

WeatherPro Hardware

8551001.40(X)(X) Basement Hardware

8551002.40(X)(X) Standard Hardware

8551003.40(X)(X) 5th Wheel Hardware

8553003.40(X)(X) 5th Wheel Hardware

FOR

8(X)5(XX)(XX.XX)(X)(X)

Fabric Roller Tube Assembly

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**For Service Center
Assistance Call:**
800-544-4881

WARNING

This manual must be read and understood before installation, adjustment, service, or maintenance is performed. This unit must be installed by a qualified service technician. Modification of this product can be extremely hazardous and could result in personal injury or property damage.

AVERTISSEMENT

Lire et comprendre ce manuel avant de procéder à l'installation, à des réglages, de l'entretien ou des réparations. L'installation de cet appareil doit être effectuée par un réparateur qualifié. Toute modification de cet appareil peut être extrêmement dangereuse et entraîner des blessures ou dommages matériels.

INSTALLATION INSTRUCTIONS

MODEL

**8(X)5(XX)(XX.XX)(X)(X)FRTA
855(X)00(X).40(X)(X)
Hardware**

REVISION
Form No. 3307821.011 7/02
(Replaces 3307821.003)
(French 3308049.006)
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LaGrange, IN 46761

Important: These instructions must stay with unit.
Owner read carefully.

SAFETY INSTRUCTIONS

This manual has safety information and instructions to help users eliminate or reduce the risk of accidents and injuries.

RECOGNIZE SAFETY INFORMATION



This is the safety-alert symbol. When you see this symbol in this manual, be alert to the potential for personal injury.

Follow recommended precautions and safe operating instructions.

UNDERSTAND SIGNAL WORDS

A signal word, **WARNING** OR **CAUTION** is used with the safety-alert symbol. They give the level of risk for potential injury.

WARNING: means if the safety information is not followed someone could be injured or killed and/or damage to equipment could occur.

CAUTION: means if the safety information is not followed someone might be injured and/or damage to equipment could occur.

Read and follow all safety information and instructions.

Learn how to operate the awning properly.

GENERAL INFORMATION

COVERED BY PATENT 5383346, 4941524, D366763,
6095221, 6230783, D414880, 6164883, 6276424,
6230786, D410192, D429894 & 6273172
OTHER PATENTS PENDING

REQUIRED PARTS (Packed with each Hardware Assembly)

8551001.40(X)(X) & 8551002.40(X)(X) Hardware

- (2) Top Mounting Bracket Cover (3108404.009(X))
- (2) Bottom Mounting Bracket Cover (3109752.000(X))
- (4) #14-10 x 2-3/4" Hex Head Screw (3104499.094)
- (4) #14-10 x 2" Hex Head Screw (3104499.086)
- (2) 1/4" I.D. x 1/2" O.D. Lock Washer (309513.064)
- (4) #10-16 x 3/4" Hex Washer Head Self Drilling Screw (310359.013)
- (4) 3/16" x 1" Oscar Rivets (113008)
- (2) #6-20 x .44" Hex Washer Head Self Drilling Screw (310359.012)
- (2) 1/4"- 20 x 3/4" Hex Head Bolts (3104176.205)
- (2) Spacer (3307943.005(X))

8551003.40(X)(X) & 8553003.40(X)(X) Hardware

- (2) Top Mounting Bracket Cover (31084404.009(X))
- (2) Bottom Mounting Bracket Cover (3109752.000(X))
- (4) #14-10 x 1-1/2" Hex Head Screw (3104499.003)
- (4) #14-10 x 2" Hex Head Screw (3104499.086)
- (2) 1/4" I.D. x 1/2" O.D. Lock Washer (309513.064)
- (4) #10-16 x 3/4" Hex Washer Head Self Drilling Screw (310359.013)
- (4) 3/16" x 1" Oscar Rivets (113008)
- (2) #6-20 x .44" Hex Washer Head Self Drilling Screw (310359.012)
- (2) 1/4"- 20 x 3/4" Hex Head Bolts (3104176.205)
- (2) Spacer (3307943.005(X))

Important: Read and understand ALL of the following steps before beginning installation.

Application

The A&E Awning is designed and intended for use on Motorhomes, Travel Trailers, and Fifth Wheels with straight sides.

Important: Structural backing is required where mounting screws/oscar rivets will be installed through sidewall for securing top/bottom mounting brackets and back channel.

Installation Height: This is the center to center distance of mounting holes in the top mounting bracket and the lower mounting bracket/back channel. See Specification chart and illustrations on page 3.

Important: Follow the Minimum distance dimensions requirements from awning rail to door. Mounting height depends on awning type and length. Insure sufficient room is available before starting installation. If questions arise, contact your Dometic Sales Representative.

Hardware Model Awning Weather Shield

	Metal
8551001.40(X)(X)	12"
8551002.40(X)(X)	7"
8551003.40(X)(X)	12"
8553003.40(X)(X)	12"

When the door falls in the center of the awning, add 2" to these distances.

Dometic Corporation reserves the right to modify appearances and specifications without notice.

Specification Chart					
8551001.40(X)(X)	8551002.40(X)(X)		855(X)003.40(X)(X)		
	15" Extension		23" Extension (Optional)		
	Min.	Max.	Min.	Max.	
A	66"	70-1/2"	81-5/8"	70-1/2"	89-5/8"
B	62-1/64"	68-5/8"	68-5/8"	59-13/16"	
C	62-33/64"	80-1/4"	88-1/4"	60-37/64"	
D	1/2"	1/2"	3/4"		
E	64-1/4"	67-3/4"	62"		
F	62"	65-1/2"	62"		
G	1-1/64"	N/A	1-1/64"		
H	1-3/4"	1-3/4"	1-3/4"		
J	5/8"	5/8"	13/32"		

- A = Overall length of hardware
B = Min. mounting distance center to center on mounting holes.
C = Max. mounting distance center to center on mounting holes.
D = Distance between mounting holes in bracket.
E = Location of hole for wire harness.
F = Back channel length.
G = Distance between bottom of back channel and center of mounting hole.
H = Distance front channel guard extends past back channel.
J = Distance from top edge of top bracket and center of first mounting hole.

FIG. 1 8551002.40(X)(X) Standard Hardware

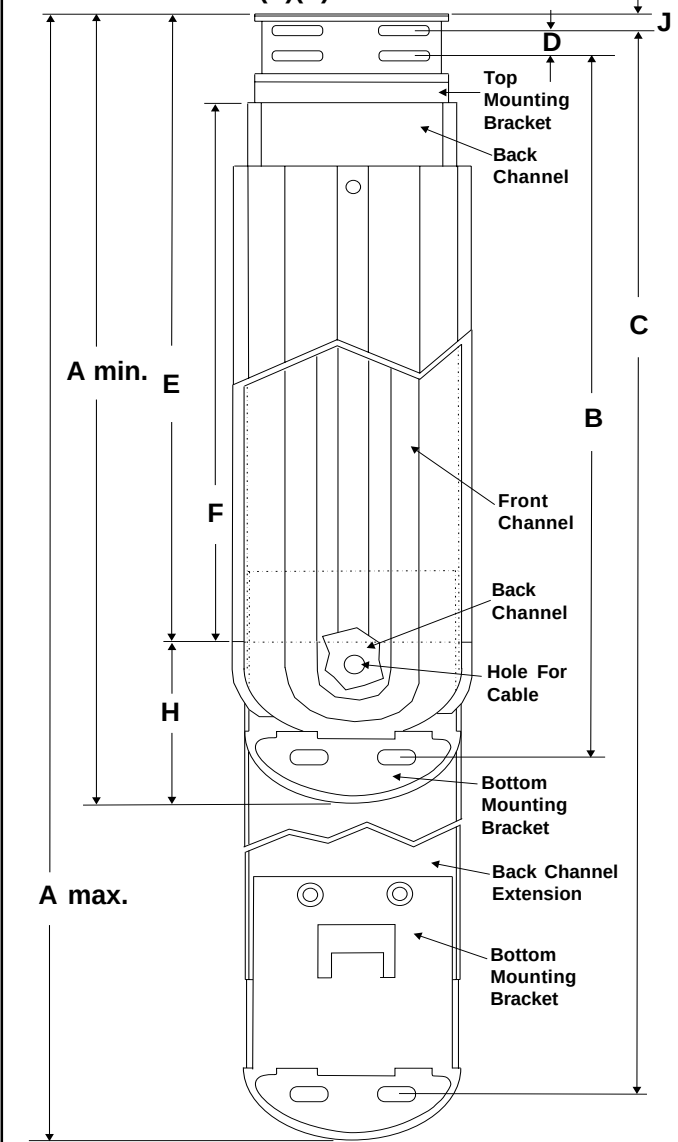


FIG. 2 8551001.40(X)(X) Basement Hardware

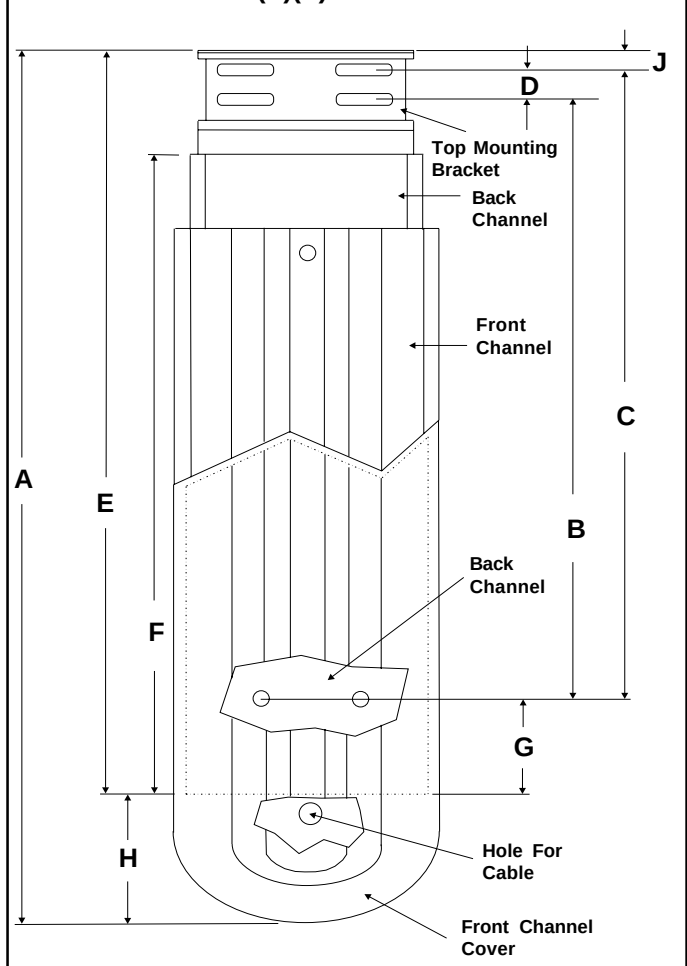
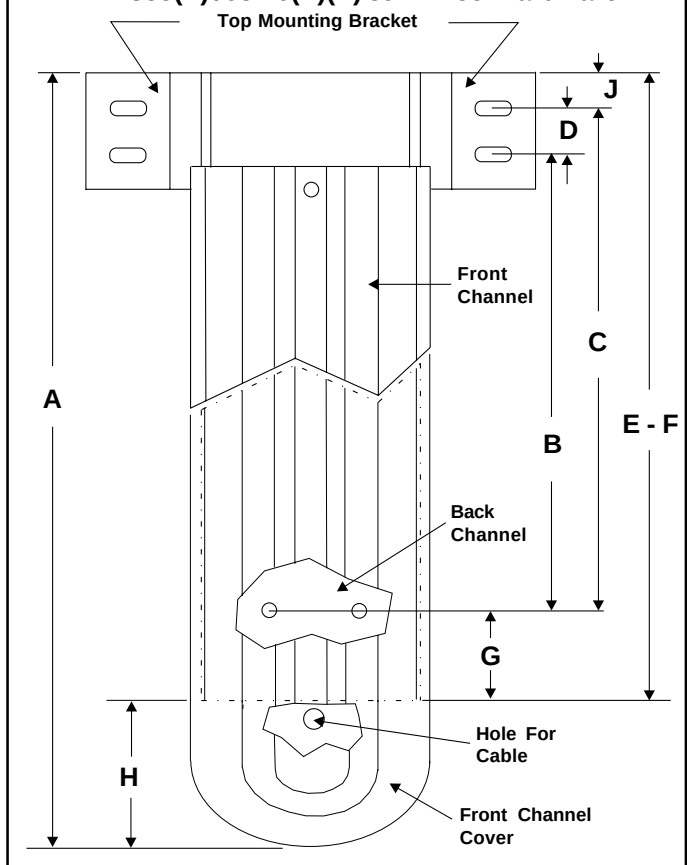


FIG. 3 855(X)003.40(X)(X) 5th Wheel Hardware



INSTALLATION

Installation of A&E Awnings will briefly require three people. Use the following procedure to assure a properly installed, and properly functioning awning.

⚠ WARNING

Do not remove the cotter pin from left hand end cap at this time.

1. Securing FRTA to Hardware

- A. Carefully lay the fabric roller tube assembly on a clean, well padded "V" trough to prevent fabric and/or roller cover damage. Remove the hardware from the packaging and place the motorized arm on the right side. The non-motorized arm has a spring loaded bottom arm and goes on the left side.

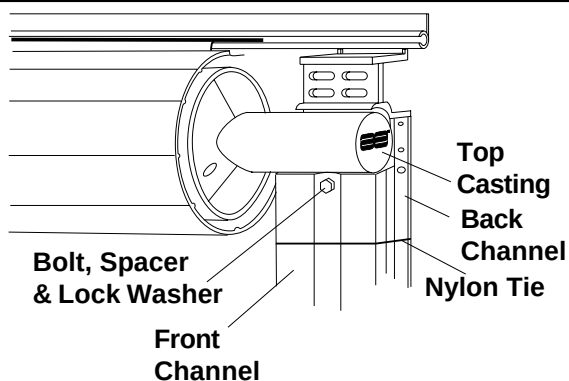
⚠ WARNING

The arm assemblies are spring loaded. Do not remove nylon ties until the unit is installed securely to the application. Failure to do this may result in personal injury or property damage.

- B. Secure each front channel to top casting mounted at the end of the FRTA. See FIG. 4. Slide top nylon tie down arm approximately 24 inches to allow hardware to open far enough to insert top casting into channel. Do Not remove nylon ties at this time. Arms are spring loaded.

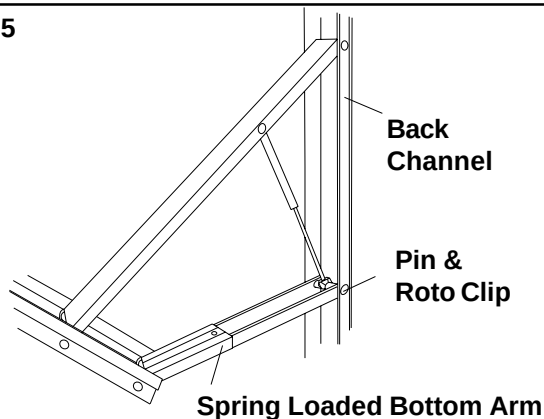
Note: One arm assembly is pre-wired for motor. This arm goes on the right side.

FIG. 4



Important: One front channel assembly has a spring loaded bottom arm. This arm goes on left side. See FIG. 5.

FIG. 5



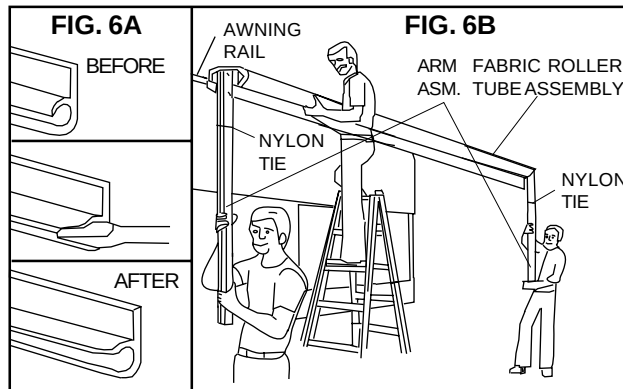
- C. Using one (1) 1/4"-20 x 3/4" hex head bolt, one spacer and one (1) 1/4" lock washer secure both top castings to front channels. See FIG. 4.
D. Remove cotter pin from LH end cap.

2. Install Fabric in Awning Rail

- A. Prepare the Awning Rail to accept the Awning Fabric. Select the end from which the awning shall be fed, then widen that end with a flat screwdriver and file off any sharp edges. See FIG. 6A.
B. Unwind fabric one revolution before feeding awning fabric into awning rail. This will allow enough space between side wall and awning hardware to connect wires in Step 3-A-3.
C. With one person grasping each Arm Assembly, carefully lift the entire assembly to an upright position.

Important: Keep the two Arm Assemblies parallel to each other to avoid excessive twisting and possible damage to the assembly.

Walk the awning to the end where the Awning Rail was prepared. See FIG. 6B.

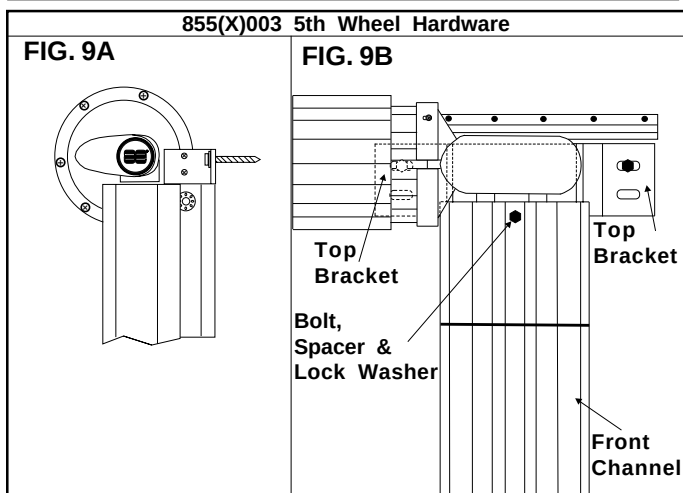
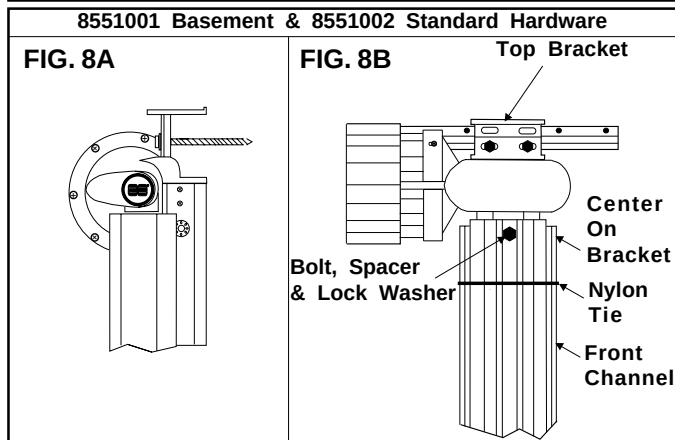
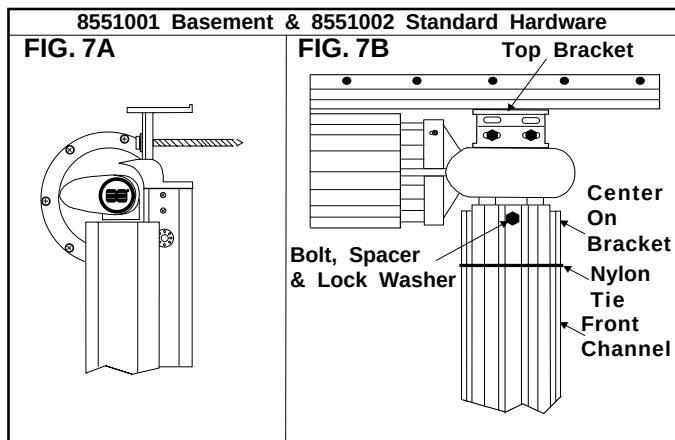


A third person is now required to feed the Fabric into the Awning Rail. The other two will walk the entire Awning Assembly forward and into the desired position.

3. Top Mounting Bracket Installation

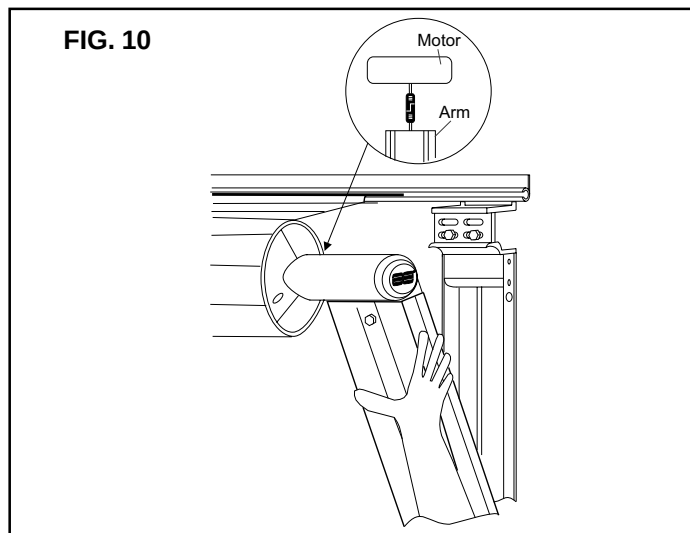
- A. (8551001Basement & 8551002 Standard Hardware) Secure Top Mounting Brackets.
1. After the complete awning assembly has been threaded into the Awning Rail, check that its position allows for solid mounting of the Top & Bottom Mounting Brackets/Back Channels. Also insure that the back channels are in the desired location (not restricting use of doors, access doors, windows, etc.).

Important: Structural backing is required where mounting screws will be installed through side wall for securing top mounting brackets.



Note: Awning rails with rain gutters may require an extension kit to prevent the FRTA from closing against the rain gutter, causing fabric damage and/or improper operation. These can be obtained through Dometic.

2. On the motorized arm assembly (right side), place the top bracket in position over or directly under the Awning Rail as shown in FIG. 7B & 8B. Top mounting bracket must be installed level with awning rail. Mark the hole position for the Top Bracket and slide the assembly out of the way. Pre-drill the two holes using a 3/16" drill bit (use a 7/32" drill bit if in steel). Install Top Bracket with two (2) #14-10 x 2-3/4" hex head screws. Seal where the screws enter the coach with clear silicon sealant. At this point the arm assembly can support itself. Mount the top bracket on the oppo-



site arm at the same height. Mark the hole position and move the FRTA out of the way to drill the hole. Seal where screws enter the coach with clear silicon sealant.

3. Motor connection
 - a. Remove nylon ties wrapped around front and back channels. See FIG. 7B.
 - b. Grasp the front channel and slowly pull it away from the side wall. See FIG. 10.
 - c. Connect the motor wire to the factory pre-wired hardware wiring. See FIG. 10.
 - d. Install wire cover in back of front channel to secure wires. This cover is pressure fitted. Slightly squeeze sides to insert into channel. Be careful not to over squeeze. This could reduce the tension causing the cover to be loose.

Important: Dielectric grease must be placed on all exposed pins.

- B. (855(X)003 5th Wheel Hardware) Secure Top Mounting Brackets
 1. After the complete awning assembly has been threaded into the Awning Rail, check that its position allows for solid mounting of the Top and Bottom Mounting Brackets. Also insure that the back channels are in the desired location (not restricting use of doors, access doors, windows, etc.).
 2. On the motorized arm assembly (right side), place the top bracket in position directly under the awning rail as shown in FIG. 9B. **Awning rails with rain gutters may not allow the FRTA to close all the way. It may be necessary to lower the top bracket position to ensure the FRTA will close properly.** Top bracket must be installed level with the awning rail. Using the outside bracket hole as a guide pre-drill a 3/16" hole for mounting screw. Drill a 7/32" hole if drilling into steel. Install outside top mounting bracket using (1) one #14-10 x 1-1/2" hex head screw. Seal where the screw enters the side wall with clear silicon sealer. Repeat this procedure for opposite side.

CAUTION

The arm assemblies must be controlled while the top mounting brackets are being installed. Damage to the side wall could occur if not controlled. When the weight of the fabric roller tube assembly is no longer supported, the downward force could cause the arm assembly to swing side ways and may damage the side wall.

3. To install screws on the inside top mounting brackets it will be necessary to pull the Fabric Roller Tube Assembly away from the side wall approximately 12". Remove nylon ties wrapped around the front and back channels. See FIG. 9B. Grasp the front channel and slowly pull it away from the sidewall. See FIG. 10. Pre-drill hole as in previous step and install one (1) #14-10 x 1-1/2" hex head screw. Repeat this procedure for opposite side.
4. Motor connection
 - a. Connect the motor wire to the factory pre-wired hardware wiring. See FIG. 10.
 - b. Install wire cover in back of front channel to secure wires. This cover is pressure fitted. Slightly squeeze sides to insert into channel. Be careful not to over squeeze. This could reduce the tension causing the cover to be loose.

Important: Dielectric grease must be placed on all exposed pins.

4. Control Box Kit (3307843.007) and Remote Switch Installation. (For 3307844.004 Control Box Kit installation see individual installation instructions packaged with kit.)

Important: Electronic control box is also pre-wired for installing an A & E Oasis Elite Awning. Use only wires designated for WeatherPro.

Important: Each control kit contains one (1) Key Fob (Remote Control) and it must stay with awning for end user.

A. Control Box

Note: The control box system is protected by a 15 amp fuse. If needed, a spare 15 amp fuse is taped inside the control box. Shut off the 12VDC power to the control box and remove control box cover to expose fuse inside. Replace if necessary.

1. First, decide on a location for the control box. Recommended locations for the control box are compartments outside the living quarters such as one of the basement storage compartments. The control box must be installed at a location where it will not be directly exposed to weather or extreme temperatures.
2. Mount the control box (within 18' of wind sensor) using four (4) #6 x 1/2" screws.

B. Connect Control Box to Awning

1. Route two (2) wires (installer supplied) from the control box to the bottom of right side (motorized) arm assembly. To avoid voltage drop, follow wire length guide listed below:

Wire Length	Wire Size
10' & Under	14 Gauge
11' to 30'	12 Gauge
Over 30'	10 Gauge

Important: When installing 8551001 & 855(X)003 hardware make sure channel is in proper position before drilling the 5/8" hole in side wall for wires. See FIG. 2 & 3.

2. Connect the Control Box to the Pre-wired arm assembly using the pig tail connection. See FIG. 16.

Important: Dielectric grease must be placed on all exposed pins.

When routing harness, take pre-caution against wires rubbing on sharp edges and use a grommet when going through walls. Harness should be routed so that when bottom bracket or back channel extension is installed it will cover hole where wire goes through wall. Seal any holes with clear silicon sealant. See FIG. 2 & 3.

C. Remote Switch

1. Install the remote switch at a convenient location such as the door area.
2. The remote switch should not be in direct exposure to weather or extreme temperatures.
3. Cut hole in structure where switch is to be installed. Place decal on bezel and pop remote switch into opening.
4. Connect the remote switch to the control box by routing three (3) wires (installer supplied) from the control box to the remote switch. These wires should be brown, yellow and green 16 gauge wires. Install 1/4" insulated terminals on the remote switch end of wires. Connect the brown, yellow and green wires to the remote switch as shown in FIG. 16. Use the Dometic supplied pig tail to connect the opposite end of wires to the control box.

Important: Dielectric grease must be placed on all exposed pins.

5. Low Voltage Connection

- A. Run two (2) wires from the control box to the 12VDC supply source. It is recommended that these wires be (Red+ and Black-) 12 gauge wires. This should be on a separate 15 amp circuit. Connect the Red and Black wires from the control box to the 12VDC supply wires using butt connectors. See FIG. 16.
- B. To ensure proper operation, the control box must have a minimum of 12.5 VDC at the control box during awning operation. It may be necessary to increase the wire size if voltage is below 12.5VDC.

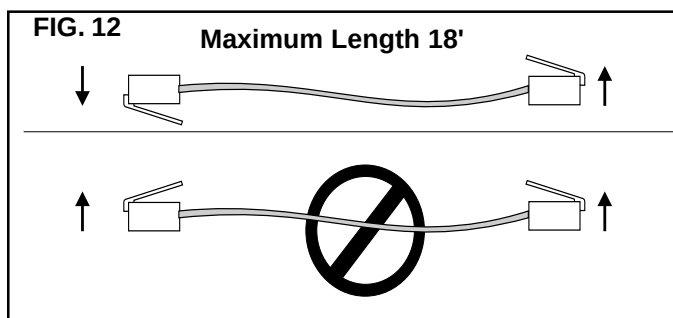
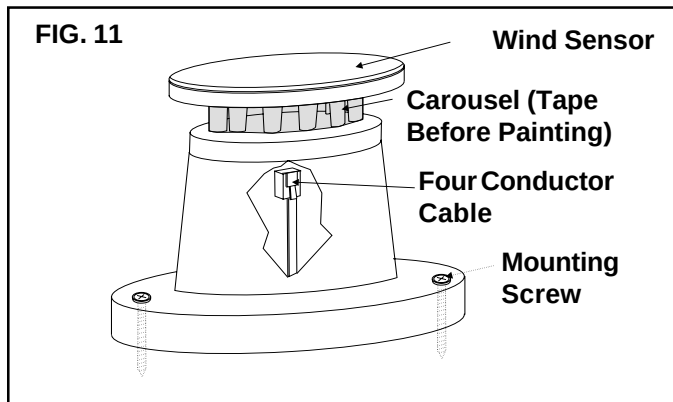
6. Ignition Interlock Connection

- A. Run a 16 gauge wire (installer supplied) from the Ignition Isolator (+12VDC) of vehicle to the Ignition Isolator (Pink) wire of control box. Connect wires using supplied pigtails. See FIG. 16.

7. Wind Sensor Installation

Note: Wind sensor is to be installed on the RV roof in a vertical position (within 3 degrees) away from other objects. It should be located within three (3) feet of the right side top mounting bracket.

- A. Find Wind Sensor location and drill a 1/2" hole through roof. See FIG. 11.
- B. Route a flat four conductor cable (maximum length 18', installer supplied) from Wind Sensor to Control Box. This cable must be terminated with an RJ-11 telephone connector on both ends. See FIG. 12. Refer to the crimp tool manufacturer for crimping instructions. Be sure the cable is installed in the proper position in the connector before it is crimped. **Polarity is important and a standard pre-made telephone cable will not work.**



Important: RJ-11 connectors must be wired identically on both ends. See FIG. 12.

- C. Connect cable to Wind Sensor. See FIG. 11.
- D. Mount Wind Sensor to roof with # 10 stainless steel screws (installer supplied) with appropriate length depending on roof thickness. Seal screw heads and wind sensor base with suitable sealant to prevent water leaks.
- E. Connect opposite end of cable to control box. See FIG. 16.

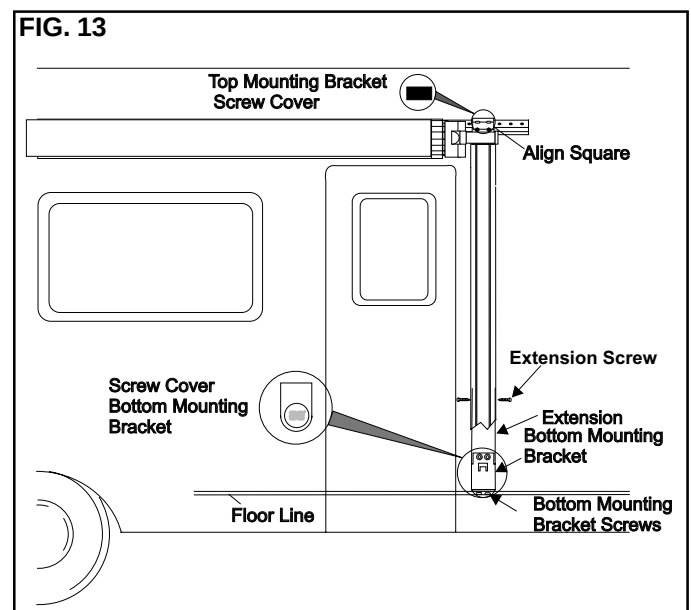
The awning control box contains an audible alarm. When the alarm sounds the awning control has detected a problem either in the wind sensor or the wind sensor cable. If you hear a beeping sound coming from the control box when the sensor switch is in the "ON" position the wind sensor feature is not functioning. Turn the sensor switch off and contact a Dometic Service Center or a qualified service technician for assistance.

Important: If vehicle is to be painted after wind sensor is installed, the carousel must be taped off. Wind sensor will withstand paint booth temperatures up to 185 degree F. The sensor material is Polycarbonate. Remove tape after painting. See FIG. 11.

8. Bottom Mounting Bracket & Back Channel Installation

- A. 8551002 Hardware Bottom Mounting Bracket Installation only

1. Extend awning as required to install back channel extension and bottom mounting bracket.
2. Locate the floor line of the application. This is the area needed to mount the bottom mounting brackets for maximum strength. Usually this is located just at or above the lower trim line.
3. Place the 15" back channel extension assembly (Dometic supplied) inside the back channel and adjust as needed so the mounting holes in the bottom mounting bracket are in line with the middle of the floor line. See FIG. 13. It is recommended that a minimum of four (4) inches of the extension remain inside the back channel. If additional length is required and optional 23" extension can be purchased through Dometic. When the vertical location is established, the arms should be squared with the vehicle and each other. A door or window frame can be used to measure from.
4. When squared, mark the hole locations and pre-drill holes using a 3/16" drill bit. Move the bracket into place and secure with two (2) # 14-10 x 2" hex head screws.

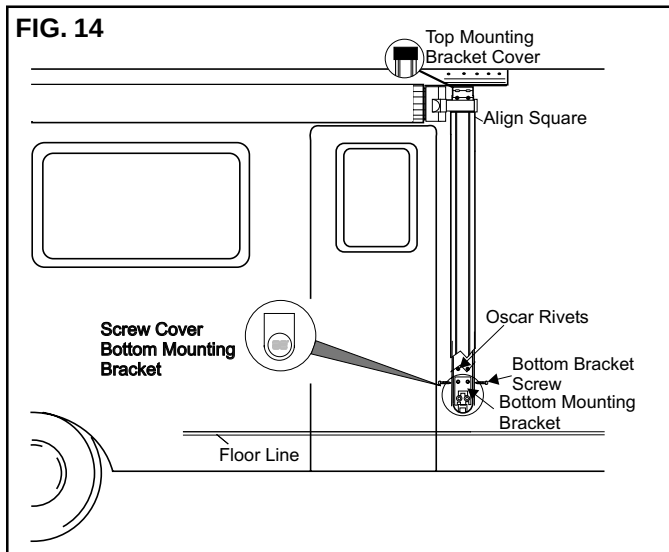


Important: Structural backing is required where mounting screws will be installed through side wall for securing bottom mounting brackets.

5. Seal where screws enter coach with clear silicon sealant. Repeat this procedure for the opposite end.
6. Secure Extensions
 - a. To secure extensions, first locate the holes on each side of the back channels. Use two (2) # 10-16 x 3/4" self drilling screws to secure the extension to the back channel. Drive screws through hole in the back channel and into the extension. Repeat this procedure on the opposite end. See FIG. 13.

B. 8551001 & 855(X)003 Hardware Back Channel Installation

1. Extend awning as required to secure back channel and install bottom mounting bracket.



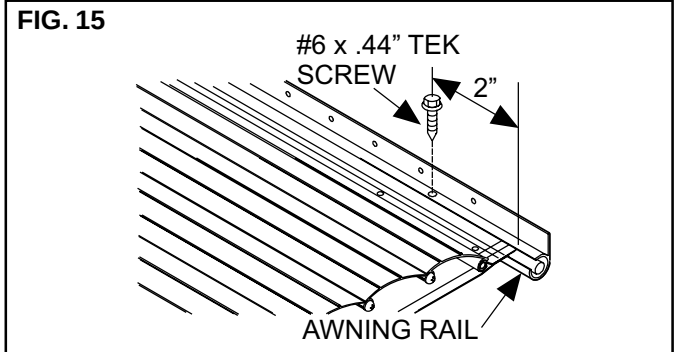
2. Remove bottom mounting bracket from inside back channel if installed.
3. Align the back channel so it is square with the vehicle and the FRTA. A door or window frame can be used to measure from. See FIG.14.
4. Drill two (2) 3/16" holes through the outside wall using the holes in the bottom of back channel as a guide. See FIG. 2 & 3.
5. Secure back channel to wall with two (2) 3/16" x 1" Oscar rivets provided. Be careful not to pinch or damage motor wire when securing channel to wall. See FIG 14.

Important: Structural backing (metal) is required where oscar rivets will be installed through side wall for securing back channel.

6. Seal where the oscar rivets enter the vehicle with clear silicon sealant.
7. Slide bottom mounting brackets back into position. While holding bottom bracket in position drive two (2) # 10-16 x 3/4" self drilling screws through hole in back channel and into bracket. See FIG. 14.

9. Initial Awning Adjustment

- A. Cycle the awning four or five times to check fabric alignment and to make sure the hardware is nesting properly. If there is a misalignment, adjust the arm by loosening the upper mounting bolts and move the bracket accordingly. Cycle the awning again to check the alignment. See User's Guide for opening and closing instructions.
- B. When satisfied with the alignment, secure fabric roller cover by driving a #6-20 x .44" Tek screw through the rail and into the fabric rope. See FIG. 15 for screw location. Repeat at opposite end. Snap top & bottom screw covers in position. See FIG 13. & 14. The installation is now complete and ready for use.



10. Close and Secure Awning

- A. If awning will not be used after installation, close and secure. See User's Guide for closing and securing instructions.

FIG. 16

