

Service Bulletin 316

Spring Package Retrofit

Technical Support 800-628-1909 (toll-free) helpdesk@rytecddoors.com

Summary	This bulletin covers the retrofit of spring packages on Spiral doors. The new spring packages use tab connections and replace the plug connections previously used.			
Products Affected	Spiral			
Keywords	spiral, spring, retrofit			
Tools and Equipment Required	Standard toolkit (imperial and metric), ladders or scissor lifts, clamps, appropriate PPE.			
Parts and Materials Required	K1072697-0X KIT, SPRING PACK RETRO			
Related Media	N/A			
	Issue Date	April 2025	Status	Active



WARNING

Read and understand the entire service bulletin before proceeding.

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

Overview

This bulletin covers the retrofit of spring packages on Spiral doors.

Kit Contents

- K1071780-0x01 ASSY,SPRING PACK,TAB STYLE**
 The exact part number, description, and quantity of spring packages included in the kit is dependent on the door configuration.
- H1071777-0x01 TUBE,BASEPLATE,SPRING MOUNT**
 The exact part number, description, and quantity of spring mount baseplates included in the kit is dependent on the door configuration.
- K1071794-0 ASSY,STRAP,STRING,40BLUE**
 The exact quantity of spring strap assemblies included in the kit is dependent on the door configuration. Each assembly includes a new spring strap clamp.

PROCEDURE

Safety Information And the Meaning Of Signal Words

Technical content produced by Rytec includes safety information which must be read, understood, and followed 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.

Each safety alert includes at least three components. The safety alert symbol may be general alert symbol or an alert symbol specific to the hazard. The safety signal word indicates the likelihood and potential severity of injury due to the hazard. The safety information contains information about the hazard and how to safely mitigate it.

The following severities may exist for working with this kit:

	DANGER Danger indicates a hazardous situation which, if not avoided, will cause death or serious injury.
	WARNING Warning indicates a hazardous situation which, if not avoided, can cause death or serious injury.
	CAUTION Caution indicates a hazardous situation which, if not avoided, can cause 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.

Raise Door for Spring Retrofit

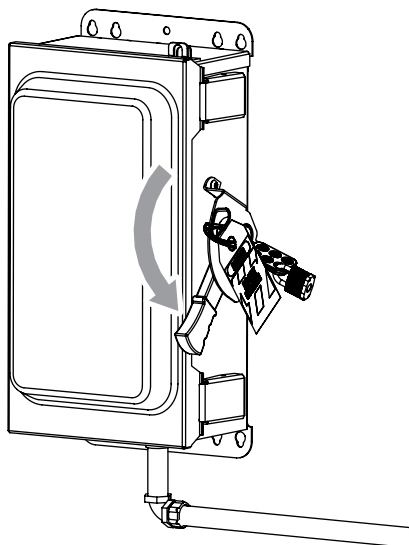
Before replacing the springs, they must be unloaded of tension by raising the door.

- 1 Place the door into **jog mode** by holding the RESET and CLOSE keys simultaneously.
- 2 **Raise** the door panel as far as possible by holding the OPEN key.

Disconnect Power and Perform Lockout/Tagout

To prevent unexpected movement and exposure to hazardous voltages, disconnect the door from power and perform a lockout/tagout when instructed.

- 1 With the door panel in the fully up position, **locate the disconnect switch**. The disconnect switch may be a fused disconnect located near the System 4® controller or located on the controller itself.
- 2 **Set the disconnect switch** to the **OFF** position.



- 3 **Perform a lockout/tagout** on the disconnect switch.



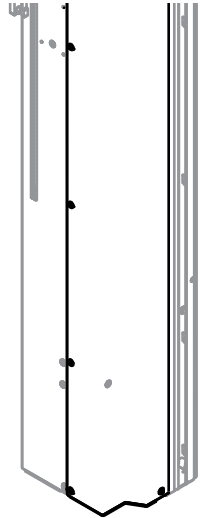
Lockout
Tagout

	CAUTION
	Inform all users of the door when the door is out of service and when it is put back into service.

Secure Door for Spring Retrofit

- 1 **Remove the side column covers** to access the springs.

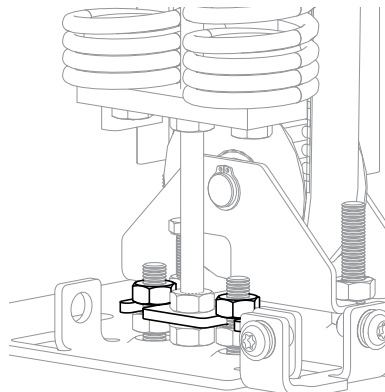
	CAUTION
	All springs must be replaced at the same time. Failure to do so will lead to reduced door performance and damage.



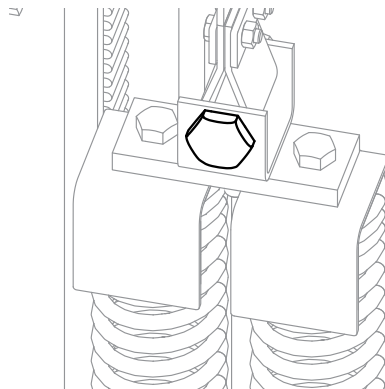
- 2 **Secure clamps** beneath the bottom roller to keep the panel from rolling down.

Remove Existing Springs

- 1 **Loosen the 2 bolts** holding the spring baseplate at the bottom of the spring assembly to the side column baseplate. Slide the spring baseplate free from the side column baseplate.

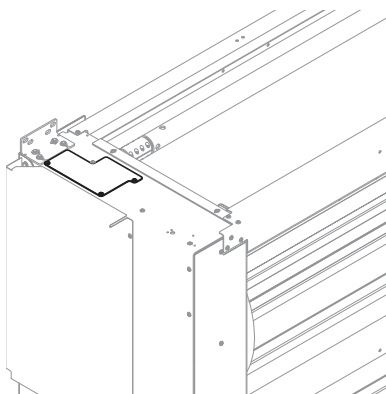


- 2 **Remove the large bolt** holding the spring header to the spring strap at the top of the spring assembly. Discard the spring assembly.



Remove Existing Spring Straps

- 1 **Remove the top cover** from the side column to access the existing spring strap.



NOTICE

Older models of Spiral doors may not have the removable top cover. In this case, the spring straps must be accessed by the front or side covers. The procedure remains the same.

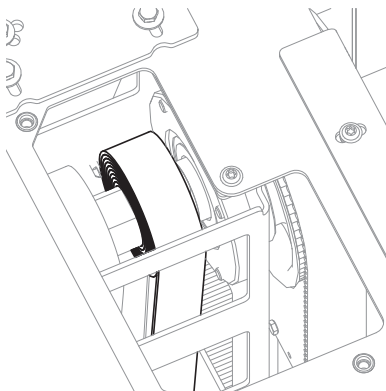
- 2 **Unwrap the spring strap** from the drive shaft. If there are multiple spring straps, unroll them all together.



CAUTION

Count the number of times the spring strap is wrapped around the drive shaft while removing the strap.

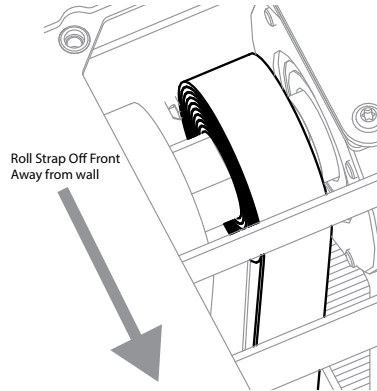
The new strap must be installed with the **same number of wraps**. Failure to do so will lead to reduced door performance and damage.



- 3 **Release the spring strap** from the drive shaft by removing the 2 bolts. Save the bolts to later install the new spring straps.

Install New Spring Straps

- 1 **Secure the new spring strap** to the drive shaft using the 2 bolts previously removed.
- 2 **Wrap the spring strap** around the drive shaft. If there are multiple spring straps, roll them all together. The strap should exit the roll off the front (away from the wall) of the drive shaft.

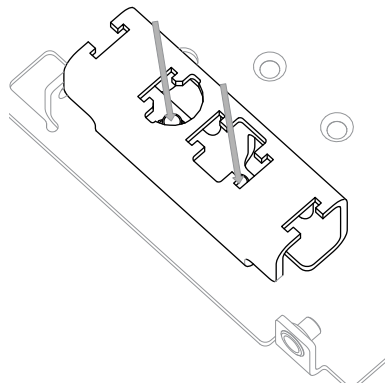


	CAUTION
	The new strap must be installed with the same number of wraps as the removed strap. Failure to do so will lead to reduced door performance and damage. If you are unsure of the number of wraps, contact Rytec Technical Support.

The remainder of the strap length routes down the side column.

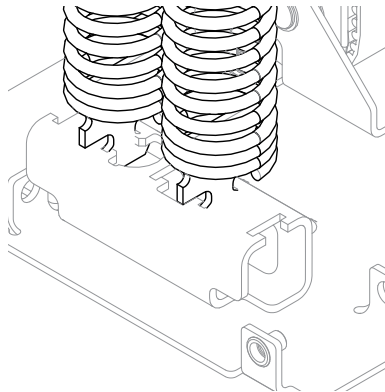
Install New Springs

- 1 **Install the replacement spring baseplate** to the side column baseplate.

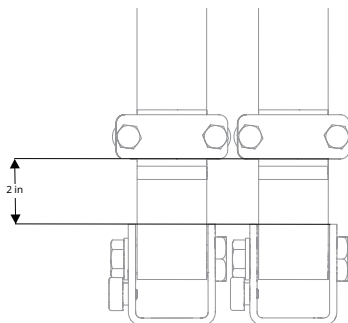


- 2 **Slide the springs** through the cylindrical guide brackets in the side column.

- 3 **Slide the bottom tabs of the springs** into the spring baseplate. Slide the tab into the wide stop, move through the narrow, and pull up to secure the spring.



- 4 **Loop the strap** through the spring header and hand-tighten the first two strap clamps. The strap clamp should be located 2" above the top of the spring header.

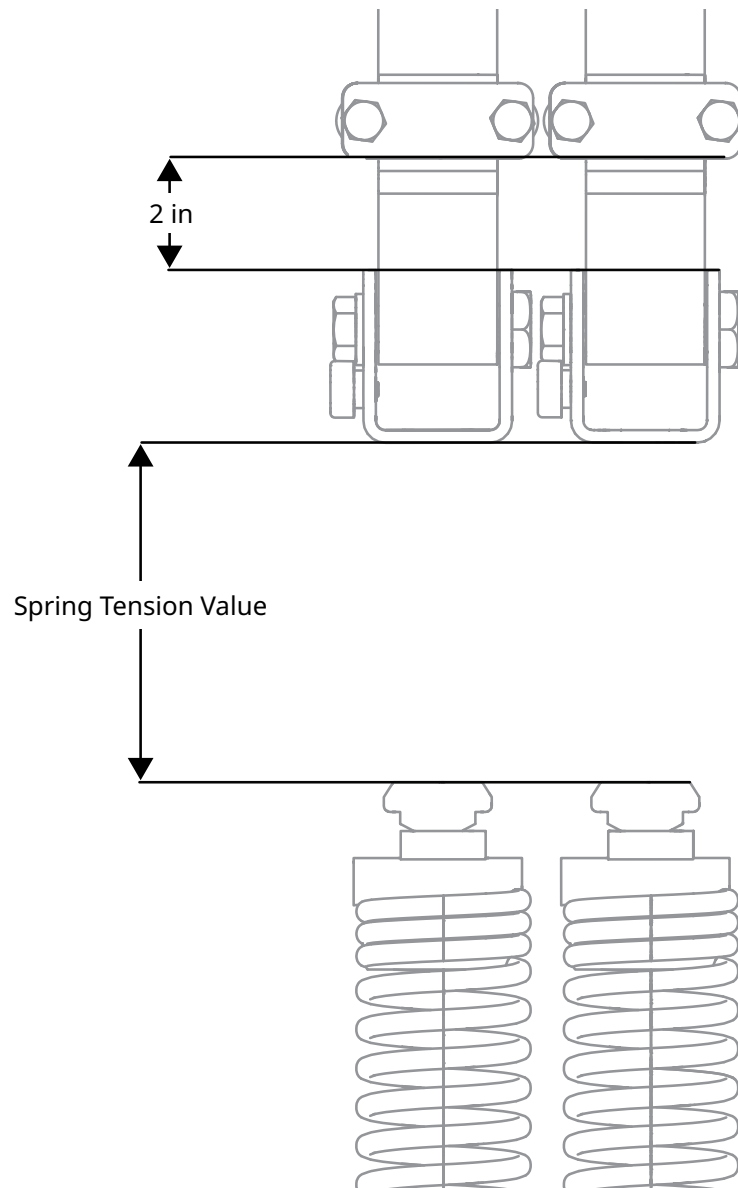


- 5 **Locate the spring tension for the door;** it is located on the object list that initially shipped with the door. If that information is not available, call Rytec Technical Support at 800-628-1909.

Place the spring header with the bumpers facing the side wall. Draw the springs straight up with minimal tension. Position the spring header so that the distance between the top tab of the spring and the bottom of the spring header equals the spring tension.

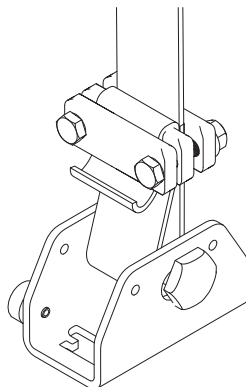
6 **Use the strap clamp to adjust the strap:**

- The spring header is located at the proper tension position as determined above.
- The strap is tight.
- The strap clamp is 2" above the top of the spring header.



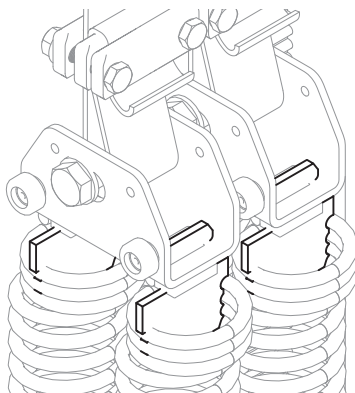
- 7 **Remove the nuts** from the strap clamp, **fold the remaining strap** into place, and **secure the strap** with the third strap clamp.

Tighten the nuts and **trim excess** strap length.

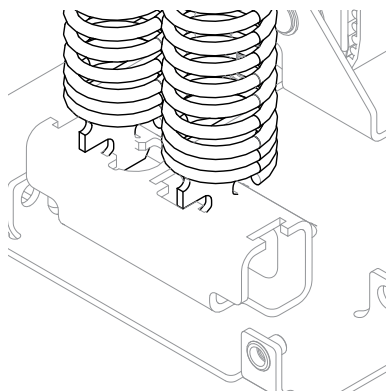


- 8 **Remove the bottom tabs** from the spring baseplate.

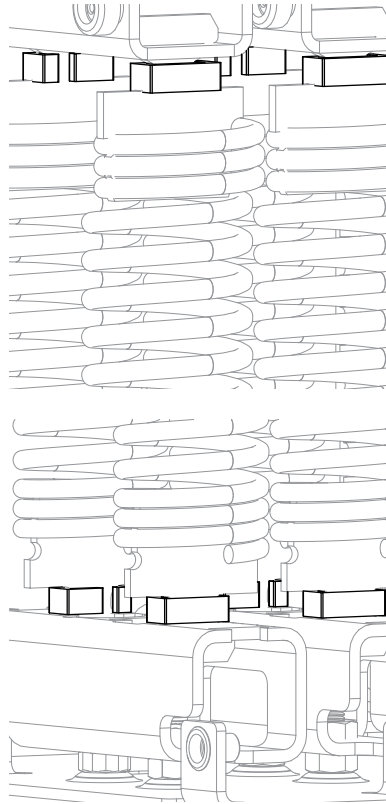
- 9 **Slide the top tabs** into the spring header. Slide the tab into the wide stop, move through the narrow; the weight of the spring holds it securely.



- 10 **Pull each spring down** and **slide the bottom tab** into the spring baseplate. Slide the tab into the wide stop, move through the narrow; the tension of the spring holds it securely.



- 11 **Install a locking collar** at the top and bottom of each spring. Slide the opening of the collar onto the tab. Twist, then push, the collar across the tab; the collar is flexible enough to fit. The locking collar snaps into place.



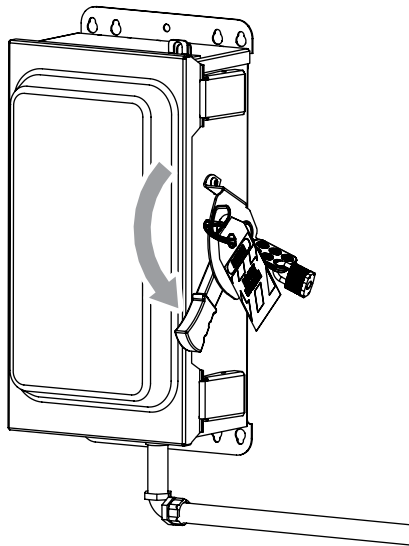
Initial Testing

- 1 **Remove the clamps** holding the door panel in place.
- 2 **Remove the lock-out tag-out** from the door.
- 3 **Operate the door** for several cycles. **Observe the action of the springs:**
 - The springs should expand and contract equally with the door motion.
 - The springs should not impact the side column.
 - The springs should not make excessive noise.
 - The tabs connecting to the spring baseplate and spring header should be secure and not shift during operation.

Resume Normal Operation

- 1 With the door panel in the fully down position, **locate the disconnect switch**. The disconnect switch may be a fused disconnect located near the System 4® controller or located on the controller itself.

- 2 **Set the disconnect switch** to the OFF position.



- 3 **Perform a lockout/tagout** on the disconnect switch.



Lockout
Tagout

	CAUTION
	Inform all users of the door when the door is out of service and when it is put back into service.

- 4 **Reinstall the side column covers.**

- 5 **Remove the lock-out tag-out** and restore power to the door.

- 6 **Operate the door for several cycles.** Pay close attention to the motion of the panel and any unusual noises coming from the side columns during operation, which may indicate the springs impacting the interior of the column.