

Multi-Shade System with Middle Motor



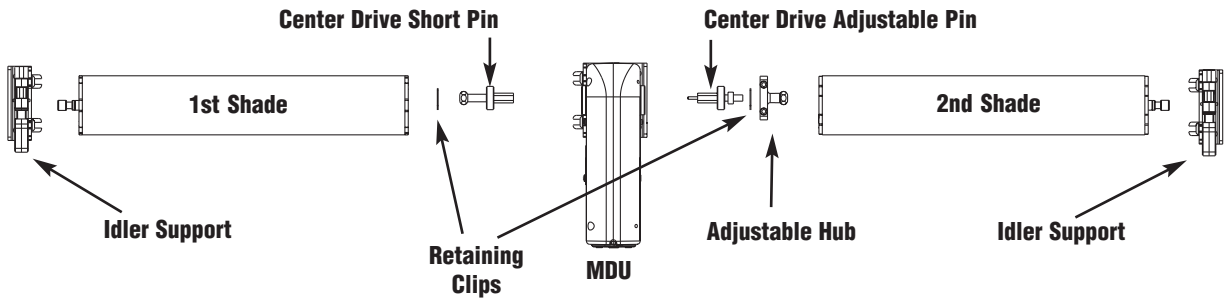
Description

The *Sivoia*® SV-MMDP Middle Motor Drive Pin Kit (to be used in conjunction with an SV-MDU-20) allows for more than one shade to be driven from each side of a single Motor Drive Unit (MDU).

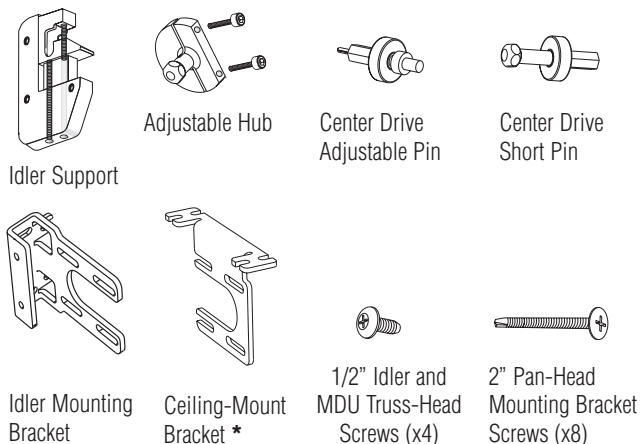
Important Notes

1. All shades controlled by the MDU must be the same height.
2. All shades must be made of the same fabric to ensure hembar alignment.
3. The total combined fabric from all shades connected to the MDU must not exceed 100 sq. ft. (30.5 sq. m).
4. The maximum width allowed for each tube in the middle motor system is 10 ft. (3.05 m).
5. All shades must be driven along a single axis (no off angle positioning).

Expanded View of the Middle Motor Shade System



Parts Included With This Kit:



Required Tools:

- 9/64" (3.6 mm) Hex Wrench (T-bar style preferable)
- #2 Phillips Screwdriver
- Tape Measure
- Power Drill: Drill Bits, Screwdriver Attachments
- Level
- Small Flat-Head Screwdriver

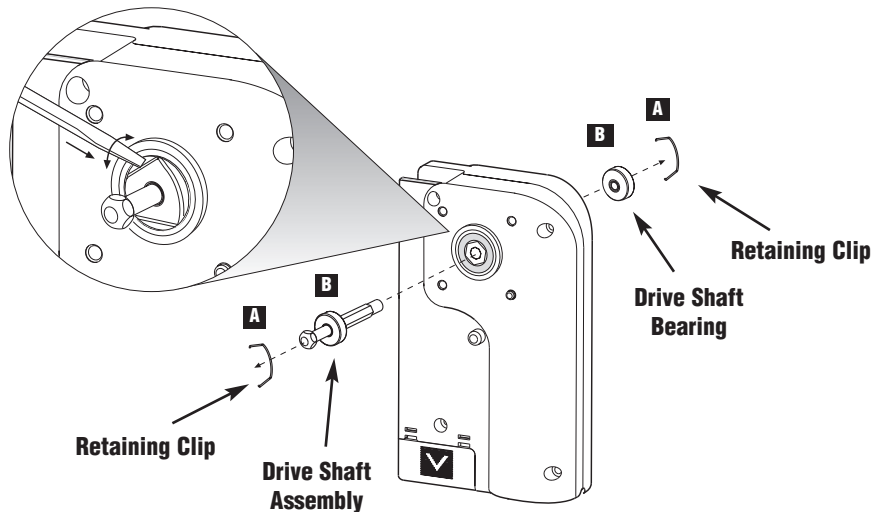


* See the SV-MDU-20 instructions for details on installing these brackets.

I. Pre-Installation

1 Remove Original Drive Shaft Assembly

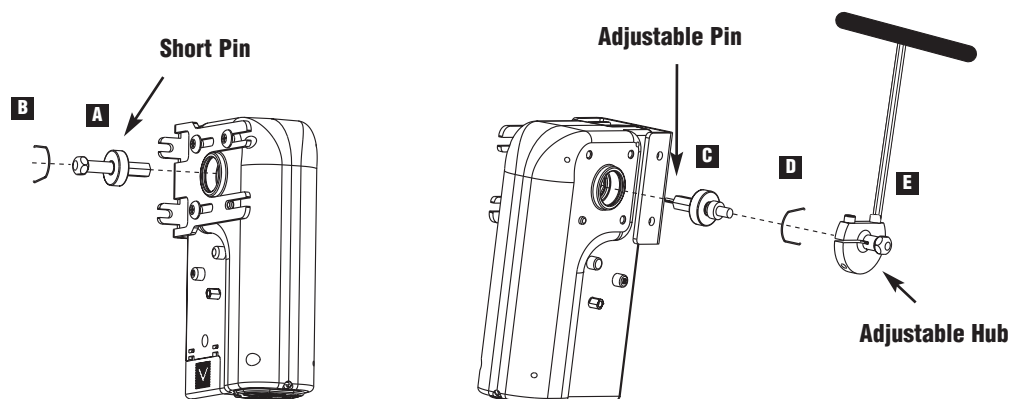
- A. Remove the retaining clips from the MDU by inserting a small flat-head screwdriver into the drive shaft opening and twisting it to dislodge the arm of the spring clip (see caution below).
- B. Grasp and remove the drive shaft assembly and bearing from the MDU.



Caution! Protect your eyes when removing the retaining clips, as they may become airborne when dislodged from the MDU casing.

2 Install New Center Drive Assembly

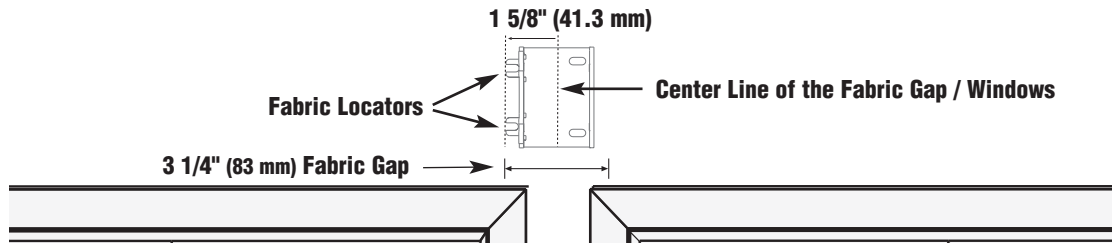
- A. Insert the center drive short pin into the MDU on the side that the MDU will be mounted to the bracket (picture shows MDU already mounted to bracket for reference. The MDU should **not** be mounted until **after** the brackets are hung).
- B. Replace the retaining clip (snaps into place using your fingers).
- C. Insert the center drive adjustable pin into the opposite side of the MDU (interlocks with the other end of the short pin).
- D. Replace the second retaining clip.
- E. Attach the adjustable hub to the end of the adjustable pin and tighten the hex screws enough to hold the hub in place (approx. 20 in.-lbs.) and prevent the shade from unrolling.



II. Fasten Mounting Brackets

1 Fasten Mounting Brackets

- A.** Mark a vertical center line with respect to the fabric gap / windows.
- B.** Mark 1 5/8" (41.3 mm) from the center line of the fabric gap / windows to the left. This designates where the fabric locators of the MDU mounting bracket will be positioned.

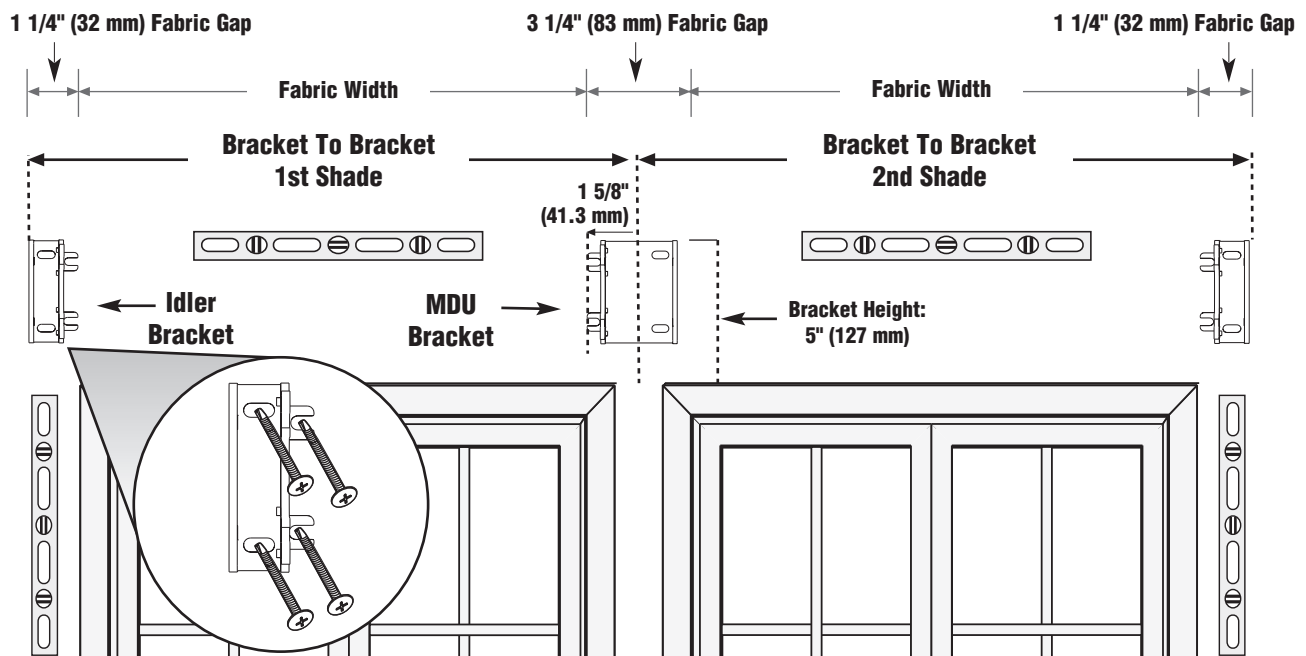


Note: Do not attach the idler supports or MDU before fastening the brackets.

- C.** Mark the **Bracket to Bracket** width for each shade.
- D.** Fasten the brackets to studs in the wall using four (4) pan-head mounting bracket screws. Use the Bracket to Bracket width as a guide to properly position the end brackets. Use a level to ensure the brackets are aligned evenly.

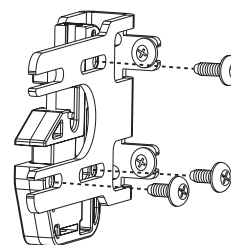
Notes:

- All four (4) screws must be securely fastened to a stud or other structural member.
- Place the top of the brackets 5" (127 mm) from the top of the window trim to ensure complete window exposure when the shades are in full up position.



2 Attach Idler Supports

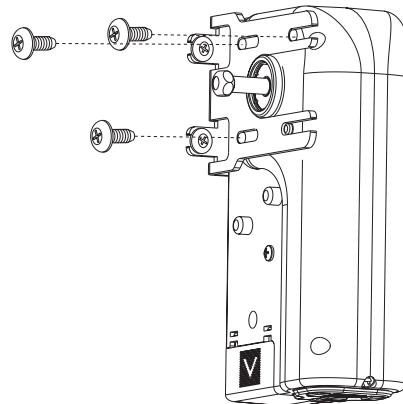
Attach the idler supports to the appropriate mounting brackets using three (3) truss-head screws.



II. Fasten Mounting Brackets (continued)

3 Attach MDU to Bracket

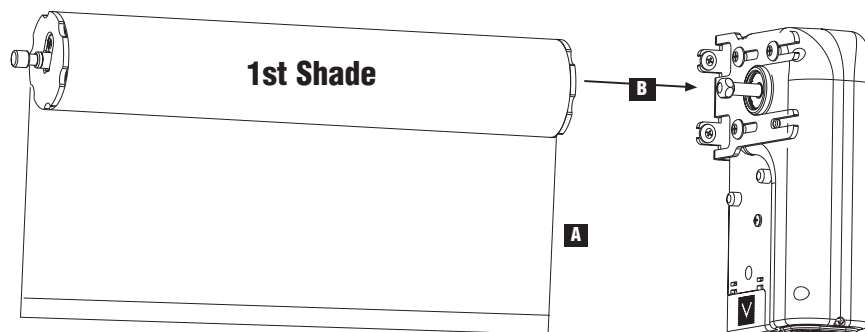
Attach the MDU to the mounting bracket using three (3) truss-head screws.



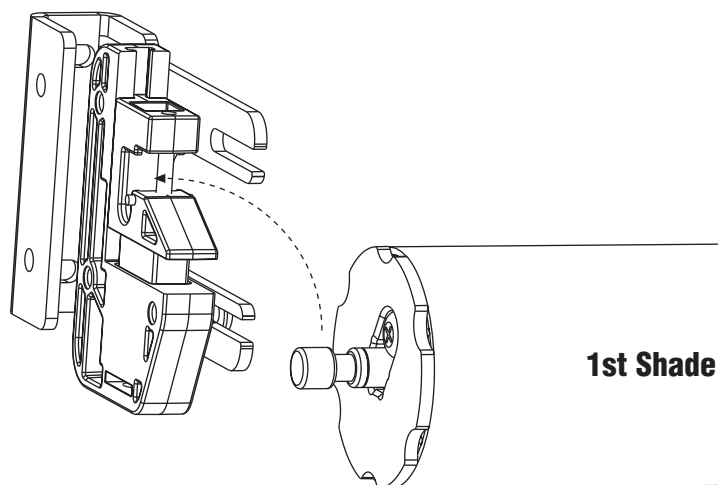
III. Hanging the Shades

1 Hang First Shade

- A.** Unwrap approximately 1 ft. (0.305 m) of shade material (on the shade that is to be closest to the MDU).
- B.** Attach the shade to the MDU first by engaging the shade's hexagonal socket with the motor's hexagonal drive ball. You may need to rotate the shade in order to push it over the hexagonal drive ball.



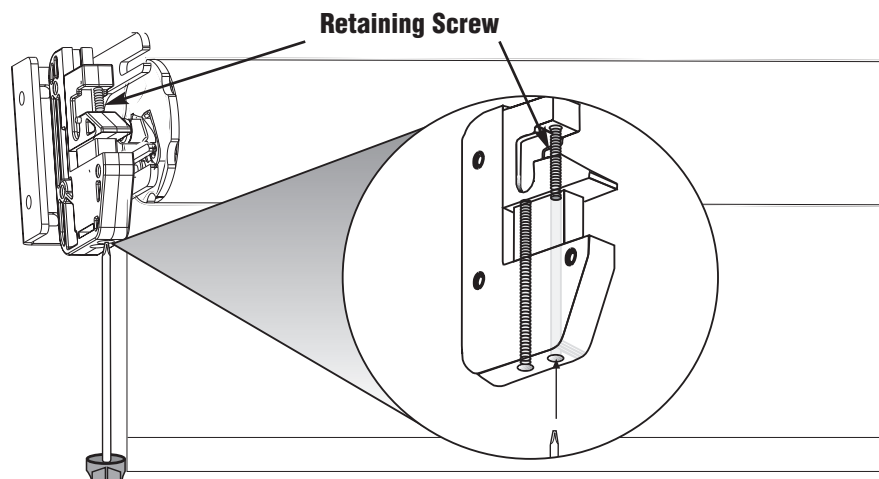
- C.** Insert the idler pin into the upper slot of the first idler support and drop it into place.



III. Hanging the Shades (continued)

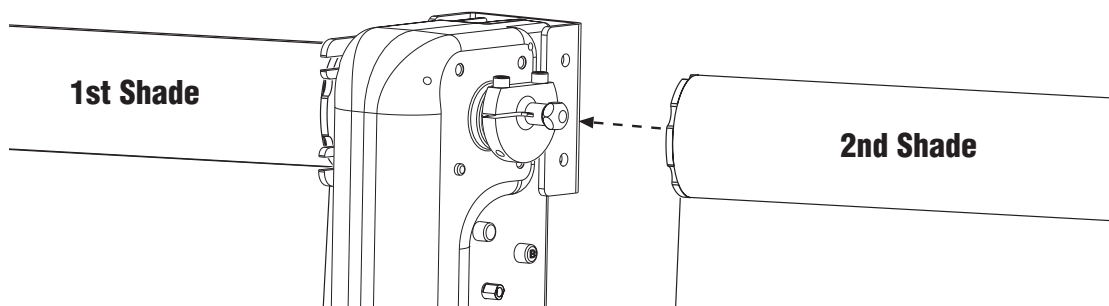
1 Hang First Shade (continued)

- D.** Tighten the shade retaining screw (#2 Phillips Screwdriver) underneath the idler support to secure the shade in place.

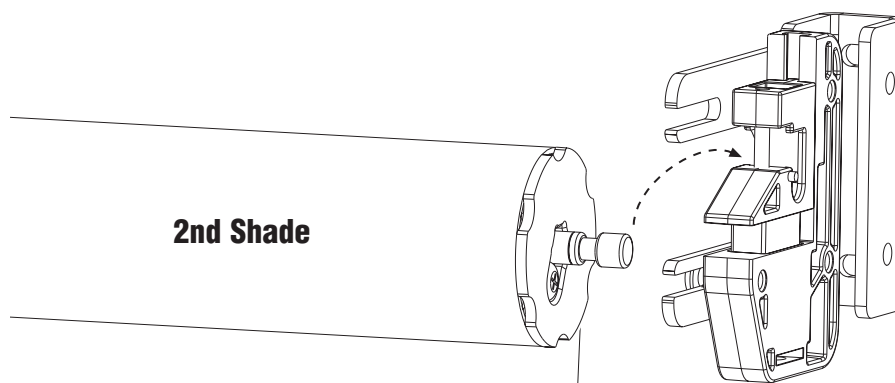


2 Hang Second Shade

- A.** Unwrap approximately 1 ft. (0.305 m) of shade material on the second shade.
- B.** Attach the second shade to the adjustable hub by engaging the shade's hexagonal socket with the hub's hexagonal drive ball. You may need to rotate the shade in order to push it over the hexagonal drive ball.



- C.** Insert the idler pin into the upper slot of the second idler support and drop it into place.



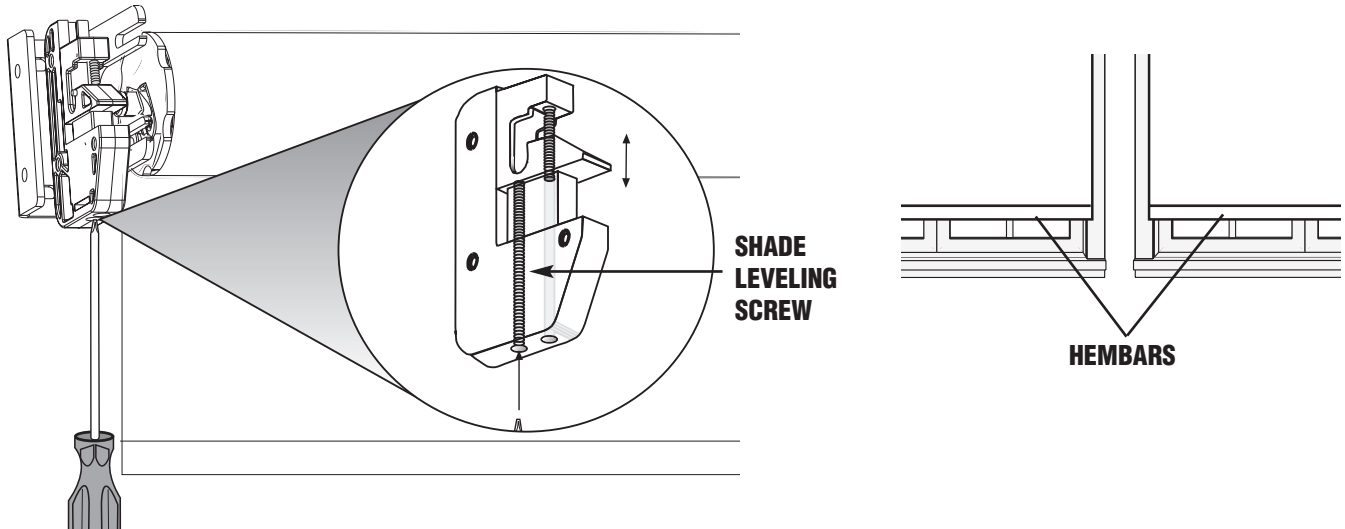
- D.** Tighten the shade retaining screw underneath the idler support to secure the shade in place (see **Step D, “Hang First Shade”** at the top of this page) .

IV. Final Adjustments

1 Adjust Level of Idler Supports

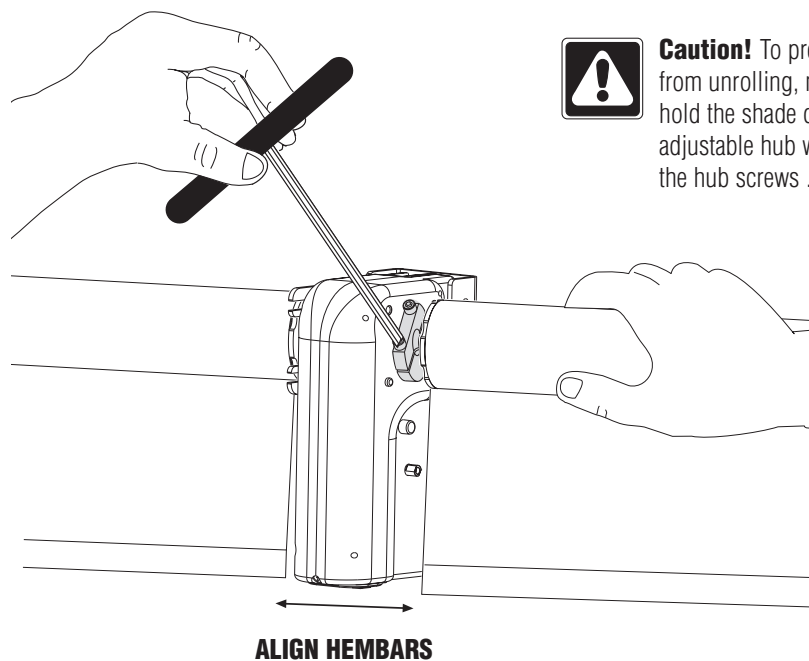
A. Adjust the shade leveling screw underneath each idler support to level the shades.

Note: Lower the shades to their lowest level and use the window sill as a guide to level the hembars.



B. Align the height of the hembars (with respect to each other) by loosening the screws on the adjustable hub.

1. While holding the shade driven by the adjustable hub, loosen the hub's hex screws enough to manually turn the shade and align the hembars.
2. Adjust the shades manually until both hex screws are accessible with a hex wrench.
3. Once the hembars are aligned, re-tighten the hex screws (to approximately 20–45 in.-lbs.).

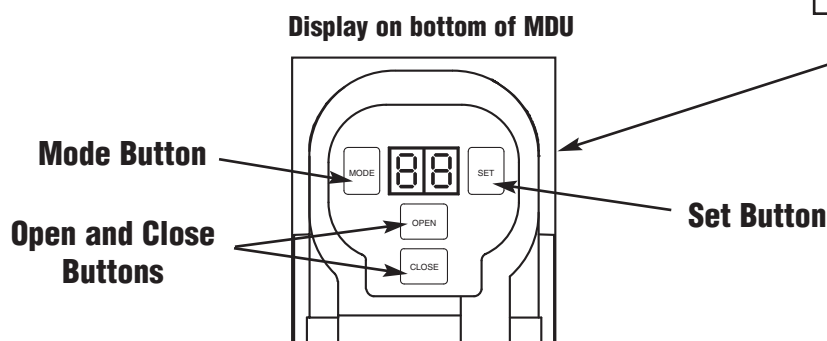
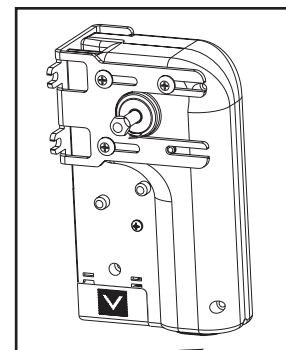


V. Motor Drive Unit (MDU) Set-Up





The Motor Drive Unit (MDU) should come from the factory with limits set. In order to change the factory limits, follow the steps below. If there is only one MDU in the system, open and close limits are the only steps required. Follow the programming steps outlined in the programming table below. If the system has multiple MDUs, follow the single MDU setup directions for each MDU and then continue with the setup codes for multiple MDU systems found in the installation instructions enclosed with the SV-MDU-20.

 **Open Limit:** The position the shade moves to when it opens.

 **Close Limit:** The position the shade moves to when it closes.



Programming Table

STEPS	MODE	ADJUST	SET
STEP 1	Open Limit: Press the Mode button on the MDU until the display reads 	Use the Open and Close buttons on the MDU to adjust the shade to the open position desired.	Press the Set button to save the current position as the "Open Limit." The display will read  and blink for 4 seconds, then go blank.
STEP 2	Close Limit: Press the Mode button on the MDU until the display reads 	Use the Open and Close buttons on the MDU to adjust the shade to the closed position desired.	Press the Set button to save the current position as the "Close Limit." The display will read  and blink for 4 seconds, then go blank.

Note: If the hembars are not properly aligned after finishing these steps, go back and repeat the previous section on page 6, **Section IV: Final Adjustments**.

LIMITED WARRANTY

SIVOIA® MOTORIZED WINDOW SHADE SYSTEM EIGHT YEAR LIMITED WARRANTY

Vimco warrants, for eight years from shipment, each new *SIVOIA* Motorized Window Shade System to be free from defects in materials or workmanship under conditions of normal use and specified ambient temperature when installed and operated in accordance with Vimco product specifications, applicable local electrical and building codes, applicable National Electrical Code® provisions, and the Safety Standards of Underwriter's Laboratories.

What Vimco Will Do

Upon the return of a system or system component, subsequently determined by Vimco to be defective, Vimco will, in its sole discretion, repair or replace the defective system or system component, provided that Vimco was promptly notified of the alleged defect within the warranty period, and provided that the system or system component was properly installed, wired, insulated, used, and maintained, as determined solely by Vimco. Vimco shall not be required to remove, install, or re-install any system or system component alleged to be defective.

Vimco will issue a credit for the cost of the repair or the replacement in accordance with the following schedule:

For the first 2 years after the date of shipment	100%
For years 3, 4, and 5 after the date of shipment	50%
For years 6, 7, and 8 after the date of shipment	25%

What This Warranty Does Not Cover

1. Damage or improper operation determined by Vimco to be due to normal wear and tear, or to abuse, misuse, or accident, such as:
 - a. Use of incorrect line voltages;
 - b. Use of incorrect fuses or circuit breakers;
 - c. Failure to follow operating instructions provided by Vimco;
 - d. Unauthorized repairs or adjustments or alterations;
 - e. Direct exposure to corrosive materials;
 - f. Vandalism;
 - g. Fire, flood, "Acts of God", and other factors beyond the control of Vimco.
2. The cost of labor, including any labor required to remove, install, or re-program any replacement item.
3. Components and equipment external to the *SIVOIA* Motorized Window Shade System, such as:
 - a. Non-Lutron lighting and automation systems;
 - b. Building wiring; and
 - c. Other manufacturers' equipment, including, but not limited to:
 - i. Time clocks;
 - ii. Audio-visual equipment; and
 - iii. Photo sensors.
4. The cost of repairing or replacing property or equipment other than the warranted system.

How to Get Service under This Warranty

Should you experience the need for service under this warranty, please contact your *SIVOIA* Motorized Window Shade System service representative immediately; or

Contact Vimco by telephone toll-free at:

1-800-446-1503; or

By mail to: VIMCO Shading Systems
11520 Sun Shade Lane
Ashland, VA 23005

or;

By E-mail: info@vimco.com

LIMITATIONS AND EXCLUSIONS

THIS WARRANTY IS EXCLUSIVE. THERE ARE NO OTHER EXPRESS WARRANTIES.

THE IMPLIED WARRANTY OF MERCHANTABILITY IS LIMITED TO TWO YEARS FROM THE DATE OF SHIPMENT. VIMCO SHALL NOT BE LIABLE FOR ANY REPAIR WORK UNDERTAKEN WITHOUT ITS PROPER WRITTEN CONSENT, OR FOR INCIDENTAL, CONSEQUENTIAL, OR SPECIAL DAMAGES. VIMCO'S LIABILITY ON ANY CLAIM FOR DAMAGES ARISING OUT OF OR IN CONNECTION WITH THE MANUFACTURE, SALE, INSTALLATION, DELIVERY, USE, REPAIR, OR REPLACEMENT OF THE SHADING SYSTEM SHALL NEVER EXCEED THE PRICE PAID FOR THE SYSTEM. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

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