



CLIPPERCREEK, INC.

INNOVATIVE INFRASTRUCTURE FOR
ELECTRIC AND HYBRID VEHICLES

ProMountDuo™ (PMD-10T)
PEDESTAL INSTALLATION GUIDE



WARNING:

**Do not overtighten the #10
self-tapping screws!**

This kit is manufactured with extruded holes. Use limited torque power tools and finish tightening by hand.



PLEASE NOTE

This user's manual 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.

If you have questions about the use of this product, contact your customer service representative. Refer to the Customer Support section located in this guide.

ProMountDuo™ Installation Guide Version 11, November 2017

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Product Number: 7004-0016



TABLE OF CONTENTS

IMPORTANT SAFETY INSTRUCTIONS	6
TOOLS REQUIRED	7
INSTALLATION REQUIREMENTS AND CONFIGURATIONS	7-15
PACKING LIST.....	16-17
OPTIONAL ORDERABLE ITEMS.....	18
INSTALLATION	
INITIAL PEDESTAL INSTALLATION	19-25
HCS EVSE INSTALLATION.....	26-28
FINAL PEDESTAL INSTALLATION	36



IMPORTANT SAFETY INSTRUCTIONS

Before You Begin: Read these instructions completely, including these Important Safety Instructions.

Note to the Installer: Follow Instructions carefully as this unit has self-tapping screws and is not meant to be disassembled. Some illustrations have been changed to grayscale to show detail for easier assembly. Be sure to leave these instructions with the user.

Note to the User: Keep these instructions for further reference.

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

- The EVSE and electrical wiring should be installed by a qualified electrician in accordance with local electrical codes and ordinances.
- Grounding Instructions - The EVSE 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 EVSE. Connections to the EVSE should comply with all local electrical codes and ordinances.
- Call your 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 EVSE installation.



TOOLS REQUIRED FOR ASSEMBLING THE ProMountDuo™ PEDESTAL WITH CLIPPERCREEK HCS

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

- Ratcheting Low-Profile Driver with T25 and T30 Torx bits (there are some tight spaces). IF USING HIGH POWER TOOLS ON THE TORX SCREWS, USE WITH CARE, ON A LOW TORQUE SETTING, AS THEY MAY STRIP AND/OR DENT THE SURFACES OF THE PEDESTAL.
- 3/16" Hex Wrench (Allen key)
- Socket Wrench (appropriately sized for the customer-supplied Anchor Nuts)
- Installers Preferred tools for flexible conduit trimming
- Installers Preferred tools for knockout removal
- Level
- Tape Measure
- Base Cardboard Template (included in the ProMountDuo™ packaging; this template can be found and punched out from the Cap and Base cardboard packaging)

- OPTIONAL: ClipperCreek CP-50 EVSE Tester (ClipperCreek part number 0500-03-000)

ProMountDuo™ PEDESTAL INSTALLATION GUIDE: CLIPPERCREEK HCS

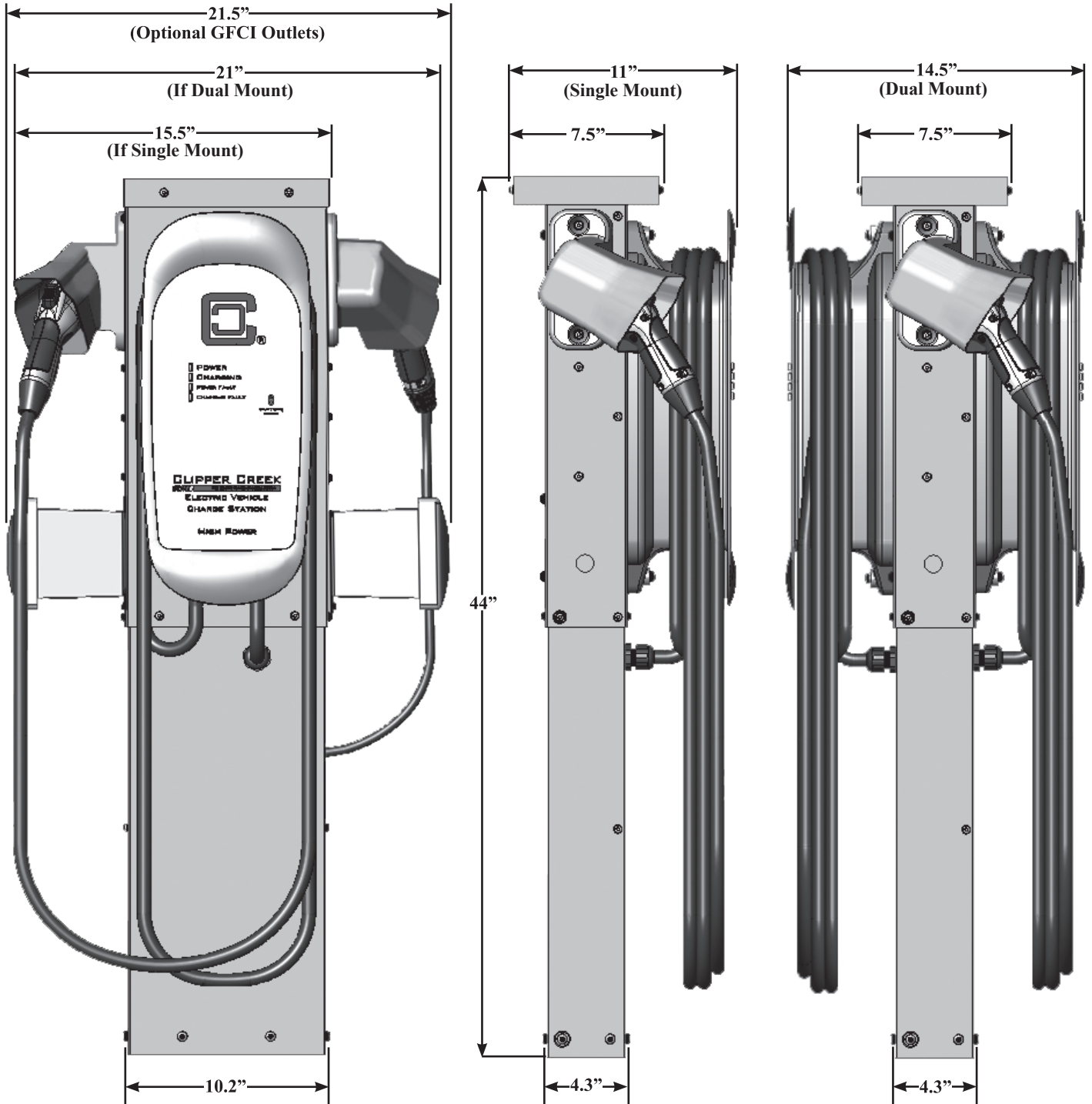
CONFIGURATION A: Single ClipperCreek HCS EVSE (dimensions shown in **Figure 1**)

CONFIGURATION B: Dual ClipperCreek HCS EVSE (dimensions shown in **Figure 1**)



HCS EVSE SINGLE AND DUAL MOUNT CONFIGURATION DIMENSIONS

Figure 1





INSTALLATION REQUIREMENTS AND CONFIGURATIONS

Refer to the EVSE documentation to determine the appropriate circuit breaker current capacity. All conductors must be appropriately sized for the EVSE current capacity, in accordance with local and national electrical codes.

CONFIGURATION A:

Required Equipment for a Single-Mount Pedestal with one ClipperCreek HCS EVSE (One EVSE per Pedestal):

- One (1) ClipperCreek ProMountDuo™ Kit, ClipperCreek part number 0300-00-025.
- One (1) ClipperCreek HCS EVSE, part number is determined by amperage and options selected.
- One (1) dedicated 208 or 240V AC branch circuit.
- One (1) circuit breaker appropriately sized for the EVSE charging capacity.
- Two (2) Live Line conductors that are appropriately sized based on the EVSE power requirements (5 feet of length is adequate).
- One (1) Ground Line conductor with enough length to comfortably pull all the way through and above the top of the pedestal (5 feet is adequate).
- Conduit sized to fit all Live Line and Ground Line conductors.
- Four (4) Anchor Bolts with Nuts and Washers (additional washers may be required for leveling)

CONFIGURATION A



Single ClipperCreek HCS EVSE

CONFIGURATION B:

Required Equipment for a Dual-Mount Pedestal with two ClipperCreek HCS EVSE (Two EVSE per Pedestal):

- One (1) ClipperCreek ProMountDuo™ Kit, ClipperCreek part number 0300-00-025.
- Two (2) ClipperCreek HCS EVSE, part numbers are determined by amperage and options selected.
- Two (2) dedicated 208 or 240V AC branch circuits.
- Two (2) circuit breakers, appropriately sized with respect to the charging capacity of each EVSE.
- Two pairs (2x2) Live Line conductors (one pair for each EVSE) that are appropriately sized based on the EVSE power requirements (5 feet of length is adequate).
- Two (2) Ground Line conductors (one for each EVSE) or a single bonded Ground Line with enough length to comfortably pull all the way through and above the top of the pedestal (5 feet is adequate).
- Conduit sized to fit all Live Line and Ground Line conductors.
- Four (4) Anchor Bolts with Nuts and Washers (additional washers may be required for leveling)

CONFIGURATION B



Dual ClipperCreek HCS EVSE



PACKING LIST

0300-00-025 ProMountDuo™ Pedestal Kit

<u>ITEM REFERENCE</u>	<u>PART NUMBER</u>	<u>QTY</u>	<u>DESCRIPTION</u>
(A)	1003-0046	1	Pedestal Metalwork, Base
(B)	1003-0047	2	Pedestal Metalwork, Bottom Panel
(C)	1003-0048	2	Pedestal Metalwork, Top Panel (RevF)
(D)	1003-0049	1	Pedestal Metalwork, Cap
(E)	4000-0023	34	Machine Screw, Self-Tapping, SST Black, Pan Head, #10-32 Size ½" length, T25 Torx
(F)	4000-0024	4	Machine Screw, SST Plated Black Oxide, Pan Head, ¼-20 Size, 2" Length, T30 Torx
(G)	4000-0025	12	Machine Screw, SST Plated Black Oxide, Pan Head, ¼-20 Size, ¾" Length, T30 Torx
(H)	4002-0010	16	Washer, SST Black, ¼" ID, ½" OD
(I)	4002-0011	34	Washer, SST Black, #10 ID, 7/16" OD
(J)	4300-0012	2	Pre-cut 4¾" Conduit, Flexible, Liquid Tight, ¼" Trade Size, Black
(K)	4015-0002	2	Plug, 1.109" Push-in, Black (installed)
(L)	4015-0005	2	Plug, 0.50" Push-in, Black (installed)
(M)	4015-0006	2	Bushing, 1.09" Push-in, Black
(N)	4015-0007	2	Bushing, 0.50" Push-in, Black
(O)	4015-0008	4	Tapered Rubber Plug, 3/16", Black

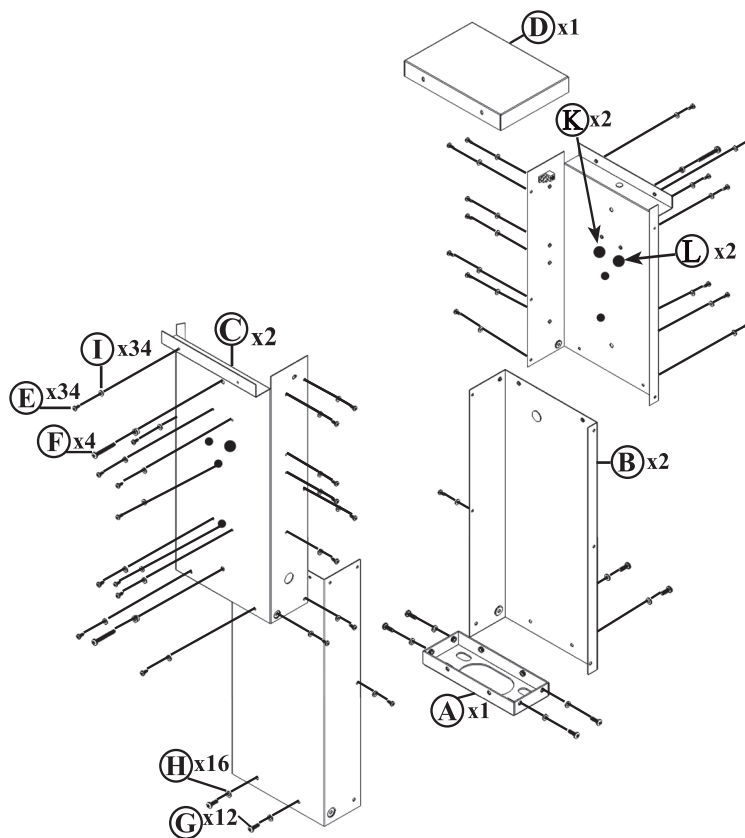
NOTE: The appropriate Conduit fittings and Holsters will be included with your EVSE. The ground lugs will come pre-installed on the Pedestal Top Panels. Item Reference Letters are referred to throughout this Installation Guide.



HARDWARE

	Front	Side
E x 34		
F x 4		
G x 12		
H x 16		
I x 34		
J x 2		
K x 2		
L x 2		
M x 2		 (Required for TESLA® EVSE only)
N x 2		 (Optional: for TESLA® EVSE only)
O x 4		 (Required For TESLA® EVSE only)

Figure 4



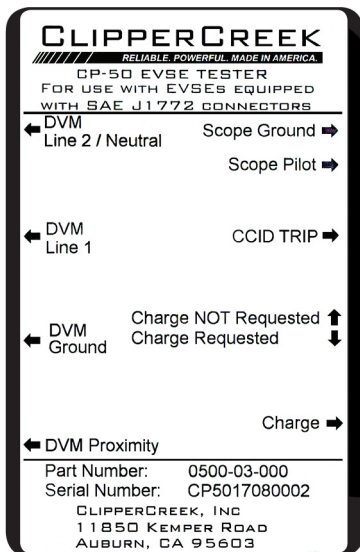
Not shown on exploded view



OPTIONAL ORDERABLE ITEMS

EVSE Tester (CP-50 0500-03-000)

Option B



CP-50 EVSE Tester from ClipperCreek is the perfect tool for installers to test the EVSE installation if there is not a vehicle present.

- Test your EVSE install without having a vehicle present
- Simulate electric vehicle charge request
- Simulate a ground fault
- Compatible with all SAE-J1772™ EVSE



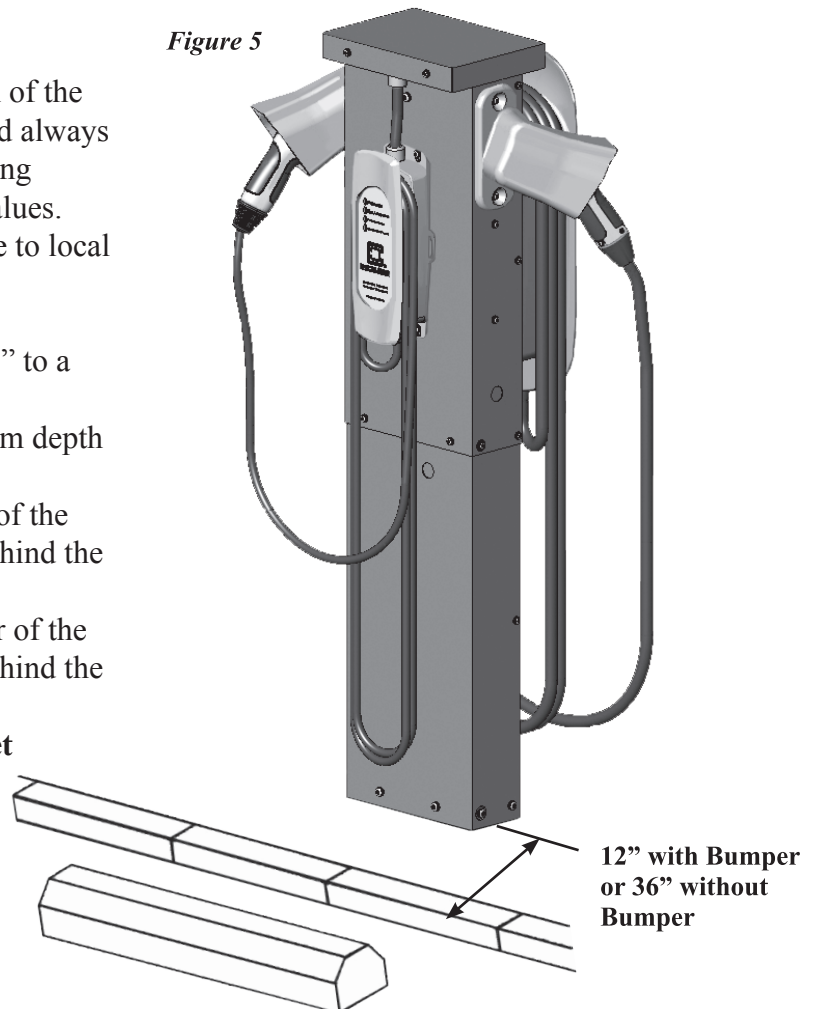
INITIAL PEDESTAL INSTALLATION

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.
- WARNING: Pull wires an extra 5 feet from conduit in order to facilitate installation.**

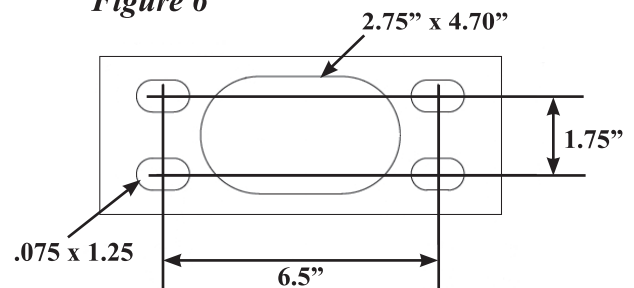
Figure 5



2. ANCHOR BOLT PLACEMENT

- A cardboard base template is provided within the ProMountDuo™ internal packaging. This template can be punched out from either the Base or the Cap cardboard boxes.
- 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 for anchor bolts to be centered in an approximately 6.5" x 1.75" rectangular pattern as shown in **Figure 6**.
- 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. Either $\frac{3}{8}$ ", $\frac{1}{2}$ ", or $\frac{5}{8}$ " anchor bolts can be used. Always check against local building codes as they may vary.

Figure 6





INITIAL PEDESTAL INSTALLATION (continued)

3. MOUNT THE PEDESTAL BASE

Once the concrete pad with anchor bolts has been prepared and the three service conductors have been pulled through the underground conduit, the Pedestal Base (A) may be placed.

- a. Feed the three service conductors up through the inside of the large center hole in the Pedestal Base (A). The conductors must be of sufficient length to pass beyond the top of the pedestal so that final connections can be worked with comfortably at a later step.
- b. Leveling adjustments must be made at this time. Washers (not included) can be used under the Base for leveling and/or to prevent water accumulation.
- c. Align the four Pedestal Base obround holes with the four anchor bolts and ease into place.
- d. Secure the Pedestal Base to the concrete anchor bolts using appropriately sized nuts and washers (not included) as shown in **Figure 7**.
- e. **Tighten the Anchor Bolts as much as possible.** See **Figure 8**.

Figure 7

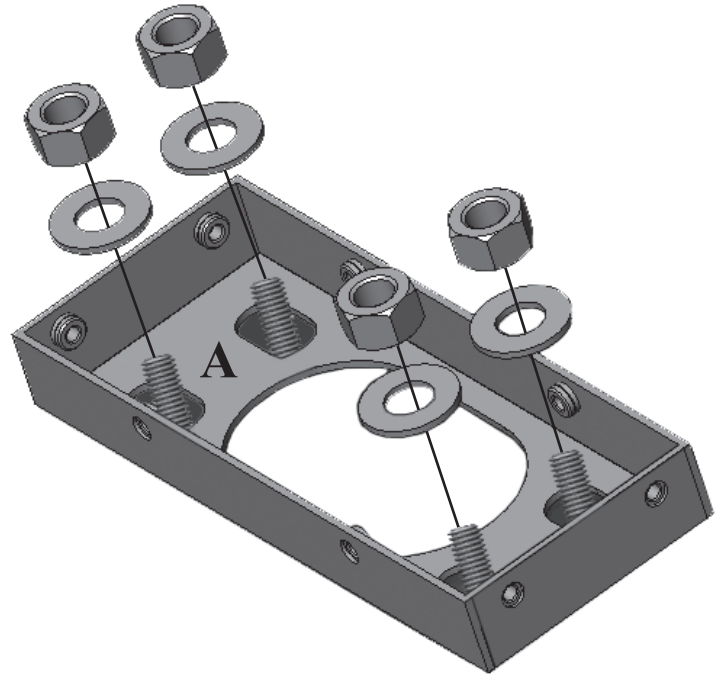
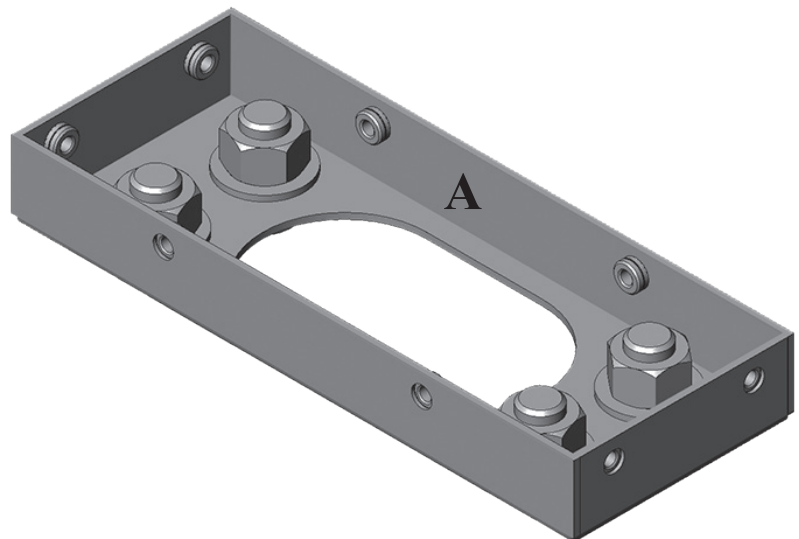


Figure 8





INITIAL PEDESTAL INSTALLATION (continued)

4. INSTALL THE BOTTOM PANELS

- Place a #10 washer (**I**) around the shaft of each of the thirty-four (34) #10 Torx T25 screws (**E**).
- Place a ¼" washer (**H**) around the shaft of each of twelve (12) ¼-20, ¾" long Torx T30 screws (**G**), as well as the four (4) ¼-20, 2" long Torx T30 screws (**F**).
- Set aside the four (4) longer 2" ¼-20 screw and washer sets (**F**) & (**H**). These will be needed later.
- Align the screw holes on the front of the first Bottom Panel (**B**) with the corresponding screw holes on the long edge of the Pedestal Base (**A**), making sure that the knockout is on the top side.
- Secure only the front of the first Bottom Panel to the Base with two (2) of the ¾" long ¼-20 screw and washer sets (**G**) & (**H**) using a T30 Torx driver as shown in **Figure 9**.
- Check level carefully along the top edge of the first Bottom Panel before installing the second Bottom Panel. Reseat Pedestal Base as needed, making sure the **anchor bolts are tightened as much as possible**.
- To install the second Bottom Panel (**B**), gently nest the narrow edges of each Bottom Panel between the Pedestal Base and the opposing Panel.
- Secure both Bottom Panels to the Pedestal Base with six (6) additional ¾" long ¼-20 Torx T30 screw and washer sets (**G**) & (**H**) as shown in **Figure 10**.
- Secure the middle of both Bottom Panels with two (2) of the #10 Torx T25 screw and washer sets (**E**) & (**I**) as shown in **Figure 11**.
- Tighten securely, but do not use such force that would cause the Panel surface to indent.
- Note: The Bottom Panels are powder coated inside AND outside for extra protection near the concrete pad.**

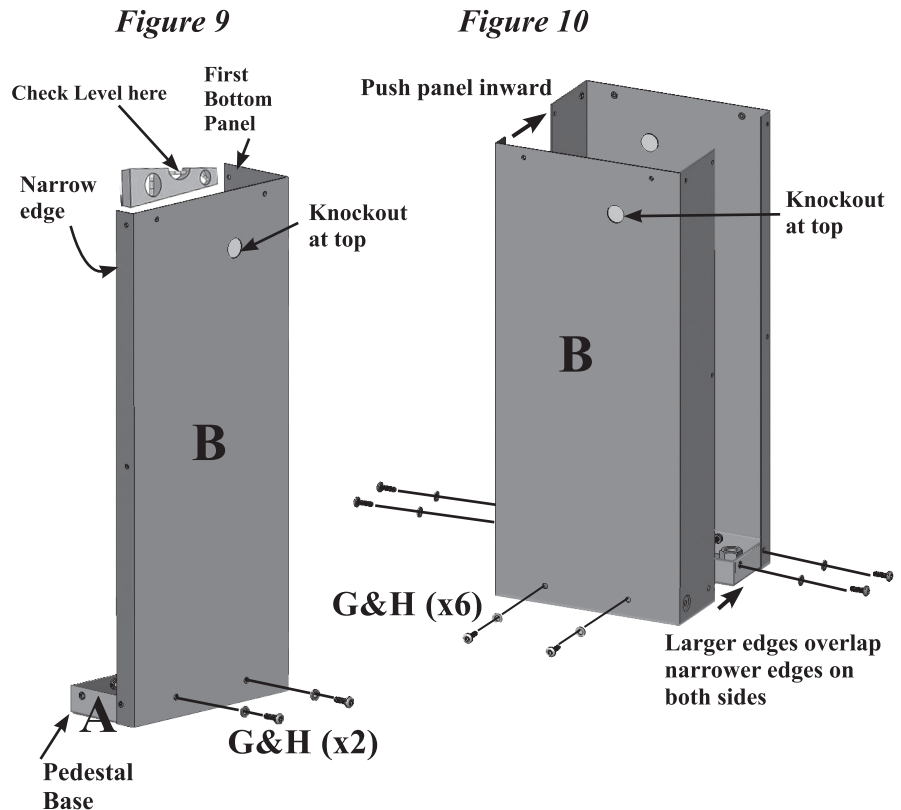
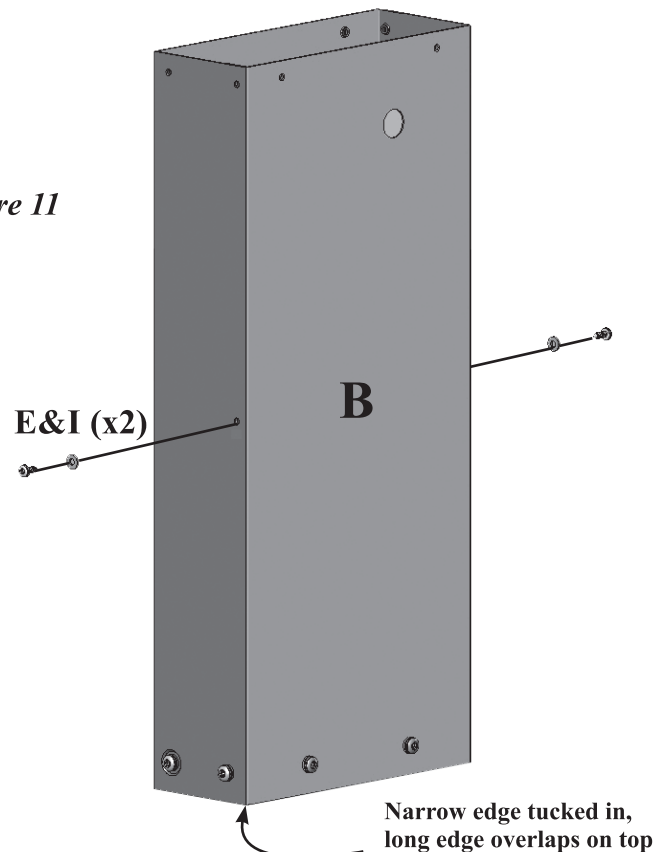


Figure 11



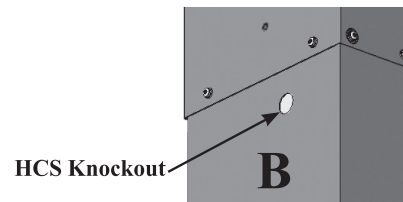


INITIAL PEDESTAL INSTALLATION (continued)

5. REMOVE KNOCKOUTS

CAUTION: BE CAREFUL TO CHOOSE THE CORRECT KNOCKOUT POSITION FOR THE PARTICULAR CONFIGURATION PER FIGURE 12.

Figure 12

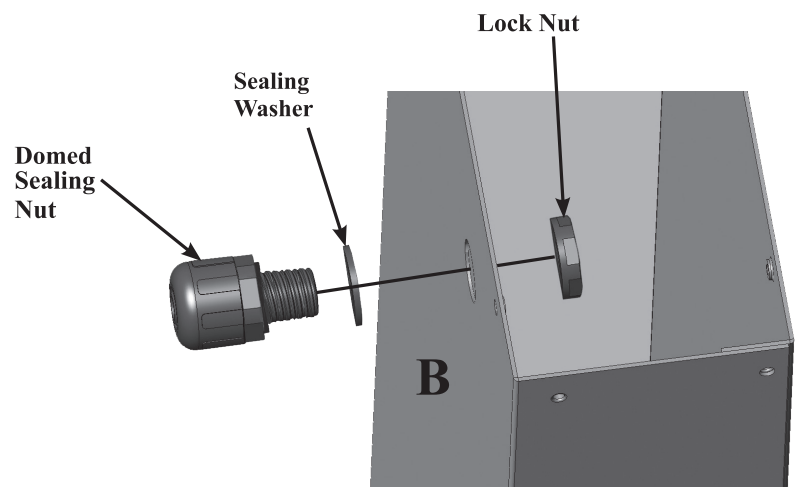


WARNING: If the wrong knockout is accidentally removed, the open holes must be plugged with plastic caps (not included).

b. HCS-Series **ONLY**:

- Remove the knockout on the side to which the HCS EVSE is to be mounted (or both sides if Dual Mounting).
- The HCS EVSE will come with an appropriately sized Conduit fitting on the end of the flexible conduit.
- Remove this fitting from the end of the flexible Conduit and install it onto the Bottom Panel hole(s) at this time, making sure the sealing washer is on the outside of the pedestal end of the conduit as shown in **Figure 13**.

Figure 13 - HCS Series only





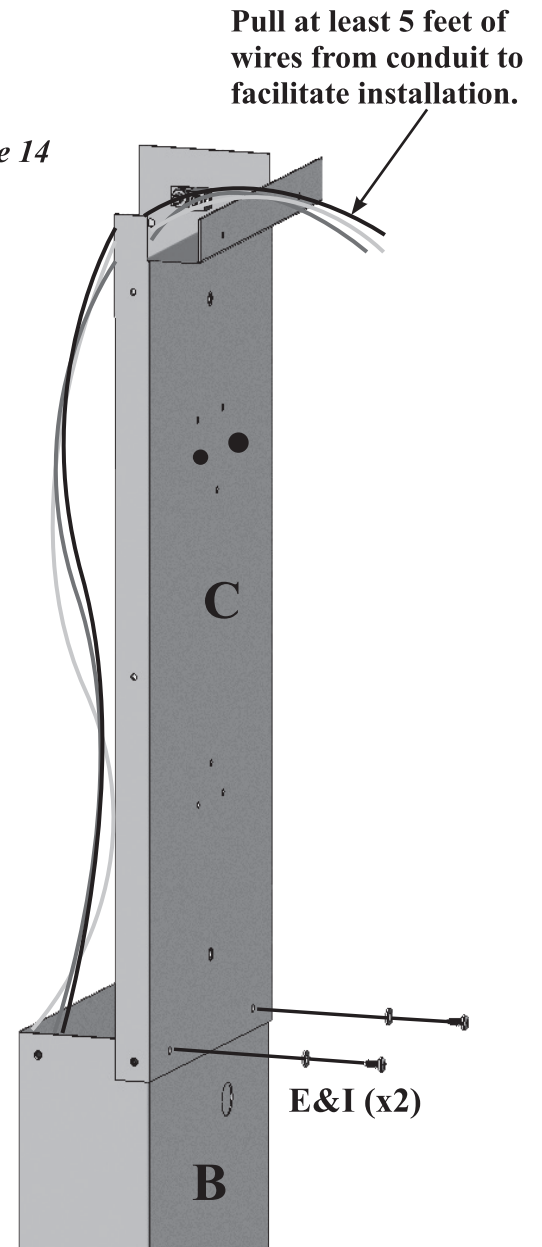
INITIAL PEDESTAL INSTALLATION (continued)

6. INSTALL THE TOP PANELS

- a. Align the screw holes of the first Top Panel (C) with the corresponding screw holes on the Bottom Panel (B). The Top Panel should be overlapping the Bottom Panel on all sides.
- b. Secure only the long front edge of the first Top Panel to the Bottom Panel with two (2) of the #10 screw and washer sets (E) & (I) using a T25 Torx driver as shown in **Figure 14**. Tighten securely, but do not use such force that would cause the Panel surface to indent.

C. WARNING: Pull the wires over the top of the first Top Panel so that they will be easily accessible in later steps.

Figure 14





INITIAL PEDESTAL INSTALLATION (continued)

- d. To install the second Top Panel (C), gently nest the narrow edge of the second Top Panel over the top of the Bottom Panel (B) and tuck inside the opposing Top Panel.
- e. Finish securing the lower edge of both Top Panels to the Bottom Panels using six (6) #10 screw and washer sets (E) & (I) as before. Tighten securely, but do not use such force that would cause the Panel surface to indent. See **Figure 15**.
- f. Secure the middle and top of both Top Panels with four (4) of the #10 screw and washer sets (E) & (I) to increase stability before the next step. Tighten securely, but do not use such force that would cause the Panel surface to indent. See **Figure 16**.

Figure 15

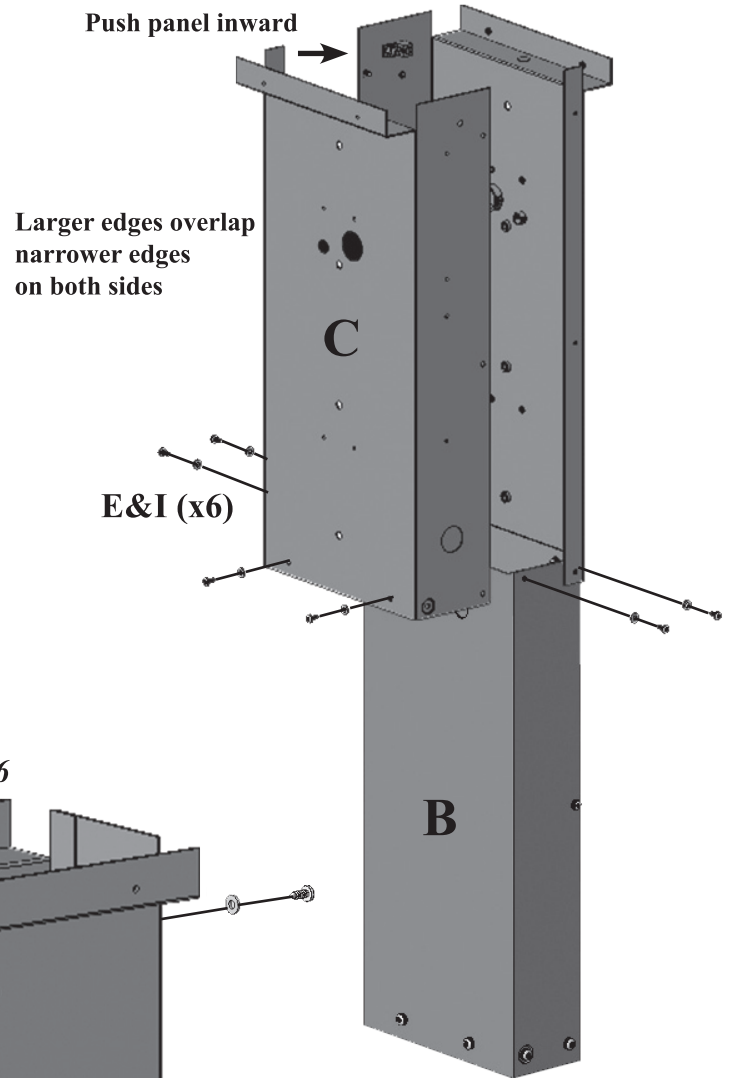
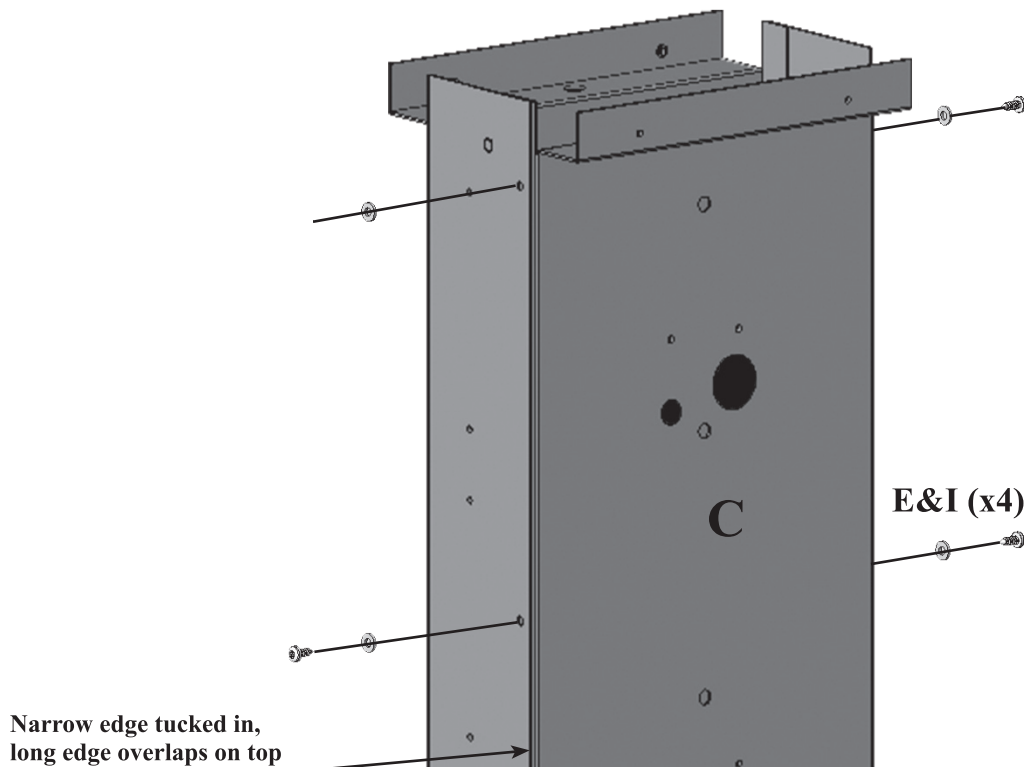


Figure 16





INITIAL PEDESTAL INSTALLATION (continued)

7. INSTALL THE HOLSTER(S)

Figure 17

- b. If installing a ClipperCreek EVSE, a Holster for the SAE-J1772™ Vehicle Connector will accompany each new EVSE. Remove the Holster(s) from the EVSE packaging. **WARNING: Discard the two wood screws used for wall mounting the Holster (these screws accompany the holster packaging). DO NOT USE WOOD SCREWS ON THIS PEDESTAL INSTALLATION.**

- c. Align the screw holes on the Holster with the corresponding screw holes on the appropriate side of the Top Panel (C). Make sure the opening of the Holster is facing the same side and directly to the left of the corresponding EVSE position. There are two Holster positions to choose from for customer convenience. The top position is the standard mounting location.
- d. Secure the Holster to the Top Panel with two (2) of the #10 screw and washers sets (E) & (I) and tighten securely as shown in **Figure 17**.
- e. Repeat on opposite side of pedestal for a Dual Mount system.
- f. Plug any unused holster holes with #10 screw and washer sets (E) & (I) as shown. **Note: Figure 18 is Single Mount; there will be another holster on the opposite side if installing a Dual Mount system.**

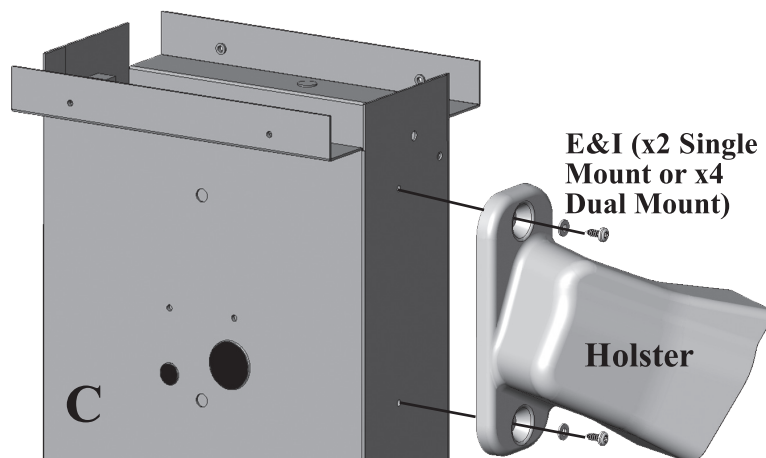
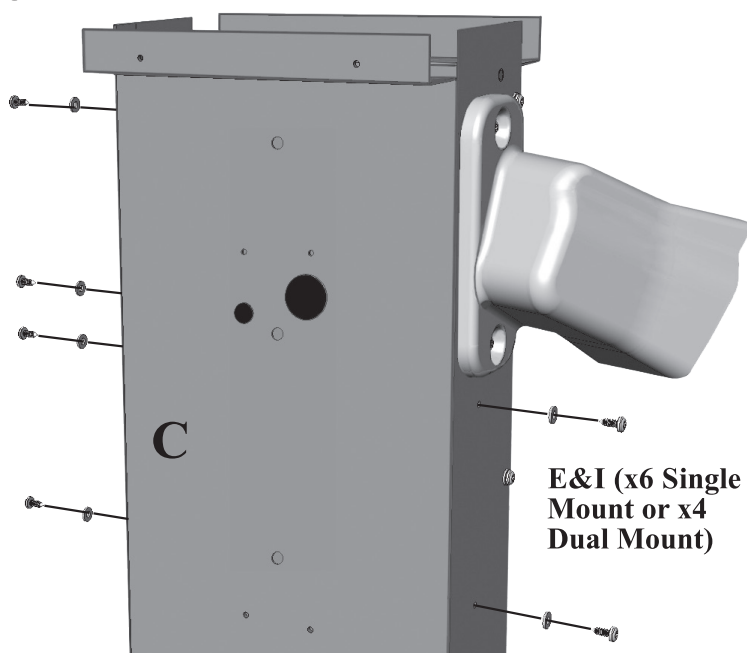


Figure 18



THE INITIAL PEDESTAL INSTALLATION IS NOW COMPLETE.



HCS EVSE INSTALLATION

1. PREPARE THE HARDWARE

- a. Retrieve two (2) 1/4-20 x 2" Torx T30 screw and washer sets (F) & (H) that were previously set aside.
- b. Locate the correct HCS plastic angle washers. These washers are included with the HCS EVSE and do not accompany this kit. There are two different styles of HCS plastic angle washers. The correct style to use with the Pedestal is the Perpendicular Screw Mount as shown in **Figure 19**.
WARNING: Discard the two wood screws used for wall mounting the HCS EVSE (these screws accompany the HCS packaging). DO NOT USE WOOD SCREWS ON THIS PEDESTAL INSTALLATION.
- c. Place an HCS Perpendicular Screw Mount plastic angle washer around the shaft of two (2) of the 1/4-20 x 2" Torx T30 screw and washer sets (F) & (H), just below the metal washers. Keep these nearby for use on upcoming steps.

2. CUT THE FLEXIBLE CONDUIT TO LENGTH

- a. Remove the packaging from the HCS EVSE.
- b. Trim the flexible Conduit to 6" as shown in **Figure 20**. **DO NOT CUT OR DAMAGE THE WIRES OR WIRE INSULATION.**
- c. Leave the EVSE service conductors full length for pulling to the top of the Pedestal.

Figure 19

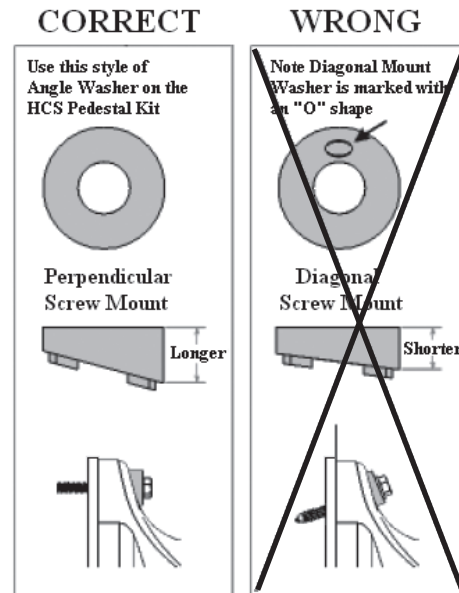
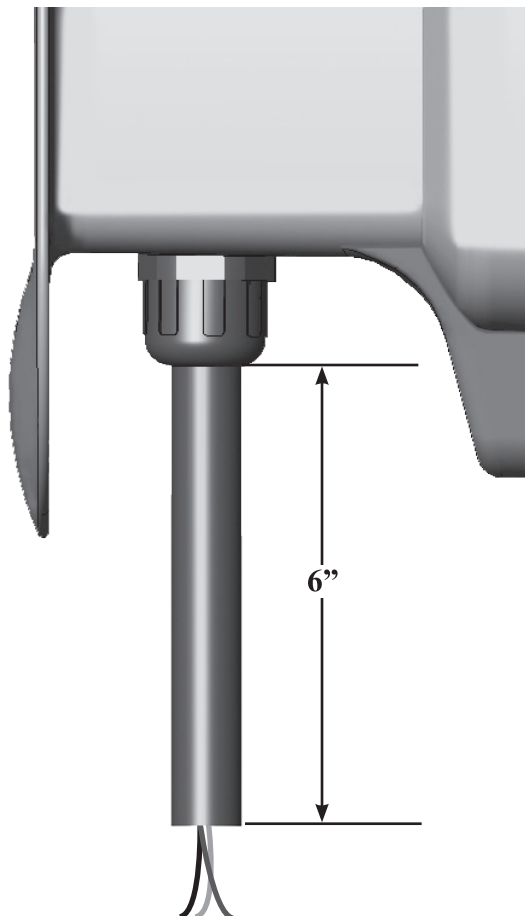


Figure 20





HCS EVSE INSTALLATION (continued)

3. INSTALL THE HCS EVSE

- a. For ease of assembly, unwrap the cable and stow the SAE-J1772™ Vehicle Connector into the Holster as shown. The button on the Connector does not need to be pressed, simply insert until the audible click is heard to lock it into place. See **Figure 21**. Coil the remaining cable on the ground and out of the way.
- b. While supporting the HCS EVSE horizontally, carefully insert the wires through the HCS Conduit fitting on the Bottom Panel (**B**). Insert the wires so that they will tend to run upward inside the pedestal for easier access at a later step.
- c. Tighten the Conduit Fitting around the Conduit.
- d. Tilt the HCS EVSE upward to the upright mounting position. Align the two screw holes on the top and bottom of the HCS EVSE with the corresponding threaded inserts on the Top Panel (**C**) per **Figure 22**.

Figure 21

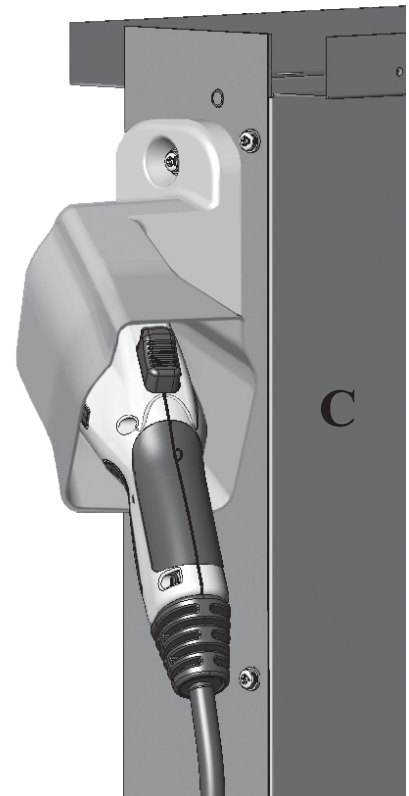
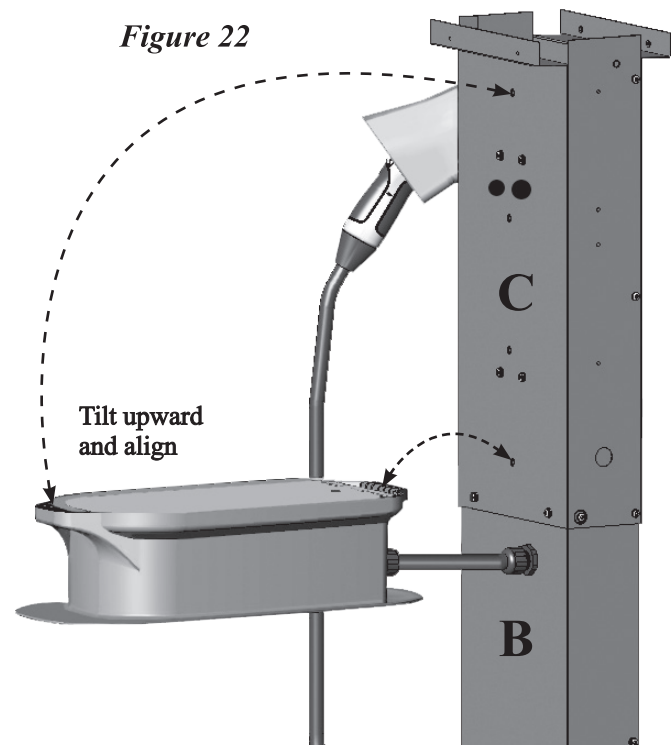


Figure 22





HCS EVSE INSTALLATION (continued)

- e. Use a T30 Torx driver to secure the top of the HCS EVSE using one (1) 1/4-20 x 2" Torx screw and washer set (F) & (H) with the HCS Plastic Angle Washer as shown. Do not over-tighten. Refer to **Figure 23**.

Figure 23

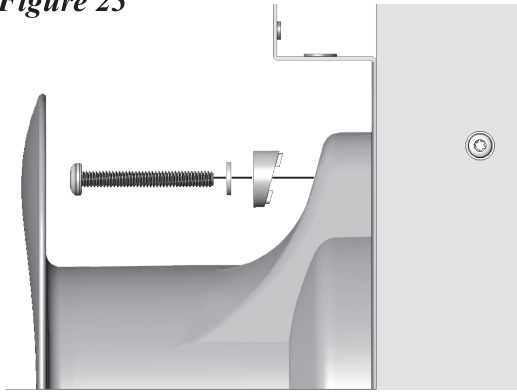
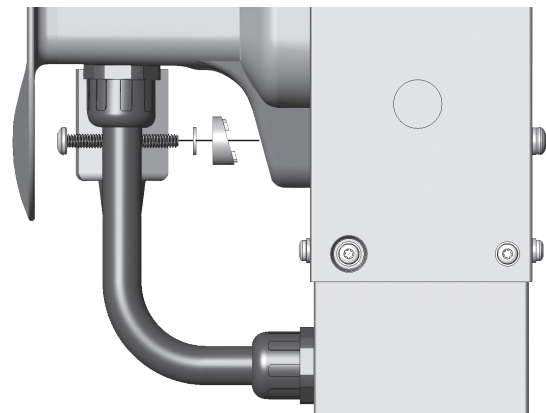


Figure 24



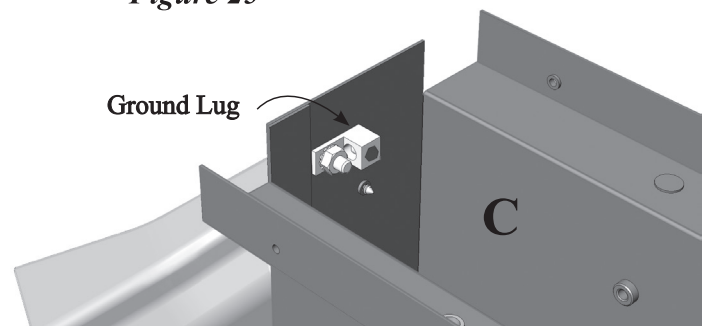
- f. Secure the bottom of the HCS EVSE using one (1) 1/4-20 x 2" Torx screw and washer set (F) & (H) with the HCS Plastic Angle Washer. Refer to **Figure 24**.
 - g. **Recheck and re-tighten the Conduit Fitting around the flexible conduit to ensure a watertight installation.**
 - h. Loosely wrap the vehicle charging cable around the HCS.
- 4. CONNECT THE SERVICE CONDUCTOR WIRING**

- a. The ground conductor and ground lug connections inside the Pedestal Post must be completed at this time. The ground lugs have a 3/16" Hex screw (Allen screw) and are already installed inside the Top Panels (C) as shown in **Figure 25**.

NOTE: The top access hole may be blocked on upcoming steps.

- b. Connect the remaining service wires per the HCS User's Manual.

Figure 25



5. CHECK CONFIGURATIONS

- a. If a Single-Mount HCS Configuration is desired, please proceed to the Final Pedestal Installation section.
- b. If a Dual-Mount HCS Configuration is desired, repeat the HCS EVSE Installation section on the opposite side of the pedestal.

INSTALLATION OF THE HCS EVSE IS NOW COMPLETE. PLEASE REFER TO THE HCS USER MANUAL FOR TROUBLE-SHOOTING AND ADDITIONAL INFORMATION.



FINAL PEDESTAL INSTALLATION

1. FOR SINGLE MOUNT PEDESTAL

- a. If a single mount configuration is desired, plug the remaining open screw holes on the opposite side of the pedestal using the remaining two (2) 1/4-20 x 2" Torx T30 screw and washer sets (F) & (H), the (2) 1/4-20 x 3/4" Torx T30 screw and washer sets (G) & (H) and the four (4) #10 Torx T25 screw and washer sets (E) & (I) as shown in **Figure 45**.
- b. Verify that the black plastic caps (K) & (L) are firmly placed in and seated against the metal.

2. INSTALL THE TOP CAP (D)

- a. Carefully fit the Cap (D) over the Top Panels (C) of the Pedestal. The Top Panels will slide up into the Cap so that they are fully enclosed within the Cap. This is a tight fit. Keep fingers clear of pinch points.
- b. Push the Cap down until it is firmly seated on top of both Top Panels and can no longer move.
- c. Verify that the Cap's four obround screw slots are on the outside of both Top Panels and aligned with the corresponding screw holes.
- d. Secure the Cap to the Top Panels using four (4) #10 Torx T25 screw and washer sets (E) & (I). Do not over-tighten. See **Figure 46**.

3. VERIFY THE EVSE OPERATION

- a. Verify the safety of the installation prior to turning on the circuit breaker.
- b. Refer to the applicable ClipperCreek EVSE User's Guides for further operational and maintenance information.
- c. OPTIONAL: After turning on power supply, use the ClipperCreek CP-50 EVSE Tester to confirm correct operation (applicable to ClipperCreek EVSE only).

Figure 45

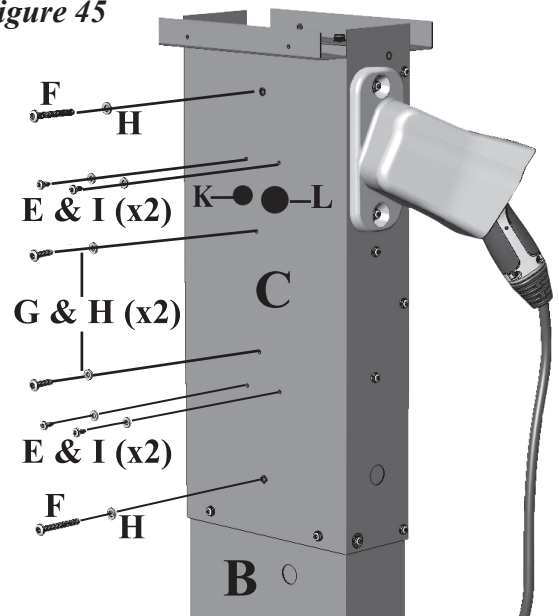


Figure 46

