This manual to remain with the door:
Date Installed:____________________
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SPECIAL FEATURES
- i-COMM™ Universal Controller - Adjustable Speeds
- Heavy-Duty Industrial Materials - Encoder Positioning
- No Springs, Pulleys or Weights - Virtual Vision
- InsulMax Curtain w/Auto Re-feed™ - Powder Coated Materials
- I-Zone™ Area Detection System - Soft-Edge™ Technology
- Flexible “You Build It” Track Design - High Pressure Capability

RECOMMENDED SERVICE PARTS
Bumper, Rubber, Motor ............................... 15250081 (2)
Fuse, 1 Amp, 250V, Time Delay ....................... 51000002 (2)
Fuse, 2 Amp, 250V, Time Delay ....................... 51000005 (2)
Kit, Drive Sphere, Qty 10 ............................ 53700561 (2)
Photoeye Source ........................................ 53700702 (1)
Photoeye Receiver ...................................... 53700703 (1)
Kit, Encoder .......................................... 53700792 (1)

NOTICE TO USER
Our mission is to “Improve Industrial Safety, Security and Productivity Worldwide Through Quality and Innovation.”

Thank you for purchasing the FasTrax® door from RITE-HITE DOORS, INC. The FasTrax door is a unique fabric door that can be transformed to fit most opening configurations while helping to keep different atmospheres separate.

This manual should be thoroughly read and understood before beginning the installation, operation or servicing of this door. This owners manual MUST be stored near the door. Complete final checklist prior to leaving site. Refer to partslist manual for exploded views and part numbers.

RITE-HITE DOORS, INC. reserves the right to modify the electrical and architectural drawings in this manual as well as the actual parts used on this product are subject to manufacturing changes and may be different than shown in this manual. Due to unique circumstances with varying requirements, separate prints may be included with the unit.

The information contained in this manual will allow you to operate and maintain the door in a manner which will insure maximum life and trouble free operation. The serial # for your door is on a label located on the side of the control box and side track, Figure 17.1.

Your local RITE-HITE DOORS, INC. Representative provides the Planned Maintenance Program (P.M.P.) which can be fitted to your specific operation. If any procedures for the installation, operation or maintenance of the FasTrax have been left out of this manual, are not complete or have suggestions, contact RITE-HITE DOORS, INC. Technical Support at 1-563-589-2722.

RITE-HITE DOORS, INC. are covered by one or more of the following U.S. patents, including patents applied for, pending, or issued:
5,203,175, 5,329,859, 5,392,836, 5,408,789
5,450,890, 5,542,463, 5,579,820, 5,601,134, 5,638,883,
5,655,591, 5,703,197, 5,743,317, 5,794,678, 5,887,385,
5,915,448, 5,944,086, 5,957,187, 6,042,158, 6,089,305,
6,098,695, 6,145,571, 6,148,897, 6,192,960, 6,321,822,
6,325,195, 6,330,763, 6,352,097, 6,360,487, 6,481,487,
6,547,832, 6,598,648, 6,612,357, 6,615,898, 6,659,158,
6,688,374, 6,698,490, 6,766,562, 6,901,703, 6,923,238,
6,926,061, 6,942,000, 6,964,289, 7,034,682, 7,045,764,
7,111,661, 7,114,753, 7,151,450, 7,748,431
It is important to verify the following basic information before starting with the installation.

1. Alternate dimensions in brackets are in [millimeters].
2. Make sure that you are working at the correct location and that you have the required work permits.
3. Inspect the site to make sure that there are no overhead obstructions (sprinkler pipes, HVAC systems, electrical supply lines, etc.) that might interfere with the installation.
4. Detour material handling equipment during the installation.
5. Make sure that the correct electrical power is supplied to the door control box and can be shut off without interfering with other plant operations.
6. Install optional equipment after verifying door operation.
7. To verify proper installation, use Checklist on Page 21.

NOTE: Electrical prints included in the parts or control box supersede any prints included in this owners manual on Pages 34 - 43. Always check for electrical prints.

### INSTALLATION TOOLS REQUIRED
- 25' [7620] Tape measure - Hydro level
- 6' [1829] Carpenters level - Ladder (6'-8') [1829 - 2438]
- Scissors Lift - Plumb Bob
- “C” Clamps - Hammer Drill
- Drill (cordless or electric) - Drill Bits
- Phillips Bit for Drill - Straight Edge
- Wire Strippers - 5/16" [8x38] Nut Driver
- Small Straight/Phillips Screwdrivers
- 7/16" [11], 1/2" [13], 9/16" [14], 3/4" [19] Socket/wrench

### RECOMMENDED MOUNTING FASTENERS

#### Wall

**Recommended Fastener**

<table>
<thead>
<tr>
<th>Wood</th>
<th>Fastener</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower Track - 3/8&quot; [10] thru-bolt at top, middle, and bottom.</td>
<td>5/16&quot; x 1-1/2&quot; [8x38] lag screws at all other fastener positions.</td>
</tr>
<tr>
<td>Upper Track - 5/16&quot; x 1-1/2&quot; [8x38] lag screws at all positions.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wood</th>
<th>Fastener</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower Track - 3/8&quot; [10] thru-bolt at top, middle, and bottom.</td>
<td>5/16&quot; x 1-1/2&quot; [8x38] lag screws at all other fastener positions.</td>
</tr>
<tr>
<td>Upper Track - 5/16&quot; x 1-1/2&quot; [8x38] lag screws at all positions.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wood</th>
<th>Fastener</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masonry positions at top, middle, and bottom.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Steel</th>
<th>Fastener</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower Track - 3/8&quot; [10] thru-bolt.</td>
<td>5/16&quot; x 1-1/2&quot; [8x38] lag screws at all other fastener positions.</td>
</tr>
<tr>
<td>2. 3/8&quot; [10] drill and tap (material must be 5/16&quot; [8] min.).</td>
<td></td>
</tr>
<tr>
<td>3. 3/8&quot; [10] drive self tap/drill screws (1/4&quot; – 14) [6].</td>
<td></td>
</tr>
<tr>
<td>4. Weld, lower track is aluminum, only weld if steel jamb option is included or provided by others.</td>
<td></td>
</tr>
</tbody>
</table>

### INSTALLATION STEPS

1. **Step 1** Measure Door Opening Width at the top
2. **Step 2** Measure Door Opening Width at the floor
3. **Step 3** Measure Door Opening Height at left side
4. **Step 4** Measure Door Opening Height at right side
5. **Step 5** Dimensions from Steps 1 - 4 should be within ± 1/2" [13] of the dimensions listed on the serial number label. If the measurements do not agree, STOP! Contact your RITE-HITE DOORS, INC. representative.
6. **Step 6** Surface, MUST be flat, smooth and collinear with opposite side
7. **Step 7** Using a 6’ [1829] carpenter’s level, verify that the door jambs and header are plumb and perpendicular.
8. **Step 8** Place a mark at 4’ [1219] on each side of the jamb.
9. **Step 9** Using a hydro level, determine if the floor is level. If the floor is not level to within 1/8” [3], mark the wall where the level point is indicated. The measurement between the level mark and the floor is the amount of shimming that needs to be done under the track that will be located on the “Low Side” (greatest measurement) of the door opening.

For space clearance requirements, see Architectural drawings on Pages 52 - 55.
CHAPTER 2 - POLY LUMBER INSTALLATION

Step 1:
Measure 1/2 Ordered Door Width + 8 3/4" [222]

Step 2:
Measure Ordered Door Width + 17 1/2" [445]

Step 3:
Measure Ordered Door Height + 10" [254]

Step 4:
Caulk behind vertical poly lumber pieces to prevent air transfer and install

Step 5:
Caulk behind horizontal poly lumber and install for lintel seal and lintel rollers

Step 6:
Install 14 1/4" [362] poly lumber pieces

IMPORTANT!!!

If door is not equipped with Poly Lumber option - proceed to Page 5.
**CHAPTER 2 - THERMAL AIR SYSTEM**

### THERMAL AIR SEAL

**5.1**

**THERMAL AIR SEAL**

**Step 1:**
Measure outside edge of aluminum retainer

**Step 2:**
Measure ordered door width + 9” [229]

**Step 3:**
Measure outside edge of aluminum retainer at O.D.H + 10” [254]

**Step 4:**
Using hardware provided, fasten aluminum retainer to the poly lumber or wall.

**Step 5:**
Verify fastener thru retainer and seal rope

**Step 6:**
Verify air bag exhaust hole, is open. Bag must not be bunched up at the bottom

**Step 7:**
Caulk behind rail to prevent air infiltration

**Step 8:**
Clamp blower to air bag outlet with cable ties

**Step 9:**
Thermal Air seal outlet is high temp fabric, do not replace or add to it

---

**5.2**

**Air Bag**

**5.3**

**THERMAL AIR SEAL BLOWER INSTALL**

1. Fasten blower to the air bag and to the wall.
2. Fasten Thermal Air System junction box to the wall and wire blower.
CHAPTER 3 - LOWER TRACK

**IMPORTANT!!!**
If door is equipped with Weld Plate option - proceed to Page 25.

**IMPORTANT!!!**
It is imperative that the tracks be mounted at the proper width. If mounted too wide, excess wear is placed on the drive spheres. If too narrow, the curtain may appear wavy or crease in the center.

---

**Step 1:** Measure Door Opening Width, find center and place mark on the floor.

**Step 2:** From centerline, measure over 1/2 Ordered Door Width + 4 1/2" [114] (+ 1/16" [1.5], -0") and place a mark on the floor.

**Step 3:** From this mark, measure over Ordered Door Width + 9" [229] (+ 1/8" [3], -0") and place a mark on the floor.

---

**Step 4:** Place drive side lower track at the previously made mark on the floor.

**Step 5:** Lower track must be 90° to wall, use shims as required to square the track.

**Step 6:** Using a 6’ [1829] level, make sure that the track is plumb in both directions.

---

**Step 7:** Place non-drive side lower track at the previously made mark on the floor.

**Step 8:** Lower track must be 90° to wall, use shims as required to square the track.

**Step 9:** Using a 6’ [1829] level, make sure that the track is plumb in both directions.

---

**Step 10:** If wall has a jamb cap, the lower track MUST be shimmed out.

---

**Step 11:** If door is equipped with Weld Plate option - proceed to Page 25.

**Critical Dimension**
Ordered Door Width + 9" [229] (+ 1/8" [3], -0")
7.1

**Step 12:** Verify proper lower track width: O.D.W. + 9".

**Step 13:** Using the predrilled slots in the track as a guide, mark and drill a hole and place a fastener in the center of the slot, at the top, (middle), bottom and tighten.

Slot location may vary based on ordered height.

If the hole goes completely through the wall, use thru-bolts and backing plates to secure the track to the wall, *Figure 7.2.* Sleeves may be required if wall collapses when tightening thru-bolt.

It is the responsibility of the installer to ensure proper lower track spacing and adequate method of fastening to the wall.

**Step 14:** After the entire door is installed and operational make sure the curtain is not too tight or too loose.

Then fill in the remaining holes with fasteners. It is imperative that all the holes are utilized to prevent lower track movement.

**Step 15:** For optional weld plates, refer to, *Figure 25.1.*

---

7.2

**Step 16:** If backer plates are being used, they must be clean and either be painted, or a non-ferrous material.
CHAPTER 4 - DRIVE TUBE INSTALLATION

8.1

Step 1: Remove the (4) 1/2" [13] bolts and lock washers from the bearing mount plate on drive and non-drive sides.

Step 2: Drive end of shaft is longer than the non-drive side. If chain hoist option is included, the longer shaft is still on the drive side.

Step 3: Make sure spacer is in place.

Step 4: Loosen set screws on bearings prior to lifting drive tube.

Step 5: Lift drive tube in place and fasten the drive and non-drive bearings onto the mounting plate with the (4) 1/2" [13] bolts and lock washers removed earlier.

Step 6: Measure from inside mounting plate to face of drive gear, approximately 5/8" [16]. Tighten bearing set screws when this dimension is equal on both sides.

**Critical Centering Dimension**

Step 7: Slide lock collar next to bearing and tighten lock collar set screws.

Step 8: Place a level on the drive tube to verify tube is level to within 1/8", if not, shim lower track as needed.

8.2

Drive Gear
**CHAPTER 4 - MOTOR / ENCODER INSTALLATION**

**Drive shaft is pre-lubricated at the factory, if more is required, lubricate with an anti-seize lubricant.**

**NOTE:**
If side clearance is not available (minimum 18” [457]) to install gearbox after drive tube is installed, place gearbox onto shaft prior to installing drive tube. A lifting device will be necessary for this procedure.

**CAUTION !!!**
Make sure lock collar is securely fastened.

**IMPORTANT !!!**
If motor rocks excessively, tighten bumpers.

---

**Step 9:** Remove lock collar from drive shaft. Slide gearbox housing onto shaft until it is against the spacer.

**Step 10:** Rotate the drive tube until the key way slots are aligned and install key. Re-install lock collar (115 in/lbs).

**Step 11:** Finger tighten top bolt on encoder mounting plate to gearbox.

**Step 12:** Slide Encoder drive sprocket onto the drive shaft.

**Step 13:** Install encoder chain around sprockets.

**Step 14:** Finger tighten remaining two mounting plate bolts.

**Step 15:** Measure from each sprocket to plate to align. Tension chain and tighten mounting plate bolts.

**Step 16:** Tighten set screw on drive sprocket using a 3/32” allen wrench (Do NOT overtighten - 5 in/lbs). Sprocket does NOT require a key.

**Step 17:** Tighten the rubber motor mounts on the back of the motor mounting plate to the wall mount bracket to reduce any motor rocking. Tighten the rubber mount nuts to lock in place. After motor is wired, run to verify motor does not rock.

**Step 18:** Fasten chain connector from gearbox to hole in wall mount bracket.
**CHAPTER 5 - UPPER TRACK VERTICAL ONLY**

**Step 1:** The proper radius is already assembled to the lower track.

**Step 2:** Locate the 2 pieces of upper track and the supplied wall mount brackets. Slide end of upper track into the lower track radius, level, plumb and fasten to wall mount bracket using self/tap drill screws.

**Step 3:** Place mounting bracket in position and mark holes to be drilled in wall.

**Step 4:** Pilot holes (.201Ø x 1 1/4" [5x32] deep) MUST be predrilled into lower track radius. Make sure drill is perpendicular and level, DO NOT drill into curtain groove.

**Step 5:** From outside to outside of tracks, measure O.D.W. + 14" [356] (+1/8"[3]-0)

**Step 6:** Fasten bracing at the end of the track, maintaining proper spacing.

**Step 7:** Fasten bracing to diagonal provide support from track to ceiling or wall.

**Step 8:** Fasten mounting brackets to the wall and then the upper track. Make sure to place screws so they go into the outer cavities of the upper track and not into the curtain groove. The drill MUST be held perpendicular and level to ensure screw does not go into groove.

**CAUTION!!**

Make sure to place screws so they go into the outer cavities of the upper track and not into the curtain groove. The drill MUST be held perpendicular and level to ensure screw does not go into groove.
CHAPTER 5 - UPPER TRACK 45° TILT ONLY

11.1


Step 2:
From outside to outside of tracks measure O.D.W. + 14" [356] (+ 1/8" [3]/-0)

Step 3:
Fasten bracing at the end of the track, maintaining proper spacing.

Step 4:
Fasten bracing to diagonal provide support from track to ceiling or wall.

Make sure to place screws so they go into the outer cavities of the upper track and not into the curtain groove. The drill MUST be held perpendicular and level to ensure screw does not go into groove.

11.2

Length of track = O.D.H. + 3" [76]

O.D.H. + 19" [483]
Step 1: The proper radius is already be assembled to the lower track.

Step 2: DO NOT Use self tap screws here. Locate splice bracket and fasten between the upper and lower track. Pilot holes (.201Ø x 1 1/4" [5x32] deep) MUST be predrilled into lower track radius. Make sure drill is perpendicular and level, DO NOT drill into curtain groove.

Step 3: At the end of the track, drive a self-tap screw into the curtain groove to prevent curtain top roller from coming out of track.

Step 4: For standard lift, slide end of upper track into the lower track radius, level and hold in place.

Step 5: From outside to outside of tracks measure O.D.W. + 14" [357] (+ 1/8"[3]-0)

Step 6: Fasten bracing at the end of the track, maintaining proper spacing.

Step 7: Fasten bracing to diagonal provide support from track to ceiling or wall.

CAUTION !!!
Make sure to place screws so they go into the outer cavities of the upper track and not into the curtain groove. The drill MUST be held perpendicular and level to ensure screw does not go into groove.
**CHAPTER 5 - UPPER TRACK HIGH LIFT ONLY**

**Step 1:** Use track splice bracket to join lower and upper track. Drill .201[\(\frac{1}{2}\)] Ø pilot hole 1 1/4" [32] deep for lag screws.

**Step 2:** Fasten upper wall mount bracket to track and wall, flush under radius and splice bracket. Minimum 6"x6" [152 x 152] backer plate required on hollow / insulated walls.

**Step 3:** Use lag screws in radius bracket.

**Step 4:** Use Self/Tap Drill screws in horizontal and vertical track.

**Step 5:** Fasten bracing at the end of the track, maintaining proper spacing.

**Step 6:** The proper radius is already assembled to the lower track.

**Step 7:** Slide end of upper track into the lower track radius, plumb and hold in place.

**Step 8:** From outside to outside of tracks measure O.D.W. + 14" [356] (+ 1/8"[3]-0)

**Step 9:** Fasten bracing at the end of the track.

**Step 10:** Fasten bracing to diagonal provide support from track to ceiling or wall.

**Step 11:** When curtain is raised later in installation, make sure spheres are centered in track groove, if too tight, move tracks in, if too loose spread tracks apart.

**CAUTION !!!**

Make sure to place screws so they go into the outer cavities of the upper track and not into the curtain groove. The drill MUST be held perpendicular and level to ensure screw does not go into groove.

For high lift, determine the high lift required per sales order and cut vertical tracks to length. **ONLY ONE CUT PER TRACK**-**DO NOT CUT SAME TRACK TWICE.**
CHAPTER 6 - CURTAIN INSTALLATION

MOTOR PHASING

Note: If electrical is available, bypass Figures 14.1 - 14.3 and proceed to Electrical Installation on Page 16, and then return here. If electrical is not complete, proceed to install curtain per Figures 14.1 - 14.3

1. With electrical complete, turn disconnect to "ON".
2. When pressing the "OPEN" button, the drive tube should rotate counter-clockwise on right hand drive door and clockwise on left hand drive door. (The back of the tube should be turning toward the ceiling.)
3. If the drive tube rotates in the opposite direction, switch wires in motor terminals U & V.

4. After curtain is fully into the track. Re-install front refeed rollers back onto the lower track. DO NOT overtighten front refeed rollers fasteners. Make sure front refeed rollers are flush with lower track when installing.

5. Fasten curtain top roller bracket back onto the curtain brace. Refer to Figure 14.2.

6. Once top rollers are securely fastened, disengage brake and continue to route curtain through opening in lower track. Refer to Figure 14.1.

7. Disengage brake by pulling the handle on the brake and locking in place, Figure 27.3.

8. Raise curtain and feed top drive sphere around the back side of the drive gear and into the radius and/or upper track approximately 6" [152] by rotating drive tube to drive curtain through the drive gears.

9. Release brake handle to hold curtain.

IMPORTANT!!!

*Top curtain roller bracket should be positioned such that the roller shaft is toward the curtain and away from the wall.
The curtain may close very quickly if the brake is fully released. Releasing the brake partially will allow the door to close smoothly. Failure to restrict the curtain speed can result in damage to product or injury to personnel.

IMPORTANT!!!
Curtain needs to be stopped at or before it reaches the top of the jamb.

WARNING!!!
The curtain may close very quickly if the brake is fully released. Releasing the brake partially will allow the door to close smoothly. Failure to restrict the curtain speed can result in damage to product or injury to personnel.

**CHAPTER 6 - LABELS / I-ZONE / SHROUD**

**15.1**

View of back Side Of Door

**Step 1:**
Clean surface where label is to be placed. Peel off backing on label and apply in position.

**15.2**

Optional

**Step 1:**
Mount I-Zone sensors to the lower tracks and route cables to the control box.

**Step 2:**
Lights on sensor will flash for 30 seconds on power up.

**Step 3:**
Alarm should be tested by removing the plastic cover from one of the I-ZONE sensors. After 30 seconds the alarm will sound. (Door should be in the open position during this test.)

**15.3**

**Step 1:**
Align extension bracket slots with holes in drive shroud and attach to upper mounting bracket with (2) thumb screws.

**Step 2:**
Place drive shroud into position and attach to lower mounting bracket with (2) thumb screws.

**Drive Shroud Installation**
CHAPTER 7 - ELECTRICAL INSTALLATION

DANGER !!!

When working with electrical or electronic controls, make sure that the power source has been locked out and tagged according to OSHA regulations and approved local electrical codes.

IMPORTANT!!!

A qualified electrician should install the wiring in accordance with local and national electrical codes. Use lockout and tagout procedures to avoid injury.

CAUTION !!!

When drilling holes in the box, DO NOT turn control box upside down or go too deeply into the box. Damage or debris may fall into electrical components causing failure or severe equipment damage.

IMPORTANT!!!

In freezer and cooler applications where a conduit passes from a warm to cold temperature zone, the conduit must be plugged with epoxy. This will help prevent condensation from forming in the conduit. For more information, see Section 300-7a of the National Electric Code.

IMPORTANT!!!

To reduce risk of injury or death, an earth ground connection MUST BE made to the green/yellow control box ground terminal. If metal conduit is used as the ground connector, an N.E.C. approved ground bushing and green/yellow wire MUST BE properly attached to the conduit for connection to the ground terminal.

Electrical Notes:

- Route all field installed wires so that separation is maintained between line voltage wires and low voltage class II wiring.
- The incoming power terminals in the control box will not accommodate wires larger than 12AWG. 20 or 30 Amp service may be required for cable runs longer than 300' [91,440].
- The control box is provided with class CC protective fusing for the incoming power.

Step 1:
It is the responsibility of the buyer to provide electrical service up to the control box with proper branch service protection and an approved means of disconnect.

Step 2:
It is recommended to mount control box adjacent to the door at approximately 54° [1372] above the floor. If possible mount on the warm side regardless of door mount side.

Step 3:
Attach control cable to the conduit mounting bracket, then route to the conduit fitting on the bottom of the control box. If the flexible conduit is too long, cut the protective outer casing and leave 16" to 20" [406 - 508] of wires. Clamp conduit to wall after the correct length is achieved.

Step 4:
Connect photoeye and/or optional I-Zone wires using electrical drawing on Page 34.

Step 5:
Connect encoder cable to encoder. Make sure to line up pins properly. Make sure connector is tight, but do not over-tighten, as pins will twist. Once tight, the connector should not be able to move back and forth.

Step 6:
Drill a hole in the bottom of the control box for the incoming power using the proper connection to maintain the NEMA rating on the enclosure. All holes drilled through the control box must be through the bottom of the box. Incoming 3-phase power must connect into fuse holder terminals F1, F2, F3 and ground terminal. See electrical drawing on Page 34.

Wire MUST be properly grounded
WARNING!!!

DO NOT DRILL HOLES ON TOP OF CONTROL BOX TO RUN CONDUIT, AS DUST PARTICLES AND MOISTURE MAY CAUSE DAMAGE TO ELECTRICAL COMPONENTS.

THE SAFEST LOCATION IS AT THE BOTTOM. FAILURE TO DO SO, WILL VOID WARRANTY.

The i-COMM is used to control all functions of the door.

Note label inside control box that is a ready reference to the i-COMM inputs and outputs, Page 18.

The green button opens and resets the door after a fault. To "OPEN", press and release the button. The i-COMM will automatically close the door after the preset time has expired.

The red Disconnect Switch stops door operation. The control is rotated to the "ON" position for normal door operation. To stop door operation rotate the control to the "OFF" position.

Whenever the door operation is stopped by using the disconnect switch, you must do the following to resume operation.

1. Rotate the red disconnect switch to the "ON" position.
2. Press the "OPEN/RESET" button to reset and open the door.
# CHAPTER 7 - i-COMM LOGIC CHART

## FasTrax Encoder™

### i-COMM Quick Reference

### Input Table

<table>
<thead>
<tr>
<th>Input</th>
<th>Input Function</th>
<th>Comments</th>
<th>Note(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>X0</td>
<td>Open PB</td>
<td>On to open door</td>
<td>1</td>
</tr>
<tr>
<td>X1</td>
<td>Stop PB</td>
<td>On to stop door</td>
<td>1</td>
</tr>
<tr>
<td>X2</td>
<td>Torque Reverse</td>
<td>Off to reverse door</td>
<td></td>
</tr>
<tr>
<td>X3,X5,X7</td>
<td>Activation Command</td>
<td>On to open door</td>
<td>1</td>
</tr>
<tr>
<td>X4</td>
<td>Close PB</td>
<td>On to close door</td>
<td>1</td>
</tr>
<tr>
<td>X5</td>
<td>Toggle Command</td>
<td>On to toggle open or close</td>
<td>1</td>
</tr>
<tr>
<td>X8,X9</td>
<td>iZone Sensors (Right &amp; Left)</td>
<td>Not Available on FasTraxCi.</td>
<td></td>
</tr>
<tr>
<td>X10</td>
<td>18° Photocell Input</td>
<td>Must be on for door to close. Off when blocked.</td>
<td>1</td>
</tr>
<tr>
<td>X11</td>
<td>54° Photocell Input</td>
<td>Must be on for door to close. Off when blocked.</td>
<td>1</td>
</tr>
<tr>
<td>X12</td>
<td>Open/Reset Switch</td>
<td>On to reset from fault.</td>
<td>2</td>
</tr>
<tr>
<td>X13</td>
<td>Induction Loop Activation</td>
<td>On to open door</td>
<td>2</td>
</tr>
<tr>
<td>X14</td>
<td>Fault Input</td>
<td>Must be on for door to run.</td>
<td></td>
</tr>
</tbody>
</table>

### Encoder Adjustment Descriptions

**Open Distance**

Use this option to set the overall opening distance of the door (in feet). For example, or an 8 ft tall FasTrax, this option should be set to "8" (to allow room for fine adjustment). This measurement is used for initial position setup only. For small adjustments of the open and close position, use "Close Position Adjust" or "Open Position Adjust".

**Set Open Position**

Use this option for initial position setup. Manually place door in the open position and select this option. Alternatively, "Set Close Pos." can be used if it is more convenient to place door in the closed position. NOTE: This option approximately sets the open and close positions. For additional adjustment of the open and close position, use "Close Position Adjust" or "Open Position Adjust".

**Set Close Position**

Use this option for initial position setup. Manually place door in the closed position and select this option. Alternatively, "Set Open Pos." can be used if it is more convenient to place door in the open position. NOTE: This option approximately sets the open and close positions. For additional adjustment of the open and close position, use "Close Position Adjust" or "Open Position Adjust".

**Open Position Adjust**

Use this option to make small adjustment to the open position. The number displayed is the measurement between the open and closed position. For example if this option was set to '100', the door would open 100 inches from the closed position. It is recommended to adjust the close position of the door first, before adjusting the open position.

**Close Position Adjust**

Use this option to make small adjustment to the closed position. The number displayed is the relative displacement of the closed position. For example, if this option was set to '-1.0' the door would close approximately 1.0 inch more. Option was set to '2.0' the door would close 2.0 inches.

### Timer Adjustment

1. PRESS [ENTER]. Controller will stop and fault door.
2. Press [UP] until desired timer is displayed, display will read "Set Close Timer" or "Set Preannounce".
3. Press [ENTER]. Display will show current timer value.
5. Press [ENTER] to return to Main Menu.
6. Press [DOWN] until exit is displayed.
7. Press [ENTER] to save values.
8. Reset Door.

**Preannounce Timer** is the amount of time the preannounce to close output will be on before door closes. **Close Timer** is the amount of time the door will remain open before the preannounce to close timer activates.

### NOTES:

1. Default setting shown in table & comments. Record any changes on space provided. Consult i-COMM manual for additional details.
2. Device operation can be changed through menu. Consult i-COMM manual for additional details.
ENCODER SETUP INSTRUCTIONS

1. Verify wiring to encoder is properly terminated.
   Note: right-hand drive doors require a wire to be terminated in the ‘DC’ terminal, while left-hand drive doors do not. If motor phase is changed during this setup, please restart this procedure.
2. Move curtain to closed position.
3. Power up door and press enter button to enter “MAIN MENU”.
4. Using down arrow, scroll to “Open Distance”.
5. Press enter button to view parameter value (measured in feet), should be O.D.H. - (two) 2’. Change the value using the up or down arrow keys, round down if required, then press enter to return to “MAIN MENU”.
6. Scroll using down arrow to item “Set Close Pos.”.
7. Press enter button to view parameter. The controller will display the following message “RESET ALL LIMITS” ... “Press Up to Start”. Pressing the up arrow key will reset all of the limits, and reboot the controller.

   NOTE: DO NOT use this menu item to make adjustment to the limits; this is only for initial setup.
8. Press green Open/Reset button.
   a. The door should begin to open, be ready to shutdown the door if it begins to move in the wrong direction. If motor phase is changed, start over at step #2.
   b. If rotation is correct proceed to the instructions for adjusting the “Open and Close positions”.

Open and Close Position Adjustment

To adjust CLOSE position:

1. Power up door and press enter button to enter “MAIN MENU”.
2. Scroll using up arrow to the item “Close Pos. Adjust”.
3. Press enter button to view parameter value. This parameter will show a coded value on the left and relative change in inches on the right. When entering this parameter the value will always start at 0.0”.

   Change values using the up or down arrows.

To bring the curtain closer to the floor, adjust this value so that it is less than zero. (i.e. To close the door 4” more, the value for “Close Pos. Adjust” will be -4.0”) Moving this parameter in the positive direction raises the curtain relative to the floor. Changing this value will not affect the open position.

   Note: If you leave this parameter and return to it, its value will again be zero. Any changes made before leaving the parameter will still be effective. For example: If you lowered the door 4.0”, leave the parameter and return, the parameter will display 0.0”. Even though the display shows 0.0” the -4.0” change has been recorded.
4. When parameter is changed press enter button for three (3) seconds to return to the “MAIN MENU”.
5. Test operation of door and continue adjustment.

TIP: At any point in the menu mode, Pressing and holding the enter button for at least 2 seconds will cause the controller to automatically accept all the changes made and exit the menu system.

To adjust the OPEN position:

1. Power up door and press enter button to enter “MAIN MENU”.
2. Using up arrow key, scroll to “Open Pos. Adjust”.
3. Press enter button to view parameter value. This parameter will show a coded value on the left and the opening height in inches on the right. This value will always be less than the door opening height.

   Change the value using the up and down arrow keys.

   To bring the open position down (closer to the floor) adjust this value to be less than the current value. To open the door more relative to the floor, adjust this parameter in a positive direction. (i.e. To open the door 4” more, and the current value is 72.0”. Change the value for “Open Pos. Adjust” to be 76.0”). Changing this value will not affect the close position.
4. When parameter is changed press enter button for three (3) seconds to return to the “MAIN MENU”.
5. Test operation of the door, and continue adjustment.

ENCODER PROGRAMMING

<table>
<thead>
<tr>
<th>OPTION</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open Distance</td>
<td>Use this option to set the overall opening distance of the door (in feet). For example, for an 8’ tall FasTrax. This should be set to “7” [178]. This measurement is used for initial position setup only. For small adjustments of the open and close position, use “Close Position Adjust” or “Open Position Adjust”</td>
</tr>
<tr>
<td>Set Open Pos</td>
<td>Use this option for initial position setup. Manually place door in the open position and select this option. Alternatively “Set Close Pos.” can be used if it is more convenient to place the door in the closed position. NOTE: This option approximately sets the open and close positions. For additional adjustment of the open and close position, use “Close Position Adjust” or “Open Position Adjust”</td>
</tr>
<tr>
<td>Set Close Pos</td>
<td>Use this option for initial position setup. Manually place door in the closed position and select this option. Alternatively “Set Open Pos.” can be used if it is more convenient to place the door in the open position. NOTE: This option approximately sets the open and close position. For additional adjustment of the open and close position, use “Close Position Adjust” or “Open Position Adjust”</td>
</tr>
<tr>
<td>Open Pos Adjust</td>
<td>Use this option to make small adjustment to the open position. The number displayed is the measurement between the open and closed position. For example if this option was set to 100” [2540] the door would open 100 inches from the closed position. It is recommended to adjust the closed position of the door first, before adjusting the open position.</td>
</tr>
<tr>
<td>Close Pos Adjust</td>
<td>Use this option to make small adjustment to the closed position. The number displayed is the relative displacement of the closed position. For example, if this option was set to 0.0” [0] the door would close approximately 0.0” [0] more. (i.e. Moving more, and the current value is 1.0” [25] less. If this option was set to 2.0” [51] the door would close 2.0” [51] less)</td>
</tr>
<tr>
<td>Apr Open Pos</td>
<td>Use this option to adjust the approach open position. This option is a measurement in inches from the open position. For example, if this option was set to 24.0” [610] the door would slow down 24.0” [610] from the open position.</td>
</tr>
<tr>
<td>Encoder Startup</td>
<td>The controller is waiting for valid data from the encoder. If the controller does not receive a response at startup, this will remain on the screen indefinitely. If this does not clear with 5 seconds, please check all encoder wiring.</td>
</tr>
<tr>
<td>Encoder Read</td>
<td>The controller is unable to read valid data from the encoder. Check all wiring. Ensure that the shield on the encoder cable is connected to ground, and that the control box is grounded. The error requires the power to be cycled to reset.</td>
</tr>
<tr>
<td>Encoder Velocity</td>
<td>The controller has received a signal from the encoder that the door is moving faster than allowed. This can occur if the encoder is not properly attached to the shaft, bad electrical connection to the i-COMM, or improper grounding. The error requires the power to be cycled to reset.</td>
</tr>
</tbody>
</table>
CHAPTER 8 - DOOR OPERATION

VERIFY DOOR OPERATION / CHECKLIST

1. It is recommended that the operation of all controls on the FasTrax be verified monthly.

2. The door operations are controlled by a Universal Controller. The controller is set-up and programmed during testing at the factory. Unless you are a RITE-HITE DOORS, INC. authorized service technician, you should not attempt to change the program.

3. A quick way of determining that the door is ready to operate, is to open the control box and look at the row of (X) green Input LED’s on the i-COMM and the label to verify proper state.

4. Are door opening dimensions correct?

5. Tracks shimmed as required?

6. Tracks aligned when installing wall fasteners?

7. Are the pillow block bearing set screws tightened to 66 to 80 in.-lb.?

8. Check for proper line voltage?

9. Are all mounting bolts tight?

10. All wires connected for the photoeyes?

11. Are loose wires secured away from moving parts?

12. With the power on, press the "OPEN" button, the door should open and close automatically after a short delay. To adjust the amount of door open time, the setting must be changed in the i-COMM controller.

13. Operate and observe the door opening to make sure that it fully opens. Observe the closing action to make sure that the door operates smoothly, and fully closes without excessive curtain ripple.

If it is necessary to adjust either position, refer to Encoder adjustment section.

14. While the door is closing, block the reversing photoeyes. The door should reverse direction and move to the open position, and then continue to operate.

15. Using end user material handling equipment, approach door slowly and verify that all the activation devices that are being used are operating properly. DO NOT attempt to drive through a door in which the green button is flashing.

16. Use caution (honk horn) and look in all directions when approaching a door that is closing and ensure that the door will reverse before proceeding.

17. Pedestrians should be advised to use man doors when present and to not lean into the door way.

18. A fault will occur if the optional non-powered chain hoist chain is pulled, simply press the green flashing "OPEN/RESET" button to return to normal operation.


20. Ground and Shield wires have been properly terminated.

Locate the receiver photoeye on the drive side lower track. Located on the top of the photoeye are three LEDs.

The yellow LED will be on when the output is energized. The orange LED will be on when the margin is > 2.5. If the yellow and green LED’s are OFF, either the beam is blocked or the photoeye is out of alignment.

The green LED should be on when the photoeye is powered and blocked causing the yellow and orange light to go off.

The source photoeye on the non-drive lower track will only have the green LED for power.

20.1 Locate the receiver photoeye on the drive side lower track. Located on the top of the photoeye are three LEDs.

20.2 i-Comm Function Buttons

Inputs

Outputs

Input (X) LED’s indicate the state of the door.
<table>
<thead>
<tr>
<th>Complete</th>
<th>N/A</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>-</td>
<td>Control box conduit mounting location (must be on the bottom)</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>Ground wires properly terminated</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>Shield wires properly terminated</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>Motor ground wire terminated to lower track</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>Encoder chain / sprockets / set screws properly aligned &amp; tightened</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>Encoder cable tightened properly</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>Lower track properly spaced</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>Lower tracks caulked</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>Lower tracks square to wall</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>Lower tracks shimmed properly if jamb cap present</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>Wall mounting brackets securely fastened to wall</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>Photoeye wires properly secured to track or wall</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>Tracks / Radials lubricated</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>Track / Spreader bar in place (Radial or Non-Radial)</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>Upper track properly spaced</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>Upper track properly braced to wall</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>Drive tube level and evenly spaced</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>Lintel roller(s) installed properly (Non-FR)</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>Proper mounting fasteners used</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>Motor terminal strip wires securely fastened</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>Motor bumpers properly adjusted</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>Security chain in place</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>Drive shroud installed</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>Radial center shroud properly installed (Radial only)</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>Chain hoist properly installed (Optional)</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>If less than 8' tall, make sure drive gear guards are in place (Optional)</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>Poly lumber properly installed (Optional)</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>FR – Air bag exhaust hole free and open (FR only)</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>FR – Blower properly mounted (FR only)</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>FR – Curtain fans properly installed (FR only)</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>FR – Step-down transformer and junction box properly installed (FR only)</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>Area clean of debris from installation</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>Notes: __________________________________________</td>
</tr>
</tbody>
</table>

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CHAPTER 9 - FR ELECTRICAL LAYOUT - DOOR MOUNTED SIDE

Step 1: Install Curtain Fan(s) off to the side of the door jamb, near the top of the opening. Adjust fan to move air across the curtain. If door is mounted on cold side, install fans on warm side.

Step 2: Locate Virtual Vision light bar assemblies on each side of the doorway and in clear view of oncoming traffic. They should be installed approximately 3' [914] off the floor, adjacent to the doorway (e.g. goal posts or wall) and in a location that is protected from potential impact damage.

Step 3: Locate Virtual Vision light bar assemblies on each side of the doorway and in clear view of oncoming traffic. They should be installed approximately 3' [914] off the floor, adjacent to the doorway (e.g. goal posts or wall) and in a location that is protected from potential impact damage.

Step 4: Mount step down transformer if 120V not available.

Step 5: If door is equipped with Thermal Air Seal step down transformer junction box, plug in Virtual Vision cable. If not, there will be a separate junction box strictly for the Virtual Vision.

Step 6: Plug cables together and wire into control box.

NOTE: Curtain Fan(s) may be turned off if there is no moisture present.

NOTE: Virtual Vision is standard on Freezer / Cooler doors provided with the Insulmax curtain. There will be a motion sensor mounted on each side of the door, as well as 2 red LED light bars on each side of the opening on both sides. The motion sensors will detect motion on the opposite side of the curtain to warn oncoming traffic of a possible pedestrian or forklift on the opposite side.

To avoid cross talk when changing the settings on the Virtual Vision or activation sensors when using the remote controls, Rite-Hite offers the following three options:

The BEA remote control allows you to set a unique security code for each sensor. Then you would be able to enter the code for the sensor you are interested in changing, and it will only change the settings for that sensor. To accomplish this, temporarily disconnect the activation sensor(s) from its power supply (at the i-COMM), use the remote to set a security code (e.g. "1111") for the Virtual Vision sensor(s), then power up all sensors. The activation sensor will have the default security code "0000" for its settings, and the Virtual Vision sensor will have its new security code (use unlock/lock sequence). There should be no cross-talk with the remote's instructions when using this approach. Make sure to record these values for future reference.

If you do not wish to use security code settings, you can simply power down one unit (at the i-COMM) while setting the other unit, and then do the same thing with the other unit. This is similar to option "a", although if you want to make subsequent changes to the settings, you would need to go through the power down procedure again.

If you do not wish to power down the units or use security settings, you can physically cover one of the units while programming the other unit. Any opaque material (e.g. cardboard) should work, this may be difficult for units mounted high above the opening.
CHAPTER 9 - FR ELECTRICAL LAYOUT - BACK SIDE OF DOOR

Step 7: Mount opposite side Virtual Vision assembly

Step 8: Mount opposite side Virtual Vision motion sensor

See Pages 34 - 43 for wiring details.
Step 1: Lubricate drive shaft with an anti-seize lubricant and place sprocket onto shaft and tighten set screws.

Step 2: Route chain around sprockets. Plumb and level chain hoist, make sure chain is taut.

Step 3: Use a straight edge to align chain sprockets. Failure to do so may result in noise and premature wear.

Step 4: Mark and drill hole locations and fasten hoist to the wall. Unit can be rotated 180° to fit.

Step 5: Attach spring to the brake handle and chain to the spring.

Step 6: Fasten chain lock bracket to wall, so that it will hold chain in place to release the brake. Trim excess chain.

Step 7: Plug in cable and wire chain hoist into control box per electrical drawing on Page 34.

Step 8: Install interior chain hoist guard.

Step 9: For opposite drive, remove top bracket, rotate 180° and re-fasten.

Step 10: Test operation of chain hoist. Pull brake chain and lock in place. Pull chain hoist chain, which will stop door operation. Release brake chain and operate door.
CHAPTER 10 - OPTIONS WELD PLATE INSTALLATION

Step 1:
Measure from bottom of track to each hole location and position weld plates on the steel jamb at these locations and weld in place. If steel is not present at the track hole locations, weld where possible. Note: There MUST be a fastener every other hole minimum, approximately 4’ [1219].

Step 2:
Position upper weld plates so they catch the wall mount bracket holes. If no steel above the opening, it must be provided.

Step 3:
Fasten lower track to weld plates with self-drill/tap screws and washers provided.

Step 4:
Fill gaps between weld plates with tape backed foam.

JAMB DETAIL
Non-Radial
If door height is less than 8'-0" [2438] tall, install drive guard onto vertical, tilt, high lift style doors.

***WARNING***
Keep Clear of Moving Parts. Door May Start Automatically At Any Time.

Step 1:
If door height is less than 8'-0" [2438] tall, install sign and brackets onto lower tracks on each side at approximately 5'-0" [1524] from the floor.

***WARNING***
Keep Clear of Moving Parts. Door May Start Automatically At Any Time.
**CHAPTER 11 - MAINTENANCE ITEMS**

**27.1**
Remove the brake cover by removing the three screws and brake handle holding it on.

**Torque Adjustment**
This should only be required after prolonged brake use.

The spanner nut is tight against the brake casing, to make adjustments unscrew the spanner nut a few clicks at a time. (2.5 turns starting out)

The lower the brake torque, the longer the brake stop time and the faster the brake release time.

Adjustments to the torque setting should not be performed without first consulting Rite-Hite Doors Technical Support at 563-589-2722.

**Step 1:**
To disengage brake, remove the chain from the lock bracket, pull down and lock the chain in place.

**Step 2:**
To engage brake, remove the chain from the lock bracket until chain is no longer taught and lock the chain in place.

**27.3**

**Step 1:**
To hold the brake release on, rotate the brake release hold down bracket to vertical position.

**Step 2:**
To engage brake, rotate bracket horizontal.

**27.2**

**Step 1:**
To replace Encoder, unscrew connector.

**Step 2:**
Using 2mm Allen wrench, loosen lock collar and slide Encoder off of shaft.

**Step 3:**
Install new Encoder, tighten lock collar (14 in/lbs), and screw connector on.

**Step 4:**
Proceed to Encoder setup instructions

**27.4**

**Step 1:**
To hold the brake release on, rotate the brake release hold down bracket to vertical position.

**Step 2:**
To engage brake, remove the chain from the lock bracket until chain is no longer taught and lock the chain in place.
### FasTrax® Inverter Program Instructions

When in Status mode, pressing and holding the "M" MODE key for 2 seconds will change the display from displaying a speed indication to displaying load indication and visa versa.

Pressing and releasing the "M" MODE key will change the display from status mode to parameter view mode. In parameter view mode, the left hand display flashes the parameter number and the right hand display shows the value of that parameter.

Pressing and releasing the "M" MODE key again will change the display from parameter view mode to parameter edit mode. In parameter edit mode, the right hand display flashes the value in the parameter being shown in the left hand display.

Pressing the "M" MODE key in parameter edit mode will return the drive to the parameter view mode. If the "M" MODE key is pressed again then the drive will return to status mode, but if either of the "UP" or "DOWN" keys are pressed to change the parameter being viewed before the "M" MODE key is pressed, pressing the "M" MODE key will change the display to the parameter edit mode again. This allows the user to very easily change between parameter view and edit modes whilst commissioning the drive.

"WARNING: Consult factory before changing any parameters not listed in this table."

<table>
<thead>
<tr>
<th>Parameter Number</th>
<th>Name</th>
<th>Default Value</th>
<th>New Value</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>00.03</td>
<td>Acceleration Rate 1</td>
<td>5.0</td>
<td>0.5</td>
<td>s/100 Hz</td>
</tr>
<tr>
<td>00.04</td>
<td>Deceleration Rate 1</td>
<td>10.0</td>
<td>1.0</td>
<td>s/100 Hz</td>
</tr>
<tr>
<td>00.10</td>
<td>Security Status</td>
<td>L1</td>
<td>L2</td>
<td></td>
</tr>
<tr>
<td>00.18</td>
<td>Preset Speed 1</td>
<td>0.00</td>
<td>0.00</td>
<td>Hz</td>
</tr>
<tr>
<td>00.61</td>
<td>Torque Detection Level</td>
<td>0</td>
<td>50</td>
<td>%</td>
</tr>
</tbody>
</table>

### FasTrax - Status Modes

<table>
<thead>
<tr>
<th>Left Display</th>
<th>Status</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>rd</td>
<td>Drive ready</td>
<td>The drive is enabled and ready for a start command. The output bridge is inactive.</td>
</tr>
<tr>
<td>in</td>
<td>Drive inhibited</td>
<td>The drive is inhibited because there is no enable command, or a coast to stop is in progress or the drive is inhibited during a trip reset.</td>
</tr>
<tr>
<td>Er</td>
<td>Drive has tripped</td>
<td>The drive has tripped. The trip code will display in the right hand display.</td>
</tr>
<tr>
<td>dC</td>
<td>Injection braking</td>
<td>DC injection braking current is being applied to the motor.</td>
</tr>
<tr>
<td>fF</td>
<td>Drive output frequency in Hz</td>
<td>Drive output frequency in Hz.</td>
</tr>
<tr>
<td>ld</td>
<td>Load current as a % of motor rated load current</td>
<td>Load current as a % of motor rated load current.</td>
</tr>
<tr>
<td>A</td>
<td>Drive output current per phase in A</td>
<td>Drive output current per phase in A.</td>
</tr>
</tbody>
</table>
# CHAPTER 11 - 230/460V INVERTER PROGRAMMING

## FasTrax® - Inverter Error Codes

<table>
<thead>
<tr>
<th>Trip Code</th>
<th>Condition</th>
<th>Possible Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>tr UU</td>
<td>DC bus under voltage</td>
<td>Low AC supply voltage, check power source. Low DC voltage when supplied by an external DC power supply.</td>
</tr>
<tr>
<td>tr OV</td>
<td>DC bus over voltage</td>
<td>The DC bus (Pr. 84) has exceeded 800V-460V or 400V-230VAC, check the following: If DC bus climbs while door is not running, disconnect CE filter with power off. If fault is intermittent when door is not running try to set Automatic reset of faults. (PR. 73 = 10.34, PR. 74=10.36, PR. 63 = 3, PR 64 = on) If fault is while door is closing add breaking resistor, see Control Box Explosion for a list of parts. Deceleration rate set too fast for the inertia of the machine. Mechanical load driving the motor.</td>
</tr>
<tr>
<td>tr It.br</td>
<td>I²C on braking resistor</td>
<td>Check door closing speed. If fault is while door is closing, add breaking resistor. See tr OV for more troubleshooting.</td>
</tr>
<tr>
<td>tr It. AC</td>
<td>I²C on drive output</td>
<td>Check that radial spacing and that they are square, or lower track spacing. Motor wiring, check for loose connections or shorts. Make sure door cannot move if brake is engaged.</td>
</tr>
<tr>
<td>tr Ol.AC</td>
<td>Drive output instantaneous over current</td>
<td>Door is mechanical binding or jammed. Check radial spacing and that they are square, or lower track spacing. Motor wiring, check for loose connections or shorts. Make sure door cannot move if brake is engaged. Disconnect CE filter with power off. If fault is while door is closing add breaking resistor. Deceleration rate set too fast for the inertia of the machine.</td>
</tr>
<tr>
<td>Ol.br</td>
<td>Braking resistor instantaneous over current</td>
<td>Excessive braking current in braking resistor. Braking resistor value too small. MUST wait 10 seconds to reset after trip occurs.</td>
</tr>
<tr>
<td>O:Sp'd</td>
<td>Over speed</td>
<td>Excessive motor speed (typically caused by mechanical load driving the motor).</td>
</tr>
<tr>
<td>tunE</td>
<td>Auto tune stopped before complete</td>
<td>Run command removed before autotune complete.</td>
</tr>
<tr>
<td>lt.br</td>
<td>t-t on braking resistor</td>
<td>Excessive braking resistor energy.</td>
</tr>
<tr>
<td>lt.AC</td>
<td>t-t on drive output current</td>
<td>Excessive mechanical load. Drive requires re-auto tuning to motor, high impedance phase to phase or phase to ground short circuit on the drives output.</td>
</tr>
<tr>
<td>O:ht1</td>
<td>IGBT over heat based on drives thermal model</td>
<td>Overheat software thermal model.</td>
</tr>
<tr>
<td>O:ht2</td>
<td>Over heat based on drives heatsink</td>
<td>Heatsink temperature exceeds allowable maximum.</td>
</tr>
<tr>
<td>th</td>
<td>Motor thermistor trip</td>
<td>Excessive motor temperature.</td>
</tr>
<tr>
<td>O:Ld1</td>
<td>User +24V or digital output overload</td>
<td>Excessive load or short circuit on +24V output. The Enable/Reset terminal will not reset an O:Ld1 trip. Use the Stop/Reset key.</td>
</tr>
<tr>
<td>OUL.d</td>
<td>I x t overload</td>
<td>Reduce motor current.</td>
</tr>
<tr>
<td>hot</td>
<td>Heatsink/IGBT temp is high</td>
<td>Reduce ambient temperature or reduce motor current.</td>
</tr>
<tr>
<td>br.rS</td>
<td>Braking resistor overload</td>
<td>See Advanced user guide.</td>
</tr>
<tr>
<td>EEF</td>
<td>Internal drive EEPROM failure</td>
<td>Possible loss of parameter values.</td>
</tr>
<tr>
<td>PH</td>
<td>Input phase imbalance or input phase loss</td>
<td>One of the input phases has become disconnected from the drive.</td>
</tr>
<tr>
<td>rS</td>
<td>Failure to measure motors stator resistance</td>
<td>Motor too small for drive. Motor cable disconnected during measurement.</td>
</tr>
<tr>
<td>O:cL</td>
<td>Overload on current loop input</td>
<td>Input current exceeds 25mA.</td>
</tr>
<tr>
<td>tr HF ###</td>
<td>Hardware Fault</td>
<td>The drive has detected a hardware problem, verify wiring is correct. This cannot be fixed in the field, replace the drive.</td>
</tr>
<tr>
<td>HF 05</td>
<td>Hardware Fault</td>
<td>No signal from DSP at start up.</td>
</tr>
<tr>
<td>HF 06</td>
<td>Hardware Fault</td>
<td>Unexpected Interrupt.</td>
</tr>
<tr>
<td>HF 07</td>
<td>Hardware Fault</td>
<td>Watchdog failure.</td>
</tr>
<tr>
<td>HF 08</td>
<td>Hardware Fault</td>
<td>Interrupt crash (code overrun).</td>
</tr>
<tr>
<td>HF 11</td>
<td>Hardware Fault</td>
<td>Access to the EEPROM failed.</td>
</tr>
<tr>
<td>HF 20</td>
<td>Hardware Fault</td>
<td>Power stage - code error.</td>
</tr>
<tr>
<td>HF 21</td>
<td>Hardware Fault</td>
<td>Power stage - unrecognized frame size.</td>
</tr>
<tr>
<td>HF 22</td>
<td>Hardware Fault</td>
<td>OI failure at power up.</td>
</tr>
<tr>
<td>HF 25</td>
<td>Hardware Fault</td>
<td>DSP Communications failure.</td>
</tr>
<tr>
<td>HF 26</td>
<td>Hardware Fault</td>
<td>Soft start relay failed to close, or soft start monitor failed or braking IGBT short circuit at power up.</td>
</tr>
<tr>
<td>HF 27</td>
<td>Hardware Fault</td>
<td>Power stage thermistor fault.</td>
</tr>
<tr>
<td>HF 28</td>
<td>Hardware Fault</td>
<td>DSP software overrun.</td>
</tr>
<tr>
<td>HF xx</td>
<td>Hardware Fault</td>
<td>HF 1-4, 9-10,12-19,23,24,29,30 Are not used.</td>
</tr>
</tbody>
</table>
CHAPTER 11 - 575V INVERTER PROGRAMMING

FasTrax™ Allen Bradley - 575V - Inverter Program Instructions

Press “ESC” once to display the Display Group parameter.
Press “ESC” again to enter the group menu, the group letter will flash. Press “UP” or “DOWN” arrow to scroll through the group menu.
Press “Enter” or “Sel” to enter a group. Press “UP” or “DOWN” arrow to scroll through the group menu.
Press “Enter” or “Sel” to view the value of the parameter. Press “ESC” to exit without making any changes. Press “Enter” or “Sel” to edit parameter, when # is flashing (Program LED will illuminate if parameter can be edited), press “UP” or “DOWN” arrow to change value.
Press “Enter” when completed to save changes. Press “ESC” to exit and return to program list.

"WARNING: Consult factory before changing any parameters not listed in this table."

<table>
<thead>
<tr>
<th>Parameter Number</th>
<th>Name</th>
<th>Default Value</th>
<th>New Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>039</td>
<td>Accel Time</td>
<td>.5</td>
<td>a/r</td>
</tr>
<tr>
<td>040</td>
<td>Decel Time</td>
<td>.3</td>
<td>a/r</td>
</tr>
<tr>
<td>056</td>
<td>Torque Detection Level</td>
<td>70.0</td>
<td>a/r</td>
</tr>
<tr>
<td>080</td>
<td>DC Brake Injection Time</td>
<td>.5</td>
<td>a/r</td>
</tr>
<tr>
<td>081</td>
<td>DC Brake Injection Level</td>
<td>1.50</td>
<td>a/r</td>
</tr>
<tr>
<td>101</td>
<td>Program Lock</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

---

**Parameter Number**

- **039** Accel Time
- **040** Decel Time
- **056** Torque Detection Level
- **080** DC Brake Injection Time
- **081** DC Brake Injection Level
- **101** Program Lock

---

**Menu Description**

- **Display Group (View Only)**: Consists of commonly viewed drive operating conditions.
- **Basic Program Group**: Consists of most commonly used programmable functions.
- **Advanced Program Group**: Consists of remaining programmable functions.
- **Fault Designator**: Consists of list of codes for specific fault conditions. Displayed only when fault is present.

---

**LED State**

- **Steady Red**: Indicates drive is running and commanded motor direction.
- **Flashing Red**: Drive has been commanded to change direction. Indicates actual motor direction while deaccelerating to zero.

- **Steady Green**: Indicates parameter number, parameter value, or fault code.
- **Flashing Red**: Single digit flashing indicates that digit can be edited. All digits flashing indicates a fault condition.

- **Steady Red**: Indicates the units of the parameter value being displayed.
- **Flashing Red**: Indicates parameter value can be changed.

- **Steady Green**: Indicates drive is faulted.

---

**Key Name**

- **Escape**: Back one step in programming menu. Cancel a change to a parameter value and exit Program Mode.
- **Select**: Advance one step in programming menu. Select a digit when viewing parameter value.
- **Up Arrow**
- **Down Arrow**: Scroll through groups and parameters. Increase/decrease the value of a flashing digit. Used to adjust internal frequency of IP66, NEMA/UL Type 4X rated drivers only when a Display Group parameter is shown and P386 [Speed Reference] is set to internal frequency, A096 [Internal Freq].
- **Enter**: Advance one step in programming menu. Save a change to a parameter value.

---

**Key Description**

- **Potentiometer**: Used to control speed of drive. Default is active. Controlled by parameter P386 [Speed Reference].
- **Start**: Used to start the drive. Default is active. Controlled by parameter P388 [Start Source].
- **Reverse**: Used to reverse direction of the drive. Default is active. Controlled by parameters P388 [Start Source] and A095 [Reverse Disable].
- **Stop**: Used to stop the drive or clear a fault. This key is always active. Controlled by parameter P387 [Stop Mode].
# CHAPTER 11 - MAINTENANCE PROCEDURES

## RITE-HITE DOORS, INC. PLANNED MAINTENANCE

### Model FASTRAX® FR

**CUSTOMER:**

**JOB#**

**SERIAL#**

**DATE:**

<table>
<thead>
<tr>
<th>Planned Maintenance Task</th>
<th>Recommended P.M. Intervals (Time Shown In Months)</th>
<th>Inspect and Perform the Following</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activation</td>
<td>1 6 12 18 24 30 36</td>
<td>Operate all devices to verify proper operation.</td>
</tr>
<tr>
<td>Curtain Fans</td>
<td>x x x x x x</td>
<td>Verify that Curtain Fans are powered and working. Make sure that the fans are positioned properly and are removing condensation from the curtain.</td>
</tr>
<tr>
<td>Auto Re-Feed</td>
<td>x x x x x</td>
<td>Verify auto re-feed is operational.</td>
</tr>
<tr>
<td>Brake</td>
<td>x x x x x</td>
<td>Verify that brake stops the door at open and closed positions as well as when stopped in the middle of travel. To move the curtain manually, turn the brake release handle to the disengaged position. The curtain should be able to be moved manually. If brake is making noise, adjust.</td>
</tr>
<tr>
<td>Controls / Wiring</td>
<td>x x x x</td>
<td>Clean, check all connections with disconnect off. Make sure all wires are free from moving parts.</td>
</tr>
<tr>
<td>Curtain</td>
<td>x x x x</td>
<td>Inspect for wear or damage, patch immediately to prevent condensation or frost buildup. Clean with warm soapy water. Check drive spheres, if missing or damaged, replaced. Check top roller.</td>
</tr>
<tr>
<td>Door Assembly</td>
<td>x x x x</td>
<td>Perform visual inspection for damage. Tighten all hardware. Replace any worn labels. Use air hose to remove dust and debris.</td>
</tr>
<tr>
<td>Door Operation</td>
<td>x x x x x</td>
<td>Operate door and make sure all operations are functioning properly.</td>
</tr>
<tr>
<td>Drive Tube</td>
<td>x x x x x</td>
<td>Verify drive tube gear is centered over track groove. Make sure bearing set screws and mounting bolts are tight.</td>
</tr>
<tr>
<td>Gearbox</td>
<td>x x x x</td>
<td>Check gearbox fluid level, fill with 90 weight if low. Check lock collar set screws.</td>
</tr>
<tr>
<td>Encoder / Chain / Sprockets</td>
<td>x x x</td>
<td>Verify Encoder chain and sprocket set screws are tight. Check open and close positions, adjust as required.</td>
</tr>
<tr>
<td>Lintel Seal (not on FR doors)</td>
<td>x x x</td>
<td>Verify lintel seal is sealing wall properly.</td>
</tr>
<tr>
<td>Motor</td>
<td>x x x x</td>
<td>Check junction box and plug connections.</td>
</tr>
<tr>
<td>Non-Powered Opening Option</td>
<td>x x x</td>
<td>With power off, verify chain hoist opens door. Lubricate chain, sprockets and check alignment.</td>
</tr>
<tr>
<td>Photoeyes</td>
<td>x x x x x</td>
<td>Verify both photoeyes reverse the curtain. LED’s on receiver should go on/off. Clean emitter and receiver lens.</td>
</tr>
<tr>
<td>Thermal Air Seal</td>
<td>x x x x</td>
<td>Verify air bag is inflated, free of tears and providing an adequate seal against curtain and the wall. If torn, patch immediately to prevent condensation buildup. Verify warm air existing exhaust holes.</td>
</tr>
<tr>
<td>Tracks / Radial (upper and lower)</td>
<td>x x x x x</td>
<td>Perform visual inspection. Lubricate radials and tracks with food grade synthetic grease (Super Lube). It may be required to remove the existing grease prior to adding new. Verify proper width and tighten all hardware. Check foam seal if present.</td>
</tr>
<tr>
<td>Track Retention Edging</td>
<td>x x x x</td>
<td>Inspect track retention edging, replace if cracked.</td>
</tr>
<tr>
<td>Virtual Vision</td>
<td>x x x x x</td>
<td>Verify virtual vision is functioning properly. Red LED’s should be lit if movement on opposite side.</td>
</tr>
<tr>
<td>Vision (not on FR doors)</td>
<td>x x x x</td>
<td>Inspect vision for tears or separation. Clean with warm soapy water.</td>
</tr>
<tr>
<td>Radial and Track Lubrication</td>
<td></td>
<td>Lubrication of radials and tracks may be required more than every 6 months, based on usage and environmental conditions. Lubrication of the radials and tracks is the sole responsibility of the end user. If door is mounted in a dirty environment, it may be required to remove the existing grease prior to adding new.</td>
</tr>
</tbody>
</table>

## MAINTENANCE INFO

### High-Temperature Synthetic Grease with PTFE (Polytetrafluoroethylene)

The synthetic oil base in this food-grade silica-thickened grease, increases the time before the next application. It also contains a PTFE additive that reduces friction and waterproofs metal surfaces, preventing rust and corrosion. NSF rated H1 for applications with incidental food contact. Temperature range is -45° to +450° F [-45° to +232° C]. Color is white.

McMaster Carr # 1378K33 - 14.1oz Cartridge
# CHAPTER 11 - TROUBLESHOOTING

<table>
<thead>
<tr>
<th>DEFINITION</th>
<th>FUNCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Activation</strong></td>
<td>It is preferred not to wire activation devices until after the door is functioning properly. (Refer to Activation Manual)</td>
</tr>
<tr>
<td><strong>Brake</strong></td>
<td>The brake is powered by 110VAC, if brake does not stop door when open or closing or if there is excessive noise, see brake adjustments on Page 27. Brake will have approx. 267 ohms on normal readings, disconnect rectifier.</td>
</tr>
<tr>
<td><strong>Breakaway</strong></td>
<td>If the curtain is separated from the lower tracks, simply press the green open/reset button and the door will auto-redeed back into the tracks without tools or intervention. If a major separation occurs the drive tube may need to be turned manually to prevent damage to the curtain.</td>
</tr>
</tbody>
</table>
| **Control Box Cable** | **DO NOT DRILL HOLES ON TOP OF THE CONTROL BOX TO RUN CONDUIT, AS DUST PARTICLES AND MOISTURE MAY CAUSE DAMAGE TO ELECTRICAL COMPONENTS.**
THE IDEA SAFEST LOCATION IS AT THE BOTTOM. Failure to do so voids warranty.
If supplied conduit cable is too short, DO NOT splice wires, as the cable is shielded to prevent electrical noise. Make sure the motor is grounded and the braided (drain) wire is properly grounded to prevent electrical noise. Contact local Representative for replacement. |
| **Curtain** | The curtain is driven by the drive spheres and the drive tube. a) If drive spheres are missing from curtain, repair or replace. b) If curtain struggles to raise or lower or is baggy, **check for proper track spacing, O.D.W. + 9”** [229]. c) Check to make sure tracks are lubricated with food grade synthetic grease (Super Lube). d) If curtain is making contact with the wall when closing, verify lower tracks are not too close together and that lintel roller is present and properly installed. e) The curtain is 27oz insulated. |
| **Disconnect Switch** | The disconnect switch is in line with fuse holder terminals F1, F2, F3, and removes power from the entire control box, except for terminals F1, F2, F3. |
| **D.O.H. or D.O.W.** | **D.O.H. = Door Opening Height or D.O.W. = Door Opening Width**. |
| **Drain Wire** | **Verify that drain wire is terminated properly, failure to properly terminate the drain wire, may result in sporadic reversals, photoeye and other issues due to either static electricity or electrical noise and void warranty.** |
| **Drive Side Switch** | The drive can be switched from right hand to left hand by performing the following:
 a) Remove and switch conduit mounting bracket to opposite side.
 b) Remove and switch motor mount bumper bracket.
 c) Remove encoder bracket and move to outside holes.
 d) Remove and switch driven sprocket.
 e) Remove and switch drive and non-drive photoeye cables.
 f) New drive shroud and bracket are required.
 g) Flip Drive Tube 180°. |
| **Drive Tube** | If drive spheres make excessive clicking noise, make sure tube drive gears are centered over track grooves. |
| **Encoder** | **See Encoder Section.**
**THE ENCODER CABLE SHOULD NEVER BE SPICLED OR EXTENDED.**
 a) If curtain is not stopping at the same position, make sure encoder cable is grounded.
 b) Verify Encoder chain is operating properly and sprocket set screws are tight to shafts.
 c) Red Encoder wire is NOT used on Left Hand drive doors.
 d) See Page 19 for Encoder errors. |
| **Fuses** | **F1, F2, F3:** incoming power fuses, must have line voltage across all 3 legs. (Transformer, Inverter, motor)
**F4, F5:** Primary side transformer fuses, must have line voltage across both legs.
**F6, F7:** Secondary side transformer fuses, F6 is 24V and F7 is 120V (power supply & brake). |
| **FCOMM Controller™** | The i-COMM controller is a circuit board that controls the actions of the door. There is a digital display that shows the cycles, status and position of the door at any time during its travel. For input and output function signals, refer to chart on Page 18. Settings can be changed for re-close or pre-announce timers, interlocks, special activation commands, among many others, refer to instructional manual included.
 a) Verify i-COMM is receiving 24VDC from power supply.
 b) If i-COMM display is blank or hard to see, adjust contrast.
 c) Input X2 - Torque Reverse needs to be on for the door to operate.
 d) Input X10 - Lower Photoeye will be on unless photoeye is blocked or not aligned.
 e) Input X11 - Upper Photoeye will be on unless photoeye is blocked or not aligned.
 f) Input X14 - Fault needs to be on for the door to operate.
 g) The door can be set to close from 2 to 255 seconds, follow i-COMM adjustment instructions. |
| **Inverter** | **See Pages 28-30 for proper parameter settings.** |
| **Motor** | If door will not run when given an activation, check the following:
 a) Check voltage to and from inverter.
 b) Check voltage and for loose wires at terminals, U, V, and W.
 c) 208V-240V motor will have 2.8 ohms on normal readings.
 d) 400V-480V motor will have 9-10 ohms on normal readings.
 e) 575V motor will have 13 ohms on normal readings. |
| **Motor Phasing** | If "Open/Reset" button is pressed and the door closes, phasing is reversed, switch wires in terminals, V and W. Make sure the motor is properly grounded to prevent electrical noise. |
| **Non-Powered Opening** | If issues arise with the non-powered opening chain hoist, check the following:
 a) If power outage, release brake and pull chain on hoist to open door.
 b) If chain hoist chain is pulled while door is powered, the door will go into fault mode (green light flashing).
 c) If chain hoist chain is pulled, reset door by pressing the green flashing button. |
| **O.D.H. or O.D.W.** | **O.D.H. = Door Opening Height or O.D.W. = Door Opening Width**. |
| **Open/Reset Push Button** | The open/reset push button function is when the button is pressed, a command to open the door is given. To jog door when i-COMM states "Photoeye Failure", press and hold the "Open/Reset" button. |
| **Pressure** | If the curtain is blowing out because of high wind or negative pressure, check the following:
 a) Tracks MUST be mounted at O.D.W. + 9” [229].
 b) If mounted wider, excessive curtain wear may occur, if too narrow, curtain buckling or billowing will be greater.
 c) Check to make sure the curtain has all the drive spheres in place.
 d) Exterior doors are equipped with a garter bag in the bottom loop to protect from the elements. |
| **Photoeyes** | The photoeyes are wired to the 24VDC circuit and are wired as normally closed when there is power to the unit and the emitter photoeye is aligned with the receiver photoeye. There are 3 lights on the receiver and one on the emitter. Green is for power, yellow for forward and orange are for proper alignment. The photoeyes will reverse or hold the door open when the photoeye beam is blocked. When the beam is not broken, the door will auto-reclose.
If photoeyes require adjustment, check that lower tracks are square to the wall.
 a) Power to Brown (DC) and Blue (OV) wires.
 b) Internal photoeye relay wires Black / Blue should be closed when photoeye is aligned and open when not aligned.
 c) When open, i-COMM verifies photoeye inputs are off. If on, door will fail. If off, test is ok, emitter's turn on.
 d) Orange and yellow light on the Receiver should be on when aligned.
 e) Green light on the Emitter indicates the unit is powered up.
 f) Input X11 will go off when the upper (54") [1372] photoeye is tripped.
 g) Input X10 will go off when the lower (18") [457] photoeye is tripped.
CHAPTER 11 - TROUBLESHOOTING

<table>
<thead>
<tr>
<th>DEFINITION</th>
<th>FUNCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Supply</td>
<td>Power Supply is powered by 120VAC from the F1 fuse and delivers 24VDC to the i-comm.</td>
</tr>
</tbody>
</table>
| Tracks | a) Verify tracks are properly spaced  
b) Lubricate as required per Maintenance Schedule. Page 31. |
| Virtual Vision | Virtual Vision is standard on the FasTrax FR door. When motion is sensed via Falcon motion sensors, the Virtual Vision red LED’s will illuminate to notify driver of movement on the opposite side of the curtain.  
a) It is normal for the YDC3 output to flash on i-COMM during door operation. |
| Voltage Change | To change the voltage, see steps below:  
a) Change transformer taps and fuses per electrical diagram.  
b) Change motor wiring per junction box diagram.  
c) Replace Inverter with proper voltage. |
| Door does not close | a) Verify inputs X2 and X4 are on.  
b) Verify inputs X5, X6 or X7 are not on, if on, remove wire from terminal to determine what is keeping light on.  
c) Verify outputs K1, K2, K4, K5 and YDC2 are on or coming on to signal inverter to close door.  
d) Check status on i-Comm display to see why door is staying open (“Photoeye Blocked” or Photoeye Failure”, etc.), should read “Door Closing in “x” seconds”.  
e) Verify inverter display is changing frequency.  
f) Verify chain hoist chain is not pulled and switch is not tripped.  
g) Verify brake handle is not released.  
h) Verify X10 and X11 are on and that the photoeyes are lined up and not blocked.  
i) Verify proper incoming power is reaching inverter at L1, L2 and L3.  
j) Verify as the curtain gets near the photoeyes that they are being shut off.  
k) If run timer occurs, check for binding or obstructions. Tracks may need to be lubricated to reduce friction.  
l) Verify inverter display is changing frequency.  
m) Verify proper incoming power is reaching inverter at L1, L2 and L3. |
| Door does not open | a) Verify inputs X2 and X4 are on.  
b) Verify input X3, X5, or X6 are coming on when activation device is being used.  
c) Verify outputs K3, K4, K5 and YDC2 are on or coming on to signal inverter to open door.  
d) Check status on i-Comm display to see why door is staying closed, should read “Door Opening”.  
e) Verify inverter display is changing frequency.  
f) Verify brake handle is not released.  
g) Verify proper incoming power is reaching inverter at L1, L2 and L3. |
| Door slams open/close | a) Verify the open and close positions are properly set.  
b) Verify encoder lock collar and sprocket set screws are tight and the chain moves when the drive tube is turning.  
c) Verify the encoder shaft turns when the drive tube is turned.  
d) Verify the inverter is changing speeds on the display.  
e) Verify the phasing is correct. The door should open when the green open button is pressed.  
f) Verify the brake is engaged and not released.  
g) Verify the key been installed on the gearbox shaft.  
h) Verify the proper ratio gearbox is being used. |
CHAPTER 12 - MANDATORY FIELD WIRING DIAGRAM

CONNECT RED WIRE TO DC FOR RIGHT HAND DRIVE DOORS.
ISOLATE RED WIRE FOR LEFT HAND DRIVE DOORS.

GROUND WIRE MUST BE GROUNDED

FROM CABLE LABELED 18" PHOTOEYE
FROM CABLE LABELED 54" PHOTOEYE

PUB. NO. FASTRAXFRG JULY 2011
INTERLOCK

2 Door Standard Interlock

Note: Consult i-COMM manual to see which inputs can be assigned to interlock in function. Connect K3 to whichever input is selected to become interlock in. No other devices should be connected to this input. Terminal Must be assigned to interlock through i-COMM menu on both doors.

HEATED PULL CORDS

NOTES:

THIS DRAWING ASSUMES INPUT FUNCTIONS ARE SET TO FACTORY DEFAULTS. CONSULT i-COMM MANUAL FOR DETAILS.

WARNING: NEVER CONNECT MOTION SENSORS TO A TOGGLE INPUT

Terms "X6", "X7" are automatic reclose.

Terms "DC" are DC common for inputs.

Terms "AC" and "N" are 24VAC terminals.

*Terminal X7 is a default

**For true toggle operation use terminal "X5".

***For Reverse hold open connect sensors to UNUSED input.

Consult i-COMM manual for additional instructions.

RADIO CONTROLS

300MHz Radio Control

40MHz Radio Control

(1, 2 or 4 Button)
CHAPTER 12- VIRTUAL VISION / CURTAIN FAN JUNCTION BOX

RITE-HITE DOORS INC.

VIR TICAL VISION / CURTAIN FAN JUNCTION BO X

STEPDOWN XFMR FUSING

NOTE: ALL WIRING IS TO BE UL LISTED.

COVER SHOWN 1/2 SCALE

REPLACEMENT FUSES:
250V 7.5A MAX 24 VAC
300V 15A MAX 24 VAC
500V 20A MAX 120 VAC

CONNECT (1) 120V CURTAIN FAN
CONNECT (1) 120V CURTAIN FAN

WIRE PROVISION:
14 AWG COPPER 90 DEG C. 600V MIN.

TRANSFORMER MUST BE INSTALLED AND GROUNDED ACCORDING TO RELEVANT ELECTRICAL CODES.

TRANSFORMER CLASSIFICATION:
4000 VA 2000 VA

WIRE IN TERTTARY."
CHAPTER 12 - VIRTUAL VISION ELECTRICAL WIRING

NOTES:
1) LED STRIPS ARE 12V DC AND MUST BE WIRED IN SERIES AS SHOWN.
2) MOUNTED SIDE REFERS TO THE SIDE OF THE DOOR OPENING THAT THE FASTRAX IS ATTACHED TO THE WALL.
3) RED CABLES ARE FOR THE MOUNTED SIDE WITH THE LONGER CABLE SUPPLIED TO THE NON-DRIVE SIDE. GRAY CABLES ARE FOR THE NON-MOUNTED SIDE OF THE DOORWAY.
4) ALL CABLES TERMINATE INTO THE 6" X 7" JUNCTION BOX PROVIDED.
5) COMM OUTPUT YOCS MUST BE PROGRAMMED TO A FUNCTION OF 21 (FLASH).
6) FALCONS SHOULD BE PROGRAMMED FOR A 5-SECOND HOLD TIME AND BI-DIRECTIONAL DETECTION.
CHAPTER 12- DEFROST JUNCTION BOX WIRING 120V

REQUIRED WIRING

NOTE: ALL WIRING MUST BE COMPLETED BY QUALIFIED ELECTRICIAN. WIRING MUST COMPLY WITH LOCAL EDITION OF NATIONAL ELECTRICAL CODE (NEC). USE WIRING CONFORMING TO THE NEC. USE 14 AWG WIRE FOR ALL WIRING BETWEEN THE CURTAIN FAN AND THE ASSEMBLY.

REQUIRED WIRING

NOTE: ALL WIRING MUST BE COMPLETED BY QUALIFIED ELECTRICIAN. WIRING MUST COMPLY WITH LOCAL EDITION OF NATIONAL ELECTRICAL CODE (NEC). USE WIRING CONFORMING TO THE NEC. USE 14 AWG WIRE FOR ALL WIRING BETWEEN THE CURTAIN FAN AND THE ASSEMBLY.

ITEM PART NO. QTY DESCRIPTION

RITE-HITE DOORS INC.

7822E014

1"=1"

JBOX, ASY, DEFROST, 120V, 30A

5358....

RPB 8/14/2007

5476

9/1/2007

BOM CORRECTION 5666 6/17/2008 LIP

C WAGO TERMINALS 5739 12/4/2008 LIP

D CHG HIGH VEL. TO CURTAIN FAN 5894 10/19/2009 RJK

FINAL ASSEMBLY

DWG. NO.

FINAL ASSEMBLY
CHAPTER 12 - DEFROST JUNCTION BOX WIRING 400V

REQUIRED WIRING

FAN CURTAIN

NOTE: BRANCH-CIRCUIT PROTECTION MUST BE SUPPLIED BY THE USER AND SUPPLY WITH ALL NATIONAL AND LOCAL ELECTRICAL CODES, USING FOR PROJECTION PURPOSES MAY BE BASED ON LITERATURE CIRCUITS.

REVISION HISTORY

REV
Dwg No
Title
Size
Sheet Scale
Date
Check
Approved
Drawn
Ref
Initial
ECN

OVER 0 INCH TOLERANCES

FINAL ASSEMBLY

DWG. NO.

FINAL ASSEMBLY

OVER 0 INCH TOLERANCES

FINAL ASSEMBLY

FROM END USER SUPPLIED FUSED DISCONNECT

220V - 50Hz

ALL WIRE TO BE UL LISTED

FAN CURTAIN

200 CURTAIN WIN 24W

OVER 0 INCH TOLERANCES

OVER 0 INCH TOLERANCES

OVER 0 INCH TOLERANCES
### CHAPTER 13 - CONTROL BOX PARTS / LIST

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<thead>
<tr>
<th>ITEM</th>
<th>QTY</th>
<th>DESCRIPTION</th>
<th>P/N</th>
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<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Ass'y (C-Box, BackPanel, Enclosure w/labels)</td>
<td>1744....</td>
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<tr>
<td>2</td>
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<td>Contactor 24VAC,16A, 50/60 Hz (Chain hoist)</td>
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<td>Contact 3 amp, 600V Time Delay (208-240V)</td>
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<tr>
<td>5</td>
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<td>Fuse Holder, 3 Pole, 600V, 30A (3Ø-1; 1Ø-2; 1Ø-3)</td>
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<td>Fuse Holder, 1 Pole, 300V, 12A</td>
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<td>Fuse, 2 amp, 250V, Time Delay</td>
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<td>Fuse Holder, 3 Pole, 600V, 20A (not 208/230V)</td>
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<td>Fuse, 1 amp, 600V, CC, Time Delay (208-230V)</td>
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<tr>
<td>10</td>
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<td>Fuse, 10 amp, 600V, CC, KLDR (400-460V)</td>
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<tr>
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<td>Fuse, 15 amp, 600V, KLDR (208-230V)</td>
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<td>Fuse, 6A, 600V, CC, KLDR (575V)</td>
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<td>Display, LCD, 2-Line, W/Conn</td>
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<td>Fuse, 20 amp, 600V, KLDR (220V 1Ø)</td>
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<td>Inverter, 2HP, 575V, 3PH, AB-FLEX40 (575V)</td>
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<td>Inverter, 2HP, 460V, 3PH, CT (460V)</td>
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<td>Inverter, 2HP, 230V, 1-3PH, CT (208-230V)</td>
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<td>Kit, Disconnect Switch, w/ Handle</td>
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<td>Kit, FasTrax Inverter Relay (not shown)</td>
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<td>Kit, i-COMM Controller, Encoder</td>
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<td>DCC, Module, i-Comm, SSI</td>
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<td>Power Supply, DIN, 24VDC, 18W</td>
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<td>Relay, SPDT,24VDC,10AMP (warn device &amp; brake)</td>
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<td>Relay, SPDT, 24VAC/DC, 6 Amp, Term (upgrade)</td>
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<td>Kit, Resistor, Inverter, 230V, 2HP (doors &gt;100 FT)</td>
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<td>Kit, Resistor, Inverter, 460V, 2HP (doors &gt;100 FT)</td>
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<td>27</td>
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<td>Socket, Relay, 1 Pole, 250VAC, 10 AMP (W.D. &amp; Brake)</td>
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<td>Switch, Push Button, Ext, Green, Illum, 22MM</td>
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<td>Switch, Disconnect Switch, w/ Handle</td>
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<td>Terminal, End Barrier, Fuse Holder</td>
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<td>Terminal, WA, Cage, 20A, Jump, 2P</td>
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<td>Terminal, WA, Cage, 20A, 3 Hole</td>
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<td>Terminal, WA, Cage, 20A, 3 Hole, carrier</td>
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<td>Terminal, WA, Cage, 20A, 3 Hole, GND</td>
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<td>Transformer, 100VA, 208/230/460V/24/115</td>
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<td>Transformer, 100VA, 380/415/575V/24/115</td>
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<td>Control Box Quick Release Latch</td>
<td>51950021</td>
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<td>38</td>
<td>1</td>
<td>Control Box Mounting Tab</td>
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Not Shown: 19, 24, 31
CHAPTER 13 - MISC SERVICE PARTS

Not Shown:
FasTrax Entire Door (1) - FASTRAX
FasTrax FR Entire Door (1) - FasTrax FR
FasTrax Service Parts Kit (1) - 53700557
FasTrax Sample (1) - 67750026
Crate (1) - 53700146
FasTrax Warning Bracket, Set (Radial Doors <8'-0" H w/o Shroud) (1) - 14500999

Air Seal Blower/Heater Kit, PTC, 110V (1) - 53700760
Air Seal Blower/Heater Kit, PTC, 230V (1) - 53700761

LH Shroud Extension Plate (1) - 65000627
RH Shroud Extension Plate (1) - 65000628

Thermal Air System Seal (FR only) (1) - 6889...
Trailer Rail, 45° Alum (FR only) (air) - 73400002

120V Curtain Fan (2) - 53700769
220V Curtain Fan (2) - 53700770
120V Fan only (2) - 13250069
230V Fan only (2) - 13250072
Arm only (2) - 11500046

Transformer, 2KVA, 600:240/120 (1) - 73550017
Transformer, 2KVA, 480/240:240/120 (1) - 73550024
Transformer, 3KVA, 600:240/120 (1) - 73550026
Transformer, 3KVA, 480/240:240/120 (1) - 73550027

Virtual Vision LED Assembly (4) - 7623...
Virtual Vision Warning Plate (4) - 65000586
H1 (2) & H10 (2)

Virtual Vision Mounting Bracket (8) - 14500971
H1 (2) & H14 (2)

Super Lube (air) - 54650002

Keep Clear Warning Label (1) - 53850534
Sign Plate (Doors <8'-0" H w/o Shroud) (1) - 65000609

I-Zone Detector Assembly (2) - 7622...
I-Zone Upgrade (air) - 7637...
I-Zone Cover (2) - 17900111

Keep Clear Warning Label (1) - 53850534
Sign Plate (Doors <8'-0" H w/o Shroud) (1) - 65000609

I-Zone Cable (1) - 1554....
I-Zone Detector Assembly (2) - 7622....
I-Zone Upgrade (air) - 7637....
I-Zone Cover (2) - 17900111

Chain Hoist, 4:1 Ratio (1) - 56150038
Kit, FasTrax, Chain Hoist, Nord, Interior (1) =>8/5/09 - 53700782
Kit, Chain Hoist, Hallmark (1) =>8/5/09 - 53700565
Shroud, Chain Hoist, Interior (1) - 53700796
Kit, FasTrax, Chain Hoist, Nord, Exterior (1) - 53700801
Exterior Chain Hoist Switch Kit (1) - 53700687
Interior Chain Hoist Switch (1) - 72700218

Poly Lumber Install Kit (1) - 5339...
Poly Lumber 1 1/2'x7 1/2'x10'-6" (air) - 65450100
Lower Track Weld Plate (16) - 65000587
Upper Track Weld Plate (6) - 65000588

Poly Lumber Header Shim 14 1/4" (2) - 69000015
Plate, 6" Ø, zinc (10) - 65000723

Virtual Vision Warning Plate (4) - 65000586
H1 (2) & H10 (2)
CHAPTER 13 - CURTAIN SERVICE PARTS

Curtain, Assembly, FasTrax, Insulated (1) - 2877....
Kit, Bottom Loop Seal Replacement (1) - 6893....
Curtain, Stiffener (1) - 7181....
Curtain, Weight Assembly, Soft Edge (1) - 7541....

Kit, Curtain Top Roller (includes 2) - 53700562
Curtain, Assembly, FasTrax, Insulated (1) - 2877....
Curtain, Kit, Drive Sphere, Qty 10 (a/r) - 53700561

PATCH KIT PARTS LIST

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<th>Patch Kit</th>
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<tr>
<td>Curtain, Patch Kit, PVC, 27 oz, Blue (a/r)</td>
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<td>Curtain, Patch Kit, PVC, 27 oz, Green (a/r)</td>
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<td>Curtain, Patch Kit, PVC, 27 oz, Gray (a/r)</td>
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<td>Curtain, Patch Kit, PVC, 27 oz, Orange (a/r)</td>
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<tr>
<td>Curtain, Patch Kit, Urethane, 27 oz, Blue (FR) (a/r)</td>
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</table>
CHAPTER 13 - VERTICAL/TILT/HIGH LIFT SERVICE PARTS

- **Cable, Control Box Conduit, 10', 20', 30', 50' (1) - 1555....**
- **Photoeye, Wiring Cover (2) - 1917....**
- **Kit, Photoeye, Thrubeam Source, 13M (2) - 53700702**
  - **Photoeye, Bracket Cover (4) - 14501207**
- **Kit, Photoeye, Thrubeam Receiver (2) - 53700703**
  - **Photoeye, Bracket Cover (4) - 14501207**
- **Breakaway Retention Strips (a/r) - 1481....**
- **Upper Track, VL, High, Stand, Tilt (1/2) - 7368....**
- **Super Lube (a/r) - 54650002**
- **Lower Track Assembly (a/r) - 7362....**
- **Drive Tube Ass'y (1) - 6749**
- **Track, Upper, <= 10'-0" O.D.H. (2) - 53700627**
- **Track, Upper, <= 12'-0" O.D.H. (2) - 53700628**
- **Track, Upper, <= 14'-0" O.D.H. (2) - 53700629**
- **Track, Upper, <= 16'-0" O.D.H. (2) - 53700630**
CHAPTER 13 - MISC SERVICE PARTS LIST

Kit, Edge Repair, 3 Sphere (a/r) - 53700712
Kit, Edge Repair, 6 Sphere (a/r) - 53700717
Kit, Edge Repair, 10 Sphere (a/r) - 53700723
Kit, Edge Repair, 12 Sphere (a/r) - 53700787

Kit, FasTrax, Refeed, LH (bracket & 3 rollers) (1) - 53700606
Kit, FasTrax, Refeed, RH (bracket & 3 rollers) (1) - 53700607

Kit, FasTrax/FR, Refeed Roller (2) (a/r) - 53700611

Kit, VL/High Lift Drive Cage, L (1) - 53700616
Kit, VL/High Lift Drive Cage, R (1) - 53700617

Label, Warning, Stand Clear, 2" x 9" (2) - 53850516

Shroud, Bracket, Upper, LH (1) - 14501097
Shroud, Bracket, Upper, RH (1) - 14501099

Shroud, Bracket, Lower (1) - 14501098

Shroud, Bracket, Upper, LH (1) - 14501097
Shroud, Bracket, Upper, RH (1) - 14501099

Guard, Drive Non-Radial (2 - <8’ d.o.h) - 51300057

Kit, Track Connector, Radius, 90° (1) - 53600185

Kit, Track Connector, Radius, 45° (1) - 53600189

Kit, Universal Track Connector (a/r) - 53600186

Track, Kit, Connector, Radius, 45° (1) - 53600189

Track, Kit, Connector, Radius, 90° (1) - 53600185

Track, Joiner, Drive Cage (2) - 65000576

Track, Perforated, Angle, 2"x2"x13’, 12GA (13’) - 71500030
CHAPTER 13 - J-BOX SERVICE PARTS

Curtain Fan Only Junction Box, FasTrax (1) - 53530012

2 Pole Fuse Holder, 600V, 30A (1) - 51000003
Fuse, 3AMP, 600V, Time Delay (1) - 51000008

Virtual Vision Only Junction Box Ass’y FasTrax (1) - 5357....

Cable, Virtual Vision (1) - 15650233

120V:
Fuse Holder, 2 Pole, 600V, 30A (208, 230, 460, 480, 575V) (1) - 51000003
Fuse, 6A, 600V, CC, KLDR (2-460-480V or 1-120V) - 51000055

400V:
Fuse, 10A, 600V, CC, Time Delay (400V) (1) - 51000011
Fuse Holder, 1 Pole, 600V, 30A (208, 230, 460, 480, 575V) (2) - 51000019
Fuse, 4A, 600V, CC, Time Delay (400V) (1) - 51000040

120V / 400V

120V:
Junction Box Ass’y FasTrax (1) - 5357....
Junction Box Ass’y FasTrax FR (1) - 5358....

Fuse, 10A, 600V, CC, Time Delay (400V) (1) - 51000011
Fuse Holder, 1 Pole, 600V, 30A (208, 230, 460, 480, 575V) (2) - 51000019
Fuse, 4A, 600V, CC, Time Delay (400V) (1) - 51000040

208-230/460/575V

208-460V:
Fuse Holder, 1 Pole, 600V, 30A (2) - 51000002
Fuse, 6A, 600V, CC, KLDR (2-460-480V or 1-120V) - 51000055

Fuse Holder, 1 Pole, 600V, 30A (2) - 51000019
Fuse, 15AMP, 600V, CC, Time Delay (2) - 51000024

Fuse Holder, 2 Pole, 600V, 30A (1) - 51000003
Fuse, 5A, 600V, CC (575V) (2) - 51000012
Fuse Holder, 1 Pole, 600V, 30A (2) - 51000019
Fuse, 15AMP, 600V, CC, Time Delay (2) - 51000024
Fuse, 12AMP, 600V, CC, Time Delay (208-230V) (1/3) - 51000027

Cable, 10/5, 600V, 90C (5') - 15650235
### CHAPTER 13 - HARDWARE & PREV GEN SERVICE PARTS

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<th>Hardware List:</th>
<th>Part #</th>
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<td>Nut, Hex, Nylon, Lock, 1/4-20, zinc</td>
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<td>Nut, Hex, Nylon, Lock, 5/16-18, zinc</td>
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<td>Nut, Hex, 3/8-16, zinc</td>
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<td>3/8-16 S.S. Hex Nut</td>
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<td>5/16” x 1.807 Fablok Blind Rivet</td>
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<td>Ring, Retaining, External, 5/16” Shaft</td>
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<td>Screw, HWHSMS, #14 x 1 1/4”, zinc</td>
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<td>#10-24 x 1/2 Phillips RHMS zinc</td>
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<td>Screw, Phip, Dr/Tap, #8 x 1/2”</td>
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<td>Screw.PHSM,Phillips,Tap,#8-18x3/4”</td>
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<td>Screw, PHSMS, Phillips, #10 x 1”, zinc</td>
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<td>#10-24 x 3/4” Phillips RHMS zinc</td>
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<td>Scre,FWH,#8x9/16”,BLK-K-LATH</td>
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<td>Screw,PH,Phillips,Plstite,#8-16x3/8”</td>
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<td>Screw, Phillips, Drill/Tap, #8 x 1/2”</td>
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<td>H18</td>
<td>1/4-20 x 1/2” Thumb Screw GR2 zinc</td>
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<td>Screw, HWH, Drill/Tap, #14x3/4”, zinc</td>
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<td>Screw, HHMS, 5/16-18x6”, GR5, zinc</td>
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<td>Screw, HHMS, 3/8-16 x 1”, GR5, zinc</td>
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<td>Screw, HHMS, 3/8-16x1 1/4”,GR5,zinc</td>
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<td>Screw, HHMS, 3/8-16 x 3 1/2”, zinc</td>
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<td>Screw, HHMS, 3/8-16 x 4”, GR5, zinc</td>
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<td>Screw, HHMS, 1/2-1 x 1”, GR5, zinc</td>
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<td>3/8-16 x 12” S.S.Threaded Rod</td>
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<td>Tape, Foam, Double Sided</td>
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<td>13/64” x 1/2 x .036 Flat Washer zinc</td>
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<td>Washer, Flat, 1/4 x 3/4 x 1/16, zinc</td>
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<td>H30</td>
<td>Washer,Flat,1/4x9/16”x3/32”,Neoprene</td>
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<td>H31</td>
<td>Washer, Lock, Split, 3/8”, zinc</td>
<td>74130002</td>
</tr>
<tr>
<td>H32</td>
<td>Washer, Lock, Split, 1/2”, zinc</td>
<td>74150005</td>
</tr>
<tr>
<td>H33</td>
<td>Self/Drill/#12 Screw</td>
<td>67850004</td>
</tr>
</tbody>
</table>

Refer to Partslist Manual for exploded views and part numbers on doors prior to 8/13/10.
RITE-HITE DOORS, INC. warrants that its FasTrax FR door will operate or perform in conformance with the published specifications when subjected to normal, proper and intended usage and be free from defects in material and workmanship for a period of one (1) year from the date of shipment.

RITE-HITE DOORS, INC. warrants that the 27oz material curtain fabric integrity only, shall be free from material defects for a period of one (1) years.

The curtain fabric warranty covers material failure under normal wear conditions. It does not cover seals, spheres, edging or damage incurred from abuse, misuse, impact, accidents or disaster. It does not cover, vision wear or labor.

Fuses, bulbs, power failures or electrical power surges are items that are not considered warranty.

All claims for breach of this warranty must be made within thirty (30) days after the defect is or can, with reasonable care, be discovered to be entitled to the benefits of this warranty, the products must have been properly installed, maintained, operated within their rated capacities, and not otherwise abused.

Periodic lubrication and adjustment is the sole responsibility of the end user.

This warranty is RITE-HITE DOORS, INC. exclusive warranty. RITE-HITE DOORS, INC. expressly disclaims all implied warranties including the implied warranties of merchantability and fitness.

Non-standard RITE-HITE DOORS, INC. warranties, if any, must be specified by RITE-HITE DOORS, INC. in writing.

In the event of any defects covered by this warranty, RITE-HITE DOORS, INC. will remedy such defects by repairing or replacing any defective equipment or parts, bearing all of the costs for parts, labor, and transportation based on the warranty policy.

This shall be the exclusive remedy for all claims whether based on contract negligence or strict liability. Neither RITE-HITE DOORS, INC. any other manufacturer whose products are the subject of this transaction, nor any RITE-HITE DOORS, INC. representative, shall in any event be liable for any loss or use of any equipment or incidental or consequential damages of any kind whether for breach of warranty, negligence, or strict liability. The application of a manufacturer’s specifications to a particular job is the responsibility of the purchaser. RITE-HITE DOORS, INC. sole obligation with respect to its product shall be to repair or (at our own discretion) replace the product.

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