

D5/D6 Series Doors MFZ Motor

Installation Manual

**RollSeal
1733 County Road 68
Bremen, Alabama 35033
256-287-7000**

Table of Contents

1	Warnings (Avertissements)	3
2	Limited Warranty	8
3	Use of Equipment.....	9
4	Physical Description.....	9
5	Specifications and Dimensions	9
6	Installation of D5/D6 Series Doors	10
6.1	Tools Required.....	10
6.2	Overview	10
6.3	Adjusting the Door Framing or Clear Opening	10
6.4	Attachment Points of Door	10
6.5	Assembly of Tracks	11
6.6	Assembly of Tracks to Head Unit.....	12
6.7	Fastening Door Assembly to Clear Opening	13
7	MFZ Motor.....	15
8	Manual Operation of the D5/D6 Series with the MFZ Motor	16
9	MFZ Initial Set-up.....	17
9.1	RollSeal Door with MFZ Motor	17
9.2	Wiring the MFZ.....	18
9.3	Setting the Limit Switches	19
9.4	Potentiometer Settings.....	20
9.5	Dip-Switch Positions	21
10	Changing Rotation Direction of 3 Phase MFZ Motor	21
11	MFZ Wiring	22
11.1	Leading Edge	22
11.2	Safety Beams	23
11.3	Open - Close Switch	23
11.4	Open - Close - Stop Switch.....	24
11.5	Open - Close - Stop - Key Lock Switch	24
12	Wiring BEA Receiver	25
13	Servicing	26
14	Troubleshooting	26
15	Door Panel Adjustments	27
16	Removal of Existing Panel.....	28
17	Installation of Replacement Panel	28
18	Cleaning Panels and Windows	30
19	Removing and Replacing Floating Magnets or Velcro	30
20	Removing and Replacing Filter on Filtered Head Units.....	34

1 Warnings (Avertissements)



Warning!

Disconnect All Power Sources Before Installing This Equipment. Failure To Disconnect Power Source Can Result In Property Damage, Serious Injury Or Death!



Warning!

Dangerous Rotating Machinery!
Keep Hands, Clothing, Etc. Clear When Operating!
Do Not Operate Without All Guards And Covers In Place!



Warning!

All Wiring Should Be In Accordance with National Electrical Codes Or Other Local Codes.



Warning!

The Installer Is Responsible For Complying With All Relevant Regulations, Such As National Wiring Regulations And Accident Prevention Regulations. Particular Attention Must Be Given To The Cross-sectional Areas Of Conductors, The Selection Of Fuses Or Other Protection, And Protective Earth/Ground Connections!



Warning!

The Voltages In The Power Cables And Certain Parts Of The Drive Can Result In Death. Whenever The Drive Has Been Used, It Must Be Isolated And Disconnected For 5 Minutes Before Any Work Commences.

Danger!

Only Qualified Electrical Personnel Familiar With The Construction And Operation Of This Equipment And The Hazards Involved Should Install, Adjust, And/Or Service This Equipment. Read And Understand This Manual In Its Entirety Before Proceeding. Failure To Observe This Precaution Could Result In Severe Bodily Injury Or Death!

Warning!



Item 4501-6312
(Warning Moving Door Label)
Supplied With Door,
MUST Be Installed
On Inside Of Cooler/Freezer
Beside Door Opening.

IMPORTANT INSTALLATION INSTRUCTIONS

Warning!

To Reduce The Risk Of Severe Injury Or Death:

1. READ AND FOLLOW ALL INSTALLATION INSTRUCTIONS.
2. Do not connect the door operator to the source of power until instructed to do so.
3. Locate the control station: (a) within sight of the door, (b) at a minimum height of 5 feet so small children cannot reach it, and (c) away from all moving parts of the door. Remove all ropes and remove or make inoperative all locks connected to the garage door before installing opener.
4. For products having a manual release, instruct the end user on the operation of the manual release. Where possible, install the door opener 8 feet or more above the floor. For products having an emergency release, mount the emergency release within reach, but at least 6 feet above the floor and avoiding contact with vehicles to avoid accidental release.

IMPORTANT SAFETY INSTRUCTIONS



Warning!

To Reduce The Risk Of Severe Injury Or Death:

1. READ AND FOLLOW ALL INSTRUCTIONS!
2. Never let children operate or play with door controls. Keep the remote control (where provided) away from children.
3. Personnel should keep away from a door in motion and keep the moving door in sight until it is completely closed or opened. NO ONE SHOULD CROSS THE PATH OF A MOVING DOOR.
4. Test the door's safety features at least once a month. After adjusting either the speed or the limit of travel, retest the door operator's safety features. Failure to adjust the operator properly may cause severe injury or death. NEVER GO UNDER A STOPPED, PARTIALLY OPEN DOOR.
5. For products having a manual release, if possible, use the manual release only when the door is closed. Use caution when using this release when the door is open.
6. KEEP DOORS PROPERLY OPERATING AND BALANCED. See Door Manufacturer's Owner's Manual. An improperly operating or balanced door can cause severe injury or death. Have trained door systems technician make repairs to cables, spring assemblies, and other hardware.
7. Install the Entrapment Warning label next to the control button in a prominent location. Install the Emergency Release Marking. Attach the marking on or next to the emergency release.
8. After installing the opener, the door must reverse when it contacts a 1-1/2 inch high object (or a 2 x 4 board laid flat) on the floor.
9. SAVE THESE INSTRUCTIONS.

French Translated Warnings



Avertissement!

Disjoindre fournissent de l'énergie tout les sources avant qu'installer cet équipement.
F[ailure] à disjoindre la source de pouvoir peut résulter dans dommage de propriété,
blessure sérieuse ou mort !



Avertissement !

Mécanisme tournant dangereux !
Garder les mains, vêtissant, etcC[lear] quand fonctionner !
Ne fonctionnez pas sans toutes gardes et couvertures dans lieu !



Avertissement !

Tout montage sur fil de fer doit être selon codes électriques nationaux ou autres
indicatifs régionaux.

Avertissement !

L'Installer est responsable pour conformer avec tout règlement pertinent, telles que règlement et règlement de prévention d'accident de montage sur fil de fer nationaux. Pl'attention articulaire doit être donnée pour les aires sectionnelles transversales de conducteurs, le choix d'elles fusées ou autre protection, et terre / prises de terre protecteur !

Avertissement !

Les tensions dans le pouvoir câblent et certains parties de la promenade en voiture peuvent résulter dans la mort. Wle |henever| la promenade en voiture a été utilisé il doit être isolé et détaché pendant 5 procès avant que tout travail commence.

Danger !

Seulement familial électrique de personnel qualifié avec la construction et opération de cet équipement et les hasards ont enveloppé devoir installer, arranger, et/ou - la révision cet équipement. R|ead| et comprendre ce manuel en entier avant que procéder. F|ailure| à observer cette précaution peut résulter dans dommage corporel sévère ou mort !

Avertissement !



Point 4501-6312
(Avertissement Moving étiquette de porte)
Livré avec porte,
doit être installé à
l'intérieur du réfrigérateur / congélateur
côté Ouverture de la porte.

LES INSTRUCTIONS D'INSTALLATION IMPORTANTES



AVERTISSEMENT!

À réduire le risque de blessure sévère ou mort:

1. LU ET SUIVENT TOUTES INSTRUCTIONS D'INSTALLATION.
2. Ne liez pas l'opérateur de porte per la source de pouvoir jusqu'à instruit faire ainsi.
3. Localisez la station de commande: (a) en vue de la porte, (b) à un minimum la hauteur de 5 pieds ainsi petit enfants ne peuvent pas l'atteindre, et (c) loin de tous parties en mouvement de la porte.
4. Pour produits ayant un délivrance manuelle, instruire l'utilisateur final sur l'opération de la délivrance manuelle.

RÈGLEMENTS DE SÉCURITÉ IMPORTANTS



AVERTISSEMENT!

À réduire le risque de blessure sévère ou mort:

1. LU ET SUIVENT TOUTES INSTRUCTIONS!
2. Jamais laisser fonctionner enfants ou mouvoir vivement avec les autorités de porte. Gardez la télécommande (où a fourni) loin des enfants.
3. Le personnel devrait garder loin une porte dans mouvement et subsistance la porte en mouvement dans vue jusqu'à est complètement fermé ou avoir ouvert. CES AUCUNS DOIVENT CROISER LE CHEMIN D'UNE PORTE EN MOUVEMENT.
4. Éprouvez les traits de sécurité de la porte au moins une fois par mois. Après qu'arrangeant la vitesse ou la fin de course, retest les traits de sécurité de l'opérateur de porte. Manque à arranger l'opérateur correctement peut causer blessure sévère ou mort.
5. Pour produits ai manuel la délivrance, si possible, utiliser la délivrance manuelle seulement quand la porte est fermée. Précaution d'utilisation à utiliser cette délivrance quand la porte est ouverte.
6. GARDER LES PORTES CORRECTEMENT QUI OPÈRE ET ÉQUILIBRÉ. Voir la porte fabricant propriétaire manuel. Un improprement qui opère ou balancé porte peut causer blessure sévère ou mort. Formez les technicien de systèmes de porte faites les réparations per les câbles, réunions de source, et autre quincaillerie.
7. **SAUVEZ CES INSTRUCTIONS.**

2 Limited Warranty

All products are warranted to be free from defects in material and workmanship for a period of one (1) year or 100,000 cycles, whichever occurs first, from the date of purchase if installed and used in strict accordance with the installation instructions. Liability is limited to the sale price of any products proved to be defective or, at manufacturers' option, to the replacement of such products upon their return. No products are to be returned to the manufacturer, until there is an inspection and/or a return-goods authorization (RGA) number is issued.

All complaints should be directed first to the authorized distributor who sold the product. If satisfaction is not obtained or the name of the distributor is not known, write the manufacturer that appears below, directed to the attention of Customer Service Manager.

This limited warranty is expressly in lieu of any and all representations and warranties expressed or implied, including any implied warranty of merchantability or fitness for a particular purpose. The remedy set forth in this limited warranty shall be the exclusive remedy available to any person. No person has authority to bind the manufacturer to any representation or warranty other than this limited warranty. The manufacturer shall not be liable for any consequential damages resulting from the use of our products or caused by any defect, failure or malfunction of our products. (Some areas 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 that vary from area to area.

Warrantor:
RollSeal
1733 County Road 68
Bremen, AL 35055
256-287-7000



3 Use of Equipment

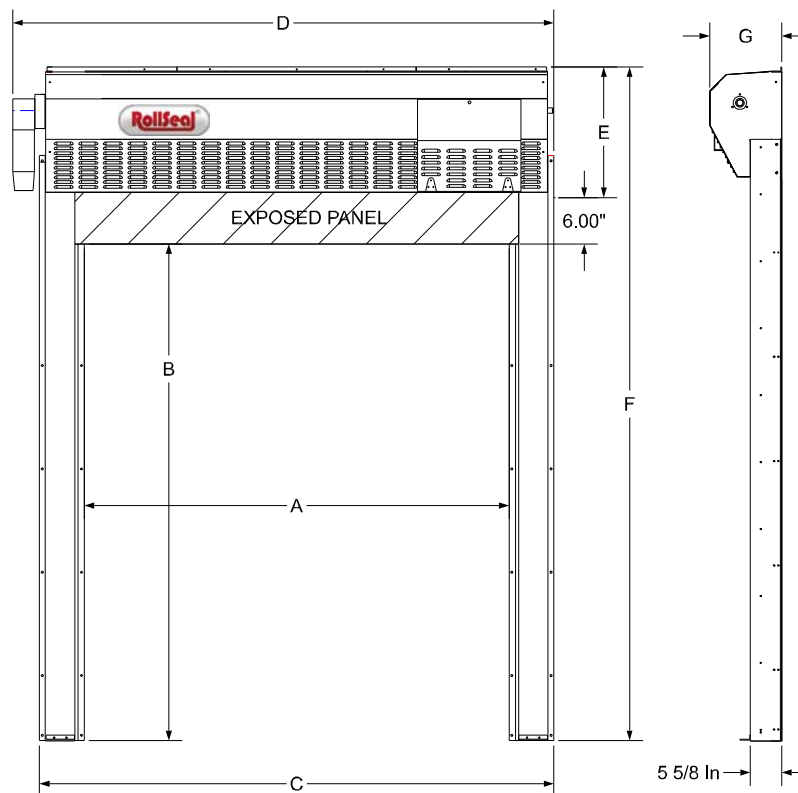
The D5/D6 Series Doors are motorized curtain enclosures for ripening rooms.

4 Physical Description

The D5/D6 Series Doors are available with multiple features and options such as:

- Operator Options: Remote Receiver and Transmitters, Loop Detector, Motion Detector, Etc.
- Windows: 18" x 18", 32" x 32" or 32" high with width varying by width of door panel.
- Fabric & Fabric Color: Frost, white, black, blue, red, tan, green, anti-static, and insect screen.
- Other accessories can be added such as a remote IR sensor, photo eye safety beams, ceiling pull switch, lock-out switch, or other various types of switches.

5 Specifications and Dimensions



A = Clear Opening Width

B = Clear Opening Height

C = Overall Track Width = A (Clear Opening Width) + 16.4 In

D = Overall Head Unit Width = A (Clear Opening Width) + 20.9 In

E = Head Unit Height: D5/RS-500 = 20.69 In; D6/RS-600 = 24.02 In

F = Overall Door Height = B (Clear Opening Height) + E (Head Unit Height) + 6.0 In

G = Head Unit Depth: D5/RS-500 = 12 7/8 In; D6/RS-600 = 15 In

6 Installation of D5/D6 Series Doors

6.1 Tools Required

3/8 in. (10 mm) Power screwdriver (portable) 3/16 in. (5 mm) and 1/4 in. Drill bit and power drill 1/4, 3/8, and 5/16 in Drive Bits 5/8 in Wrench 3/8 x 1 in. Bolts and nuts (supplied)	9/16 in Socket Hammer Tape measure Carpenter's level
<i>NOTE: Other Tools May Be Required According To Installation.</i>	

6.2 Overview

The D5/D6 Series Doors are shipped with pre-assembled vertical members (left track and right track), and a pre-assembled horizontal member (head unit). When components are received, check for damaged, loose or missing parts. If there are damaged or missing parts contact your RollSeal distributor immediately. Please read and understand all instructions in this manual before beginning installation.

6.3 Adjusting the Door Framing or Clear Opening

Read the value of height and width of the clear opening for the door size that you are installing. This gives the required dimensions of the clear opening. If necessary, adjust the dimensions of the mounting posts or framing members to the height and width of your D5/D6 Series Door System as shown. Refer to **Section 6.7, page 13**, Error! Reference source not found. for details of attaching door to framing members. Framing material must provide suitable support for attachment of screws. Make sure that mounting posts or framing members are positioned so that the screw holes of the outer flanges of the vertical members will align with the mounting posts or framing members.

Diagram 6A

NOTE: Make sure that there is space for appropriate motor without encountering any obstructions during installation.

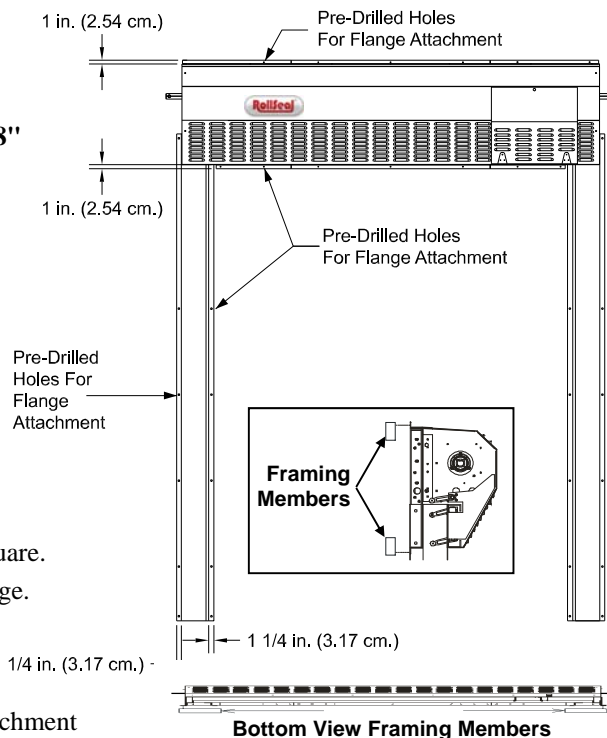
NOTE: Allow 1' (30.4 cm) minimum, preferably 18" (45.7 cm) clearance above the Head Unit for future panel maintenance or replacement.

6.4 Attachment Points of Door

When sizing the clear opening for attachment of the door, pay close attention to the following guidelines. Door flanges have pre-drilled holes that serve as mounting points of door.

Flange widths are shown in **Diagram 6A**.

1. Make sure that door assembly is plumb and square.
2. The top unit has a top flange and a bottom flange. Make sure these flanges overlap framing.
3. The vertical members have inner flanges and outer flanges. The inner and outer flanges have pre-drilled holes that serve as attachment points. Make sure the outer flanges overlap framing.
4. When door is raised in front of clear opening (**Section 6.7, page 13, Diagram 6F**) flanges must be flush against framing for attachment of screws.



6.5 Assembly of Tracks

Taller doors that require a total track length over 13' 6" have spliced tracks. If track sections need to be assembled, follow the instructions shown below.

1. Arrange the Top and Bottom Tracks so that they can be assembled. **See Diagram 6B.**
2. Slide the Bottom Track into the Top Track so that the Tracks butt together on the Splice Bracket and Splice Plate. **See Diagram 6C.**
3. Note that the Tracks butt together inside the Track Bracket and butt together on top of the Track Plate.
4. Bolt the Tracks together. Check that ALL bolts in the Splice Bracket and Splice Plate are properly tightened.

Diagram 6B

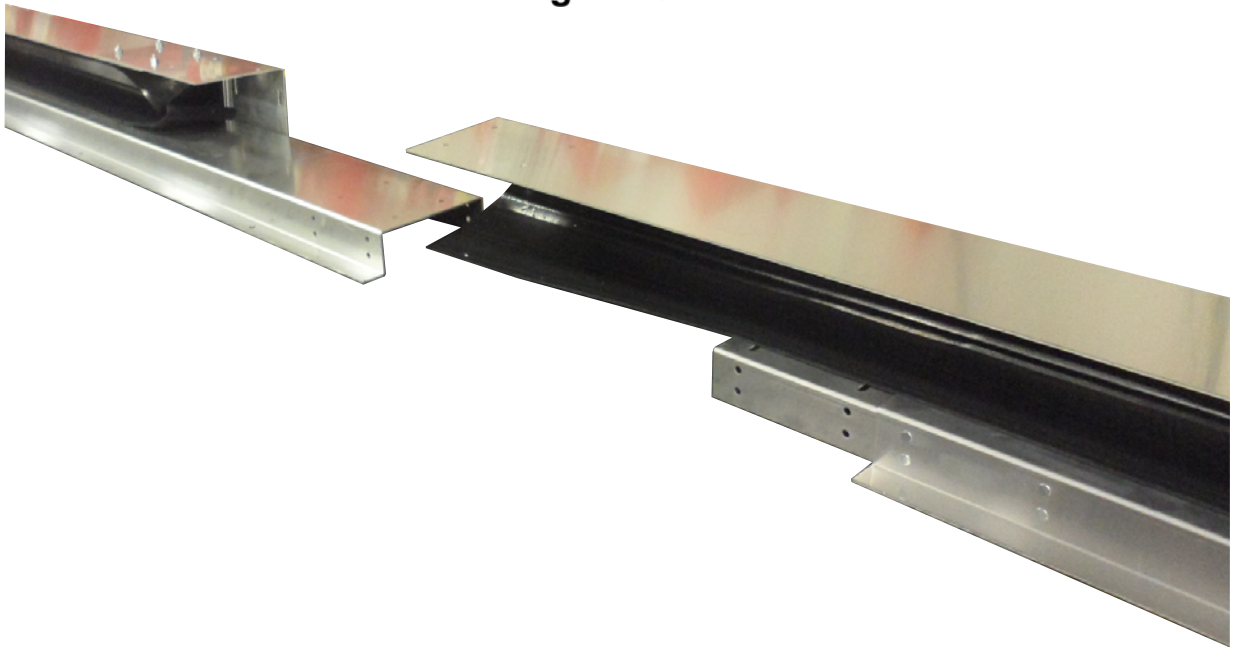
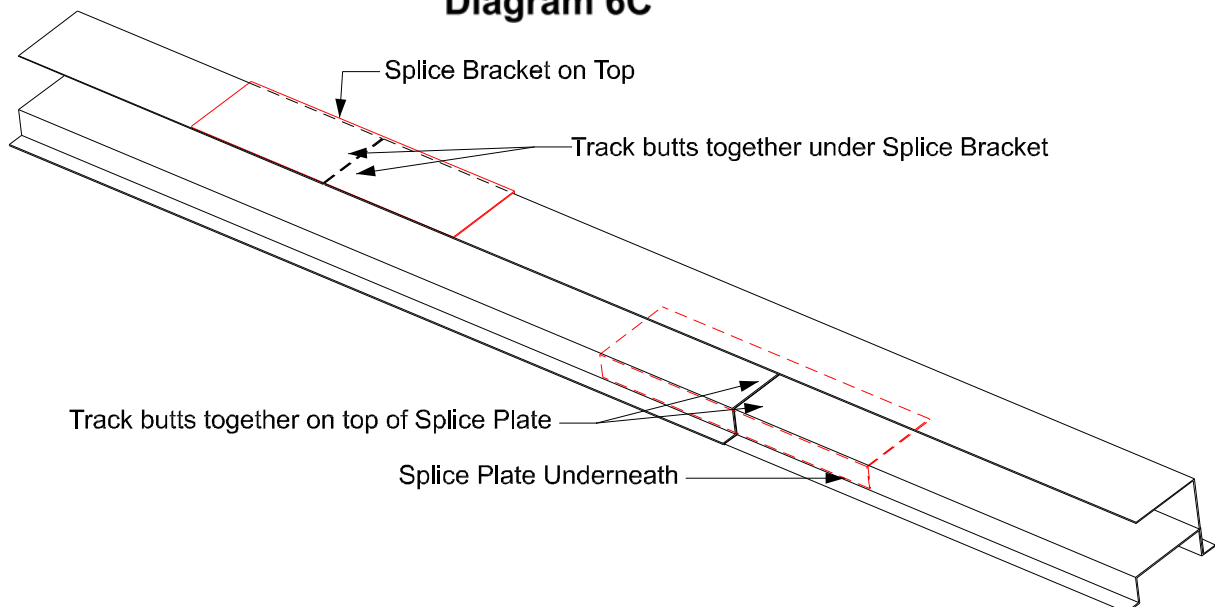


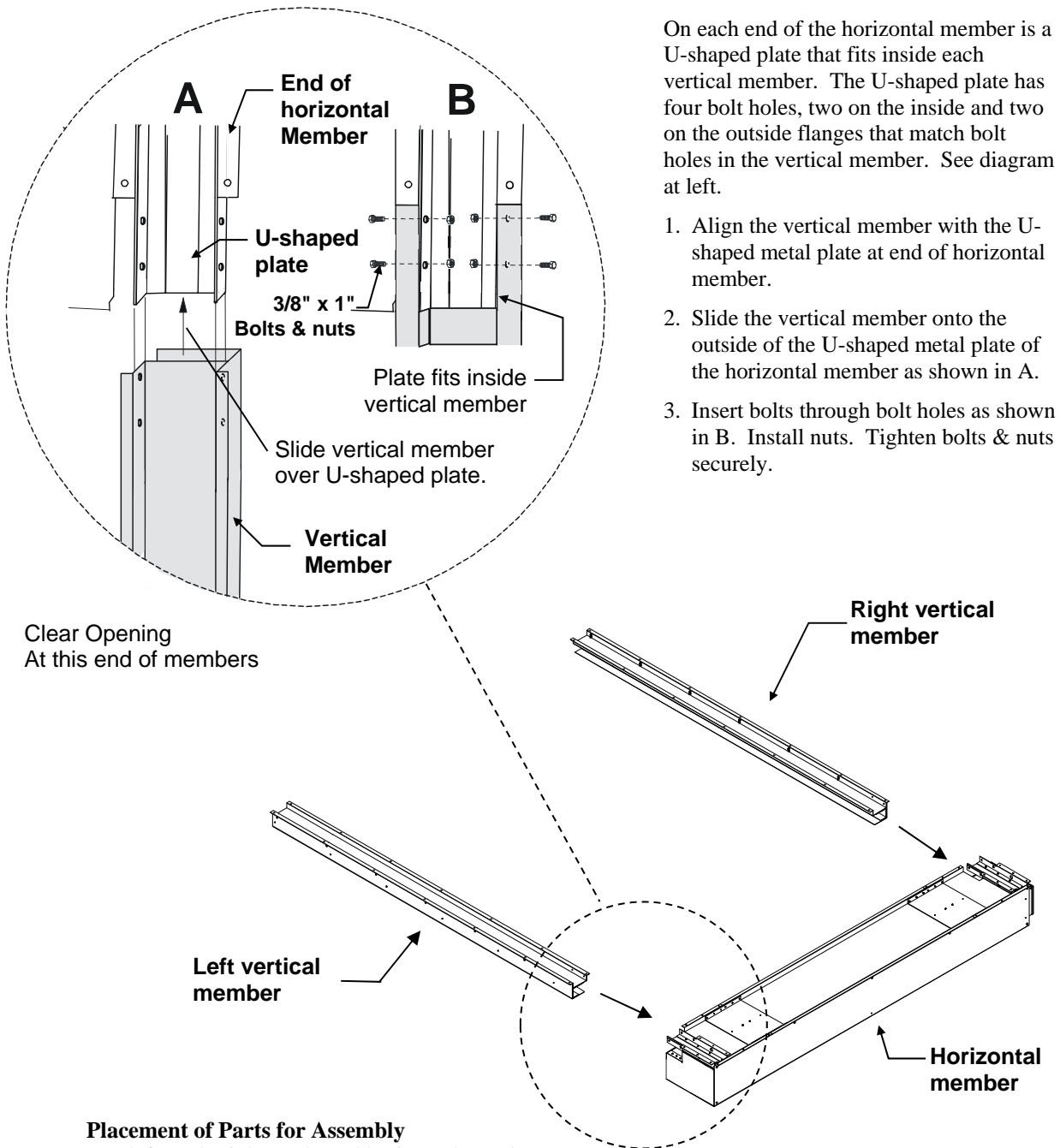
Diagram 6C



6.6 Assembly of Tracks to Head Unit

Arrange the horizontal member, left vertical member (left track), and right vertical member (right track) on the floor in front of the clear opening as shown in **Diagram 6D**. The curtain side of the horizontal member and each vertical member faces down.

Diagram 6D



On each end of the horizontal member is a U-shaped plate that fits inside each vertical member. The U-shaped plate has four bolt holes, two on the inside and two on the outside flanges that match bolt holes in the vertical member. See diagram at left.

1. Align the vertical member with the U-shaped metal plate at end of horizontal member.
2. Slide the vertical member onto the outside of the U-shaped metal plate of the horizontal member as shown in A.
3. Insert bolts through bolt holes as shown in B. Install nuts. Tighten bolts & nuts securely.

Placement of Parts for Assembly

Lay left track, right track, and horizontal member face down in front of the clear opening as shown.

6.7 Fastening Door Assembly to Clear Opening

Reference the Diagram 6E for proper placement of Fab-loc fasteners, Stitch screws and #5 Tek screws for the appropriate door height.

Fab-loc fasteners are indicated by the larger dots.

Diagram 6E

DOOR HARDWARE LAYOUT (26GA MATERIAL ASSUMED)

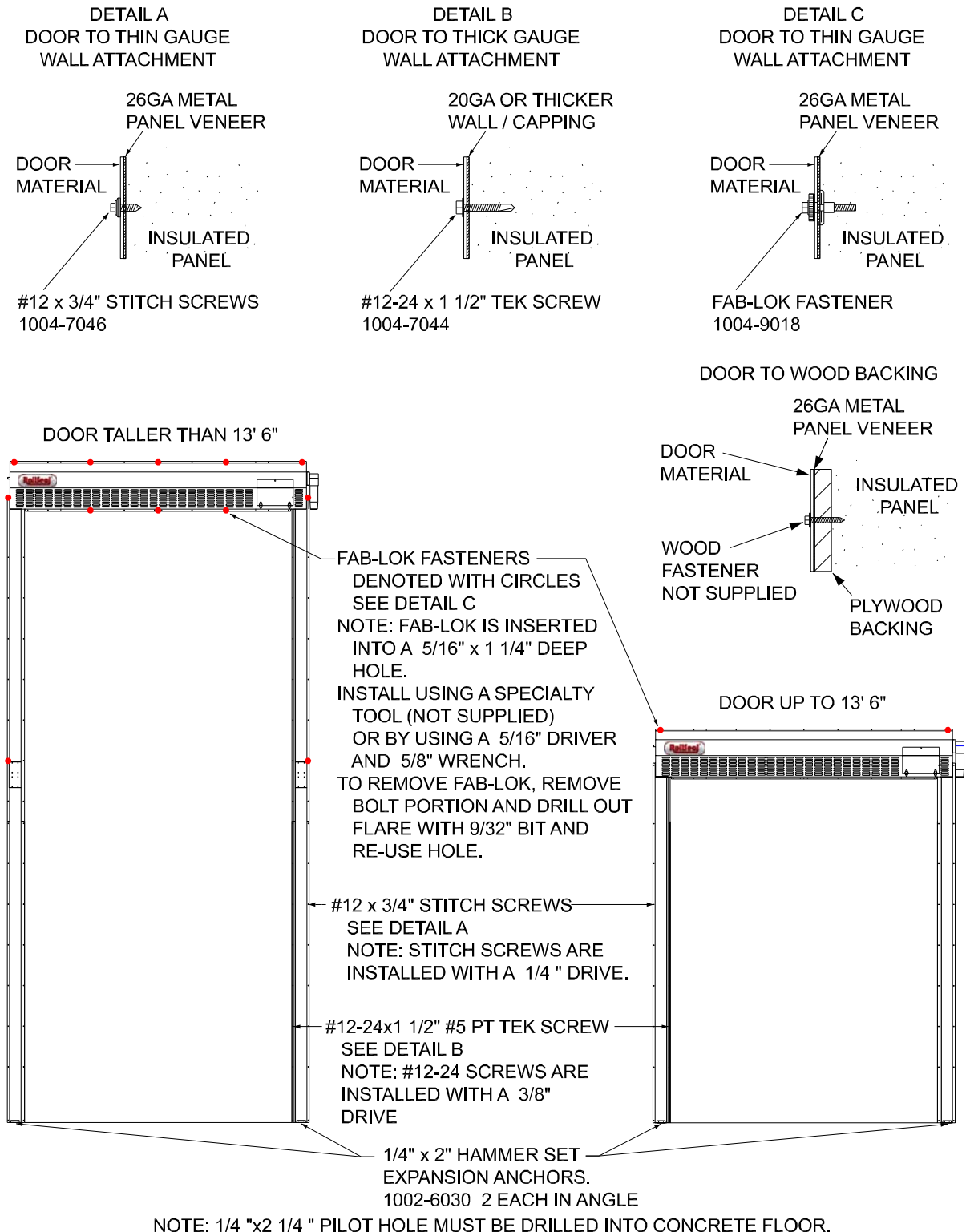


Diagram 6F

1. Use a tape measure and make sure that the overall height and overall width of the clear opening meet the door requirements.
2. Make sure that door assembly is plumb and square. **See Diagram 6F**
3. Center door assembly on clear opening. Align the bottom of each vertical member with the respective framing board or posts of the clear opening.

NOTE: The vertical members should be aligned so that their outer flanges will exactly overlap with the framing boards or posts when the door assembly is raised into position.

4. Assemble workers and equipment into position on each side of the door assembly.

IMPORTANT: SLOWLY LIFT TOP OF DOOR ASSEMBLY TO RAISE THE DOOR. See Diagram 6G.

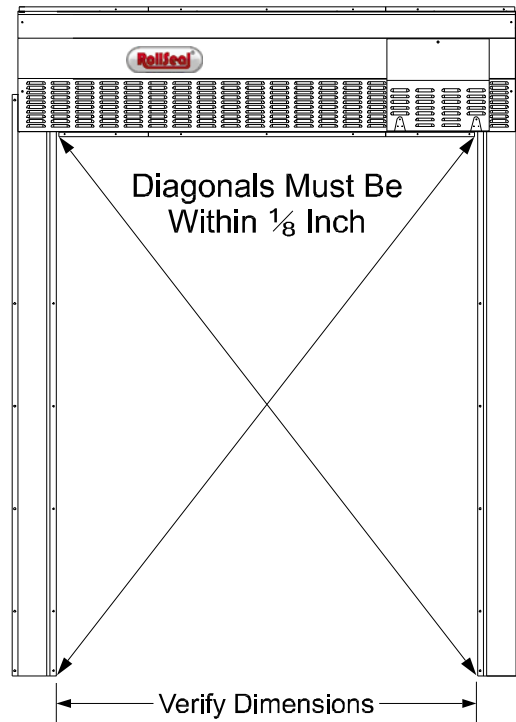


Diagram 6G

5. Lean door assembly upright against clear opening.
6. Carefully press flanges of the door assembly flush against faces of framing boards or posts.
7. Fasten the appropriate screws through the flanges on sides (tracks) of door assembly. Securely tighten all screws.
8. Fasten the appropriate screws through the lower and upper flanges of the horizontal member of door assembly. This secures the top of the door to the clear opening.

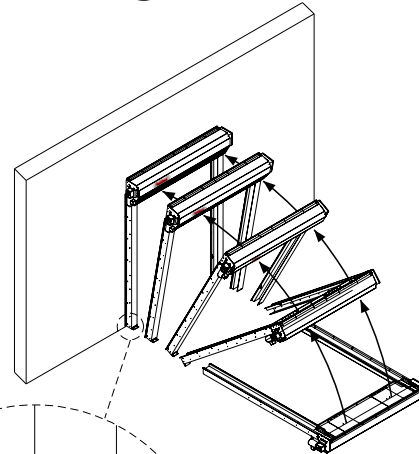
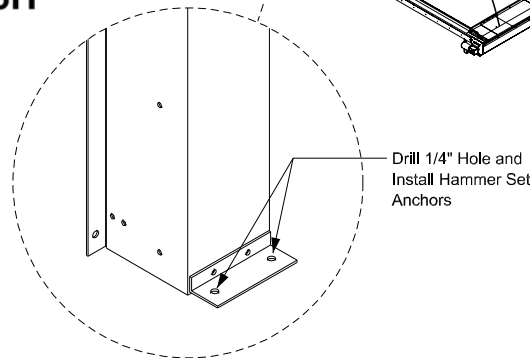


Diagram 6H

9. Locate the two floor mounting holes at the bottom of the left and right tracks. **See Diagram 6G.**
10. Drill 1/4" x 2 1/4" pilot holes and install Hammer Set Anchors (1002-6030) in both right and left tracks. **See Diagram 6H.**
11. This completes fastening of the door assembly to the clear opening.



7 MFZ Motor

Control unit KV1 (3 phase) basic control systems model, for automatic doors, gates and similar. The units' control logic is software based.

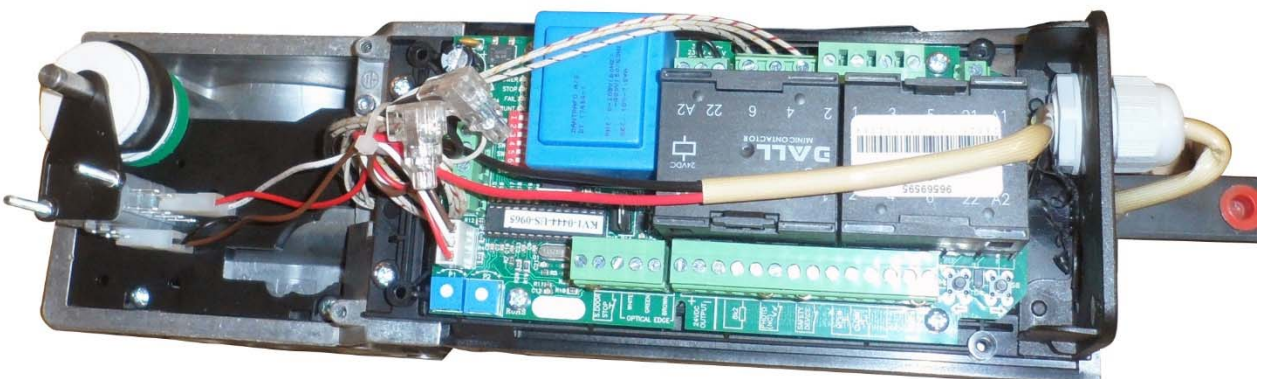
Diagram 7A



The safety circuits are connected directly in series with the motor control to ensure that no safety related function is dependent in the mode of the program or the electronics.

Limit switches, a manual operation switch, motor thermal protection and the motor come connected to the mechanism's control unit at delivery.

Diagram 7B



8 Manual Operation of the D5/D6 Series with the MFZ Motor

Diagram 8A

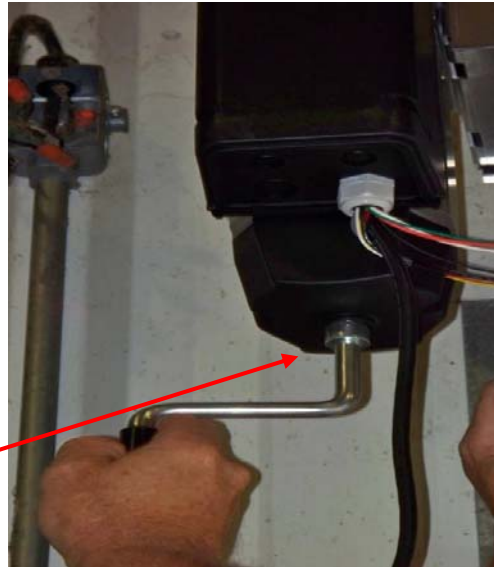
Operation Instructions

The D5/D6 Series Door can be operated manually in the event of a power outage or if there is a motor malfunction. To operate the door manually, perform the following instructions.

Manual Operation with Emergency Hand Crank:

1. Push the Emergency Hand Crank into the operator as far as it will go.
2. Move the door in the OPEN or CLOSE direction by turning the Emergency Hand Crank.
3. Remove the Emergency Hand Crank from the operator after completing emergency manual operation.

Insert Manual
Crank And Rotate



9.2 Wiring the MFZ

1. Remove the motor cover, ensure the supply voltage jumper, as shown below, is moved to the correct position for input facility voltage (400 3-Phase).



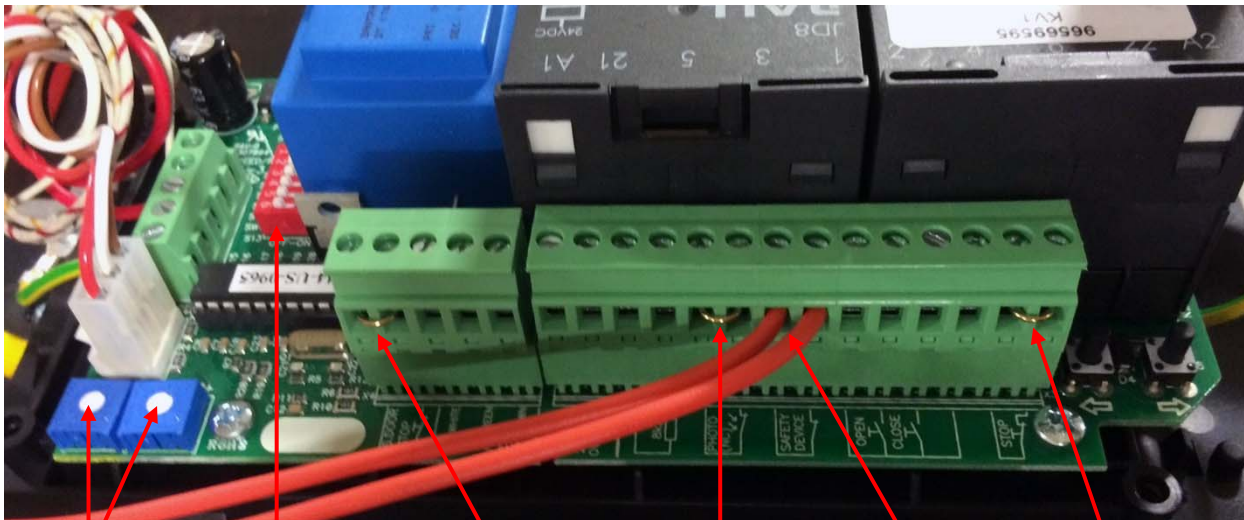
Warning!

Ensure Power Is Dis-Connected At The Source
(I.E. Circuit Breaker) Prior To Wiring Or Servicing Unit.

2. Wire incoming power to L1, L2, L3 and Ground 3-Phase. N is used in 3-Phase WYE connection. **See MFZ Owners Manual and Diagram 9A.**
3. Ensure that required jumpers or peripheral devices are installed in all areas on the terminal strip connections as shown below. Ensure jumpers are installed on the following if a particular function or device is not going to be used: S. Door, if Safety Switch is not wired; Photo-cell, if safety beams not wired; Safety Device, if leading edge is not wired; and Stop Push Button, if stop push button not wired.
4. Turn Potentiometers (CCW) and Dip Switches 1-6 (OFF).

Note: Jumper wires on Photo-cell & Stop Push Button. However, Safety and Leading Edge Switches have replaced their respective jumpers.

Diagram 9B



Potentiometers
(CCW)

Dip Switches
1-6 OFF

S-Door Safety
Switch Jumper

Photo-cell
Jumper

Safety Device
(Leading Edge
Switch Wires)

Stop Push
Button Jumper

Note: If you will be wiring safety beams from RollSeal, you will be required to have a relay for proper operation.

9.3 Setting the Limit Switches

The Limit Switches are used for selected functions, such as door position (Open or Close) or similar requirements.

The Leading Edge Switch is located within the horizontal member mechanism. This switch is attached to a lever that contacts the curtain. This switch stops the curtain in the event of a doorway obstruction that is up to 12 foot tall. See Section 11.1 for the Leading Edge Switch location and wiring in the head unit.

Connections to these extra limit switches can be achieved directly with isolated flat connectors (red 0.5 — 1.5 mm², 4.8 x 0.8 mm), to either the opening or closing contacts. Only extra low voltage should be connected to the additional limit switches.

White Cam 1
Leading Edge
Black Cam 2
Closed Limit
White Cam 3
Open Limit
Green Cam 4

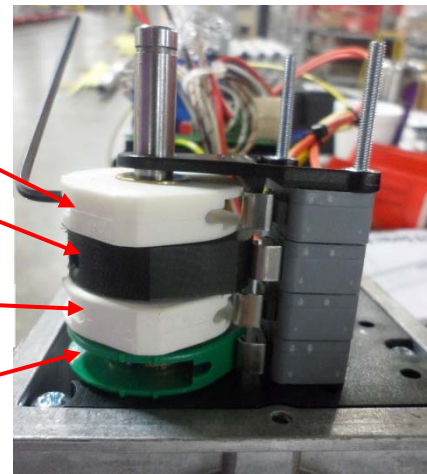


Diagram 9C

1. Using the manual crank handle, crank the door (CCW) down until the fabric panel is 1-2 feet below the head unit. **See Section 8** for information on manual operation.
2. Locate the Open (Green) and Leading Edge (Black) Cams, loosen their applicable Allen head screws. **See Diagram 9C** for DIP Switch location.
3. Ensure that DIP Switches 1 and 2 are in the Off Position. **See Diagram 9D**.
4. Apply power to the motor (Turn On breaker).

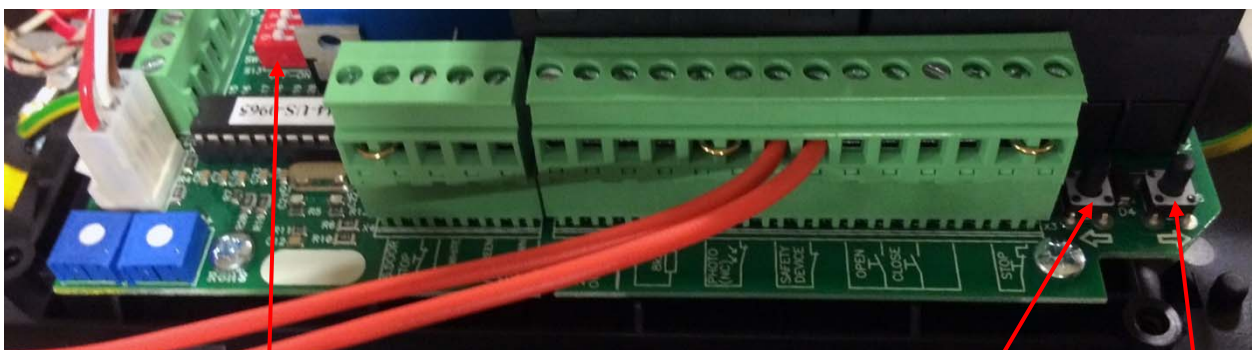


Warning!

Dangerous Rotating Machinery!
Keep Hands, Clothing, Etc. Clear When Operating!

5. Press and hold the OPEN/CLOSE button, as shown in **Diagram 9D** to open/close the door to the desired position.

Diagram 9D



Dip Switches

Open Button

Close Button

NOTE: If the door goes in the wrong direction, you will have to **REVERSE** the direction using procedures that will be explained in 10. Proceed to next step if direction is correct.

6. After opening the door to desired position, rotate the Open Limit Cam (Green Cam 4) and Leading Edge Cam (Black Cam 2) until they come in contact with the Switch arms. Tighten the set screws to hold the cams in position.

NOTE: Do not activate the switch arms at this time.

NOTE: There is a Fine Adjustment Screw on the Green and White Cams that may be used to dial in the limit you desire after you tighten the Shaft Set Screw. You may have to move the door up and down with the buttons to dial in the limit.

7. Rotate the Fine Adjustment Screw on the Open Limit Cam (Green Cam 4) clockwise until it activates or clicks the limit switch arms. See **Diagram 9E**.
8. Loosen the Leading Edge Cam (Black Cam 2) slightly past the Open Limit Cam so that the larger radius of the Black Cam will engage the micro switch until the door lowers to a height of approximately 12 foot high. Tighten the Leading Edge Cam.
9. Check the setting of the Green Open Limit Cam and Black Leading Edge Cam. Use the Open Push Button to operate the door and roll the panel onto the drive pipe. The Open Limit Switch should activate and stop the door at the desired position.
10. Press and hold the Close button, as shown in **Diagram 9D** to close the door to the desired position.
11. After closing the door to desired position, rotate both White Cams (Cam 1 and Cam 3) until they come in contact with the Switch arms. Tighten the set screws in both cams to hold the cams in position.
12. Open and Close the door to ensure the correct setting of the Limit Switches.

NOTE: Make adjustments to the Open, Close and Leading Edge Cams as necessary to achieve desired results.

13. Return DIP Switches 1 and 2 to the desired position.

Diagram 9E

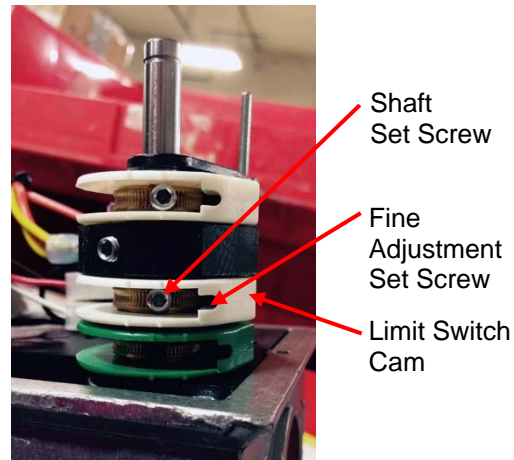


Diagram 9F

9.4 Potentiometer Settings

P1 allows adjustment of the minimum force to reverse a closing door. Turn clockwise to increase sensitivity. Turn fully CCW to disable.

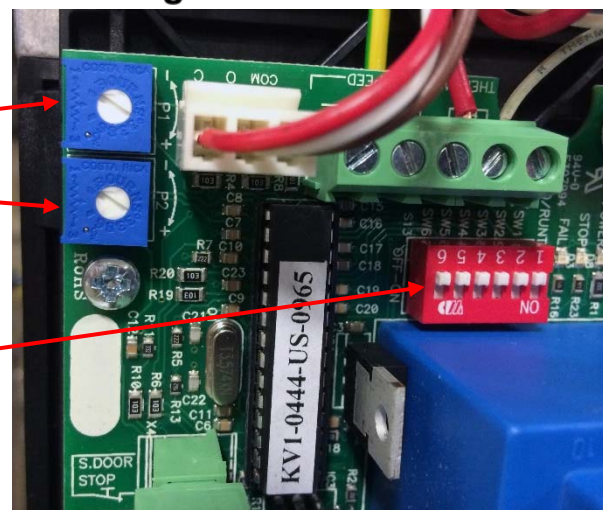
The door can be set to close automatically. The timer for opening is set using potentiometer P2; the time range is linear, 2-125 seconds.

If automatic closing is not used, turn P2 fully CCW to disable.

P1 - Force To Reverse Door

P2 - Auto Close Delay In seconds (2-125)

Dip Switches 1-6



Automatic closing can be disabled temporarily to keep the door open by pressing the STOP button for more than 5 seconds while the door is open. The door must be closed using the close button. Automatic closing will take place as normal in the next door cycle.

9.5 Dip-Switch Positions

1. Ensure Dip switches 1 and 2 are in the correct position for the desired operation. OFF for constant pressure to operate door or ON for momentary pressure to operate the door.

See **Diagram 9F** for DIP Switch location.

Switch	Function
1	Impulse open/Momentary pressure to operate door (ON)/dead man mode/constant pressure to operate door (OFF)
2	Impulse close/Momentary pressure to operate door (ON)/dead man mode/constant pressure to operate door (OFF)
3	Force recognition Off (OFF)
4	1-button control (Opens a closed door, closes an open door or switches the direction of a closing door) (ON)
5	The closed limit is set approximately 50 mm from the floor; the door continues over the limit and stops after receiving a signal from the safety edge; if no signal is received, the control closes the door for a fixed time.
6	Electric safety edge.

2. Re-install the motor cover.



Warning!

Run the door several times to ensure proper setting of the limits and proper operation of all desired functions and **safety devices**.

10 Changing Rotation Direction of 3 Phase MFZ Motor

See **Diagram 10A**.



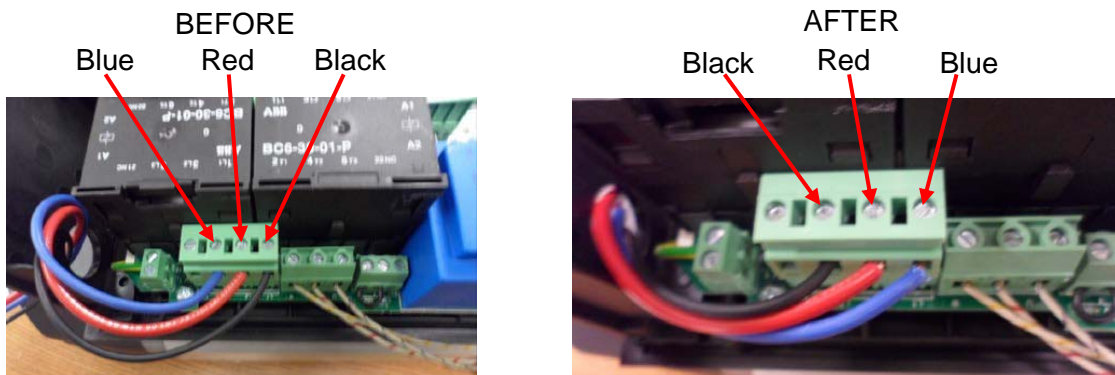
Warning!

Danger Of Personal Injury Altering The Rotation Direction of 3 Phase Motor!
When Installing For The First Time, The 3 Phase Motor Direction May Be Incorrect,
And The Phase Sequence Must Be Inverted

! Warning!

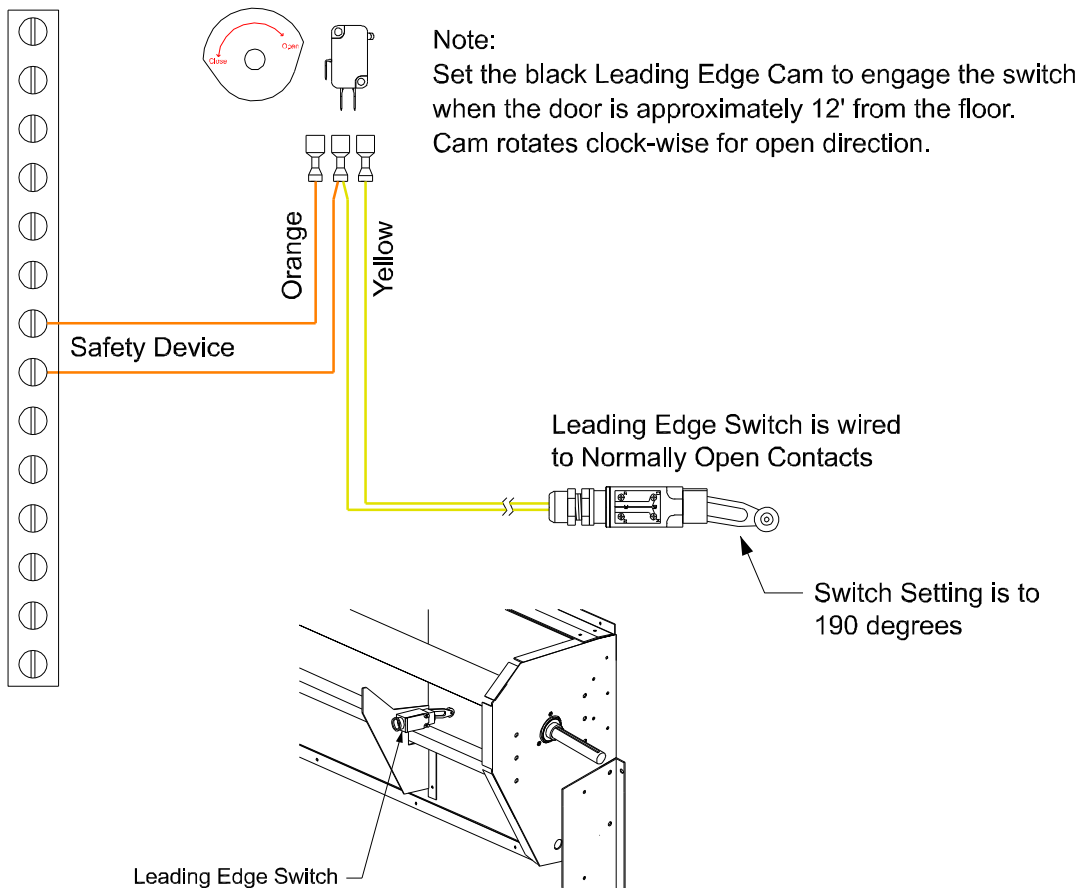
Before Changing The Rotation Direction Of A Three Phase Motor
Make Sure The Power Is Disconnected. Rotation Direction Can Then Be Changed By
Swapping 2 Of The Input Power Wires (I.E. L1 And L3 As Indicated In Diagram)

Diagram 10A Changing 3 Phase Wiring



11 MFZ Wiring

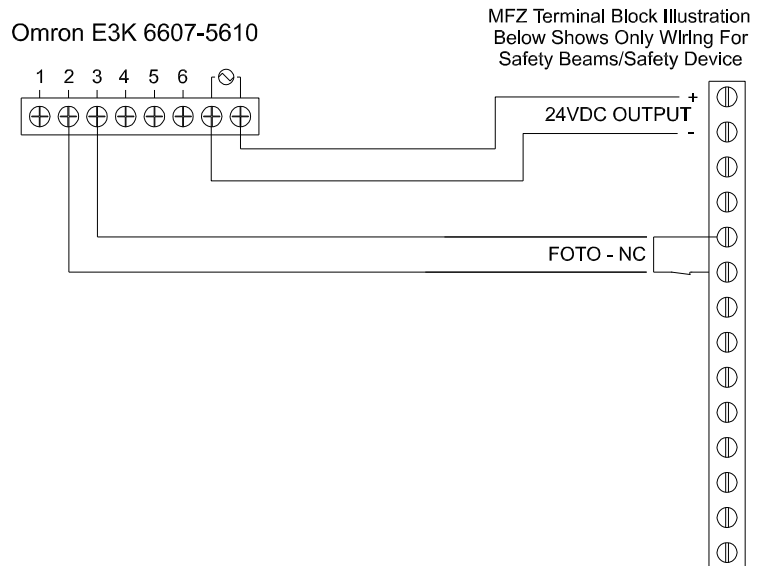
11.1 Leading Edge



11.2 Safety Beams

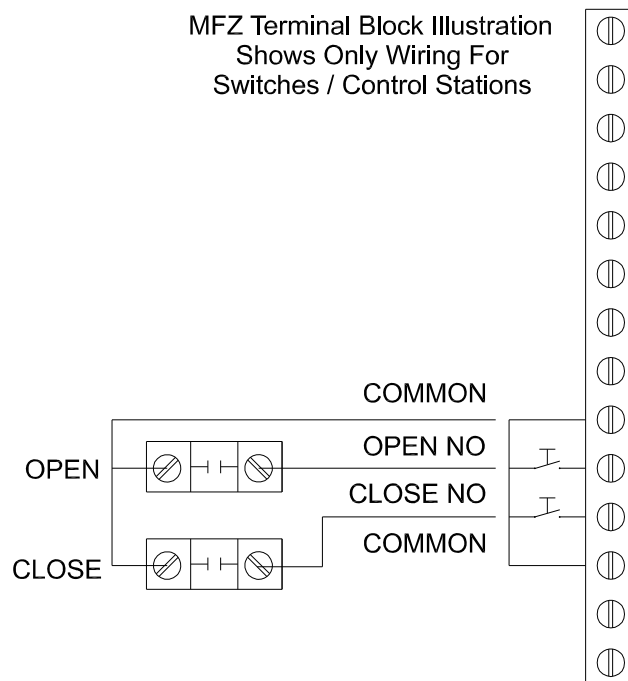
The MFZovitor uses normally closed contacts for the safety device. Also, the motor can supply 24VDC. Use an appropriate device and refer to the device's manual and the MFZ wiring diagram for installation. After installation test the door and safety device to insure proper function.

Diagram 11A

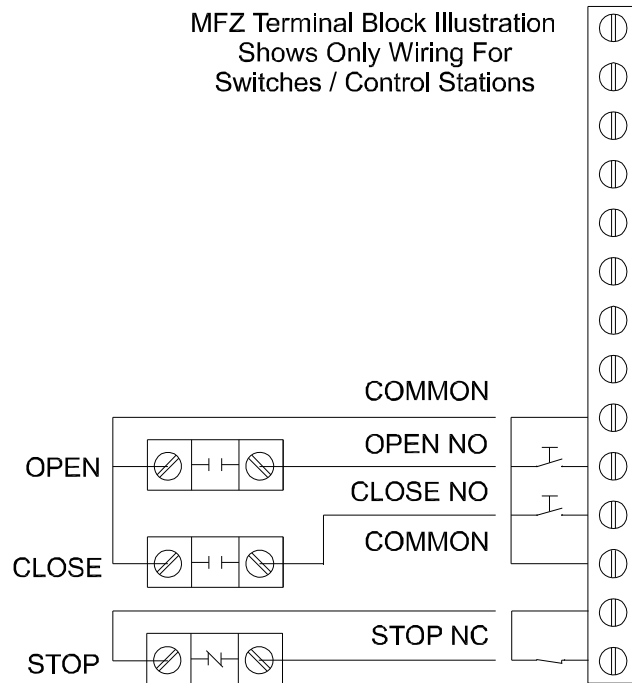


11.3 Open - Close Switch

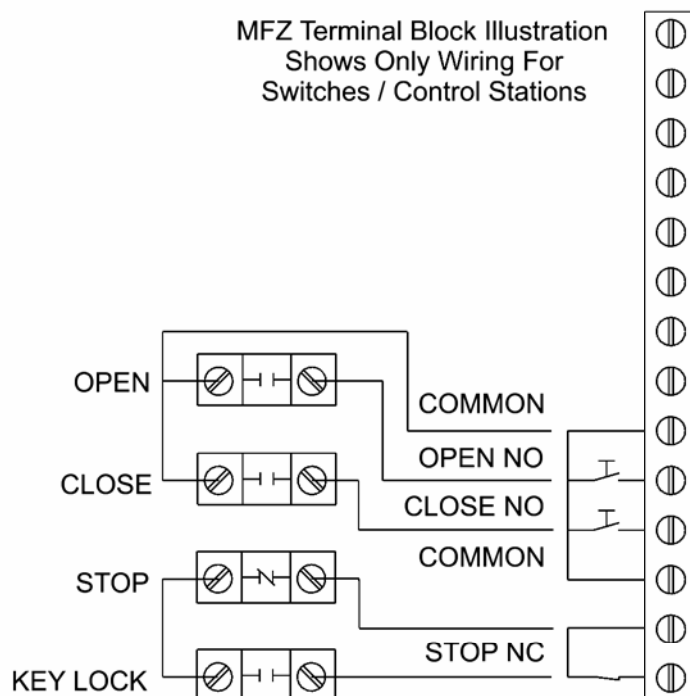
MFZ Terminal Block Illustration
Shows Only Wiring For
Switches / Control Stations



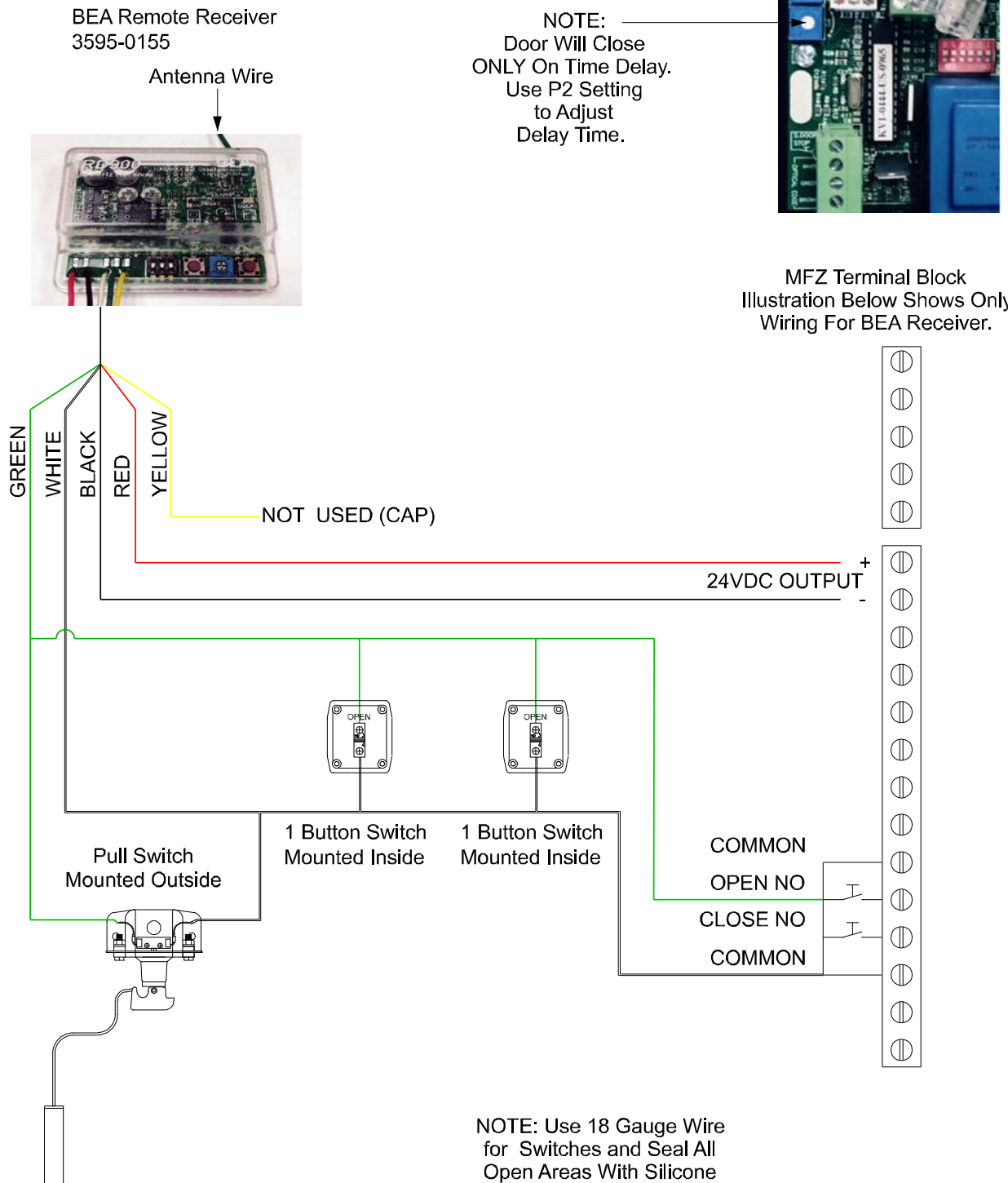
11.4 Open - Close - Stop Switch



11.5 Open - Close - Stop - Key Lock Switch



12 Wiring BEA Receiver



13 Servicing

The actual control unit including its components is an electro mechanical and electronic device, which does not normally require servicing. The tight enclosure of the device stops dirt and dust from penetrating the actual unit. In conditions where vibration is present, it may be necessary to check the tightness of terminal block connections e.g. when servicing the operator and the door.

The lenses of photocells used as safety devices and any mirrors must, depending on circumstances, be cleaned regularly to ensure a faultless functioning of the door.

14 Troubleshooting

Make sure the settings described in the instruction manual have been made according to the type and operating method of the door in question, and that the peripherals have been connected according to the diagrams to the connectors reserved for them.

Check that the green led "POWER" is on in the circuit card, showing that the 24 VDC control voltage is present.

Make sure that the malfunction is not due to any errors discussed above in the instruction manual.

Description of LED Codes

CODE	PWR LED (GREEN)	STOP LED (RED)	SAFETY FAIL LED (YELLOW)	SPEED/RUNT LED (YELLOW)
Fixed Light	Power On	Stop or Emergency Stop activated	Safety Edge or Photo active when CLOSE push-button active. NO close	Speed control and adaptive runtime not learned
1 Flash	Not possible	Not in use	Safety Edge failure	Adaptive learn time learned, Speed control not learned
2 Flashes	Not possible	Not in use	Not in use	Door stopped by cause of runtime
3 Flashes	Not possible	Not in use	EPROM failure	Door stopped because of runtime error
4 Flashes	Not possible	Not in use	Not in use	Speed Control wear failure
5 Flashes	Not possible	Not in use	Not in use	Tacho fail. Missing pulse

15 Door Panel Adjustments

During normal operation, the tension pipes should run in close proximity of each other. The clearance between the tension pipes should normally be between 1/4" to 1/2" (6.35 mm - 12.7 mm). See Detail 3 below. There are two situations pertaining to the tension pipes that may cause problems with door operation. If the tension pipes are too far apart, the tension pipes will not repel each other. This causes poor contact between the hook & loop or magnets. On the other hand, if the tension pipes are riding one another (i.e. touching one another), the door panel material does not flow evenly, thus leaving wrinkles in the panel instead of a stretched, smooth & even appearance.

Adjustment Procedures

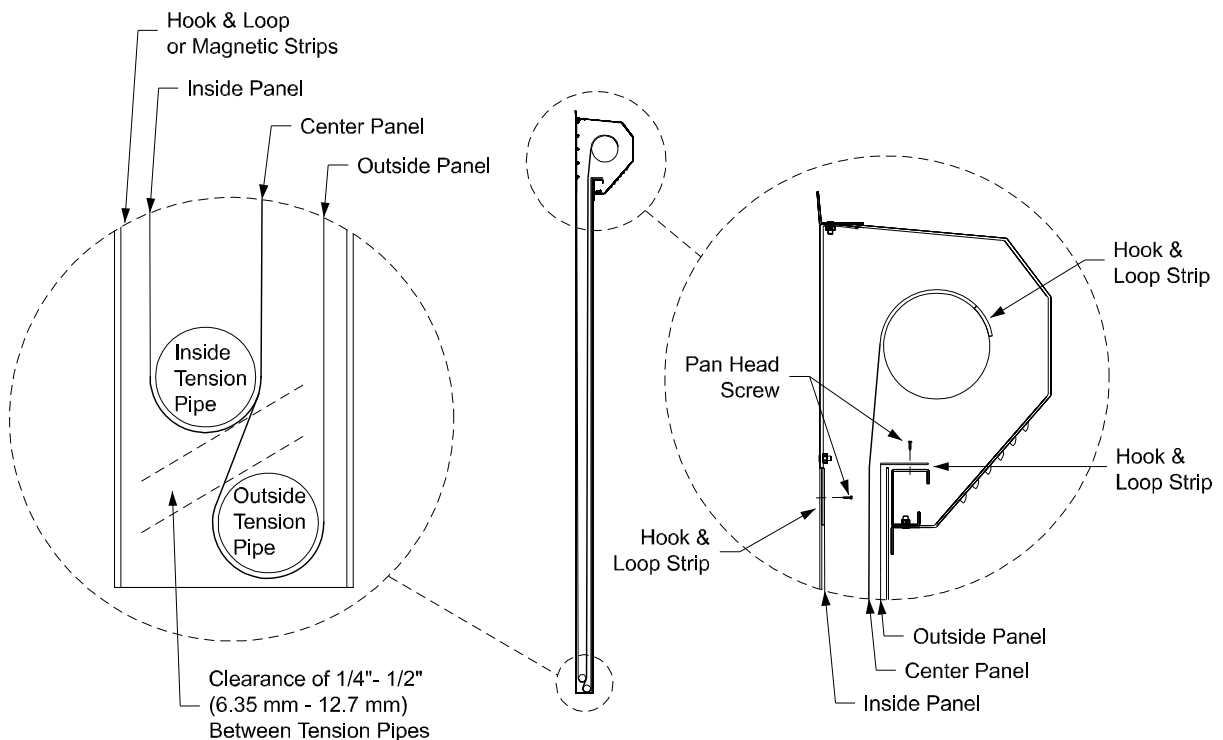
The clearance between the tension pipes can be adjusted by raising or lowering the door panels. Each door has three panels: (1) the inside panel (panel facing the inside of building) is attached to the back plate. (2) The center panel is attached to the roller. (3) The outside panel (facing the outside of building) is attached to the front bar. Adjustments are made to the inside panel and/or the outside panel.

NOTE: The door must be in the closed position for panel adjustments. Ensure the panels are not damaged while removing or reinstalling the nuts and screws.

To adjust the height of the outside tension pipe, raise or lower the outside door panel by detaching the panel hook & loop from the front bar, and raising or lowering the panel. Then re-attach the panel loop to the hook on the front bar. Be sure to keep the tension pipe level during this procedure.

To adjust the height of the inside tension pipe, raise or lower the inside door panel by detaching the panel hook & loop from the back plate, and raising or lowering panel. Then re-attach the panel loop to the hook on back plate. Be sure to keep tension pipe level during this procedure. Install Tek screws through the panel material and into the back plate to securely hold the material in place.

Diagram 15A



16 Removal of Existing Panel

1. Lower the panel to the floor.
2. Remove power source.
3. Remove and lower the cover from the door head unit.
4. Locate the 3 fabric sheets that make up the entire door curtain. See **Diagram 17A, Detail 2, Page 29**. The center panel has a hook & loop strip across the top. The center panel does not have magnets or hook & loop strips on the sides. The inside and outside panels have hook & loop strips at the top, and magnets or hook & loop strips along the sides of the panels. The outside panel may be identified as the longer of the two panels.
5. Mark the end of each sheet and along the edge of each sheet with a marker. This will prove vital to ensure you install the new panel sheets at the proper locations to alleviate major curtain adjustment.
6. Remove the 3 screws from each sheet (front, center, and back). See **Diagram 17A, Detail 2, Page 29**. Detach the hook & loop area of each sheet left to right, starting with front, then center, and then back sheets. Let the panel/curtain fall to the floor.

NOTE: Observe how the tension pipes are installed before removal. They *MUST* be re-installed first, with one pipe in the front/outer pocket (closest to outside of the cooler) and the other pipe in the back/inside pocket. Locate the back pipe behind the triangle piece that is attached to the yellow strap. The front/outer pipe will always hang lower than the back/inside pipe.

NOTE: Failure to install properly could result in door sticking up.

8. Slide the 2 tension pipes out of their respective pockets. Remove the panel/curtain away from the door. You are now ready to install the new panel/curtain.

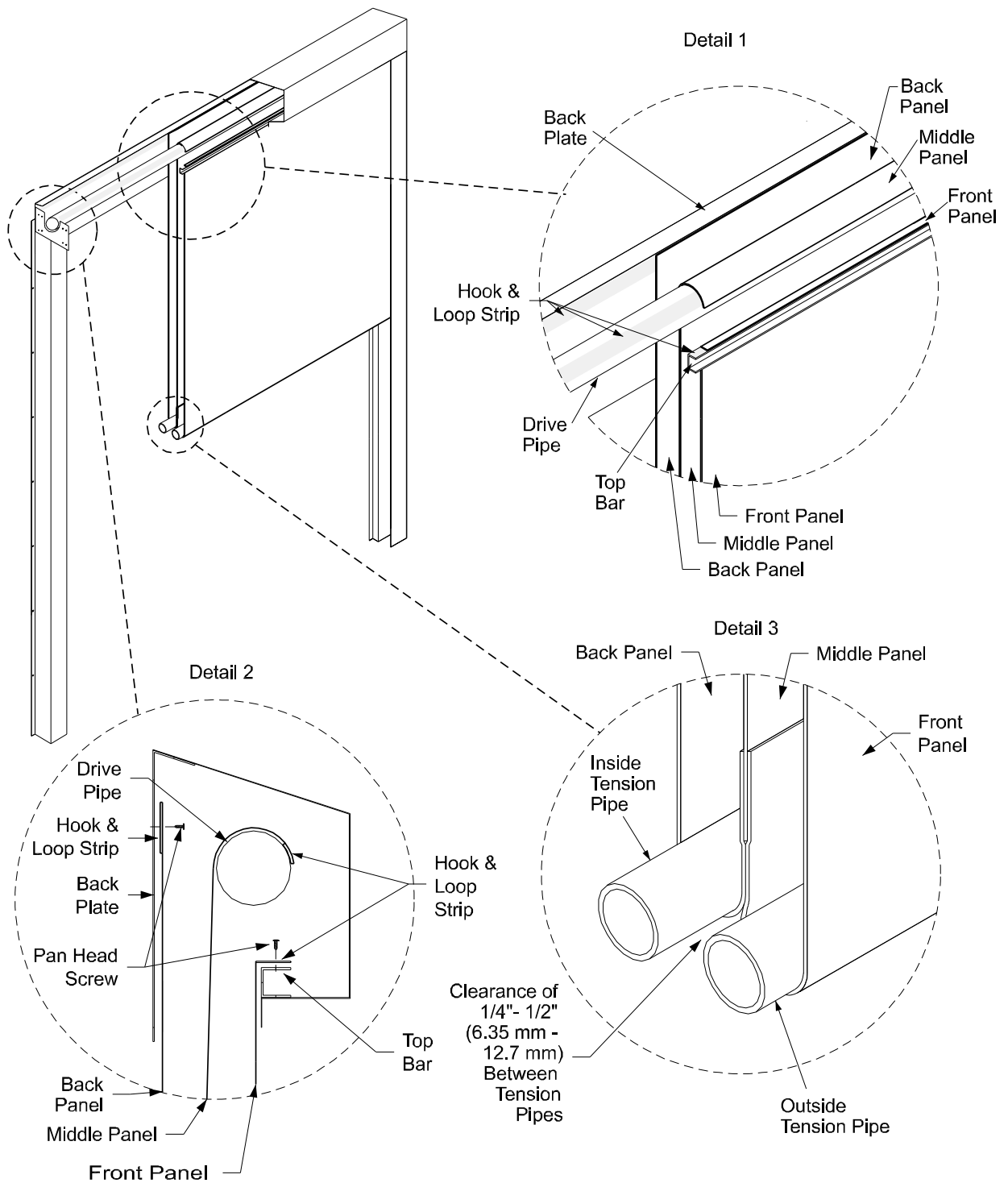
17 Installation of Replacement Panel

1. Place the new panel in front of the door opening and make sure the part number label is on the left side.
2. Take the back panel (**Diagram 17A, Detail 1 & 2, Page 29**) and attach the material to the backplate placing material on the marks that were created during removal of old panel.
3. Take the center curtain (**Diagram 17A, Detail 1 & 2, Page 29**) and attach to the drive pipe.
4. Take the outside curtain (**Diagram 17A, Detail 1 & 2, Page 29**) and attach to the top bar.

NOTE: Ensure that the Leading Edge Switch is in the proper position.

5. After the curtain has been secured, install the bottom pipes in the curtain as shown in **Diagram 17A, Detail 3, Page 29**. The front pipe should be installed first. Then the back pipe is placed in front of inside panel but behind the yellow strap and triangle piece of material. It should be above the front pipe
6. Ensure all panels are inside the tracks on both sides. Manually raise and lower to straighten the panel (**See Section 11**). Run the door as normal.

Diagram 17A Curtain Installation



18 Cleaning Panels and Windows

Panels and Windows can be cleaned using a solution of cold to warm, mild soapy water and a cloth.

Wipe off the soiled area to remove dirt particles. Using a cloth gently wipe the panel and window with the soapy solution. Thoroughly rinse the area with pure cold or warm water to remove soap.

Dry off thoroughly with a dry cloth. **DO NOT ROLL-UP the panel onto itself without making sure it is completely dry!!!**

DO NOT USE: Solvents or strong alkaline cleaners. Use of these products could cause damage.

If in doubt about a particular cleaning solution, please do not hesitate to contact customer service for our recommendation.

19 Removing and Replacing Floating Magnets or Velcro

NOTE: The door shown in the following illustrations may have different options and accessories than your door. Removing and replacing the floating is the same for all RollSeal units.

Diagram 19A

1. Open the door to its upper limit.
2. Remove power source.
3. Raise the panel as high as it will go into the head unit. Refer to Page 22, Section 11, Manual Operation of the MFZ Motor. This will make it easier for you to remove and re-install the “Floating Magnets or Velcro and PIM Plate Assemblies” from the left and right side tracks (**Diagram 19A**).



Ensure panel is raised into the head unit.



Warning!

Ensure Power Is Turned “OFF”
To Prevent Door Movement
While Removing PIM Plate
Assembly And Floating!

2. After you have raised the panel into the head unit, you can remove all of the PIM Plate nuts from both sides. Then remove the PIM plate and floating assemblies from their associated tracks (**Diagram 19B** and **Diagram 19C**).



Diagram 19B



Diagram 19C

3. Lay the PIM plate assembly down on the floor and remove the old floating material from the PIM plate. Pay particular attention to the top of the PIM plate assembly. You will notice the material, at the top, has been cut at an angle. It will be necessary to re-install the new piece in the same arrangement as the one you have removed (**Diagram 19D** and **Diagram 19E**). Get the new piece of floating material. Flip the new piece upside down with the magnets or Velcro toward the floor. Align the pre-drilled holes of the material with the PIM bolts on the PIM plate assembly. You might find it easier to start at one end with the first PIM bolt, insert it, and then move to the other end slightly lifting the PIM plate in a bend to insert the PIM bolt at that end (**Diagram 19F**). Lay the assembly back down on the floor flat. This will slightly pull the material allowing the remaining holes to align properly. Proceed to insert the rest of the PIM bolts in their proper holes. Repeat the same steps for installing the floating to PIM plate for the other side.



Diagram 19D

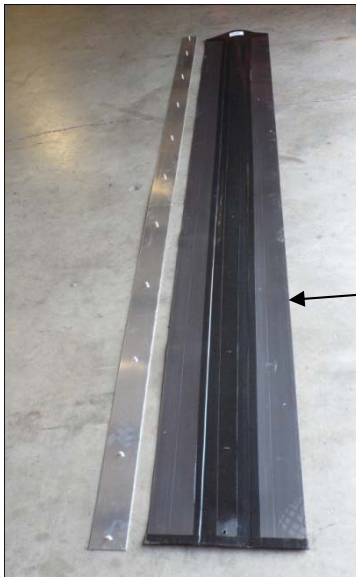


Diagram 19E

Remove the "old" floating and discard. Re-install the "new" floating

Lay the new floating next to the PIM plate with top of floating (Angled Cut) material to top of PIM plate. Flip the floating over the PIM Plate with magnets or Velcro against the floor then attach the floating over the PIM Plate Bolts



Diagram 19F

Re-install the "new" floating. It may be necessary to bend one end of the PIM plate up to attach onto the end PIM bolt.

4. Grab and hold the PIM plate assembly and floating in a manner that will prevent the floating material from coming off of the PIM bolts. Re-install the PIM plate assembly in the track starting with the top PIM bolt. Align the PIM bolts with the holes in the track (**Diagram 19G**). Firmly press the PIM bolts into their associated holes and attach the PIM nuts to the PIM bolts but do not tighten until all bolts have been installed. After all of the PIM bolts have been installed, tighten the nuts pulling the PIM plate firmly against the track (**Diagram 19H**).

Squeeze the floating around the PIM Plate and push the top in the track assembly first. Align all PIM bolts with holes in the track assembly



Diagram 19G

After all of the PIM bolts have been installed, tighten the nuts pulling the PIM plate firmly against the track



Diagram 19H



Warning!

Do not over tighten!

5. Repeat steps 1-4 above for opposite side.
6. Manually lower the panel, down, out the head unit (0). Refer to Page 22, Section 11, Manual Operation of the MFZ Motor. Lower the panel below the upper limits to allow normal operation.
7. "OPEN" and "CLOSE" the door several times to ensure smooth operation and proper setting of upper and lower limits.



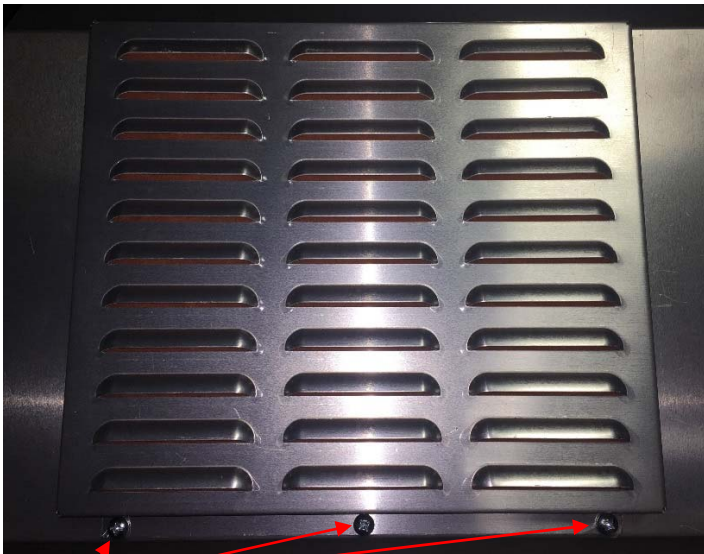
Diagram 19I

20 Changing Head Unit Filters

On Doors equipped with a Filtered Head Unit, replacement time of the filters will vary due to environment. Filters are not meant to be cleaned. Minimal cleaning can be accomplished by using compressed air to blow any loose particles off the material. **DO NOT WASH the filter material.** RollSeal recommends a visual inspection every 3 to 6 months depending on the environment. RollSeal also recommends replacing filters yearly to keep your RollSeal Unit operating at maximum efficiency

To remove Filter:

1. Remove the 3 screws from the bottom of each filter cover (**Diagram 20A**).
2. Pull cover toward you and push up to remove cover (**Diagram 20B**).
3. Remove filter and replace (**Diagram 20C**). Align tabs on Filter Cover with slots on the Head Cover (**Diagram 20D**). Insert tabs in slots and pull cover down until tabs are engaged and holes line up (**Diagram 20E**). Replace screws and tighten. **Note: Tabs on Filter Cover can be bent if needed to achieve a tighter fit.**
4. Filters are ordered as a Kit containing 3 filters. Kit Part # is 6450-9005.



REMOVE
SCREWS

Diagram 20A

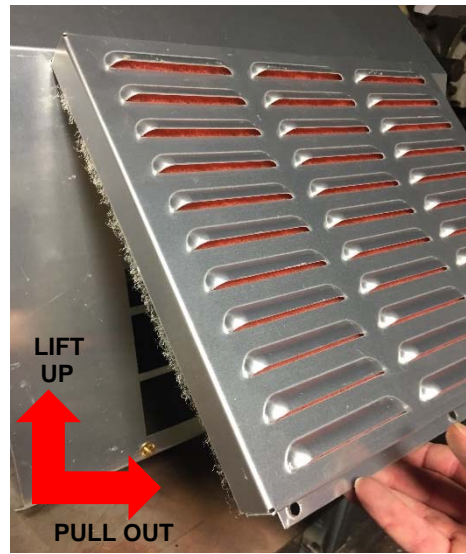


Diagram 20B



Diagram 20C

REMOVE
FILTER



Diagram 20D

REPLACE
FILTER



Diagram 20E

INSERT TAB
INTO SLOT

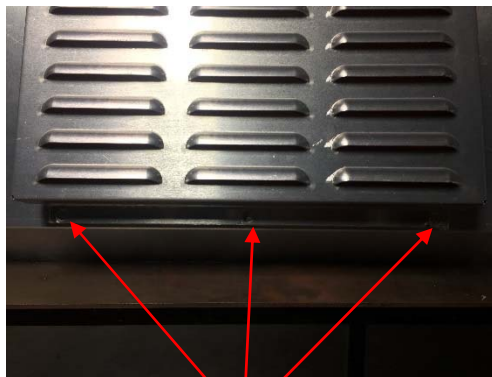


Diagram 20F

ALIGN HOLES



Diagram 20G

INSERT SCREWS
AND TIGHTEN

