

Owner's Manual

Spiral[®] and Spiral[®] Prewire Doors

Read and understand all operation, warning and safety instructions in this manual before operating or servicing the door.

When instructed to do so, follow lockout/tagout procedure before servicing the door.



RYTEC

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The information contained in this manual will allow you to operate and maintain your Rytec Spiral[®] door in a manner which will ensure maximum life and trouble-free operation.

Any unauthorized changes to these procedures, or failure to follow the steps as outlined, will automatically void the warranty. Any changes to the working parts, assemblies, or specifications as written, which are not authorized by Rytec Corporation, will also cancel the warranty. The responsibility for the successful operation and performance of this door lies with the owner.

DO NOT OPERATE OR PERFORM MAINTENANCE ON THIS DOOR UNTIL YOU READ AND UNDERSTAND THE INSTRUCTIONS CONTAINED IN THIS MANUAL.

If you have any questions contact your Rytec representative or **call the Rytec Technical Support Department at 800-628-1909**. Always refer to the serial number of the door when calling the representative or Technical Support.

A set of wiring schematics is provided with each individual door specifically covering the control panel and electrical components of that door. The schematics for a door are shipped inside the box that holds the System 4[®] controller.

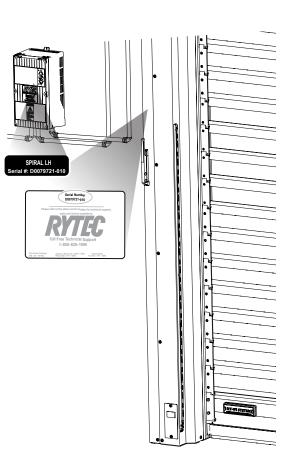
How to find the serial number

!IMPORTANT!

You will need to know the serial number of your door any time you call Rytec Technical Support.

There are labels displaying the serial number in several locations on the door.

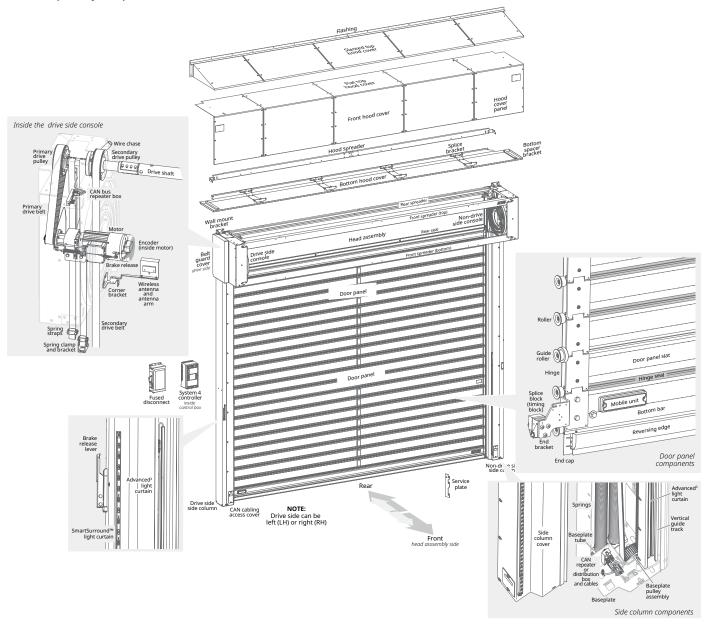
The easiest labels to locate are at roughly eye level on the left side side column of the door and at the bottom of the display on the controller.





Rytec naming conventions

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



Safety information and 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 are as follows:



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



Caution indicates a hazardous situation which, 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, can result in damage to the door or other property.

Operational and maintenance safety

Operational precautions

Observe these precautions while using the door.

- Make sure that all individuals who use the door have been informed about the correct use of the door and all activating devices, and that they understand all safety devices for the door.
- Make sure that only individuals who are trained, qualified and authorized can access the control system, system software and control parameters.
- Do not run through the door opening or attempt to cross the threshold before you are able to do so while walking fully upright.
- Do not drive a vehicle through the door until the door is completely open and has stopped moving.
- Do not climb on or hang on the door.
- Do not touch any part of the door or door frame while the door is opening or closing.
- Only operate the door at the approved supply voltage.
- If the door is to be kept open for a sustained period of time, use the control system to put the door in jog mode, and jog to the desired height. For servicing, set the door to the open position, then set the power disconnect to the OFF position and perform a lockout/tagout. Make sure all personnel are informed that the door is not operational during this time.
- Safety devices must not be modified or put out of services. Do not use the door if there is any indication that a safety device is not operating correctly.



Maintenance precautions

Observe these precautions while performing maintenance on the door.

- Maintenance of the door and the control system is to be done by trained, qualified and authorized individuals only.
- Make sure all routine maintenance is performed as scheduled in the instructions for the door.
- Make sure the power disconnect is set to the OFF position and a correct lockout/ tagout procedure has been performed before servicing any component of the door that is powered by the control system.
- The control system includes components that remain charged after the power has been disconnected. Do not open the control box until at least 5 (five) minutes have elapsed after power is disconnected.
- Do not pass through or stand in the door panel pathway while the door is being serviced.
- Make sure you have and use all required Personal Protective Equipment.
- Make sure that you are aware of the location of all power lines, piping and HVAC systems within the work site.
- Make sure all components and hardware used to service the door are approved by the manufacturer.

Object Detection and Alerting Systems

The standard Spiral installation includes both required and optional safety features, which are located in and around the side columns of the door and, as an option, in the bottom bar.

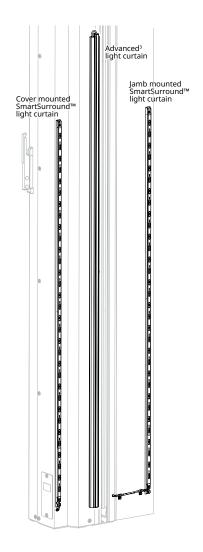
The **SmartSurround**[™] **and Advanced**³ **light curtains** provide three detection planes across the door opening that reverse the closing door, or hold the door open, when an obstruction is detected in the door opening. The light curtains extend from the floor to a height of five to seven feet, depending on the configuration of the door.

The **SmartSurround**[™] **light curtains** also act as intelligent alerts, with a bright LED display that indicates the status of the door:

- While the door opens or closes: a repeating sequence of lights that move up or down until the door stops.
- Before the door closes: slow blinking lights to indicate a close at normal speed, fast blinking lights to indicate a close at "creep" speed, that match the timing of the Delay to Close timer.
- If an obstruction is detected: rapidly blinking lights until the obstruction is cleared.
- If the RESET button is pressed to stop the door while it is opening: a solid red display until the door is restarted.

The **reversing edge** is located at the bottom of the bottom bar, and reverses the door if it makes contact with an obstruction while the door is closing. This object detection system is optional on doors with the **SmartSurround**[™] feature.

Your installation may also include other optional safety devices.

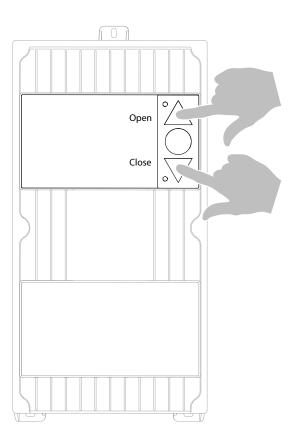


How to open and close the door using the System 4 controller

The System 4 controller should be installed within sight of the Spiral door.

- Press the UP arrow to manually open the door.
- Press the DOWN arrow to manually close the door. Under normal operating conditions, the door should always close automatically.

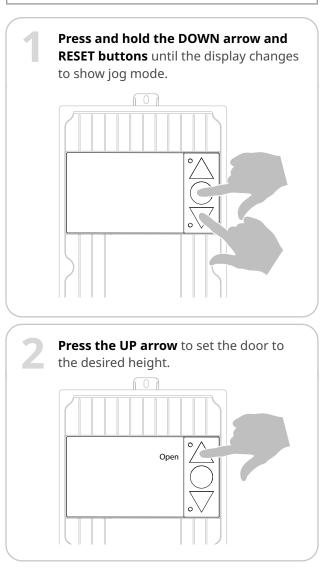
Under normal operating conditions, it should not be necessary to use the System 4 controller. Rytec offers a wide range of automatic and manual activators designed to fit the specific requirements of the installation. Call Rytec Technical support at **800-628-1909** if you have questions about the activators for your door.



How to hold the door open normal use

NOTICE

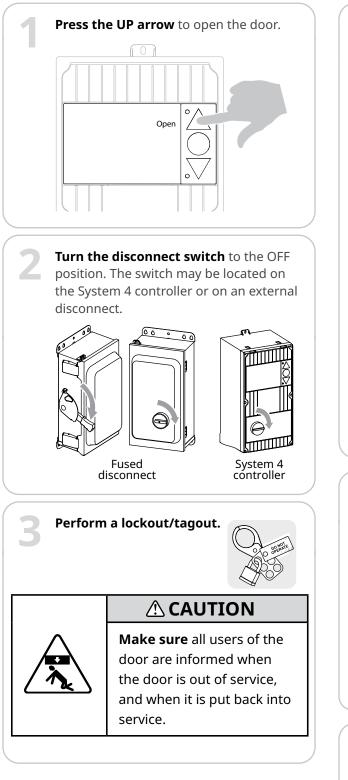
Do not use a safety feature or activator, such as a light curtain or motion detector, to hold the door open.



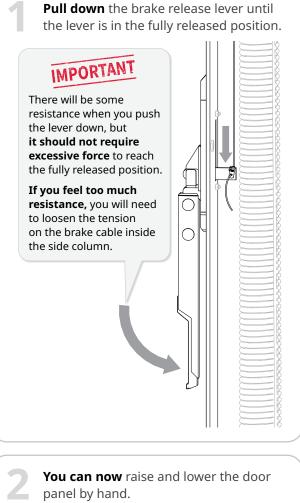
OPERATION



How to hold the door open to service



How to open and close the door manually



IMPORTANT

- Place a vise grips or c-clamp in both vertical tracks under the bottom bar rollers to hold the door in place.
- The springs in the side columns will prevent the door panel from reaching the fully closed position.
- Release vise grips or clamps and push up the brake release lever when you are done to re-engage the brake and allow the door panel to raise and lower automatically.

Recommended inspection and maintenance schedule

Action	Daily	Quarterly
Inspect visually for damage		
Test door operation		
Test reversing edge		
Test photo eyes or light curtains		
Clean vision panels		
Visually inspect controller, cabling and conduit		
Inspect hardware; tighten where necessary		
Visually inspect side columns and anchoring		
Visually inspect all components in head assembly		
Inspect the primary drive belt		
Inspect the secondary drive belt		
Visually inspect all spreaders and seals		
Inspect seals on both sides of door track		
Inspect the springs, spring strap and brackets in both side columns		
Visually inspect the wireless antenna and wire		
Visually inspect the door panel		
Inspect the full length of the reversing edge		
Check open and close limit; adjust if necessary		
Test brake release and inspect brake release cable		

NOTICE

This door does not require lubrication.

- The gearbox used with this door is a sealed unit. **DO NOT** attempt to lubricate.
- DO NOT lubricate any parts, components, or assemblies of this door. This includes the door panel rollers, guides and track. Lubricants will attract dust and dirt, which can cause the door panel to bind.



Daily maintenance

These steps should be followed every day.

NOTICE

!IMPORTANT! Immediately turn off the door and perform a lockout/tagout if any of the daily checks reveals that the door is not operating properly.

- **Activate** the door using each activating system. **Run** the door through at least three cycles for each system.
- Make sure the door panel rises to the fully open position, remains in place for the standard time, and then closes to the fully closed position.
- **Make sure** the reversing edge is level when the door is fully closed.
- **Repeat** for each activating device.

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

- **Unusual noises** such as grinding, whining or excessive motor noise
- Changes in door speed from one cycle to the next. NOTE: The door motion should accelerate, then decelerate, during a normal run up or down.
- **Excess movement** by the motor, drive or door panels.
- **Unexpected delay** in activation or unusually long time period before automatically closing.

- Make sure the SmartSurround™
 operates correctly as the door opens and closes:
 - **An upward cascade of red lights** while the door opens.
 - A sequence of blinking yellow lights matching the delay to close timer before the door starts to close.
 - **A downward cascade of red lights** while the door closes.

Inspect the side columns and head assembly for signs of damage or signs of excessive wear.

Inspect the door panels, reversing edge and rollers for damage or signs of excessive wear.

Test the SmartSurround[™] system:

Make sure the light curtains flash rapidly whenever either of the planes are broken.

 If one plane is broken but the other is not, the light curtains should reverse/ hold the door, then the door should count down and descend at creep speed.



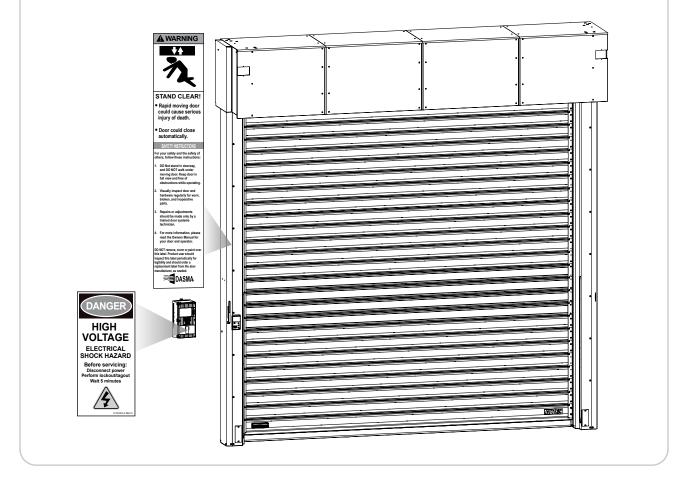
 If all planes are broken, the light curtains should reverse/hold the door, then the door should count down and descend at normal speed.

How to inspect the safety labels

There are three safety labels on this door: a DASMA label on the side column (depending on the configuration of the door, this can be the left side column or the right side column), a shock warning on the front of the System 4 control box, and a shock warning with instructions for manually moving the door on the bottom of the motor, next to the brake release lever.

Make sure all three labels have no rips or tears, that they can be clearly seen, and that all text is readable.

Call Rytec technical support at **800-628-1909** if any of the labels need to be replaced.





How to clean the door

NOTICE

!IMPORTANT! Do not use bleach, industrial grade cleaners, abrasive cleaners or petroleum-based solvents on Rytec doors.

NOTICE

Rytec doors are self-lubricating. Do not lubricate the drive track or door panel. Grease and lubricating oil can attract dirt and grime, which may prevent the door from operating correctly.

NOTICE

Clean the light curtains with a damp cloth soaked in water only. Do not get cleaners of any kind on the light curtain lenses.

Rain-X® **620036 Plastic Water Repellent** is approved for light curtains.

General cleaning of the door

Clean side columns with a mix of household cleaner and water. Isopropyl alcohol can be used on hard-to-clean areas.

Cleaning solid door panels

Clean solid door panels with a mix of household cleaner and water. Isopropyl alcohol can be used on hard-to-clean areas.

Cleaning full vision panels

Full vision panels should be inspected on a daily basis for dirt, grease, scratches and abrasions. Cleaning must be done when anything else that diminishes panel clarity is observed.

The fused disconnect must be in the OFF position and a lockout/tagout performed before performing the following procedure

General cleaning

- 1. Rinse with flowing water.
- 2. Clean with warm water and small amount of mild non-abrasive soap (dish soap).
- 3. Lightly rinse vision panels using a water spray.
- 4. Remove excess water using a clean and dry microfiber of lint free cloth.
- 5. Use a small squeegee to completely dry all panels.
- 6. Wipe any additional moisture with dry microfiber or lint free cloth.

Heavy cleaning and fine scratch removal

- 1. Remove all surface dirt and dust with warm water spray.
- 2. Mix a mild non-abrasive soap (dish soap) into a bucket of warm water.
- 3. Gently wash using a microfiber or lint free cloth keeping the cloth sudsy at all times.
- 4. Lightly rinse vision panels using a water spray.
- 5. Remove excess water using a clean and dry microfiber or lint free cloth.
- 6. Use a small squeegee to completely dry all vision panels.
- 7. Wipe any additional moisture with a dry microfiber or lint free cloth.
- 8. Over the counter products can be used to polish the vision panels. Products such as NOVUS Polish #2 (*www.novuspolish.com*) are designed specifically for polycarbonate windows and will help maintain clarity and shine of the vision panels. Follow the instructions on the product for the proper application.

NOTE: The product must be non-abrasive and designed specifically for polycarbonate windows. Avoid the use of abrasive cleaners, squeegees and/or other cleaning implements that may mar or gouge the coating.

For full vision panels with Lexan[™] windows, use these cleaning agents

Aqueous solution one of these detergents:

- Top Job
- Mr. Clean
- Joy
- Formula 409
- Fantastik

Organic solvents:

- Butyl Cellosolve
- Hexcel, F.O. 554
- Kerosene
- Neleco-Placer
- Naphtha (VM&P) Grade
- Turco 5042

NOTE: All residual organic solvents should be removed with a secondary rinse.

Alcohols:

- Methanol
- Isopropyl

All residual organic solvents should be removed with a secondary rinse.

Graffiti removal

- Butyl Cellosolve (for removal of paints, marking pen inks, lipstick, etc.). The use of masking tape, adhesive tape or lint removal tools works well for lifting off old weathered paints.
- To remove labels, stickers, etc., the use of kerosene or VM&P naphtha are generally effective.
- When the solvent will not penetrate sticker material, apply heat (hair dryer) to soften the adhesive and promote removal.

Cleaning and scratch removal using NOVUS #1, #2, and #3

NOVUS #1 Plastic Clean and Shine

- 1. Remove surface dust with soft cloth.
- 2. Shake well. Apply a light mist of polish.
- Spread evenly over the entire surface. If the surface is extremely dirty, apply NOVUS #1 liberally and wipe using long, sweeping strokes. Do not use pressure at this time or large dirt particles may scratch the Lexan[™].
- 4. Buff with a clean, soft, lint-free cloth.
- 5. Re-apply NOVUS #1 Polish using short, circular strokes with a clean portion of the cloth.
- 6. When the surface is thoroughly clean and uniformly covered, buff to a slippery glaze with a clean portion of the cloth. Surfaces buffed to a high glaze are more resistant to dust and future scratching.

NOTE: Reapply NOVUS #1 regularly to maintain the antistatic, smudge and scratch resistant properties.



NOVUS #2 Fine Scratch Remover

Observe condition of the surface to be treated. The deeper the scratches, the greater the pressure required to remove them. If the surface is dirty, clean with NOVUS #1 first.

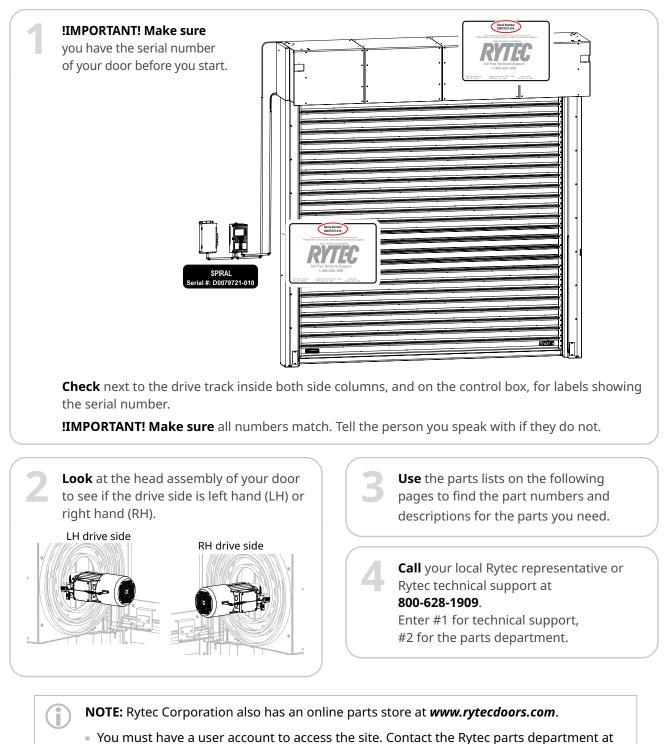
- 1. Shake well. Test in an inconspicuous area.
- 2. Remove surface dust with clean, soft cloth.
- 3. Apply polish in circular motion until dry. Apply NOVUS #2 liberally. Using a clean, soft cloth, polish with a firm backand-forth motion at right angles to the scratches. Keep the cloth saturated with polish at all times.
- 4. Buff with a clean cloth.
- 5. When the worst scratches have been polished out, reapply NOVUS #2 uniformly in a circular motion to the entire surface using short, circular strokes and light pressure. Allow to dry to a light haze.
- Using a clean portion of the cloth, buff the surface to a slippery glaze using firm, short strokes. This procedure is imperative in achieving the best results.

NOTE: For heavy scratches, multiple applications of NOVUS #2 or application of NOVUS #3 may be required. Follow with NOVUS #1 for best results.

NOVUS #3 Heavy Scratch Remover

- 1. Shake well. Test in an inconspicuous area.
- 2. Remove surface dust with a clean, soft cloth.
- Using a clean, soft cloth, apply NOVUS #3 with firm back and forth strokes at right angle to visible scratches. Apply NOVUS #3 liberally. Using a clean, soft cloth, polish with a firm back-andforth motion at right angles to the scratches. Keep the cloth saturated with polish at all times.
- 4. Continue polishing until only the fine scratches remain.
- 5. **!IMPORTANT!** Using a cloth, remove all of the remaining polish.

How to order parts



The site stocks standard parts such as bearings, spools and encoders, as well as straps at precut lengths. Parts listed as "configured" in this manual **are not available** on the site.

800-628-1909 Ext. 2 to request an account.

Some parts are available for next-day shipping.



How to return unwanted parts

For returns covered by warranty, call Rytec technical support at 800-628-1909 Ext. 1 for authorization.

For returns NOT covered by warranty (physical returns), call the Rytec parts department at 800-628-1909 Ext. 2 for authorization. Requests for quotes, or part orders, should also be e-mailed to PARTS@RYTECDOORS.COM.

- Your call will be redirected if necessary to put you in touch with the correct department.
- There may be a **restock fee** for the returned part.
- **Electrical parts which have been energized,** such as the System 4[®] controller, the brake assembly, the mobile unit, the light curtains or third party activators, cannot be returned.
- Also, there are restrictions on returns for **configured parts** that were built to match the specifications of your door.

Warranty return

Rytec will create a **Return Merchandise Authorization (RMA)** and assign you an **incident number**.

You will receive replacement parts, a prepaid return label, and the RMA paperwork.

NOTE: Rytec may determine that it is not necessary to return the warranted parts in order to receive the replacement parts.

Use the box and prepaid label to return the warranted parts to Rytec within 30 days of receiving the replacements. !IMPORTANT! You must include the RMA

paperwork with the returned parts.

Why you may be sent substitute parts

Many Rytec doors are custom engineered to meet the unique needs of the installation site, so the parts used for your door may be different from those shown in this manual.

If a part has been improved or updated since your installation, the new part will be substituted for the part ordered. The new part may have a revised part number.

Physical return

Rytec will assign you an **incident number**.

Box and return the parts.

IMPORTANT! You must include the incident number with the returned parts.

Unless you are told otherwise by Rytec, shipping costs for a physical return **are your responsibility.** Call the Rytec parts department at **800-628-1909 Ext. 2** if you have any questions.

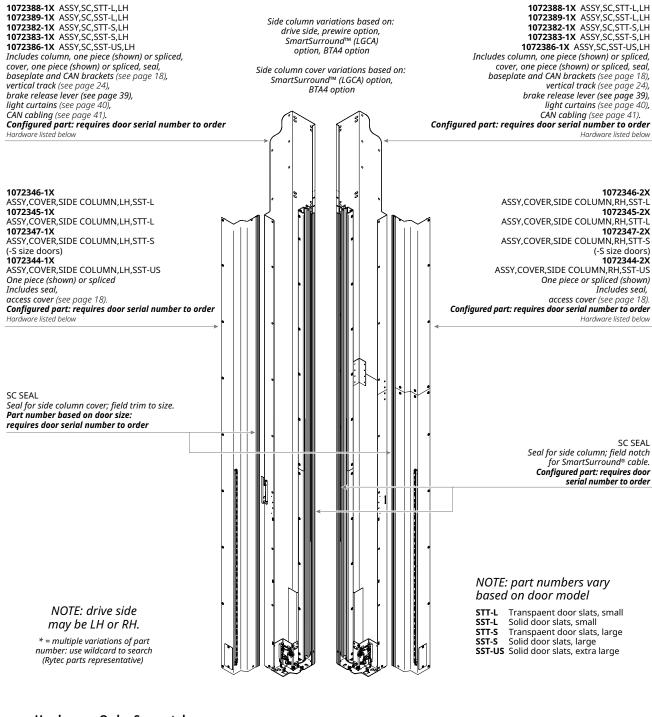
When Rytec receives the parts, we will inspect them. When we have determined the parts are in good working order, we will issue a refund to your account, or send a check by mail within 30 days.

Rytec Technical Knowledge Center

The Rytec Technical Knowledge Center, reached via the Customer Support page at **www.rytecdoors.com**, holds manuals, service bulletins, and video presentations for all Rytec model doors.



Side Column Assemblies all doors



Hardware – Orde	r Separately		
PN/Description	Hardware	Description	Qty
ASSY,SC,2-PC*	5550289-0Z04	BLIND RIVET FLUSH HEAD 0.19OD 0.33GP SS	16
ASSY,COVER*	01900820	BSCSF,M8-1.25 X 16,T40,ZN	V
ASSY,COVER,2-PC*	5550289-0Z04	BLIND RIVET FLUSH HEAD 0.19OD 0.33GP SS	16

01900820

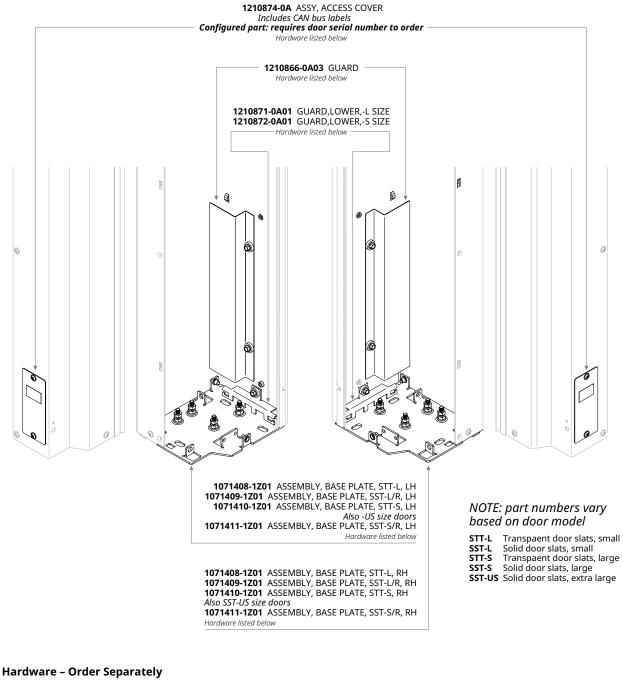


1210738-0 DOME PLUG, 0.50 DIA HOLE, 0.25 MAX WALL, NYLON, BLK

v = varies based on height of door

5550289-0Z04

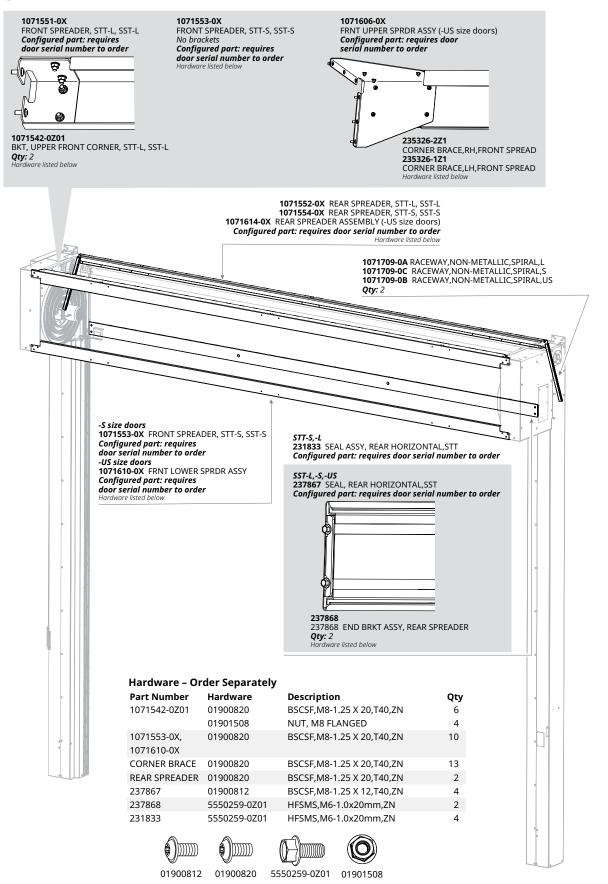
Side Column Assemblies - Baseplate Area all doors



PN/Description	Hardware	Description	Qty		0	
BASEPLATE	5550301-0Z01	HFSMS,M8-1.25X8 CL10.9 ZN	1	(\bigcirc)		
	5550296-0Z01	RIV-NUT, M8-1.25, AHS4T-8125-7.9	3	S		V
	01300530	SCREW, M10 X 30, DIN 963-4.8	2	01270060	01300530	01900816
	01270060	NUT, M10 HEX, DIN 934-8 ZN	4			
	01900820	BSCSF,M8-1.25 X 20,T40,ZN	3	A Da))
1210866	5550300-0Z01	HFSMS, M8-1.25X12 CL10.9 ZN	2	U h		\mathcal{I}
	1210870-0A	SPACER,ROUND	2	019	00820 12108	70-0A
1210868	01900816	BSCSF,M8-1.25 X 16,T40,ZN	2		a-1)	<u></u> 1
1210871/72	5550300-0Z01	HFSMS, M8-1.25X12 CL10.9 ZN	1	0HD		
	1210870-0A	SPACER,ROUND	1	5550296-0Z01	5550300-0Z01	5550301-0Z01

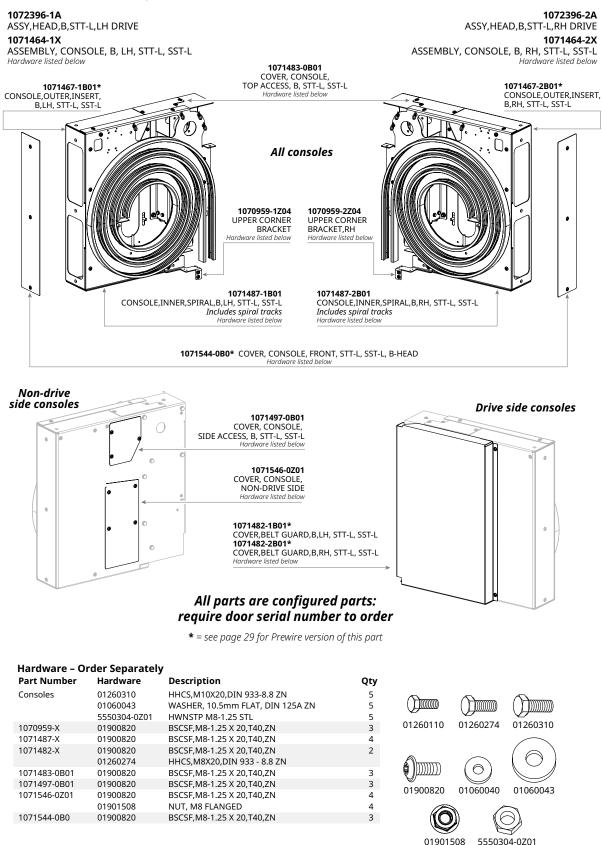


Spreaders and Seals all doors



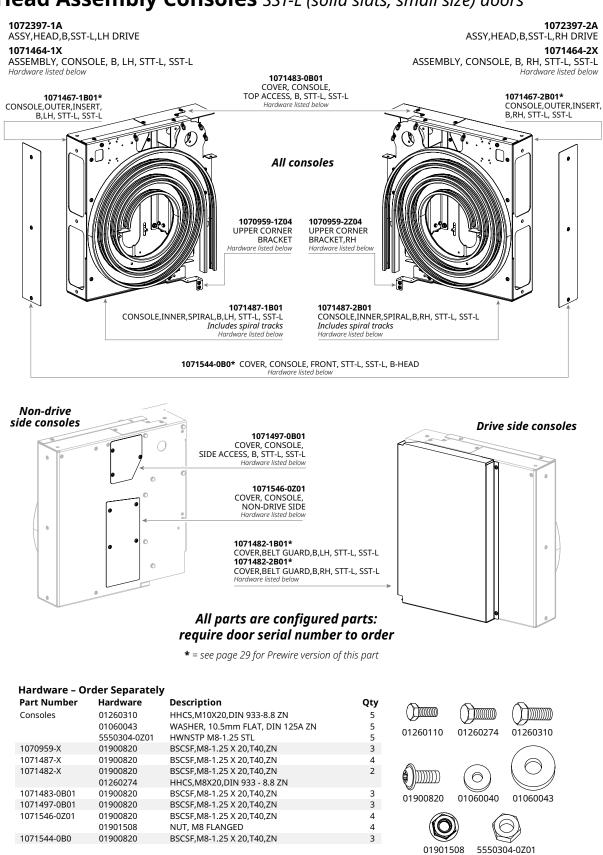


Head Assembly Consoles STT-L (full vision slats, small size) doors



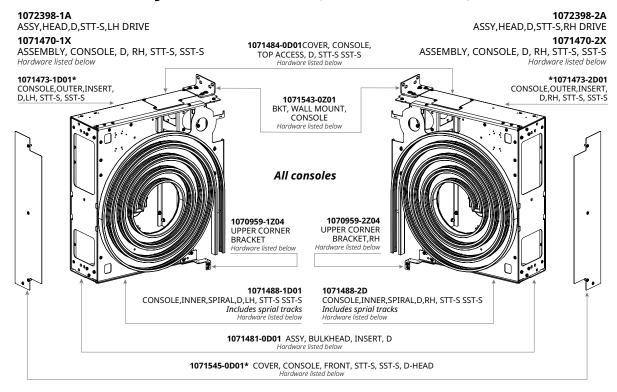


Head Assembly Consoles SST-L (solid slats, small size) doors

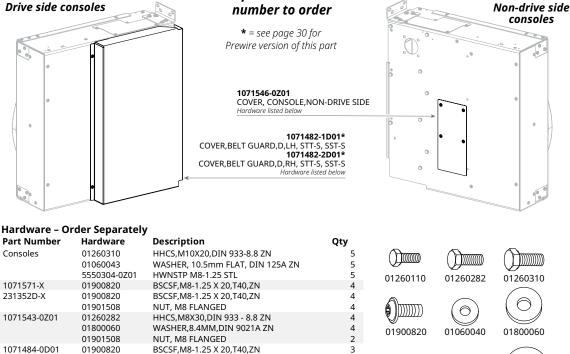




Head Assembly Consoles STT-S (full vision slats, large size) doors



All parts are configured parts: require door serial number to order



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4

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BSCSF,M8-1.25 X 20,T40,ZN

NUT, M8 FLANGED

01060043

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01901508 5550304-0Z01

1071488-X

1071482-X

1070959-X

1071545-0D01

1071546-0Z01

01900820

01900820

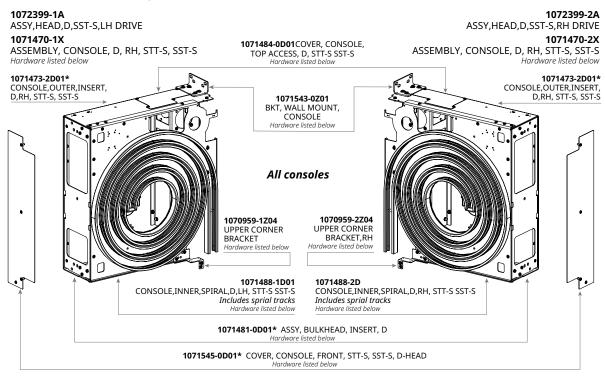
01900820

01900820

01901508

01900820

Head Assembly Consoles SST-S (solid slats, large size) doors



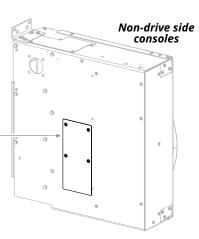
All parts are configured parts: require door serial number to order

* = see page 30 for Prewire version of this part

> 1071546-0Z01 COVER, CONSOLE, NON-DRIVE SIDE

1071482-1D01* COVER,BELT GUARD,D,LH, STT-S, SST-S **1071482-2D01*** COVER,BELT GUARD,D,RH, STT-S, SST-S Hardware listed below

Hardware listed below



Drive side consoles

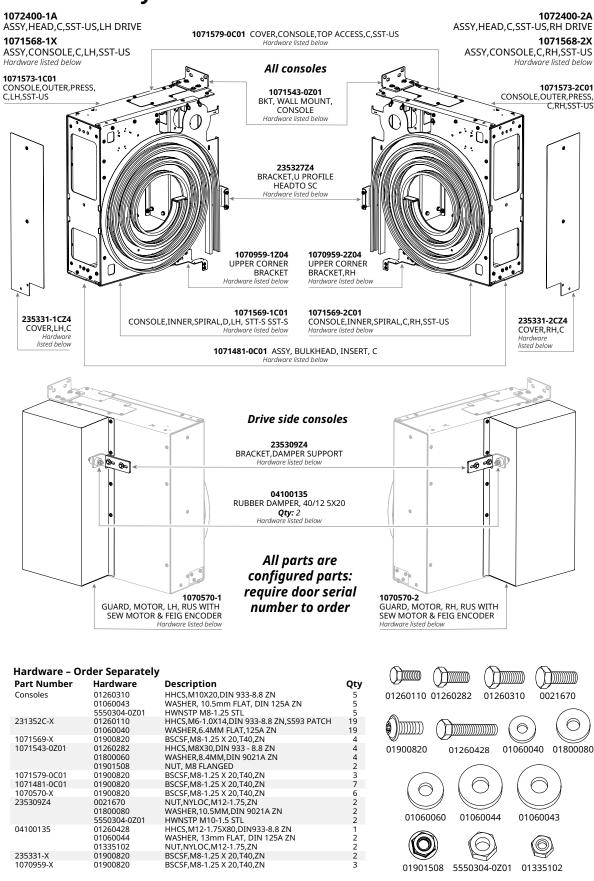
Hardware - Order Separately

Part Number	Hardware	Description	Qty
Consoles	01260310	HHCS,M10X20,DIN 933-8.8 ZN	5
	01060043	WASHER, 10.5mm FLAT, DIN 125A ZN	5
	5550304-0Z01	HWNSTP M8-1.25 STL	5
1071571-X	01900820	BSCSF,M8-1.25 X 20,T40,ZN	4
231352D-X	01900820	BSCSF,M8-1.25 X 20,T40,ZN	4
	01901508	NUT, M8 FLANGED	4
1071543-0Z01	01260282	HHCS,M8X30,DIN 933 - 8.8 ZN	4
	01800060	WASHER,8.4MM,DIN 9021A ZN	4
	01901508	NUT, M8 FLANGED	2
1071484-0D01	01900820	BSCSF,M8-1.25 X 20,T40,ZN	3
1071488-X	01900820	BSCSF,M8-1.25 X 20,T40,ZN	7
1071482-X	01900820	BSCSF,M8-1.25 X 20,T40,ZN	4
1071545-0D01	01900820	BSCSF,M8-1.25 X 20,T40,ZN	4
1071546-0Z01	01900820	BSCSF,M8-1.25 X 20,T40,ZN	4
	01901508	NUT, M8 FLANGED	4
1070959-X	01900820	BSCSF,M8-1.25 X 20,T40,ZN	3



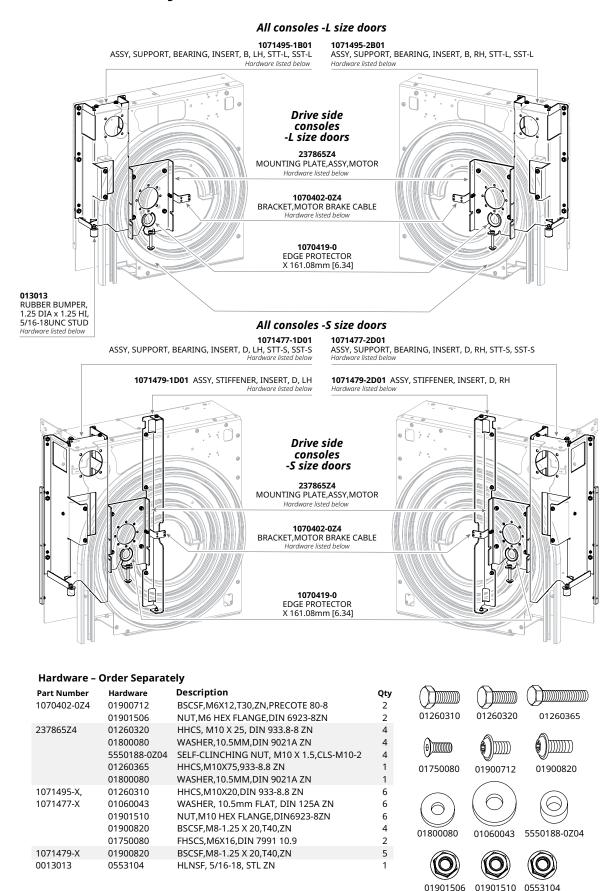


Head Assembly Consoles -US size doors



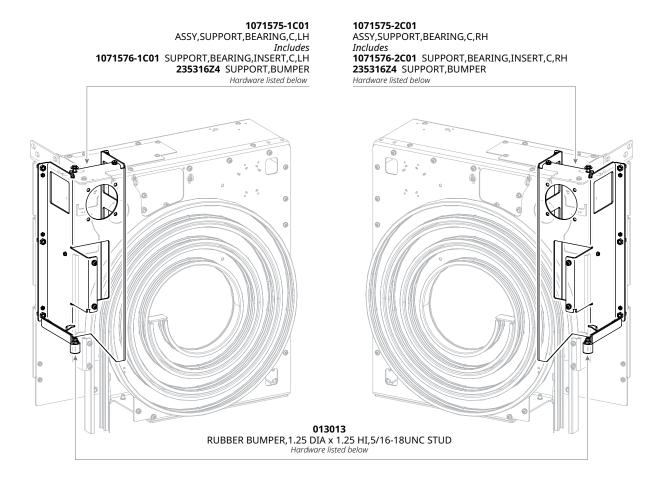


Head Assembly Console Brackets -L and -S size doors



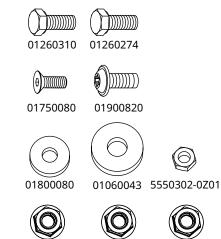


Head Assembly Console Brackets -US size doors



Hardware - Order Separately

Part Number	Hardware	Description	Qty
1071575-X	01260310	HHCS,M10X20,DIN 933-8.8 ZN	6
	01060043	WASHER, 10.5mm FLAT, DIN 125A ZN	6
	01901510	NUT,M10 HEX FLANGE,DIN6923-8ZN	6
	01900820	BSCSF,M8-1.25 X 20,T40,ZN	4
	01750080	FHSCS,M6X16,DIN 7991 10.9	2
	5550302-0Z01	HWNSTP M6-1.0 STL	2
235316Z4	01260274	HHCS,M8X20,DIN 933 - 8.8 ZN	1
	01901508	NUT, M8 FLANGED	1
0013013	0553104	HLNSF, 5/16-18, STL ZN	1



01901508

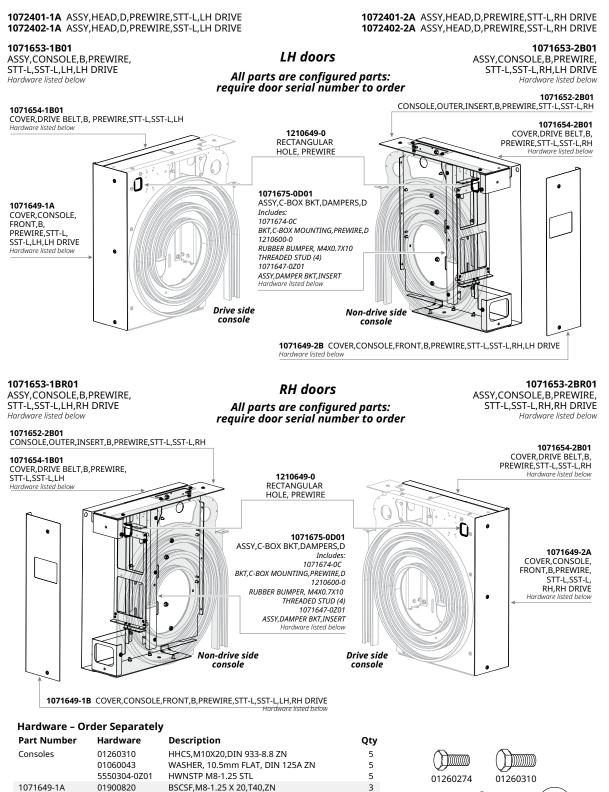


SPIRAL LH OWNER'S MANUAL = 1072467-0 = REV 01 = 04/22

01901510



PREWIRE Variations to Console Covers and Brackets -L size doors



2

2

2

1

6

4

12

12

01900820

01900705

BSCSF,M8-1.25 X 20,T40,ZN

BSCSF,M8-1.25 X 20,T40,ZN

BSCSF,M8-1.25 X 20,T40,ZN

HLNNI M4-0.7 GR8 ZN

HHCS.M8X20.DIN 933 - 8.8 ZN

WASHER,8.4MM,DIN 9021A ZN

BSCSF,M5X20,T25,ZN,PRECOTE 80-8

WF 0.25ID 0.75OD 0.06T NYL BLACK

01900820

01900820

01260274

01800060

01900820

01900705

5550057-0Z01

5550195-0700

1071649-2B

1071654-XB01

1071703-0D01

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01800060

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5550304-0Z01

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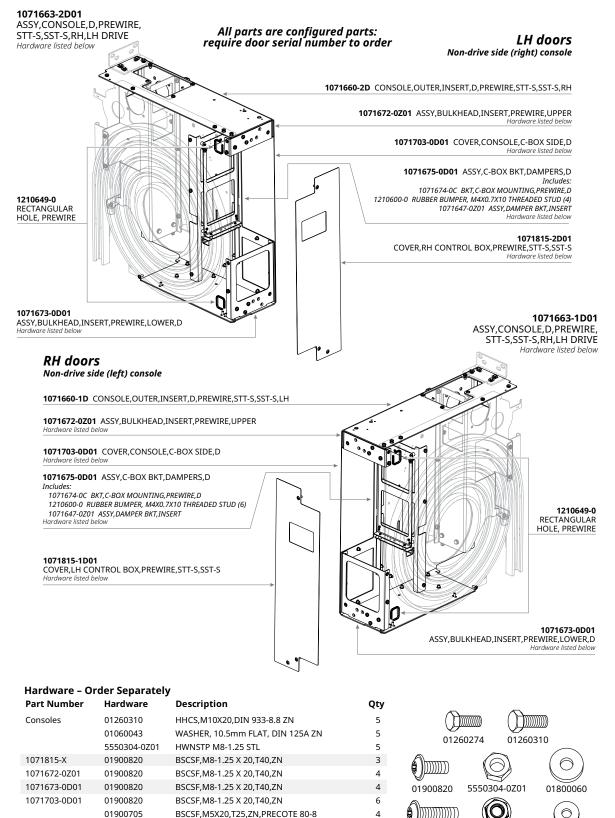
5550057-0701 5550195-0200



PREWIRE Variations to Console Covers and Brackets -S size doors

1072403-1A ASSY, HEAD, D, PREWIRE, STT-S, LH DRIVE 1072404-1A ASSY, HEAD, D, PREWIRE, SST-S, LH DRIVE

1072403-2A ASSY, HEAD, D, PREWIRE, STT-S, RH DRIVE 1072404-2A ASSY, HEAD, D, PREWIRE, SST-S, RH DRIVE



5550057-0Z01

5550195-0Z00

01900705

5550057-0Z01

5550195-0Z00

BSCSF, M5X20, T25, ZN, PRECOTE 80-8

WF 0.25ID 0.75OD 0.06T NYL BLACK

HLNNI M4-0.7 GR8 ZN

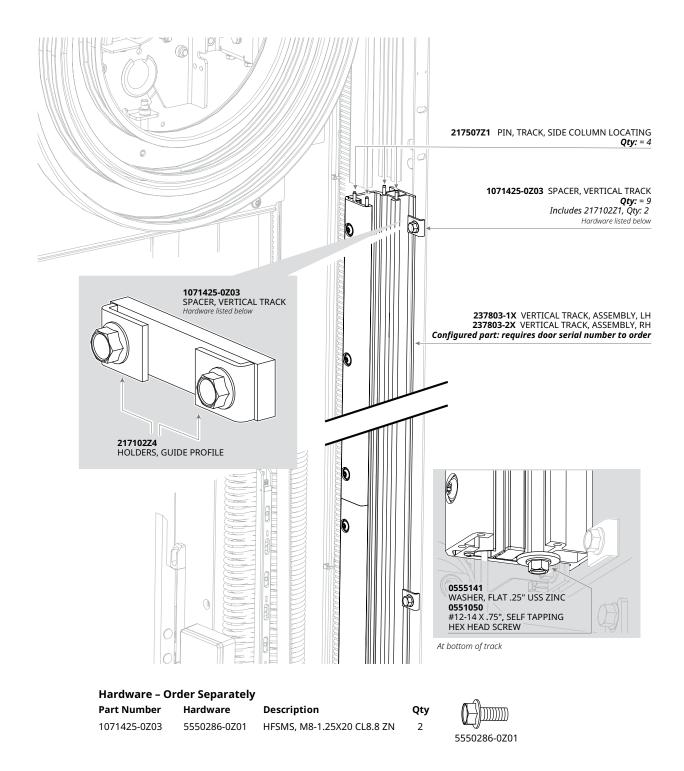
4

12

12

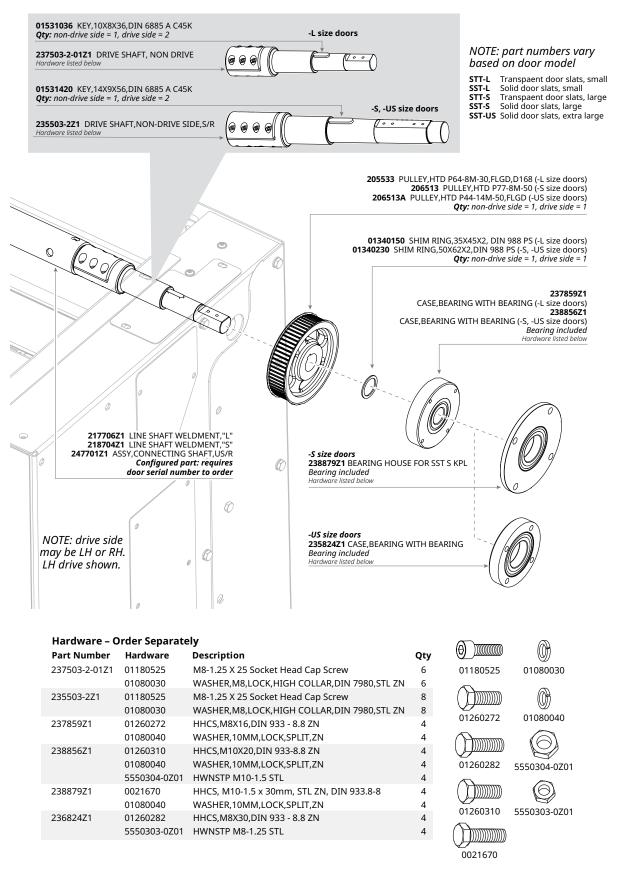
01900705

Vertical Tracks all doors





Drive Shaft, Non-Drive Side all doors



01260310

0021670

5550349-0A01

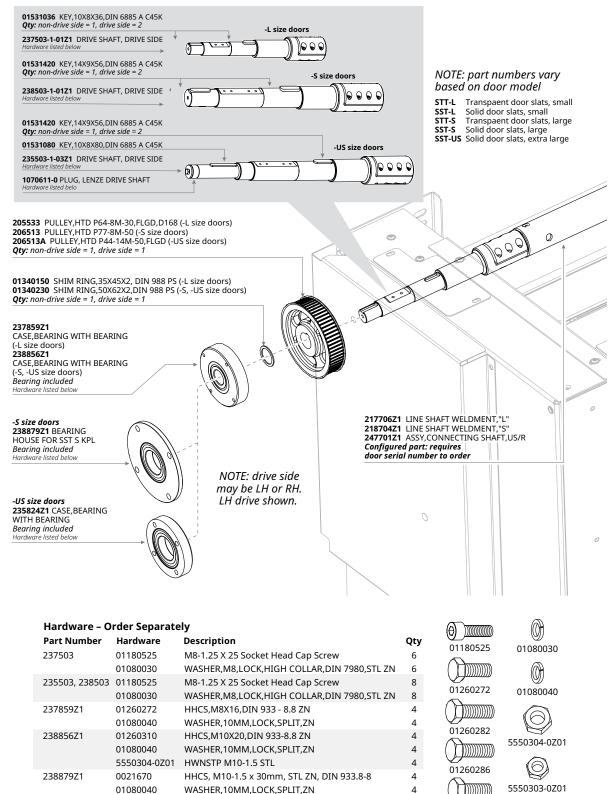
4

4

1

1

Drive Shaft, Drive Side all doors



01260282

01260286

5550303-0Z01

236824Z1

1070611-0

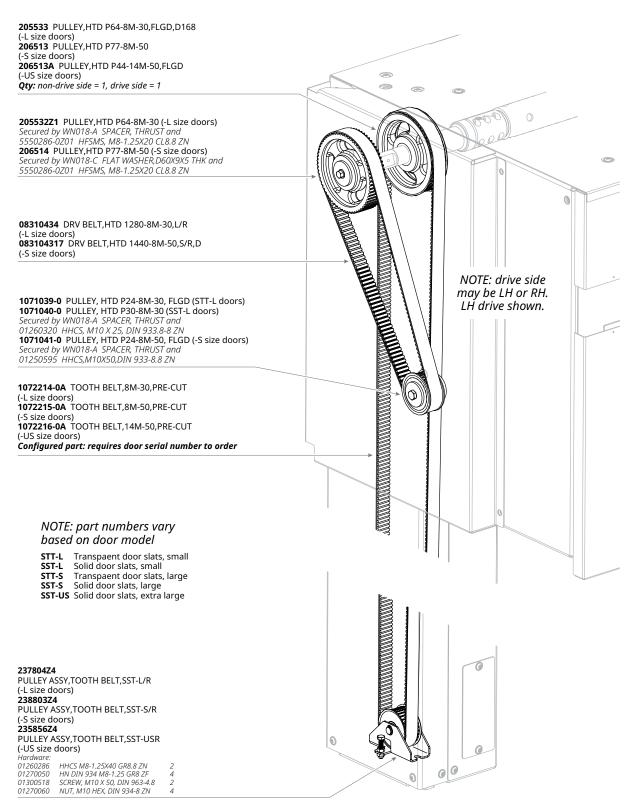
HHCS,M8X30,DIN 933 - 8.8 ZN

HHCS M8-1.25X40 GR8.8 ZN

HWNSTP M8-1.25 STL

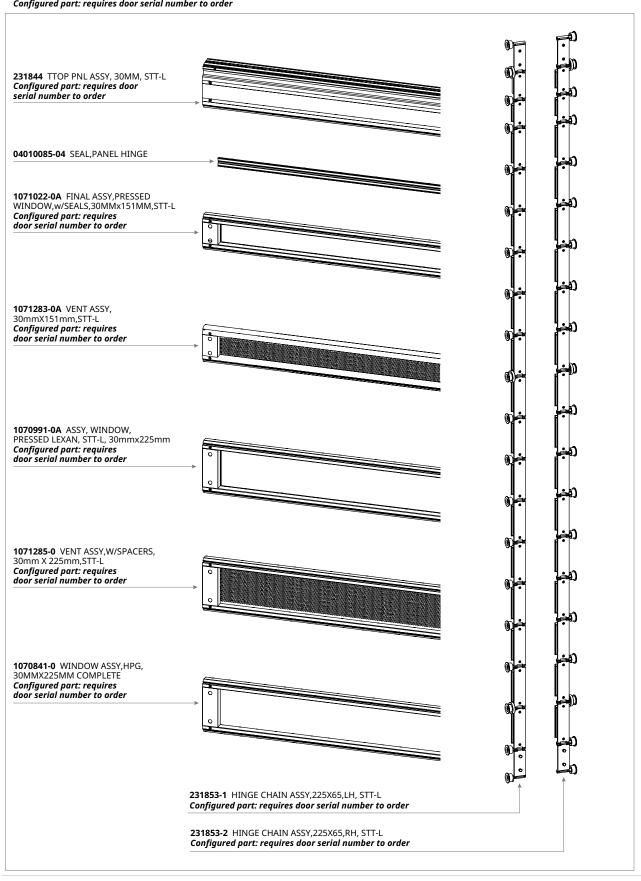
5550349-0A01 WASHER, THRUST, ø1.367

Drive Belt all doors



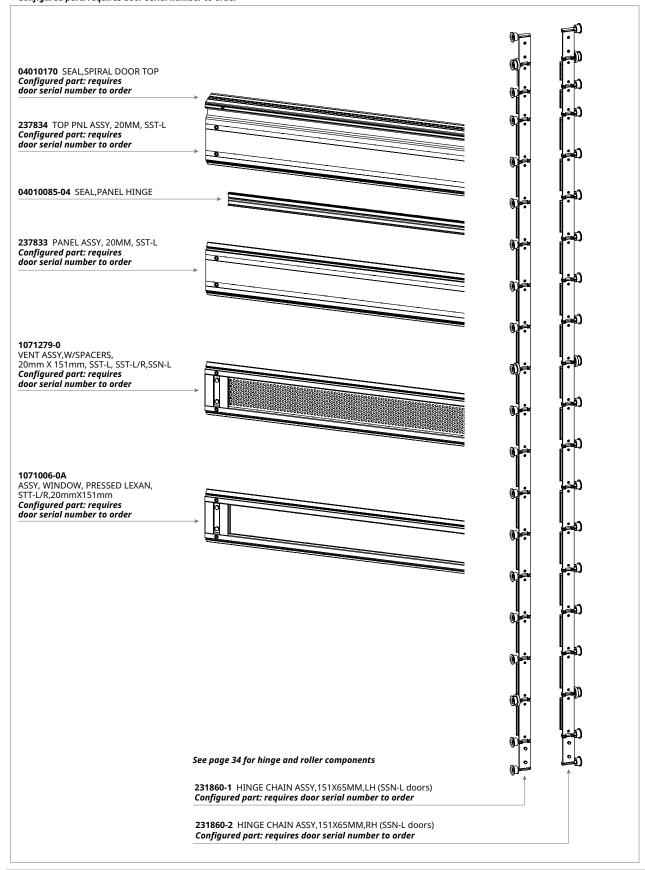
Door Panels -L size doors with Full Vision panels (1072406 STT-L)

231851 PANEL/HINGE ASSY,STT-L Configured part: requires door serial number to order



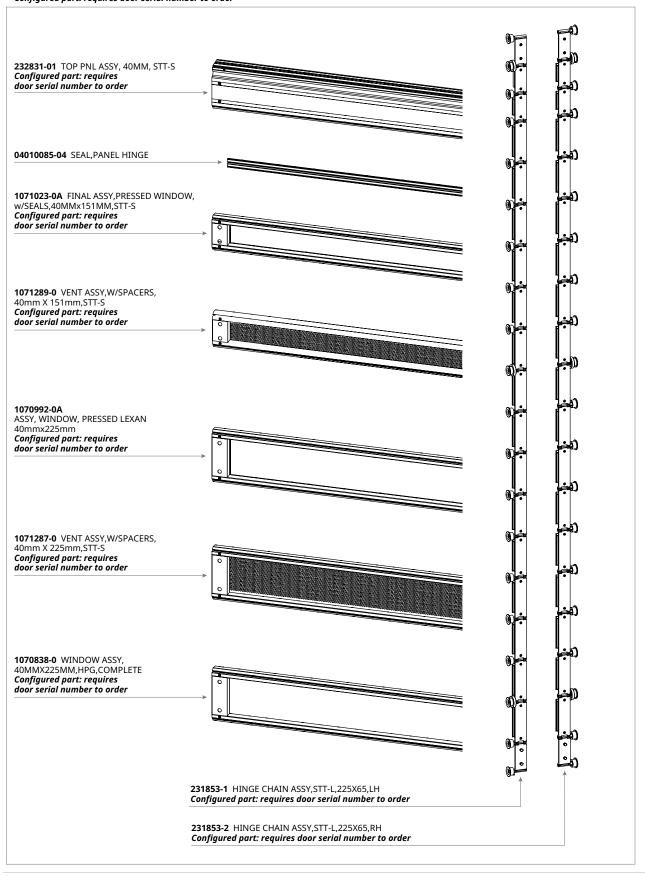
Door Panels - L size doors with solid panels (1072407 SST-L)

237830 PANEL/HINGE ASSY,SST-L Configured part: requires door serial number to order



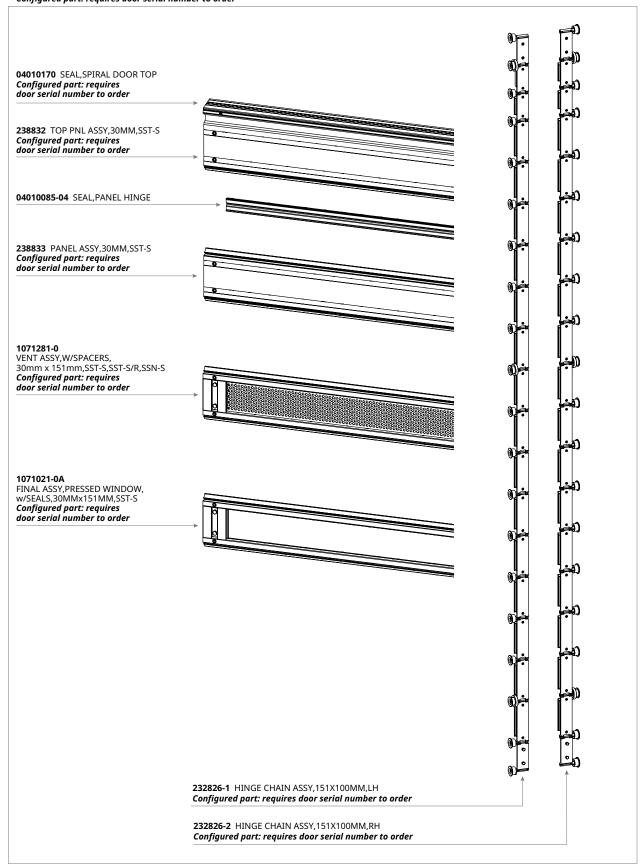
Door Panels -S size doors with Full Vision panels (1072408 STT-S)

232852-01 PANEL/HINGE ASSY,STT-S **Configured part: requires door serial number to order**



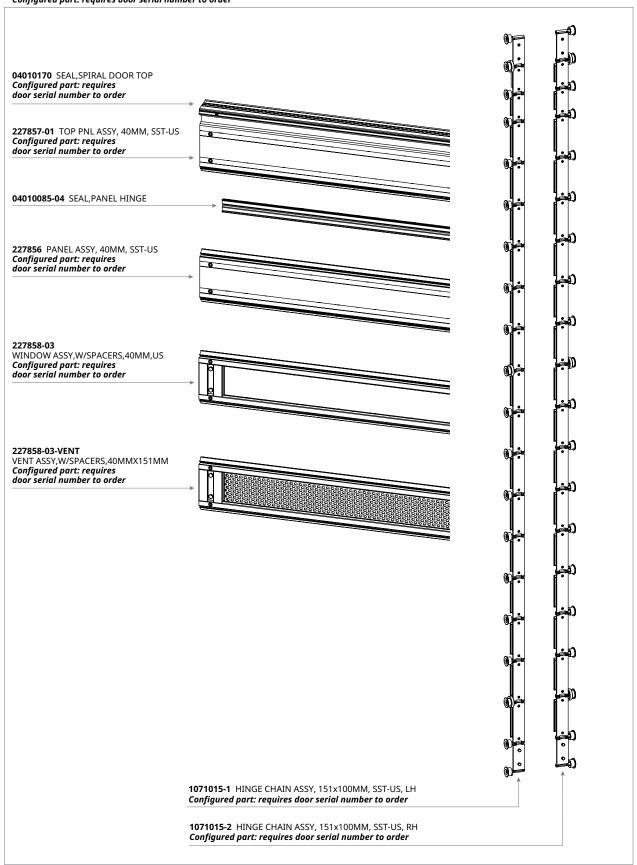
Door Panels -S size doors with solid panels (1072409 SST-S)

238830 PANEL/HINGE ASSY,SST-S **Configured part: requires door serial number to order**

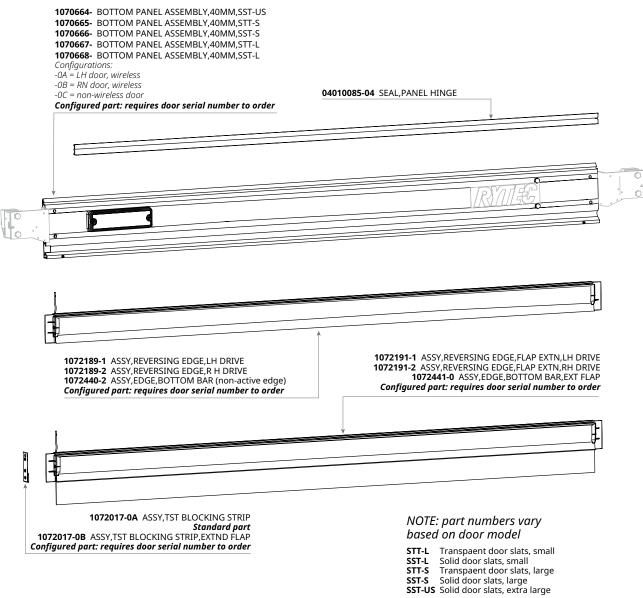


Door Panels -US size doors with solid panels (1072412 SST-US)

235806 PANEL/HINGE ASSY,SST-US Configured part: requires door serial number to order



Bottom Bar Assembly all doors

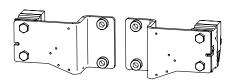




End brackets and splice blocks/clamps all doors

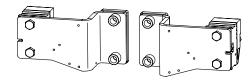
SST-L 237831-121 END BRKT ASSY,SST-L,LH Includes splice block and clamp 237831-2Z1 END BRKT ASSY,SST-L,RH Includes splice block and clamp Hardware listed below

STT-L 231831-1Z1 END BRKT ASSY,STT-L,LH Includes splice block and clamp 231831-2Z1 END BRKT ASSY,STT-L,RH Includes splice block and clamp Hardware listed below



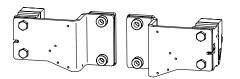
NOTE: part numbers vary based on door model

- STT-L Transpaent door slats, small
- STI-L Solid door slats, small STI-S Transpart door slats, large SSI-S Solid door slats, large
- SST-US Solid door slats, extra large



SST-S 238841-1Z1 END BRACKET ASSY,SST-S,LH Includes splice block and clamp

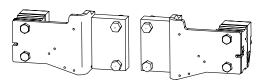
238841-221 END BRACKET ASSY,SST-S,FH Includes splice block and clamp Hardware listed below

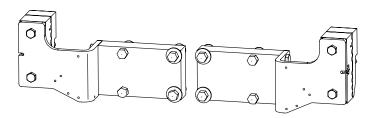


STT-S

1071000-1 ASSY, WELDED SPACER, END BRKT, STT-S, LH ASSY, WELDED SPACER, END BRKT, STT-S, RH Hardware listed below

SST-US		
235831-1Z1	END BRKT ASSY,SST-US,LH	
235831-2Z1	END BRKT ASSY,SST-US,RH	
Hardware listed	below	





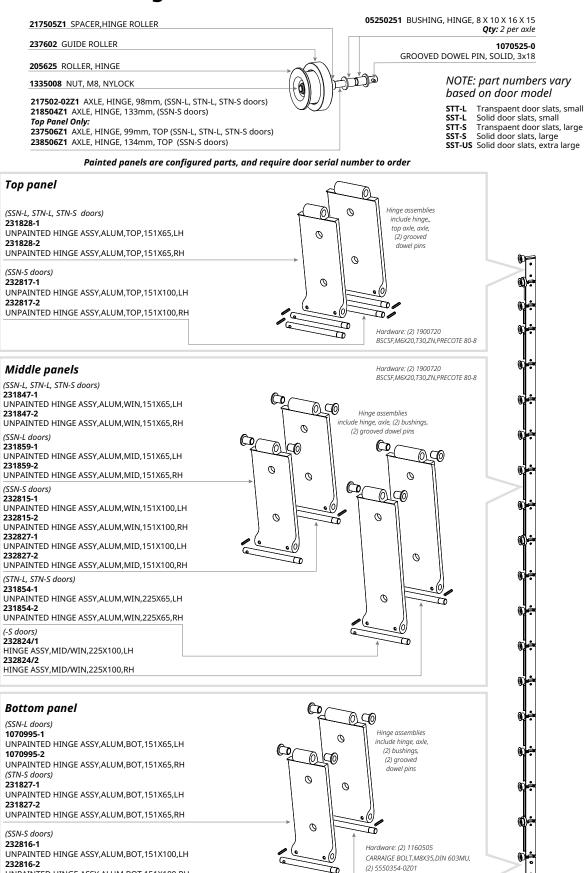
Hardware - Order Separately

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Part Number	Hardware	Description	Qty	מונומומווווול א מונומוווווול א
231831, 237831,	5550370-0Z01	NUT,M8-1.25,DIN 1587,ZN	2	
1071000	0116505	CARRAIGE BOLT,M8X35,DIN 603MU	2	01260320 01260282
238841	01260282	HHCS,M8X30,DIN 933 - 8.8 ZN	3	\land
	01230010	NUT,M10-1.5,HEX,CAP,DIN917,ZN	2	
	01160600	CARRIAGE BOLT, M10 X 40mm	2	01160606
235831	01260320	HHCS, M10 X 25, DIN 933.8-8 ZN	2	
	01800080	WASHER,10.5MM,DIN 9021A ZN	2	(f) (f)
	01230010	NUT,M10-1.5,HEX,CAP,DIN917,ZN	4	
	01160600	CARRIAGE BOLT, M10 X 40mm	4	01230010 5550370-0Z01
				\frown

01800080



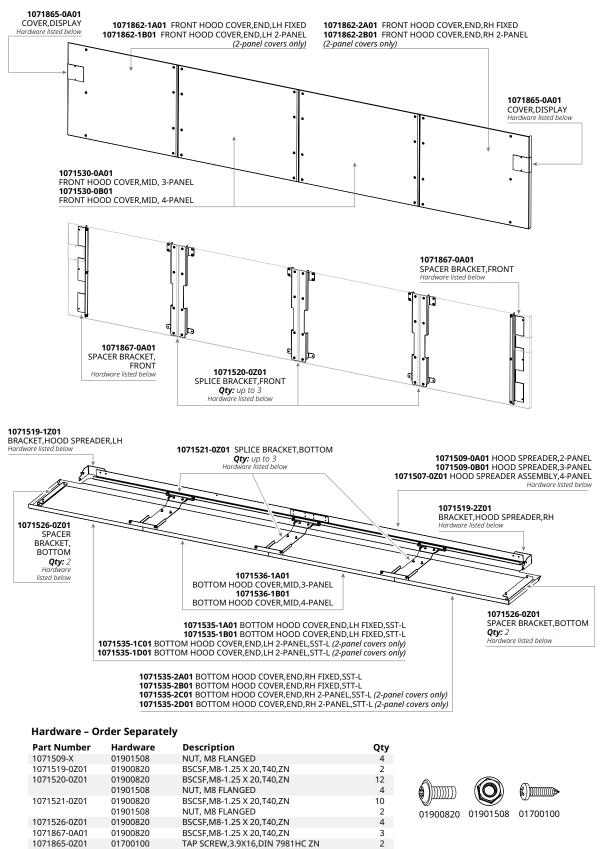
Door Panel Hinges all doors



NUT, M10-1.5, HEX, CAP, DIN 1587, ZN

UNPAINTED HINGE ASSY, ALUM, BOT, 151X100, RH

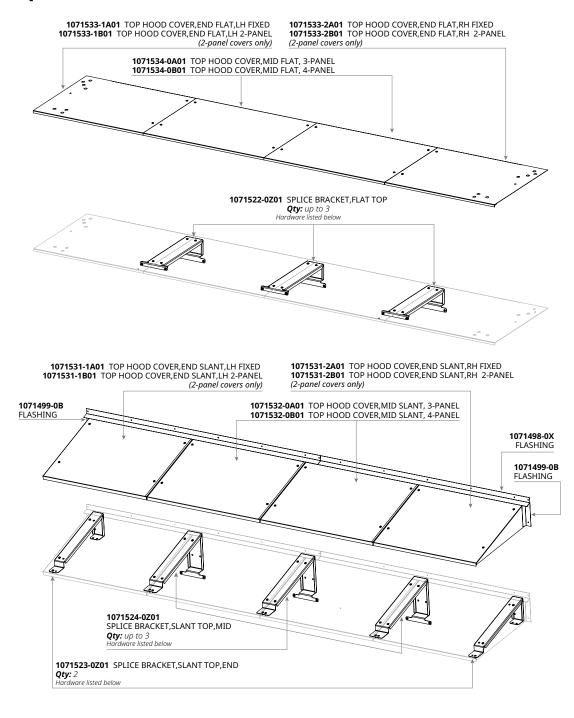
Front and Bottom Hood Covers -L size doors



All panels are configured parts: require door serial number to order



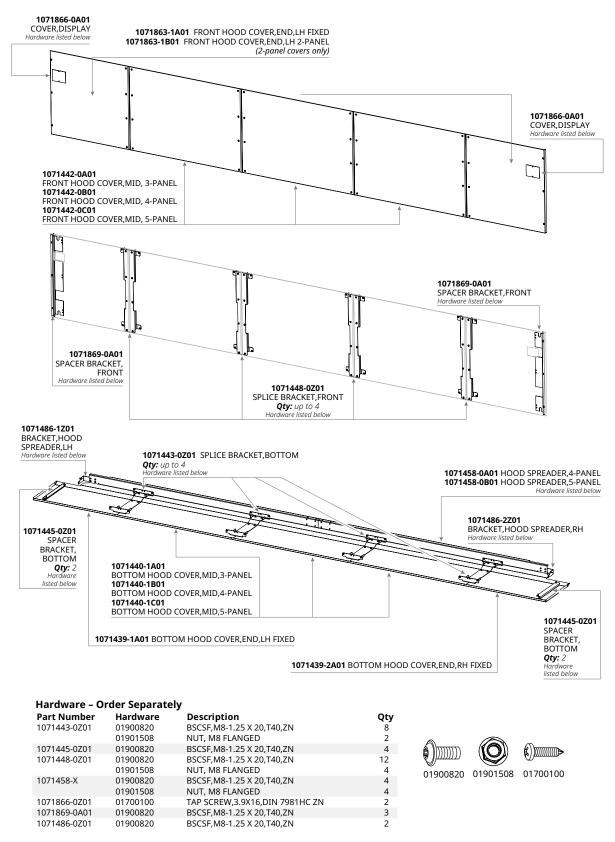
Top Hood Covers, Flat and Slanted -L size doors



Hardware – Order Separately					
Part Number	Hardware	Description	Qty	_	
1071522-0Z01	01900820	BSCSF,M8-1.25 X 20,T40,ZN	8		
1071523-0Z01	01900820	BSCSF,M8-1.25 X 20,T40,ZN	8		
1071524-0Z01	01900820	BSCSF,M8-1.25 X 20,T40,ZN	8		
	01901508	NUT, M8 FLANGED	2	01900820 01901508	

All panels and flashing are configured parts: require door serial number to order

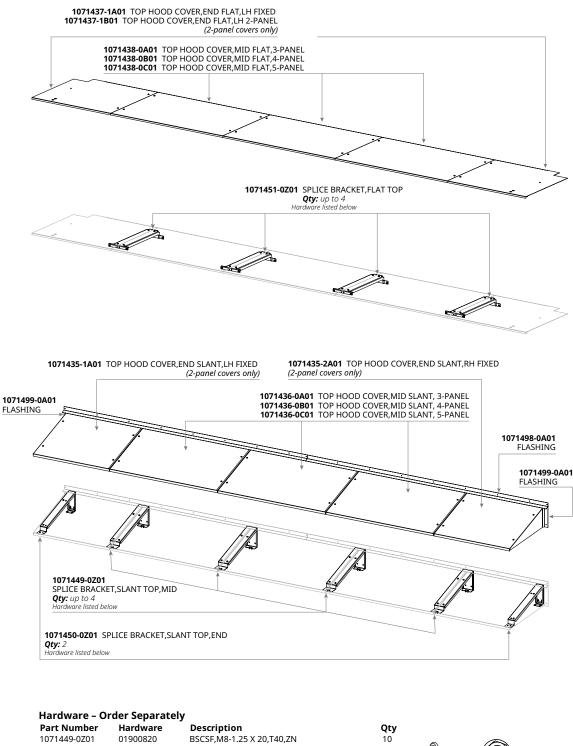
Front and Bottom Hood Covers -S size doors



All panels and flashing are configured parts: require door serial number to order



Top Hood Covers, Flat and Slanted -S size doors



 1071449-0Z01
 01900820 01901508
 BSCSF,M8-1.25 X 20,T40,ZN
 10 4

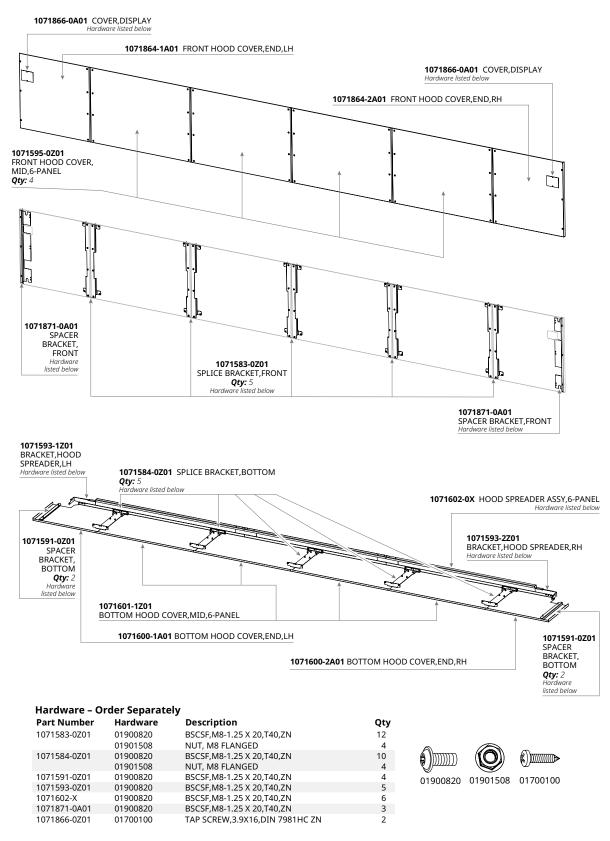
 1071450-0Z01
 01900820
 BSCSF,M8-1.25 X 20,T40,ZN
 8

 1071451-0Z01
 01900820
 BSCSF,M8-1.25 X 20,T40,ZN
 8

 10901508
 NUT, M8 FLANGED
 4
 01900820
 01901508

All panels and flashing are configured parts: require door serial number to order

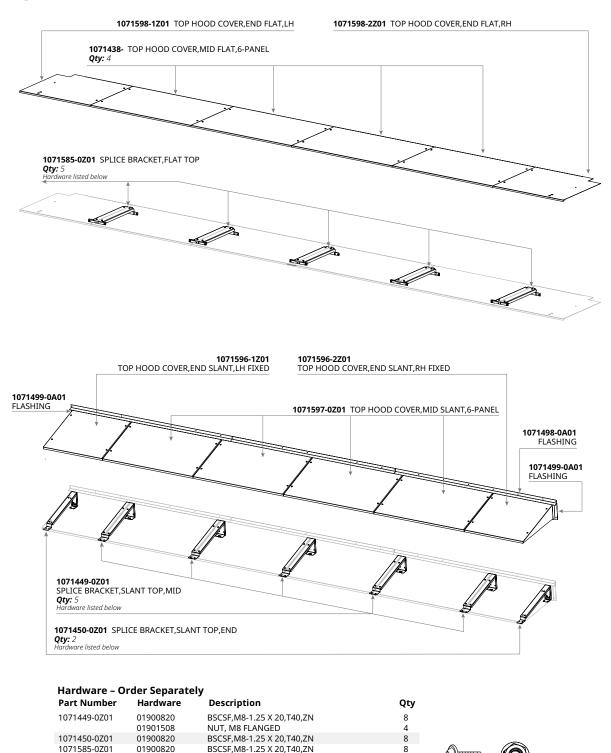
Front and Bottom Hood Covers -US size doors



All panels and flashing are configured parts: require door serial number to order



Top Hood Covers, Flat and Slanted -US size doors



All panels and flashing are configured parts: require door serial number to order

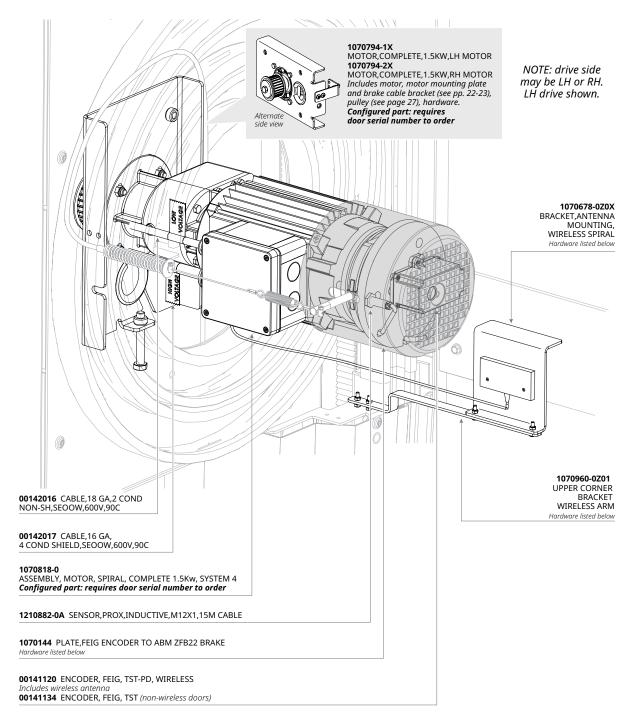
NUT, M8 FLANGED

01901508

01900820 01901508

4

Motor and Encoder -L and -S size doors



Hardware – Order Separately				
Part Number	Hardware	Description	Qty	
1070144	01750080	FHSCS,M6X16,DIN 7991 10.9	3	
1070960-0Z01	5550246-0Z01	HHCS M4-0.7X16 GR5 ZN	4	
	5550057-0Z01	NUT, M4-0.7, HEX HEAD,ZINC,NYLOCK	4	
1070678-0Z0X	5550264-0	RATCHET FASTENER,.16 X .0425,BLK NYLON	2	

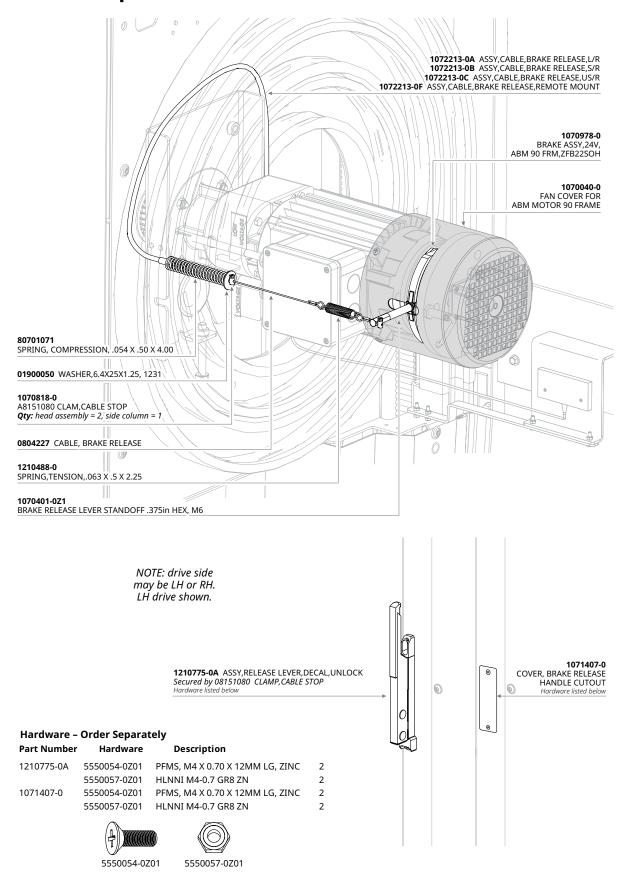






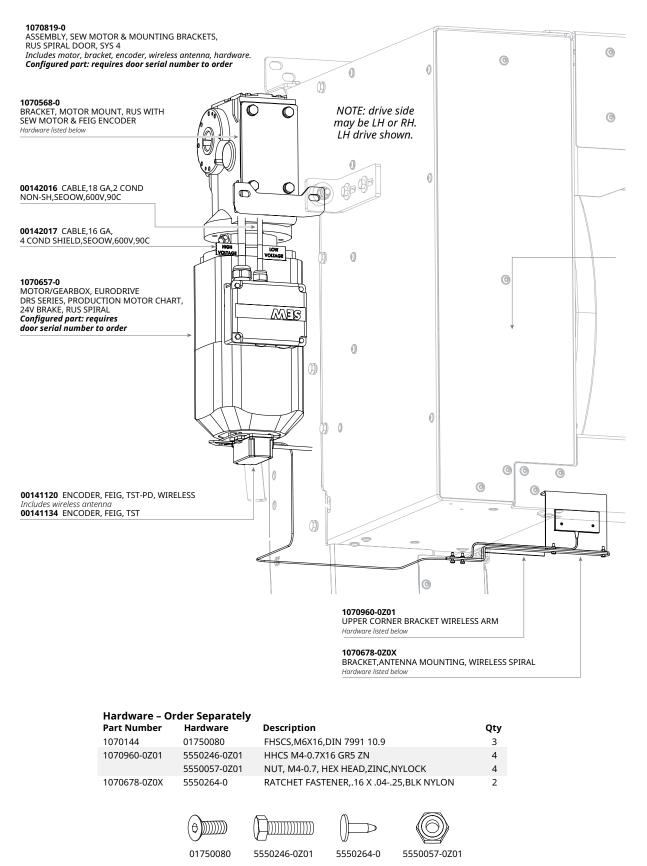
5550246-0Z01 5550264-0

Brake Components -L and -S size doors



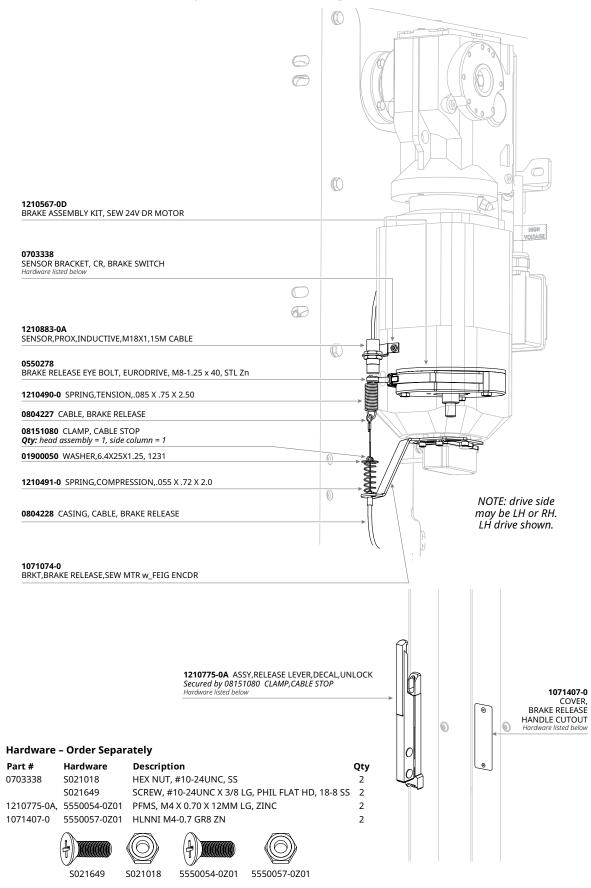


Motor and Encoder -US size doors

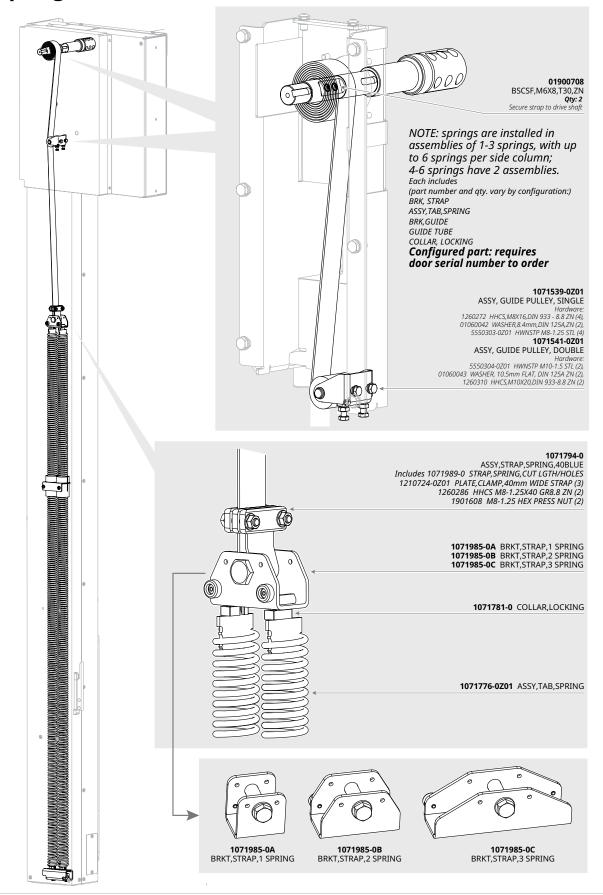




Brake and Proximity Sensor Components -US size doors

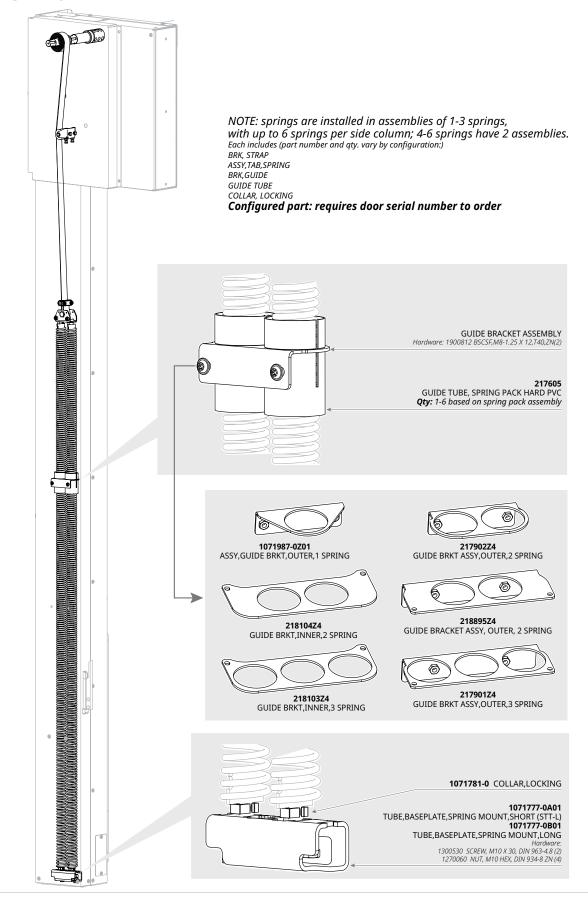


Spring Assemblies - Part 1 all doors

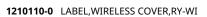


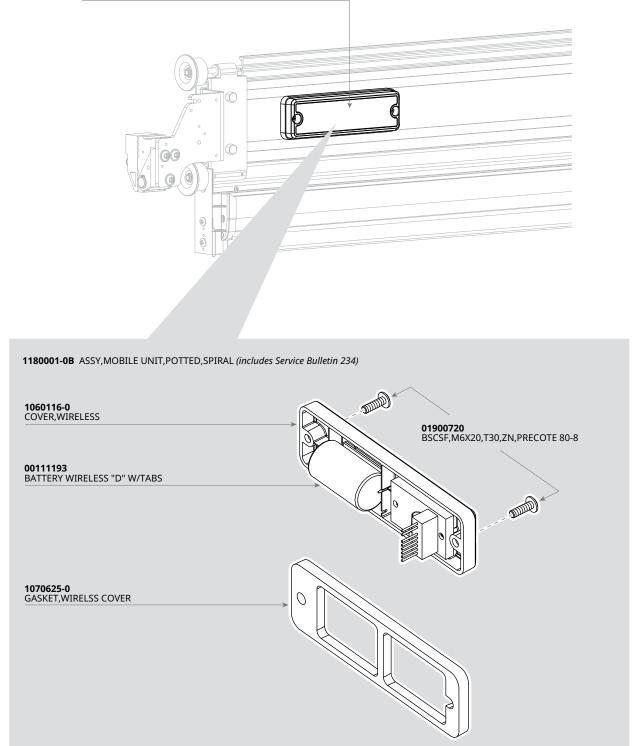


Spring Assemblies - Part 2 all doors



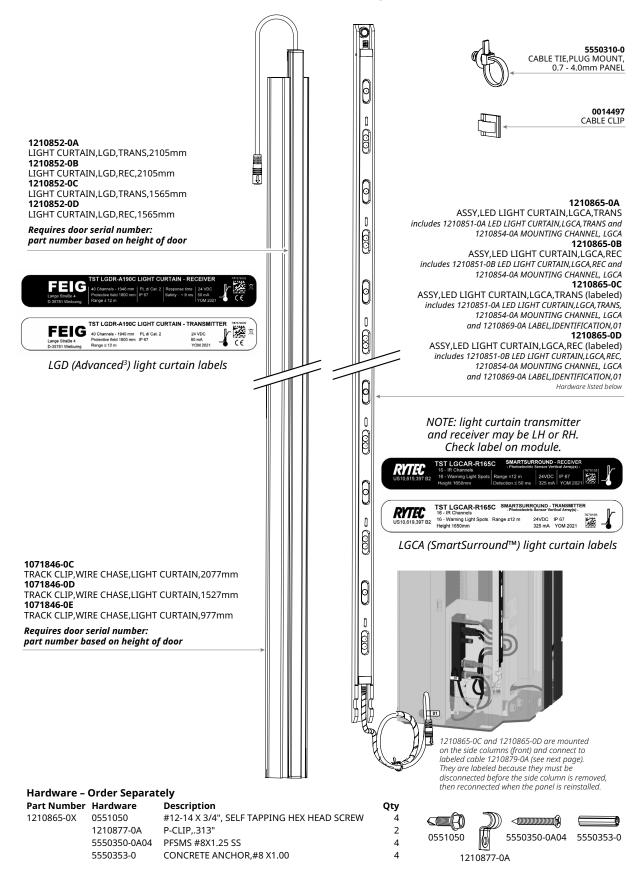
Remote Mobile Unit all doors





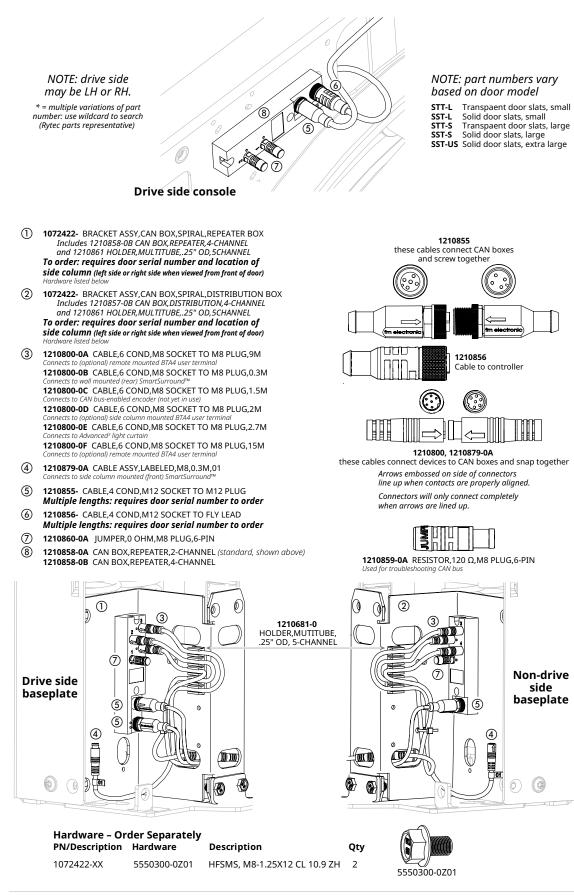


SmartSurround[™] and Advanced³ Light Curtains all doors

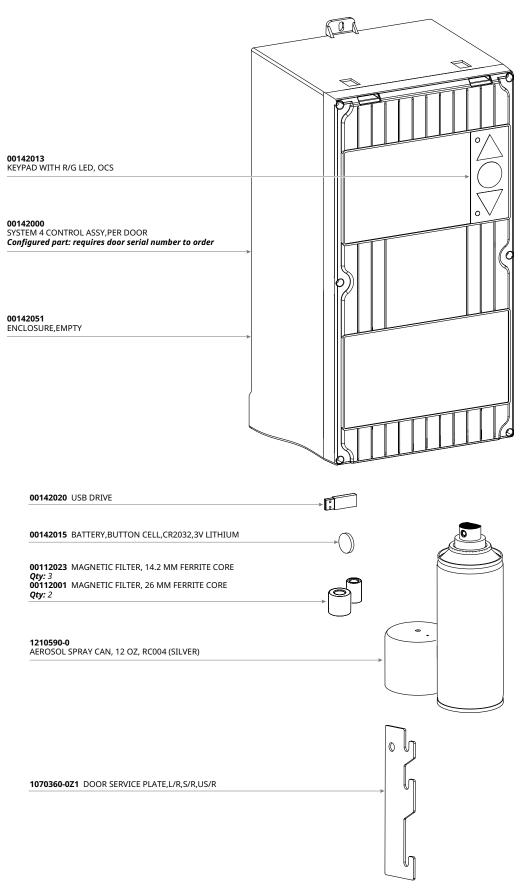




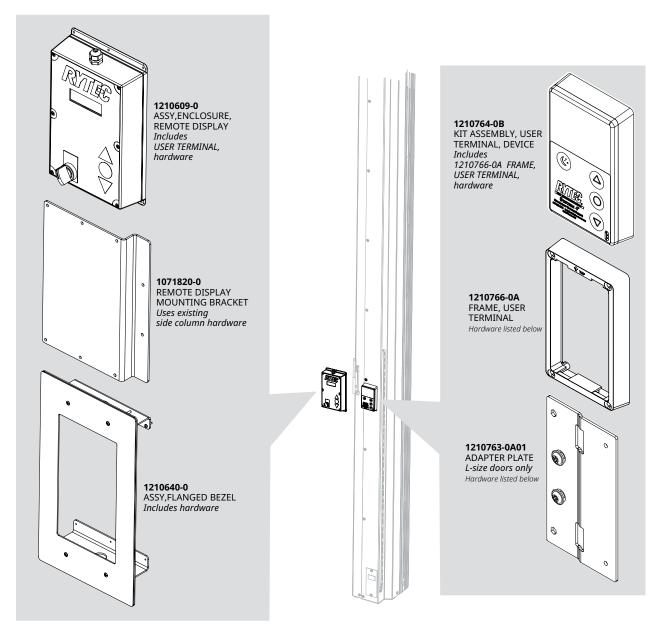
CAN Cables, Connectors and Components all doors



System 4[®] Controller and Accessories all doors



User Terminals all doors



Hardware – Order Separately

Part Number	Hardware	Description	Qty
1210763-0401	01900820	BSCSF,M8-1.25 X 20,T40,ZN	2
1210766-0A	5550351-0A01 5550057-0Z01	PFMS M4-0.7x30 STL ZN NUT, M4-0.7, HEX HEAD, LOCKING, NYLON INSERT, ZINC	4 4





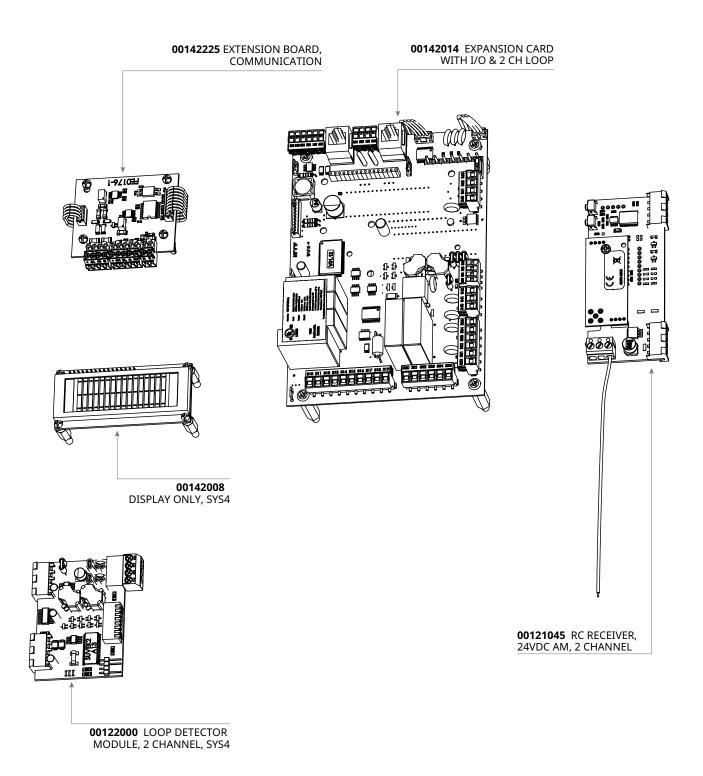


01900820 555035

5550351-0A01 5550057-0Z01



Expansion Boards all doors







SPIRAL® AND SPIRAL® PREWIRE LIMITED WARRANTY

Rytec Corporation ("Seller"), an Illinois corporation with its principal place of business at One Cedar Parkway, PO Box 403, Jackson, WI 53037, warrants to the original registered end-user commercial purchaser ("Buyer") that the **Spiral® Door Series** ("Product") sold to the Buyer will be free of defects in materials and workmanship (ordinary wear and tear excepted) for the time periods set forth below:

- Mechanical components for a period of Five (5) Years from the date of shipment of the Product from the Seller's plant ("Shipment"). Note: Motor assembly is a mechanical component.
- Electrical components for a period of Two (2) Years from Shipment.
- Standard door panel assemblies, including panel slats, hinge rollers, and hinges for a period of Two (2) Years from Shipment.
- Drive pulleys, side column brush/vinyl seals, spring straps, lower tooth pulley assembly, drive & timing belts, wireless mobile unit battery, are considered wear items and are not covered under this Limited Warranty.
- Aftermarket parts, accessories and assemblies for a period of ninety (90) days from the date of Shipment.
- Remedies Seller's obligation under this Limited Warranty is limited to repairing or replacing, at Seller's option, any part which is determined by Seller to be defective during the applicable warranty period. Such repair or replacement shall be the Seller's sole obligation and the Buyer's exclusive remedy under this Limited Warranty. Labor Except in the case of aftermarket parts, accessories and assemblies, labor is warranted for one year. This means that Seller will provide warranty service without charge for labor in the first year of the warranty period. Thereafter, a charge will apply in to any repair or replacement under this Limited Warranty. In the case of aftermarket parts, accessories and assemblies, Seller will provide replacement parts only. Claims Claims under this Limited Warranty must be made (i) within 30 (thirty) days after discovery and (ii) prior to expiration of the applicable warranty period. Claims shall be made in writing delivered to the Seller at the address provided in the first paragraph of this warranty. Buyer must allow Seller and Dealer, or their agents, a reasonable opportunity to inspect any Product claimed to be defective and shall, at Seller's option, either (x) grant Seller and Dealer or their agents access to Buyer's premises for the purpose of repairing or replacing the Product or (y) return of the Product to the Seller, f.o.b. Seller's factory. **Original Buyer** This Limited Warranty is made to the original Buyer of the Product and is not assignable or transferable. This Limited Warranty shall not be altered or amended except in a written instrument signed by Buyer and Seller. Not Warranted Seller does not warrant against and is not responsible for, and no implied warranty shall be deemed to cover, damages that result directly or indirectly from: (i) the unauthorized modification or repair of the Product, (ii) damage due to misuse, neglect, accident, failure to provide necessary maintenance, or normal wear and tear of the Product, (iii) failure to follow Seller's instructions for installation, operation or maintenance of the Product, (iv) use of the Product in a manner that is inconsistent with Seller's guidelines or local building codes, (v) movement, settling, distortion, or collapse of the ground, or of improvements to which the Products are affixed, (vi) fire, flood, earthquake, elements of nature or acts of God, riots, civil disorder, war, or any other cause beyond the reasonable control of Seller, (vii) improper handling, storage, abuse, or neglect of the Product by Buyer or by any third party. DISCLAIMERS THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER REPRESENTATIONS AND WARRANTIES, EXPRESS OR IMPLIED. AND THE SELLER EXPRESSLY DISCLAIMS AND EXCLUDES ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR PURPOSE. SELLER SHALL NOT BE SUBJECT TO ANY OTHER OBLIGATIONS OR LIABILITIES, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORIES OF LAW, WITH RESPECT TO THE PRODUCTS SOLD OR SERVICES RENDERED BY THE SELLER, OR ANY UNDERTAKINGS, ACTS, OR OMISSIONS RELATING THERETO.
- LIMITATION OF LIABILITY IN NO EVENT WILL SELLER BE RESPONSIBLE FOR, OR LIABLE TO ANYONE FOR, SPECIAL, INDIRECT, COLLATERAL, PUNITIVE, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, EVEN IF SELLER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Such excluded damages include, but are not limited to, personal injury, damage to property, loss of goodwill, loss of profits, loss of use, cost of cover with any substitute product, interruption of business, or other similar indirect financial loss.
- Product DescriptionsAny description of the Products, whether in writing or made orally by the Seller or the Seller's agents, including
specifications, samples, models, bulletins, drawings, diagrams, engineering or similar materials used in connection
with the Buyer's order, are for the sole purpose of identifying the Product and shall not be construed as an express
warranty. Any suggestions by the Seller or the Seller's agents regarding the use, application, or suitability of the
Product shall not be construed as an express warranty unless confirmed to be such in writing by the Seller.
- **Limited Warranty Void** This Limited Warranty shall be void in its entirety if:
 - (a) The Product is modified in a manner not approved in writing by Seller; or
 - (b) Buyer fails to maintain the Product in accordance with instructions contained in the Owner's Manual for the Product. © Rytec Corporation 2022

RYTEC

Owner's Manual Spiral[®] and Spiral[®] Prewire Doors





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