



Pack Door Installation



JAMISON DOOR COMPANY

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- **NOTES:**
 - Please use this booklet as a step by step installation guide.
 - This book contains instructions for many different door configurations. Some sections may not be needed.
- **CONTENTS OF CRATES AND CARTONS**
 - Unit is shipped in one crate
 - Control panel key and attaching hardware are in the control panel
 - There is one box of miscellaneous hardware which will include hardware and electrical options
- **INSPECT FOR DAMAGES AND/OR SHORTAGES IMMEDIATELY**
 - Open all shipping containers and inspect for concealed damage and/or shortages. Carefully repack to prevent further damage or pilferage.
 - Note on all copies of the delivery receipt any damages and/or shortages.
 - If shipping damage occurred, report it in writing to the transportation company. Refer to Jamison's Terms & Conditions Form 166.
- **HANDLE ALL PARTS CAREFULLY**
 - Certain parts such as gaskets, wiring, etc. are vulnerable to damage.
- **READ ALL INSTRUCTIONS BEFORE PROCEEDING WITH THE INSTALLATION**
 - Instructions include basic drawings and schematics. These instructions and any other documents are included with this shipment.
 - Refer to job drawings for special features.
- **PLAN AHEAD**
 - Choose installers who are Millwrights or have equal qualifications.
 - Have all tools and materials necessary for installation readily available.



- **Before any service, personnel must be properly trained and be qualified to work on the equipment.**
- **Working on the electrical equipment requires special training and no one should work on the electrical equipment without proper certification.**
- **Before doing any electrical work be sure the power to the door is turned off, locked and tagged out.**
- **Be sure installing personnel fully read and understand the manual prior to installation.**
- **Block off the area from traffic and place signs indicating the door is out of operation and personnel are in the area working**
- **Unauthorized people must not repair or maintain the door and should not be in the area during maintenance.**
- **Do not use any heat sources that could start fires near the door and do not solder during maintenance.**
- **Do not use compressed air or any solvents on the door.**

EQUIPMENT NEEDED

1	Tape Measure	10	Level
2	Suitable equipment to lift and access the parts of the door (ladder, forklift, man lift, etc.)	11	Wrenches, SAE and metric
3	Screwdrivers – small precision screwdrivers and Phillips	12	Voltmeter
4	Cordless Drill & Right Angle Drill	13	Hammer
5	Tools to install the wall fasteners. Each install is unique so be sure you have what you need for your wall.	14	Grinder
6	Drill bits	15	Caulk Gun
7	Scissors	16	Pliers
8	Wire Stripper	17	Hammer Drill
9	Clamps	18	M6 Driver Bit and Allen Key



Man Lift

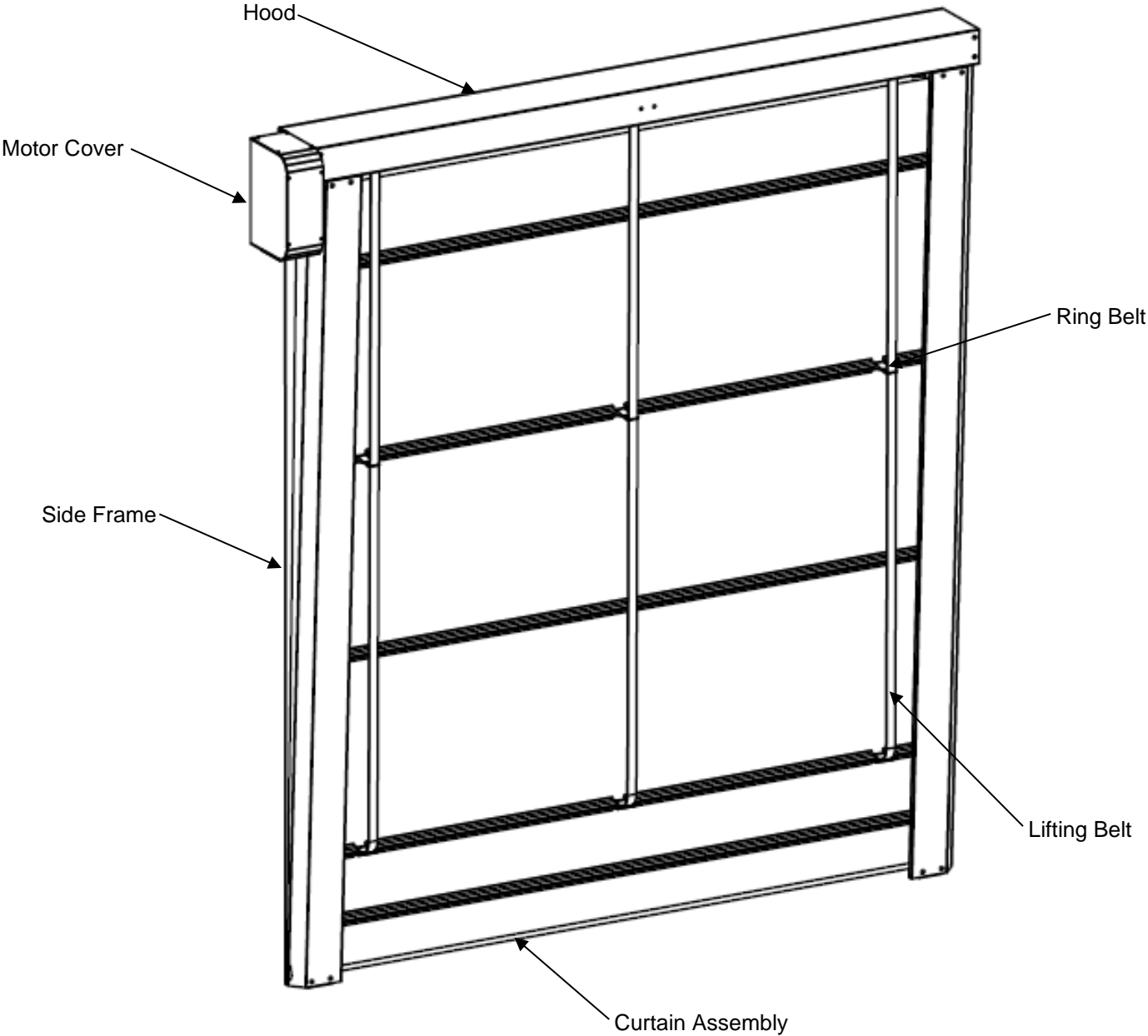


Fork Lift



The manufacturer may change this manual at any time without notice. The pictures in this manual may not fully represent the actual product and are meant for illustrative purposes to assist installation.

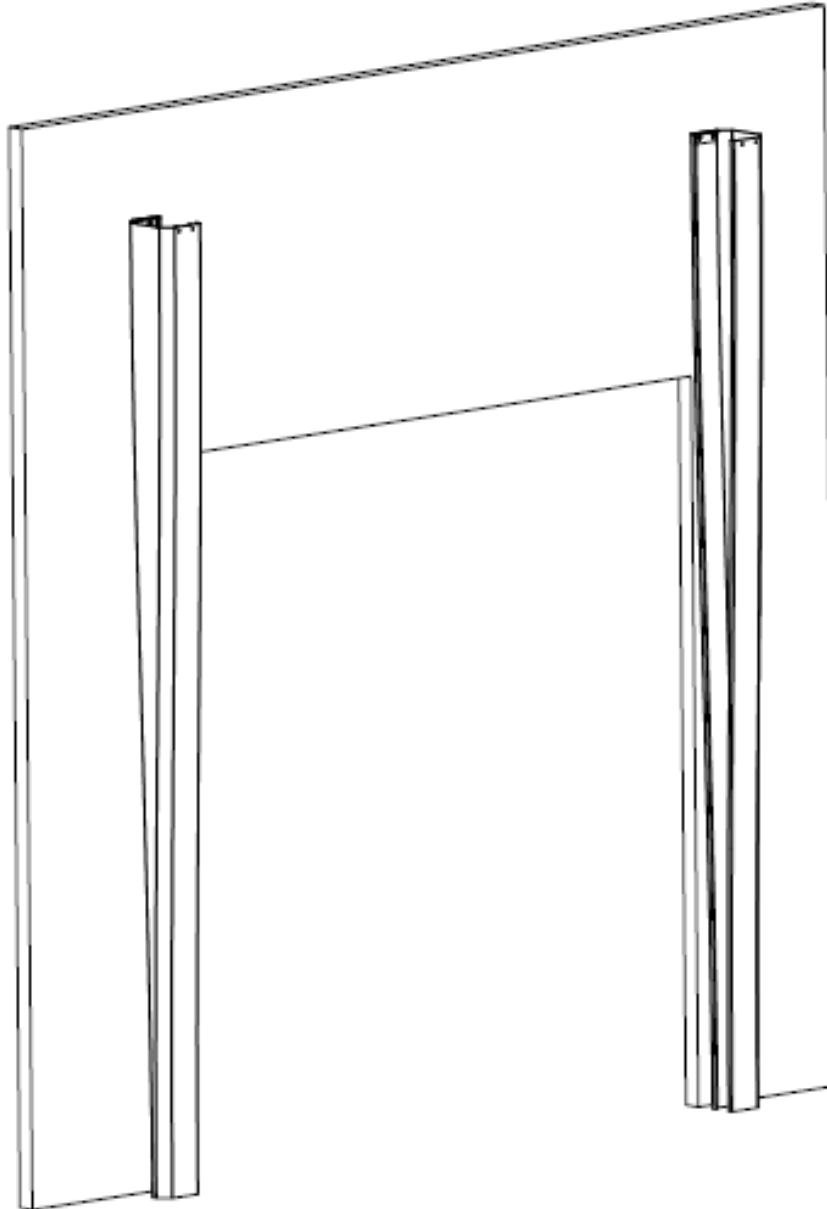
Assembly Information



MECHANICAL ASSEMBLY

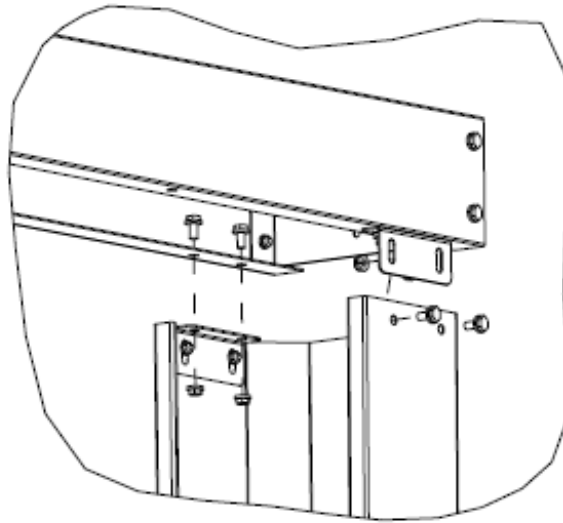
Side Frame Installation

- Remove the head and side frames from the crate.
- The side frames are labeled “Motor Side” and “Non-Motor Side”. Make sure that these are placed on the correct side of the opening.
- Clamp (do not drill or permanently position at this time) the side frames to the wall so they line up with the edge of the opening. The metal bend of the side frame should be flush with the edge of the opening. Final positioning will be done later.



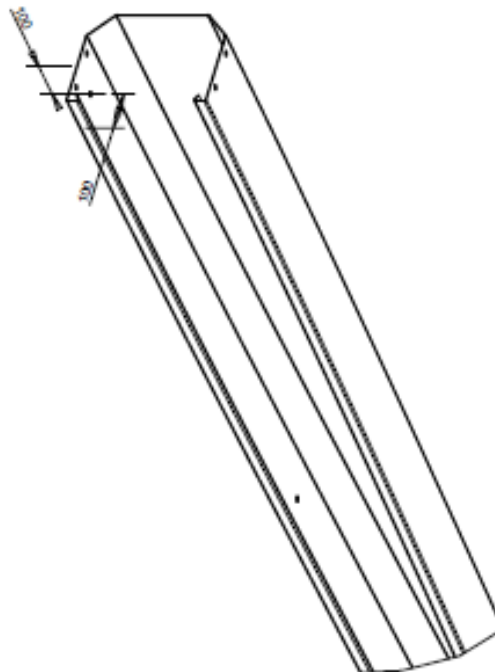
Head Installation

- **Make sure the forklift is supporting the head assembly throughout this process.**
- Lift the head assembly onto the top of the side frames and center the head on the opening.
- Line up the holes on the hood and side frame mounting brackets, as shown in the figure below.
- Bolt the head to the side frames.

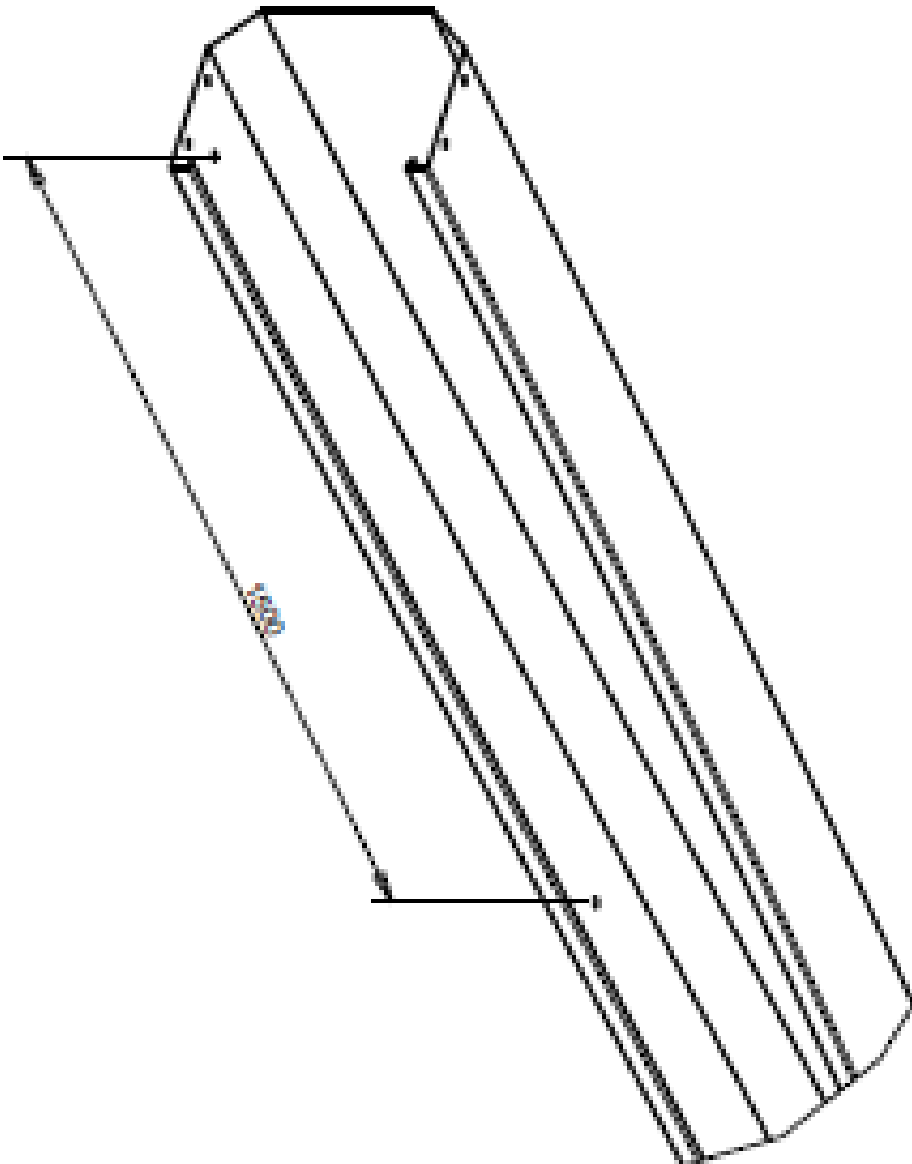


Securing to Wall

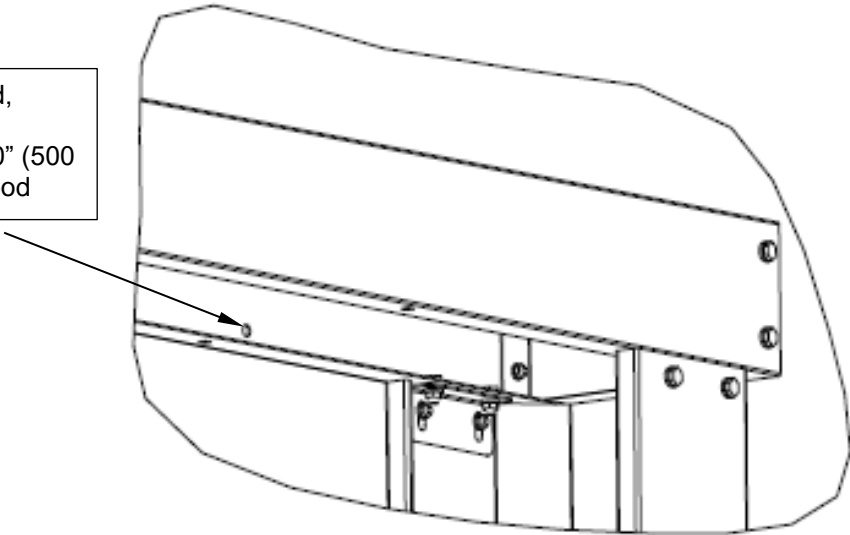
- **Before moving forward with the installation, ensure that the side frames and head are square and level.**
- While the forklift is still supporting the head assembly, drill a 1/2" hole through the side frame and wall. These holes should be centered on the flat portion of the side frame 4" (100 mm) down from the top and 4" (100 mm) from the open side as shown in the figure below.



- After the hole is drilled at the top for mounting, add one hole centered on the side frame 5' below the top hole. Make sure to keep the side frames plumb.
- Add one hole approximately every 5 feet (1500 mm).

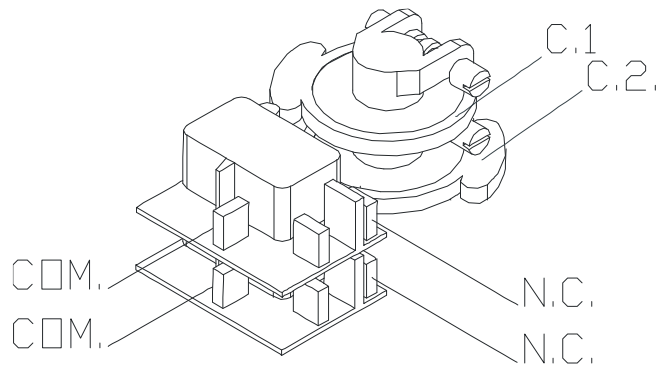


Drill $\frac{1}{2}$ " hole in hood,
1" (25 mm) up from
bottom edge and 20" (500
mm) from end of hood

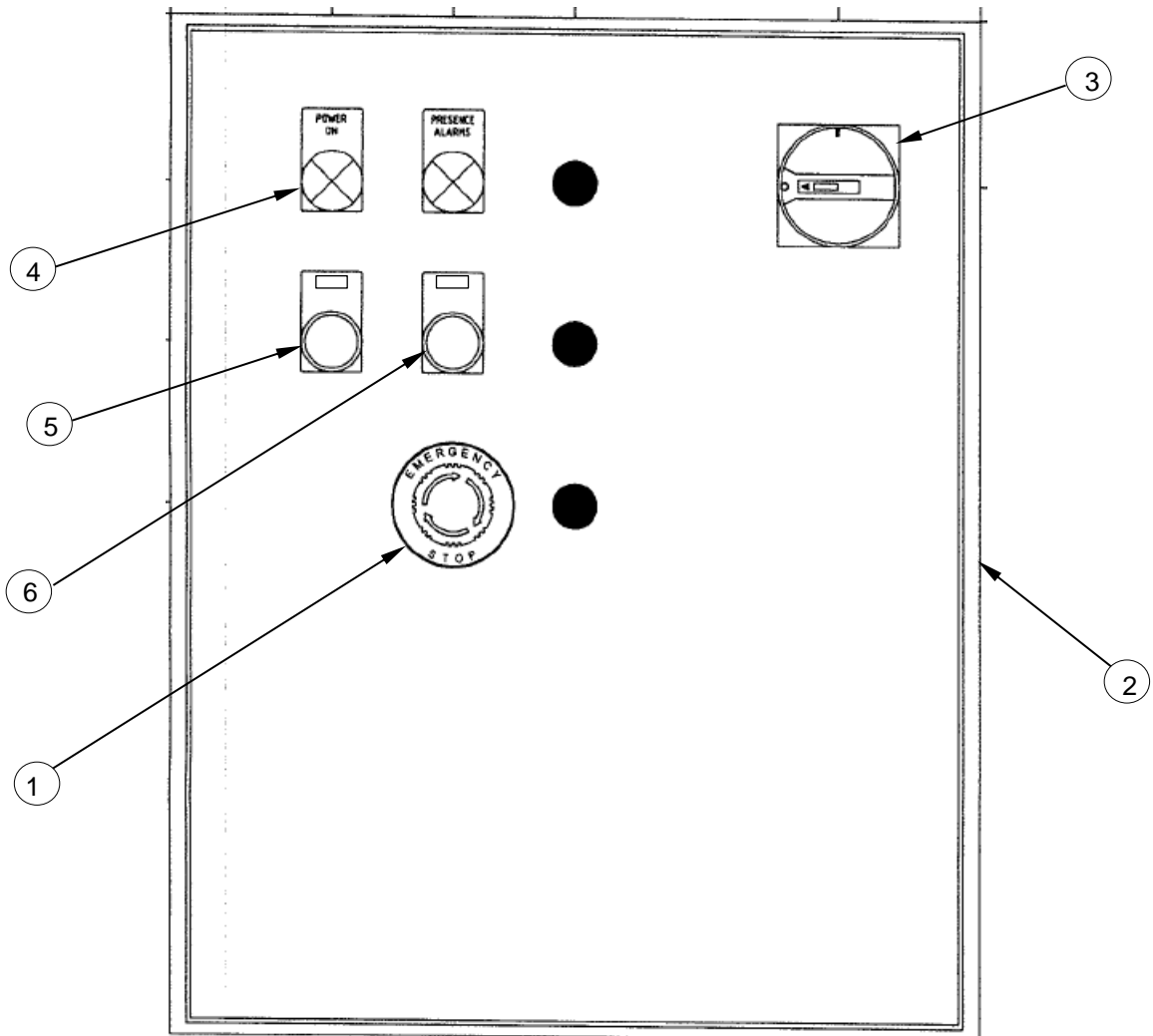


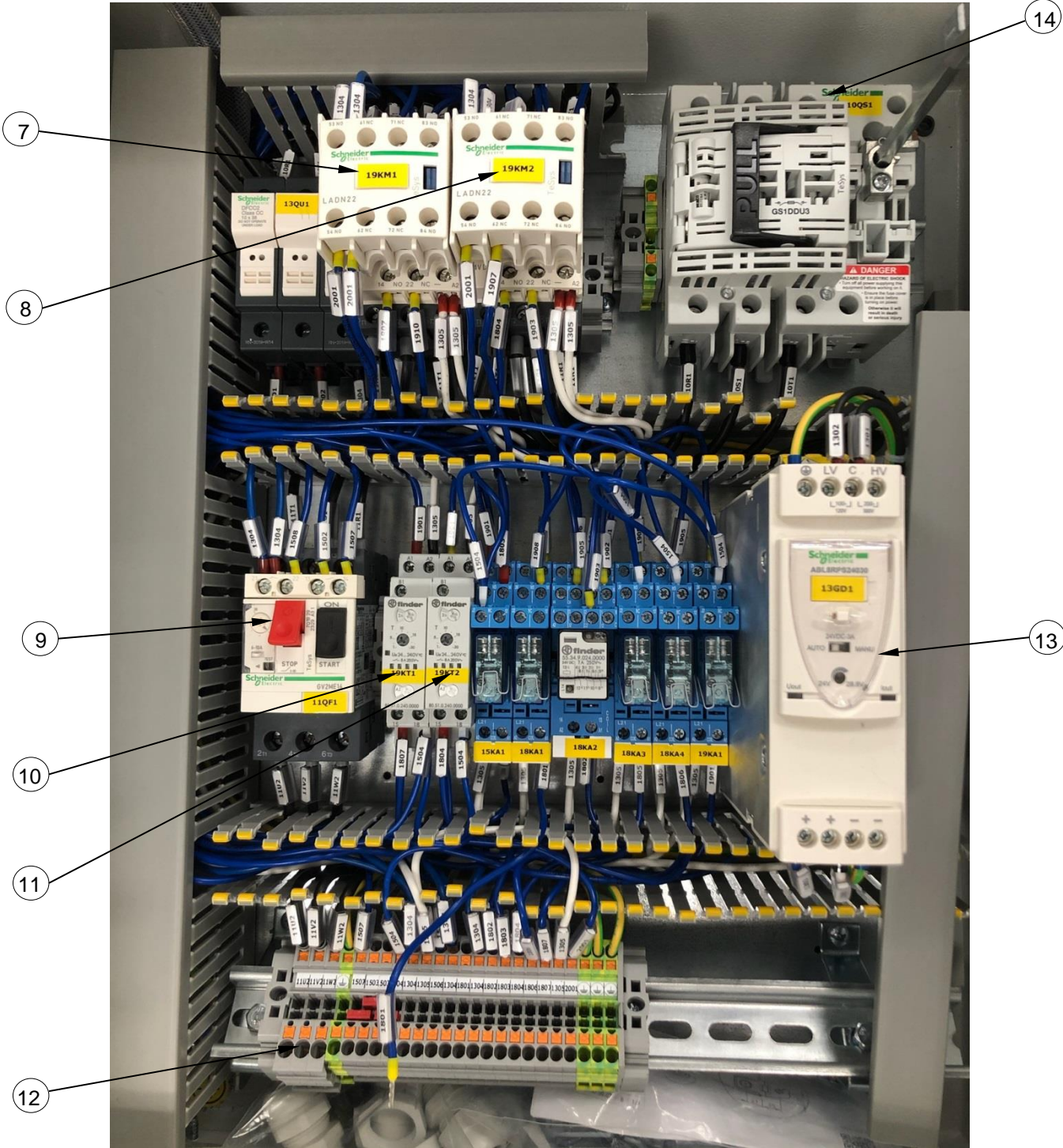
- Drill mounting holes in hood and wall. Locate the holes 1" (25 mm) up from the bottom edge of hood and 20" (500 mm) from each end of the hood. Also locate one hole in the approximate center of the hood if possible.
- Insert the attachment fasteners and tighten securely.
- **RECONFIRM THAT ALL PARTS OF THE DOOR ARE LEVEL AND PLUMB BEFORE COMPLETELY TIGHTENING THE FASTENERS.**
- If all-thread rods (or long carriage bolts) were used to fasten the side frames to the wall with the hex nut inside of the side frame, install the hex nut covers over the hex nuts. This will help to minimize any rubbing of the curtain over the bolts or rods.
- Remove the fork truck from the opening. The door is now fully supported.

LIMIT SWITCH CONNECTION



CAM	CONTACT	DESCRIPTION
C1	N.C.	OPENING CAM
C2	N.C.	CLOSING CAM
	COM	COMMON (FOR BOTH LIMIT SWITCHES)



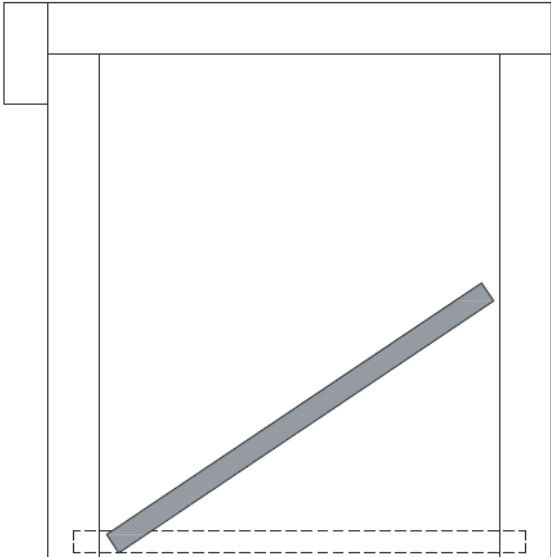


1	EMERGENCY STOP BUTTON	8	CLOSING CONTACTOR (KM2)
2	ENCLOSURE	9	MOTOR PROTECTOR
3	POWER SWITCH	10	OPEN TIME DELAY
4	POWER INDICATOR	11	CLOSE TIME DELAY
5	OPEN PUSH BUTTON	12	MOTOR TERMINALS (U-V-W)
6	CLOSE PUSH BUTTON	13	AC TO DC CONVERTOR
7	OPENING CONTACTOR (KM1)	14	INCOMING POWER CONNECTION

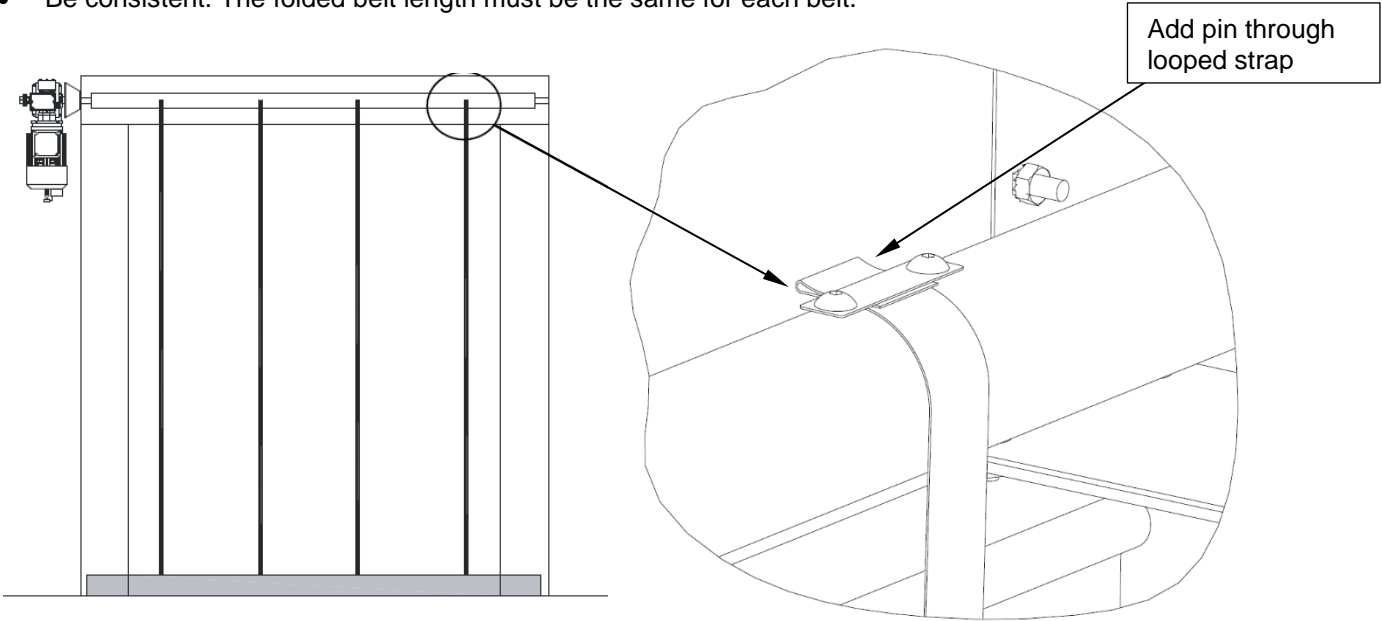
ELECTRICAL CONNECTIONS
(SEE WIRING DIAGRAM H4492033 FOR DETAILS)

Curtain Installation

- To insert the curtain into the side frames, fold or roll the curtain up so that it can fit in the side frames. **Make sure that the belts are facing away from the wall.**
- Lift one end of the curtain and push the other end into the side frame
- Once one end is successfully in place, place the other end into the side frame.

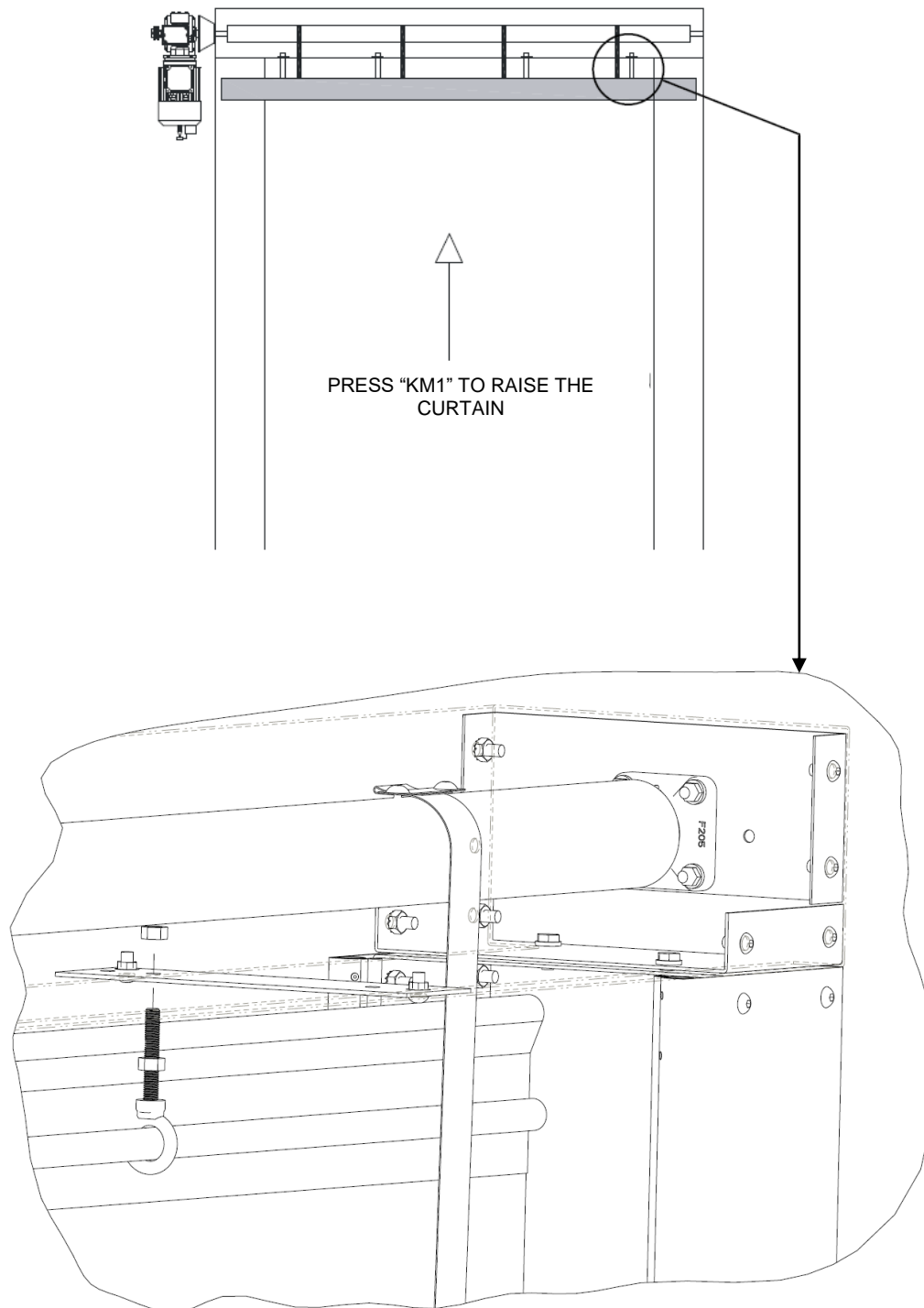


- Once both sides of the curtain are in the side frames, find the top of the lifting belts and pull them tight.
- The lifting belts should be brought directly from the floor and attached to the drum where the clamping plates are located. This is shown in the figure below.
- The lifting strap needs to be brought through the clamping plate, folded over, add one pin (per strap) than looped back through, and secured.
- Be consistent. The folded belt length must be the same for each belt.



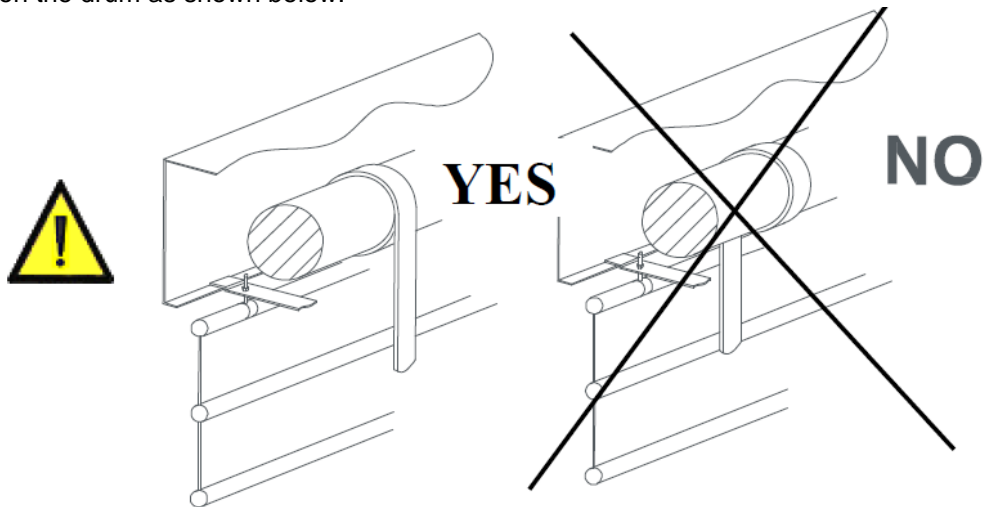
Attach Curtain to Mounting Plates

- **WARNING: DO NOT CONNECT** the jumper wires at terminal 1803 to 1804 and 1806 to 1807 **BEFORE** setting the Open Limit and Close Limit of the curtain. **With jumper connected, the curtain could open or close automatically.**
- Verify the “Start” button is pushed in on the Motor Protector.
- Using the access window of “KM1” in the control panel, fully raise the curtain.
- Once the curtain is at the top of the head, insert the eyebolts into the designated mounting plate holes. **MAKE SURE TO USE THE SET OF HOLES CLOSEST TO THE WALL.**
- Tighten the nuts so the flap on the top of the curtain is flush with the mounting brackets.
- Be sure that all of the bolts are adjusted to the same length and that the top of the curtain is level.
- These bolts may have to be adjusted when the final close position is being set.

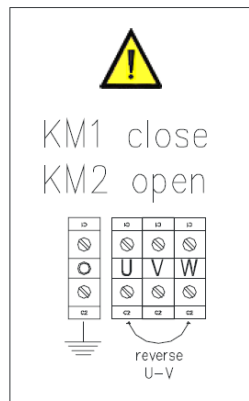


STRAP ROTATION

- Once the curtain is secured onto the head, check the rotation of the straps. Make sure the straps are rolling on the drum as shown below.

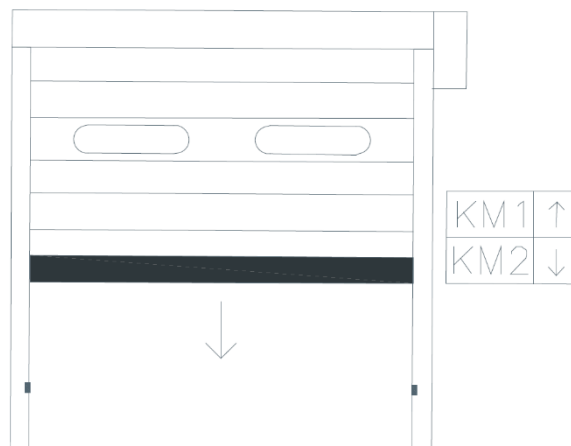


- The straps should be rolling off of the front of the drum
- KM1 should be open and KM2 should be close.
- If the straps are rolling on the drum as depicted in the incorrect picture, and/or KM1 and KM2 are opposite, switch two phases of the motor at the terminal strip at the bottom of the control panel. **DO NOT SWITCH INCOMING POWER, THIS WILL NOT CHANGE PHASE.**



SETTING THE LIMIT SWITCHES

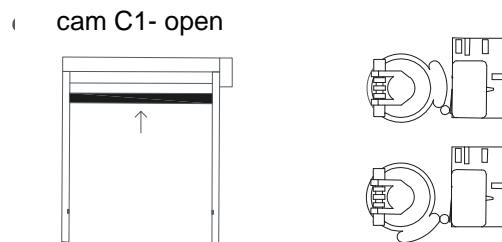
- After ensuring that the rotation direction of the motor and contactors are correct, continue with the limit switch setting.
- Control the rotation direction of the limit switch cam.
- Put the door in a partially open position.



SETTING OPEN LIMIT

OPEN LIMIT SWITCH C1

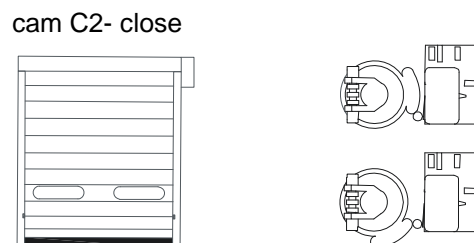
1. Use the open contactor "KM1" in the control panel to raise the curtain to totally opened (HIC), during this operation the limit switch **cam C1** (green cable) will rotate.
2. To adjust the cam, the screw located in front of cam C1 may require loosen to make major rotation adjustment. Fine rotation adjustment can be made using a screw located opposite of the cam face.
3. Rotate the **cam C1** with a screwdriver in the same direction it rotated until the **cam C1** contact the roller switch and an audible "click" is heard.
4. Tighten adjustment screw in front of cam C1.



SETTING CLOSED LIMIT

SET CLOSING SWITCH C1

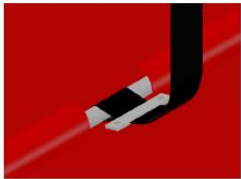
1. Use the close contactor "KM2" in the control panel to lower the curtain to totally closed and the belts are no longer tight. Make sure that during this operation control the rotation direction of the limit switch **cam C2** (black cable).
2. To adjust the cam, the screw located in front of cam C1 may require loosen to make major rotation adjustment. Fine rotation adjustment can be made using a screw located opposite of the cam face.
3. Rotate the **cam C2** with a screwdriver in the same direction it rotated until the **cam C2** contact the roller switch and an audible "click" is heard.
4. Tighten adjustment screw in front of cam C1.



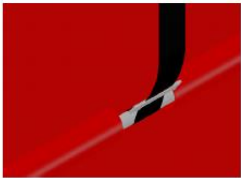
- If the curtain is not sealed against the floor or too far down when the door is in the closed position, adjust the supporting eye bolts at the top of the door.
- Once, the closed position is set properly, adjust the lifting belt to the position shown below.
- Jumper wire from 1803 can be connected to 1804, and jumper wire 1806 can be connected to 1807.



YES



NO



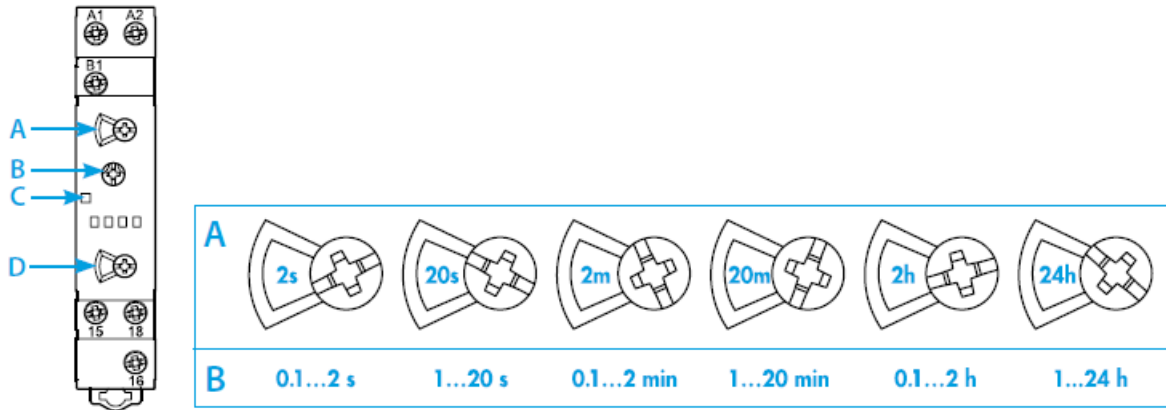
NO



TIME DELAY SETUP

⚠ ATTENTION: IN ORDER FOR THE DOOR TO OPERATE PROPERLY, THIS STEP HAS TO BE FULLY COMPLETED.

- This step sets the time which the door will pause before reversing (or open) after the (safety) light curtain beam was tripped (or broken).
- To set the delay time, locate window "A" on the 19KT1 unit. This is the maximum duration period setting. There are six (6) options (2 seconds, 20 seconds, 2 minutes, 20 minutes, 2 hours, and 24 hours).
- Next locate the adjustment knob "B" on the 19KT1 unit. This is the fine adjustment of the maximum duration period setting. The unit of time is set by window "A" (seconds, minutes, or hours).
- Example, for 1 second delay open: set "A" to 2s (for maximum of 2 seconds), adjust "B" to 10 (where 5=0.5 second, 10=1 second, 15=1.5 seconds, and 20=2 seconds)



- The closing delay will start once the curtain reaches the set Open Limit.
- To set the closing delay time, locate window "A" on the 19KT2 unit. This is the maximum duration period setting. There are six (6) options (2 seconds, 20 seconds, 2 minutes, 20 minutes, 2 hours, and 24 hours).
- Next locate the adjustment knob "B" on the 19KT2 unit. This is the fine adjustment of the maximum duration period setting. The unit of time is set by window "A" (seconds, minutes, or hours).
- Example, for 30 second delay close: set "A" to 2m (for maximum of 2 minutes), adjust "B" to 5 (where 5=30 seconds, 10=1 minute, and 20 = 2 minutes)

WARNING: If the Emergency Stop button was used to stop the curtain during its opening or closing travel (not fully opened nor fully closed), the curtain may continue its movement after the release of the Emergency Stop button.

PERIODICAL CHECKS AND MAINTENANCE

ORDINARY CLEANING AND MAINTENANCE

Ordinary maintenance operations keep the door safe, running well and give it a long life. These items can be done by your maintenance staff and will reduce your overall maintenance costs.

COMPONENT	DESCRIPTION	FREQUENCY
Structure	Verify that the structure is correctly fixed to the wall in order to avoid incidents. Clean with soft cloth without using any solvent (eventually use water and soap) If there is ice on the structure immediately remove it	6 Months
Photocell and radar	Clean with soft cloth without using any solvent(in dusty areas could be necessary to clean more frequently the photocells: dust on photocells could cause malfunctioning of the photocells)	6 Months
Windows	Clean the window with a soft cloth and if necessary with water and soap (do not use any solvent that could damage the window)	6 Months
Curtain	Check the condition of the belts and curtain. (Failure to inspect the condition of the belts could result in severe injury or death. ANY DAMAGED BELT NEEDS TO BE REPLACED. DO NOT REPAIR BELTS.) Clean the window with a soft cloth and if necessary with water and soap (do not use any solvent that could damage the window)	3 Months

PLANNED INSPECTIONS AND MAINTENANCE

Only people trained to inspect and maintain the Jamison/BMP roll up doors should do the following tasks. The maintenance is required to maintain the factory warranty.

ITEM	DESCRIPTION	FREQUENCY
Structure	<ul style="list-style-type: none"> - Verify the condition of the side frames, the condition of the wall anchors and of the support bars(if present) - Check that there aren't any structural deformations due to any accidents 	6 Months
Electrical components	<ul style="list-style-type: none"> - Verify the electrical connections in the control board and check for any moisture. - Check the electrical connections in the junction box and check for any moisture. - Check the conditions and functioning of the safety components (light curtain, and emergency button) - Check the conditions and functioning of the opening components (opening buttons and optional if present) - Verify that all the electrical cables are in good condition. 	6 Months
Mechanical components	<ul style="list-style-type: none"> - Verify the condition of the motor - Check the condition of the motor brake - Check the wear and tension of the drive chain of the motor adapter. - Check the condition of the reducer: oil leak, attachment to the motor, structural attachment to the door. - Check the condition of the limit switch: wear of the beltwheel, wear of the gear, condition of the chain, the correct functioning of the safety switches, the correct functioning of the cam and switches. - Check all bolts and nuts to make sure they are tight. - Verify that the pulley is linear - Check the condition and greasing of the bearings. - Check the condition of the anti-wear washers on the columns 	6 Months
Curtain	<ul style="list-style-type: none"> - Verify the condition and wear of the curtain and in particular in the areas subject to rubbing. - Check the curtain for rips and weak spots. - Check the condition of the belts, lower and upper clamping plates. (Failure to inspect the condition of the belts could result in severe injury or death. ANY DAMAGED BELT NEEDS TO BE REPLACED. DO NOT REPAIR BELTS.) - Check the condition of the curtain bars - Check that the curtain is folding correctly. 	3 Months

Trouble Shooting

Before contacting technical service, use this list to try and solve any issues. If the problem persists, contact technical service.

PROBLEM	SOLUTION
The door doesn't open or close	<ul style="list-style-type: none"> -Check incoming power supply -Check the fuses in the control panel -Check that the Motor Protector overload "Start" button is pushed in.
The door opens but won't close	<ul style="list-style-type: none"> -Check that the Motor Protector overload "Start" button is pushed in. -Verify jumper is place between terminal 1803 & 1804. -Check the safety light curtain is not blocked. -Check if the activation devices are not activated.
The door is closed and will not open	<ul style="list-style-type: none"> -Verify the Emergency Stop button is not pushed in. -Check that the Motor Protector overload "Start" button is pushed in. -Verify jumper is place between terminal 1806 & 1807. -Check if the activation devices do not work
Safety Light Curtain are not working	<ul style="list-style-type: none"> -Verify the Transmitter is powered on, one LED should be visible on the outer edge of the non-motor side frame. -Verify the Receiver is powered on, one (or more) LED should be visible on the inner edge of the motor side frame. -Check the transmitter and receiver connections in the control panel and the pig-tail connection at the top of each unit.
If the open contactor closes the door or the close contactor opens the door.	<ul style="list-style-type: none"> -Reverse two phases of the motor. -Check how the lifting belts are rolling on the drum.
The door goes open before hitting the floor	<ul style="list-style-type: none"> -Check to ensure the position of the Close Limit switch setting is correct -Check safety light curtain for any obstruction -Check to ensure reflective materials are not too close to the light curtain's receiver -Check that the motion detectors(if installed) are not reversing the door.
The door will not close automatically	<ul style="list-style-type: none"> -Check time setting of "19KT2" -Check jumper wire between Terminal 1803 & 1804
The motor cannot lift the curtain	<ul style="list-style-type: none"> -Check the resistance on the motor brake. (Should be 500 ohms) -Check incoming voltage to the motor -Check the wiring of the motor brake controller -Check the voltage on the motor brake. (Should be 230VDC) -Verify the Start push button is pushed in on the Motor Protector
The motor cannot lift the curtain when setting the limit switch	<ul style="list-style-type: none"> -See previous solutions
When the door is open and the curtain is slowly falling.	<ul style="list-style-type: none"> -Adjust motor brake (remove the fan cover and adjust the brake adjustment until the door doesn't slip.

[*]These operations must be performed by qualified personnel.

