

Instructions for ClipperCreek CS-100 J1772 cable replacement

This guide contains important instructions you must follow during the installation and maintenance of the ClipperCreek CS-100.

Safety and advisory symbols

	DANGER: This indicates a hazardous situation, which, if not avoided, will result in death or serious injury.
	WARNING: This indicates a situation where failure to follow instructions may be a safety hazard or cause equipment malfunction. Use extreme caution and follow instructions carefully.
	NOTE: This indicates information essential for optimal system operation. Follow instructions carefully.

Safety instructions

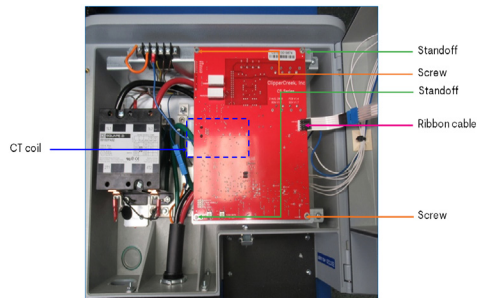
	DANGER: Risk of electric shock. Always de-energize the AC branch circuit before servicing.
	NOTE: Using unapproved attachments or accessories could result in damage or injury.

Tools required

- T15 Torx screwdriver
- Torque driver with a standard bit
- Allen key (M4 and 3/16 in)
- Two wrenches for strain relief gland - adjustable, or 1.65 in (41.9 mm)

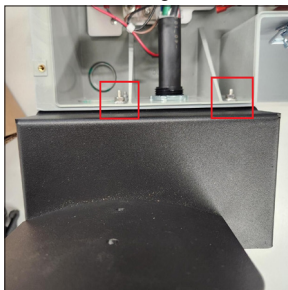
Steps to remove the cable

1. Turn the power off to the CS-100.
2. Remove the two screws on the left with a T15 Torx screwdriver, then unlatch the hidden latch on the enclosure's underside to open the door.
3. Ensure that no indicator LEDs are illuminated on the PCBA.
4. Remove both 6-32 1/2" screws securing the board to the tray and gently pop it off the standoffs. Disconnect the ribbon cable and reposition the board for easier access to the CT coil.



5. Disconnect the blue pilot communication wire from PCBA.
6. Disconnect the black L1 wire from the contactor 2T1 terminal and the white L2 wire from the contactor 4T2 terminal using an M4 Allen key.
7. Disconnect the green (ground) cable wire from the vehicle ground lug using an M4 Allen key.
8. Loosen the gland strain relief with wrenches.

✓ **NOTE:** Uninstall the cable cradle metalwork for wall-mounted CS units for easier access to the strain relief gland.



9. Carefully pull the cable through the strain relief and remove the wires from the enclosure.

Steps to install the cable

1. Ensure the power is turned off and no LEDs are illuminated on the PCBA.
2. Ensure that the branding on the new cable matches the branding on the front overlay of the CS-100.

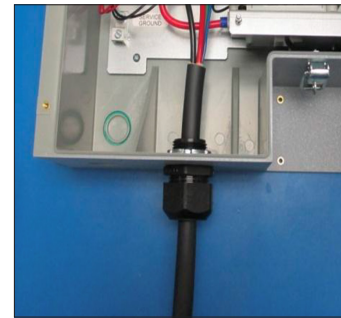


WARNING: Visually inspect the cable for signs of degradation or damage. Do not install this cable if there are any signs of damage.

3. Remove the sealing nut from the gland strain relief and route the cable through the nut before inserting the wires into the strain relief.
4. Route the cable wires through the strain relief gland and into the enclosure. Feed the cable through until you see about 0.5-1" of the cable jacketing.
5. Thread the sealing nut onto the strain relief gland and tighten to a torque of 60 in-lb.



WARNING: Once tightened, the cable should not be able to spin or move by hand.



6. Connect the green ground wire to the frame. **DO NOT** route this wire through the CCID coil. Tighten to a torque of 40 in-lb.
7. Connect the black (L1) wire to the 1L1 contactor terminal and the white (L2) wire to the 3L2 contactor terminal. Tighten the terminals to a torque of 60 in-lb or to the specification on the contactor, if provided.



WARNING: Route the L1 and L2 cable wires through the CCID coil.

8. Connect the blue pilot communication wire to the PCBA.
9. Replace the board onto the standoffs and secure it with the two 6-32 1/2" screws. Reconnect the ribbon cable.
10. Turn on the breaker and verify that the diagnostic LED on the PCBA is blinking slowly and no other indicators are on.



DANGER: The cables will be energized during this self-test. The cable should not be connected to an EV during this time.

11. Perform a self-test by pressing and holding the two buttons next to the diagnostic LED. Verify that the contactor closes as intended while both buttons are held down.
12. Close and secure the front door with the screws and latch.
13. Verify that the charging station functions as intended using either an EV or a tester.

Revision history

REVISION	DATE	DESCRIPTION
140-00506-01	August 2024	Initial release.

