Motor Replacement Instructions

SUNSETTER ESSENTIALS MOTORIZED AWNINGS

For Technical Support:

HTTPS://SUPPORT.SUNSETTER.COM

E-MAIL CONTACTUS@SUNSETTER.COM

CALL TOLL FREE 800-670-7071

⚠ WARNING

FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN SERIOUS PERSONAL INJURY, INCLUDING DEATH.

⚠ WARNING

- Remove and immediately recycle or dispose of used batteries according to local regulations and keep away from children. Do NOT dispose of batteries in household trash or incinerate.
- Even used batteries may cause severe injury or death.
- Call a local poison control center for treatment information.
- Applicable to compatible battery type **CR2430, CR2032, and CR2450.**
- Nominal battery voltage is **3V.**
- Non-rechargeable batteries are not to be recharged.
- Do not force discharge, recharge, disassemble, heat above **60° C** or incinerate. Doing so may result in injury due to venting, leakage or explosion resulting in chemical burns.
- Ensure the batteries are installed correctly according to polarity (+ and -).
- Do not mix old and new batteries, different brands or types of batteries, such as alkaline, carbon-zinc, or rechargeable batteries.
- Remove and immediately recycle or dispose of batteries from equipment not used for an extended period of time according to local regulations.
- Always completely secure the battery compartment. If the battery compartment does not close securely, stop using the product, remove the batteries, and keep them away from children.

Parts Supplied

1. Replacement Motor
2. Limit Adjustment Screwdriver
3. Motor Adaptor Plate
4. Two (2) M6 25mm Socket Head Screws with pre-applied threadlocker
5. Motor Mount Hardware
   a. Two (2) M6 30mm Socket Head Screws
   b. Two (2) Washers
   c. Two (2) M6 Nuts

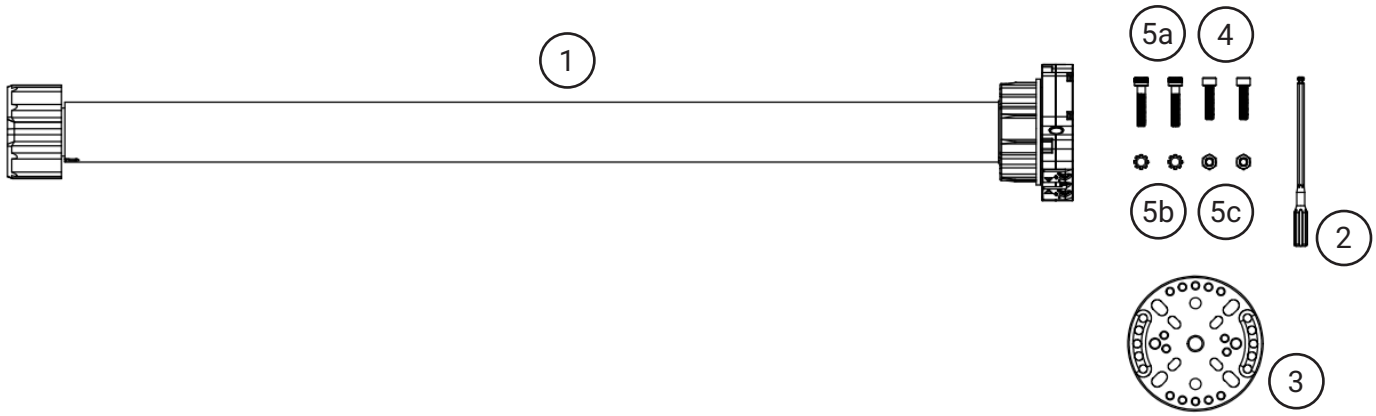


Figure 1 - Parts Supplied

Tools Needed

- Two Helpers
- Two Step Ladders
- Pencil or Marker
- Phillips Screwdriver
- 5mm Hex Key
- 3mm Hex Key
- 6mm Hex Key
- Small Hammer (optional)
- Pointed Tool (paper clip, toothpick, etc.) to press recessed Programming Button on rear of Remote

1 Prepare awning

1. Open the awning to the fully extended position.

2. **Unplug the power cord from the power (GFI) outlet.**

⚠ WARNING

FAILURE TO DISCONNECT POWER TO THE AWNING CAN RESULT IN PERSONAL INJURY!

Note: For awnings that have a SunSetter Aluminum Hood installed, on the same side as the motor, remove the hood end plate (see Figure 2).

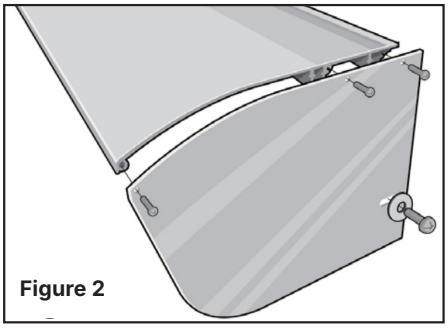


Figure 2

3. Using the manual crank wand, continue to unroll the fabric until you expose the fabric slot in the roller bar and create maximum slack in the fabric (see **Figure 3**).

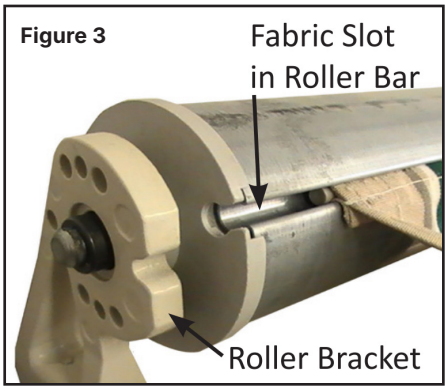


Figure 3

1 Prepare awning cont.

! NOTICE MOTOR ALIGNMENT

1. **BEFORE DISASSEMBLY, notice the alignment of the motor mount screws. Mark the holes in both the roller bracket and adaptor plate that the screws are aligned to.**
   a. **On both the roller bracket and adaptor plate, mark alignment of the two M6 30mm screws that secure the roller bracket to the adaptor plate (see Figures 4 and 5).**
   b. **On the adaptor plate, mark alignment of the two M6 25mm screws that secure the adaptor plate to the motor head. These screws insert from the tube side of the motor (see Figures 4 and 5).**

   Once the current motor is removed, you will copy markings to the replacement motor's adaptor plate to ensure easy alignment.

Figure 4 - RIGHT side mounted motor view

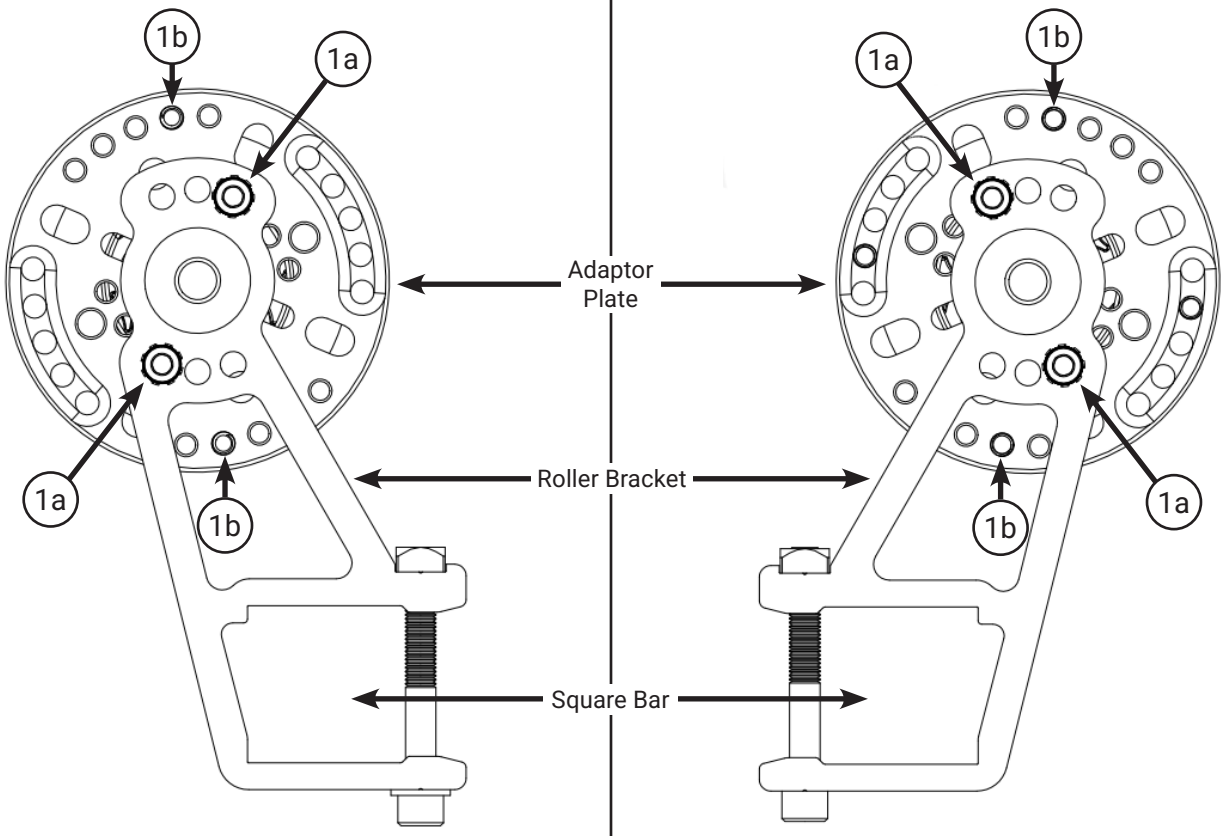


Figure 5 - LEFT side mounted motor view

2 Remove motor

6. Have one helper hold the roller bar near the roller bracket on the side that is opposite of the motor. **This is necessary to keep the roller bar from coming out of the roller bracket while the motor is unbolted from the other side (see Figure 3).**

Note: The roller bar can be removed from between the roller brackets if more space is needed to remove and replace the motor. Be careful to not lose the gray bushing on the pin at the end of the roller bar. The helper(s) must hold and stabilize the roller bar with care.

7. Using a 6mm hex key, loosen the retaining bolt that secures the roller bracket to the square bar.
8. While a helper supports the roller bar near the motor, slide the motor assembly out of the roller bar.
9. Remove the two M6 30mm socket head screws and washers that connect the motor to the roller bracket (see **Figure 7)**.

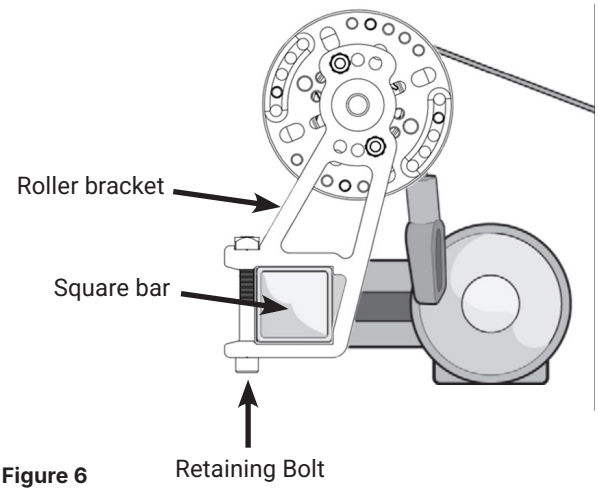


Figure 6

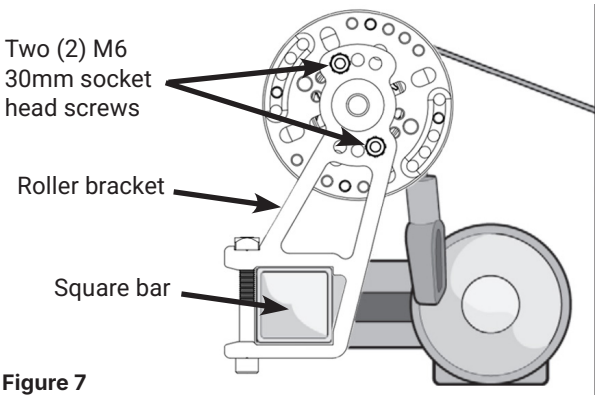


Figure 7

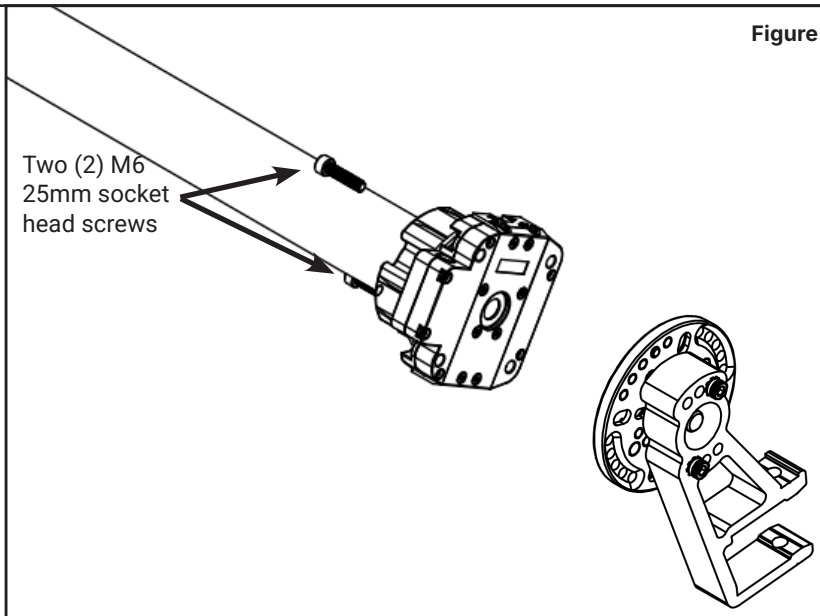
! NOTICE MOTOR ALIGNMENT

10. **Looking at the back side of the motor head, mark the holes that the two M6 25mm screws are aligned to (see Figure 8).**

    Mark the holes in the adaptor plate as well as the motor head.

11. **Compare the front and back of the replacement adaptor plate with the original. Copy alignment of the two M6 30mm (see Figures 4 and 5) and the two M6 25mm (see figure 8) screw markings to the replacement adaptor plate to ensure easy alignment.**

Figure 8



3 Attach motor to roller bracket

12. Using the 5mm hex key, two M6 30mm screws, washers, and M6 nuts, attach the replacement adaptor plate to the roller bracket.Take care to align the previously marked holes.

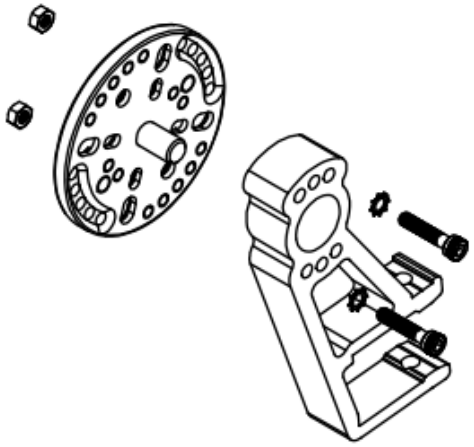


Figure 9a

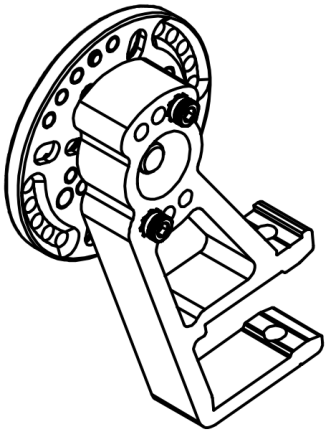


Figure 9b - Front view of assembly

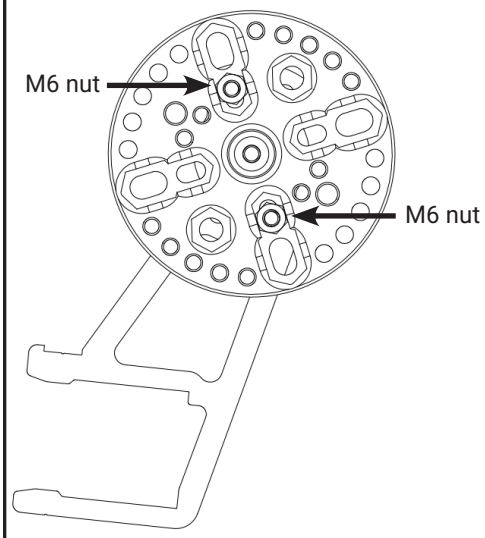


Figure 9c - Rear view of assembly

13. Using the two M6 25mm screws with pre-applied threadlocker, attach the roller bracket and adaptor plate assembly to the motor head. Take care to align the previously marked holes.

Note: Due to the pre-applied threadlocker, the M6 25mm screws are single use only. If additional screws are needed, please contact SunSetter Dealer Service team at 844-313-0143 to place an order.

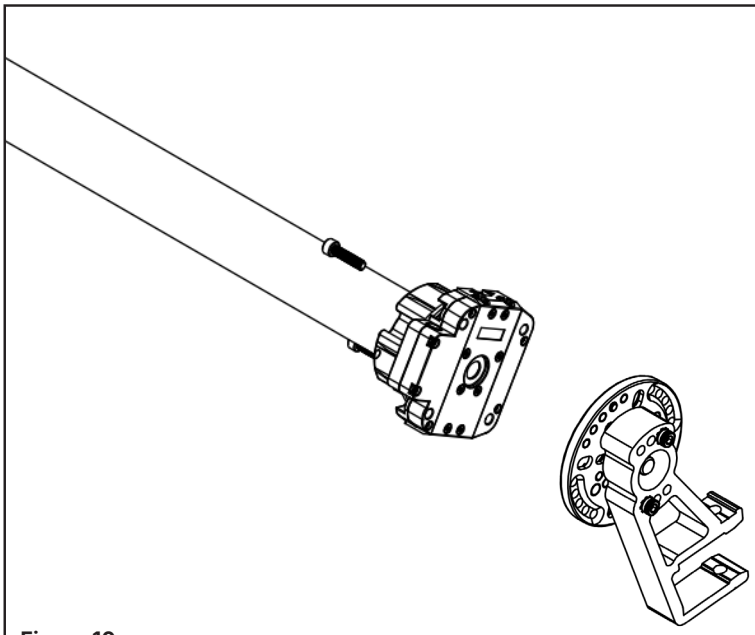


Figure 10

4 Replace motor

14. Insert the new motor into the roller bar, aligning the cream colored slots in the black tube driver and crown gear with the fabric slot in the roller bar (see **Figures 11 and 12**).

Figure 11

End View of Drive Gear shows four different sized slots of the Drive Gear.

This is the second smallest slot. The Fabric Slot in the Roller Bar fits this slot. The other slots are either too large or small.

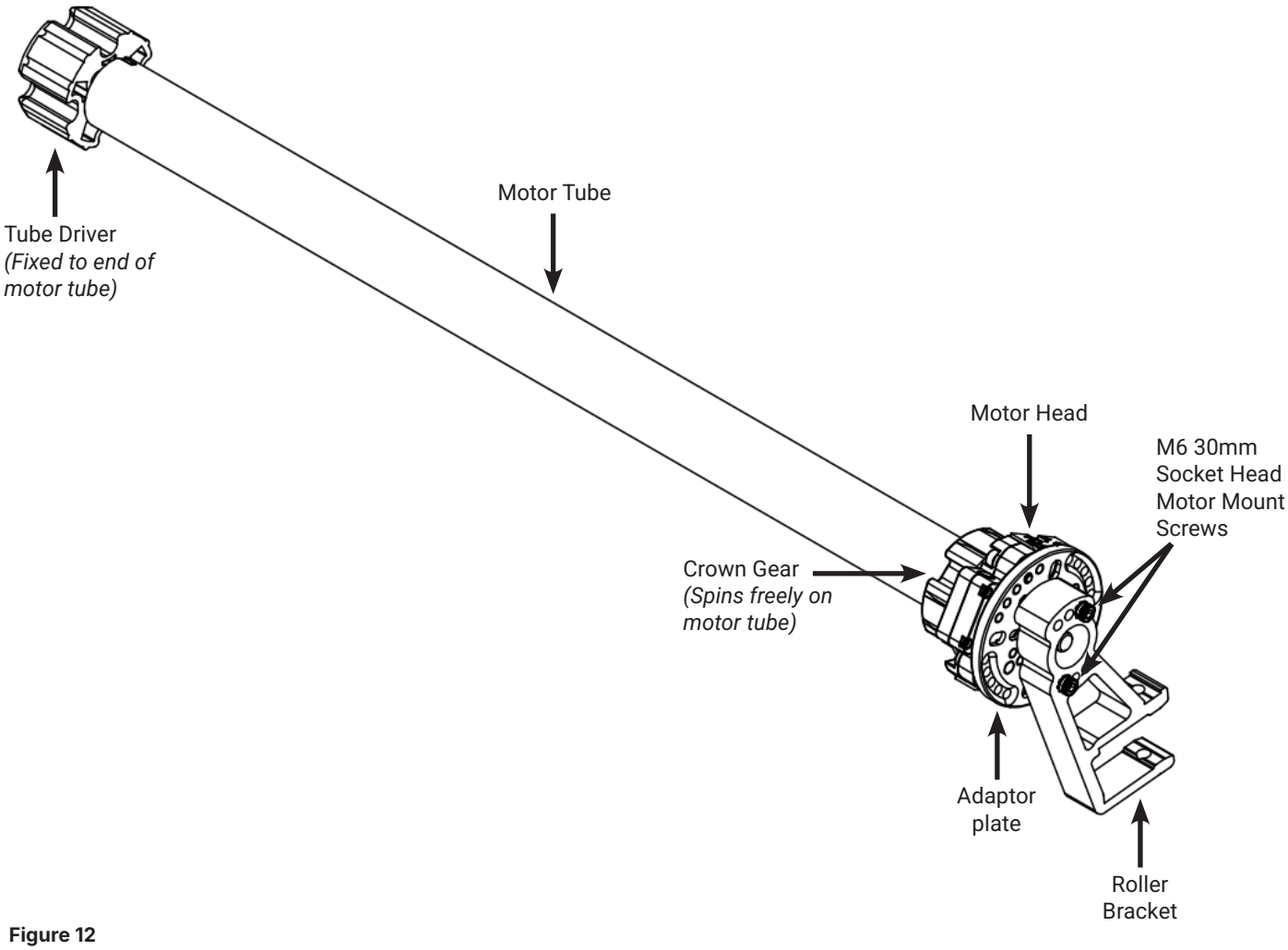


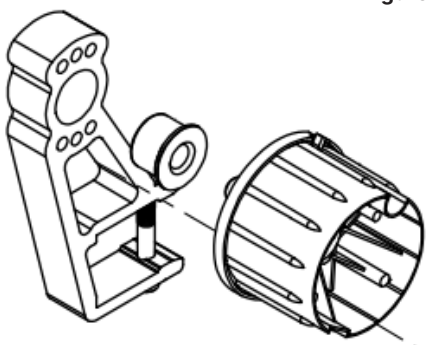
Figure 12

5 Secure roller brackets

15. Replace the roller bar between the two roller brackets.

Note: Ensure the gray bushing is on the round pin of the end cap before sliding it into the roller bracket (on the end opposite the motor). Ensure the end cap of the roller bar is in contact with the roller bracket on the end opposite the motor (see Figure 13).

Figure 13



16. Using a 6mm hex key, tighten the retaining bolt that secures the roller bracket to the square bar (see **Figure 14**).

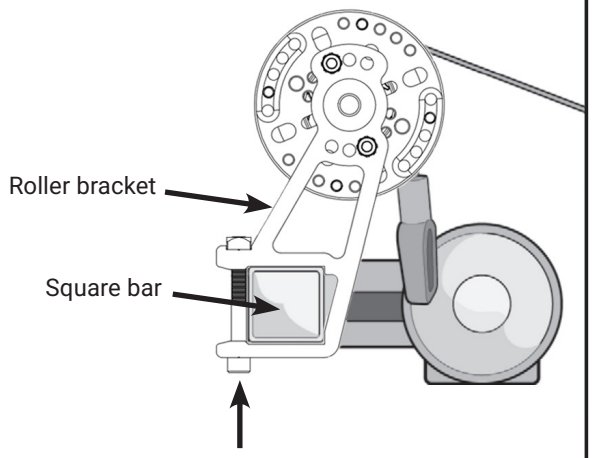


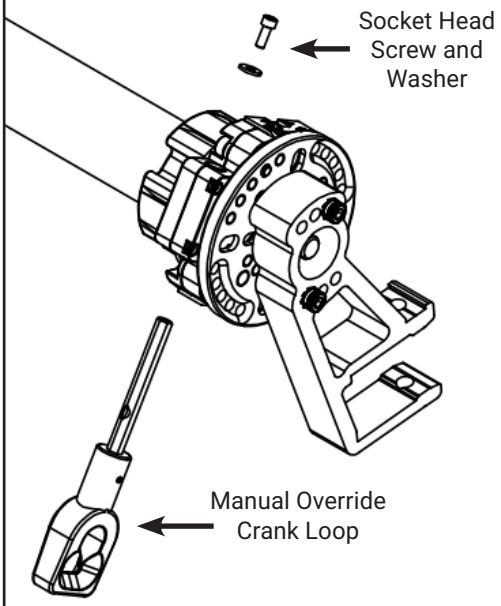
Figure 14

6 Move manual overide crank loop to new motor

17. Remove the override crank from your old motor using a 3mm hex key. Insert the override crank into the new motor from the bottom of the groove in the motor so the override crank loop faces downward. Secure the override crank from the top with the hex socket cap bolt and washer (see **Figure 15**).

Note: The override crank should be facing toward the front of the awning.

Figure 15



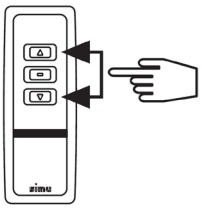
7 Manually retract awning

18. Center the fabric on the roller bar and on the front bar. Hold the fabric snug across the length of the roller bar, ensuring it rolls up evenly. When closing, the awning should not bang against the house nor should an arm stick out beyond the valance. If it does, center the fabric on roller bar.
19. Use the manual crank wand to slowly roll the fabric onto the roller bar, until the awning is approximately half-way closed.
20. Reinstall the hood end plate, if removed.

8 Program remote to the new motor

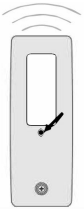
Note: To prevent accidental reprogramming of any other remote-controlled SunSetter devices, unplug them prior to programming the new awning motor.

21. Plug the power cord back into the wall outlet.



22. Press and hold the UP/CLOSE and DOWN/OPEN buttons together, on the remote.

    Hold until motor jogs or moves.



23. Briefly press the PROGRAMMING button.

    The motor will jog back and forth.

24. To add additional control devices (remotes, wall switches, or sensors), follow the additional control device's instructions.

    All SunSetter instructions can be found at https://support.sunsetter.com.

9 Adjust the open and close limits

USE SECTION A FOR LEFT SIDE MOUNTED MOTOR

USE SECTION B FOR RIGHT SIDE MOUNTED MOTOR

OPEN POSITION

When open, the lateral arms are slightly bent and the fabric is snug.

The fabric should be rolling over the top of the roller bar (see Figure 16), not underneath (See Figure 17). If the fabric is rolling from the bottom of the roller bar, continue unrolling the fabric until it rolls over the top of the roller bar. Then roll up the fabric until both the lateral arms bend slightly and fabric becomes tight.

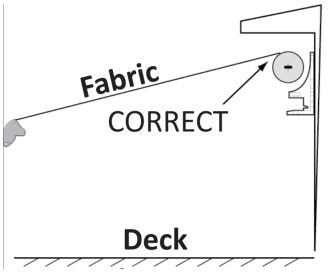


Figure 16

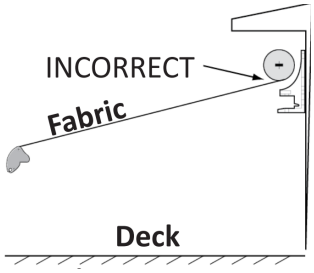


Figure 17

CLOSE POSITION

The awning should close to about 1" - 2" between the front bar and the arm clamps (see Figure 18).

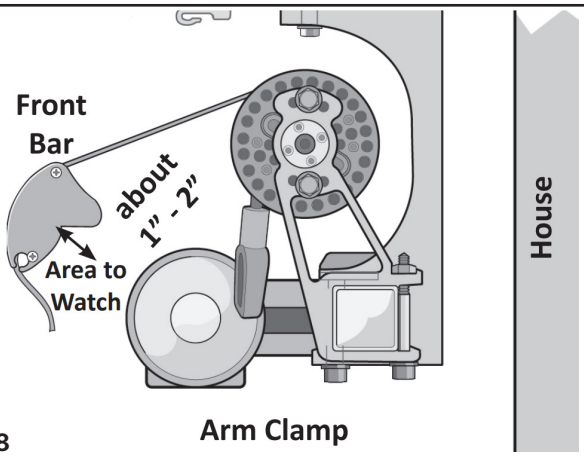


Figure 18

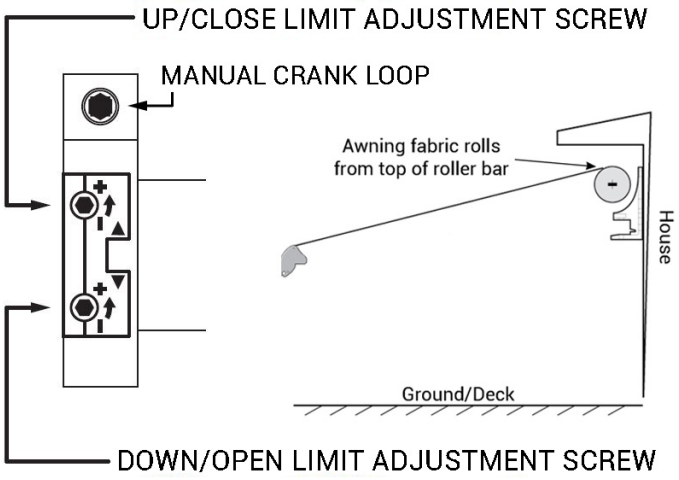
Adjusting the open and close limits

SECTION A: LEFT SIDE MOTOR MOUNT

Identify which limit adjustment screw controls the closed limit and which controls the open limit (see **Figure 19**). It is important to note that the arrows by the limit adjustment screws refer to the tube's rotation. Thus if the material comes off the tube from the top side, and you are adjusting the limits from the side that the motor cable is not on (as per **Figure 19**), the limit adjustment screw with the arrow facing up controls the up limit and vice-versa.

Turning an adjustment screw positive (+) will increase the maximum travel in the direction that it controls and turning it negative (-) will decrease the maximum travel. For the adjustment screws on the side without the motor cable, turning counter clockwise is positive (+) and clockwise is negative (-).

Figure 19



1. To set a limit, run the motor in the selected direction, and allow it to stop on its own at the current limit.

2. If the motor stops on its own before reaching the desired stop, turn the appropriate limit screw positive (+). Every 2 or 3 turns of the limit adjustment screw will allow the motor to travel about 1 inch further. After every few turns of the limit adjustment screw, use the control switch to move the motor to the new limit position. If the motor does not stop on its own before reaching the desired stop, go to step 4.

3. When you are approximately at the desired stop, use the control switch to run the motor away from the limit 2 or 3 feet and then back. This will allow you to see precisely where the limit is set. Make small adjustments and repeat.

4. If the motor does not stop on its own at least 6 inches before the desired limit position, stop the motor with the control switch. Then, turn the adjustment screw in the negative (-) direction. Confirm that the motor is stopped at the limit and set the limit as in steps 2 and 3. If the motor is not stopped at the limit, continue turning the limit adjustment screw (up to 120 turns may be required).

Note: The motor has a built-in thermal cut-off. If after several minutes of use the motor will not run in either direction, allow the motor to cool approximately 20 minutes.

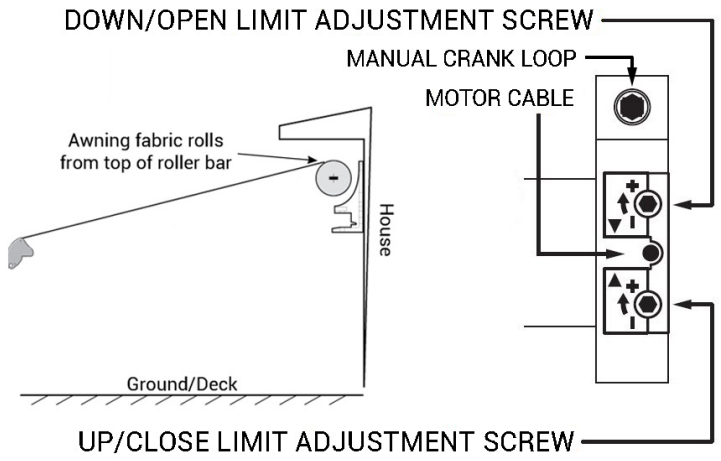
Adjusting the open and close limits

SECTION B: RIGHT SIDE MOTOR MOUNT

Identify which limit adjustment screw controls the closed limit and which controls the open limit (see **Figure 20**). It is important to note that the arrows by the limit adjustment screws refer to the tube's rotation. Thus if the material comes off the tube from the top side, and you are adjusting the limits from the same side that the motor cable is on (as per **Figure 20**), the limit adjustment screw with the arrow facing up controls the up limit and vice-versa.

Turning an adjustment screw positive (+) will increase the maximum travel in the direction that it controls and turning it negative (-) will decrease the maximum travel. For the adjustment screws on the side with motor cable, turning counter clockwise is negative (-) and clockwise is positive (+).

Figure 20



1. To set a limit, run the motor in the selected direction, and allow it to stop on its own at the current limit.

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3. When you are approximately at the desired stop, use the control switch to run the motor away from the limit 2 or 3 feet and then back. This will allow you to see precisely where the limit is set. Make small adjustments and repeat.

4. If the motor does not stop on its own at least 6 inches before the desired limit position, stop the motor with the control switch. Then turn the adjustment screw in the negative (-) direction. Confirm that the motor is stopped at the limit and set the limit as in steps 2 and 3. If the motor is not stopped at the limit, continue turning the limit adjustment screw (up to 120 turns may be required).

Note: The motor has a built-in thermal cut-off. If after several minutes of use the motor will not run in either direction allow the motor to cool approximately 20 minutes.

Thank you for choosing SunSetter.