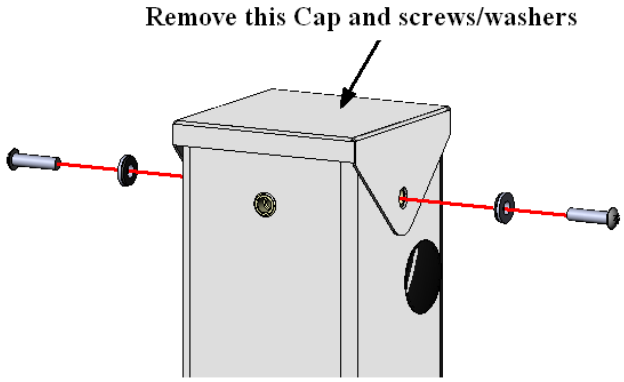
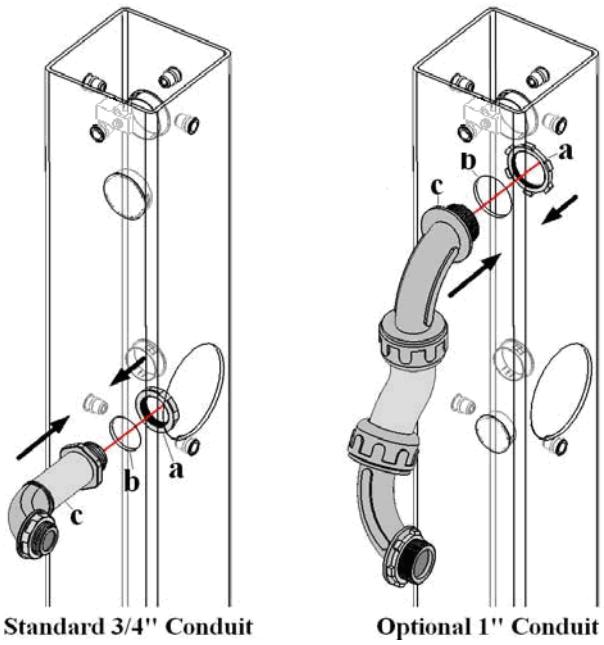


Figure 10: Standard ¾" and Optional 1" Conduit Assemblies



Standard 3/4" Conduit | Optional 1" Conduit

6. Assemble the Retractor Mount

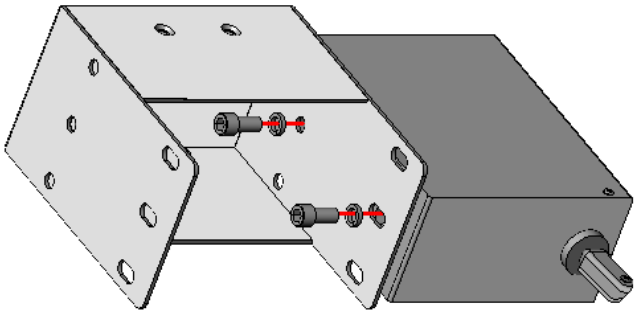
For Single-Mount Charger Installations:

- Place a 3/8" Split Lock Washer around the shaft of each of the two (2) 3/8"-16 Hex Head Cap Screws .
- Align the threaded inserts of the Cable Retractor Box with the vertical center holes on one side of the Top Retractor Mount.
- Secure the Cable Retractor Box to the Top Retractor Mount with the two (2) 3/8"-16 Hex Head Cap Screws (with washers) using a 5/16" Allen wrench. See Figure 11.

For Dual-Mount Charger Installations:

- Place a 3/8" Split Lock Washer around the shaft of each of the four (4) 3/8"-16 Hex Head Cap Screws .
- Align the threaded inserts of the first Cable Retractor Box with the vertical center holes on one side of the Top Retractor Mount.
- Secure the first Cable Retractor Box to the Top Retractor Mount with two (2) 3/8"-16 Hex Head Cap Screws (with washers) using a 5/16" Allen wrench. See Figure 11.
- Repeat for the second Cable Retractor Box on the opposite side of the Top Retractor Mount.

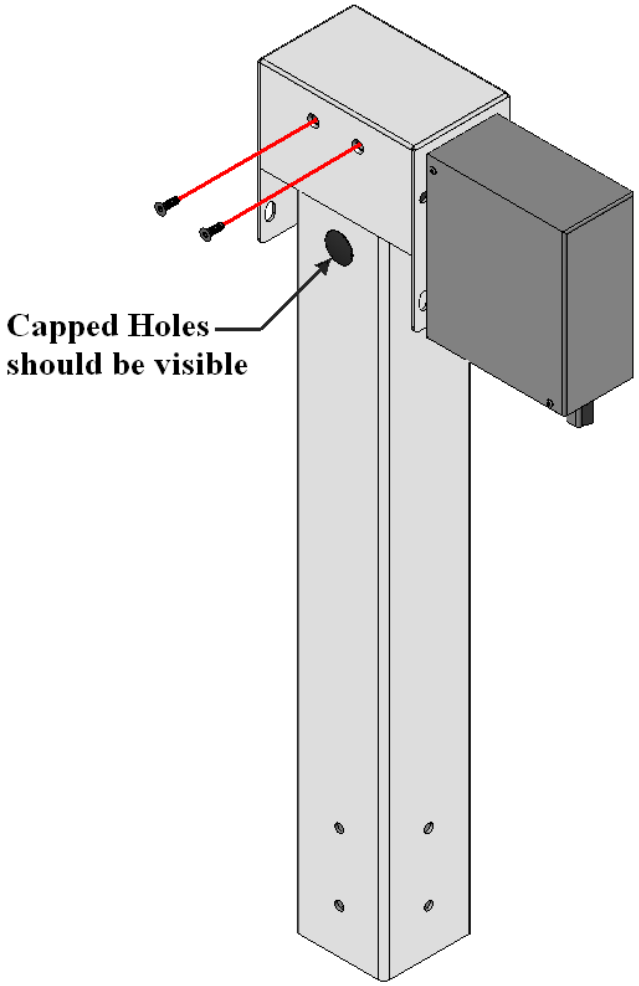
Figure 11: Cable Retractor Box and Top Retractor Mount Assembly



7. Install the Retractor Mount Assembly

- Orient the Retractor Mount Assembly with the Pedestal Extension Post. The two capped holes in the top of the Extension are provided to run wires for optional lighting fixtures and should remain accessible per Figure 12.
- Align the front and rear screw holes of the Retractor Mount Assembly with the corresponding thread inserts on the Pedestal Extension Post.
- Secure the Retractor Mount Assembly to the Pedestal Extension Post with four (4) Tapered Flat Head 1/4"-20 x 3/4" Length Machine Screws using a T27 Torx driver. Tighten until the flat screw heads are flush with the surface of the Top Retractor Mount.

Figure 12: Install the Retractor Mount Assembly



8. Install the Post Splices and Extension

- Place a 1/4" Neoprene-bonded sealing washer around the shaft of ten (10) 1/4-20 x 1" Torx button-head screws. The metal portion of the washer should face the head of the screw while the neoprene should face the tip of the screw
- The two Post Splices are of an identical design. Hold the first Post Splice against the pedestal post EXACTLY as shown in Figure 13 and secure as pictured with one (1) 1/4 -20 1" screw with washer.
- Repeat on the opposite side of the pedestal post with the second Post Splice and one (1) screw and washer assembly.
- **FOR SAFETY, THIS ASSEMBLY REQUIRES TWO PEOPLE!** Orient the Extension as shown in Figure 14. Slide the Extension into place between the two Post Splices. The Pedestal Extension should come to a rest on the top of the pedestal post.
- Align the Pedestal Extension to the Post Splices. Finger-tighten the remaining eight screws as shown in Figure 15. NOTE: The two lower most screw holes in the front face of each post splice should remain unused at this point.

- Tighten all ten screws in an alternating fashion to fully secure the Pedestal Extension to each Post Splice.

Figure 13: First Post Splice Orientation

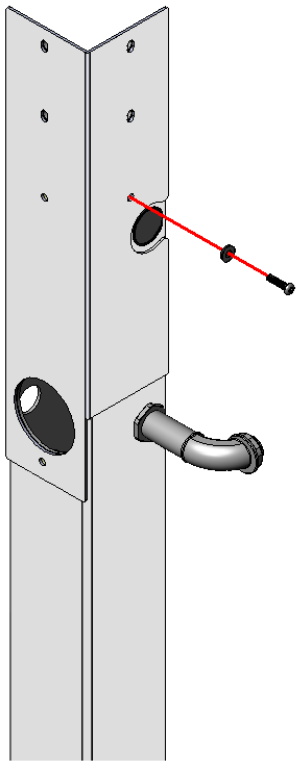


Figure 15: Secure Extension
(Both sides = eight screws and washers)

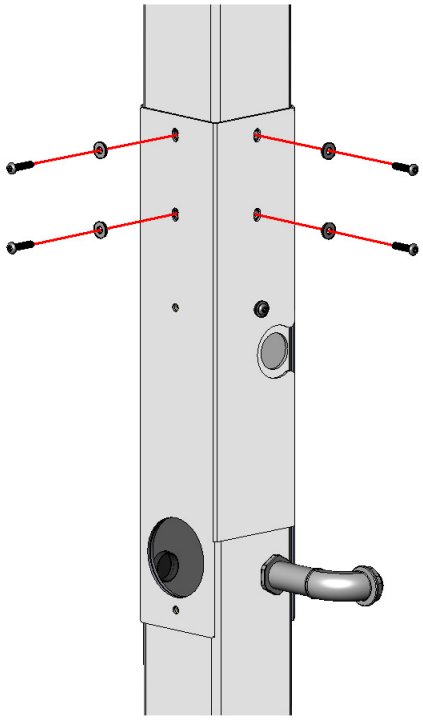
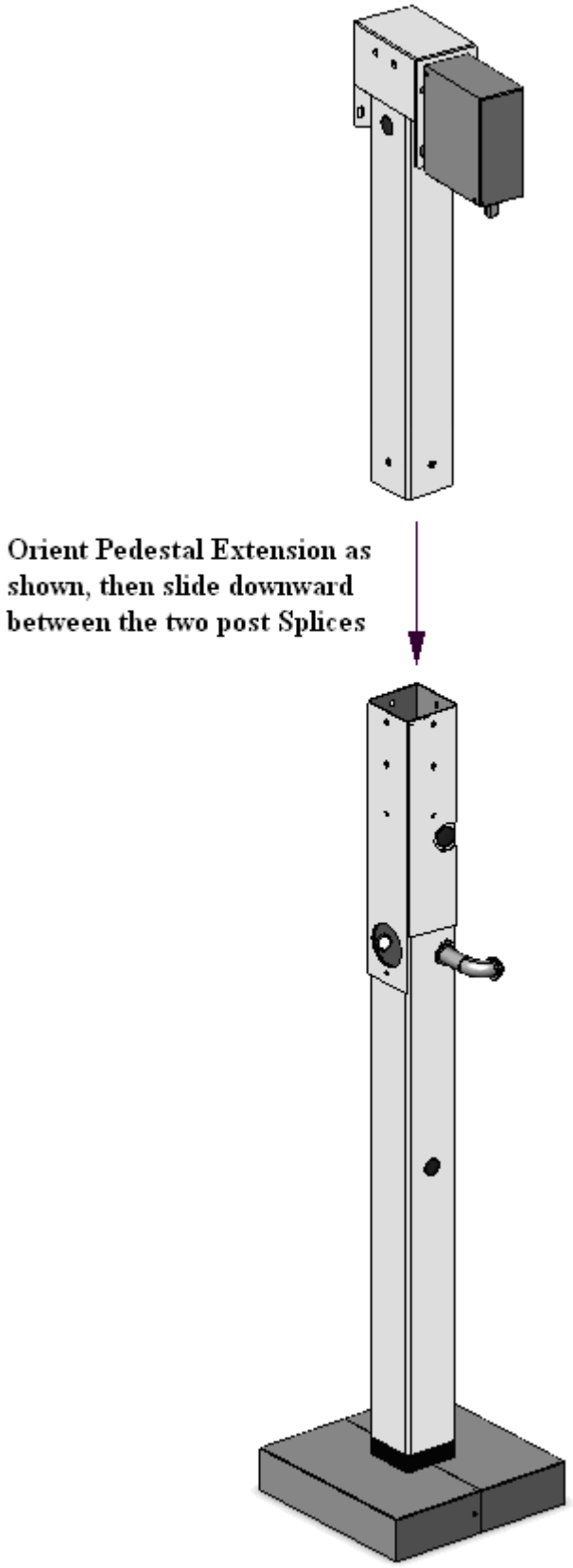


Figure 14: Pedestal Extension Orientation



9. Install the Charger Mounting Plate

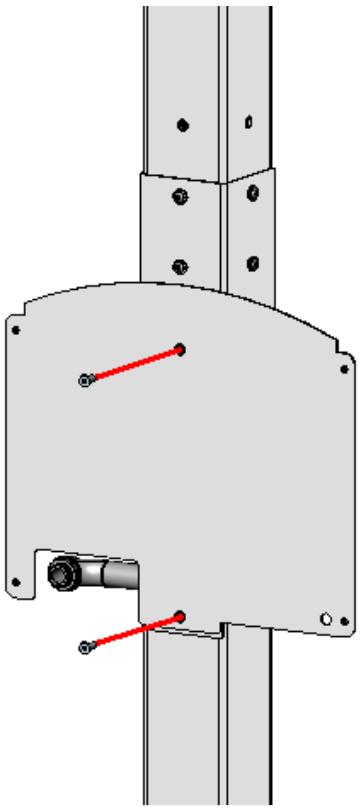
A charger mounting plate is affixed to the front of the pedestal post to provide a flat and rigid base on which the charger can be mounted. In the case of a dual-charger installation, a second mounting plate is affixed to the opposite side of the pedestal post.

- Hold the charger mounting plate against the front side of the pedestal post **with the notch toward the left side to allow clearance for the conduit piece**.
- Align the two screw holes along the centerline of the mounting plate with the corresponding holes in the Post Splices and the threaded inserts on the front of the pedestal post.
- Secure the mounting plate to the pedestal with the two (2) 1/4-20 x 3/4" Torx flat-head taper screws using a T27 Torx driver. Tighten until the head of the screws are flush with the surface of the mounting plate.

For Dual-Mount Charger Installations:

- The Dual-Mount Kit includes a second charger mounting plate. This second mounting plate is affixed to the back side of the pedestal post, opposite of the first mounting plate.
- As with the first mounting plate, align the two screw holes and tighten two (2) 1/4-20 x 3/4" Torx flat-head taper screws using a T27 Torx driver until the screw heads are flush with the surface of the mounting plate.

Figure 16: The Charger Mounting Plate



10. Install the Single-Charger Back Bracket

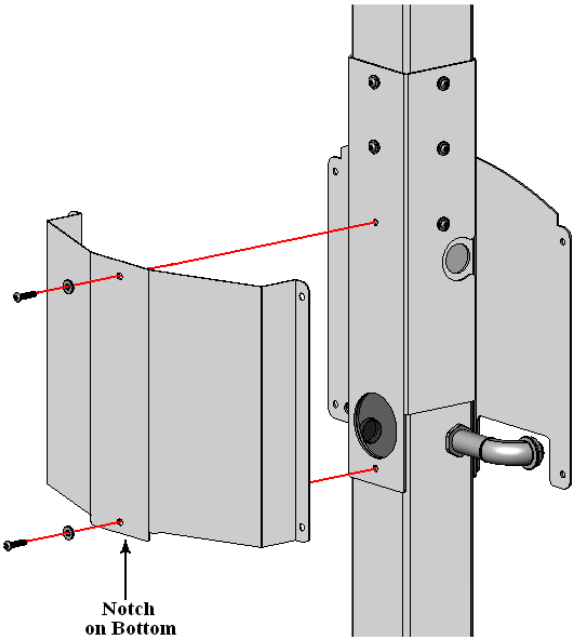
A bracket with threaded inserts is included with the pedestal kit to make the installation more rigid and to provide threaded inserts for mounting the charger. *Note that this bracket is **not used** for dual-charger installations.*

- The top edge of the bracket is flush along its length, while the bottom edge of the bracket has a metal tab in the middle to accommodate a screw hole.
- Hold the bracket against the back side of the pedestal post and align the two screw holes along the centerline of the bracket with the corresponding holes in the Post Splices and the threaded inserts on the back of the pedestal post.
- Place a 1/4" Neoprene-bonded sealing washer around the shaft of two (2) 1/4-20 x 1" Torx button-head screws. The metal portion of the washer should face the head of the screw while the neoprene should face the tip of the screw.

➔ **Note that the neoprene washer must be used to maintain a watertight seal.**

- Secure the bracket to the pedestal with the two (2) 1/4-20 x 1" Torx button-head screws (with washers) using a T27 Torx driver.

Figure 17: The Single-Charger Back Bracket



11. Mounting a Single-Charger to the Pedestal

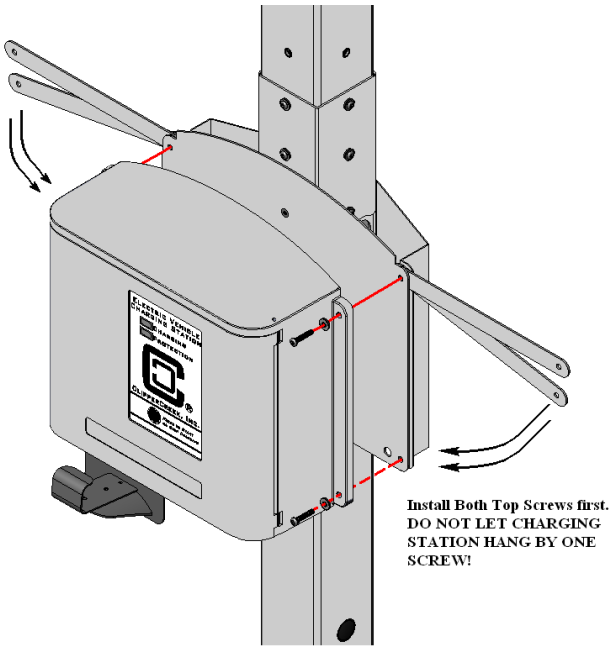
With the mounting plate and back bracket in place, the pedestal is now ready for a single-charger to be mounted. For a *dual-charger* installation, proceed to Step 12.

- Four spacer plates (two per side) and four (4) 1/4-20 x **1-1/4"** Torx button-head screws (with washers) will be required along with a T27 Torx driver.
- Place 1/4" Neoprene-bonded sealing washers around

the shaft of four (4) 1/4-20 x **1-1/4"** Torx button-head screws. The metal portion of the washer should face the head of the screw while the neoprene should face the tip of the screw.

- Align the four screw holes on the side flanges of the charger with the corresponding screw holes in the mounting plate and the threaded inserts on the back bracket. **A second installer must fully support the weight of the charging station and keep it supported until the charging station is firmly fixed in place. DO NOT ALLOW THE CHARGING STATION TO HANG BY ONE SCREW!**
- The four screws used in the following steps should be fairly snug but not fully tightened until the charging station is set in place.
- Align the top holes of the first two spacer plates as shown in Figure 18, then secure the components with one screw at the top hole.
- Gently allow spacer plates to hang down. Do not place the bottom screw yet.
- Repeat the above for the top screw on the opposite side.
- Fasten both bottom screws into place.
- Fully tighten all four screws from the steps above to firmly mount the charging station in place.

Figure 18: Mounting a Single-Charger

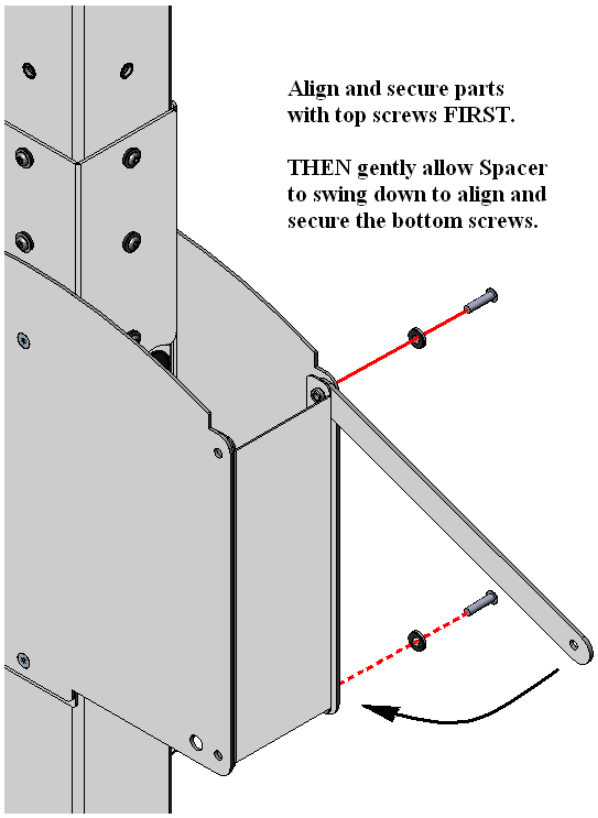


12. Mounting Two Chargers to the Pedestal

For an installation with two chargers affixed to the same post, the Dual-Mount Kit provides two side brackets to be used in place of the single back bracket.

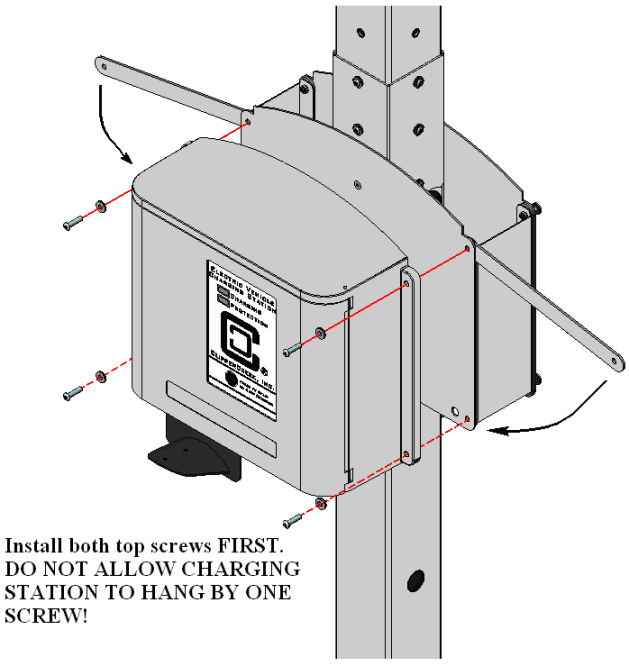
- Four spacer plates (one per each of the four corners) and eight (8) 1/4-20 x **1-1/4"** Torx button-head screws (with washers) will be required along with a T27 Torx driver.
- Place a 1/4" Neoprene-bonded sealing washer around the shaft of eight (8) 1/4-20 x **1-1/4"** Torx button-head screws. The metal portion of the washer should face the head of the screw while the neoprene should face the tip of the screw.
- For ease of assembly, temporarily secure one bracket and one spacer plate in place on each side of the same face. Refer to Figure 19.

Figure 19: Temporarily Hold Dual-Mounting Brackets and Spacers in Place



- On the opposite face, align the four screw holes on the side flanges of the charger with the corresponding screw holes in the mounting plate and the threaded inserts on the back bracket. **The second installer must fully support the weight of the charging station and keep it supported until the charging station is firmly fixed in place. DO NOT ALLOW THE CHARGING STATION TO HANG BY ONE SCREW!**
- The eight screws used in the following steps should be fairly snug but not fully tightened until both charging stations are set in place.
- Align the top hole of one spacer plate between the mounting plate and side bracket as shown in Figure 20, then secure the components with one screw at the top hole.

Figure 20: Mounting the First of Two Chargers with Dual-Mount Kit



- Gently allow spacer plate to hang down. Do not place the bottom screw yet.
- Repeat the above for the top screw on the opposite side of the first charging station.
- Fasten both bottom screws into place.
- To install the second charging station remove screws temporarily inserted and repeat the previous steps on the opposite side, as shown in Figure 21.
- Fully tighten all eight screws from the steps above to securely mount both charging stations in place.

Figure 21: Mounting the Second of Two Chargers with Dual-Mount Kit

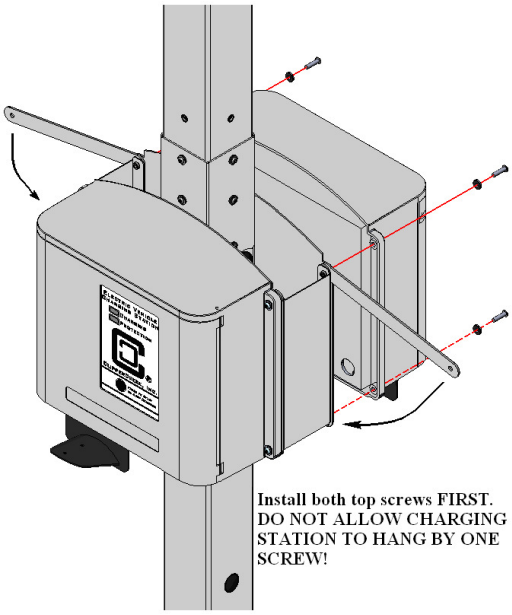
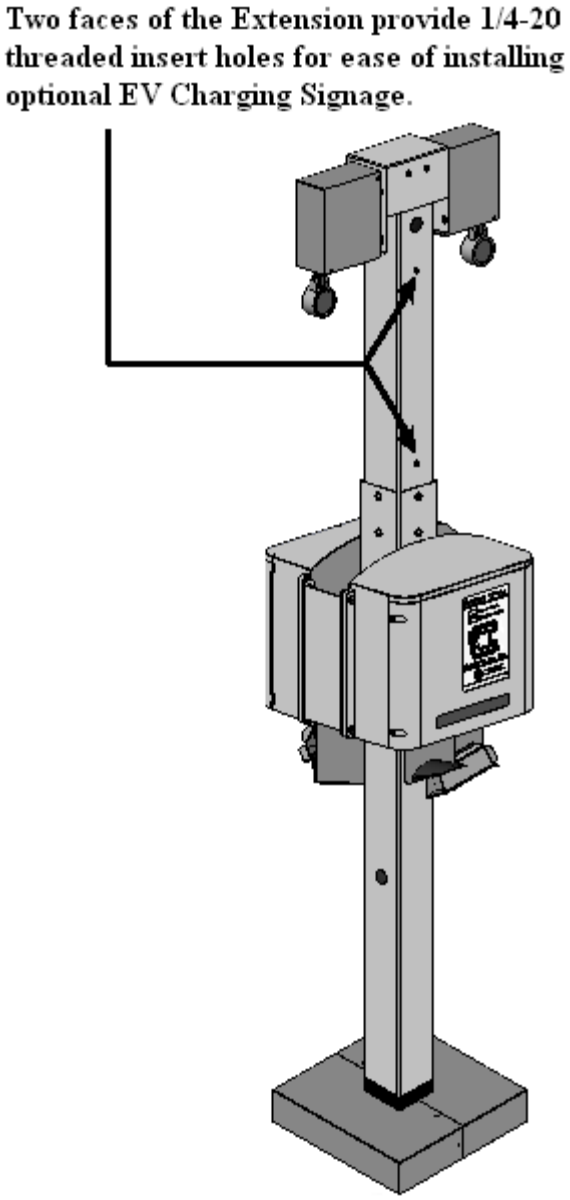


Figure 22: Completed Dual-Mount Pedestal Extension Kit

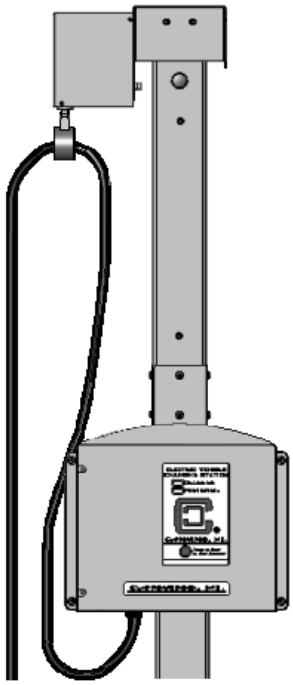


13. Attach the Hose Clamp

The cable management system requires that a hose clamp be attached to the EVSE charge cable and then to the Cable Retractor Box.

- Two hose clamp sizes are provided. The CS-40 and lower amperage models use the hose clamp with two holes (Hose Clamp A). The CS-50 and higher amperage models use the hose clamp with one hole (Hose Clamp B). Refer to Figure 24.
- The hose clamp should be attached to the cable at 4½ feet from the charging station. This distance provides the correct cable management by keeping the cable off the ground without any sags or loops between the hose clamp and the charging station as shown in Figure 23.

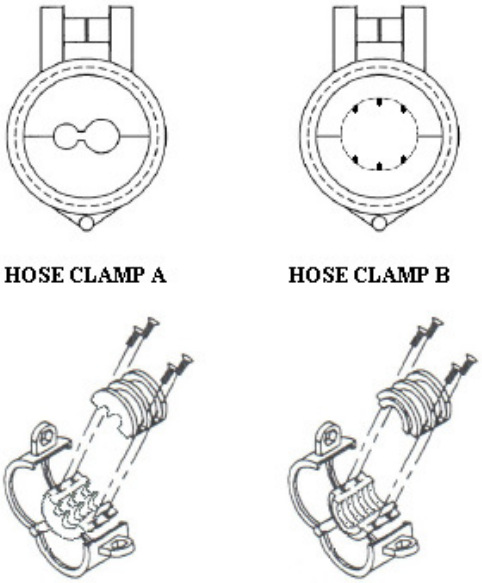
Figure 23: Positioning of the Hose Clamp



For correct cable management, there should be no loops and very little sag between the Charging Station and the Retractor Hose Clamp as shown.

- Secure the hose clamp to the EVSE charge cable by using the four (4) 5/8" Phillips screws with a #2 Phillips screwdriver. Refer to Figure 24.

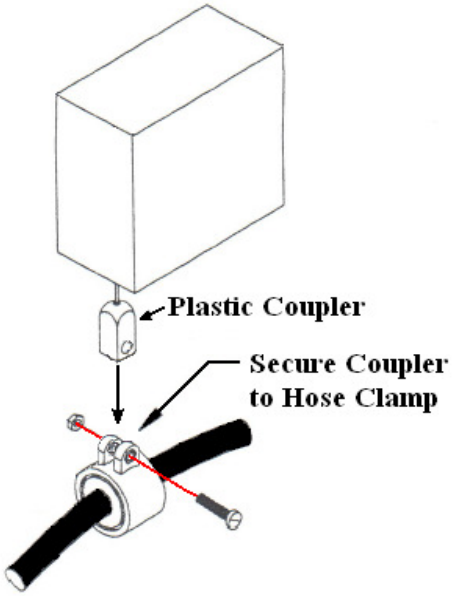
Figure 24: Hose Clamps



CS-40 and lower amperage charging stations require Hose Clamp A.
CS-50 and higher amperage charging stations require Hose Clamp B.

- The hose clamps should not be moved once they are attached to the cable. Do not try to pull or force the hose clamps into another position. If repositioning is required, remove the hose clamp completely and repeat previous steps.
- To connect the hose clamp to the Pedestal Extension, use the plastic coupler which is secured at the end of the Retractor cable. See Figure 25.

Figure 25: Retractor Box with Plastic Coupler



- Fasten the hose clamp tightly to the plastic coupler using the 10-32 x 1¼" long screw and 10-32 nut provided in the hose clamp kit with a 1/4" slotted screwdriver.
- Loop the excess EVSE charge cable around the charging station hanger so that the cord is off the ground.
- Insert the vehicle connector into the holster.

14. Adjust Retractor Box Cable Tension

To obtain proper tension for your specific installation, the Retractor Box cable tension should be adjusted with the EVSE charge cable already attached. The recommended procedure for adjusting tension of the Retractor Box cable is as follows:

- The protective cover must be removed from the Retractor Box. Remove the four Phillips screws using a #2 Phillips screwdriver and pull the cover off.
- **WARNING: Use caution when adjusting tension! The stored energy from the retractor wheel winding must be safely restricted while performing this adjustment.**
- Remove one loop at a time from the retractor reel until there is a slight droop in the retractor cable and it does not fully retract when unsupported.
- Add one loop back in to achieve full retraction while providing the lowest tension possible for end users.

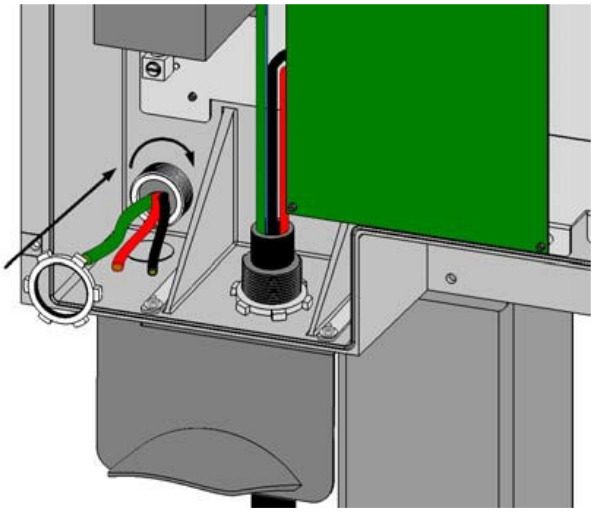
15. Seal the Conduit and Enclosure

It is necessary to ensure a good environmental seal between the conduit piece and the rear wall of the charger.

- To open the charger door, remove the two door screws on the left side of the charger enclosure using a T15 Torx driver. Unlock the safety latch on the bottom of the charger enclosure and swing the door open.
- If it has not already been removed, knock out the plug found at the bottom left corner of the rear wall of the charger enclosure.
- Pull the three conductor wires into the enclosure and insert the threaded end of the 90 degree conduit fitting into the open aperture.
- Thread the remaining conduit locknut onto the conduit fitting and hand-tighten it until it is snug.

➔ **Apply silicone sealant to fill the conduit where it enters the enclosure. Use a sufficient quantity of silicone to ensure that no water or debris may enter the enclosure through the conduit.**

Figure 26: Tighten the Conduit Lock Nut

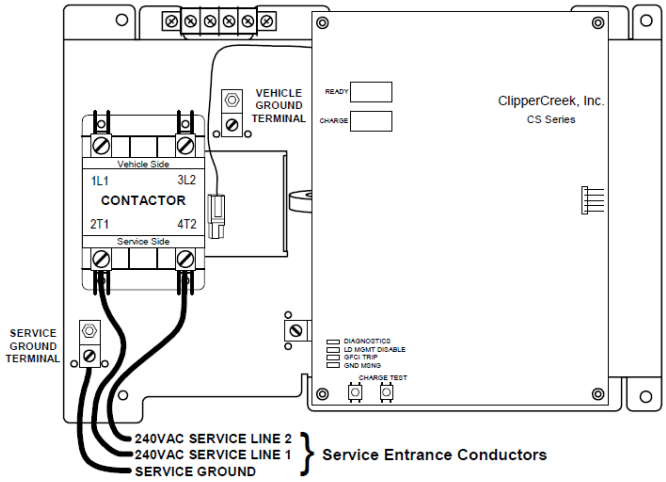


16. Wiring the Conductors to the Charger

The three service conductors must be wired to the charger's internal chassis and contactor.

- Strip the end of the ground conductor and insert the exposed wire into the *Service Ground Terminal Block*.
- Tighten the *Service Ground Terminal* screw using an appropriately sized flathead screwdriver.
- Strip the ends of the two live conductors.
- Insert the exposed wire of the first live conductor into the "2T1" terminal on the bottom of the contactor.
- Insert the exposed wire of the second live conductor into the "4T2" terminal on the bottom of the contactor.
- Tighten the contactor terminal blocks using ¼" flathead screwdriver or 5/32" hex head wrench.

Figure 27: Wire Service Conductors to the Chassis



17. Complete the Installation

- Close the charger door and lock the safety latch.
- Replace the two door screws on the left side of the charger enclosure and tighten them using a T15 Torx driver. ***Do not over tighten.***
- Verify the safety of the installation prior to turning on the circuit breaker.
- Refer to the Charging Station User's Guide for further operational and maintenance information

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Pedestal Extension Kit Installation Guide
Version 1.4, December, 2013