02/12/2009

1. DOOR DOES NOT MOVE AT ALL

1.1. Control panel white POWER light is OFF

a. Control Panel breaker tripped - Try resetting the control panel breaker back ON.
b. Facility breaker tripped - Try resetting any breaker located ahead of the Control Panel.
c. Faulty wiring - Check main power wiring to control panel.
d. Call for service.

1.2. Control panel white POWER light if ON

Try pushing the Test pushbutton located on the side of the Control Panel.

1.2.1. Control Panel Test Button works

Jump to Section 2 ("Door can move, but is not fully functional").

1.2.2. Control Panel Test Button does not work

a. Door is disabled - Check the PLC screen. Inputs #4 and #6 must be ON or the door will not operate.
   - STOP buttons and lock hasp switches connect in series to input #4. If this loop is broken, then input 4 is OFF. If a door leaf does not include any STOP button or lock hasp, then a jumper must be installed as necessary on specific terminal blocks #1 through #4. Refer to the Terminal Blocks table on page ***xxx*** and check that the jumpers are in place. Check for STOP loop continuity. Look for defective switches or wiring.
   - Bullet Sensor and other sensors that are designed to disable door movement may be connected in series to input #6. (Note that active sensors, like the Bullet Sensor, cannot be wired in series with other sensors. Only one active sensor can be connector to input #6.) If the loop is broken, then input #6 is OFF. Check for defectives switches, sensors or wiring. If none of these devices/sensors exist, then make sure that a wire jumper exists between terminal block #15 and a +24 VDC terminal block , like terminal block #14.

b. Door is stuck – Detach the door leaf from the chain and check that it can move freely.
c. Bad motor cable connection between the operator and the motor – Check.
d. Bad motor – Check.
e. Bad motor drive – Look for any error that may be displayed on the drive.
f. Seized sprocket or gearbox – Check. Grease sprockets or replace gear box if necessary.

2. DOOR CAN MOVE, BUT IT IS NOT FULLY FUNCTIONAL

2.1. Pull Cord does not work

a. Pull the pull cord down and check that PLC input #1 turns ON. If it does, then jump back to Section 1 ("Door does not move"). Call for service if Section 1 does not help solve the problem.
b. Check that the pull cord switch is not stuck in either the OPEN or CLOSED position.
   - If ice has build up in the switch, use a hair dryer or heat gun to melt the ice and seal conduit penetration in the switch. Re-test the switch.
   - If no ice or obstruction can be found in the switch, replace the switch.
c. Check the wiring between the Control Panel and the Pull Cord switch.

2.2. OPEN button does not work

a. Check PLC input #12 ("Interlink IN"). If ON, then door opening function is disabled because another door serving the same room is opened. Close the other door and try again. If input #12 is still ON when the other

door is closed, then check Interlink OUT signal from other door, and check wiring and any relay interposed between doors Interlink signals.

b. CLOSE button is stucked ON – Check PLC input #3. If ON, then jump to Section 2.3.
c. Check wiring between OPEN button and PLC input #2.
d. Replace OPEN switch.

2.3. CLOSE button does not work

a. Check PLC input #11 ("Traffic"). If ON, then door closing function is disabled because an object is being detected in the door way or in proximity of the door. This signal is generally issued by sensors like magnetic loops, photo-eyes or motion sensors. Clear the obstruction and try again. If input #11 remains ON, please check sensors and wiring to input #11.
b. OPEN button is stucked ON – Check PLC input #2. If ON, then jump to Section 2.2.
c. Check wiring between CLOSE button and PLC input #3.
d. Replace CLOSE switch.

2.4. STOP button does not work

a. Check PLC input #4. It should be ON by default. If not, then jump to section 1.2.2.
b. Press on STOP switch. If input #3 does not turn OFF, replace STOP switch.

2.5. Safety Edge does not work

a. Door safety edge not sensitive enough. Adjust (see Adjust the Door Edge on page xxx).
b. Inspect the vertical and horizontal air hoses against cuts and holes. Replace as necessary.
c. Check signal cable between door leaf junction box and control panel. You may short-circuit the air switch leads and check that PLC input #5 turns ON.
c. Test air switch. Replace if defective.

2.6. Some sensors, like magnetic loop, photo-eye, motion sensor or card reader do not work

a. Check the wiring between the sensor and its corresponding input. Most traffic sensors (magnetic loop, photo-eye, motion sensor, etc.) connect to PLC input #11 ("Traffic"). Card readers or other similar sensors may connect to Input #2 ("Open"), #1 ("Pull Cord") or #11 ("Traffic").
b. Clean sensor, if applicable (photo-eye may be fogged up or dirty).
c. Adjust sensor, if applicable (motion sensor sensitivity may need adjustment).
d. Replace sensor.

2.7. Door movement is rough

a. Chain is loose and it jumps teeth on sprockets. Tighten the chain.
b. Check for obstruction in door track. Clean track as necessary.
c. Check for items stuck under the door leaf(ves).
d. Check the roller wheels and bearing for proper greasing and potential wear.

2.8. Door does not close normally

2.8.1. Door does not close at all

a. Door jammed - Verify by manually operating the door.

2.8.2. Door starts to close, then stops and opens immediately

a. Door pathway obstructed - Clear the door pathway and try again.
b. Door safety edge too sensitive - Adjust (see Adjust the Door Edge on page ***xxx***).

2.8.3. Door does not close fully

a. Check Close Sensor Bracket adjustment. (See Door Travel Adjustment on page ***xxx***).

b. On bi-parting doors, check that door leaves are symmetric. Measure the distance between each door hanger and the middle of the track. Relocate slave door leaf as necessary.

2.8.4. Door closes very slowly

a. Safety edge air switch stuck in the ON position. PLC will detect this problem and will limit door speed for safety. Check the PLC screen for a "DOOR EDGE ERROR" message. Adjust the air switch. See Adjust the Door Edge on page ***xxx***.

2.8.5. Door closes fully, and then re-opens at slow speed nearly immediately (bi-parting door only)

a. Operator in "SINGLE" mode. Check "R-PLUS DOORS" screen on the PLC. See the Door Settings table, second screen. If screen indicates " **SINGLE** ", then call R-Plus Doors for instructions on how to switch back to " **BIPART** " mode.
b. Safety Edge disabled too late – Move the Close Sensor Bracket about ½" away from the close position and re-test.

2.8.6. Door slams closed (not slowing down)

a. Check Close Sensor Bracket adjustment. (See Door Travel Adjustment on page ***xxx***).
b. Check Close Decel Sensor. Matching Close Decel Sensor orange light on control panel must turn on when Magnet Slide passes under the Close Decel Sensor.

2.8.7. Motor keeps driving for a while when door is closed

a. This is normal on bi-parting doors, as long as driving speed does not exceed 5 Hz (see red LED display on drive).
b. On single slide doors, check the Close Stop Sensor. Verify that the matching Close Stop Sensor red light on the control panel is ON.

2.8.8. Door closes by itself after a certain amount of time

a. Auto-close function active – Check Auto-Close Mode and Auto-Close Delay parameters. See Door Settings table.

2.8.9. Door opens and closes at regular interval

a. Door in Auto-Cycle mode – This is a factory testing mode. In this mode, the PLC screen display "AUTO-CYCLE" along with the total cycle count. Press on ▼ to return to normal operating mode or turn OFF the operator power for 15 seconds and turn power back ON.

2.9. Door does not open normally

2.9.1. Door does not open at all

a. Door jammed. Verify by manually operating the door.

2.9.2. Door starts to open, then stops and closes immediately

2.9.2.1. Door is equipped with a trailing safety edge

a. Door pathway obstructed. Clear the door pathway and try again.
b. Door safety edge too sensitive. Adjust. See Adjust the Door Edge on page ***xxx***.

2.9.2.2. Door is not equipped with a trailing safety edge

a. Make sure that the "Trailing Edge Enabled" parameter is set to Disabled in the program (See Door Settings table).
b. Door safety edge too sensitive. Adjust. See Adjust the Door Edge on page ***xxx***.

2.9.3. Door opens very slowly

a. Door is clearing an obstacle - Not an issue.
b. Safety edge air switch stuck in the ON position. PLC will detect this problem and will limit door speed for safety. Check the PLC screen for a "DOOR EDGE ERROR" message. Adjust the air switch. See Adjust the Door Edge on page ***xxx***.

2.9.4. Door does not open fully

a. Check Pedestrian Cycle Length parameter. See Door Settings table.
b. Check Open Sensor Bracket adjustment. See Door Travel Adjustment on page ***xxx***.

2.9.5. Door slams opened (not slowing down)

a. Check Open Sensor Bracket adjustment. See Door Travel Adjustment on page ***xxx***.
b. Check Open Decel Sensor. Matching Open Decel Sensor orange light on control panel must turn on when Magnet Slide passes under the Open Decel Sensor.

2.9.6. Motor keeps driving for a while when door is opened

a. Check the Open Stop Sensor. Verify that the matching Open Stop Sensor red light on the control panel is ON.

3. MECHANICAL ISSUES

3.1. Chain master link keeps breaking

a. Chain too tight – Repair and properly adjust chain. See Chain Drive Adjustment, page 9.

3.2. Chain rubs against some header components

a. Check and adjust all sprockets.

4. THERMAL ISSUES

4.1. Jambs Sweating

4.1.1. Door Heaters Module light is ON

a. Gasket not sealing – Check for proper 1/8" compression.
b. Heat cable wiring defective – Check that 110VAC is present in the door leaf J-box.
c. Defective heat cable/thermostat assembly – Replace.

4.1.2 Door Heaters Module light is OFF

a. Reset Door Heaters Module breaker or replace fuse (depending on model).
b. Reset any breaker installed ahead or the Door Heaters Module.
c. Check power wiring to the Door Heaters Module.

4.2. Sweating or ice forming at door leaf(ves) panel joints

a. Check for cracked panels joints. Clean cracked joints and fill with silicone caulk.

4.3. Motor is hot

a. This is normal for bi-parting doors. When bi-parting doors are closed, motor is being driven at 5Hz to maintain a positive seal on leading edge gaskets. This leads to the motor warming up.