

SERVICE BULLETIN



DEPARTMENT OF COMPLIANCE
VEHICLE SAFETY AND RECALL MANAGEMENT
BUILDING 11
423 N MAIN ST
MIDDLEBURY, INDIANA 46540-9218

Technical Service Bulletin: 225-0901

- o Integrity
- o Safety
- o Quality
- o Customer Service

November 16, 2018

This Notice applies to your vehicle VIN listed above.

Dear Forest River Customer:

Forest River is alerting you to an issue involving certain 2018 through 2019 Coachmen – CrossFit – CFB22CF, CFB22CFEB, CFB22CFEBCA, CFB22DF, CFB22DFEB Class B motorhome recreational vehicles.

WHAT IS THE ISSUE?

Certain vehicles have Nova Kool refrigerators installed in which the 12VDC/120VAC circuit board fail, causing the refrigerators to turn off. In addition, the ventilation requirements of the refrigerator may need to be enlarged.

OWNERS: WHAT SHOULD YOU DO?

Please contact your dealer without delay and request a service appointment to schedule the free repair. Forest River has notified dealerships of this Technical Service Bulletin and have provided them with remedy instructions. The vehicle Owner is responsible for making arrangements to have the work completed. Please state you have been notified by Forest River of the issue and provide the TSB number (located at the top of this page) to the dealership. It is also helpful to give the dealership a copy of this letter when you take your vehicle in for the repair.

You may visit www.forestriverinc.com to search for dealer locations.

HOW LONG WILL THE REMEDY PROCESS TAKE?

The estimated time of repair is 2.00 to 2.50 hours. However, the dealership may need to keep your vehicle or schedule an appointment with you for a later date to fit into their regular service schedule.

DEALERS: WHAT SHOULD YOU DO?

Please review the included document remedy instructions.

Condition of payment; a picture of the old AC/DC Board and Serial Number is *Required* for any payment.

TSB NUMBER	DESCRIPTION	REPAIR CODE	TIME ALLOWED
225-0901	INSTALL VENTALTION KIT ONE PER REMEDY INSTRUCTIONS & 12VDC/120VAC BOARD REPLACEMENT	10-225901	2.50 HRS
225-0901	INSTALL VENTALTION KIT TWO PER REMEDY INSTRUCTIONS & 12VDC/120VAC BOARD REPLACEMENT	10-225902	2.00 HRS

MAY FOREST RIVER ASSIST YOU FURTHER?

CONTACT	PHONE
CROSSFIT CUSTOMER SERVICE	(574) 825-8590
CROSSFIT PARTS DEPARTMENT	(574) 825-8618

PLEASE NOTE: FEDERAL LAW REQUIRES THAT ANY VEHICLE LESSOR RECEIVING THIS SERVICE BULLETIN NOTICE MUST FORWARD A COPY OF THIS NOTICE TO THE LESSEE WITHIN TEN DAYS.

Sincerely,

Keith Fisher
Forest River, Inc.
Engineer
Office of Corporate Compliance

How to Change the Control Module from ACDC to DC:

1. Turn off all power to the unit, AC and DC.
2. Take a picture of ACDC module wiring for future reference.



3. Remove all wires from the ACDC module and remove the screw that holds the module in place.



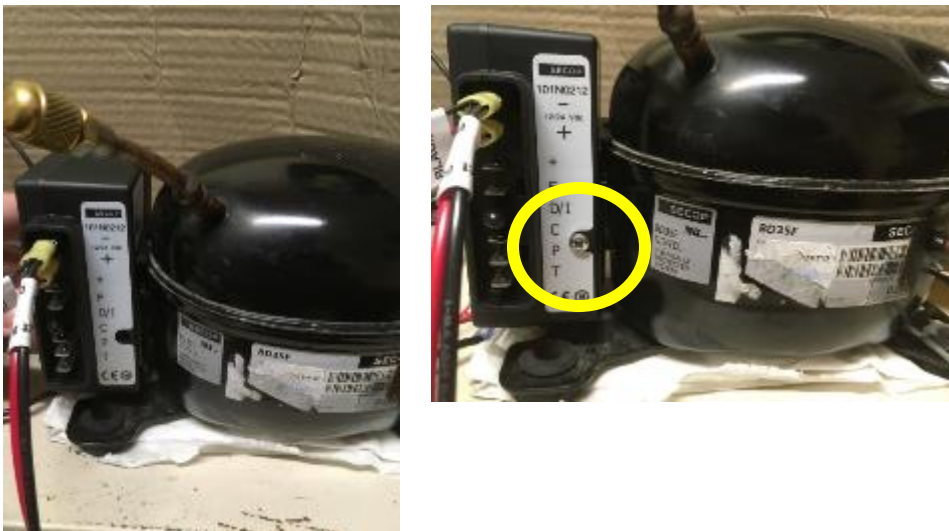
4. "Hinge" the module towards the back of the compressor, and then remove the "3 Pin" plug.



5. Put the new DC only module onto the compressor, starting with the “3 Pin” connector.



6. Replace screw that holds the module to the compressor.



7. Starting at the bottom of the new module, plug in the thermostat wires as follows:
- i. **Black wire from thermostat > Red Resistor > “T” Terminal**
 - ii. **Red wire from thermostat > “P” Terminal**
 - iii. **Red Jumper wire from thermostat > “C” Terminal**



8. The positive fan wire is “piggy backed” onto the positive DC wire when using the ACDC module. The DC only module however, has a dedicated connection for the positive fan wire. Begin by “un-piggy backing” the fan wire and the DC wire.



9. Plug the fan in as follows:
- i. **Black** negative lead from fan > “F” Terminal
 - ii. **Red** positive lead from fan > “+” Terminal



10. Connect the light wires to the marked light connections on the new DC only module. Red to Red and Black to Black.



- 11.** Connect the DC wires from the old ACDC module into the connections provided on the new DC module. Red to Red and Black to Black.



- 12.** Unplug the 110V cord from the power box. This cord is no longer needed, as the unit is DC only now. The **White** and **Black** wires that were connected to the “L” and “N” Terminals should be tucked to the side out of the way.



- 13.** Turn on the DC power to the unit. The unit should now be running on DC power only.

December 20, 2017

Service Bulletin

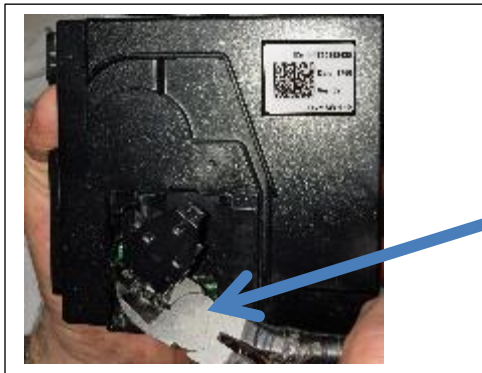
To activate the warranty on your new electronic control 101n0510, 101n0511 or 101n0212

Nova Kool will require 2 photos emailed to us at support@novakool.com. (Please include **your unit's Serial Number and Model Number**)

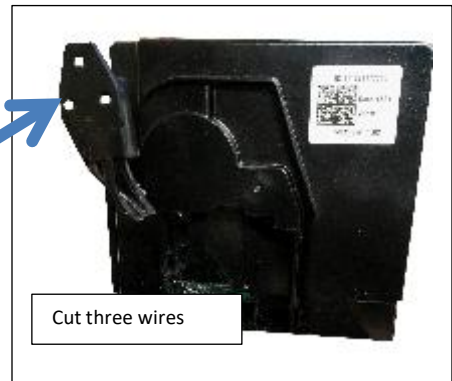
The **first** photo required is a clear photo of the bar code label from your **faulty** controller



The **second** photo is of the old controller with the three wires cut off.



Remove the plastic three hole terminal by cutting the 3 wires leading into it with wire cutters.



We will not need the faulty controller back once the wires are cut, you may dispose of it.

If you would rather return the module to nova kool please call to get instructions for the return.

For information on removing your old controller and installing the new controller go to our service videos on www.novakool.com

On the home page click video link on lower left

To phone us we are on pst 1-604-523-6515

CROSSFIT – NOVA KOOL - REFRIDGERATOR REMEDY INSTRUCTIONS

Disconnect the vehicles' battery Positive and Negative, disconnect any House battery(s) Positive and Negative, if equipped with a generator ensure it is off and lastly, ensure the vehicle is disconnected from shore power. Block any tires/wheels to prevent the vehicle from rolling. Failure to do so may result in electrocution, fire or other personal injury, property damage and/or death.

SERVICE:

Certain vehicles have Nova Kool refrigerators installed in which the 12VDC/120VAC circuit board fail, causing the refrigerators to turn off. In addition, the ventilation requirements of the refrigerator may need to be enlarged.

INSTRUCTIONS:

1. REVIEW THE VENTILATION OF THE NOVA KOOL REFRIDGERATOR, THE PROCEED WITH ONE OF THE TWO FOLLOWING REMEDIES;
2. REPLACE THE 12VDC/120VAC CIRCUIT BOARD AS DESCRIBED BELOW;
3. PHOTO'S ARE ON THE NEXT PAGE

There are two separate versions of the required ventilation upgrade listed below;

If there is NOT a big vent below the refrigerator, please order part kit 1; F100073625 – KIT 1
Venting Kit One Contains:

Bottom Vent & Fasteners – #8 x 18

Top Vent & Fasteners – 2 ¾ x 12

Insulation - 3 pcs each, measuring 24" x 27" total 1.5 linear feet ea.

If the coach HAS a big vent below the refrigerator, please order kit 2; F100073626 – KIT 2
Venting Kit Two Contains:

Top Vent & Fasteners – 2 ¾ x 12

Insulation - 3 pcs each, measuring 24" x 27" total 1.5 linear feet ea.

Nova Kool Venting and Board Replacement

While the refrigerator is on the shop floor, move the location of the fan from the side to the rear, slightly pointing upward
Reinstall refrigerator.

Inadequate venting can reduce your refrigerators cooling ability. Nova Kool has also determined there are some of the 12VDC/120VAC boards are failing at the conversion point in the board. This will cause the refrigerator to turn off. You may experience one or both of these scenarios. Contact Nova Kool (604-523-6515) with the refrigerator serial number and they will send out a new board. We advise to utilize the 12V DC only board to eliminate or prevent the board failure. 12V DC only board will only pull power from your RV's house battery bank. Essentially when you are plugged into shore power, you will pull 12V power from your battery while your on board house converter is constantly charging the battery. So you will be converting at the coach instead of the refrigerator.

Remove the refrigerator and install new board;

Remove the 120V AC power cord. Add the required vents below the refrigerator and above the Microwave;

For the vent above the Microwave utilize a 2.5" hole-saw and finish with a dremal type tool;

While the refrigerator is out, open the bottom platform ventilation transfer;

Remove the Microwave and open the air transfer cavity from the refrigerator cavity to the Microwave cavity, this will allow the proper "chimney affect" and the added vent above the Microwave will eliminate the heat buildup and allows proper flow;

Ensure all insulation is neatly tucked away from the heat transfer cavities and adhered to the inner chassis wall;

You have completed the remedy of this service bulletin.
Please claim the appropriate remedy repair code.

Thank you for your help!

CROSSFIT – NOVA KOOL - REFRIDGERATOR REMEDY INSTRUCTIONS

