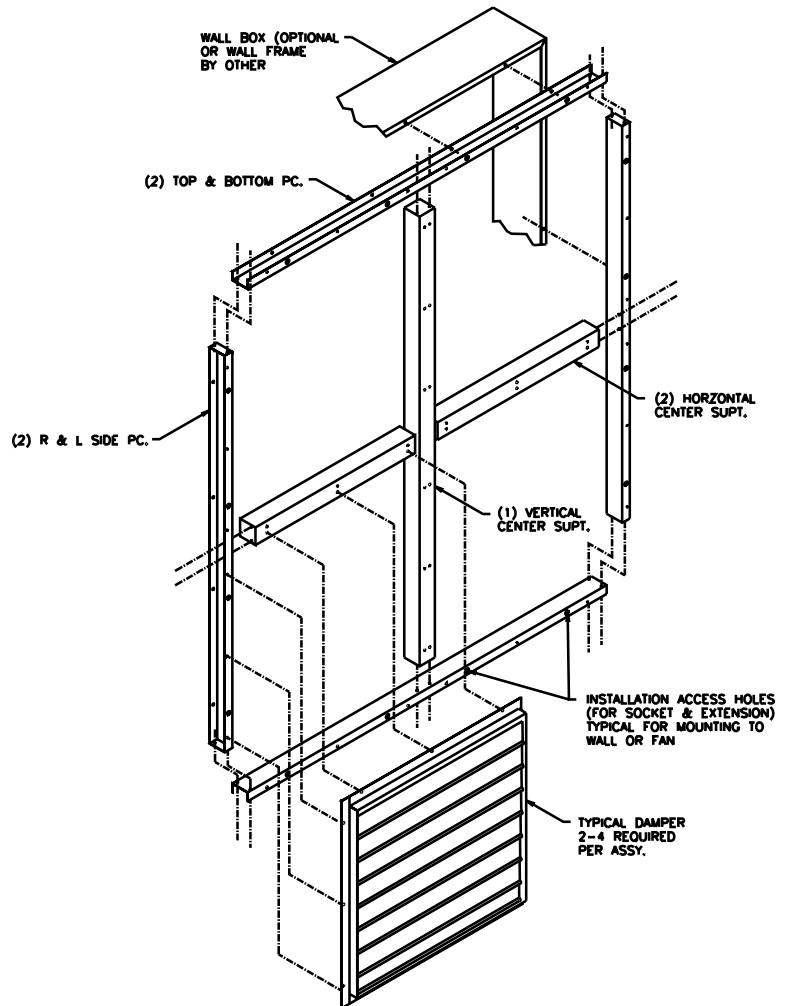


Read and Save These Instructions

ASSEMBLY INSTRUCTIONS FOR MOTORIZING WAG, WAA, WAGC & WAAC Single & Double Panel Mullion Dampers

Mullion Assembly Instructions

1. Attach (2) horizontal center supports to vertical center support. Align pre-punched holes of horizontal center support to pre-punched holes of vertical center support and attached using #14 screws.
2. Attach right and left side pieces to the horizontal center support. With installation access holes facing outward, align left and right side vertical support to pre-drilled holes of the horizontal support and attach using #14 screws.
3. Attach top and bottom pieces to vertical center support. With installation access holes facing outward, align top and bottom pre-punched hole in right, left and center supports and attach using #14 screw.
4. Install mullion as required.
5. Install dampers on mullion. Align prepunched holes in damper frame to prepunched holes in mullion assembly. Attach with #14 screws provided.



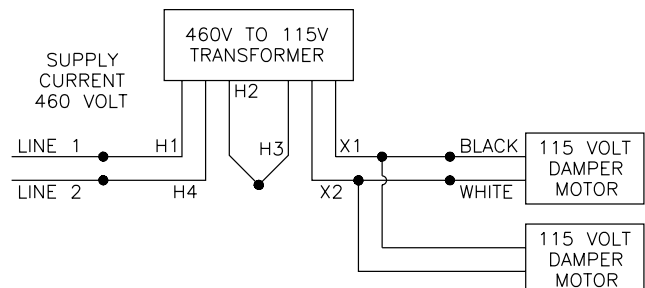
Motorizing Instructions

This CAM motor operation package consists of four major components: Motor with base, CAM assembly (with pull spring, CAM pulley and spring retainer) and hardware. Follow steps in sequence for best results.

Make all electric connections using good wiring practices and in accordance with National Electric Code and any local codes.

HINTS

- (A) On new installations, assembly of the motorizing kit would be more easily done prior to installing the damper.
- (B) **DO NOT** ATTACH THE CAM OPERATOR TO THE MOTOR UNTIL THE CAM ASSEMBLY IS ATTACHED TO THE DAMPER LADDER BAR AND THE MOTOR IS ATTACHED TO THE DAMPER
- (C) Each 460V/115V transformer can be used to handle up to 2 motor operator kits.



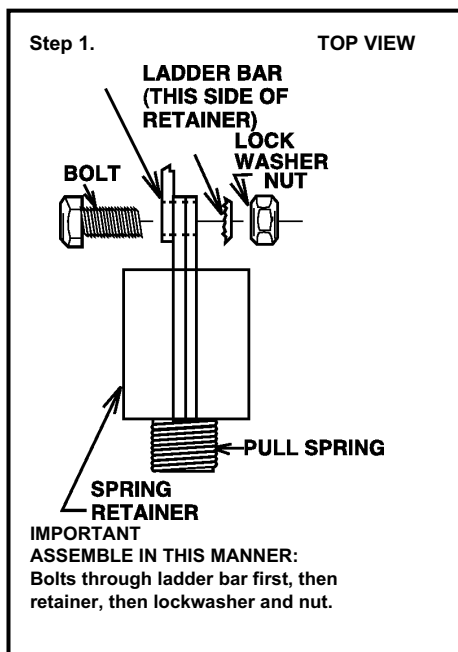
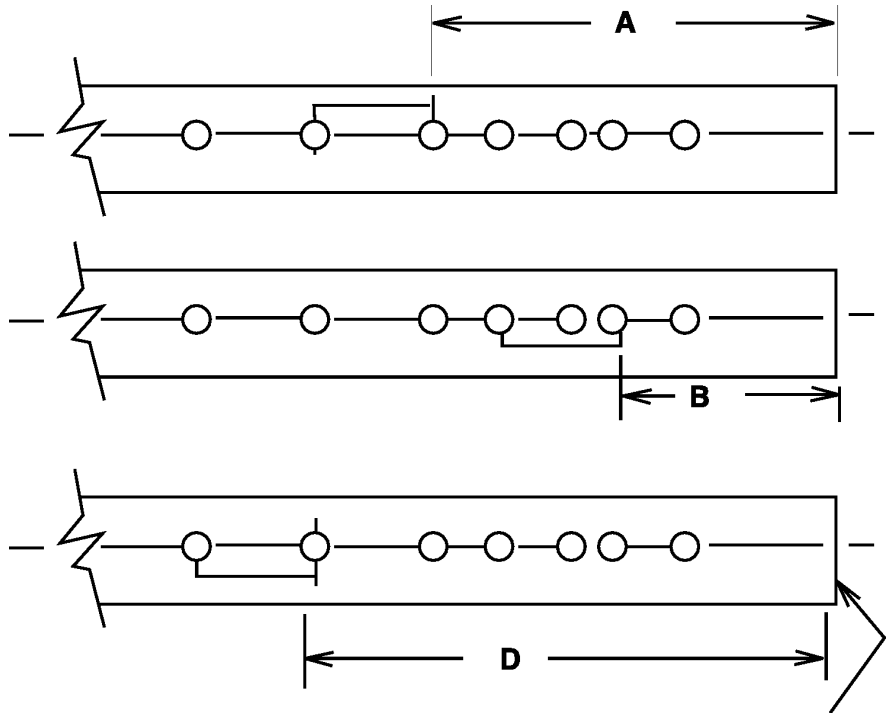
Single Panel Instructions

1. Refer to chart below for proper location. Attach the pull spring retainer to the damper ladder bar using two (2) bolts, lockwashers and nuts. Opening the damper will give easy access to the ladder bar.
2. Mount the motor and base using three (3) No. 8 screws (and three [3] speed nuts on aluminum frames) by aligning the slots in the motor with the three (3) holes in the frame. (**Note:** On some models the damper frame is not pre-drilled. In this case, use the motor base as a template to locate the proper locations. For single panel dampers, the motor base should fit in the lower left corner of the damper as viewed from the inlet side. For double panel dampers,

the motor base will fit to the right of the center support at the bottom as viewed from the inlet side. The motor base should be square to the damper. Self drilling screws can be used to secure the motor base to the damper frame. As an alternate to the self drilling screws, 0.125" diameter holes can be pre-drilled to use the #8 screws provided in the motor kit.

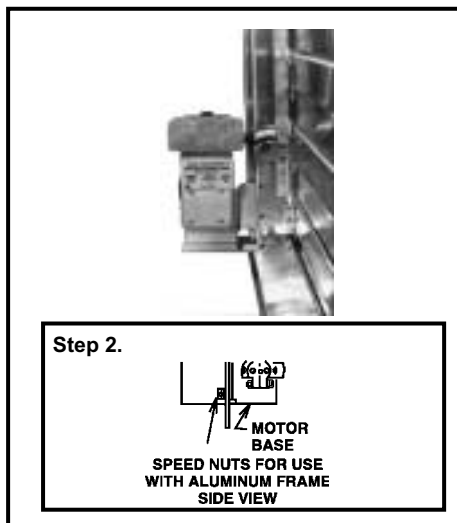
3. Attach the CAM pulley to the motor shaft. Position the CAM assembly so that approximately 1/8" of the motor shaft is showing through the CAM pulley, then tighten the retainer bolt.
4. Check to see that all other bolts in the assembly are tight.

MATCH TEMPLATE HOLE PAIR TO DAMPER MODEL							
A*		B*		D*		D*	
IN	MM	IN	MM	IN	MM	IN	MM
2 3/32	58	1 1/4	32	2 15/16	59	2 15/16	59
3131		3232		3333		3434	
3535		3636		3737		3838	
3939		4040		4141		4242	
4343		4444		4545		4646	
4747		4848		4949		5050	
5151		5252		5353		5454	
5555		5656		5757		5858	
5959		6060		6161		6318	
6363							



Drilling template for pull spring retainer
Drill 2 - 11/64" holes

Place this edge on end of ladder bar



TERMS AND CONDITIONS

DESIGN CHANGES The Company reserves the right to make changes in design, improvements and additions in and to its products any time without imposing any liability or obligations to itself to apply or install the same in any product manufactured by it.

TITLE The title and right of possession of the equipment sold herein shall remain with the Company and such equipment shall remain personal property until all payments herein (in-

cluding deferred payments whether evidenced by notes or otherwise) shall have been made in full in cash and the Purchaser agrees to do all acts necessary to perfect and maintain such right and title in the Company.

SAFETY ACCESSORIES The Company manufactures equipment designed to serve multiple applications and offers a wide range of safety equipment, including guards and other devices, as may be required to meet customer specifica-

tions. Without exception, the Company recommends that all orders include applicable safety devices. Equipment ordered without applicable safety devices is clearly the responsibility of the Purchaser. Further, the Purchaser warrants that he has determined and acquired any and all safety devices required for equipment sold by the Company. Weather covers and guards for motor and V-belt drives, couplings, shafts and bearings, along with inlet and outlet screens, are optional accessories noted in the price list.

These instructions cover the usual installation, operation and maintenance methods for which the product(s) was designed. They do not purport to cover all details or variations in the product(s) nor to provide for every possible contingency that might be met in connection with the installation, operation and maintenance. For any departures from these instructions, or should particular problems arise which are not covered sufficiently for the purchaser's purpose, the matter should be referred to the Company.

WARNING The Company products are designed and manufactured to provide reliable performance but they are not guaranteed to be 100% free of defects. Even reliable products will experience occasional failures and this possibility should be recognized by the User. If these products are used in a life support ventilation system where failure could result in loss or injury, the User should provide adequate back-up ventilation, supplementary natural ventilation or failure alarm system, or acknowledge willingness to accept the risk of such loss or injury.

WARNING DO NOT use in HAZARDOUS ENVIRONMENTS where fan's electrical system could provide ignition to combustible or flammable materials unless unit is specifically built for hazardous environments.

CAUTION Guards must be installed when fan is within reach of personnel or within seven (7) feet (2.134 m) of working level or when deemed advisable for safety.

DISCLAIMER The Company has made a diligent effort to illustrate and describe the products in this literature accurately; however, such illustrations and descriptions are for the sole purpose of identification, and do not express or imply a warranty that the products are merchantable, or fit for a particular purpose, or that the products will necessarily conform to the illustrations or descriptions or dimensions.

LIMITED WARRANTY

WARRANTY AND DISCLAIMER: The Company extends this limited warranty to the original buyer and warrants that products manufactured by the Company shall be free from original defects in workmanship and materials for two years from date of shipment, unless otherwise noted (see specific product literature), provided same have been properly stored, installed, serviced, maintained and operated. This warranty shall not apply to products which have been altered or repaired without the Company's express authorization, or altered or repaired in any way so as, in the Company's judgment, to affect its performance or reliability, nor which have been improperly installed or subjected to misuse, negligence, or accident, or incorrectly used in combination with other substances. The Buyer assumes all risks and liability for results of use of the products. Warranties on purchased parts, such as but not limited to bearings, sheaves, belts, couplings, electric motors, pumps and controls are limited to the terms of warranty extended by our supplier.

Polyethylene tubing and cooling pads are warranted to be free of defects in material and workmanship for a period of 90 days from date of shipment and a like warranty applies to the cross fluted cellular type cooling cells for a period of two years from date of shipment provided same have been properly handled, stored, installed, serviced, maintained and operated. And further, not subjected to excessive heat, corrosive agents or chemicals, or mechanical abuse that may cause tearing, crushing or undue deterioration nor used on a system or in a manner other than that for which it was designed as explained in the product literature.

LIMITATION OF REMEDY AND DAMAGES: All claims under this warranty must be made in writing and delivered to P. O. Box 978, Muskogee, Oklahoma, 74402, within 15 days after discovery of the defect and prior to the expiration of the warranty period from the date of ship-

ment by the Company of the product claimed defective, and Buyer shall be barred from any remedy if Buyer fails to make such claim within such period.

Within 30 days after receipt of a timely claim, the Company shall have the option either to inspect the product while in Buyer's possession or to request Buyer to return the product to the Company at Buyer's expense for inspection by the Company. The Company shall replace, or at its option repair, free of charge, any product it determines to be defective, and it shall ship the repaired or replacement product to Buyer F.O.B. point of shipment; provided, however, if circumstances are such as in the Company's judgment to prohibit repair or replacement to remedy the warranted defects, the Buyer's sole and exclusive remedy shall be a refund to the Buyer of any part of the invoice price, paid to the Company, for the defective product or part.

The Company is not responsible for the cost of removal of the defective product or part, damages due to removal, or any expenses incurred in shipping the product or part to or from the Company's plant, or the installation of the repaired or replaced product or part.

Implied warranties, when applicable, shall commence upon the same date as the express warranty provided above, and shall, except for warranties of title, extend only for the duration of the express warranty. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. The only remedy provided to you under an applicable implied warranty and the express warranty shall be the remedy provided under the express warranty, subject to the terms and conditions contained therein. The Company shall not be liable for incidental and consequential losses and damages under the express warranty, any applicable implied warranty, or claims for negligence, except to the extent that this limitation is found to be unenforceable un-

der applicable state law. 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. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

No employee, agent, dealer, or other person is authorized to give any warranties on behalf of the Company or to assume for the Company any other liability in connection with any of its products except in writing and signed by an officer of the Company.

REPLACEMENT PARTS If replacement parts are ordered, buyer warrants that the original components in which these replacement parts will be placed are in satisfactory working condition, and when said replacement parts are installed, the resultant installation will operate in a safe manner, at speeds and temperatures for which the original equipment was purchased.

TECHNICAL ADVICE AND RECOMMENDATIONS, DISCLAIMER: Notwithstanding any past practice or dealings or any custom of the trade, sales shall not include the furnishing of technical advice or assistance or system design. Any such assistance shall be at the Company's sole option and may be subject to additional charge.

The Company assumes no obligation or liability on account of any recommendations, opinions or advice as to the choice, installation or use of products. Any such recommendations, opinions or advice are given and shall be accepted at your own risk and shall not constitute any warranty or guarantee of such products or their performance.

GENERAL In no event shall any claim for consequential damages be made by either party. The Company will comply with all applicable Federal, State, and local laws.