FlexTec™XL Installation Manual

Rytec Installation Safety information

The meaning of signal words

Summary

Technical content produced by Rytec includes safety information which must be read, understood and obeyed to reduce the risk of death, personal injury or equipment damage. This information is boxed to set it apart from other text. The boxed text identifies the nature of the hazard and appropriate steps to avoid it.

The safety alert symbol identifies a situation that can result in personal injury. The accompanying signal word indicates the likelihood and potential severity of the injury. The meaning of the signal words is as follows:

⚠ WARNING

Warning indicates a hazardous situation that, if not avoided, could result in death or serious injury.

⚠ CAUTION

Caution indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.

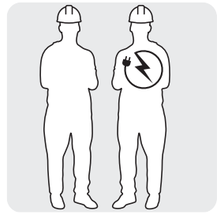
NOTICE

Notice is used to address practices not related to physical injury but which, if not followed, could result in damage to the door or other property.

Installation safety

- **Do not install any Rytec product until** you have read and understood the safety information and instructions. Make sure all applicable regulations are observed and obeyed at all times.
- **Observe these precautions** while installing the door:
  - Only trained, qualified and authorized individuals are to install the door and the control system.
  - The installation site comprises the physical area required to safely uncrate, stage and install the door.
  - Make sure that all personnel at the installation site have been informed of the date, time and location of the installation.
  - Make sure that there is no pedestrian or vehicular traffic within the installation site for the duration of the installation.
  - Make sure you have and use all required Personal Protective Equipment.
  - Make sure you have adequate personnel and equipment to safely perform all lifts.
  - Make sure that you have been informed of any hazardous conditions that exist within the installation site.
  - Make sure that the installation site is kept clear of obstructions and debris and that the floor is dry.
  - Make sure that you are aware of the location of all power lines, piping and HVAC systems within the installation site.
  - Make sure all accessories installed with the door are approved by the manufacturer.

Requirements – Staffing



- Two installers
- A licensed electrician is recommended for making all electrical connections

Electrician's responsibilities

Refer to the Rytec System 4® Drive & Control Installation & Owner's Manual for a complete list of the electrician's responsibilities.

⚠ WARNING

Electrical work must meet all applicable local, state and national codes.

Failure to wire the door correctly can cause shock, burns or death to the people who install, use or service the door.

Failure to comply also voids the warranty for the door.

Requirements – Site Conditions

- Installers must have unrestricted access to the door opening at all times during the installation.
- Make sure there is no pedestrian or vehicular traffic within the installation site for the duration of the installation.

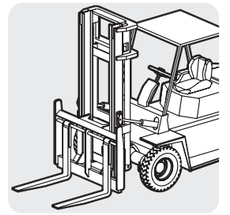
Safety icons used in this manual

Requirements – Lifts

⚠ WARNING

A forklift is mandatory for the safe and proper installation of this door.

- **Forklift** that meets the following specifications:

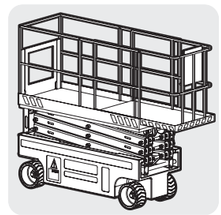


  - Minimum 4,000-pound lift capacity
  - Minimum height ability: door height + 12"
  - 48-inch wide fork
  - Side shift capability

⚠ WARNING

Follow all safety instructions on all lifts and ladders used for this installation.

- **Scissor lift** that meets the following specifications:

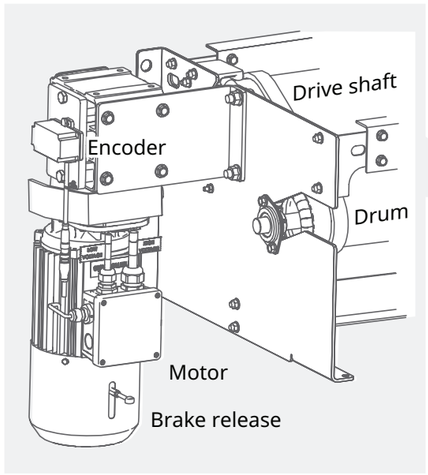


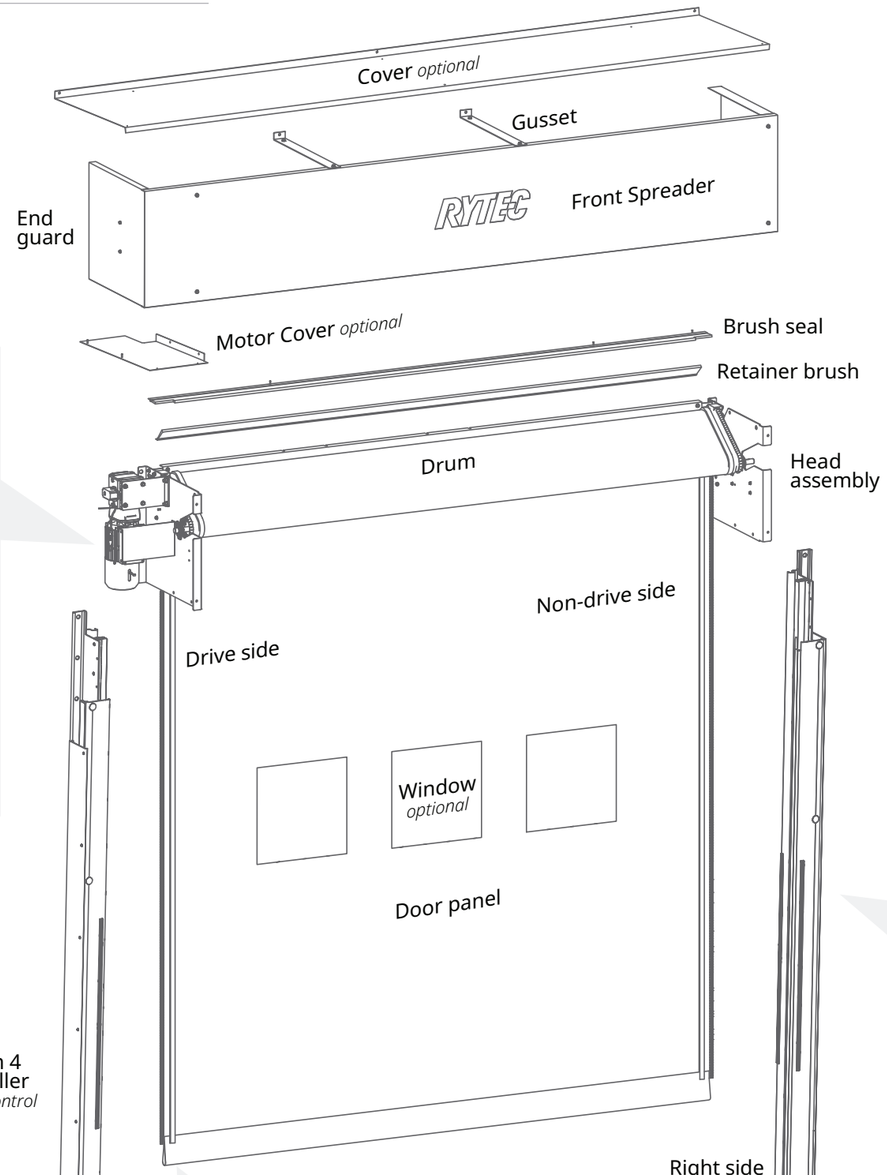
  - Can hold both installers
  - Minimum height ability: door height

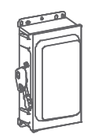
- **Alternatively, two ladders** of sufficient height to safely access the door head assembly

Terms used by Rytec to describe the parts of the door

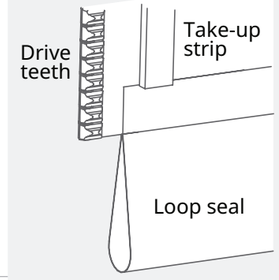
This illustration shows the terms used by Rytec technical support to refer to the major components of your door.
Using these terms helps technical support provide assistance as quickly as possible.



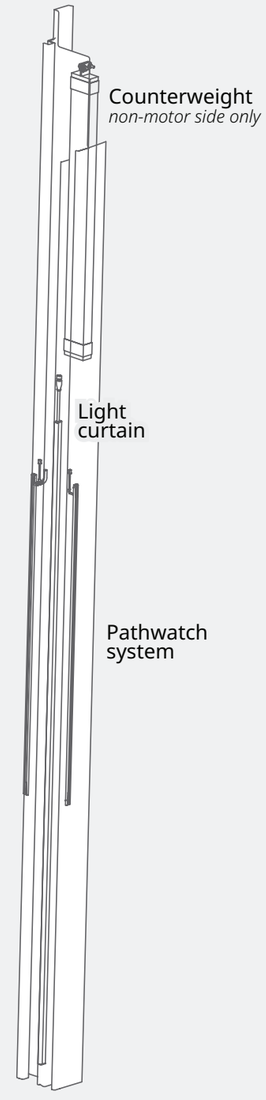



Fused disconnect


System 4 controller *inside control box*



In side column



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Call 800-628-1909
or email helpdesk@rytecdoors.com

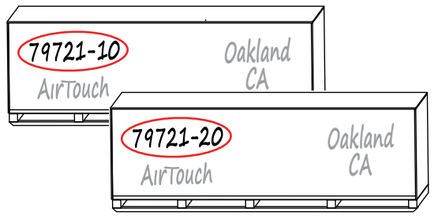
if you have any questions during this installation. See previous page for list of Rytec terms for the parts of the door.

How to uncrate the door and inspect the installation site

NOTICE

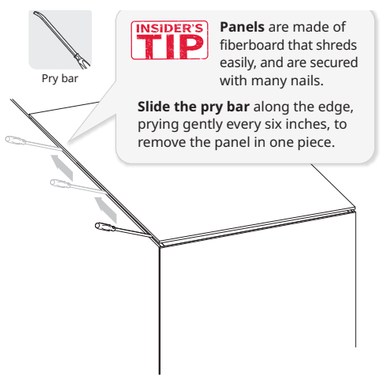
If more than one door is to be installed, **treat each crate as a separate installation.**

Each door is shipped in a separate crate, and **all parts for the door are in the same crate.** Each door has a unique serial number.

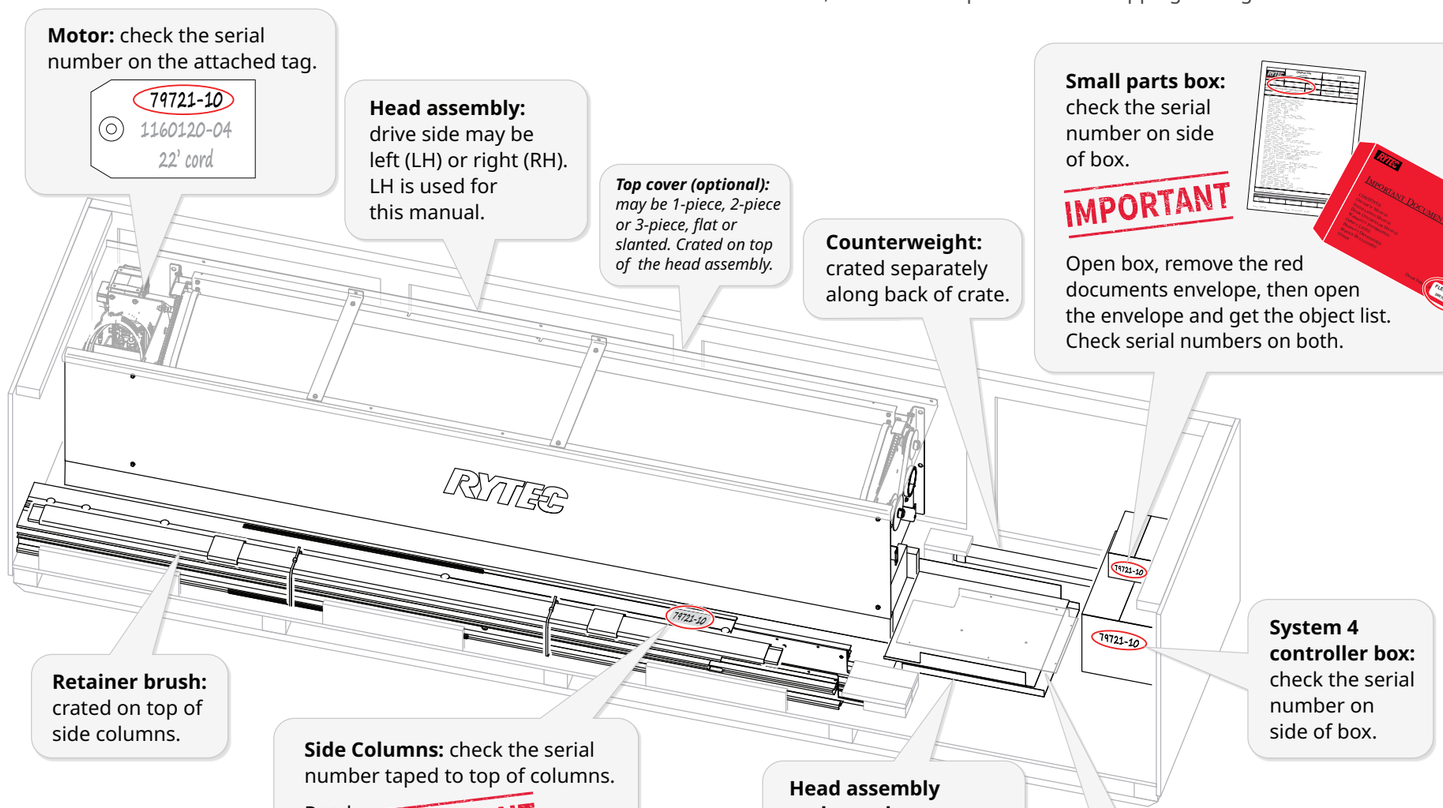


Using parts from different crates in the same door voids the warranty for all doors in the installation.

1 Remove the top panel.



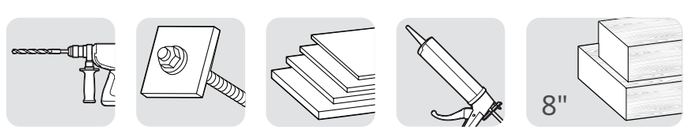
2 Check the crate. Make sure all serial numbers match the number on the crate, and all visible parts have no shipping damage.



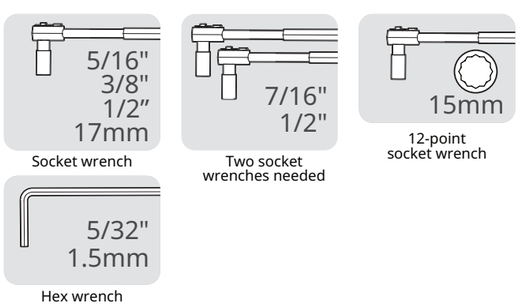
3 Check your tools. Make sure you have all tools and supplies for the installation.

Tools you need

You also provide

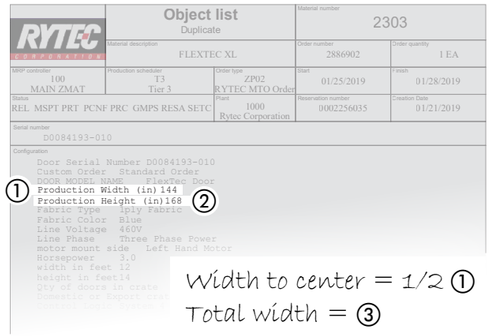


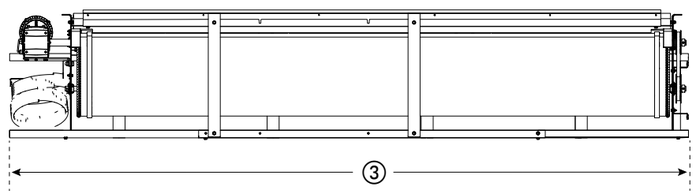
Hardware tools and sizes (manual or powered)

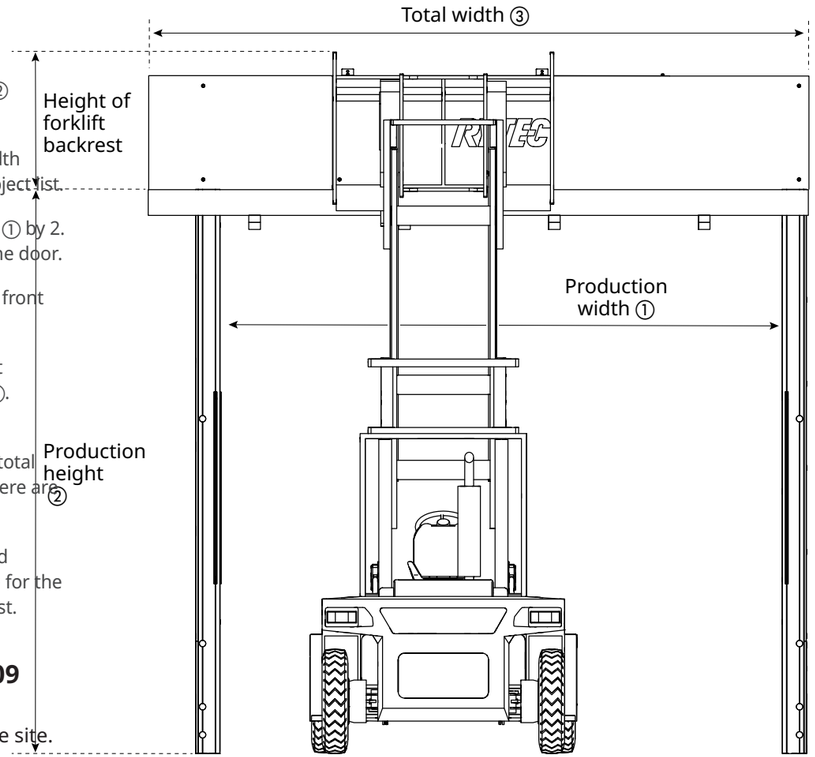


4 Check the measurements. **Make sure** the door will fit in the installation site.

Tape Measure







1. **Locate** the production width ① and the production height ② on the object list.
2. **Measure the door opening** to make sure the height and width match the production width and production height on the object list.
3. **Calculate the width to center:** divide the production width ① by 2. **Write the result** on the object list. Use it when you center the door.
4. **Find the total width of the door:** measure the width of the front spreader ③. **Write the result** on the object list.
5. **Calculate the total height of the door:** measure the height of the front spreader ④. Add this to the production height ②. **Write the result** on the object list.
6. **Inspect the site around the door opening:** make sure the total width and height of the door will fit in the space, and that there are no obstructions.
7. **Make sure there is enough space to lift the door:** the head assembly is lifted from the top. Make sure the site has space for the total height of the door plus the height of the forklift backrest.

Call Rytec technical support at 800-628-1909 or email helpdesk@rytecdoors.com
if you have any questions about the measurements at the site.

5 If all checks are good, **finish** uncrating the door. Starting at the center, remove the crossbars, then remove the front and side panels.

Mallet and crowbar

or

Reciprocating saw

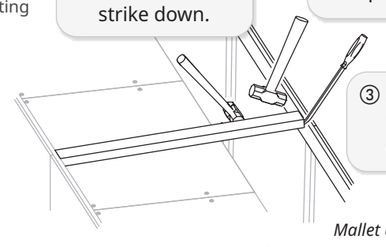
⚠ CAUTION

Flatten exposed nails as you go.

Keep hands clear while striking or cutting.

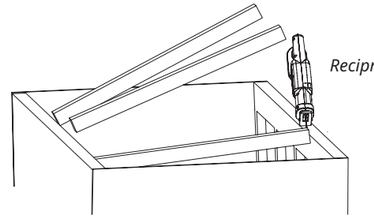
① **Strike across** the crossbar to loosen nails. **Do not** strike down.

② **Strike** the side panel to expose nails.



③ **Pry up** to remove crossbar.

Mallet and pry bar

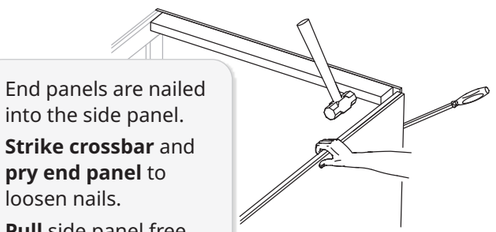


Reciprocating saw

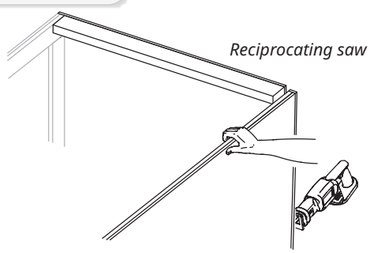
End panels are nailed into the side panel.

Strike crossbar and **pry end panel** to loosen nails.

Pull side panel free from sides, then pull down to remove.



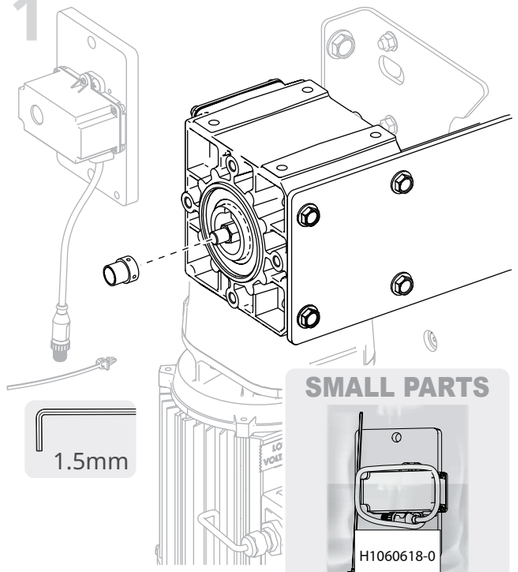
Mallet and pry bar



Reciprocating saw

How to install the encoder

1



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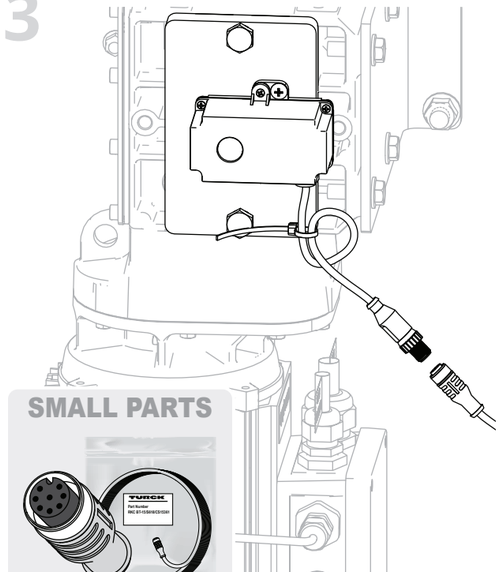
3



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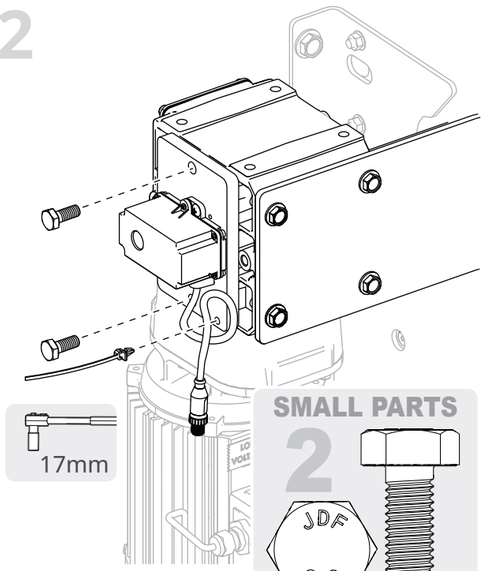
2



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How to center the door in the door opening

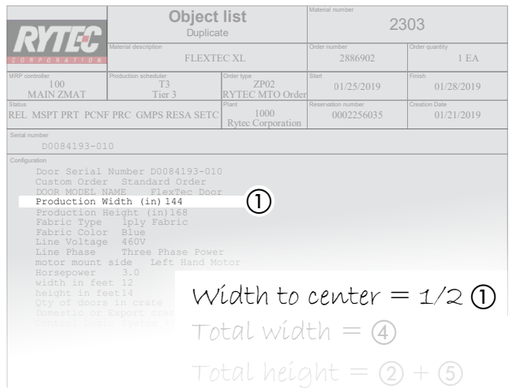
IMPORTANT

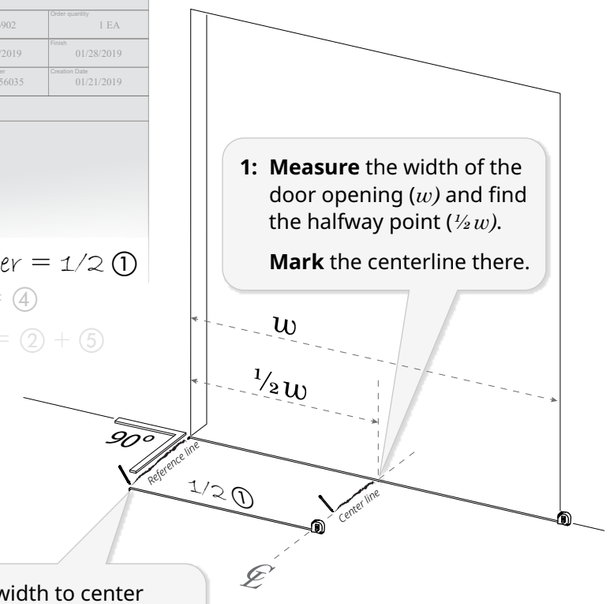
Rytec doors are engineered to be centered in the door opening, so follow these steps even if the width of the opening and the production width match exactly.

1

Measuring tape

Carpenter's square





1: Measure the width of the door opening (*w*) and find the halfway point (*½ w*).

Mark the centerline there.

2: Use the width to center from the object list (*1/2 ①*).

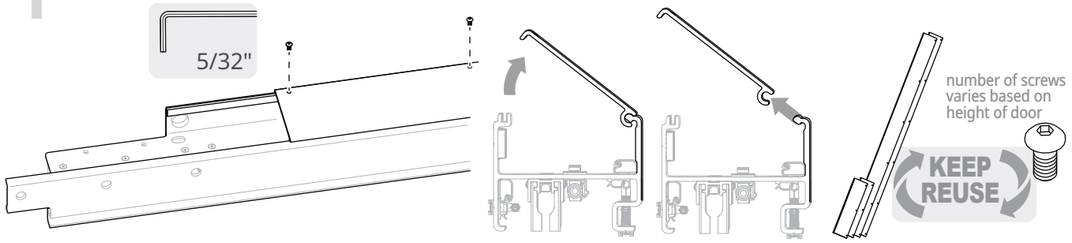
Starting at the centerline, measure and mark the reference line for the first column.

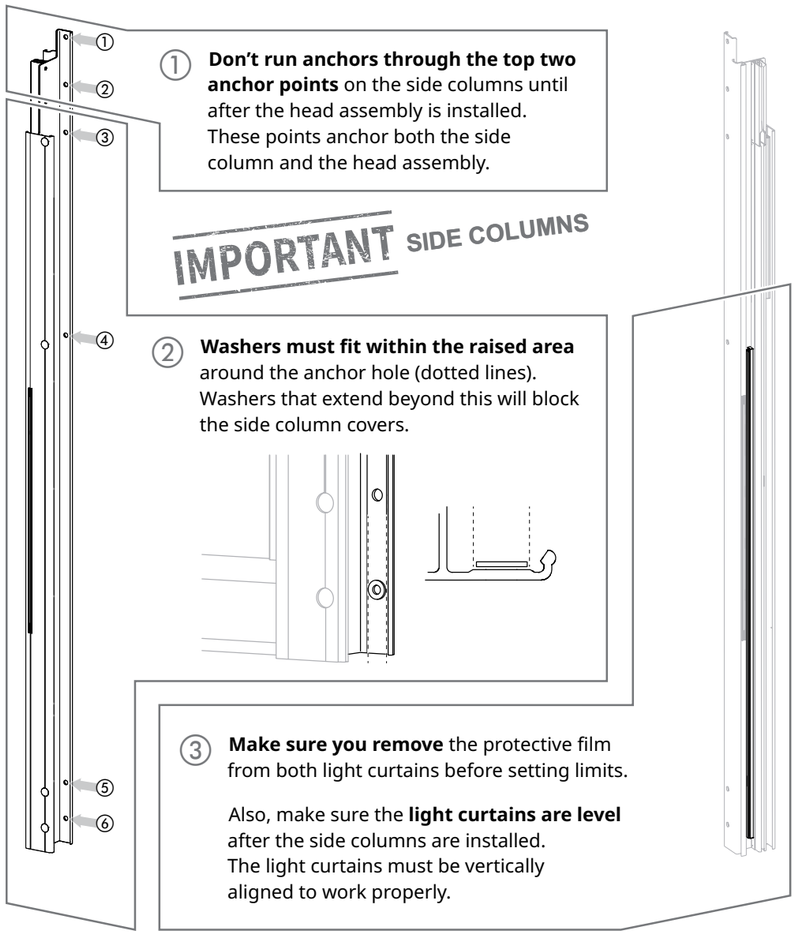
Plumb, level, square: how to position the door correctly as you install the side columns and head assembly

NOTICE

Call 800-628-1909 immediately and stop the installation if you are not able to correctly position the door.

1 **Remove** the top and bottom front covers from both side columns.





① **Don't run anchors through the top two anchor points** on the side columns until after the head assembly is installed. These points anchor both the side column and the head assembly.

IMPORTANT SIDE COLUMNS

② **Washers must fit within the raised area** around the anchor hole (dotted lines). Washers that extend beyond this will block the side column covers.

③ **Make sure you remove** the protective film from both light curtains before setting limits.

Also, make sure the **light curtains are level** after the side columns are installed. The light curtains must be vertically aligned to work properly.

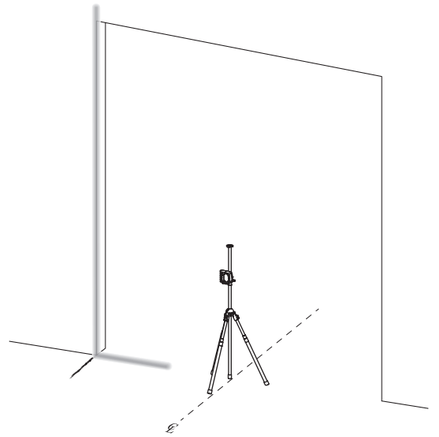
Step 1: Level the site, then install and plumb the side columns

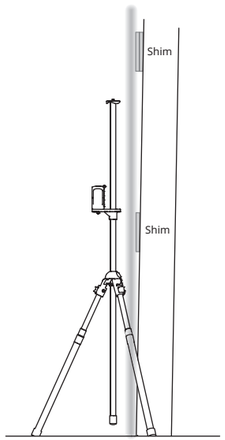
1 **Plumb** the door opening. **If the wall is not plumb,** or there is bowing or an obstruction in the wall, shim the columns.

IMPORTANT To prevent column from bowing, shim as needed at each anchor point.

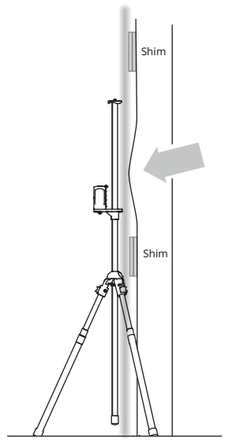

Laser level


Shims





Wall not plumb

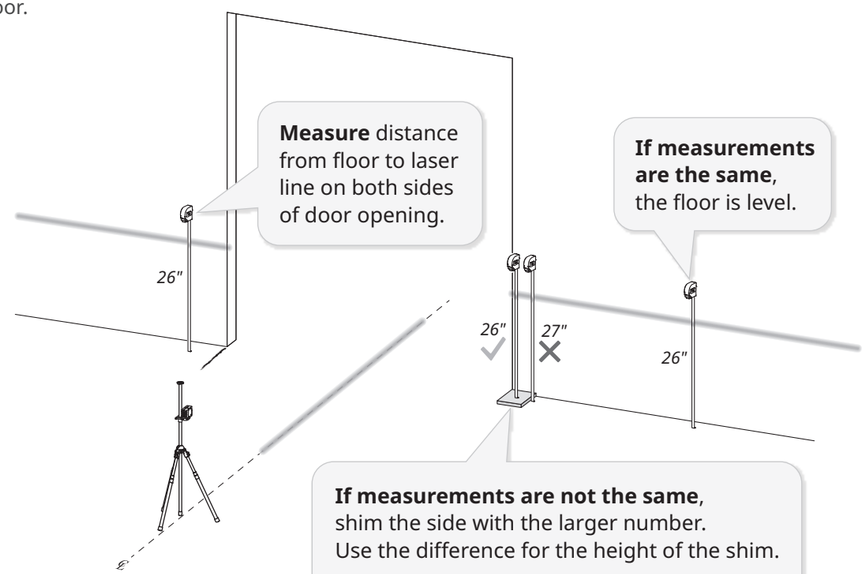


Surface obstructions

2 **Level** the floor.


Laser level


Measuring tape

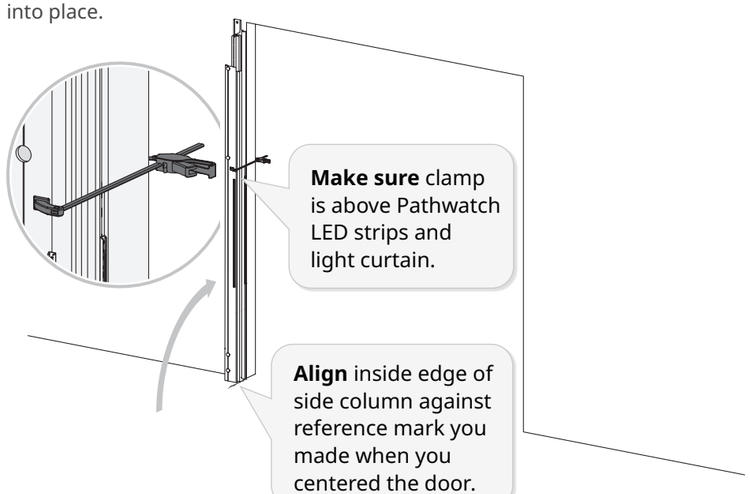


If measurements are not the same, shim the side with the larger number. Use the difference for the height of the shim.

Measurements should match when you measure with the shims in place.

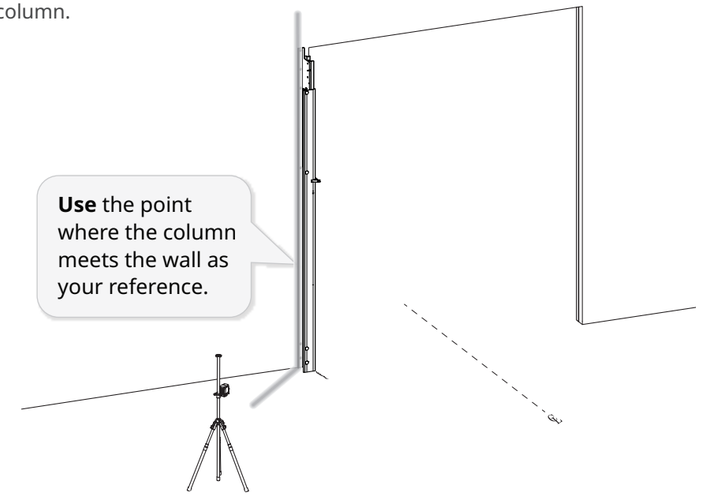
3 **Clamp** the drive side column into place.


Bar clamp

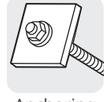


4 **Plumb** the drive side column.


Laser level



5 **Anchor** the drive side column to the wall. **Set** anchors tight. **Remove** clamp.


Anchoring hardware

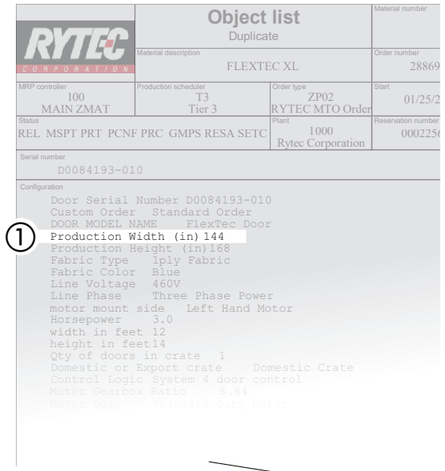
IMPORTANT

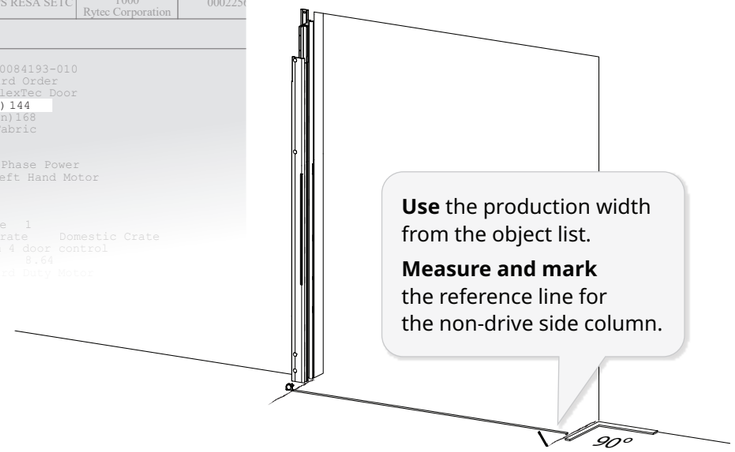
- **Make sure** you use only the bottom four anchor points, and the washers are the correct size.
- Use **1/2" diameter through bolts, 1/2" diameter threaded rods** or equivalent to anchor side columns.
- Anchoring hardware and materials must be provided by the door owner or installer.
- **Make sure** anchors will not interfere with moving parts of the door.

6 **Measure and mark** the reference mark for the non-drive side column.

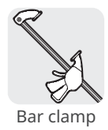

Measuring tape

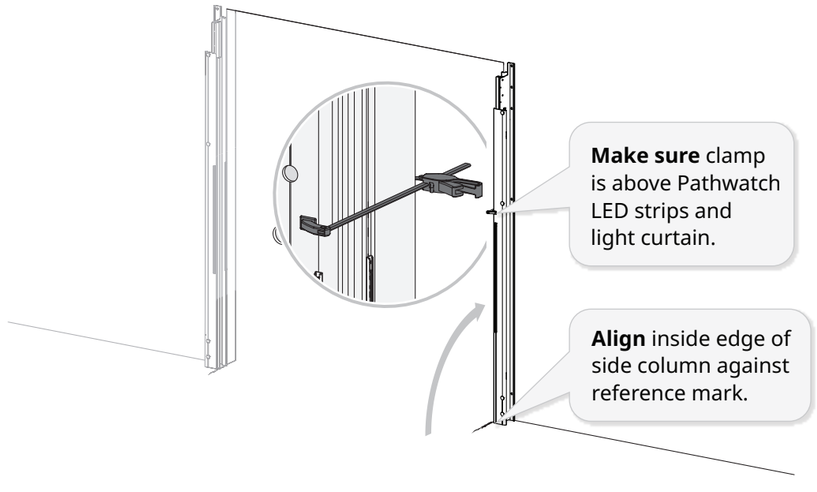

Carpenter's square





7 Clamp the non-drive side column into place.

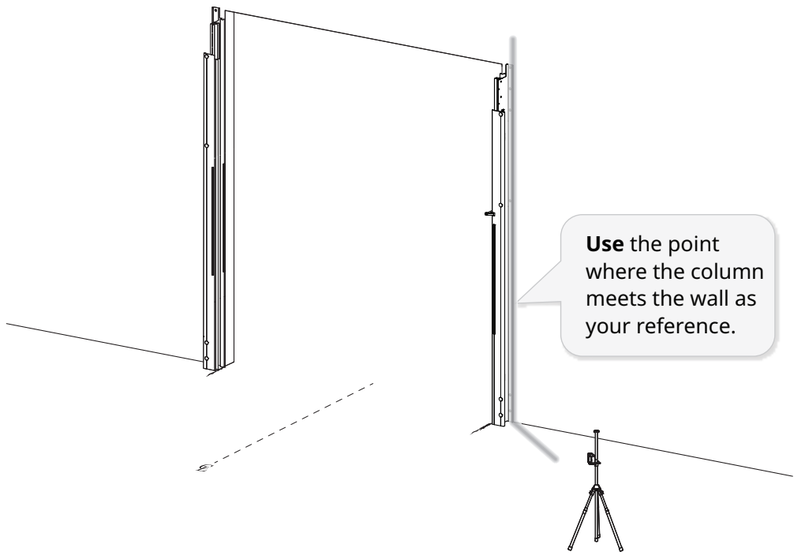

Bar clamp



8

Plumb the non-drive side column.


Laser level

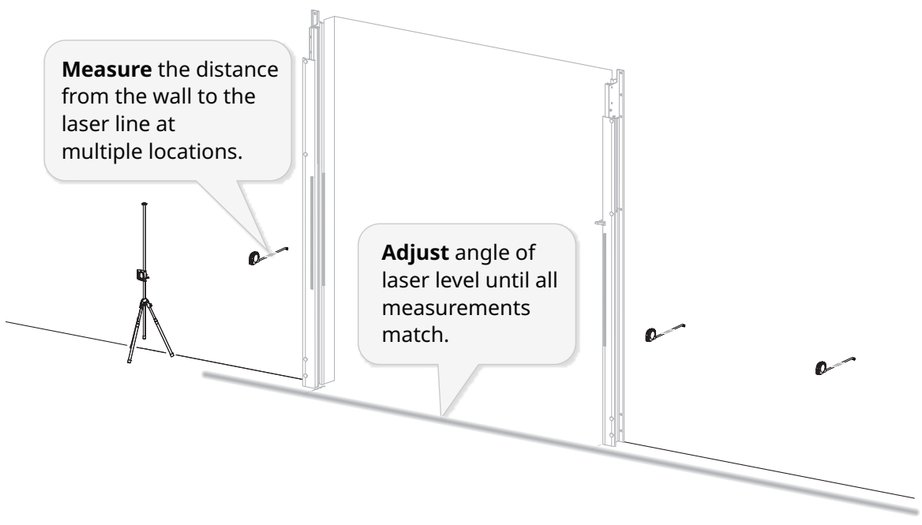


9

Set a laser line parallel to the wall 1” (one inch) in front of columns. **Make sure** the line is parallel to the wall.


Laser level


Measuring tape

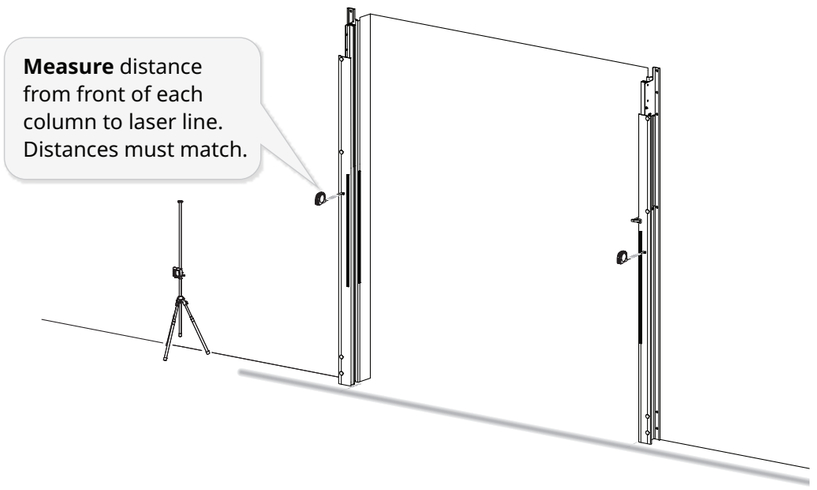


10

Plumb the columns to each other: make sure distances from front of columns to laser line match.


Laser level


Measuring tape



11


Shims

If necessary, shim the side columns so they are plumb to each other.

12

Loosely anchor the non-drive side column to the wall. **Remove** clamp.


Anchoring hardware

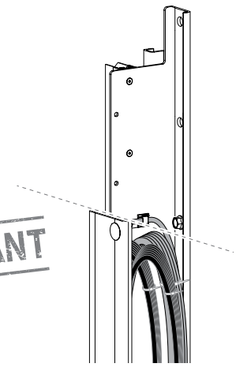
IMPORTANT

Make sure you use only the bottom four anchor points, and the washers are the correct size.

13

Before installing the head assembly, make sure the preinstalled cables for the light curtain (gray) and front and rear Pathwatch (black) are below the third anchor point (dotted line) so they are not pinched or crushed when the head assembly is installed.

IMPORTANT



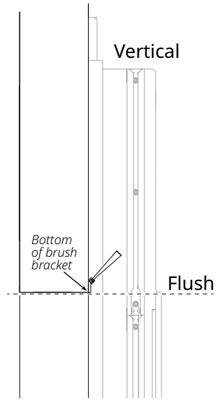
Step 2: Install the retainer brush

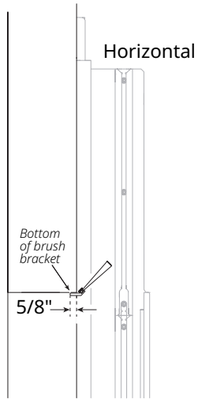
1 **Install** the retainer brush against the top of the door opening so that the brush points forward and up.

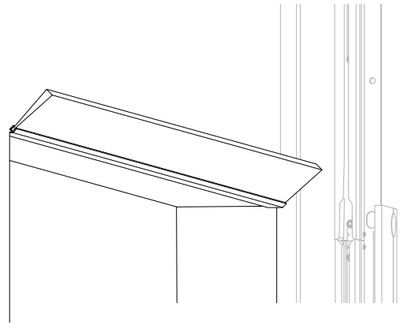
The brush can be installed **vertically** or **horizontally**.

- To install vertically, align the bottom of the brush flush with the top of the door opening.
- To install horizontally, offset the brush 5/8" from the edge of the door opening.

Self-tapping anchoring hardware



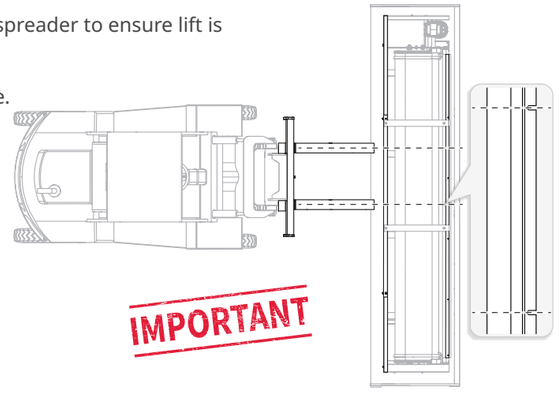




Step 3: Install the head assembly

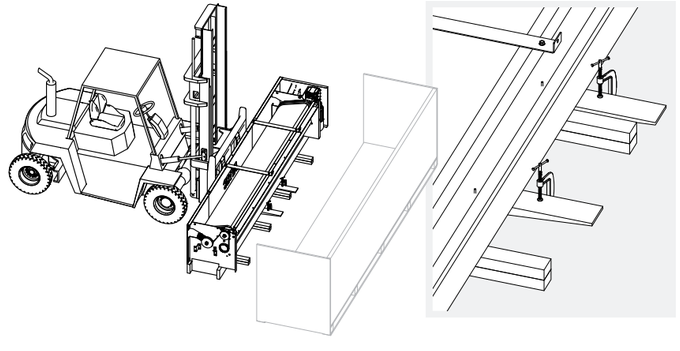
1 **Line up** forks with indentations in top rear spreader to ensure lift is properly balanced.

If necessary, adjust forks to fit under cradle.

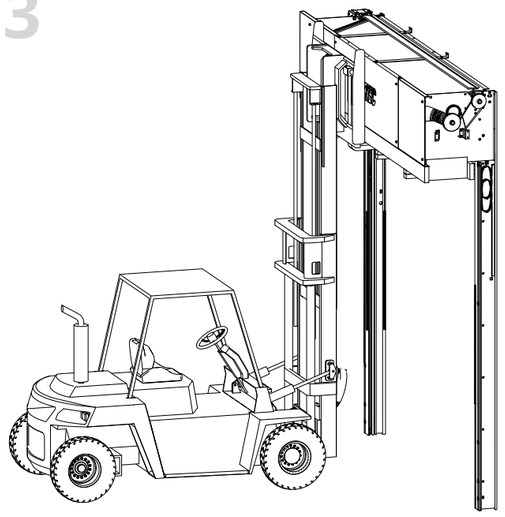


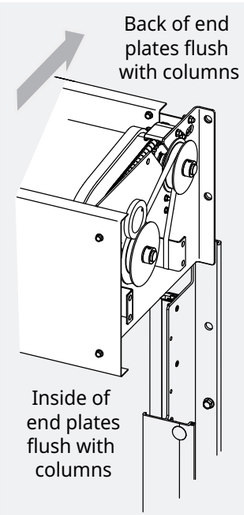
2 **Clamp** end of forks.

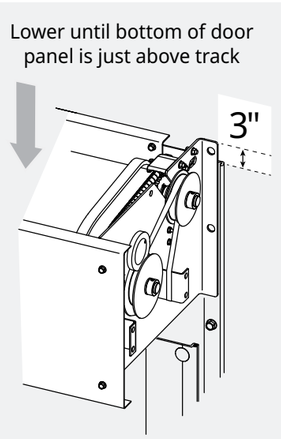
C-Clamp (2)



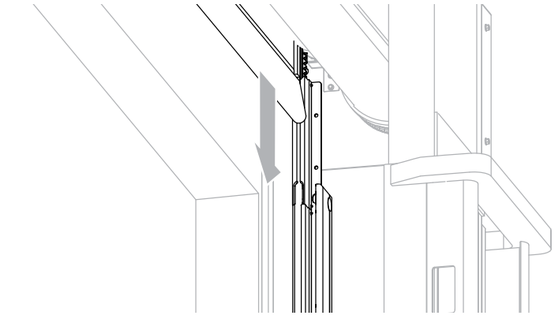
3





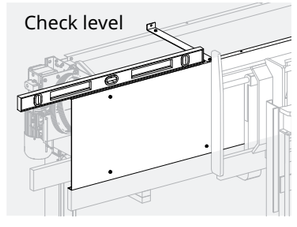


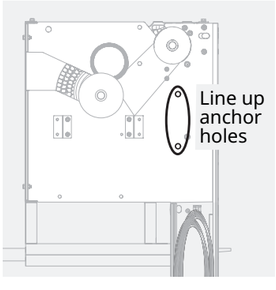
4 **Manually pull** the door panel into the drive tracks in both side columns. Then **finish lowering** the head assembly.

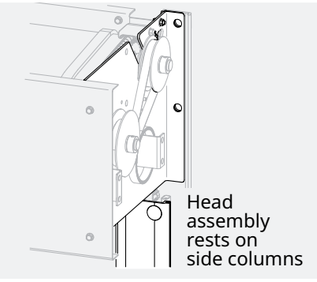


5 **Make sure** the head assembly is aligned correctly.

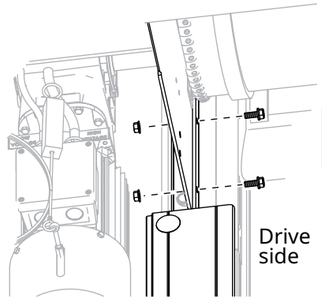
Spirit level

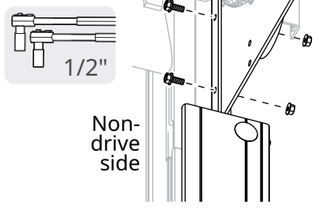


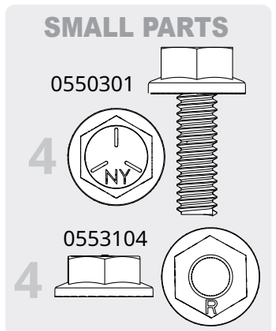




6 **Anchor** head assembly to columns.



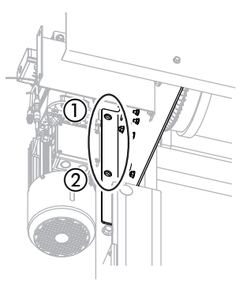


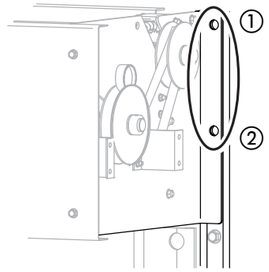


7 **Anchor** both side columns to the wall using anchor points ① and ②.

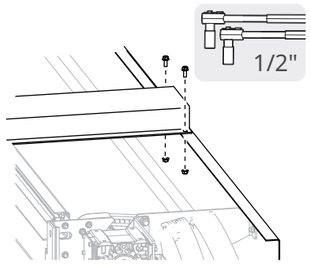
Set anchors tight.

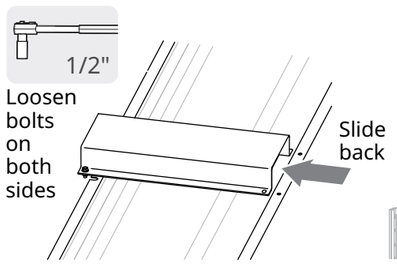
Anchoring hardware

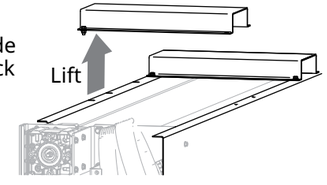




8 **Remove** lift pockets.







Step 4: Replumb and square the door and finish anchoring the side columns

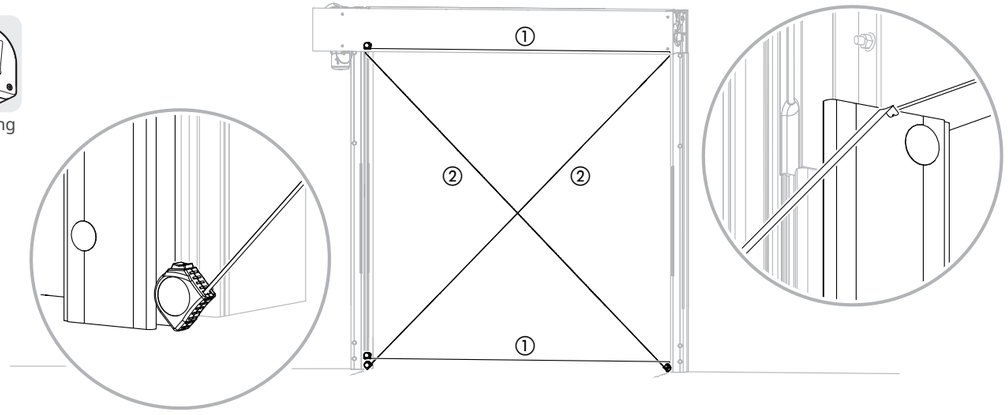
1 **Plumb** both side columns from the front again.
Realign if necessary.

Laser level

2 **Square** the door:

- **Measure** distance between side columns at top and bottom of columns ①.
  Make sure the distances are the same.
- **Measure** distance from bottom corner of drive side to top corner of non-drive side, then from bottom corner of non-drive side to top corner of drive side ②.
  Make sure the distances are the same.

Measuring tape

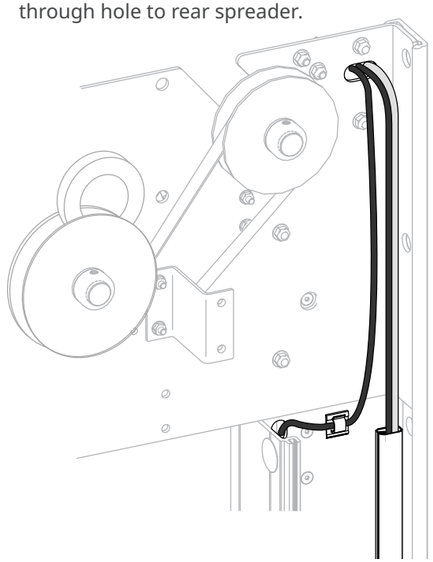


3 **Tighten** all anchors.

Anchoring hardware

How to run the wires from the non-drive side column

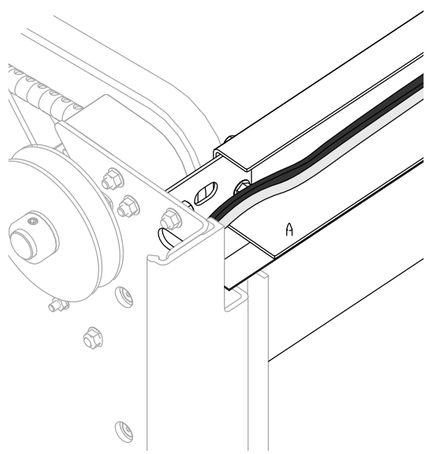
1 **On the non-drive side:** cut ties, run cables through hole to rear spreader.



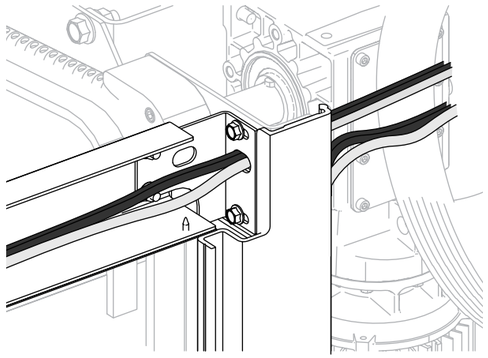
2 **Thread** cables through the rear spreader.

⚠ CAUTION

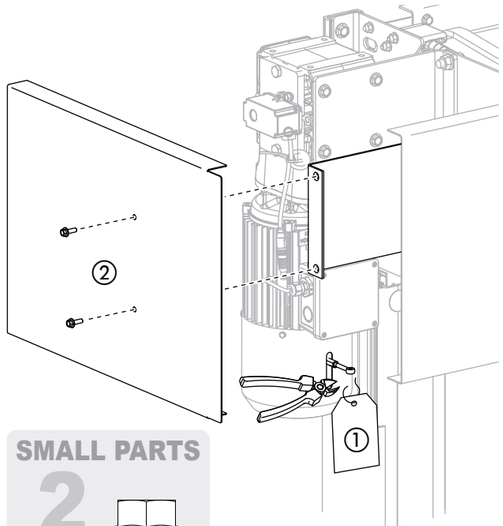
Self-drilling screws that secure rear seal to rear spreader are exposed along spreader.



3 **Thread** cables through hole in drive side column. **Run cables together** with drive side cables.



4 On the drive side, **remove** the motor tag ① and **install** the drive side end guard ②. This end guard has shorter flanges.



SMALL PARTS

2

0550016

3/8"

How to install the counterweight

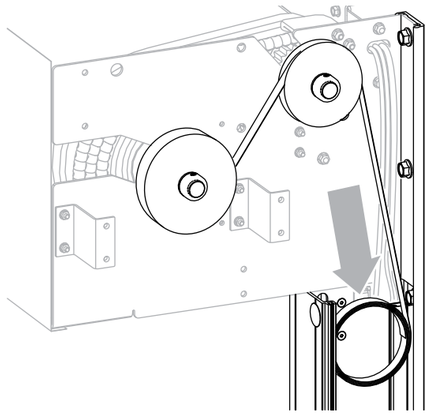
NOTICE

Do not unspool or trim the counterweight strap. The strap is pre-cut and pre-spooled to match the door height.

NOTICE

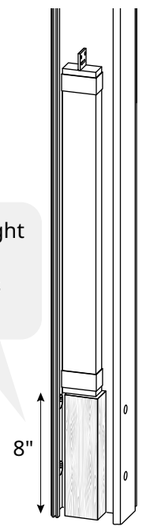
Make sure door is in fully open position before setting counterweight.

1 **Cut** tie to release strap.
Roll strap down side column.



2

Place counterweight on 8-inch block of wood until strap is tightened.



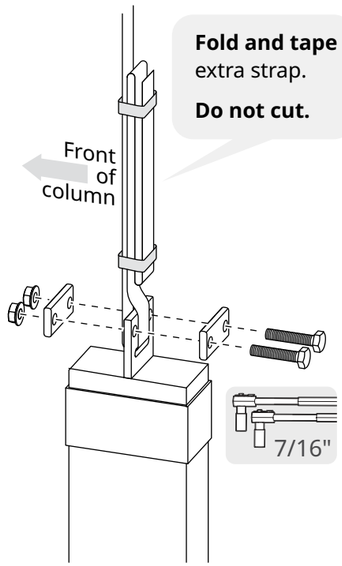
3 **Loosen and remove** bolts, nuts and retainers.

Thread strap through top bracket from front to back and **pull** strap tight.

Replace retainers, bolts and nuts and tighten to secure strap in place.

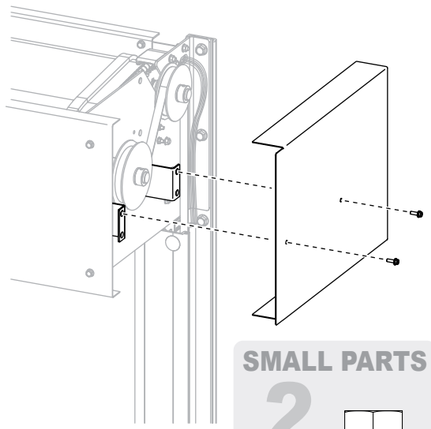
Fold and tape extra strap.

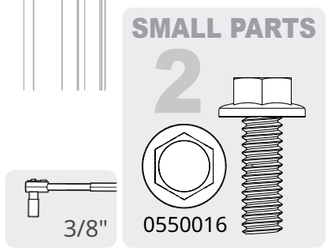
Do not cut.



How to finish the installation

1 **Install** the non-drive side end guard. This end guard has wider flanges.

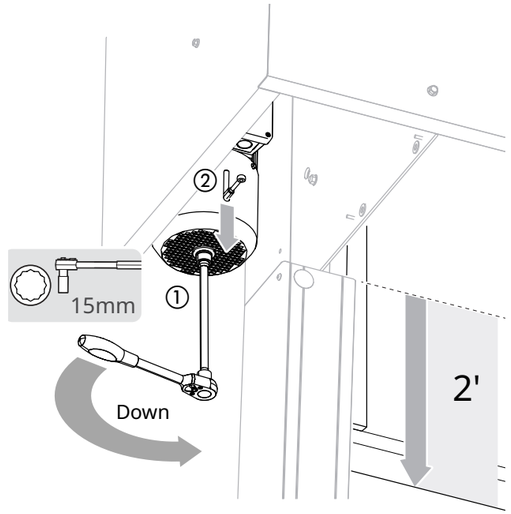




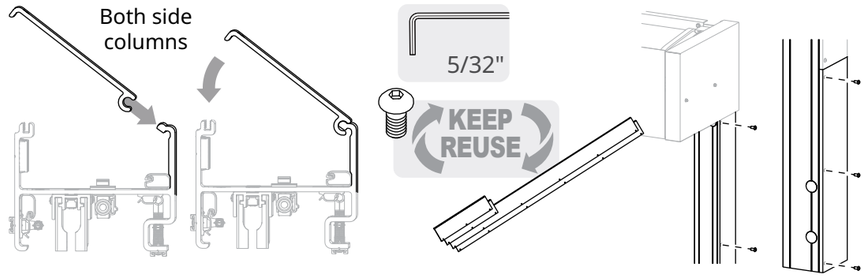
2 **Insert** a 12-point 15mm socket into the bottom of the motor ① and engage the manual axle.

Pull down on the brake release lever ② to release the brake.

Turn the wrench counterclockwise to lower the door panel two feet below head assembly, then **release** the brake release lever.

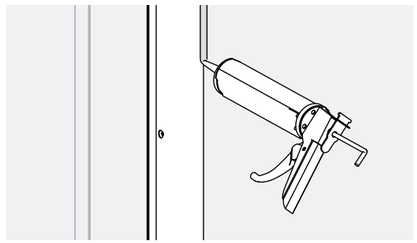


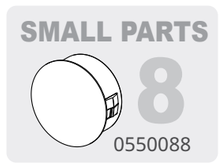
3



4 **Caulk** head assembly and side columns.

Install dome plugs from small parts box.





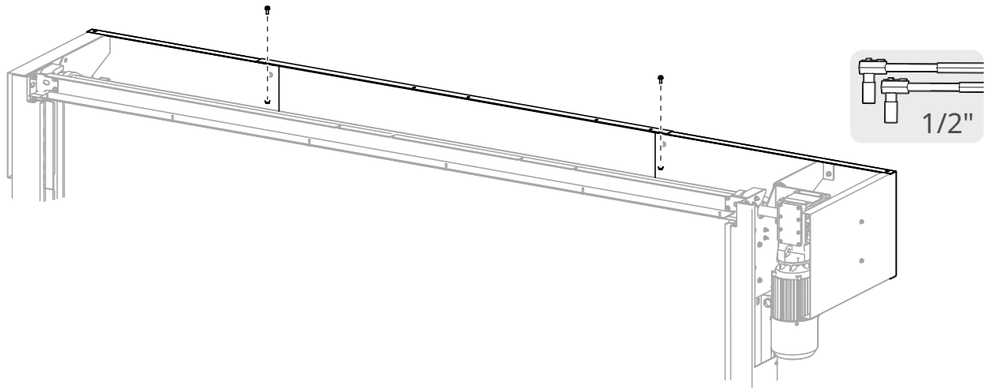
How to install the top cover and motor cover (optional)

NOTE: The configuration of the front spreader and cover change based on the width of the door.

- The front spreader is 1-piece up to a production width of 121".
  It is 3-piece when the production width is greater than 121”.
- The cover is 1-piece up to a production width of 97”.
  It is 2-piece when the production width is greater than 97”.
- The motor cover/cap are a separate option from the cover and may or may not be included. Check the object list.

How to install the top cover

1 **If front spreader is 3-piece:** remove the top bolt and nut from both overlap points so the top cover will lie flat.

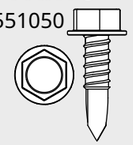


2 **Line up** the cover panel(s) so that the front lip overlaps the front spreader.
Install self-tapping screws through all holes in cover.
Anchor flange on top cover to wall.

Anchoring hardware

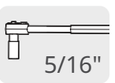
SMALL PARTS

0551050

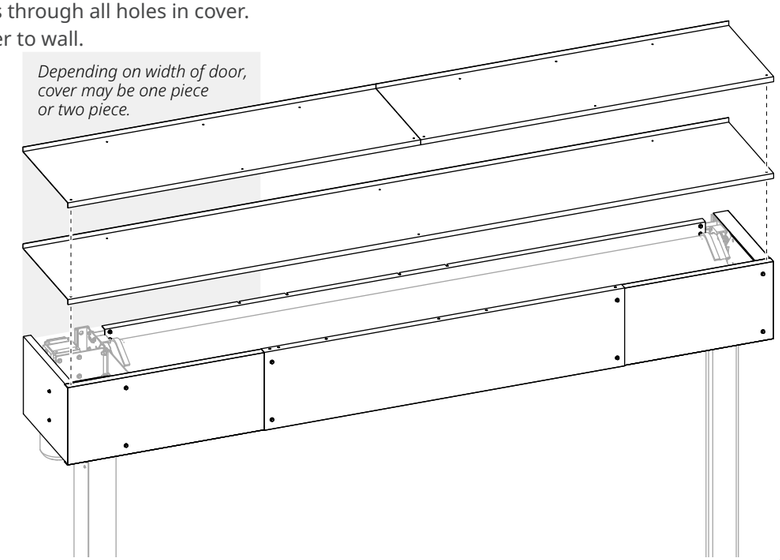


1-piece cover: 6

2-piece cover: 12

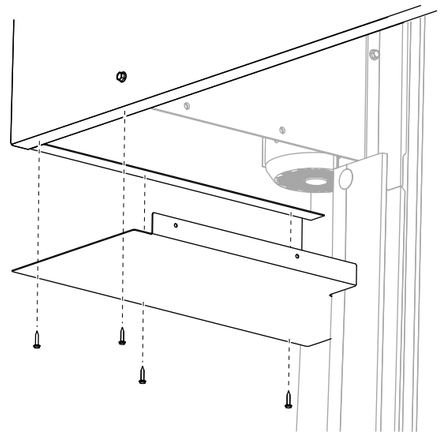


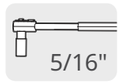
Depending on width of door, cover may be one piece or two piece.



How to install the motor cover

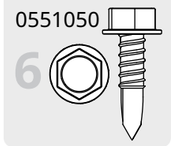
1



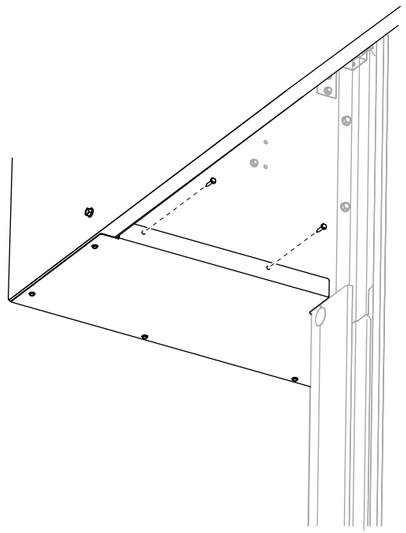


SMALL PARTS

0551050



6



How to install the System 4 controller and wire the door

⚠ WARNING

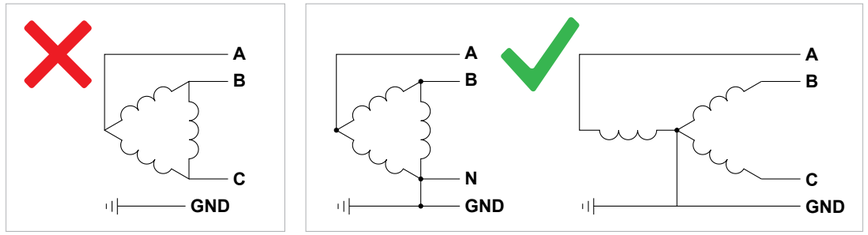
All electrical work must meet all applicable local, state and national codes.
It is recommended that all electrical work be done by a certified electrician.

Failure to wire the door correctly could result in shock, burns or death to the people who install, use or service the door.

⚠ WARNING

The high-voltage power to the controller must be properly grounded.

Improper grounding could result in shock, burns or death to the people who install, use or service the door, as well as catastrophic motor failure.



- **If the service is floating, ungrounded or open delta type** power, an isolation transformer must be installed.
- Metal conduit entering the bottom left of the control box contacts the metal protection ground plate inside the controller. **If non-metallic conduit is used**, a protection ground conductor must be used.

NOTICE

The System 4 installation must meet all of the standards and follow all of the steps shown in these instructions. Failure to do so voids the warranty for the door.

- **The high-voltage and low-voltage conduits must be separated** by a distance that meets all applicable federal, state and local codes and regulations.
- **Wires must be cut to length.** Do not loop wires or leave excess length untrimmed.
- **Use shielded wiring** where indicated in these instructions.
- **If you splice wires:**
  - **You must use** the same gauge wire for the entire length. Gauge is listed in the steps in these instructions.
  - **All spliced field wiring** must maintain the voltage and temperature rating supplied by Rytec.

Contract Rytec Technical support at 800-628-1909 or email helpdesk@rytecdoors.com before starting the installation if you cannot meet any of these standards or have questions about how to implement them.

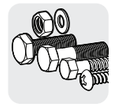
Before you begin

1 **Make sure** you have all supplies and tools.

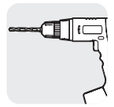
Supplies that you provide


Conduit for high-voltage wiring


Conduit for low-voltage wiring


Mounting hardware for controller (3 anchors)

Tools you will need


Power drill


Step drill bit


#2 Phillips


T20 Torx


Precision screwdriver


Wire tool


Cement drill (if needed to mount controller)

2 **Check** the job site.

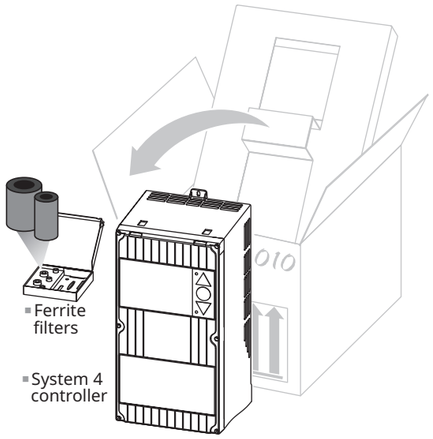
- **The ambient temperature** must be between **-4°F** and **149°F** at all times.
  NOTE: for freezer doors, the controller and fused disconnect must be mounted on the warm side of the door.
- **The mounting surface** for the System 4 controller and fused disconnect must be structurally sound and free of mechanical shock and vibration.

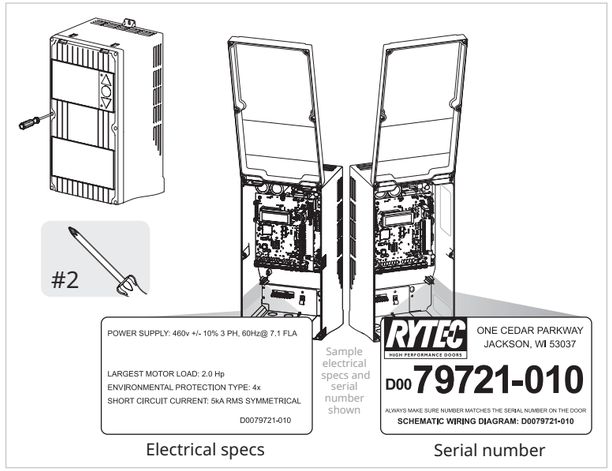
3 **Install** the high-voltage power supply.

- **Provide a high-voltage power supply** that matches the electrical spec for the System 4 controller.
- **A fused disconnect is recommended.** Fuses must meet NEC code for FLA listed on the electrical spec for the System 4 controller.

How to install the System 4 controller

1 **Open** the System 4 controller box and get the controller and ferrite filters.
Loosen screws on the control box and **open** the cover panel.



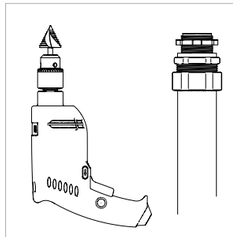


Electrical specs | Serial number

Verify that the serial number and electrical specs for the controller match the door.

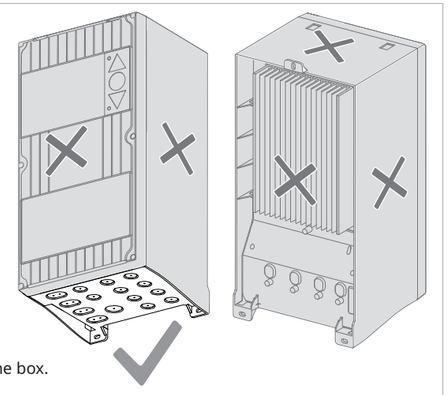
2 **Install** the control box onto the wall using the hardware you have supplied.

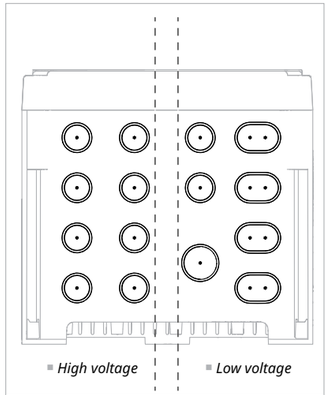
3 **Drill** holes through the bottom of the control box for conduit.



ONLY drill holes and **install conduit** through the **bottom** of the control box.

DO NOT drill through the front, back, top or sides of the box.





NOTICE

- **Conduit must enter through the bottom of the control box.** Drilling holes in the front, back top or sides of the control box voids the warranty.
- **High-voltage wires** must enter through the left side of the box bottom.
- **Low-voltage wires** must enter through the right side of the box bottom.
- **Holes must be drilled.** The indentations in the box bottom are not knockouts.

How to install the high-voltage wiring

⚠ WARNING

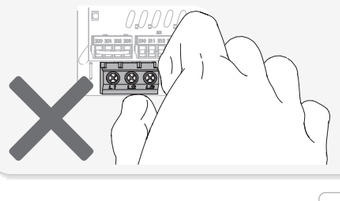
Set the disconnect switch to the OFF position and perform a lockout/tagout of the high-voltage disconnect before installing wiring to the controller. Do not set the disconnect switch to the ON position until the wiring installation is complete and the controller is fully earth grounded per instructions.

Failure to comply could result in shock, burns or death.

1 **Connect** the supply voltage wiring from the disconnect.

12 AWG

DO NOT use power tools

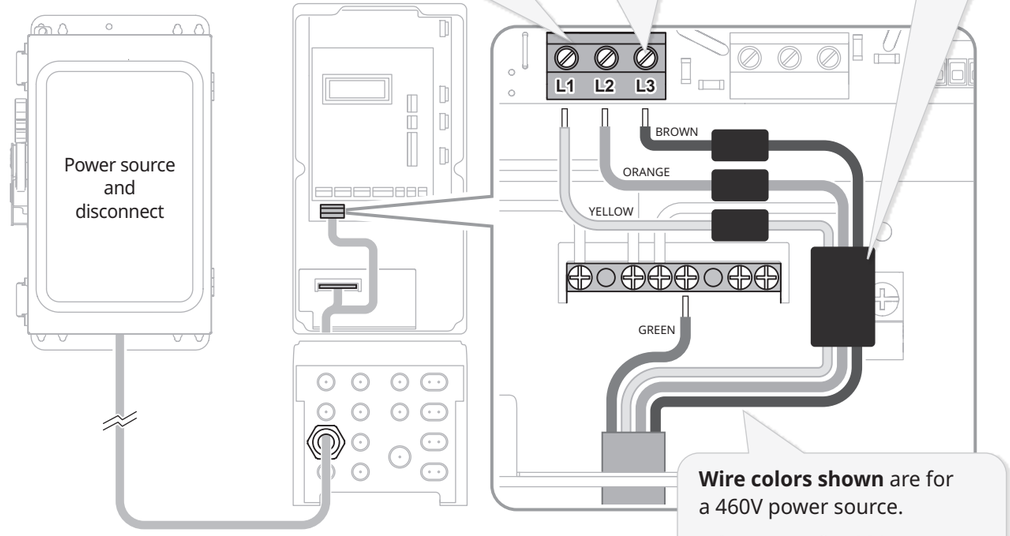


Do not try to remove the green terminal block from the circuit board.

It is fixed in place and will break.

Maximum torque for all screws is **2.5 in-lbs.**

Place one large ferrite filter around all three wires, and **one small filter** around each individual wire.

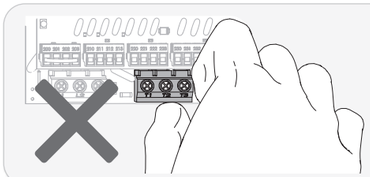


Wire colors shown are for a 460V power source.

Wire colors for 230V power are L1=red, L2=black, L3=blue.

2 Connect the high-voltage wiring from the motor. 16 AWG

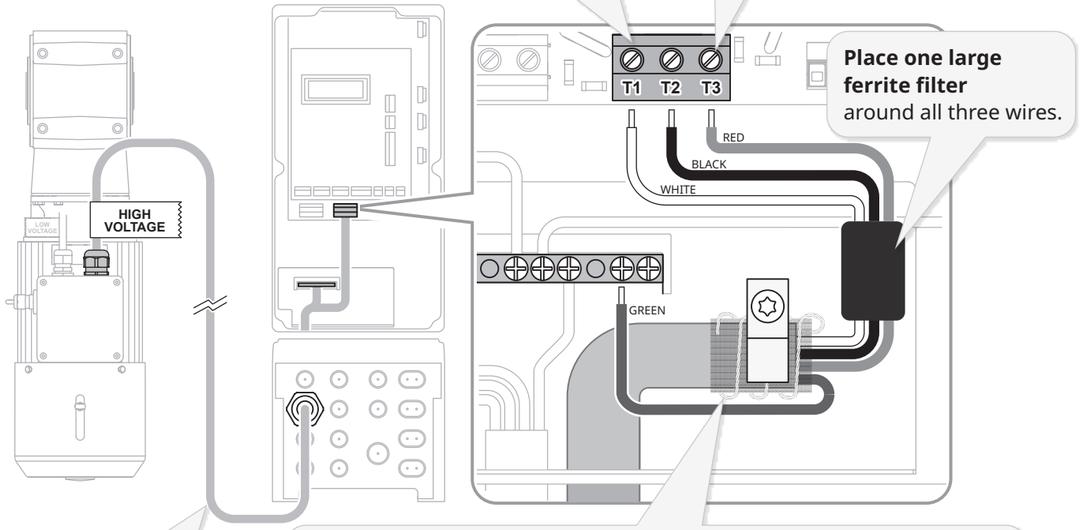
Shielding: braided copper mesh and drain wire



Do not try to remove the green terminal block from the circuit board.

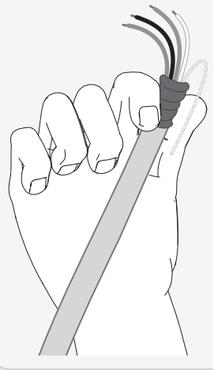
It is fixed in place and will break.

Maximum torque for all screws is **2.5 in-lbs.**



Place one large ferrite filter around all three wires.

Maximum wire length between motor and controller: **100′ (one hundred feet).**



The **shield** (braided copper mesh) and **drain wire** (bare metal) must be in contact with the **P-clip**.

To ensure a tight contact:

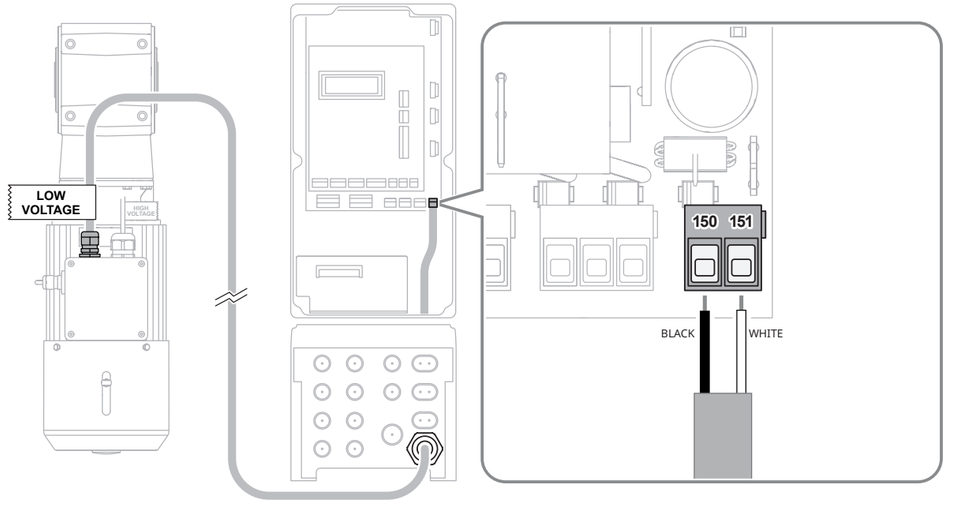
1. Loosen the P-clip.
2. Strip high-voltage cable jacket to expose braided shield, then pull back shield and wrap drain wire around it.
3. Run wires, shield and wrapped drain wire under clip.
4. Tighten clip.
5. Trim excess drain wire.

How to install the low-voltage wiring

- Low-voltage wires can be run in the **same conduit.**
- All low-voltage wiring must be 24 VDC+ only, installed per NEC to Class II power supply requirements.
- Maximum torque for all System 4 controller screws is **2.5 in-lb. DO NOT use power tools.**

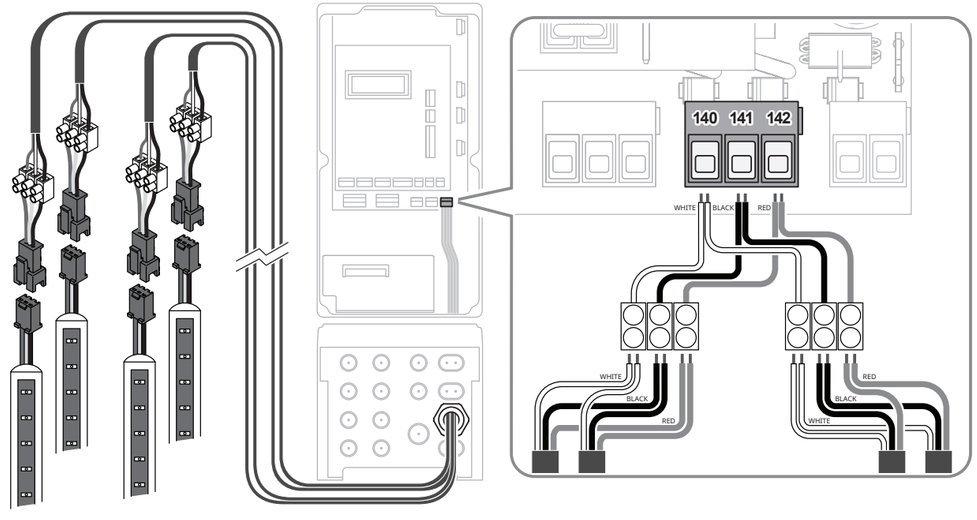
1 Connect the brake wiring from the motor. 18 AWG

Shielding: unshielded



2 Connect the wiring from the Pathwatch LED strips. 18 AWG

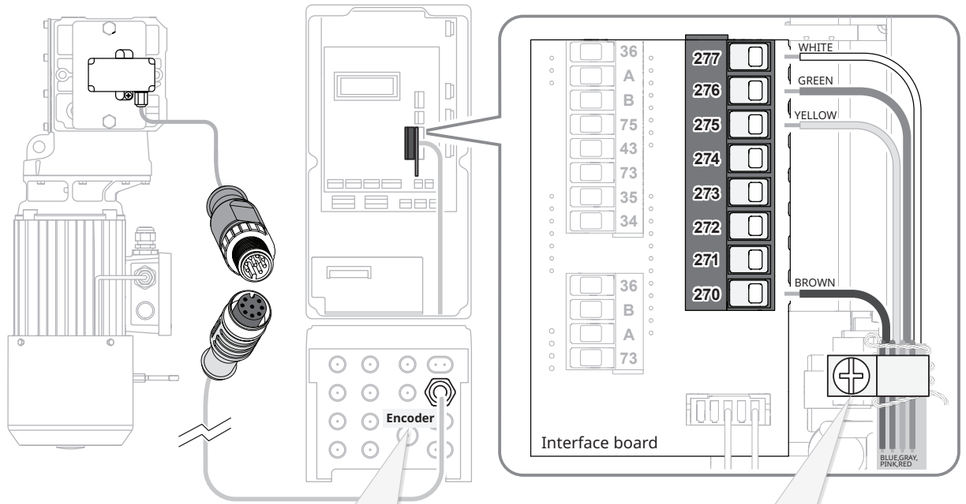
Shielding: unshielded



3 Connect the wiring from the encoder.

Shielding: metal foil and drain wire

24 AWG

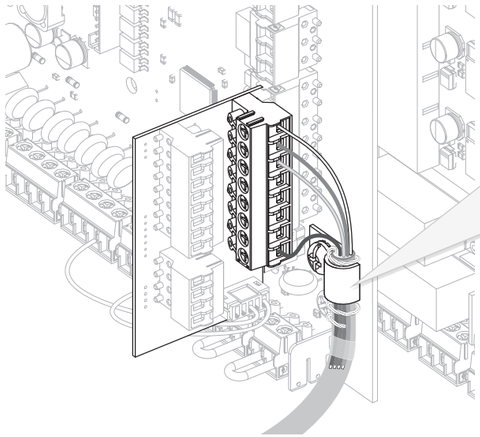


Mark controller end of cable as **"Encoder"**

The **drain wire** (bare metal) must be in contact with the **P-clip**.

To ensure a tight contact:

1. Loosen the P-clip.
2. Strip encoder cable jacket to expose wires.
3. Trim and bend red, pink, gray and blue wires. Tape to jacket.
4. Wrap drain wire around jacket and unused wires.
5. Slide cable under P-clip and tighten. **Make sure there is maximum contact** between clip and drain wire.
6. Trim excess drain wire.



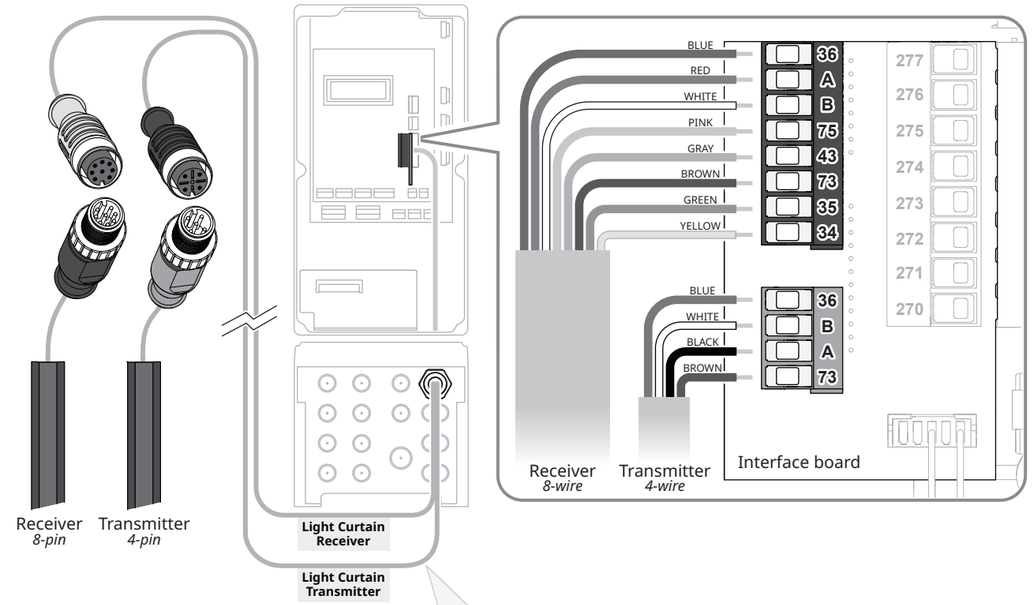
NOTICE

Encoder wiring must not be spliced unless you have consulted with Rytec technical support at **800-628-1909**.

4 Connect the wiring from the light curtain.

Shielding: metal foil and drain wire

Receiver: 24 AWG
Transmitter: 22 AWG



Mark controller end of receiver cable (8-wire, yellow connector) as **"Light curtain receiver"**

Mark controller end of transmitter cable (4-wire, black connector) as **"Light curtain transmitter"**

Before powering up the door

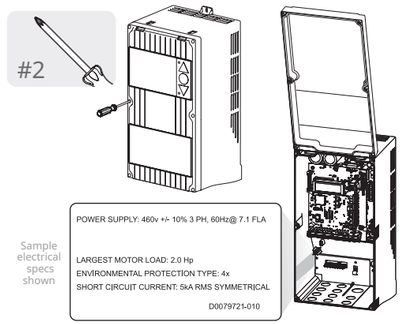
⚠ WARNING

It is recommended that this pretest be done by a certified electrician.

1 **Make sure** the power to the door is correct.

- **Open** the System 4 control box and check the power supply listed on the label inside.
- **Test** the voltages at the disconnect. Test leg to leg and leg to ground.
- If power is correct, **power up** the door and start the set limits sequence.

Multimeter



Sample electrical specs shown

How to set limits and test the door

⚠ CAUTION

Make sure that people and vehicles do not pass through the open doorway until the automatic calibration is complete. The door can open or close unexpectedly, resulting in injury.

The Controller Display

Access level

0 = Operator level

S = Service level
Accesses more parameters

R = Rytec level
Accesses all parameters
Requires password from technical support

Parameter name

Parameter number
All three digits are hexadecimal

Parameter value
? = value being changed
√ = change saved

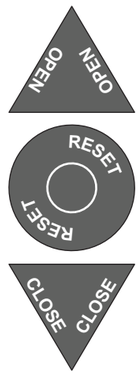
Blinking cursor
On left side of display: *press arrows to change parameter number*
On right side of display: *press arrows to change paramter value*

The Controller Controls

UP Arrow
- **Press** to increase a value or parameter number
- **Press and hold** to increase values or parameter numbers quickly

RESET Button
- **Press** to toggle the flashing cursor between parameters and values
- **Press and hold** to save changes to a value

DOWN Arrow
- **Press** to decrease a value or parameter number
- **Press and hold** to decrease values or parameter numbers quickly



NOTE: The System 4 display uses hexadecimal numbers to number parameters and for some values.

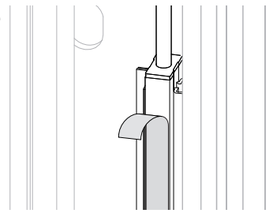
The display uses the ten numeric characters (0-9), plus six letters (A-F), which represent the values from 11 through 16.

In some cases it will be necessary to press the UP arrow sixteen times to change a value from 0000 to 0010.

Icon key

Press | Press and hold | Press UP or DOWN arrow, as needed

Make sure the protective film has been removed from both light curtains before turning on power to the door.



Do This *Result*

1 ON / OFF

Turn on power to controller

```
! Syncron.  !
_0 Press Reset
```

The sequence starts. Scrolling message:

```
Press Reset button to begin
```

2 1x to start sequence

```
To Open Pos.
_0 Hold Reset
```

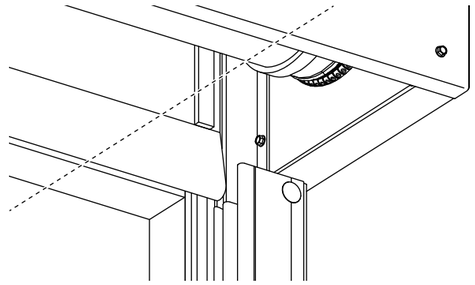
Scrolling message:

```
Hold Reset button if position OK
```

3 until open height is correct

```
To Open Pos.
_0 Hold Reset
```

The bottom of the loop seal should line up with the lintel (top of the door opening).



Do This *Result*

4 until "Open Limit Set" screen displays

```
Open Limit Set
_0    _
```

when quality check is complete, you see these screens:

```
LGx Qual. Check
  _0
```

```
! Syncron.  !
_0 Press Close
```

Scrolling message:

```
Press Close button to begin
```

5 1x to lower the door panel

```
Search Edge
_330_Auto Close
```

the door panel stops when it reaches the bottom of the light curtain, then you see:

```
!Auto Calibrate!
Press Open butto
```

6 1x to start auto-calibration

```
Acll     =   4Sec
Object       232
```

```
Door Is Closing
I515 Limit Corr.
```

```
Spiral
[xxx] Cycles
```

- The door opens and closes automatically **up to 12 times**.
- The controller automatically sets the close limit position while the door calibrates.
- When calibration is complete, the door switches to Run mode.

IMPORTANT **The door may not open or close completely** during automatic calibration. This is normal.

When calibration is complete, the door will open and close correctly.

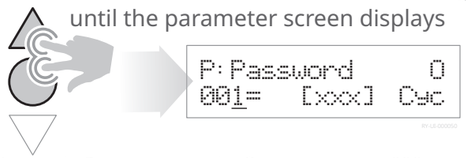
You can now **test the door.**

How to manually reset the close limit (optional)

First: set the controller to Parameter mode and access Service level parameters

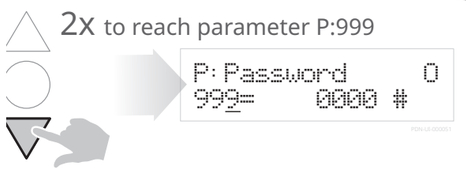
Do This *Result*

1 until the parameter screen displays



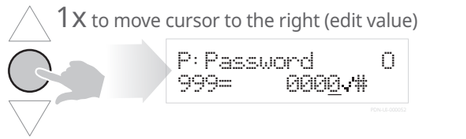
You are in Parameter mode. Go to parameter 999.

2 2x to reach parameter P:999



The Password parameter P:999 screen displays.

3 1x to move cursor to the right (edit value)



You can now change the value of parameter P:999.

Do This *Result*

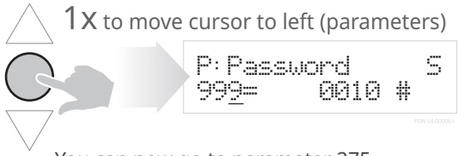
4 16x to set value to hexadecimal 10

Set the value to 10 (Service level password).

5 until question mark changes to checkmark (value saved)

The Service level password is saved.

6 1x to move cursor to left (parameters)



You can now go to parameter 275.

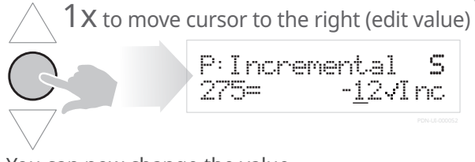
Next: navigate to parameter P:275 and change the value

Do This *Result*

1 until parameter displays

The default value is -12 (default at.

2 1x to move cursor to the right (edit value)

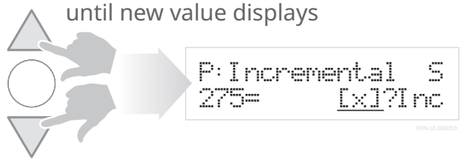


You can now change the value.

- **The UP arrow** increases the value and raises the close limit position for the door.
- **The Down arrow** decreases the value and lowers the close limit for the door.
- Each press of an arrow changes the limit by a fraction of an inch, which gives you precise control of the value.

Do This *Result*

3 until new value displays



IMPORTANT Do not change the value by more than 10 increments. Then test the door.

4 until question mark changes to checkmark (value saved)

The new value is saved.

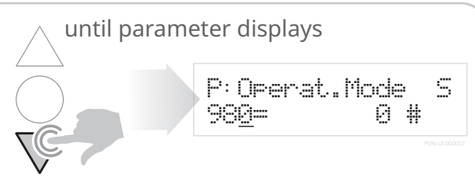
5 until door returns to run mode

How to test the door and the safety features

Navigate to parameter P:980 and set the value to 4 so the door will cycle continuously

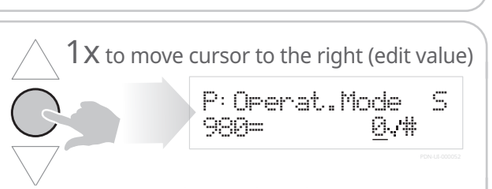
Do This *Result*

1 until parameter displays



The default value is 0.

2 1x to move cursor to the right (edit value)



You can now change the value.

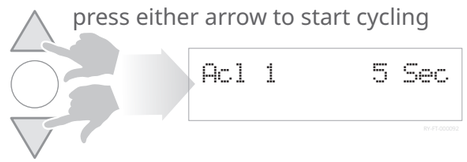
3 4x to change the value to 4

4 until question mark changes to checkmark (value saved)

The new value is saved.

5 until door returns to run mode

6 press either arrow to start cycling



1 **Watch** the door as it cycles.

- **Make sure** the door panel rises to the fully open position, remains in place for the standard time, then closes to the fully closed position.
- **Make sure** the fully open and fully closed positions remain at the set limits.
- **Make sure** the reversing edge is level when the door is fully closed.

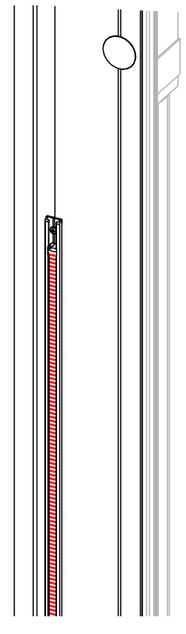
IMPORTANT
- **Let the ACL timer** hold the door open through each cycle. Shortening the timer while the door is cycling can cause the motor to overheat.

2 While the door cycles, **look and listen** for:

- **Unusual noises** such as grinding, whining or excessive motor noise
- **Excess movement** by the motor, drive or drum.
- **Unexpected delay** in activation or unusually long time period before automatically closing.

3 **Make sure** the Pathwatch LED strips operate correctly as the door opens and closes:

- **Continuous red light** while the door closes.
- **Three-second sequence** of yellow light before the door closes.
- **If the door also has a Pathwatch II** warning light at the top of the door:
  - There is also a continuous red light **while the door opens.**
  - The three-second sequence before the door closes is **red instead of yellow.**

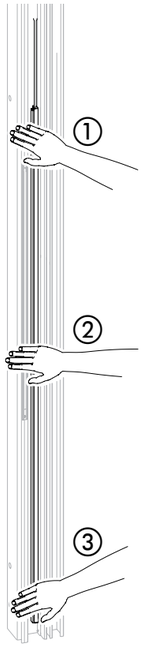


4

Test the light curtain by placing your hand flat across the light curtain in the path of the door at the top ①, middle ② and bottom ③ of the light curtain while the door panel closes.

Make sure the door panel returns to the fully open position each time the light curtain is activated.

Make sure the door panel stops immediately when you place your hand at the top a of the light curtain, and gradually when you place your hand in the middle b or at the bottom c.



⚠WARNING

Make sure you are standing clear of the door panel while performing this test.

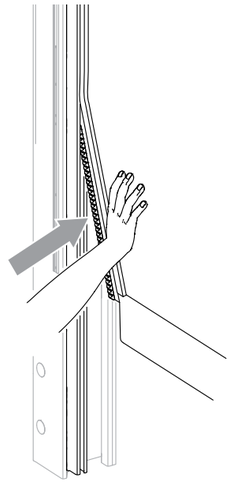
5

Test the reversing edge by placing your arm in the path of the door while it is closing.

IMPORTANT

Make sure you place your arm above the light curtains.

The door panel should stop, then reverse direction and rise to the fully open position.



6

IMPORTANT

Set the controller to parameter mode.

Set Parameter 980 back to 0 to take the door out of continuous cycle.

Return to run mode.

7

Activate the door using each activating system at least three times per system.