

## RECALL 24V040 / 2024-035 REMEDY INSTRUCTIONS



Make(s): NOVA, BEYOND & GALLERIA  
Model(s): MANY, SEE BELOW  
Model Year(s): 2020 - 2023

Concern:  
A gearbox housing has been observed to show a crack that may develop into a fracture. As a result of such fracture is a potential for release of the awning brake under certain in-use conditions.

Repair Code: RC-042-01-00-004484

Allotted Time: .50 HRS.

Inspection Code: N/A

Allotted Time: N/A

Photo(s) Required: YES, SEE BELOW

Prior Authorization Required: YES

Part(s) Kit Number: F100514931

Part(s) Return: NO – DESTROY IN FIELD

**Turn off LP Gas at LPG Tank(s). 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.**

CERTAIN – 2021 – 2023 NOVA: NAB20C, NAB20D & NAB20RB

CERTAIN – 2021 – 2023 BEYOND: BYB22CAWD, BYB22CFCD, BYB22CFEB, BYB22CRWD, BYB22DAWD, BYB22DFEB, BYB22DRWD, BYB22RBAWD, BYB22RBEB & BYB22RBRWD

CERTAIN – 2020 – 2023 GALLERIA: GAB24AM, GAB24AM4X4, GAB24FLM, GAB24FLM4X4, GAB24QM, GAB24QM4X4, GAB24TM& GAB24TM4X4

**PARTS TO ORDER:**

1 - F100514931

**REQUIREMENTS:**

PHOTO(S) ARE REQUIRED OF ANY DAMAGED PARTS.

PHOTO OF THE AWNING SERIAL NUMBER.

**REMEDY:**

REVIEW THE DOCUMENTS ATTACHED TO THIS LETTER.



# **SERVICE MANUAL**

## **LEFT HAND MOTOR WEDGE INSTALLATION**

**RV****12V MOTORIZED ROOF MOUNTED BOX AWNING**

Read this manual before installing or using this product. Failure to follow the instructions and safety precautions in this manual can result in personal injury and/or cause the product to not operate properly.



***These instructions apply to all models listed. Details and procedures unique to a specific model are labeled appropriately.***

## **NOTICES AND DISCLAIMERS**

### **SUPPLEMENTAL INSTRUCTIONS**

These instructions are intended to be supplemental to the existing Freestyle Evolution service manual. If there are additional questions on service, please refer to service manual (PN 070036-301).

### **SAFETY INFORMATION**



This is the safety alert symbol. It is used to alert individuals to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible personal injury or death.



Indicates a hazardous situation, which if not avoided, could result in death or serious bodily injury.



Indicates a hazardous situation, which if not avoided, may result in minor or moderate bodily injury.



Indicates a situation that may result in equipment-related damage.

#### **General Safety:**



This product can expose you to chemicals including Di-isodecyl phthalate (DIDP), Vinyl Chloride and Formaldehyde, which are known to the state of California to cause cancer or birth defects or other reproductive harm. For more information visit [www.P65warnings.ca.gov](http://www.P65warnings.ca.gov)



Shock Hazard. Always disconnect battery or power source before working on or around the electrical system.



Always wear appropriate safety equipment (i.e. goggles).



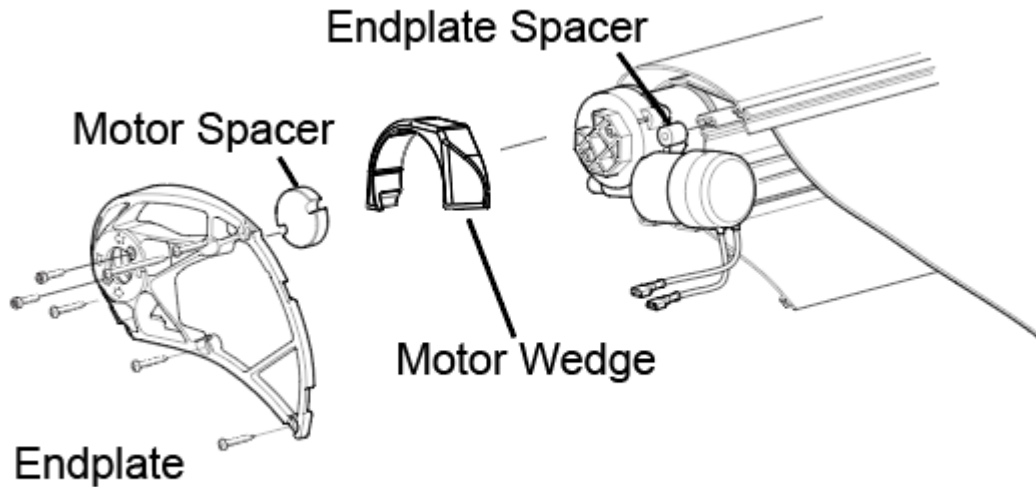
Always use appropriate lifting devices and/or helpers when lifting or holding heavy objects.



When using fasteners, do not over tighten. Soft materials such as fiberglass and aluminum can be "stripped out" and lose the ability to grip and hold.

## PRODUCT OVERVIEW

This manual covers the installation of a motor wedge into the existing Carefree Freestyle Evolution awning. The motor wedge is used to provide additional support to the motor in normal operations. Below is a schematic showing the motor wedge, a Left Hand motor is shown.

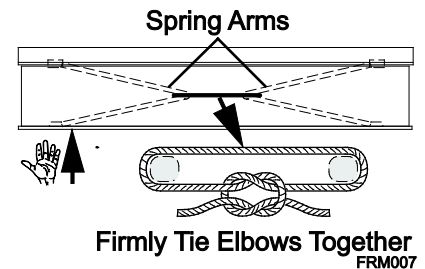


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## INSTALLING THE MOTOR WEDGE

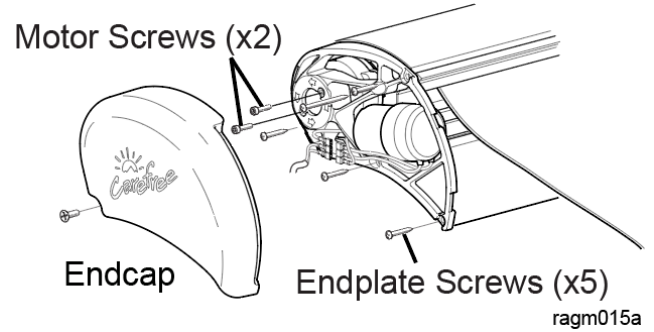
**⚠ WARNING** If the awning is closed when the motor and end cap screws are removed, the spring arms will extend the awning quickly, possibly causing personal injury and damage to the awning.

1. Disconnect power to the awning.
2. If the awning is extended: Carefully push the lead rail toward the case so that the arms collapse. While holding the lead rail in this position, firmly tie the elbows of the spring arms together. Use a minimum 1/2" rope - do not use bungee cords. When tying the rope, use a non-slip knot such as a square knot or equivalent.
3. If the awning is closed: Secure the lead rail in the closed position with at least 3 zip ties (tensile strength of 40lb or above) spaced equally along the awning.



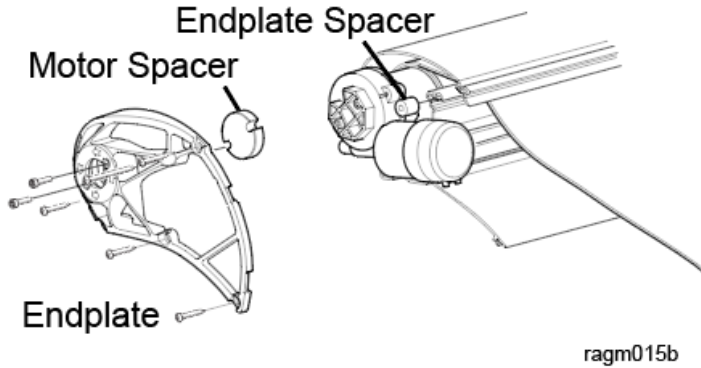
**CAUTION** Failure to secure the lead rail as described will allow the spring arms to unexpectedly extend out possibly causing personal injury and damage to the awning.

- Remove the motor end cap screw and remove the Endcap and set aside. For installed awnings, you may need to loosen the bracket bolts to gain access to the motor Endcap, depending on motorcoach model. Please reference service manual 070036-301 for additional information if you need to partially remove your awning to perform the motor wedge installation procedure.

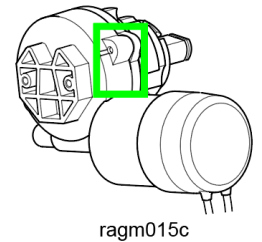


- Remove the motor screws (x2) and the endplate screws (x4) using either a T20 Torx head bit and the longer rail screw (x1) using a #2 Phillips head bit. Some awnings were installed with all 5 screws being the Phillips head screw.

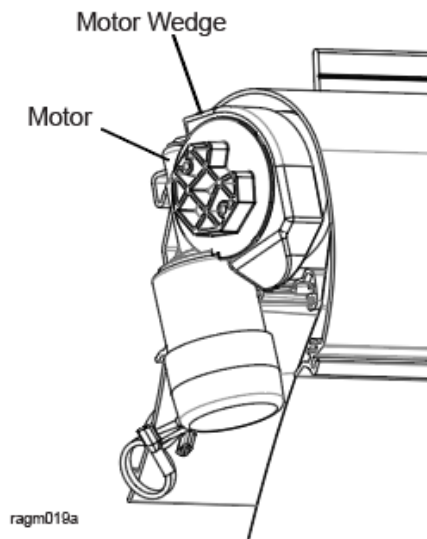
- Pull the endplate away from the case. Take care to not lose the small Endplate Spacer. The Motor Spacer should stay wedged inside the Endplate.



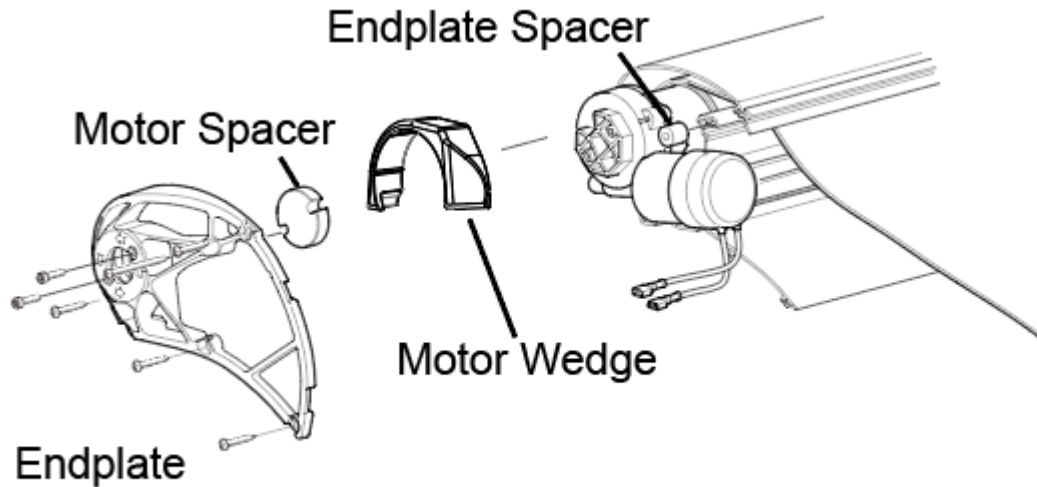
- With a flashlight, inspect the motor housing. Do not remove the motor from the roller tube. Pay particular attention to this highlighted zone. Inspect for any cracks anywhere on the motor housing. If there are no cracks visible, then the motor can continue to be used.



- If there are cracks, please follow the instructions detailed in the section **REPLACING THE MOTOR** in service manual 070036-301
- Install the motor wedge over the gear motor. The wedge will only fit one way onto the motor.



- After installation of the motor wedge, reassemble all the parts. Pay particular attention to the Endplate Spacer, which will be loose once you remove the Endplate.



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11. Attach the end plate to the motor with the motor screws provided in the replacement kit (x2). Use a #2 Phillips head bit and a torque limiting driver. Drive the screws until they are tight.
12. Align the screw holes in the end plate and attach the new 1 inch Torx head screws to the awning case (x4). Use a T20 bit to drive the Torx head screws. Use a #2 Phillips head bit to drive in the longer screw in the endplate spacer. In some cases, the 1 inch Torx screw may not bite into the aluminum, especially at the location that uses the Endplate spacer. It is acceptable to reuse one of the longer Phillips head screws in that location if necessary.
13. While firmly holding the partially extended lead rail, carefully remove the spring arm ties previously installed. Allow the lead rail to extend until the fabric is taut. If using zip ties, carefully cut the zip ties. The lead rail should not move.
14. Attach the End Cap and screw.
15. Connect to the awning via the Carefree Connects App, and follow the Firmware Update procedure in user manual 056513-003.
16. Using the awning switches, verify function of the awning.
  - a. Extend the awning fully. Note that the fabric is taut.
  - b. Retract the awning fully. Make sure that the lead rail sits into the case. Small gaps are acceptable but should be no bigger than 1/2".
  - c. Extend the awning and shake the leadrail. The awning should close automatically.
17. Follow all OEM instructions to validate that ignition lockout testing is functioning.

# SERVICE MANUAL



# CAREFREE CONNECTS FIRMWARE UPDATE

**RV**

**FOR CAREFREE 12V MOTORIZED AWNINGS EQUIPPED WITH CAREFREE'S BT12 WIRELESS AWNING CONTROL SYSTEM**



Read this manual before installing or using this product. Failure to follow the instructions and safety precautions in this manual can result in personal injury and/or cause the product to not operate properly. This instruction is limited to BT12 Firmware updates and verification of BTMotion connectivity. For more information on Carefree Connects mobile app, please reference the Carefree Connects Mobile App Manual pn 070029-201.



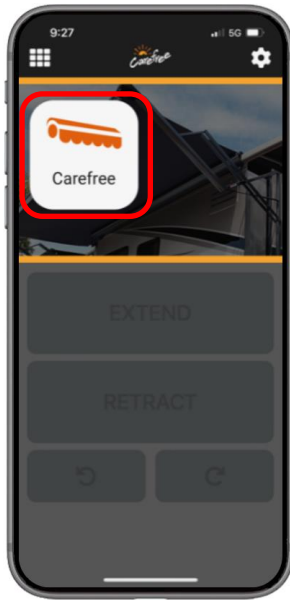
## DOWNLOAD

Download the latest version of the Carefree Connects App from the Apple App store or the Google Play store.

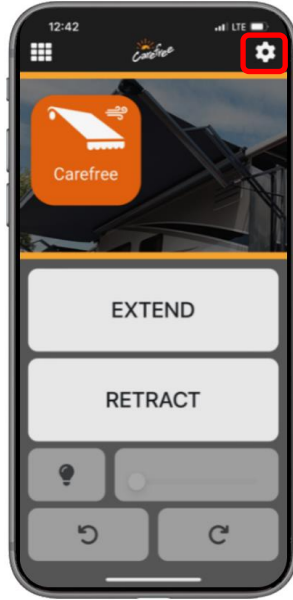
## FIRMWARE VERIFICATION



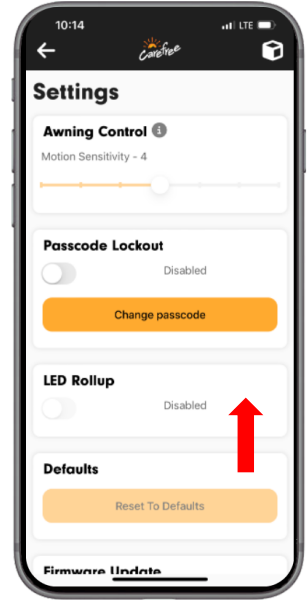
Open the Carefree Connects mobile app.



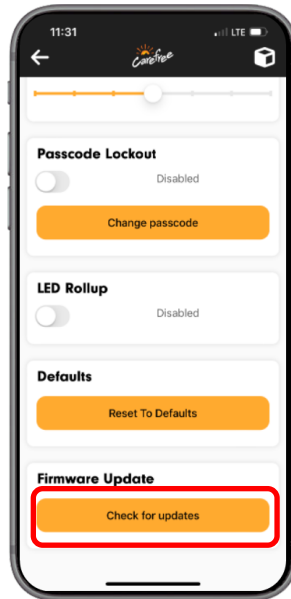
Pair then click on the awning you want to update (it might have a different name).



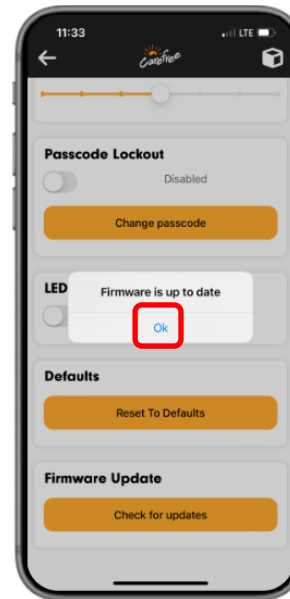
Click on cogwheel in upper corner.



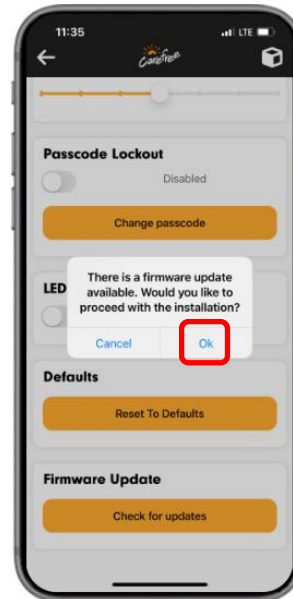
Scroll down on settings.



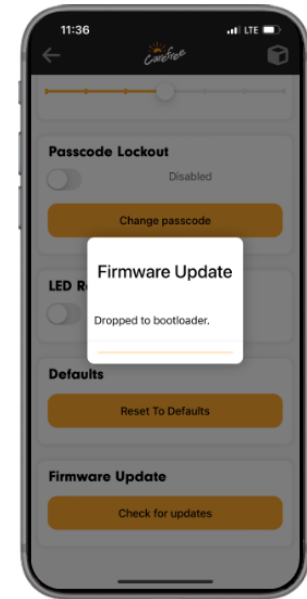
Scroll to the bottom, click on "Check for updates".



If the Firmware is up to date, click ok and test the app below.

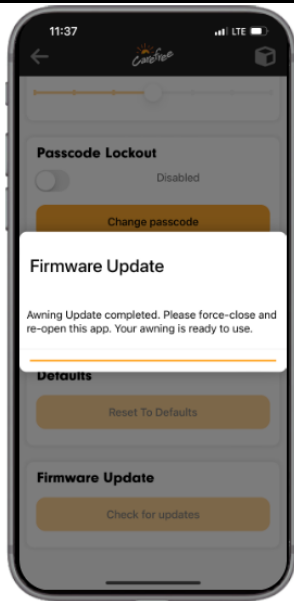


If the Firmware needs updating, click "Ok".

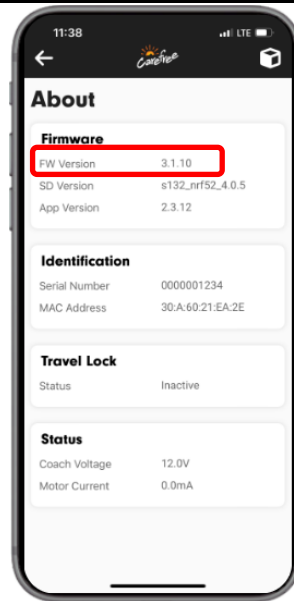


After clicking "Ok", you will see several screens appear and a download status.



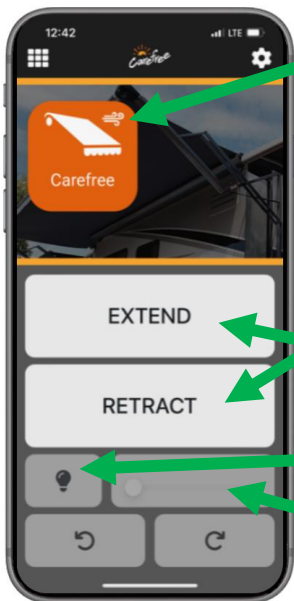


Once the download is complete, you must force-close the app and reopen.



Reopen the app, reconnect to the awning, click on the cogwheel, and scroll to the About screen. Verify FW version 3.1.10 is loaded. Then proceed to test the app.

## TEST THE APP



Verify the wind sensor is working – This wind symbol should be present, and White. If it is Black or missing, you must reconnect the wind sensor. Please refer to 070029-201 Carefree Connects Mobile app for pairing instructions.

Extend and Retract the connected awning – These buttons should fully extend and fully retract the awning

If the BT12 control module has the LED chip, this symbol will appear – Cycle the LED lights on/off, and verify that dimming controls are working.

