

**SERVICE MANUAL****MOTOR WEDGE INSTALLATION**

Product style code: IJ

**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).



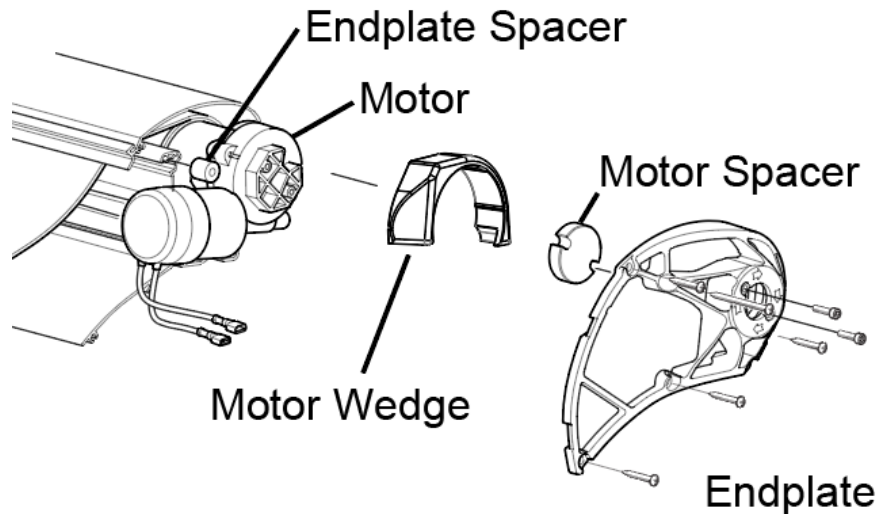
Always use appropriate lifting devices and/or helpers when lifting or holding heavy objects.



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

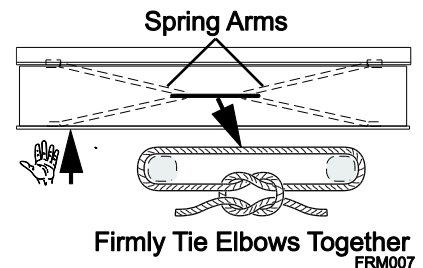
This manual covers the installation of a motor wedge into the existing Carefree Freestyle Evolution awning. The motor wedge is used to provide additional support to the motor in normal operations. Below is a schematic showing the motor wedge, a Right-Hand motor is shown.



## INSTALLING THE MOTOR WEDGE

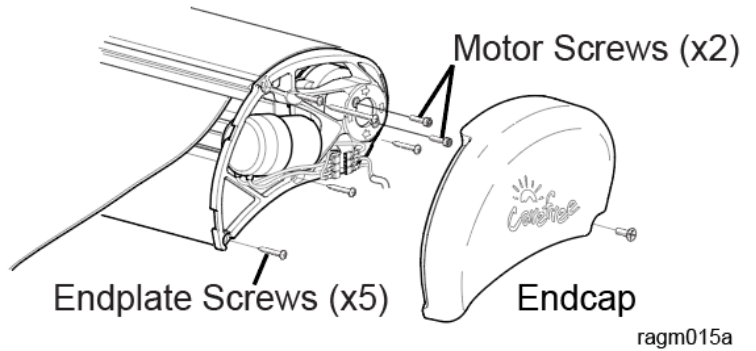
**! WARNING** If the awning is closed when the motor and end cap screws are removed, the spring arms will extend the awning quickly, possibly causing personal injury and damage to the awning.

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.



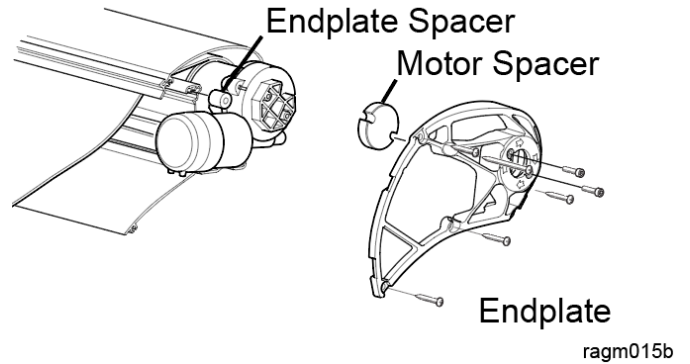
**CAUTION** Failure to secure the lead rail as described will allow the spring arms to unexpectedly extend out possibly causing personal injury and damage to the awning.

4. 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.

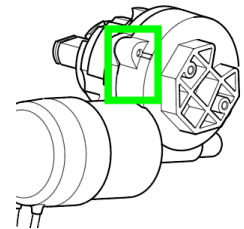


5. Remove the motor screws (x2) and the endplate screws (x5) using a #2 Phillips head bit.

6. 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

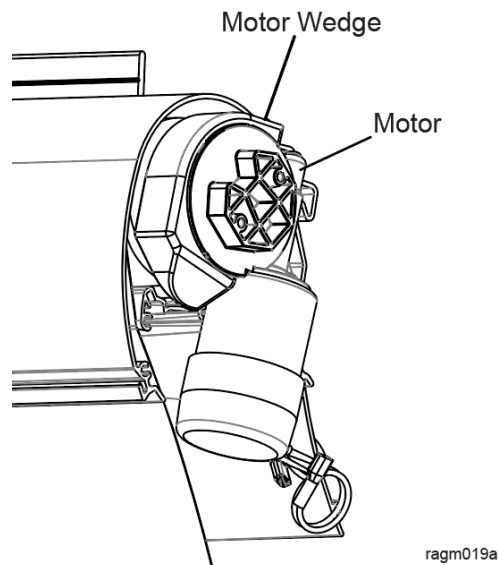


7. With a flashlight, inspect the motor housing. Do not remove the motor from the roller tube. Pay particular attention to this highlighted zone. Inspect for any cracks. If there are no cracks visible, then the motor can continue to be used.

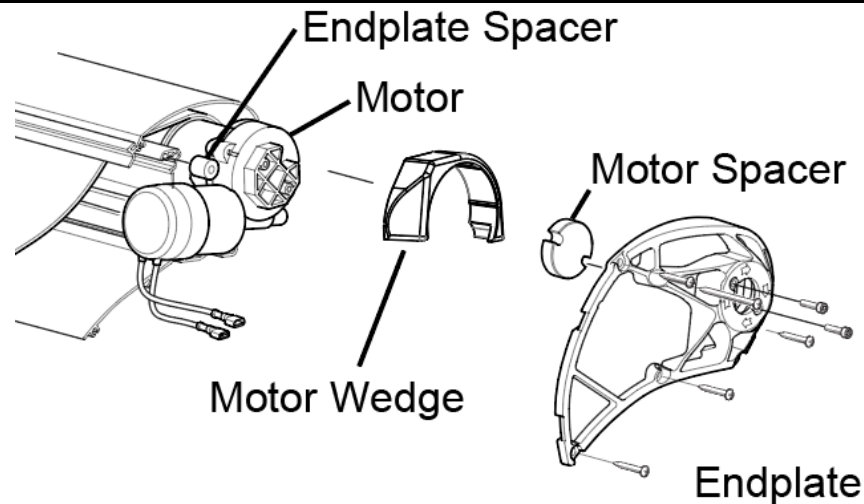


8. If there are cracks, please follow the instructions detailed in the section **REPLACING THE MOTOR** in service manual 070036-301

9. Install the motor wedge over the gear motor. The wedge will only fit one way onto the motor.



10. 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.



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 (x5). Use a T20 bit to drive the Torx head screws. 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. Using the awning controls, 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.