

Airstream Service Bulletin

Technical Service Bulletin Number: **189**

Product Line: **Basecamp**

Subject: **Hi-Pot Testing**

Operation code: **TTSBR8396079**

Labor rate will be: **.5**

It has come to our attention that there were Basecamp trailers built from **April 1, 2021 - July 20, 2021** that did not have the proper Hi-pot test performed before the Basecamps were delivered to the dealers.

Please contact the Airstream Customer Service office at 877-344-1076 ext. 7491 or customersupport@airstream.com with any questions.

RANGE OF VEHICLES INVOLVED:

Airstream built between - **April 1, 2021 - July 20, 2021**

Serial number range: **204931 - 206111**

Note: Because our VINs do not run in a contiguous series, there will be units in the VIN range which will not be affected by this Service Bulletin.

Equipment needed:

Megohm Meter
Phillips screwdriver
#2 bit screwdriver



Insert the batteries into the meter.

1. Remove the screw from the battery door using a Phillips screwdriver.
2. Insert the 6 x 1.5 AA batteries. (follow the polarity markings)
3. Replace the door and screw.




Make sure all non-factory items are unplugged inside the trailer.

Testing the Ground Pin

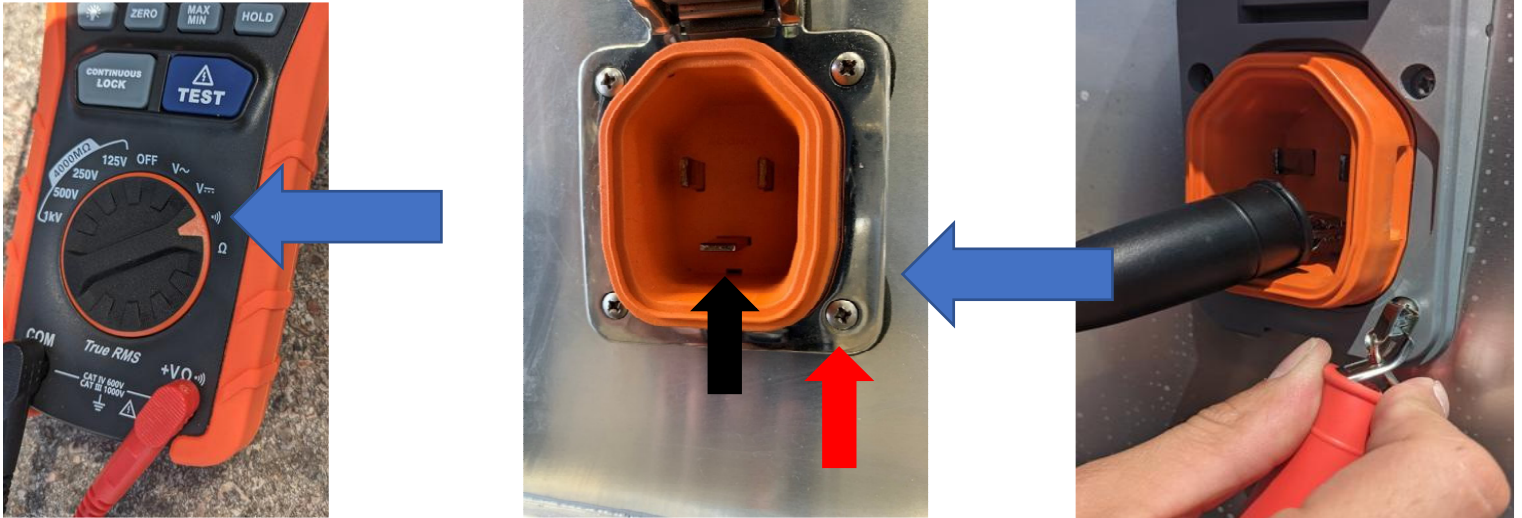
Connect the leads with alligator clips to the meter. The black lead will go to the Common socket and the red lead will go to the Positive socket, as shown.



Test 1:

1. Set the meter to the Audible Continuity setting. 
2. Place the black Common clamp on the ground pin of the shoreline outlet, as shown.
3. Place the red Positive clamp against a screw or rivet.
4. When you hear a Beep/Tone it has passed the ground pin testing.

This test will tell if the ground is bonded to the trailers skin.



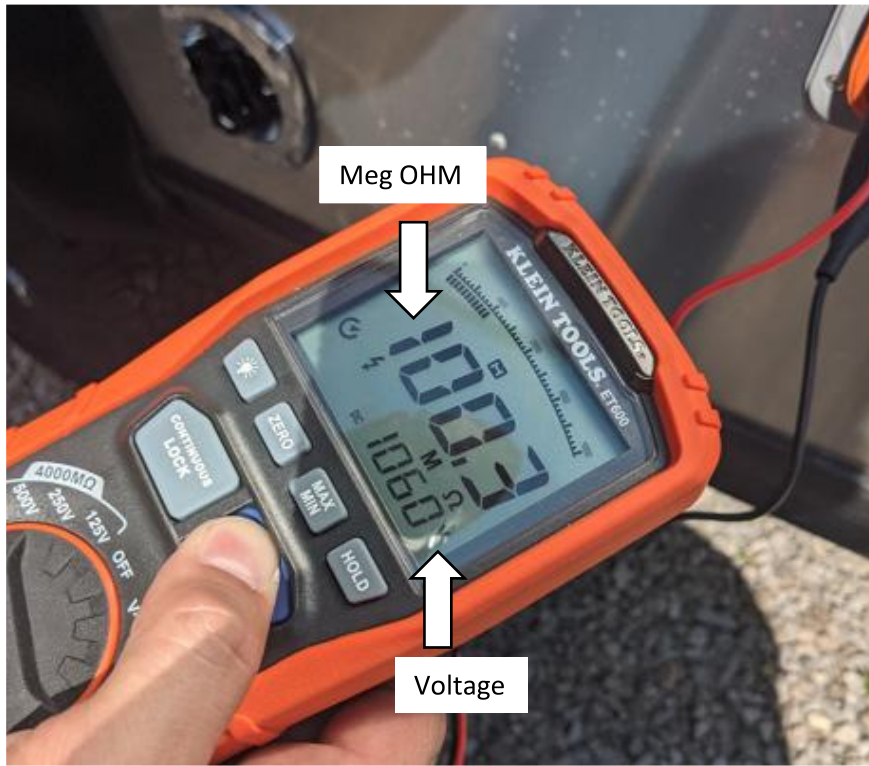
Digital Testing of the Insulation and Resistance

Test 2:

1. Make sure all of the breakers in the power center are in the ON position.
2. Place the black Common clamp on the ground pin of the shoreline outlet, as shown.
3. Place the red Positive clamp on the neutral pin, as shown.
4. Turn the dial of the meter to the 1kV setting, as shown.
5. Press and hold the blue test button.

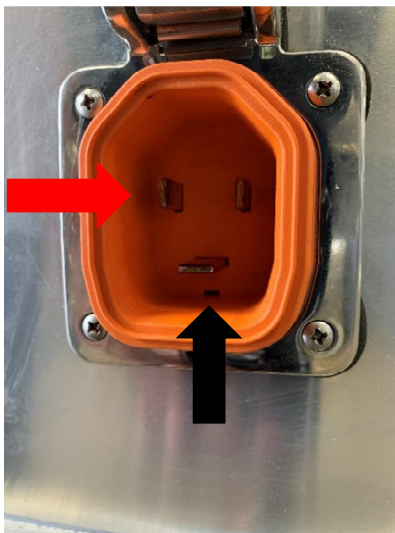


Depending on the unit, the meter may peg out to 400 before dropping and then start to climb again. As long as the reading shows a steady 100 Meg OHM @ 1000V within 30 seconds, it has passed.

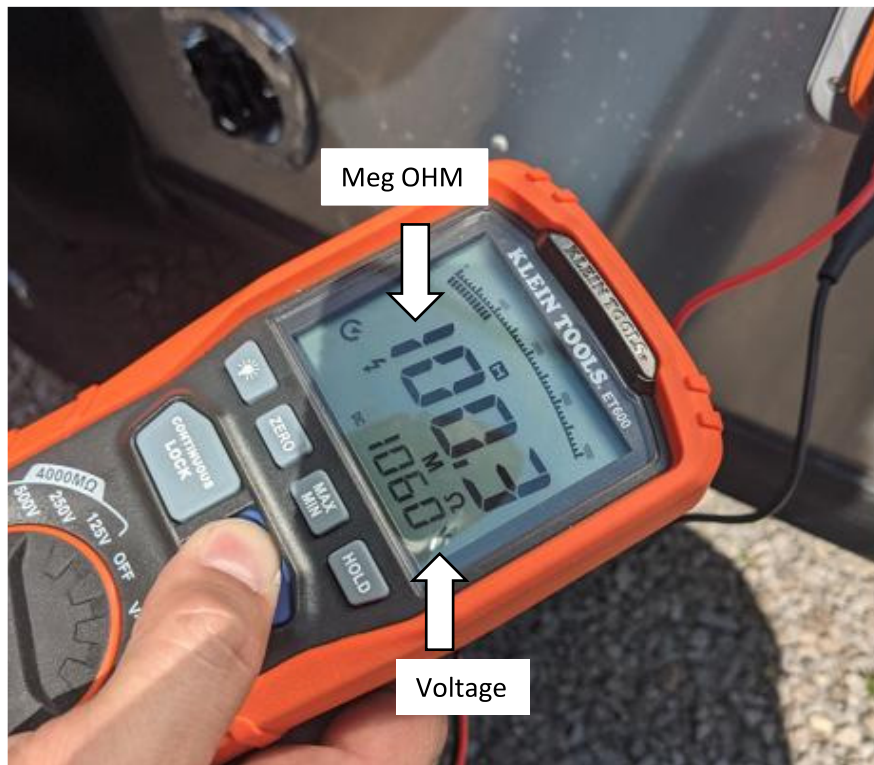


Test 3:

1. Place the black Common clamp on the ground pin of the shoreline outlet, as shown.
2. Place the red Positive clamp on the positive pin, as shown.
3. Turn the dial of the meter to the 1kV setting, as shown.
4. Press and hold the blue test button.



Depending on the unit, the meter may peg out to 400 before dropping and then start to climb again. As long as the reading shows a steady 100 Meg OHM @ 1000V within 30 seconds, it has passed.



If there were no failures on all three tests, the trailer passes and is safe to use.


The picture below, shows what a short would look like on this meter. If this happens, the trailer does not pass and further steps will need to be taken.

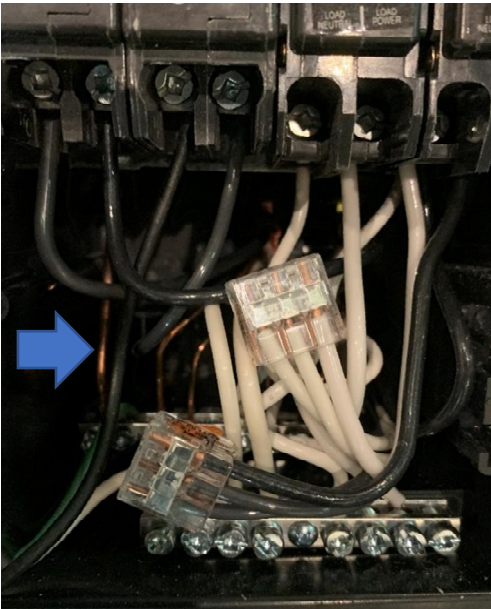


How to Isolate a Failure

Test 1 Failure:

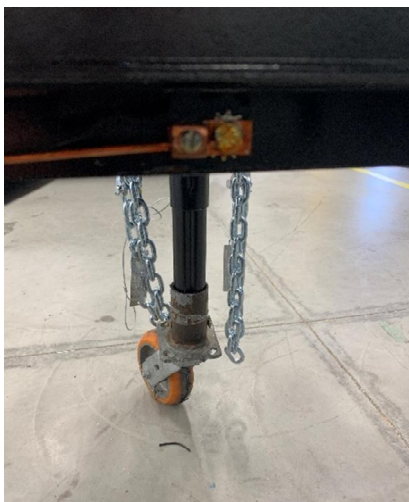
If the unit fails test 1 (continuity test on the ground leg), you will need to test the ground in the power center.

1. Connect the black Common clamp to the 8 gauge chassis ground wire in the power center. **Do Not** remove the wire from the grounding block.
2. Touch the red Positive clamp to a rivet in the skin.
3. Set the meter to the Audible Continuity setting. (same setting as Test 1) 
4. When you hear a Beep/Tone it has passed the ground testing.

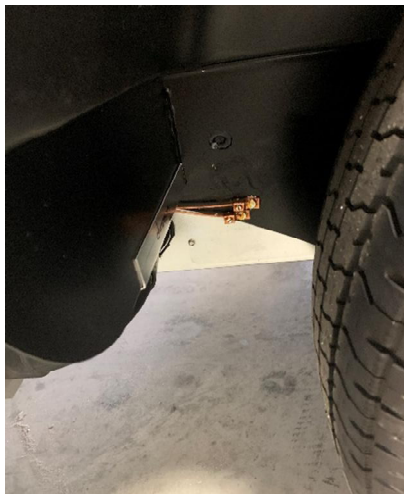


If it does not pass, check the grounding block on the chassis. If it does pass, check the ground screw on the exterior shoreline outlet.

The grounding block on the BC16 is below the LP cover, under the A-frame.



The grounding block for the BC20 is in the wheel well, on the roadside.



The grounding screw is on the back side of the shoreline outlet.



Test 2 and 3 Failure:

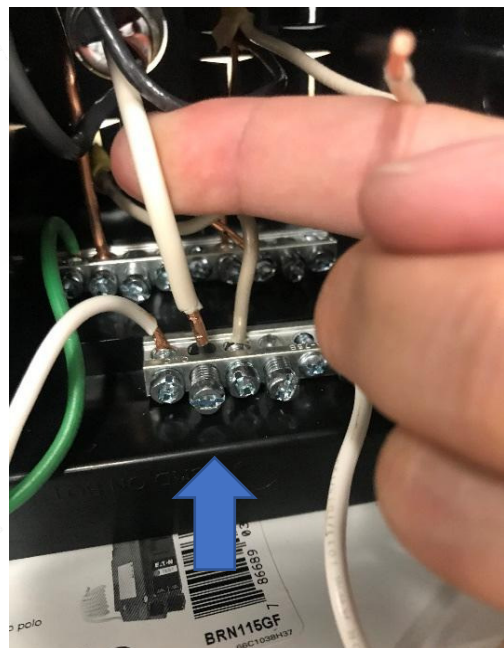
If the unit fails test 2 or 3 (positive line or Neutral leg) follow the steps below.

1. Connect the black Common clamp to the 8 gauge chassis ground wire in the power center. **Do Not** remove the wire from the grounding block.



2. Using a #2 screwdriver, remove the main 10 gauge positive wire from the 30 amp breaker.

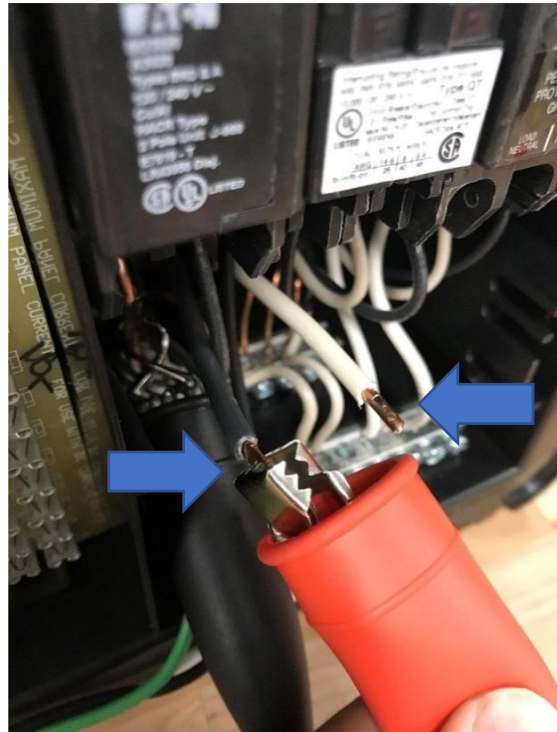
3. Using a #2 screwdriver, remove the main neutral 10 gauge wire from the neutral buss bar.



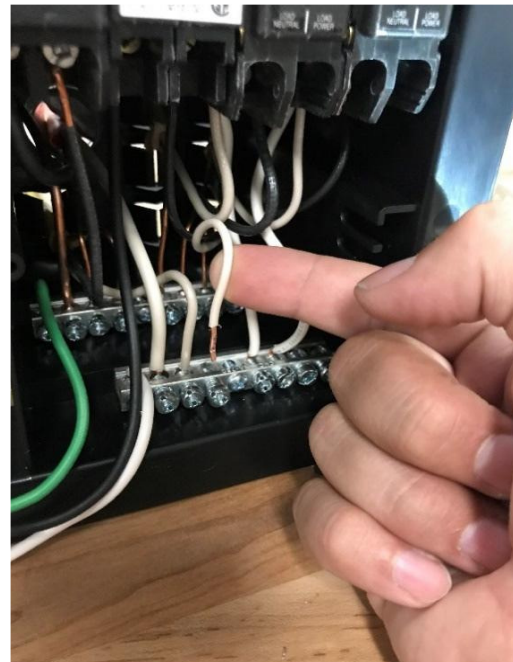
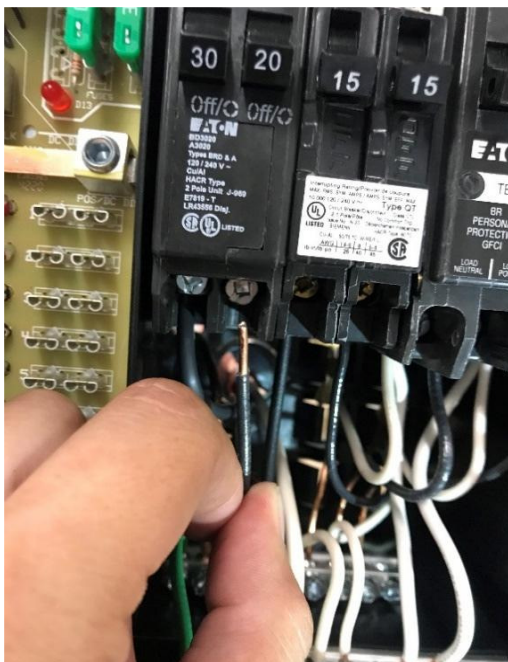
4. Connect the red Positive clamp to the positive 10 gauge wire.
5. Turn the dial of the meter to the 1kV setting.
6. Press and hold the blue test button.

Depending on the unit, the meter may peg out to 400 before dropping and then start to climb again. As long as the reading shows a steady 100 Meg OHM @ 1000V within 30 seconds, it has passed.

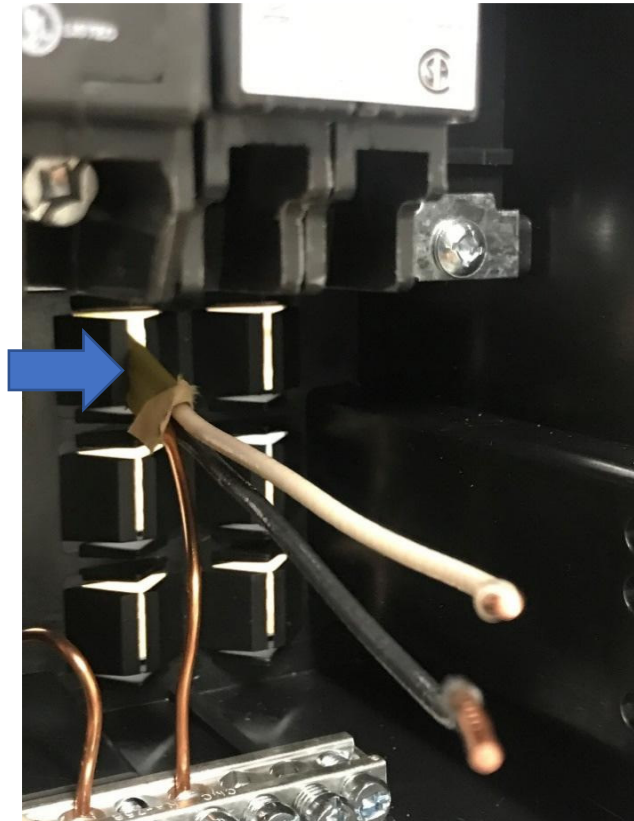
7. Connect the red Positive clamp to the 10 gauge neutral wire and repeat the test.



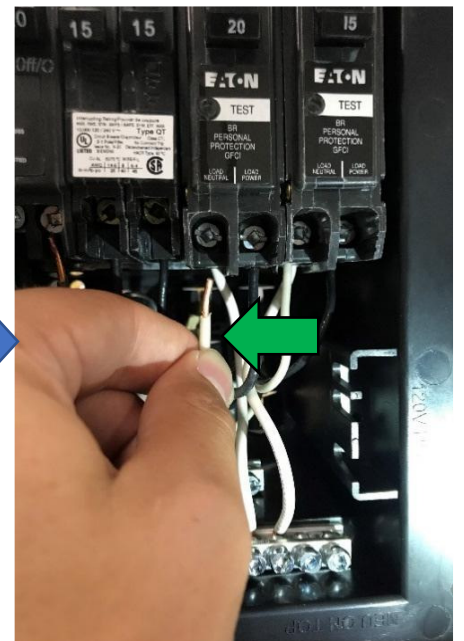
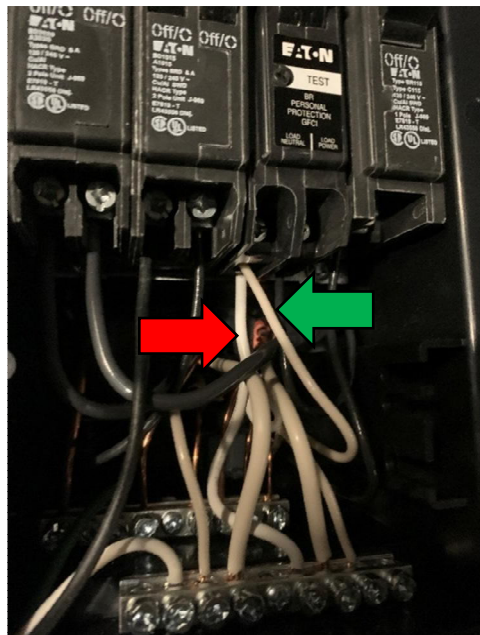
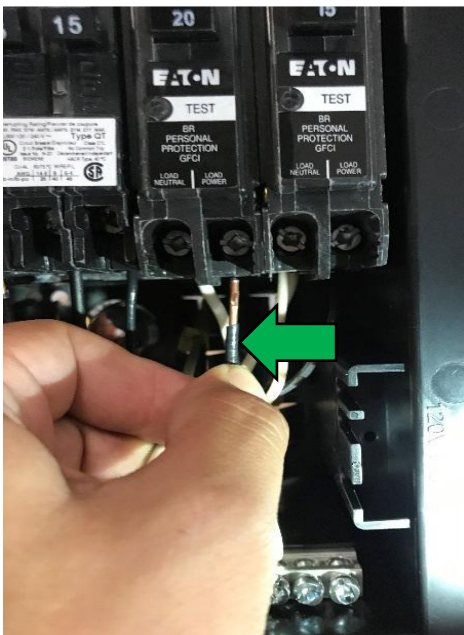
Repeat this process on all the load circuits that are not GFCI breakers.



To determine which neutral wire runs with each load wire, disconnect the black load wire and follow it until it reaches the inlet of the breaker box. The neutral wire will come from the same Romex wire.



1. To test the GFCI circuit, remove the black positive load wire and the white neutral wire from the breaker. Leave the white return pigtail attached to the buss bar.



2. Connect the black Common clamp to the 8 gauge chassis ground wire in the power center. **Do Not** remove the wire from the grounding block.
3. Connect the red Positive clamp to the positive 10 gauge wire.
4. Turn the dial of the meter to the 1kV setting.
5. Press and hold the blue test button.

Depending on the unit, the meter may peg out to 400 before dropping and then start to climb again. As long as the reading shows a steady 100 Meg OHM @ 1000V within 30 seconds, it has passed.

6. Connect the red Positive clamp to the 10 gauge neutral wire and repeat the test.



After you identify the circuit that has failed, check all of the connection points in that circuit. Example: A/C junction box, outlets, and screw points.

The following are the Airstream Basecamp 120-volt print numbers should you need to chase the issue in a circuit.

Basecamp 16 - Layout **953208**, wire routing **953226**

Basecamp 20 - Layout **953595**, wire routing **953594**

If the failure is not at a junction point, but in-between junction points, that section of wire will need to be replaced.