

AIRSTREAM®

419 W. Pike St., Jackson Center, OH 45334

Airstream Atlas E1 & Interstate 24 E1 & 19 E1 Touring Coach Technical Service Bulletin #200 – Airstream and Volta E1 Package Updates

Date: 7/17/2024

TO: Airstream Dealer

PROBLEM:

It has come to our attention that in certain model year **2023-2025** Atlas E1, Interstate 24 E1 & Interstate 19 E1 touring coaches, the Volta System may fail to re-engage in the charging process, which could lead to the battery pack completely discharging.

RANGE OF VEHICLES INVOLVED:

Model year **2023-2025** Atlas E1, Interstate 24 E1 & Interstate 19 E1 touring coaches built between:

March 8, 2022 – July 10, 2024

Serial Number Range: 307182-311984

Note: Because our VINs do not run in a contiguous series, there will be units in the VIN range that are not affected by the technical service bulletin.

WARRANTY REIMBURSEMENT:

A notice of this technical service bulletin has been sent to affected retail owners. A copy of the Owner's Letter is included for your review. They may request that you complete the repair. If so, please follow the warranty reimbursement procedure. If the unit and/or units are in your inventory, or if you are requested to perform the repair for the retail customer, please complete the advised repair and send in a warranty claim referencing this technical service bulletin number for reimbursement. The time allowed for the repair is explained below.

SERVICE ACTION:

Step 1 - Atlas - Dual "Rib" rewire, Firefly software update and Soft Start installation. Use Operation Code TCSBR8934079. 1.75 Hrs.

Step 2 - Interstate 24 and Interstate 19 – Dual "Rib" rewire and Firefly software update. Use Operation Code TCSBR8933079. .75 Hrs.

Step 3 - Interstate 24, Interstate 19 & Atlas Volta firmware updates, upgraded touchscreen interface, fuse replacement and AC detect timer harness installation. Use Operation Code TCSBR8935079. 1.50 Hrs. *Note: The 1.50 labor time should be included only if Volta is not able to be onsite to complete the updates. If Volta does complete their portion of the updates "onsite", then the code should still be entered, and no labor should be requested.*

encl. – Owners Letter, Repair Procedure



Rick March

General Manager of Airstream Customer Service Group

Re: Technical Service Bulletin #200

Airstream & Volta E1 Package Update

Airstream is always seeking to improve and upgrade our products. It has come to our attention through customer feedback that if the Volta System fails to invert power or re-engage in the charging process, in certain cases the battery pack will completely discharge.

Airstream and Volta have been working hand in hand on an update that will prevent this battery issue from occurring. A portion of the work must be completed by Airstream Dealer Service Techs, while other updates may be completed by Volta technicians. Volta upgrades may be performed by an Airstream Dealer Service Tech with permission from Volta. The dealer will be required to contact Volta directly for approval.

Volta's updates include an upgraded touchscreen interface, Volta firmware update, AC detect timer harness, and fuse replacement. Airstream will update Firefly software, rewire the distribution panel, and potentially install an air conditioning soft start.

We are asking affected customers to schedule an appointment with their local Airstream dealer to have their unit serviced. Ideally this work should be scheduled so that Volta and Airstream service techs can complete the work simultaneously.

Safety Precautions:

- **WARNING:** Before working on the Touring Coach, unplug the coach and ensure the Volta system is powered down and the three 30-Amp breakers are in the OFF position.
- **Caution:** The possibility of accidentally tripping the breaker still exists if the touring coach is plugged in with the inverter turned ON. **After wiring the Dual RIB box, the inverter must be turned OFF when plugging the touring coach into a GFCI outlet.**
- **NOTE:** Updating the Firefly firmware will result in a full system cycle and the lights will go off for a short period of time while the system updates. It is advised to have a flashlight to assist during this process.
- **NOTE:** The air conditioner on an Atlas Touring Coach may not function correctly after updating the Firefly firmware if the air conditioner does not have a soft-start installed. A soft-start will need to be installed prior to testing the load shed.

Contact Airstream:

Questions or concerns? Airstream Owner Relations is available from 8:00 am to 6:00 pm EST at support@airstream.com or 877-344-1076 ext. 7401.

Before You Begin:

- Please read this document, in its entirety, before performing any actions.

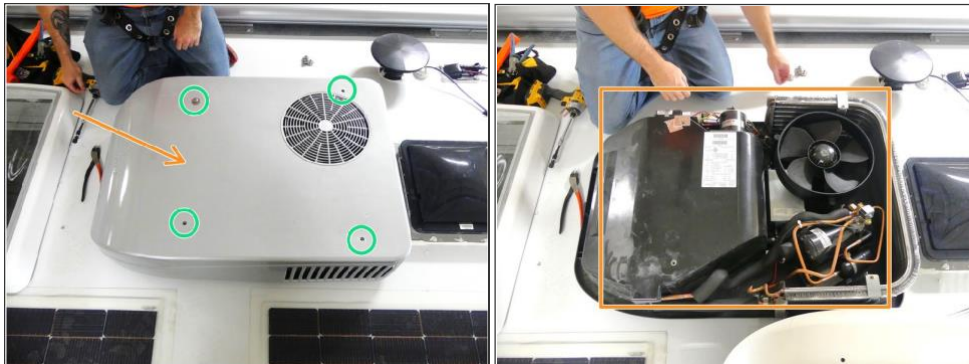
Step 1 - Install Air Conditioner Soft Start (Atlas only, proceed to Step 2 otherwise):

1. Turn power off to the coach by unplugging the shore cord, verifying the inverter is in the off position, and turning off the AC breaker. To turn off the breaker, locate the distribution box (breaker panel) within the cabinets along the curbside wall. Flip the breaker labeled "A/C" to the "OFF" position.

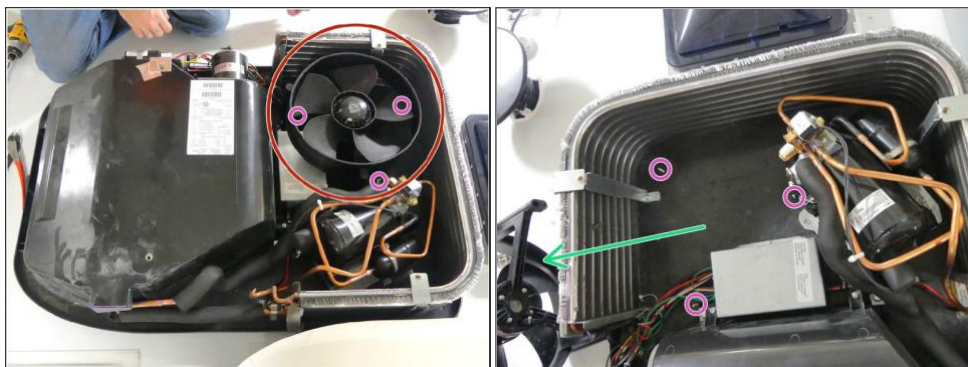


2. Access the air conditioner on the roof and remove the four phillips screws with washers securing the AC shroud. Remove and save the AC shroud and fasteners.

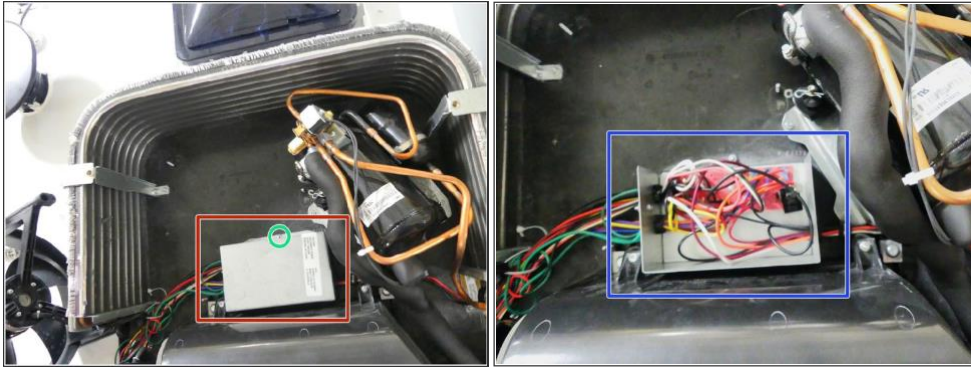
Note: If the AC is mounted on top of a unit, fall protection should be worn when working at a height of 4+ feet.



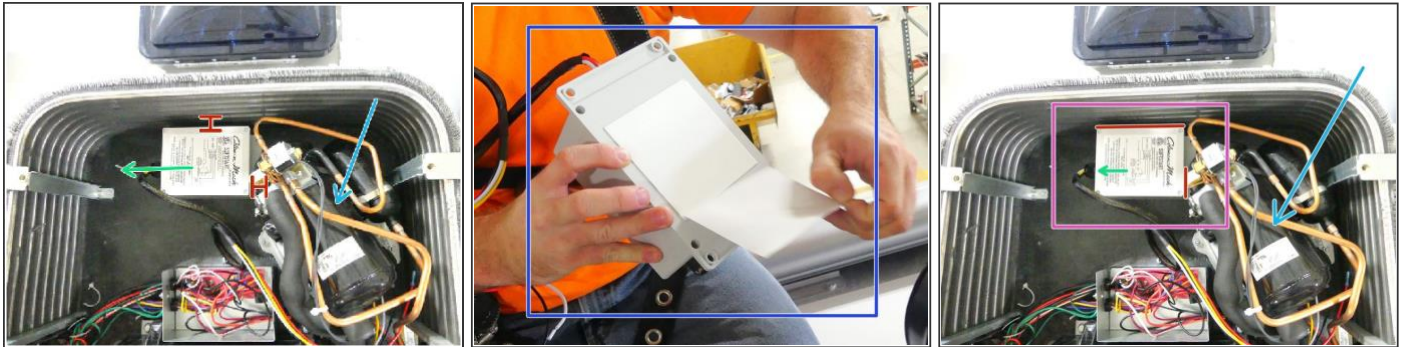
3. With the shroud removed, locate the fan and use a 10mm socket to remove the three nuts securing the fan. Lift up on the fan to remove it from the threaded studs and set the fan off to the side.



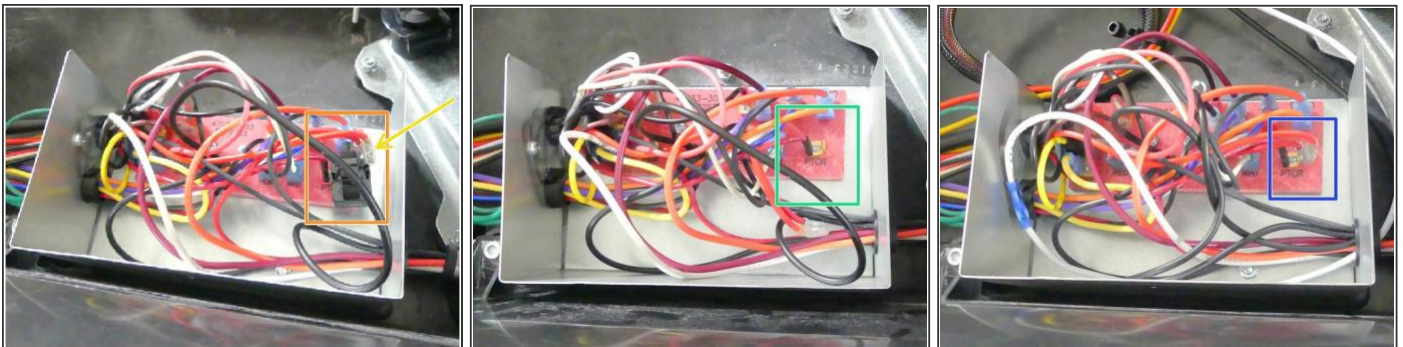
4. Locate the electrical panel next to the compressor and remove the panel's cover using a 10mm socket.



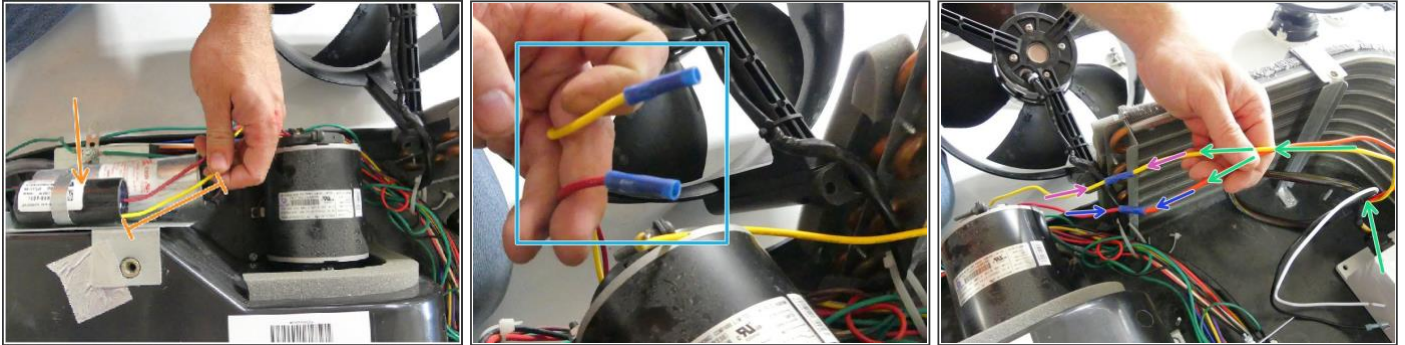
5. The soft start box should be installed at least a 1/2" away from the AC coils and 1/2" away from the AC compressor. Ensure that the wires exiting the soft start box are oriented away from the AC compressor. Clean the area where the soft start box will be installed using denatured alcohol to prep the surface. Adhere the soft start box by removing the paper backing from the double-sided tape on the back/bottom of the box.



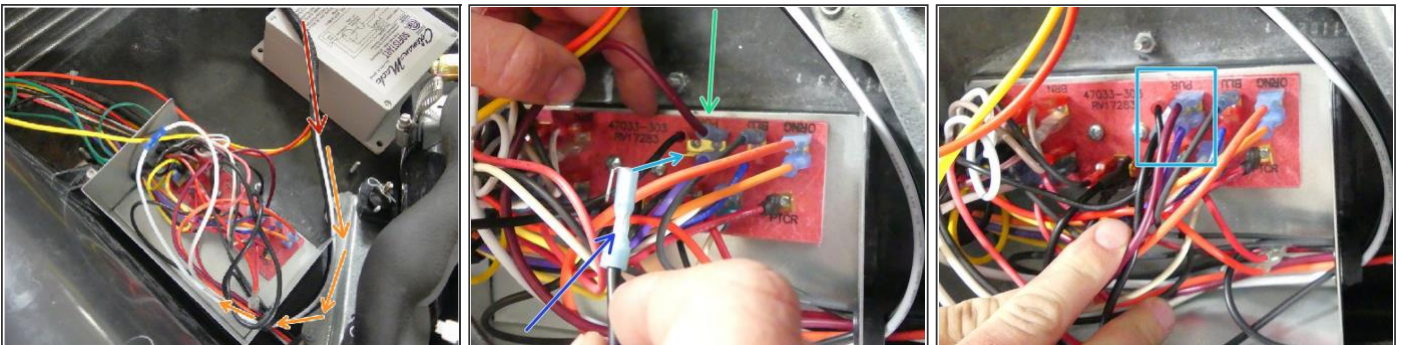
6. Locate the Positive Temperature Coefficient Resistor (PTCR) and remove the female spade connector with two red wires from the PTCR. Next, remove the PTCR from its spade connector and discard the PTCR. Reconnect the female spade connector, with two red wires, to the now open male spade connector where the PTCR was removed.



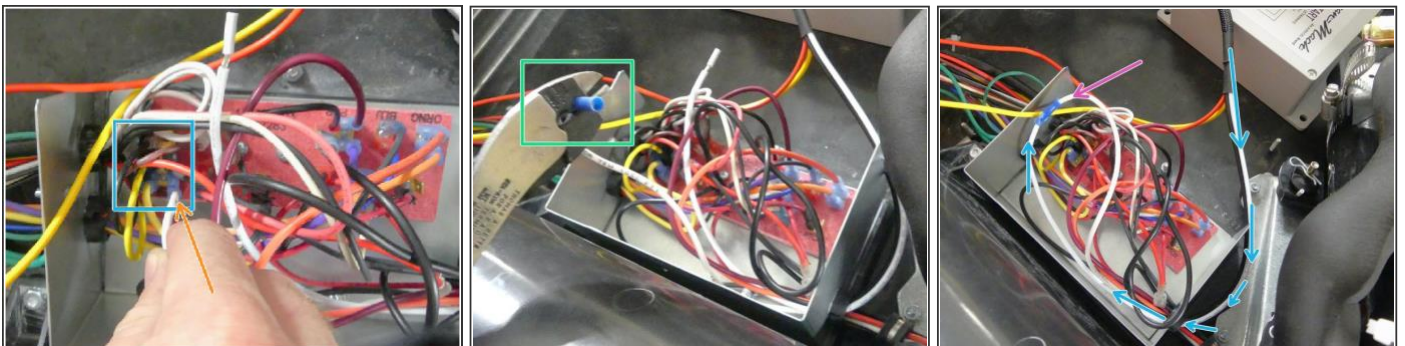
7. Locate the start capacitor on the side of the AC and cut the yellow and red wires (approximately 6" from the top of the capacitor). Properly strip the red and yellow wire ends that are **NOT** connected to the start capacitor. Affix blue 16-14 gauge butt connectors (or properly sized Wagos) to the ends of the red and yellow wires. Locate the red and yellow wires coming from the installed soft start and ensure that each wire is properly stripped. Connect the red wire from the soft start to the red wire from the start capacitor and the yellow wire from the soft start to the yellow wire from the start capacitor.



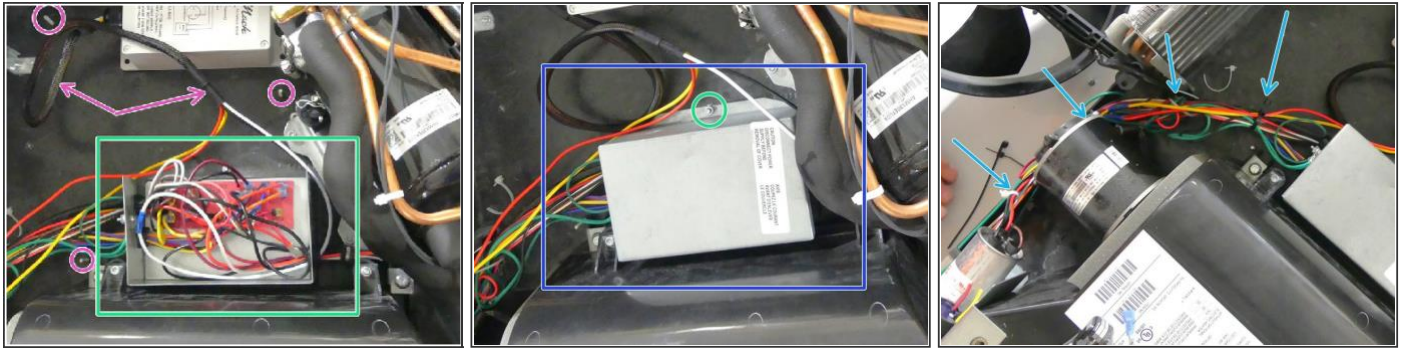
8. Locate the black and white wires coming from the installed soft start box and route the wires through the electrical panel opening next to the AC compressor. Connect the black wire to the open spade connector labeled "PUR," in the electrical panel.



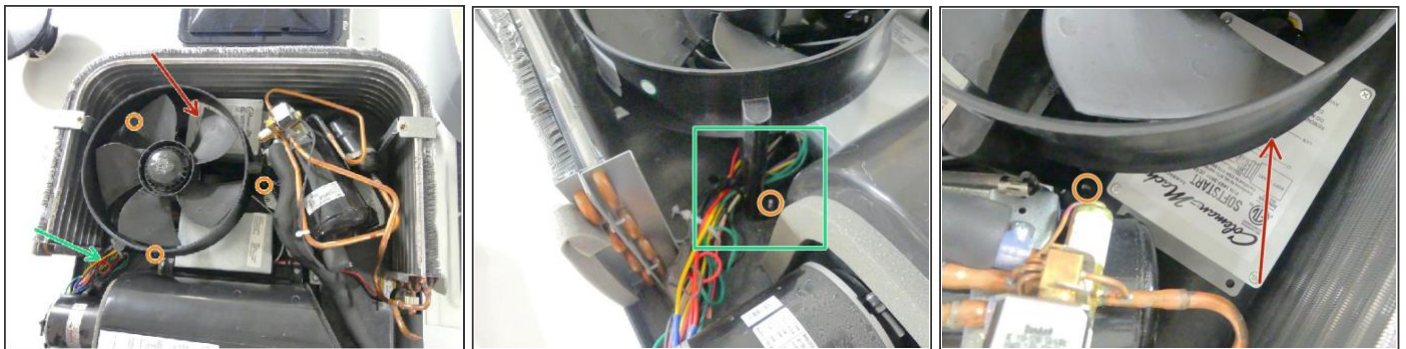
9. Locate the male spade connectors labeled "YEL" on the circuit board within the electrical panel. Remove the thicker gauge white wire installed on one of the "YEL" spade connectors. Cut off the spade connector from the thicker gauge white wire and properly strip the wire's end. Install a blue 16-14 gauge butt connector (or properly sized Wago) on the end of the white wire. Retrieve the routed white wire from the soft start (routed into the electrical panel in the previous step) and connect the two white wires.



10. Ensure all wires outside of the electrical panel are laid flat on the base of the AC and are routed away from the threaded studs where the fan will be reinstalled. Properly reinstall the cover over the electrical panel using a 10mm socket. Using black cable ties, secure the wires together that are routed from the side of the electrical panel around to the start capacitor (include any wires from the soft start).

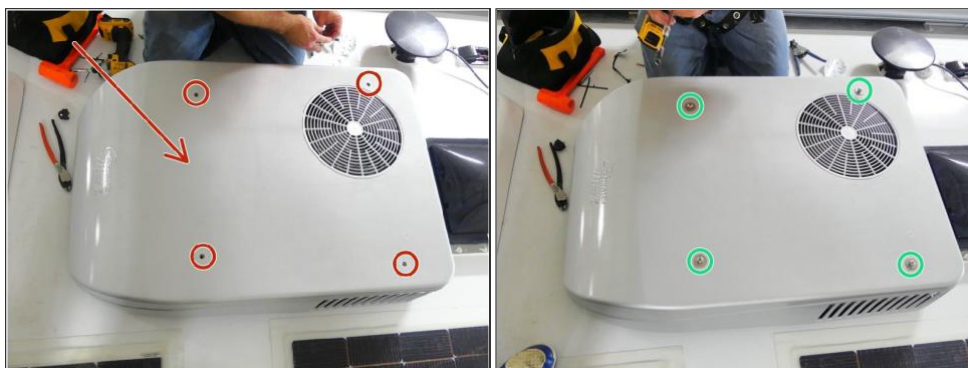


11. Reinstall the fan over the threaded studs on the base of the AC in the same orientation in which it was removed. Ensure all wires are clear of the fan and are not pinched under the fan's feet. Properly tighten the fan nuts using a 10mm socket.



Note: Ensure that the fan sits flush on the base of the AC and that the soft start box does not impede the fan installation. If needed, reposition the soft start box.

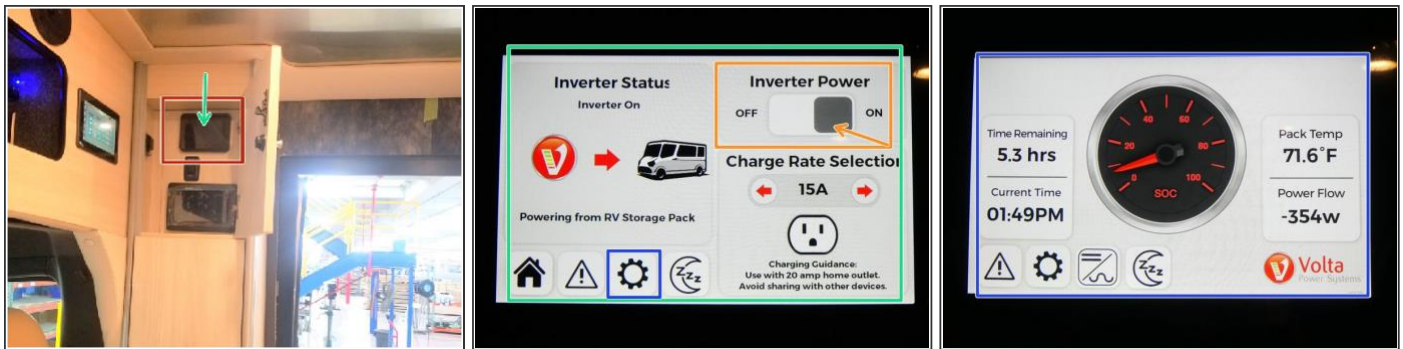
12. Locate the AC shroud and reinstall it so that the four mounting hole locations align. Properly tighten each screw.



13. Inside the unit, locate the distribution box (breaker panel) and flip the AC breaker to the "ON" position.



14. Locate the Volta touchscreen display in the upper cabinet next to the entry door. Turn the inverter ON and test that the air conditioner is functioning properly.



15. Repeat the testing process for the air conditioner using external AC power. Before plugging in, make sure to turn the inverter OFF.

Step 2 - Perform Firefly Update:

Note: [Click here](#) to watch a video on how to update the Firefly firmware.

To update the Firefly firmware Logic to 7.27 (Interstates) or 7.19 (Atlas), complete the following steps:

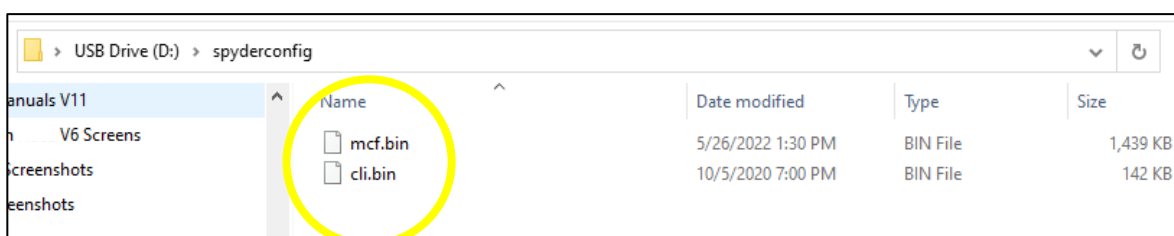
1. Navigate to the Settings Menu by tapping the gear icon on the Firefly touchscreen. In the Settings, press and hold on "Floorplan" (a pop-up message may be displayed and will need to be accepted to continue). The proceeding page will display the preset options for that model. Take a picture of these settings to refer back to them once the firmware update has been completed. Interstate models will have additional option pages for Shades/Lights. Make sure to note these option settings as well.



2. Load the Firefly firmware files onto a freshly formatted FAT32, 8gb or smaller, USB drive. The firmware files can be obtained by downloading from Airhub, or by contacting Airstream Customer Support at support@airstream.com, or calling 877-344-1076 ext. 7401.
 - Firmware files will be available for both the 5" and 7" Firefly screens. The files will need to be loaded onto separate USB's or the drive will need to be reformatted prior to updating a different screen size (both files cannot be loaded onto the same USB at the same time). It is also recommended that the 7" screen be updated before the 5" screens.
 - The files should be located on the root directory of the USB drive, inside a folder you create named: **spyderconfig**



3. Drag and drop the files into the newly created **spyderconfig** folder.

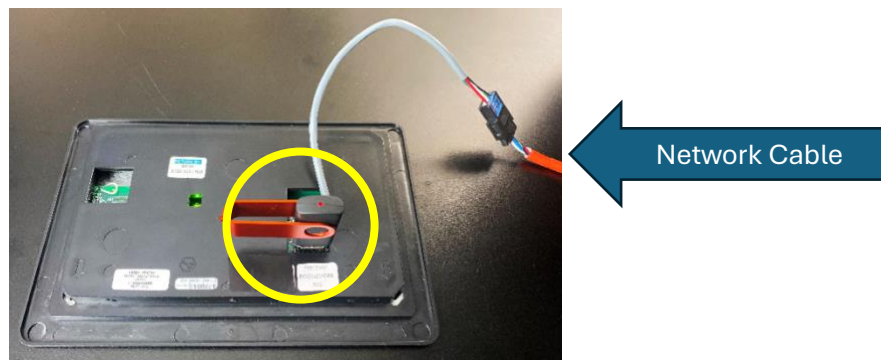


4. Remove the main Firefly touchscreen from the wall by placing your fingers along the top of the screen and applying pressure “down and out” to pop the screen out of the wall mount.

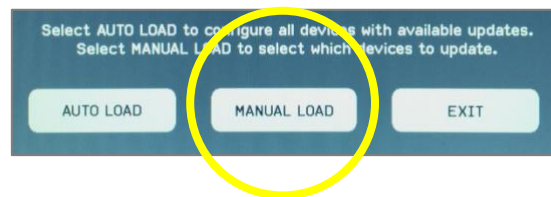


Note: Take care to not drop the touchscreen once it comes free from the wall mount.

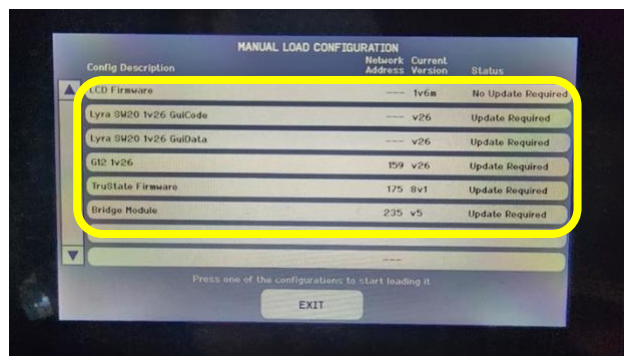
5. Plug the flash drive, containing the firmware update files, into the USB port on the back of the touchscreen. Then, unplug the network cable from the touchscreen for at least 5 seconds, then plug it back in.



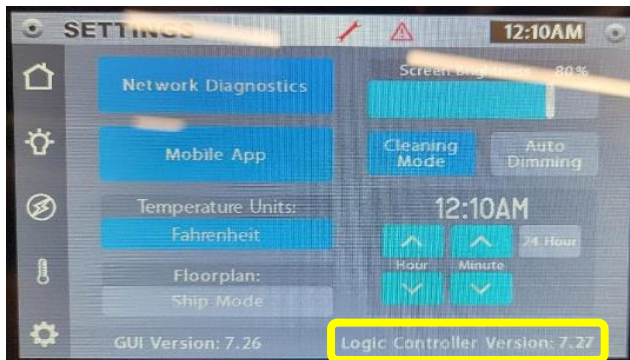
6. Once the touchscreen boots back up, tap Manual Load.



7. Several updates may be required. Tap the first update to begin the installation process (even if it says “No Update Required”). Once the status for the first update changes to “Update Successful”, repeat this process for the remaining updates.



8. Once all configs have been updated successfully, tap Exit. Remove the flash drive from the screen and perform another power cycle, by unplugging the network cable and waiting 5 seconds.
9. Check the update by verifying the Logic version on the SETTINGS page is now 7.27 (INT) or 7.19 (Atlas).

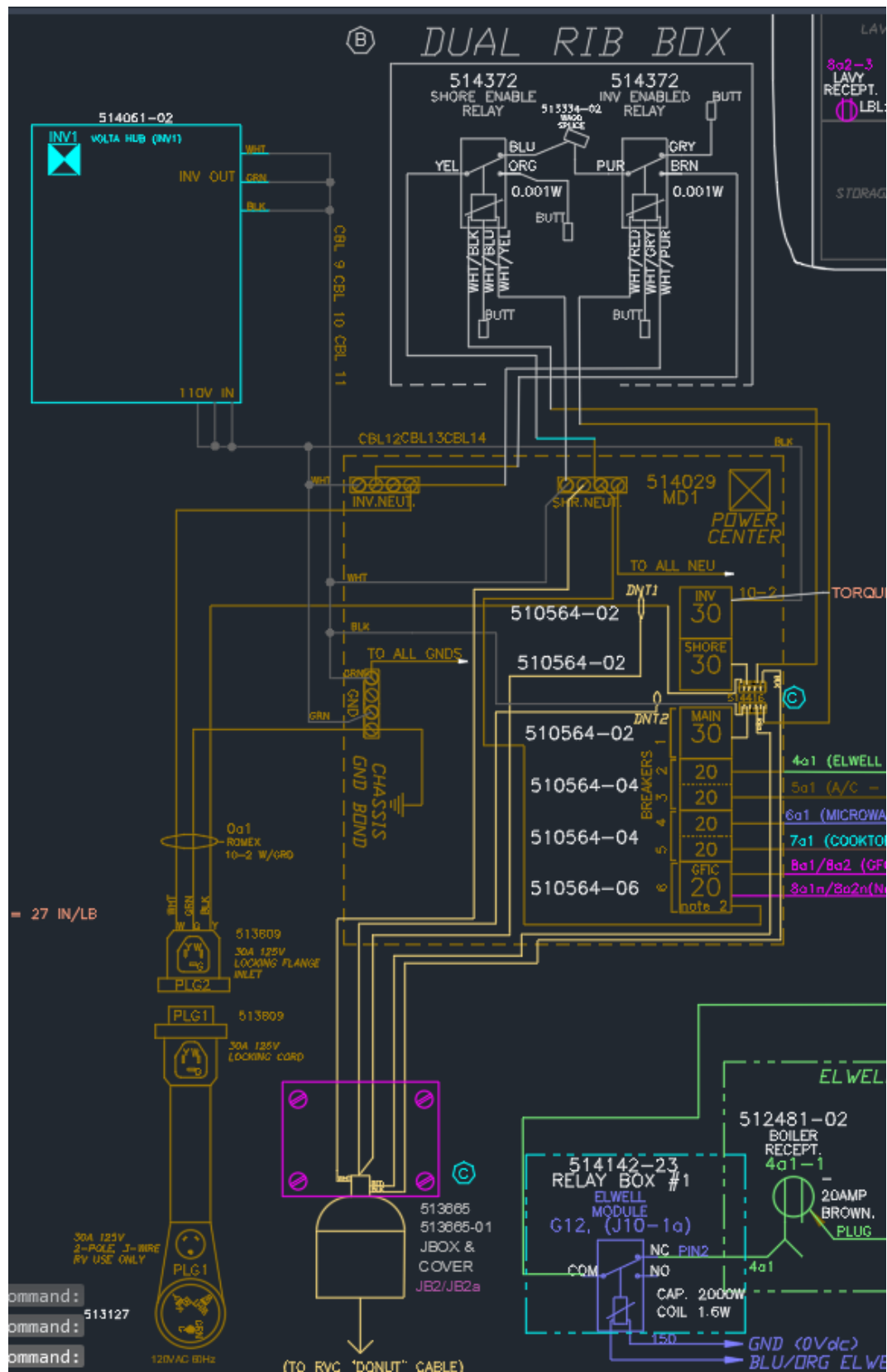


10. Once the Logic has been verified, 7.27 (INT) or 7.19 (Atlas), navigate back to the settings menu and press and hold on "Floorplan." Verify the options selected still match the picture that was taken. If any options do not match, tap the screen to activate/disable.

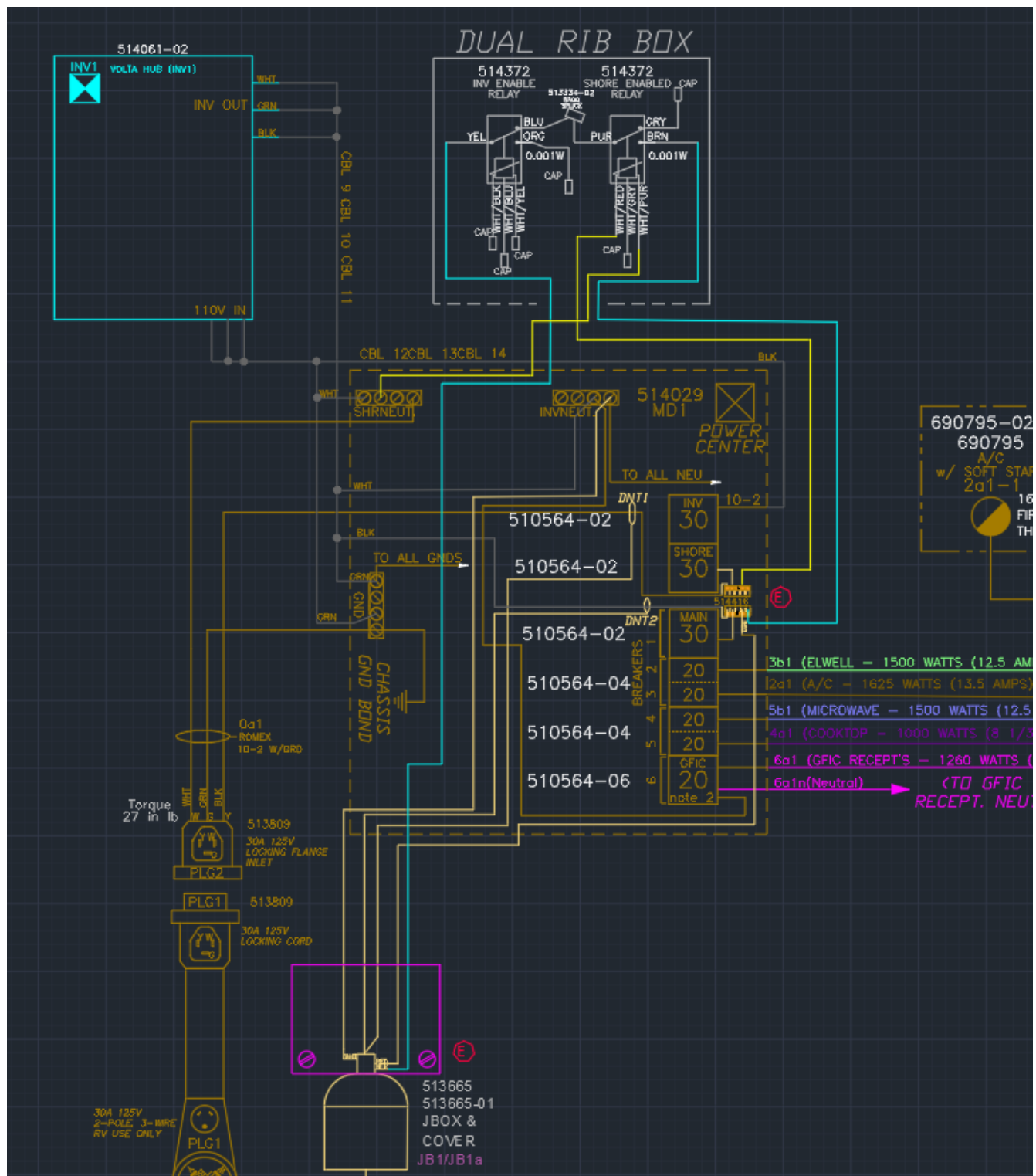


11. Once complete, reinstall the touchscreen by applying pressure to the corners to "snap" it back into the wall mount.

Old Wiring:



New wiring:



RIB Rewiring:

1. Fully disconnect power to the coach by unplugging the shore power cord, ensuring the Volta system is powered down, and placing the three 30-amp breakers in the OFF position.



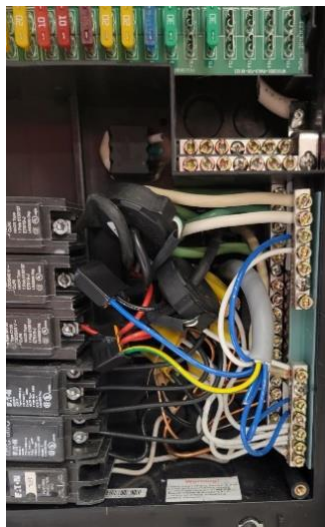
2. Remove the cover on the distribution panel to gain access to the screws securing the breaker box in place.
 - For Atlas Models: Remove the Power Center, and the drawer above it, for easier access.
 - For Interstate Models: Remove the ottoman seat cushion.



3. Identify which version of RIB wiring the coach has. The coach should have a RIB box wired in 1 of 3 ways. Once you have identified the wiring type, proceed to the corresponding instructions.



Colored Cable RIB



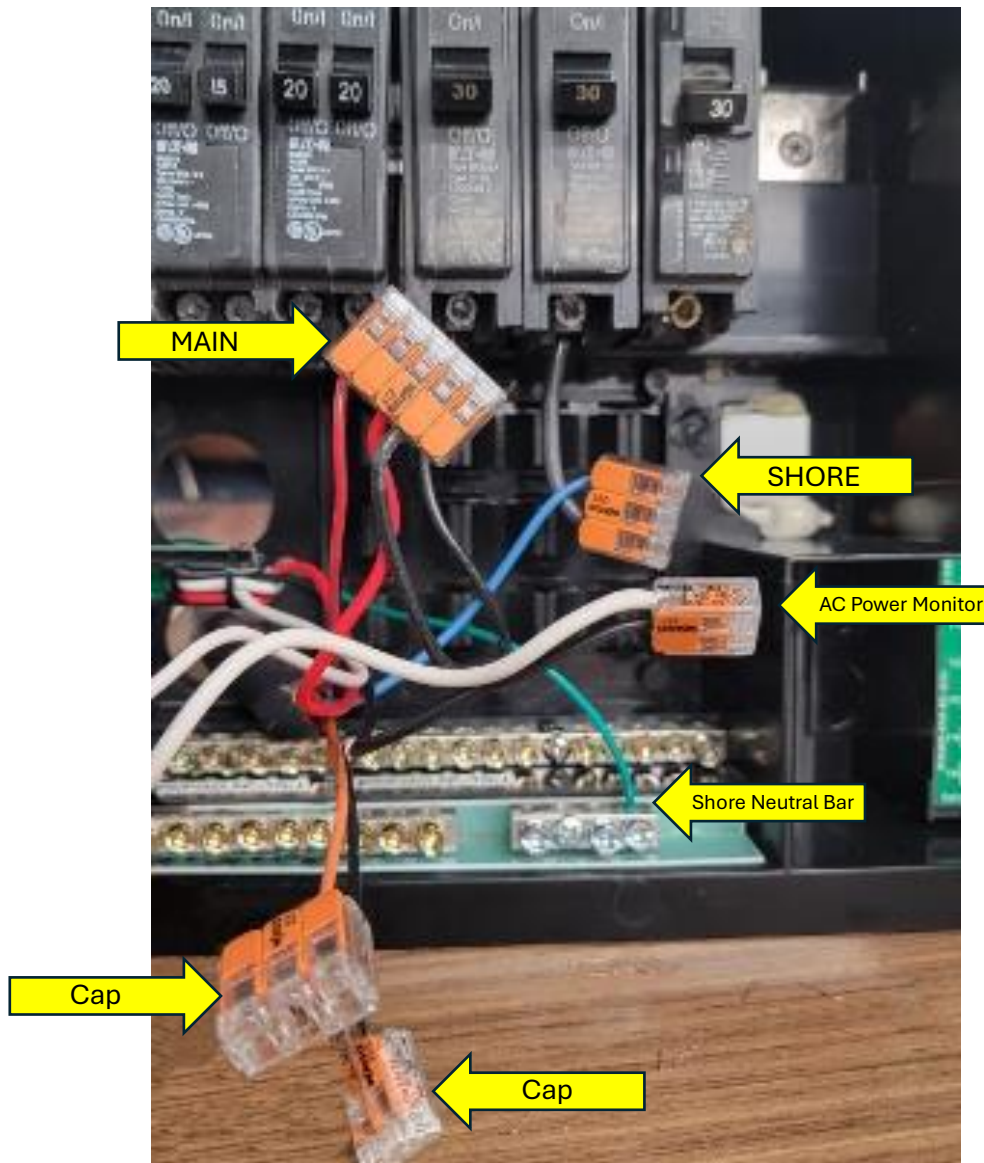
Blue Cable RIB



True Dual Cable RIB

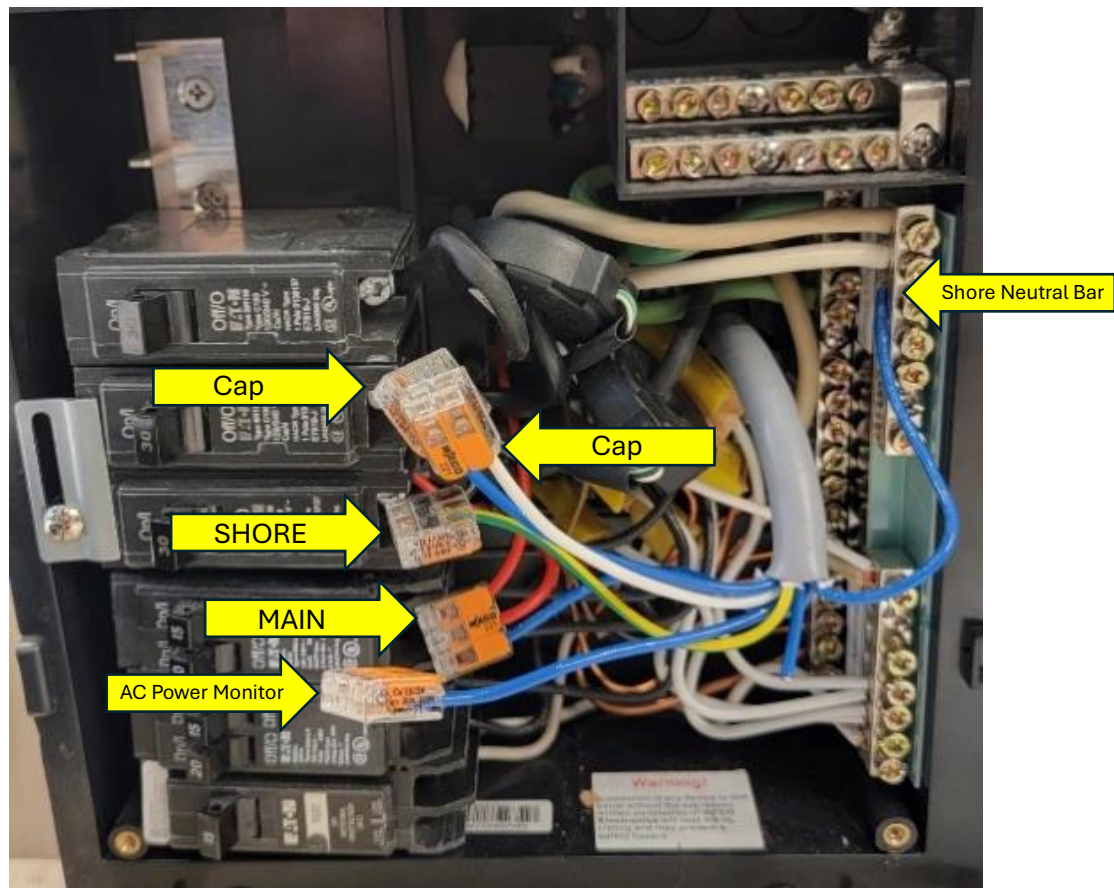
Colored Cable RIB:

1. Disconnect all wires from the dual RIB cable.
2. Using the existing Wago, connect the White wire to the Black wire from the AC power monitor.
3. Connect the Red wire to the “MAIN” breaker Wago.
4. Connect the Blue wire to the “SHORE” breaker Wago.
5. Connect Green wire to the shore neutral bar.
6. Cap off any remaining wires.



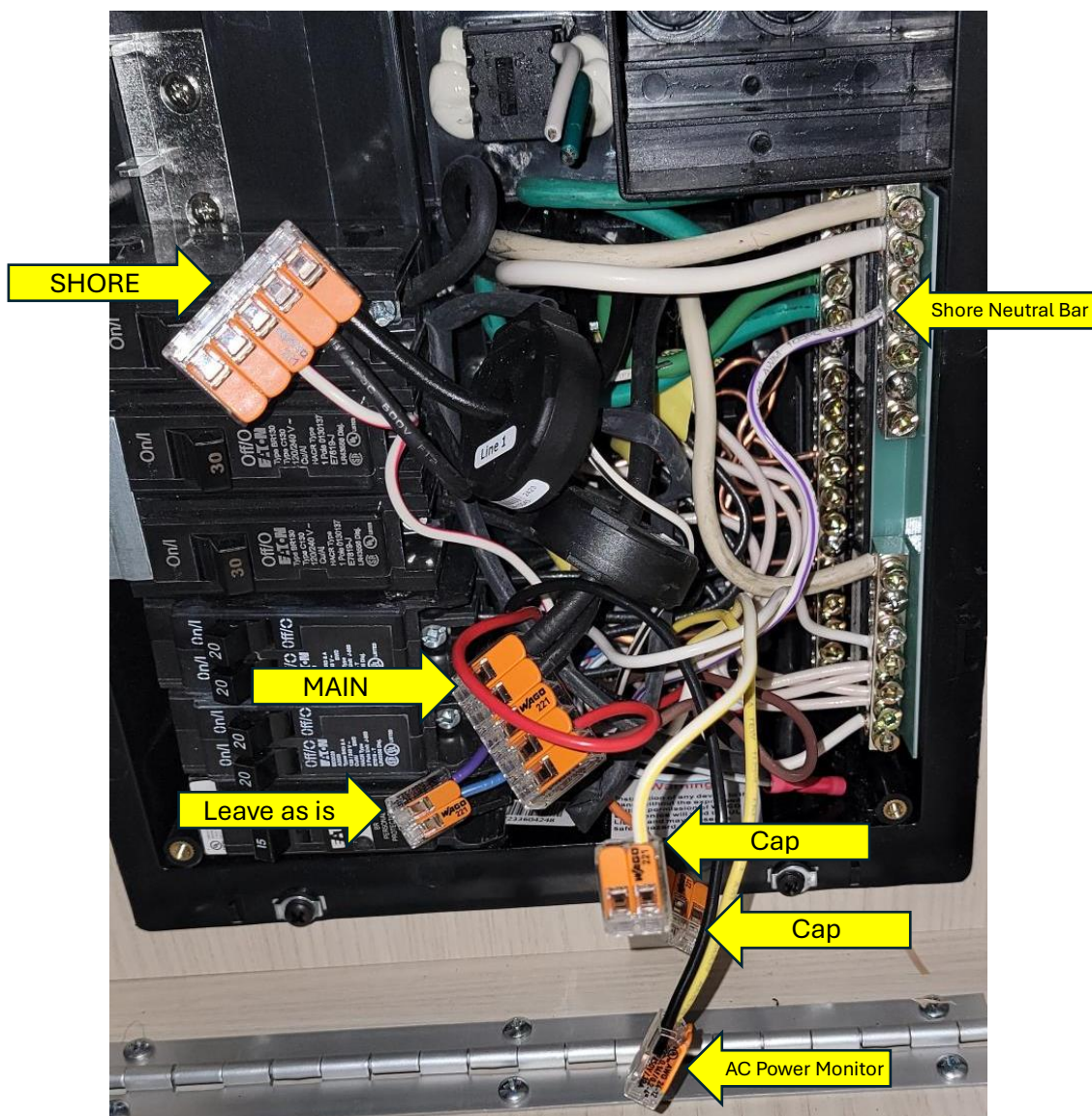
Blue Cable RIB:

1. Disconnect all the wires from the dual RIB cable.
2. Using the existing Wago, connect the Blue 1 wire to the Black wire from the AC power monitor.
3. Connect the Blue 4 wire to the “MAIN” breaker Wago.
4. Connect the Yellow/Green wire to the “SHORE” breaker Wago.
5. Connect the Blue 5 wire to the shore neutral bar.
6. Cap off any remaining wires.



True Dual RIB:

1. Disconnect all the wires from the dual RIB cable except for the Blue and Purple wires, which are connected together.
2. Using the existing Wago, connect the Yellow wire to the Black wire from the AC power monitor.
3. Disconnect the Brown wire to the “MAIN” breaker Wago.
4. Connect the White/Red wire to the “SHORE” breaker Wago.
5. Connect the White/Purple wire to the shore neutral bar.
6. Cap off any remaining wires.



Overview

This document outlines the process for implementing the AC detect solution for the Volta Power Distribution Hub inside an Airstream coach. This solution involves connecting an adaptor harness to the Power Distribution Hub, touchscreen replacement, pack firmware updates, and 100A internal PDH fuse replaced with 175A fuse.

It is recommended that the Pack firmware is updated before the touchscreen is replaced. All other steps can be done in any order.

Safety

Warnings



Warning: Careless handling of electrical components can be fatal. Never touch or use electrical components or appliances while feet are bare, while hands are wet, while standing in water, or while on wet ground.



Warning: Components and devices in Volta Systems shall not be opened or modified. Only Volta technicians or trained professionals with in-depth knowledge of Volta Systems should perform service work on a Volta system. Any attempt to service a system by unapproved personnel may cause damage to the system, voiding of the warranty, injury, or harm.

Safety Guidelines

- **Power Down Safely:** Before initiating any work on the system, ensure that the system is powered down safely and that all power sources are disconnected. Perform lockout and tagout procedures to ensure systems are not powered on while being serviced.
- **Assistance:** If you are unsure about any aspect of the procedure or if you encounter difficulties during the process, seek assistance from a qualified technician or contact Volta customer support for guidance.
- **Secure Connections:** Double-check all connections to ensure they are securely fastened and properly seated. Loose connections may lead to operational issues or malfunctions.

Contact Volta:

Questions or concerns? Volta phone support is available during business hours at **616.226.4222**

Before You Begin:

- Please read this document in its entirety before performing any actions.
- If you are not comfortable performing any of the actions included in this document, please contact Volta Power Systems.

Tools Required:

To perform these instructions, you need basic hand tools, such as screw drivers and wrenches. The tools required may vary by vehicle.

AC Detect Timer Harness Installation

The AC Detect Timer harness is labeled to indicate the appropriate connection points.

Timer Harness Installation



Figure 1. The AC Detect Timer Harness. Note: The appearance and availability of all components of the harness may vary from what is shown.

1. Follow the instructions provided by your OEM/Upfitter to access the Power Distribution Hub (PDH).
2. Once you have access to the PDH, ensure the Volta System is powered off and the vehicle is off.
3. Twist the connector ring counterclockwise to disconnect the 23-pin communication connector from the Power Distribution Hub. See Figure 2 below.

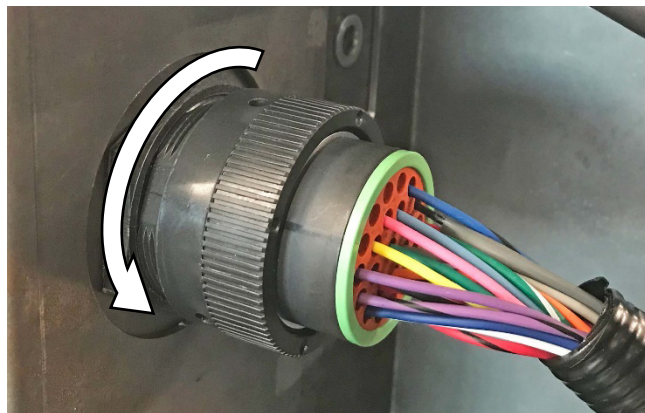


Figure 2. Rotate connector ring counterclockwise to remove from hub.

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4. Locate the male end of the AC Detect Timer harness, labeled “PDH.” See Figure 3 below.



Figure 3. Male end of AC Detect Timer Harness

5. Rotate the connector from the Timer harness until they are mated and then rotate the connector ring clockwise to tighten the connection. You should hear a click when seated properly. See Figure 4 below.

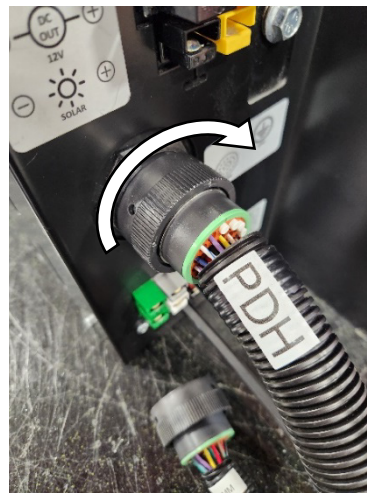


Figure 4. Once connector body is properly aligned, rotate connector ring clockwise to secure to PDH.

6. Using the same connection method as before, connect the 23-pin connector attached the coach's main system harness into the female end of the AC Detect Timer Harness labeled “Trunk.” Check to ensure connector rings are properly seated and are not loose. The finished installation is shown in Figure 5 below.



Figure 5. Finished installation of AC detect harness

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Volta Touchscreen Service Instructions

Estimated Repair Time:

0.5 hours

Instructions:

OPTION A) REPROGRAM THE EXISTING TOUCHSCREEN WITH VOLTA SUPPLIED PROGRAMMER

Perform the following instructions to connect a supplied programming tool to a port on the back of the Volta Touchscreen.

1. Disconnect your vehicle from shore power.
2. Turn off the vehicle.
3. Turn off the Volta System. Ensure the touchscreen is off and the LED on the pushbutton is off.
4. Gain access to the rear of the Volta display. This varies based on the model. Please find location of display and necessary steps to access USB port in table below.

Model	Volta Display Location	Steps to Access USB Port
Atlas	Upper curbside locker behind passenger seat	Remove panel housing display by unscrewing four screws located at panel corners
Intersate 19	Upper locker behind pantry cabinet on roadside wall	Remove panel by unscrewing two screws located near bottom of panel
Interstate 19X	Upper cabinet panel located on left as entering coach through sliding door	Remove panel with coax connector plate in upper locker behind display by removing four screws. Then remove panel directly behind display (left of recently removed panel) by removing four additional screws.
Interstate 24GL	Upper roadside locker located behind the driver's seat	Remove panel by pulling panel towards oneself. Panel is held in position by spring loaded latches
Interstate 24GT	Upper roadside locker located behind the driver's seat	Remove panel by pulling panel towards oneself. Panel is held in position by spring loaded latches
Interstate 24X	Upper roadside locker located behind the driver's seat	Remove panel by pulling panel towards oneself. Panel is held in position by spring loaded latches

5. Locate the USB port (refer to G on figure 6) on the back of the touchscreen. Remove the port's cap by rotating it counter-clockwise. The correct port is identified by a "USB" symbol and will be the top cap.
6. Ensure the switch (J in figure 8) on the programming tool (K in figure 8) is in the "O" position.

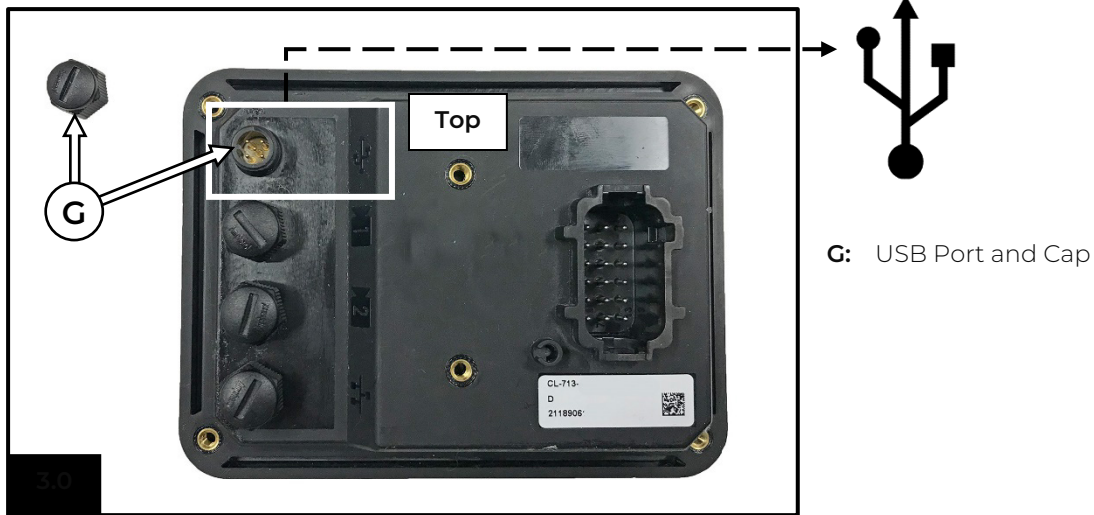


Figure 6. Back side of touchscreen/display.

7. Connect the attached cable (**L in figure 8**) on the programming tool to the port on the touchscreen. The orientation of the connections must be exact. Pay close attention to the prongs and key on the connections. Refer to the port diagram and the connector (**figure 7**). Do not force the connection. When the connections are engaged in the proper orientation, twist to tighten.

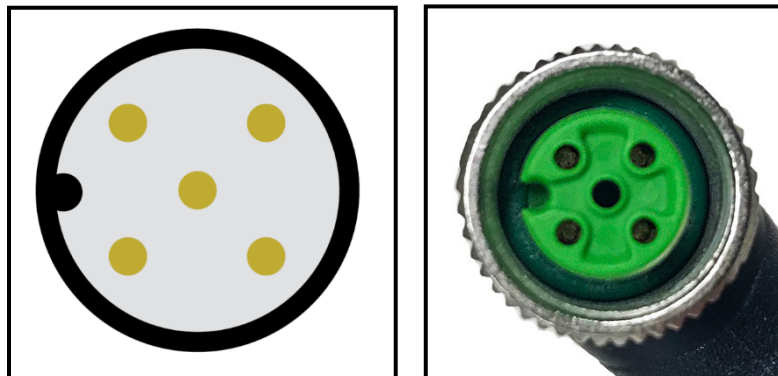


Figure 7. Port diagram and connector cable. Note locating notch which ensures proper alignment.



Figure 8. Volta supplied programming tool.

8. Perform programming steps (refer to figure 8):
 - a. Flip the switch on the programming tool to the “I” position.
 - b. Monitor the (2) LEDs (H and I) on the programming tool. After a few seconds, and when the upper LED (H) is solid green and the lower LED (I) is flashing green, the system checks are successful. Proceed to the next step.
 - c. Turn on the Volta System using the pushbutton.
 - d. After approximately 90 seconds, a “Download Mode” message and a progress bar appears on the touchscreen. If the “Download Mode” message does not appear after approximately three minutes, a “Download Failed!” message appears, or if the bottom LED on the programming tool turns off, you must restart the programming process. To restart, turn off the Volta System, switch off the programming tool, then return to step 7-a.
 - e. Do not turn off or disconnect the Volta System or the programming tool during Download Mode. Programming may take up to 10 minutes.
 - f. “Download Complete” appears on the touchscreen when the programming process is complete.
 - g. Turn off the Volta System.
 - h. Switch off the programming tool.

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- i. Disconnect the programming tool from the touchscreen and replace the cap on the touchscreen port.
 - j. Programming is now complete.
9. Disconnect the programmer and reassemble any components.
10. Turn on Volta system and confirm new (3.01) firmware has been successfully installed by verifying screen matches image below with "v3.01" text below Volta Power Systems in upper right corner. See Figure 9 below.



Figure 9. Representative Volta "Home Screen." Note V3.01 in upper right corner

11. Disable the “inverter enable at start-up setting” by going into the settings tab, denoted by the gear icon (second icon in bottom row in Figure 9). Then select “inverter settings.” After entering the inverter settings passcode (12550) disable the “inverter enable on startup” setting. After disabling this setting the screen should appear as shown in Figure 10 below.

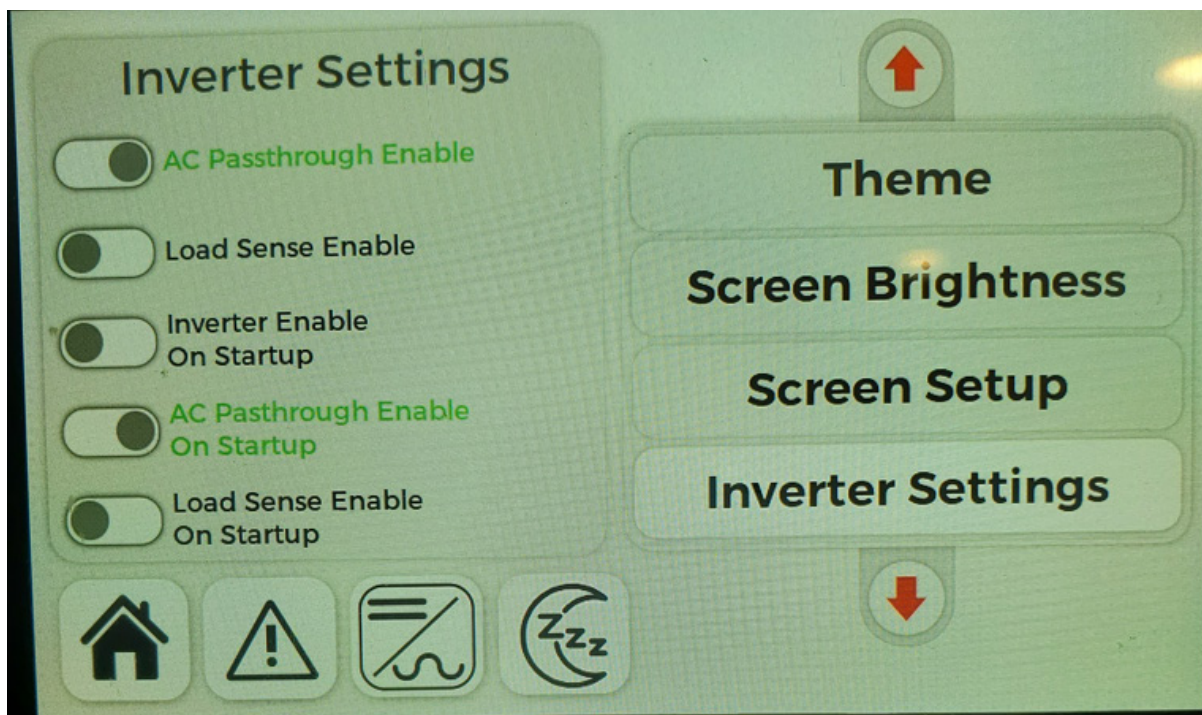


Figure 10. Inverter settings after disabling “inverter enable on startup” feature.

12. Cycle power to the Volta system by depressing the Volta pushbutton and ensure that the inverter stays in the off state upon Volta system restart. If the inverter turns on go back into the touchscreen’s inverter settings page and ensure the “inverter enable on startup” setting is off.
13. Return the programming tool to the original packaging, apply the label to the package, and mail the package back to Volta from any USPS location.

OPTION B) REPLACE THE EXISTING TOUCHSCREEN WITH A VOLTA SUPPLIED PRE- PROGRAMMED TOUCHSCREEN

Perform the following instructions to locate, remove, and swap out the Volta touchscreen.

- A. Disconnect your vehicle from shore power.
- B. Turn off the vehicle.
- C. Turn off the Volta System. Ensure the touchscreen is off and the LED on the pushbutton is off.
- D. Gain access to the rear of the Volta display. This varies based on the model. Please find location of display and necessary steps to access USB port in table below.

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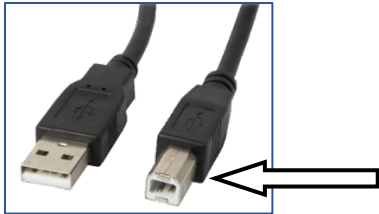
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Atlas	Upper curbside locker behind passenger seat	Remove panel housing display by unscrewing four screws located at panel corners
Intersate 19	Upper locker behind pantry cabinet on roadside wall	Remove panel by unscrewing two screws located near bottom of panel
Interstate 19X	Upper cabinet panel located on left as entering coach through sliding door	Remove panel with coax connector plate in upper locker behind display by removing four screws. Then remove panel directly behind display (left of recently removed panel) by removing four additional screws.
Interstate 24GL	Upper roadside locker located behind the driver's seat	Remove panel by pulling panel towards oneself. Panel is held in position by spring loaded latches
Interstate 24GT	Upper roadside locker located behind the driver's seat	Remove panel by pulling panel towards oneself. Panel is held in position by spring loaded latches
Interstate 24X	Upper roadside locker located behind the driver's seat	Remove panel by pulling panel towards oneself. Panel is held in position by spring loaded latches

- E. Unplug the connector from the rear of the touchscreen by depressing the locking tabs at the top and bottom of the connector and pulling on connector.
- F. Remove the four screws affixing the touchscreen to the panel (one screw in each corner).
- G. Remove the touchscreen and install the replacement touchscreen noting top and bottom orientation of the touchscreen per Figure 6 (white sticker is on bottom).
- H. After fastening the four screws reattach the connector. Note that connector will only install in one orientation due to alignment tab. Push firmly so that both locking tabs engage and perform a pull test on the connector to verify fitment.
- I. Turn on Volta system and confirm new (3.01) firmware has been successfully installed by verifying screen matches below with "v3.01 text" below Volta Power Systems in upper right corner as shown in Figure 9.
- J. Disable the "inverter enable at start-up setting" by going into the settings tab, denoted by the gear icon (second icon in bottom row in above image). Then select "inverter settings." After entering the inverter settings passcode (12550) disable the "inverter enable on startup" setting. After disabling this setting the screen should appear as shown in Figure 10.
- K. Cycle power to the Volta system by depressing the Volta pushbutton and ensure that the inverter stays in the off state upon Volta system restart. If the inverter turns on go back into the touchscreen's inverter settings page and ensure the "inverter enable on startup" setting is off.
- L. Reassemble any components.

Pack Firmware Updates

Overview

- Windows Laptop
- USB-B Cable



- Volta Battery Monitor Software
- Flex Pack Firmware Package
- TeamViewer (Remote Access Software when performing firmware reflash remotely)

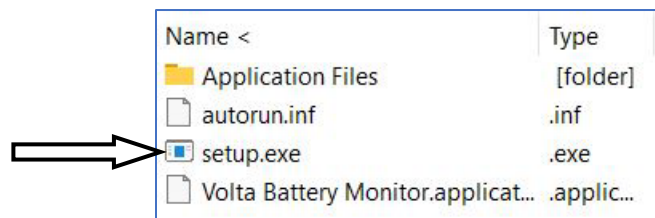
Download and Install Required Software

1. Download the following files to your Windows Laptop. To acquire these files, contact Volta Power Systems:

- CDM212364_Setup (7)
- Release_20241702_4.01.00 1
- Volta Battery Monitor_2.03

2. Install Volta Battery Monitor:

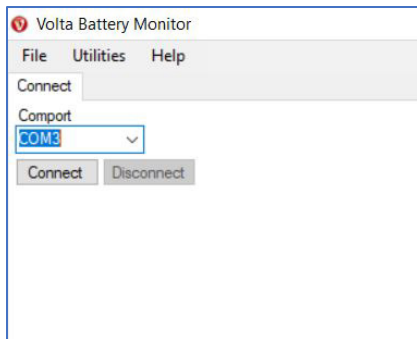
- a. Open the Volta Battery Monitor_1.50 Zip File and click the setup.exe file.



- b. Follow screen commands to install the file.

Airstream AC Detect Updates

3. If successful, you can open the Volta Battery Monitor application, or the following window will pop up automatically, confirming a successful installation.



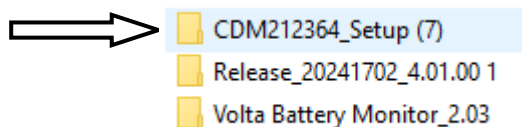
Connect Laptop to Volta Flex Pack

Depending on the vehicle, the Flex Pack location may vary.

1. Connect USB-B cable to the USB-B port on the Flex Pack. The exact location of the USB-B port may vary. Twist off the cap to gain access to the port:

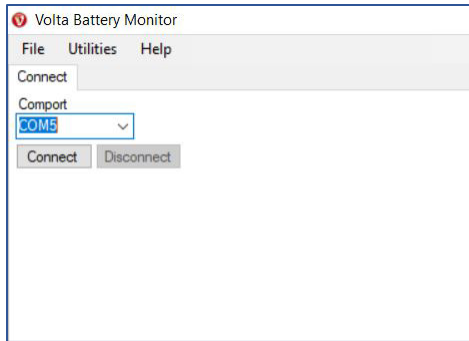


2. Connect the other end of USB cable to the available USB port on your laptop.
 - a. If connected to Wi-Fi, the required device driver should automatically download to your laptop. Allow a few moments for the download to complete. If you've used this laptop previously to reflash a Flex Pack, the driver may already be installed.
 - b. If not connected to Wi-Fi, install the driver to your laptop. Open the file below then run the .exe file.

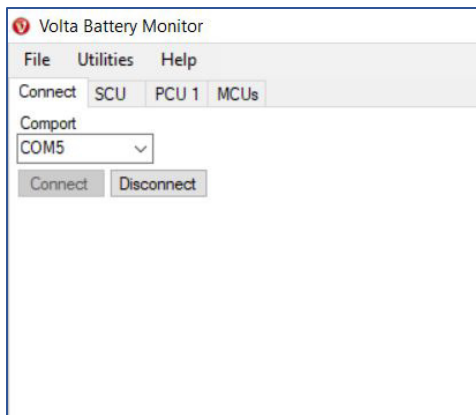


Connect Volta Battery Monitor to Flex Pack

1. With the Laptop connected to the Flex Pack, select the Comport in Volta Battery Monitor and click Connect:

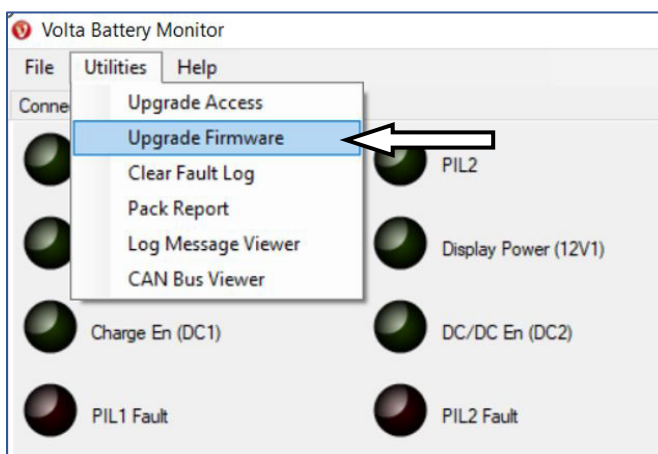


2. If connection is successful, three tabs will appear (SCU, PCU, MCU). If it does not connect, attempt a different comport from the dropdown, then press Connect again.



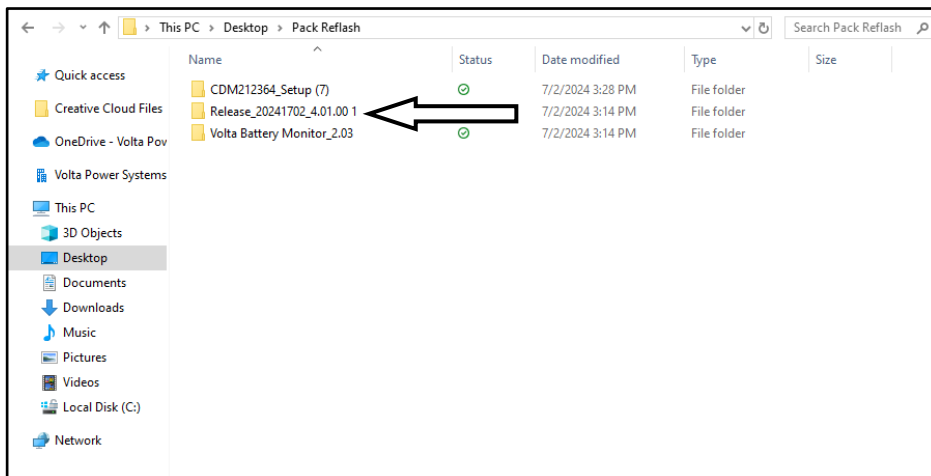
Reflash Pack Firmware

1. Click on the SCU Tab.
2. Unplug from Shore Power, turn off the vehicle, and turn off the Volta System.
3. Click on Utilities and click on Upgrade Firmware. Do not click or attempt any other actions within VBM:

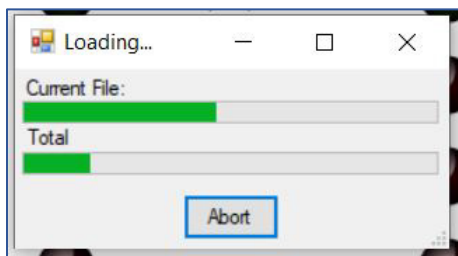


Airstream AC Detect Updates

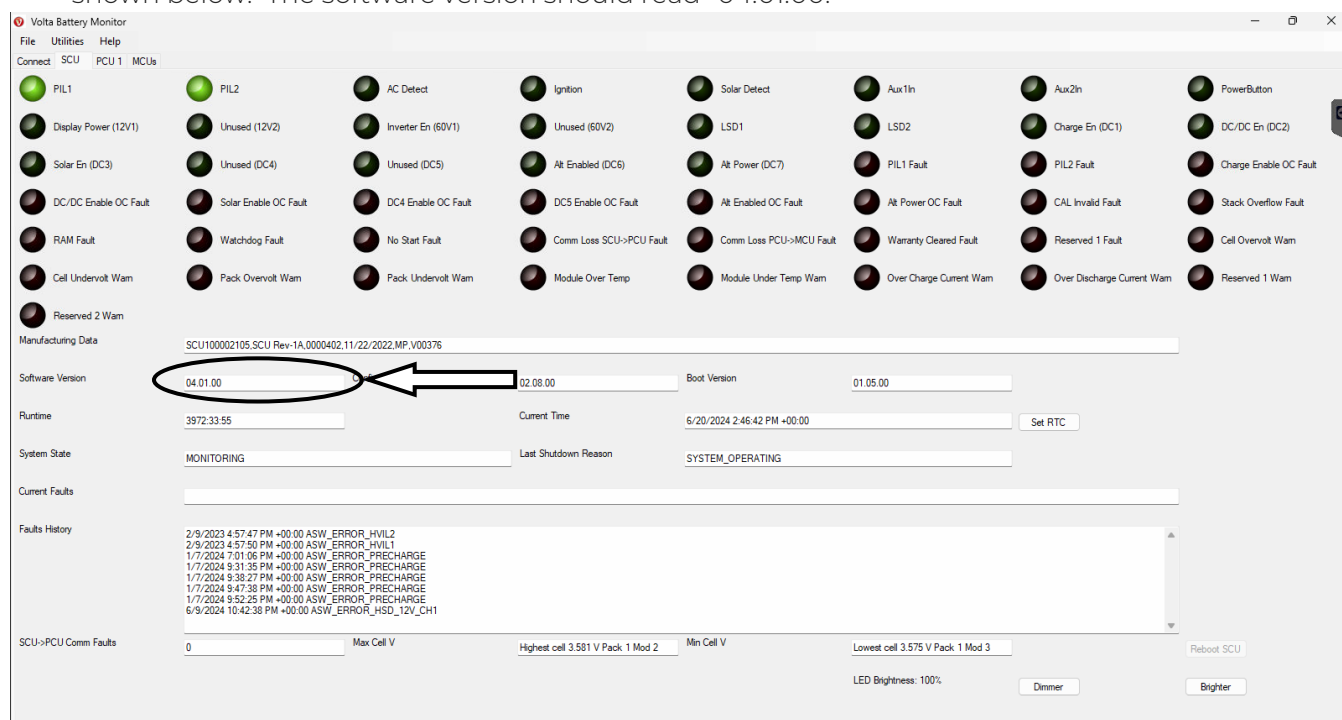
4. Select the Firmware package release from your laptop in the location where you originally downloaded the files.



4. After zip file is selected, download starts automatically. During the download, to not exit the program. Upon successful download, the Loading... pop up will disappear.



5. Return to the SCU tab and verify 04.01.00 was successfully installed by checking the details shown below: The software version should read "04.01.00."



Airstream AC Detect Updates



After Pack Reflash

1. Disconnect from Volta Battery Monitor.
2. Disconnect USB cable from pack and reinstall protective USB cap.

Internal PDH Fuse Replace



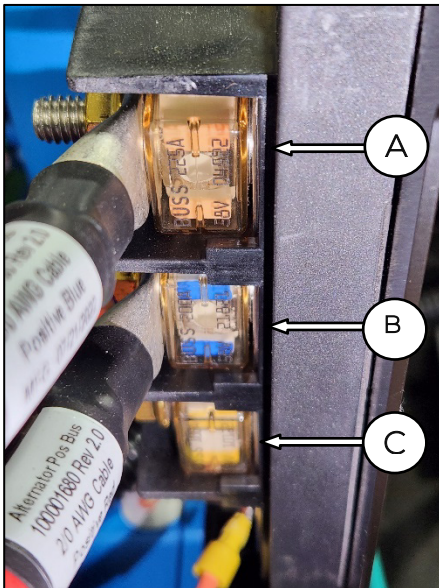
Warning: Unauthorized opening of the Power Distribution Hub (PDH) will void your warranty. If you need to open the PDH for any reason you need approval from Volta.



Warning: Circuit protection devices that are not rated for the specific application, or that are installed incorrectly, can cause overheating. Incorrect or inadequate circuit protection can cause damage to the system and surrounding environment.

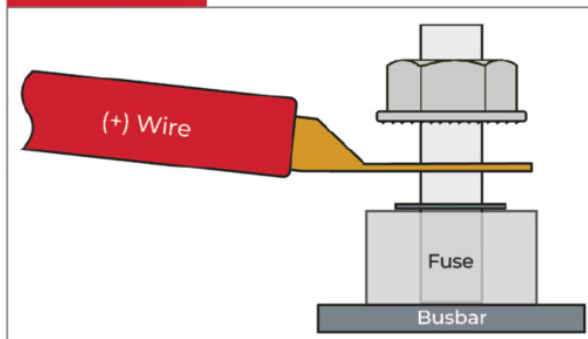
Overview

Refer to the following diagrams for internal fuse location and installation best practices. The fuse being replaced is fuse C below, with a 175A block fuse.



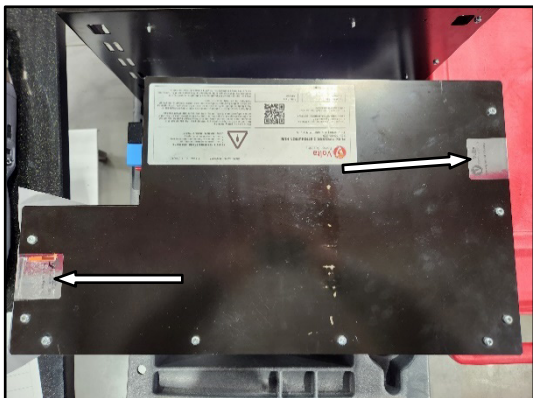
- A. 250A Fuse for the Volta FLEX pack.
- B. 200A Fuse for the Alternator
- C. 100A Fuse for the Inverter being replaced with 175A fuse.

Terminal Fuse

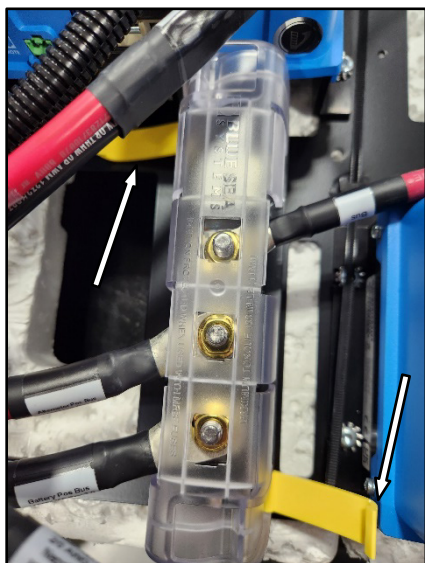


100A Fuse Removal

1. Remove the warranty labels and use a T 25 Torx bit to remove the screws holding on the lid of the PDH.

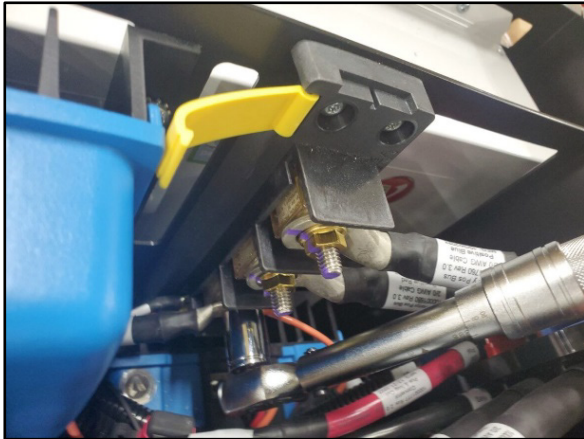


2. Lift the two yellow latches and remove plastic cover over the fuses.

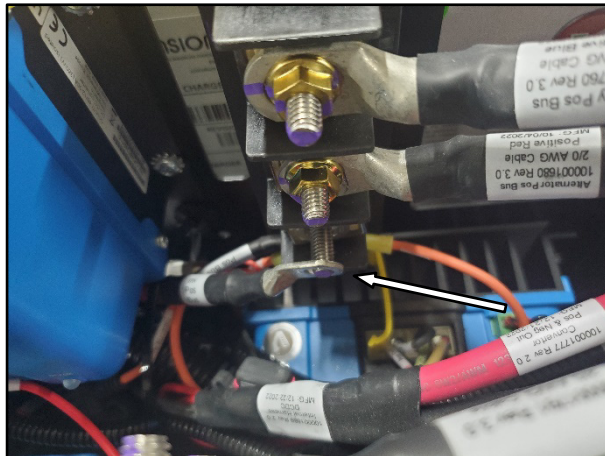


Airstream AC Detect Updates

3. Remove serrated nut fastening the 100A fuse.



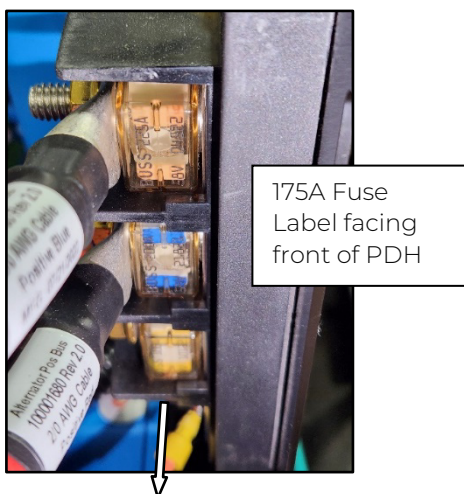
4. Remove lug from fuse post.



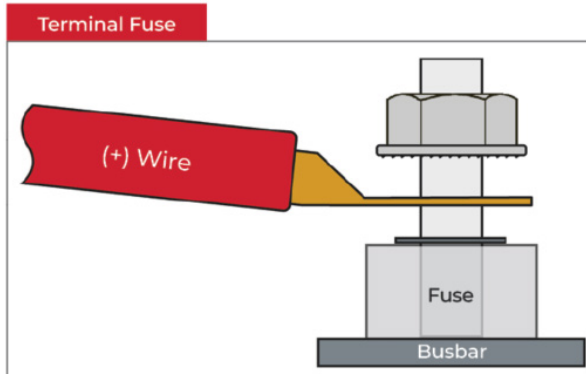
5. Note the orientation of the label/coloring of the fuse, then remove 100A fuse

175A Fuse Replace

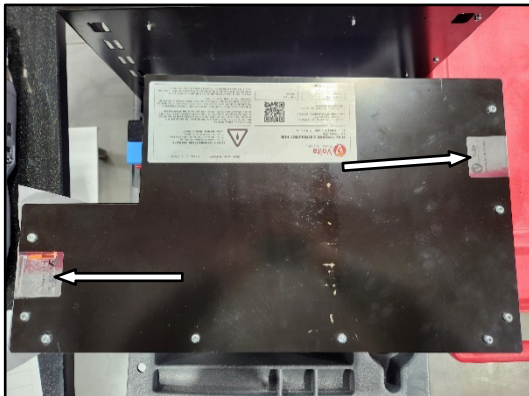
6. Place the 175A fuse on the fuse post. The fuse must be inserted with the label/coloring facing the same direction, toward the front (connection side) of the PDH (reference page 15). Otherwise, the fuses could be damaged when torquing. Fuse label in direction of wire harness.



7. Replace lug and serrated nut. Before tightening the serrated nut, ensure the terminal fuse is seated level on the busbar. The conductor lug must be contacting the fuse. Do not place any additional hardware, such as washers, between the fuse and the conductor lug. Torque serrated nut to **100 in-lb**.



8. Replace the plastic fuse cover (note that plastic cover can only be installed in one orientation) and set the two yellow latches. Pull the cover to ensure it is properly latched.
9. Replace lid and install T 25 screws to affix lid to PDH. Torque to **40 in-lb**.
10. Place new warranty labels on the front and back ends of the PDH.



POST-INSTALLATION CHECKS

Perform the following checks after completing these updates to ensure the Volta system is operating properly.

1. When the system is turned on ensure there are no faults present on the touchscreen and the SOC gauge is solid green, yellow, or red.
2. When the system is turned on ensure the touchscreen responds to changes in loads. For example, if the inverter is turned on does the coach have 120VAC power.
3. Verify the touchscreen software version, as seen in the upper right corner of the touchscreen, is at version 3.01.
4. The system turns on when connected to shore power if previously off (pushbutton should be flashing green when plugged into shore with Volta system off).
5. When connected to shore power, the touchscreen registers a positive power flow (positive power flow will be accompanied by a green shore power icon).
 - a. Some inverter models may default to 0 amp charge rate after new firmware and may not register a positive power flow right away,
 - b. If you do not get a charge after firmware update, adjust the charge rate on the inverter tab to reset this charge rate signal.
6. The system charges from alternator, as verified by a positive power flow on the touchscreen or a DC amp clamp on the 2/0 red wire from the alternator positive post. To charge from alternator:
 - a. SOC must be below 85%
 - b. RPM must be sustained about 1400 RPM
 - c. Pack must not be too cold to charge (approximately 40F or greater)
7. 110 VAC loads are working (Air Conditioner, microwave, etc.) when plugged into shore and when operating off the inverter when unplugged from shore.
8. 12 VDC loads are working (lights, refrigerator, etc.).
9. After service is complete, it is recommended that the Volta System is charged to approximately 70% SOC.

Service Bulletin #200 Affected Unit List - Airstream Volta E1 Package Update

306465	307898	308234	308654	310204	310601	310991	311076	311200	311307	311385	311449	311525	311629
306705	307903	308238	308656	310307	310614	310995	311077	311205	311315	311386	311450	311526	311630
307181	307904	308239	308755	310309	310615	310997	311078	311208	311316	311388	311451	311527	311631
307182	307906	308240	308831	310319	310616	311000	311079	311209	311317	311389	311452	311528	311632
307210	307908	308244	308843	310337	310624	311007	311080	311212	311318	311390	311453	311529	311635
307262	307921	308245	308904	310375	310625	311008	311081	311213	311320	311391	311454	311530	311636
307282	307922	308247	309051	310406	310626	311011	311083	311214	311323	311392	311455	311531	311639
307290	307926	308255	309053	310413	310627	311013	311093	311215	311324	311393	311456	311532	311640
307311	307937	308262	309148	310418	310651	311014	311096	311222	311326	311394	311457	311533	311648
307312	307938	308282	309212	310427	310659	311024	311097	311223	311329	311395	311458	311534	311652
307320	307939	308284	309213	310433	310662	311025	311098	311224	311333	311396	311459	311535	311653
307326	307941	308288	309214	310434	310663	311026	311100	311225	311335	311397	311463	311537	311656
307341	307946	308292	309215	310459	310698	311027	311101	311227	311336	311400	311464	311538	311657
307357	307959	308293	309219	310464	310700	311032	311102	311229	311337	311402	311465	311539	311660
307369	307962	308294	309221	310469	310701	311033	311103	311231	311339	311404	311466	311540	311661
307374	307995	308295	309223	310470	310714	311034	311104	311232	311341	311406	311467	311541	311662
307416	308000	308320	309226	310472	310715	311035	311105	311233	311342	311407	311468	311542	311664
307417	308003	308372	309230	310476	310719	311036	311106	311234	311343	311409	311469	311543	311665
307419	308007	308379	309231	310483	310720	311037	311107	311241	311346	311410	311470	311544	311667
307422	308008	308380	309233	310484	310723	311038	311108	311242	311347	311411	311472	311546	311669
307453	308009	308382	309234	310485	310728	311039	311110	311243	311348	311412	311473	311547	311671
307490	308012	308384	309240	310486	310777	311040	311128	311244	311349	311413	311474	311550	311673
307525	308015	308387	309241	310493	310778	311041	311129	311245	311351	311414	311475	311551	311679
307544	308017	308392	309242	310494	310779	311042	311130	311246	311352	311415	311476	311552	311681
307548	308018	308394	309244	310499	310881	311043	311132	311247	311353	311417	311478	311553	311684
307560	308021	308395	309247	310501	310882	311044	311133	311252	311357	311418	311480	311554	311695
307571	308023	308398	309248	310504	310883	311045	311135	311253	311358	311419	311481	311555	311699
307575	308024	308401	309250	310521	310889	311047	311136	311254	311359	311420	311483	311557	311728
307582	308025	308468	309255	310524	310890	311050	311138	311255	311360	311428	311484	311558	311730
307708	308027	308469	309256	310530	310893	311051	311141	311261	311362	311429	311485	311559	311731
307726	308028	308470	309257	310531	310898	311053	311145	311262	311365	311430	311506	311560	311732
307741	308073	308472	309259	310532	310903	311054	311146	311263	311366	311431	311507	311561	311733
307749	308074	308473	309260	310542	310904	311055	311149	311265	311367	311432	311508	311562	311736

Service Bulletin #200 Affected Unit List - Airstream Volta E1 Package Update

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