



CHALLENGER DOOR
1520 SERIES
OWNER'S MANUAL

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Introduction

The Challenger Door Series 1520 entry door is designed to accommodate wheelchair accessibility and is an easy hands-free option to getting in and out of the recreational vehicle. Using the remote access, the door opens and closes with a touch of a button, with the use of an air powered compressor.

Additional information about this product can be obtained from [lci1.com/support](https://support.lci1.com/support) or by downloading the free LippertNOW app. The app is available on Apple App Store® for iPhone® and iPad® and also on Google Play™ for Android™ users.

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For information on the assembly or individual components of this product, please visit:

<https://support.lci1.com/entry-doors>

NOTE: Images used in this document are for reference only when assembling, installing and/or operating this product. Actual appearance of provided and/or purchased parts and assemblies may differ.

Safety

Read and understand all instructions before installing or operating this product. Adhere to all safety labels.

This manual provides general instructions. Many variables can change the circumstances of the instructions, i.e., the degree of difficulty, operation and ability of the individual performing the instructions. This manual cannot begin to plot out instructions for every possibility, but provides the general instructions, as necessary, for effectively interfacing with the device, product or system. Failure to correctly follow the provided instructions may result in death, serious personal injury, severe product and/or property damage, including voiding of the LCI limited warranty.



The “DANGER” symbol above is a sign that improper operation has a safety risk involved and may cause death, serious personal injury, severe product and/or property damage if not performed safely and within the parameters set forth in this manual.



The Challenger Door Series 1520 is in use with an air compressor, which when in use, can cause the door to rapidly open. Should an error arise and the door does not open, ALWAYS drain the air out of the air compressor's bypass valve before attempting to manually open the door. There is NOT an object sensor on the door. Keep all people and personal property away from the door area when opening and closing the door. Failure to adhere to this warning will result in severe product and unit damage, including serious personal injury or death.

⚠ WARNING

The "WARNING" symbol above is a sign that a procedure has a safety risk involved and may cause death or serious personal injury if not performed safely and within the parameters set forth in this manual.

⚠ WARNING

Failure to follow instructions provided in this manual may result in death, serious personal injury and/or severe product and property damage, including voiding of the component warranty.

⚠ CAUTION

The "CAUTION" symbol above is a sign that a safety risk is involved and may cause personal injury and/or product or property damage if not safely adhered to and within the parameters set forth in this manual.

⚠ CAUTION

Always wear eye protection when performing service, maintenance or installation procedures. Other safety equipment to consider would be hearing protection, gloves and possibly a full face shield, depending on the nature of the task.

⚠ CAUTION

Moving parts can pinch, crush or cut. Keep clear and use caution.

Operation

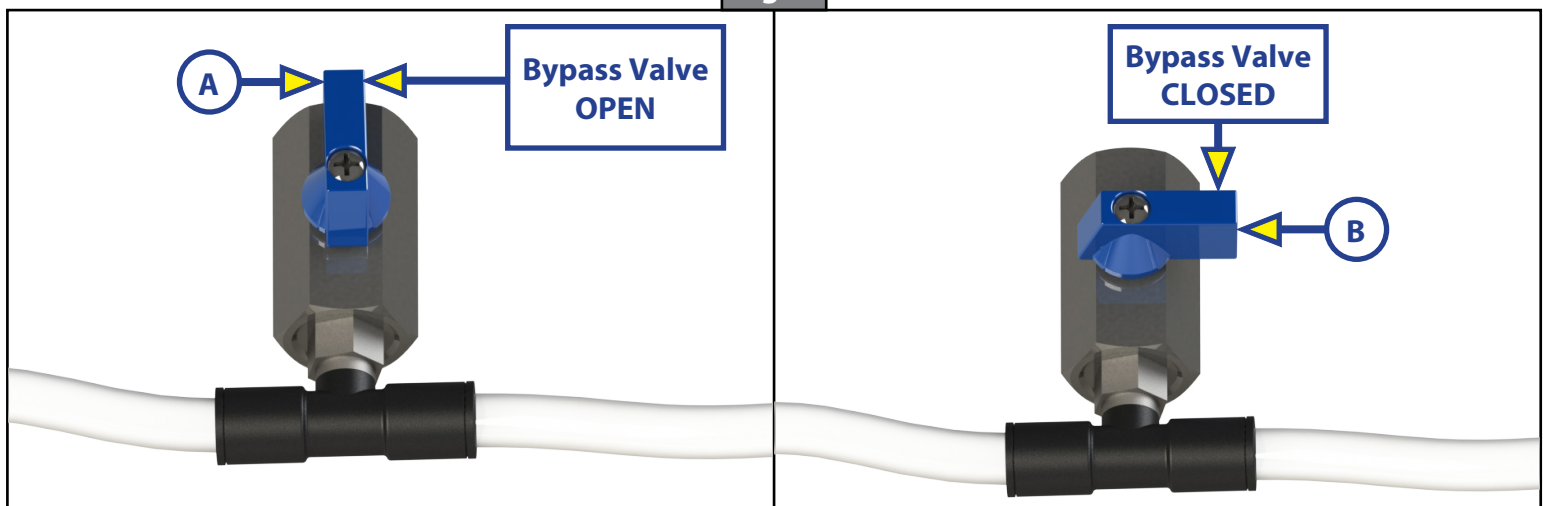
⚠ DANGER

When operating the Challenger door and the door does not open with the remote, the **BYPASS VALVE** (Fig. 1A) **MUST BE CLEARED OF AIR FIRST BEFORE OPENING THE DOOR** with the key.

Switch the bypass valve to the **OPEN** position (Fig. 1A) from the closed position (Fig. 1B).

The Challenger Door Series 1520 is in use with an air compressor, which when in use, can cause the door to rapidly open. Should an error arise and the door does not open, **ALWAYS** drain the air out of the air compressor's bypass valve before attempting to manually open the door. There is **NOT** an object sensor on the door. Keep all people and personal property away from the door area when opening and closing the door. Failure to adhere to this warning will result in severe product and unit damage, including serious personal injury or death.

Fig. 1



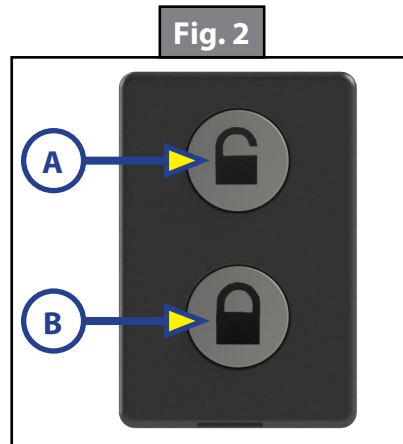
⚠ WARNING

Do NOT leave the key in the ignition when operating the door. Leaving the key in the ignition while opening or closing the door can cause personal injury and/or product or property damage. Remove the key from the ignition before opening or closing the door.

Using the Flex Wall Switch

NOTE: Replacement battery for the Flex Wall Switch is one A23 battery.

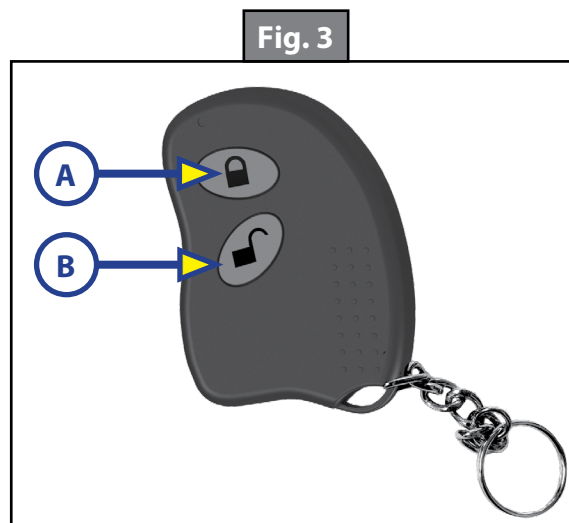
1. Make sure the ignition key to the unit is not in the ignition. The Challenger door will not open or close unless the key to the unit is removed from the ignition.
2. Make sure people and objects are clear of the door opening.
3. Press the unlock button (Fig. 2A) on the switch to open the door.
4. Press the lock button (Fig. 2B) on the switch to close the door.



Using the Remote Key Fob

NOTE: Replacement battery for the Remote Key Fob is one L1028F battery.

1. Make sure the ignition key to the unit is not in the ignition. The Challenger door will not open or close unless the key to the unit is removed from the ignition.
2. Make sure people and objects are clear of the door opening.
3. Press the unlock button (Fig. 3B) on the remote to open the door.
4. Press the lock button (Fig. 3A) on the remote to close the door.



⚠ WARNING

Do NOT operate the door until the bypass valve is cleared of air. Opening or closing the door while the bypass valve is NOT cleared of air can cause personal injury and/or product or property damage. Purge the bypass valve before opening or closing the door.

Using the Key

- 1. Turn the bypass valve to the **OPEN** position (Fig. 1A). The bypass valve should be located in the same compartment as the air compressor.
- 2. Make sure people and objects are clear of the door when first opening the door after shutting off the bypass valve as some air may still be in the air hose line.

Troubleshooting

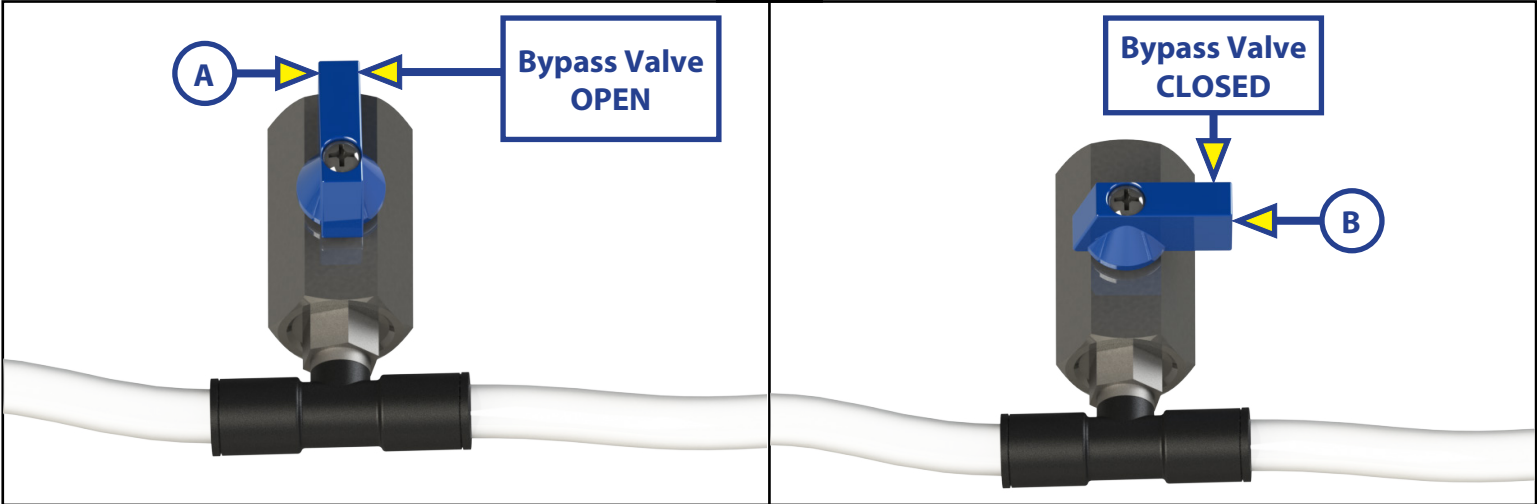
⚠ DANGER

When operating the Challenger door and the door does not open with the remote, the **BYPASS VALVE (Fig. 4A) MUST BE CLEARED OF AIR FIRST BEFORE OPENING THE DOOR** with the key.

Switch the bypass valve to the **OPEN** position (Fig. 4A) from the closed position (Fig. 4B).

The Challenger Door Series 1520 is in use with an air compressor, which when in use, can cause the door to rapidly open. Should an error arise and the door does not open, **ALWAYS** drain the air out of the air compressor's bypass valve before attempting to manually open the door. There is **NOT** an object sensor on the door. Keep all people and personal property away from the door area when opening and closing the door. Failure to adhere to this warning will result in severe product and unit damage, including serious personal injury or death.

Fig. 4



What is Happening	Why?	What Should Be Done?
Door does not open or close.	Key is in the ignition.	Remove the key from the ignition.
	No power.	Check if the power source is fully charged.
	Batteries in key fob or flex switch need to be replaced.	Replace key fob with a L1028F Battery. Replace the flex switch with an A23 Battery.
	Check to see if the in-line fuse is blown.	Replace with a 20AMP fuse.
	Check to see if the RC35b Relay fuse is blown.	Remove from the air compressor tray and open the RC35b relay switch. If the fuse is blown inside the relay, order a replacement RC35b relay.
	Bypass valve not in the correct position.	The bypass valve must be in the closed position (Figs 1B, 4B) to operate with the use of the air compressor.

Remote Control Door and Compressor Relay Replacement Programming

NOTE: If all other options have been addressed for the door not opening or closing, and the RC relay has been opened and checked that the circuit board is blown, use the procedure below to replace and set the remotes for the new RC relay.

NOTE: Have the Flex Wall Switch and remote key fobs close to the newly installed relay switch to be able to program the remotes to work with the new RC Relay.

NOTE: During the code learning mode, if there is no action after 5 seconds, the system will exit the code learning mode.

1. Make sure power is off to the system.
2. Remove the screw (Fig. 5A) holding the RC Relay to the air compressor board, remove the old relay from the board, set screw aside to install with the new relay.
3. Pull the cover off of the new RC relay (Fig. 6A).
4. Located inside the new RC relay are two small white switches (Fig. 7A), make sure both switches are placed in the bottom position (Fig. 8A).
5. Install and wire the new RC relay onto the board.
6. Make sure power is on to the system.
7. Within five seconds press both buttons on one of the remotes at the same time. The system will then enter into a learning mode. The unlock output will trigger so that you are aware that the system is in learning mode.
8. Within 5 seconds after entering the code learning mode, press any button on the remote. The unlock output will trigger to let you know the remote has been recognized and is compatible with the system.
9. Repeat steps 6-8 for all other remotes.

Fig. 5



Fig. 6



Fig. 7

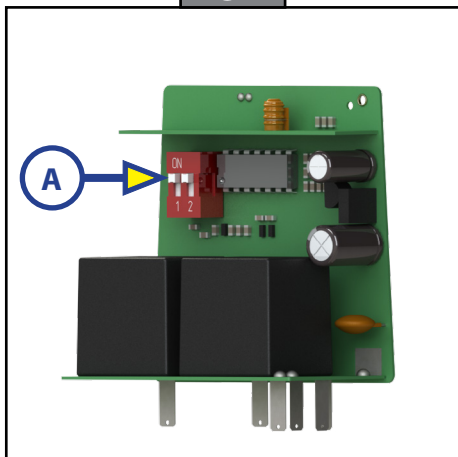
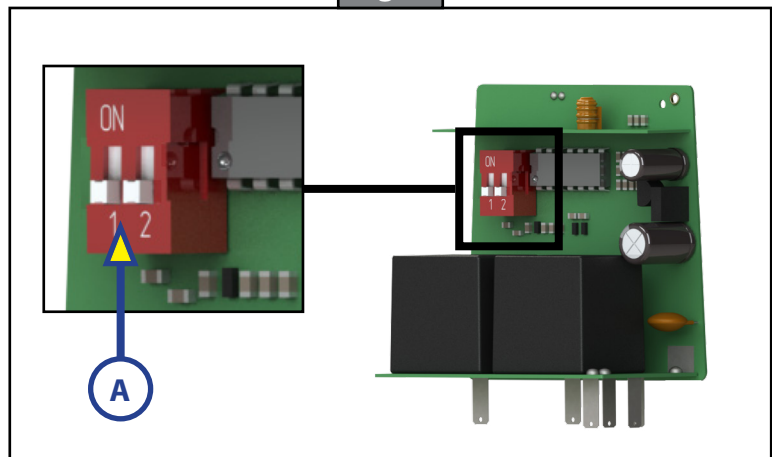
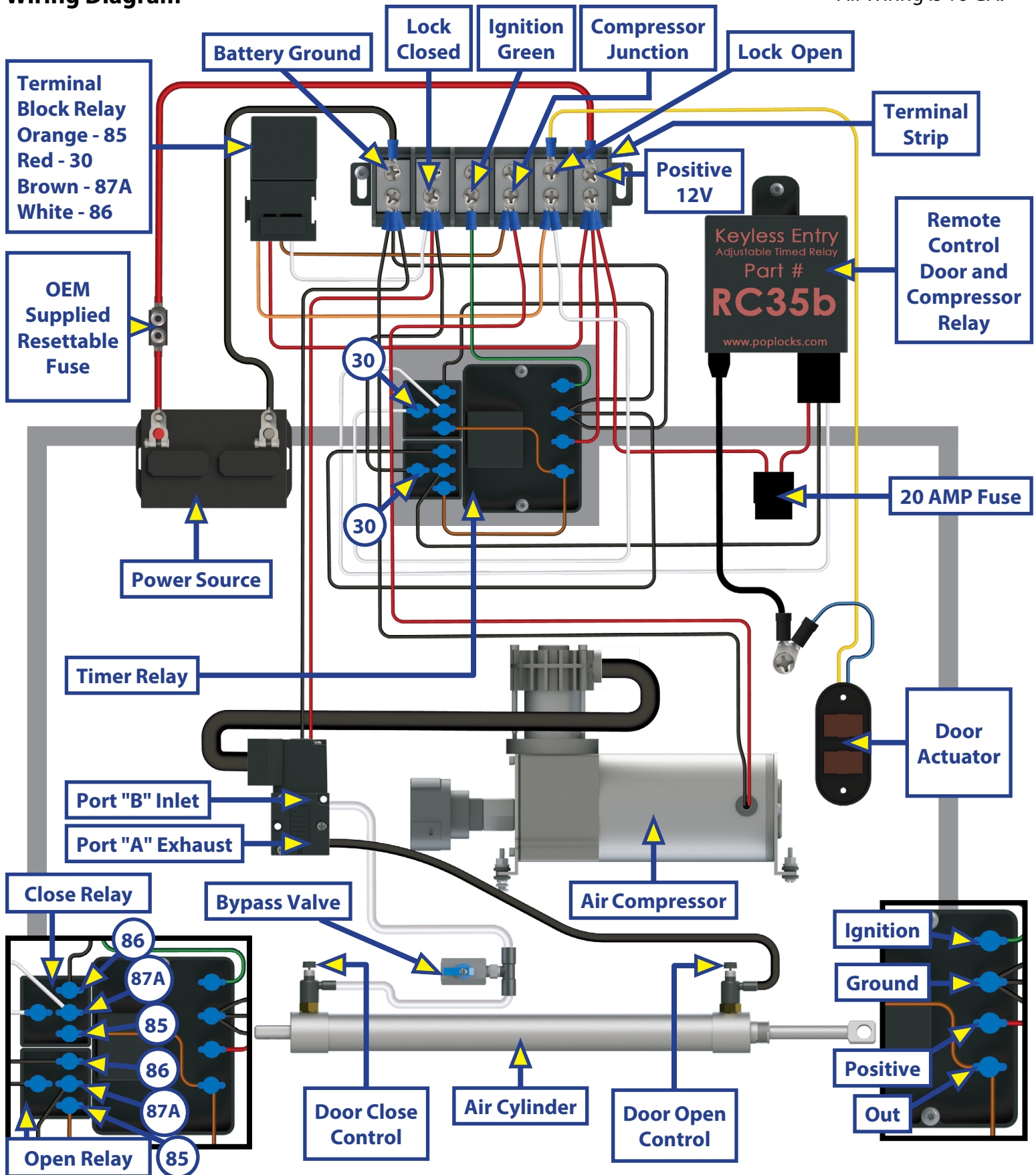


Fig. 8



Wiring Diagram

• All Wiring is 16 GA.



NOTE: If the compressor fails, open the bypass valve to allow the doors to move manually.

NOTE: If the door doesn't have power locks, put the rotary actuator ground to ground on the terminal strip, **NOT** on the closed terminal.

NOTE: Delayed relays do not work for 10 seconds after the ignition is shut off and key is removed.



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