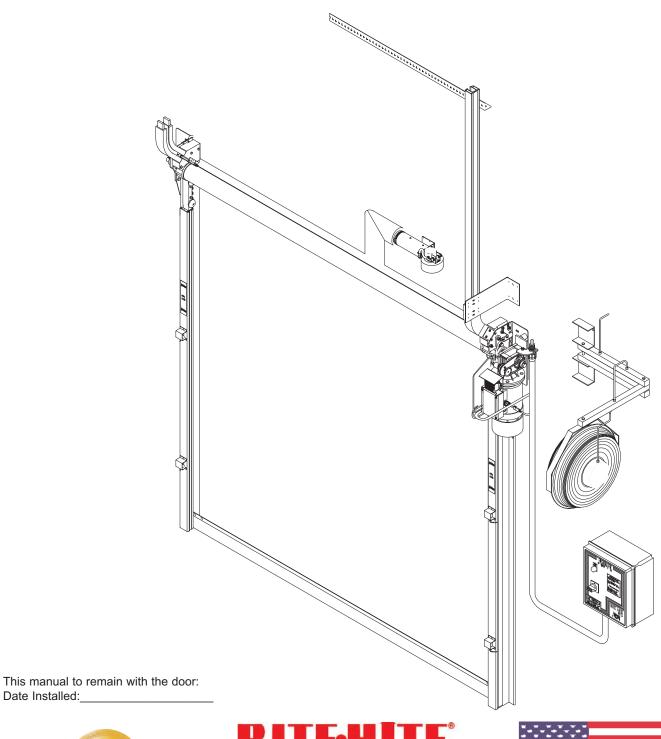
# **FASTRAX® FR**

# HIGH PERFORMANCE MODULAR DOOR









This Manual Covers Doors Shipped = > 8/16/2010. Added Encoder, fabric shroud and updated radials. Refer to FasTraxE for doors prior.

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#### SPECIAL FEATURES

- i-COMM™ Universal Controller
- Heavy-Duty Industrial Materials
- No Springs, Pulleys or Weights
- InsulMax Curtain w/Auto Re-feed™
- I-Zone™ Area Detection System
- Flexible "You Build It" Track Design
- DuraMax Curtain w/Auto Re-feed™
- Adjustable Speeds
- Encoder Positioning
- Virtual Vision
- Powder Coated Materials
- Soft-Edge™ Technology
- 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, 5,329,781, 5,353,859, 5,392,836, 5,408,789 5,450,890, 5,542,463, 5,579,820, 5,601,134, 5,638,883, 5,655,591, 5,730,197, 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, 6,574,832, 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

# CAUTION !!!

Make sure to barricade the door opening on both sides to prevent unauthorized use until the door has been completely installed.

# It is important to verify the following basic information before starting with the installation.

- 1. Alternate dimensions in brackets are in [millimeters].
- Make sure that you are working at the correct location and that you have the required work permits.
- 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.
- 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.

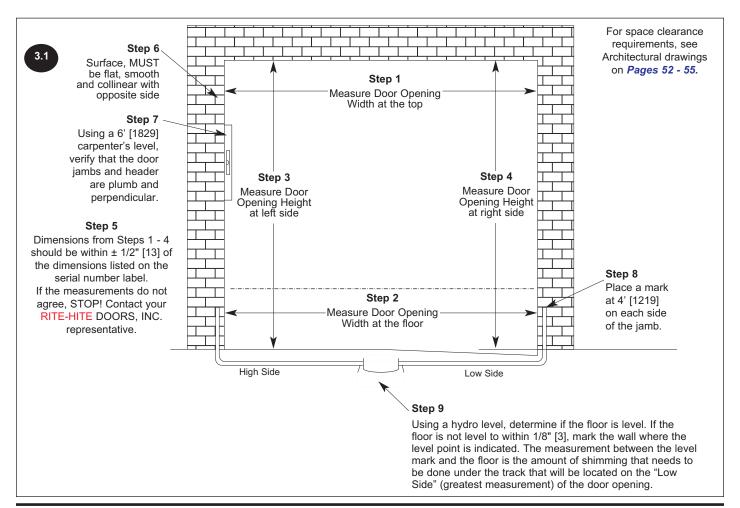
NOTE: Electrical prints included in the parts or control box supersede any prints included in this owners manual on Pages 34 - 43. Always check for electrical prints.

#### CHAPTER 1 - DOOR JAMB

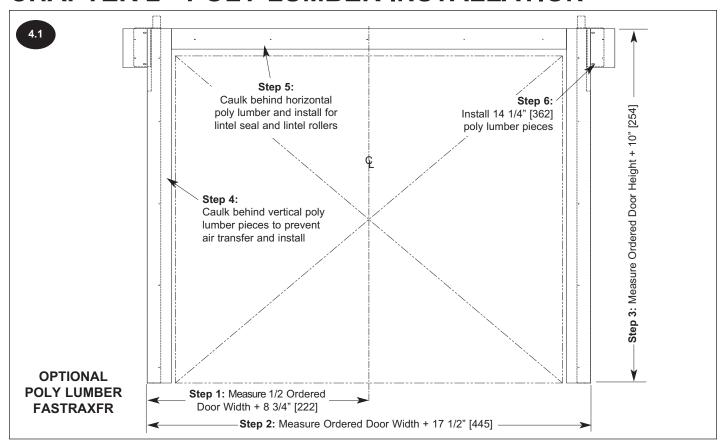
R	RECOMMENDED MOUNTING FASTENERS							
Wall	Fastener							
Wood	Lower Track - 3/8" [10] thru-bolt at top, middle, and bottom. 5/16" x 1-1/2" [8x38] lag screws at all other fastener positions. Upper Track - 5/16" x 1-1/2" [8x38] lag screws at all positions.							
Wood /Steel	Lower Track - 3/8" [10] thru-bolt at top, middle, and bottom. 5/16" x 1-1/2" [8x38] lag screws at all other fastener positions. Upper Track - 5/16" x 1-1/2" [8x38] lag screws at all positions.							
Wood	Lower Track - 3/8" [10] thru-bolt or 3/8" [10] masonry anchor							
/Masonry	positions.at top, middle, and bottom. 5/16" x 1-1/2" [8x38] lag screws at all other fastener positions.							
Steel	<ol> <li>3/8" [10] thru-bolt.</li> <li>3/8" [10] drill and tap (material must be 5/16" [8] min.).</li> <li>3/8" [10] drive self tap/drill screws (1/4" – 14) [6].</li> <li>Weld, lower track is aluminum, only weld if steel jamb option is included or provided by others.</li> </ol>							

#### **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 BitsPhillips Bit for Drill Straight Edge
- Wire Strippers 5/16" [10] Nut Driver
- Small Straight/Phillips Screwdrivers
- Allen Wrench Set (2MM, 1/8" [3] & 5/32" [4])
- 7/16" [11], 1/2" [13], 9/16" [14], 3/4" [19] Socket/wrench



# **CHAPTER 2 - POLY LUMBER INSTALLATION**

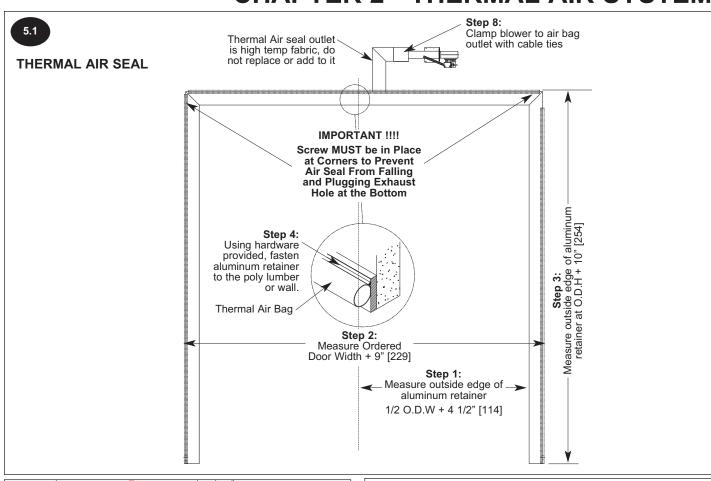


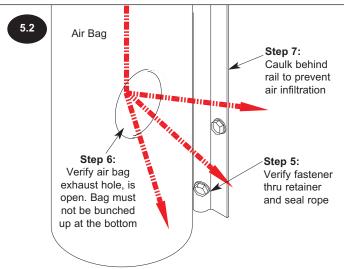
#### **IMPORTANT!!!**

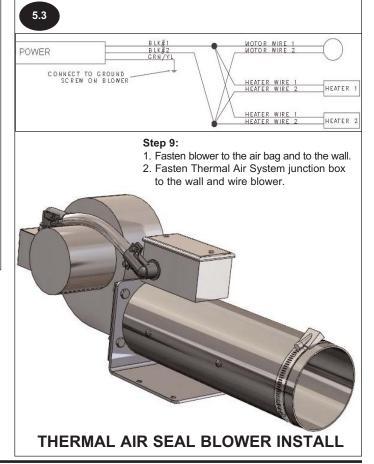
If door is not equipped with Poly Lumber option - proceed to Page 5.

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# **CHAPTER 2 - THERMAL AIR SYSTEM**







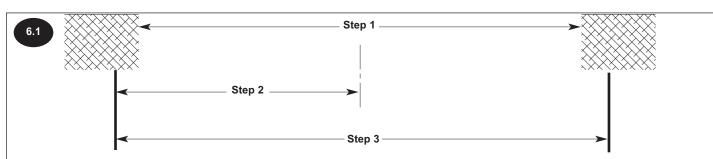
#### CHAPTER 3 - LOWER TRACK

#### **IMPORTANT!!!**

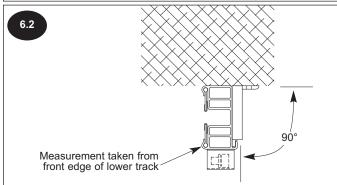
If door is equipped with Weld Plate option - proceed to Page 25.

#### IMPORTANT!!!

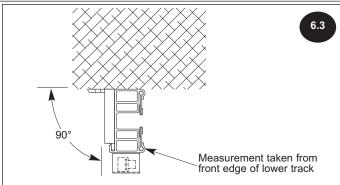
It is imperative that the tracks be mounted at the proper width. If mounted too wide, excess wear is placed on the drive spheres. If too narrow, the curtain may appear wavy or crease in the center.



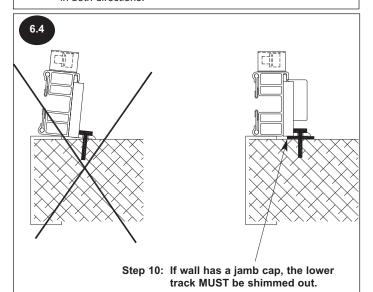
- Step 1: Measure Door Opening Width, find center and place mark on the floor.
- Step 2: From centerline, measure over 1/2 Ordered Door Width + 4 1/2" [114] (+ 1/16" [1.5], -0") and place a mark on the floor.
- Step 3: From this mark, measure over Ordered Door Width + 9" [229] (+ 1/8" [3], -0") and place a mark on the floor.

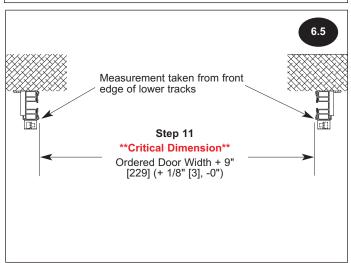


- Step 4: Place drive side lower track at the previously made mark on the floor.
- Step 5: Lower track must be 90° to wall, use shims as required to square the track.
- Step 6: Using a 6' [1829] level, make sure that the track is plumb in both directions.



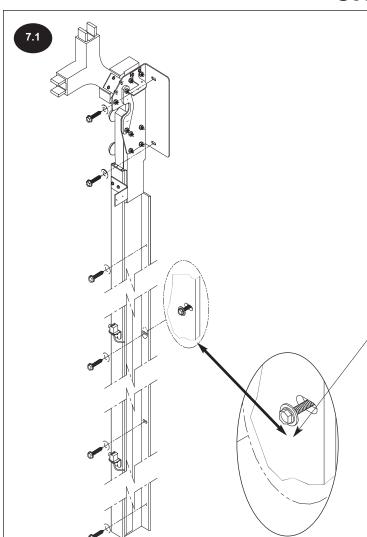
- **Step 7:** Place non-drive side lower track at the previously made mark on the floor.
- Step 8: Lower track must be 90° to wall, use shims as required to square the track.
- Step 9: Using a 6' [1829] level, make sure that the track is plumb in both directions.





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# **CHAPTER 3 - LOWER TRACK**



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.

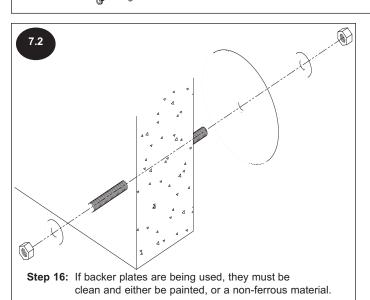
If the hole goes completely through the wall, use thrubolts and backing plates to secure the track to the wall, *Figure 7.2*.

Sleeves may be required if wall collapses when tightening thru-bolt.

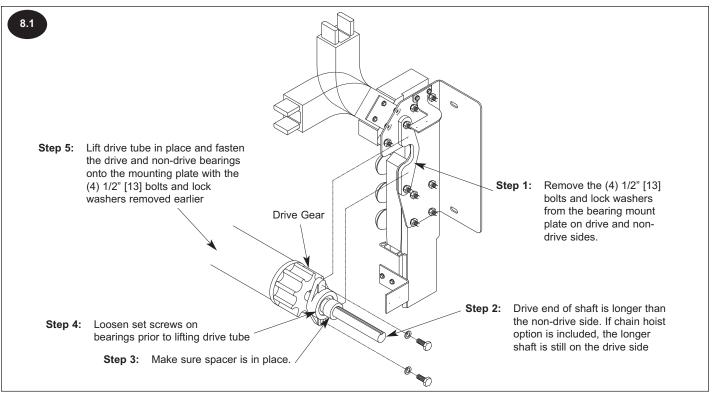
It is the responsibility of the installer to ensure proper lower track spacing and adequate method of fastening to the wall.

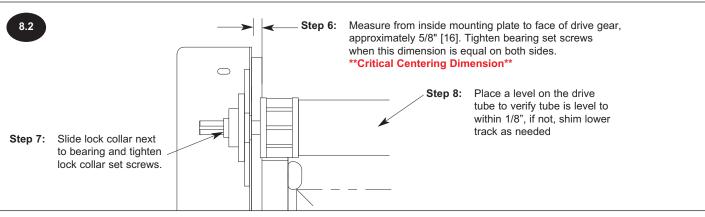
Step 14: After the entire door is installed and operational make sure the curtain is not too tight or too loose. Then fill in the remaining holes with fasteners. It is imperative that all the holes are utilized to prevent lower track movement.

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



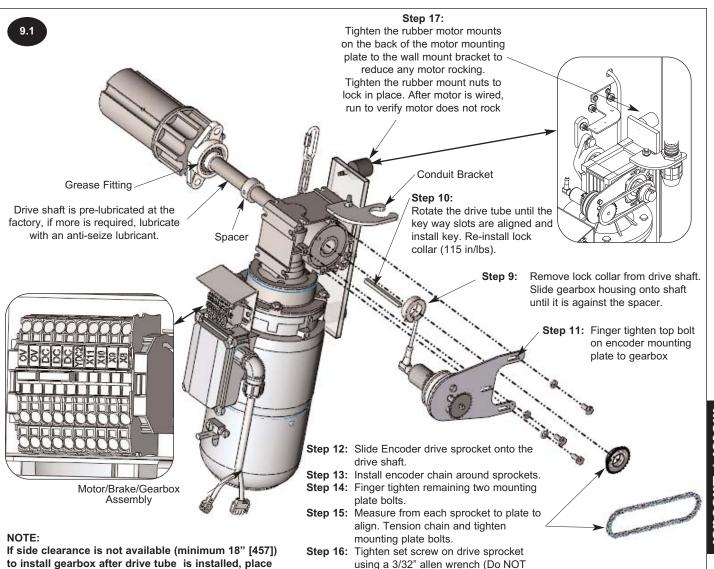
# **CHAPTER 4 - DRIVE TUBE INSTALLATION**





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# **CHAPTER 4 - MOTOR / ENCODER INSTALLATION**



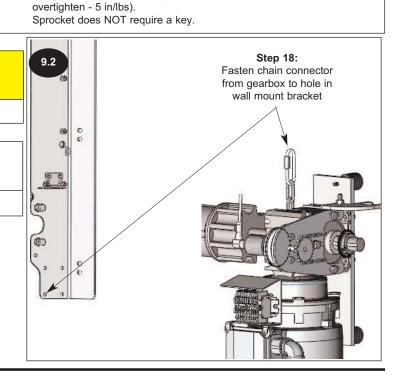
If side clearance is not available (minimum 18" [457]) to install gearbox after drive tube is installed, place gearbox onto shaft prior to installing drive tube. A lifting device will be necessary for this procedure.

# CAUTION !!!

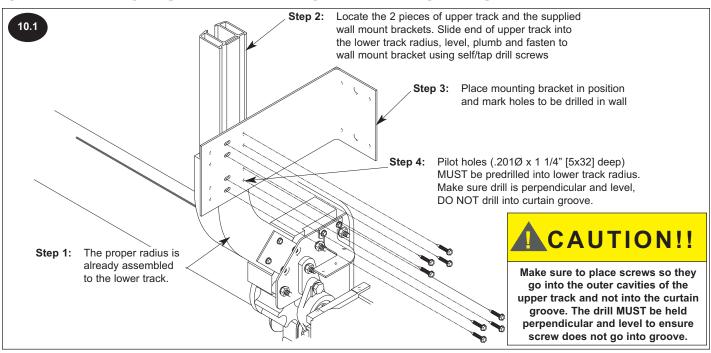
Make sure lock collar is securely fastened.

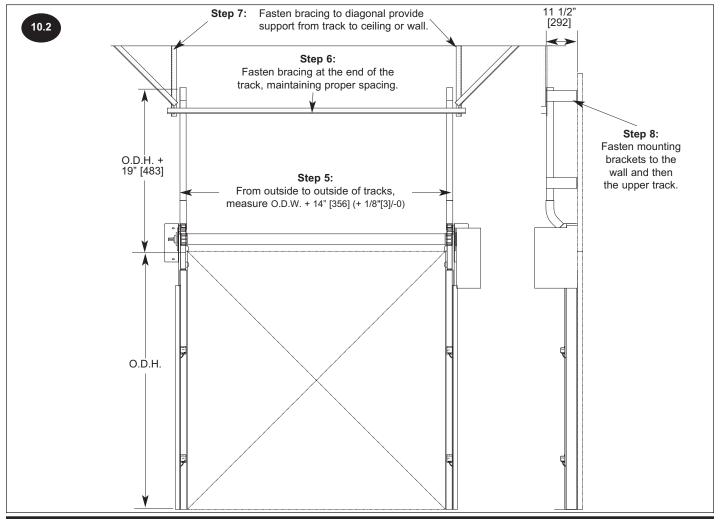
#### IMPORTANT!!!

If motor rocks excessively, tighten bumpers.

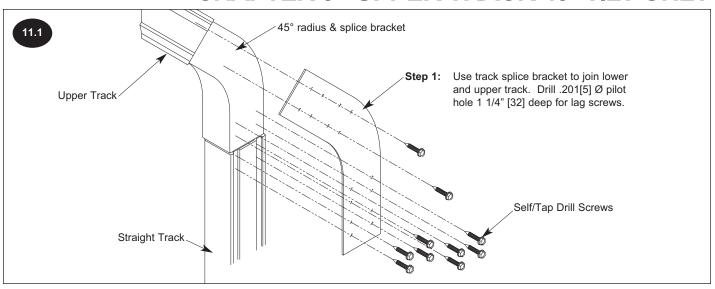


# **CHAPTER 5 - UPPER TRACK VERTICAL ONLY**



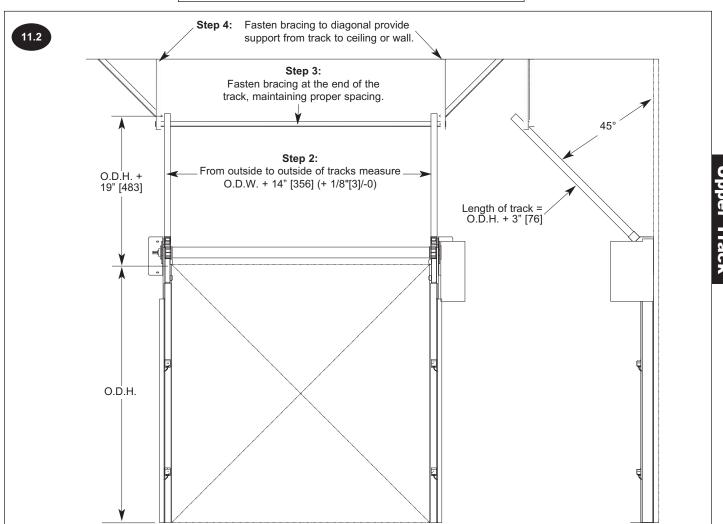


# **CHAPTER 5 - UPPER TRACK 45° TILT ONLY**

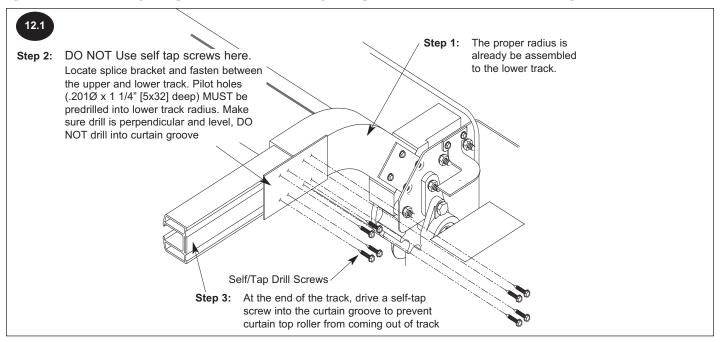


# **CAUTION !!!**

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.

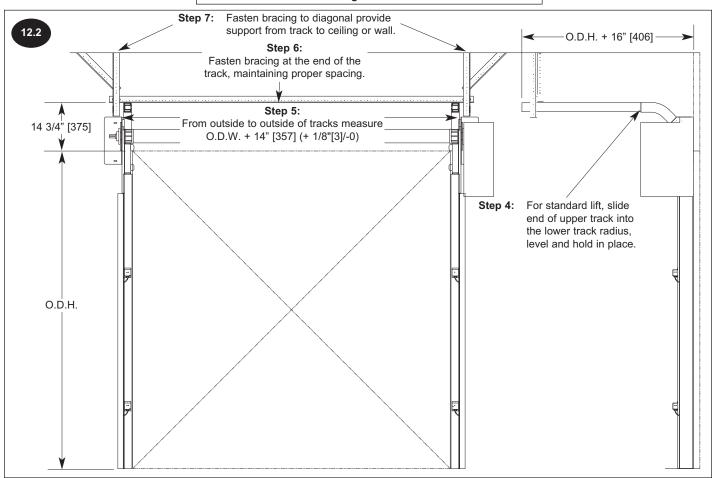


# **CHAPTER 5 - UPPER TRACK STANDARD LIFT ONLY**



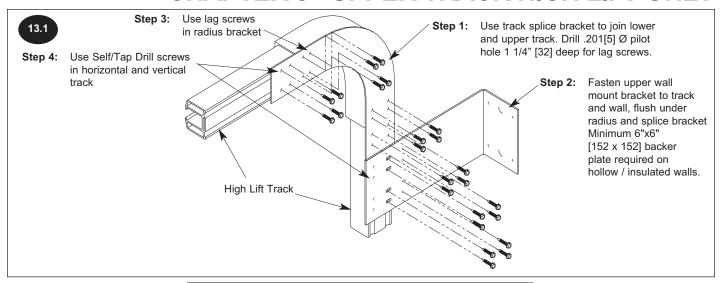
# A CAUTION !!!

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.



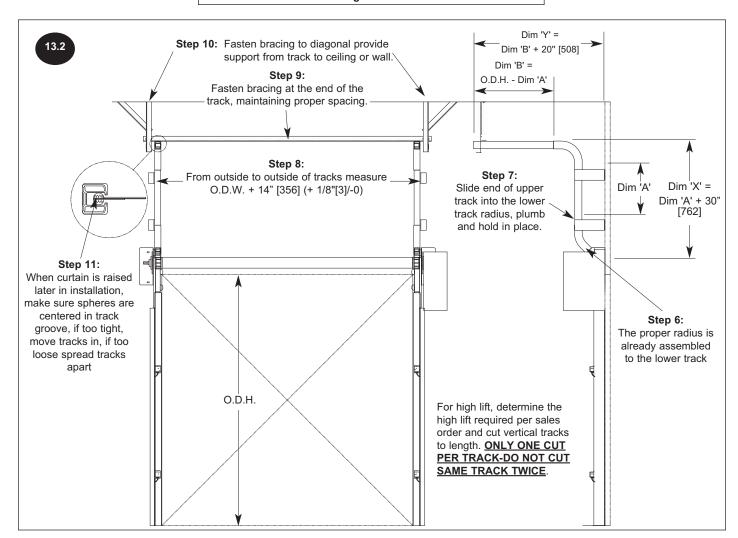
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# **CHAPTER 5 - UPPER TRACK HIGH LIFT ONLY**



# A 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.

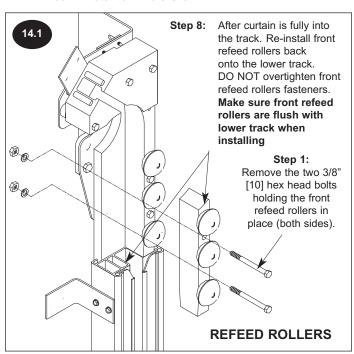


# **CHAPTER 6 - CURTAIN INSTALLATION**

#### **MOTOR PHASING**

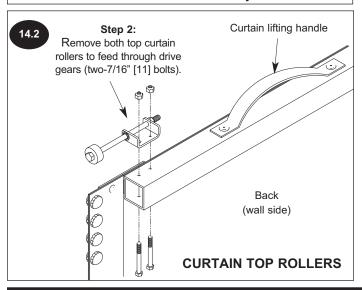
Note: If electrical is available, bypass Figures 14.1 - 14.3 and proceed to Electrical Installation on Page 16, and then return here. If electrical is not complete, proceed to install curtain per Figures 14.1 - 14.3

- 1. With electrical complete, turn disconnect to "ON".
- 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.)
- If the drive tube rotates in the opposite direction, switch wires in motor terminals U & V.

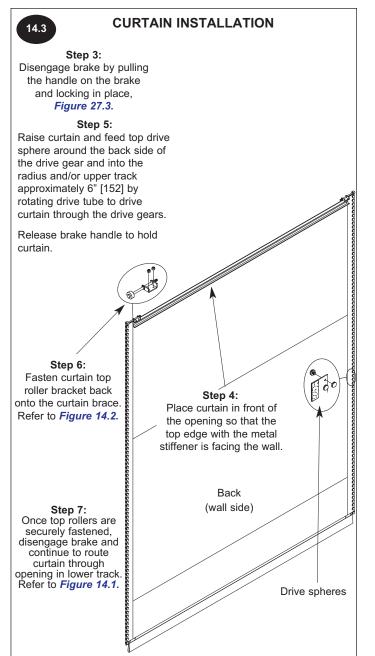


#### **IMPORTANT!!!**

\*Top curtain roller bracket should be positioned such that the roller shaft is toward the curtain and away from the wall.



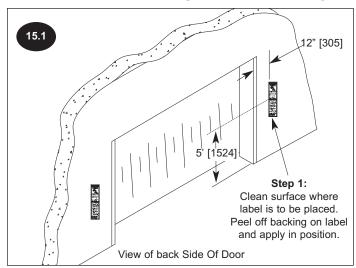
14

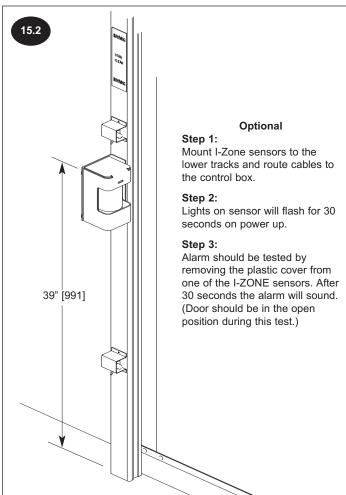


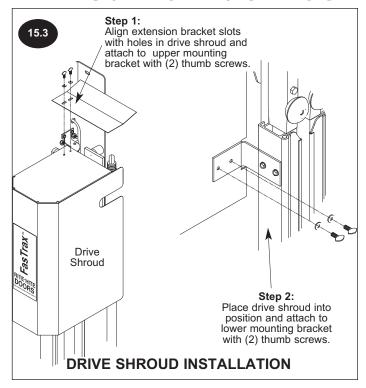
PUB. NO. FASTRAXFRG JULY 2011

# curtain

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







#### **IMPORTANT!!!**

Curtain needs to be stopped at or before it reaches the top of the iamb.

# 🔔 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 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.

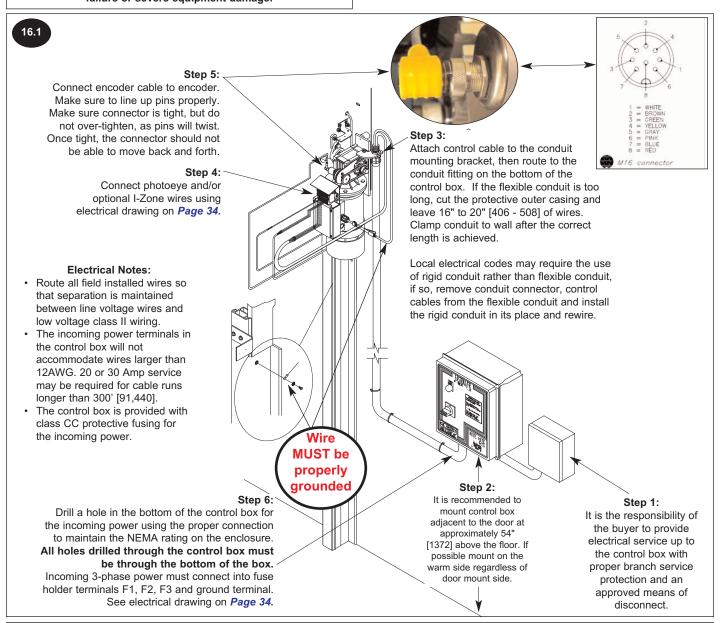
Damage or debris may fall into electrical components causing failure or severe equipment damage.

#### 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.

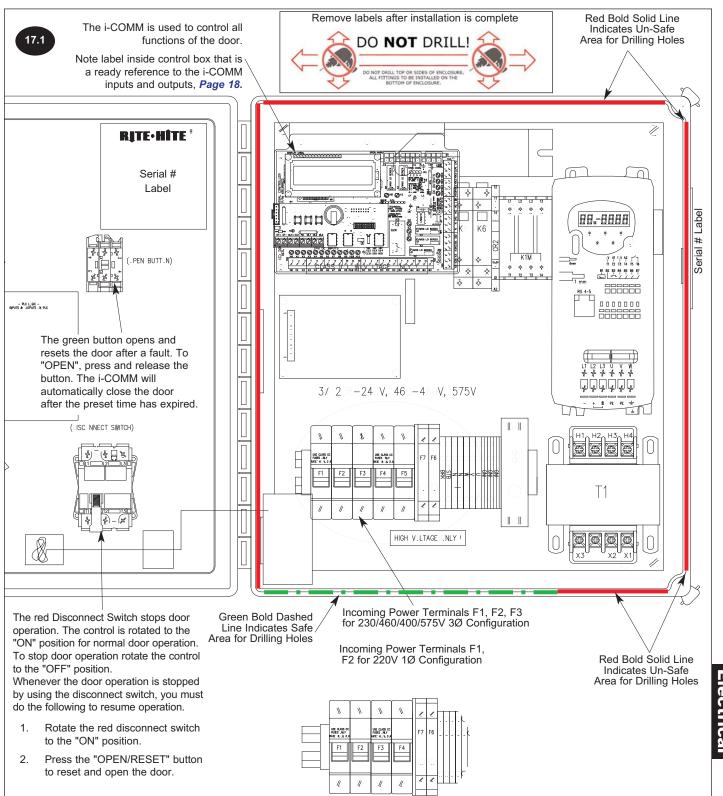


# **CHAPTER 7 - ELECTRICAL INSTALLATION**

#### **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



# **CHAPTER 7 - i-COMM LOGIC CHART**



#### FasTrax Encoder™ i-COMM Quick Reference

	Input 7	Гable	
Input	Input Function	Comments	Note(s)
ХО	Open PB	On to open door	1
X1	Stop PB	On to stop door	1
X2	Torque Reverse	Off to reverse door	
K3,X6,X7	Activation Command	On to open door	1
X4	Close PB	On to close door	1
X5	Toggle Command	On to toggle open or close	1
X8,X9	IZone Sensors (Right & Left)	Not Available on FasTraxCL	
X10	18" Photoeye Input	Must be on for door to close. Off when blocked.	
X11 54" Photoeye Input		Must be on for door to close. Off when blocked.	
X12	Open/Reset Switch	On to reset from fault.	2
X13	Induction Loop Activation	On to open door	2
X14	Fault Input	Must be on for door to run.	

7	Encoder Adjustment Descriptions						
(Refer to i-COMM and Owners Manuals for additional detail)							
Open Distance	Use this option to set the overall opening distance of the door (in feet). For example, or an 9 foot tall FasTrax, this option should be set to "8" (to allow room for fine						
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 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"						
Use this option for initial position setup. Manually place door in the close position  Set Close Position  Use this option of initial position setup. Manually place door in the close 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 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 closed 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 closed 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.
4. Using [UP] & [DOWN] keys select desired time.
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.

53850564-1

#### **CHAPTER 7 - ENCODER SETUP**

#### **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.
- Power up door and press enter button to enter "MAIN MENU".
- 4. Using down arrow, scroll to "Open Distance".
- 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:

- Power up door and press enter button to enter "MAIN MENU".
- 2. Scroll using up arrow to the item "Close Pos. Adjust".
- 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:

- Power up door and press enter button to enter "MAIN MENU".
- 2. Using up arrow key, scroll to "Open Pos. Adjust".
- 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.

- 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.

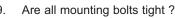
#### **ENCODER PROGRAMMING**

OPTION	DESCRIPTION
Open Distance	Use this option to set the overall opening distance of the door (in feet). For example, for an 8' tall FasTrax. This option 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"
Set Open Pos	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"
Set Close Pos	Use this option for initial position setup. Manually place door in the close 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 positions.
	For additional adjustment of the open and close position, use "Close Position Adjust" or "Open Position Adjust"
Open Pos 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" [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.
Close Pos 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"[-25] the door would close approximately 1.0" [25] more.
	If this option was set to 2.0" [51] the door would close 2.0" [51] less.
Apr Open Pos	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.
Encoder Startup	The controller is waiting for valid data from the encoder. It 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.
Encoder Read	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.
Encoder Velocity	
	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.

# **CHAPTER 8 - DOOR OPERATION**

#### **VERIFY DOOR OPERATION / CHECKLIST**

- It is recommended that the operation of all controls on the FasTrax be verified monthly.
- 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.
- 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?
- Tracks shimmed as required? 5.
- 6. Tracks aligned when installing wall fasteners?
- 7. Are the pillow block bearing set screws tightened to 66 to 80 in.-lb. ?



8.

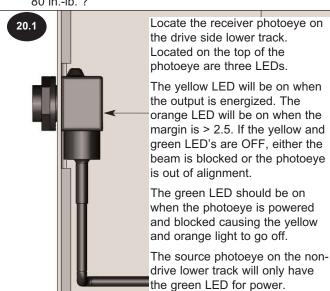
- 9.
- 10. All wires connected for the photoeyes?

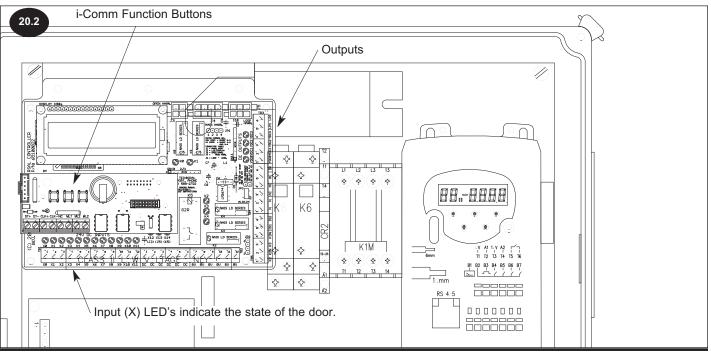
Check for proper line voltage?

- 11. Are loose wires secured away from moving parts?
- With the power on, press the "OPEN" button, the door 12. 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.
- Operate and observe the door opening to make sure that 13. 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.
- 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.
- 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.
- Pedestrians should be advised to use man doors when 17. present and to not lean into the door way.
- 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.
- 19. Motor shroud installed.
- 20. Ground and Shield wires have been properly terminated.

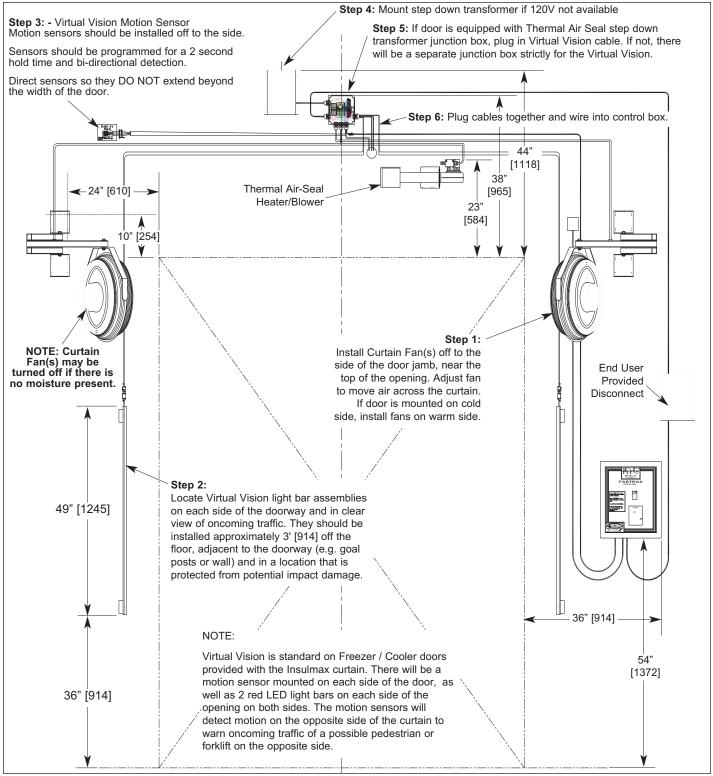




# **CHAPTER 8- FINAL CHECKLIST**

Complete	N/A	<u>Description</u>
_	_	Control box conduit mounting location (must be on the bottom)
_	_	Ground wires properly terminated
_	_	Shield wires properly terminated
_	_	Motor ground wire terminated to lower track
_	_	Encoder chain / sprockets / set screws properly aligned & tightened
-	_	Encoder cable tightened properly
-	_	Lower track properly spaced
-	_	Lower tracks caulked
-	_	Lower tracks square to wall
-	_	Lower tracks shimmed properly if jamb cap present
-	_	Wall mounting brackets securely fastened to wall
-	_	Photoeye wires properly secured to track or wall
_	-	Tracks / Radials lubricated
-	-	Track / Spreader bar in place (Radial or Non-Radial)
-	-	Upper track properly spaced
-	-	Upper track properly braced to wall
-	-	Drive tube level and evenly spaced
-	-	Lintel roller(s) installed properly (Non-FR)
-	-	Proper mounting fasteners used
-	-	Motor terminal strip wires securely fastened
-	-	Motor bumpers properly adjusted
-	-	Security chain in place
-	-	Drive shroud installed
-	-	Radial center shroud properly installed (Radial only)
-	-	Chain hoist properly installed (Optional)
-	-	If less than 8' tall, make sure drive gear guards are in place (Optional)
-	-	Poly lumber properly installed (Optional)
-	-	FR – Air bag exhaust hole free and open (FR only)
-	-	FR – Blower properly mounted (FR only)
-	-	FR – Curtain fans properly installed (FR only)
-	-	FR – Step-down transformer and junction box properly installed (FR only)
-	-	Area clean of debris from installation
-	-	Notes:6/17/11

#### **CHAPTER 9 - FR ELECTRICAL LAYOUT - DOOR MOUNTED SIDE**



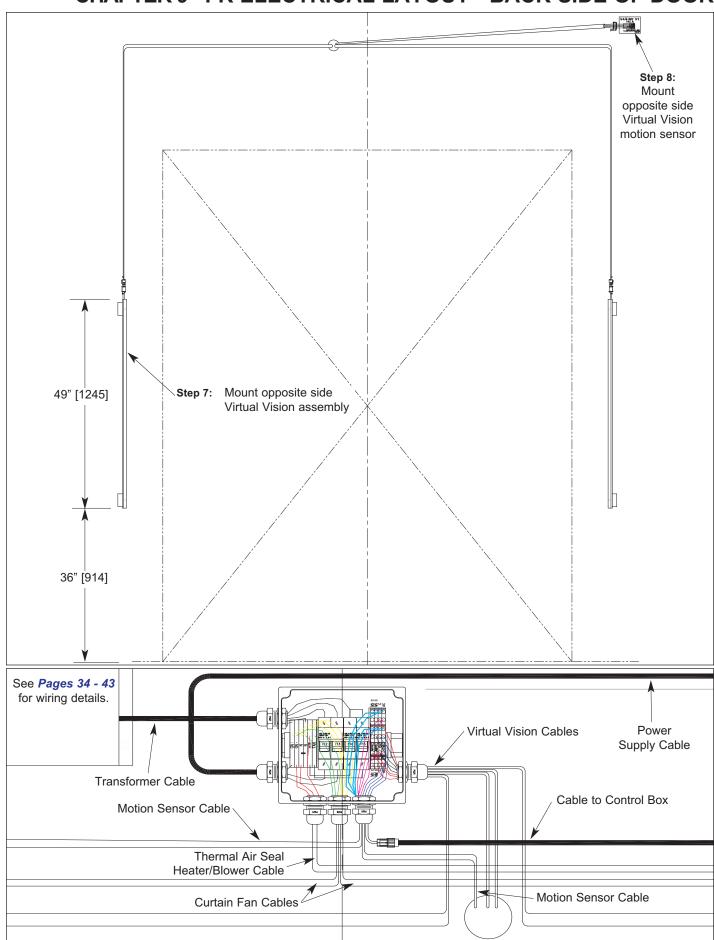
To avoid cross talk when changing the settings on the Virtual Vision or activation sensors when using the remote controls, Rite-Hite offers the following three options:

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.

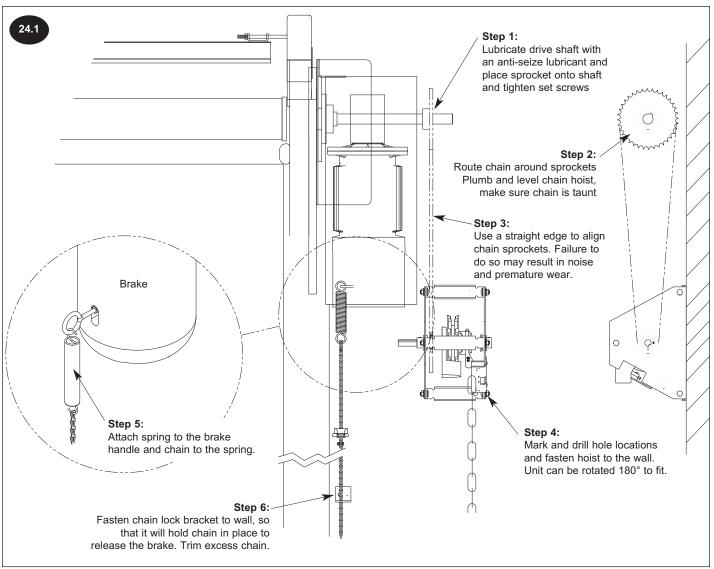
If you do not wish to use security code settings, you can simply power down one unit (at the i-COMM) while setting the other unit, and then do the same thing with the other unit. This is similar to option "a", although if you want to make subsequent changes to the settings, you would need to go through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

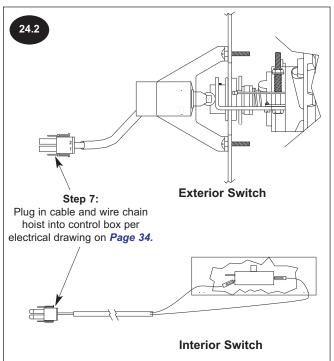
If you do not wish to power down the units or use security settings, you can physically cover one of the units while programming the other unit. Any opaque material (e.g. cardboard) should work, this may be difficult for units mounted high above the opening.

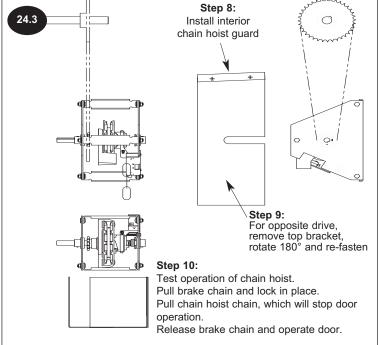
# **CHAPTER 9 - FR ELECTRICAL LAYOUT - BACK SIDE OF DOOR**



# **CHAPTER 10 - OPTIONS BRAKE RELEASE / CHAIN HOIST**

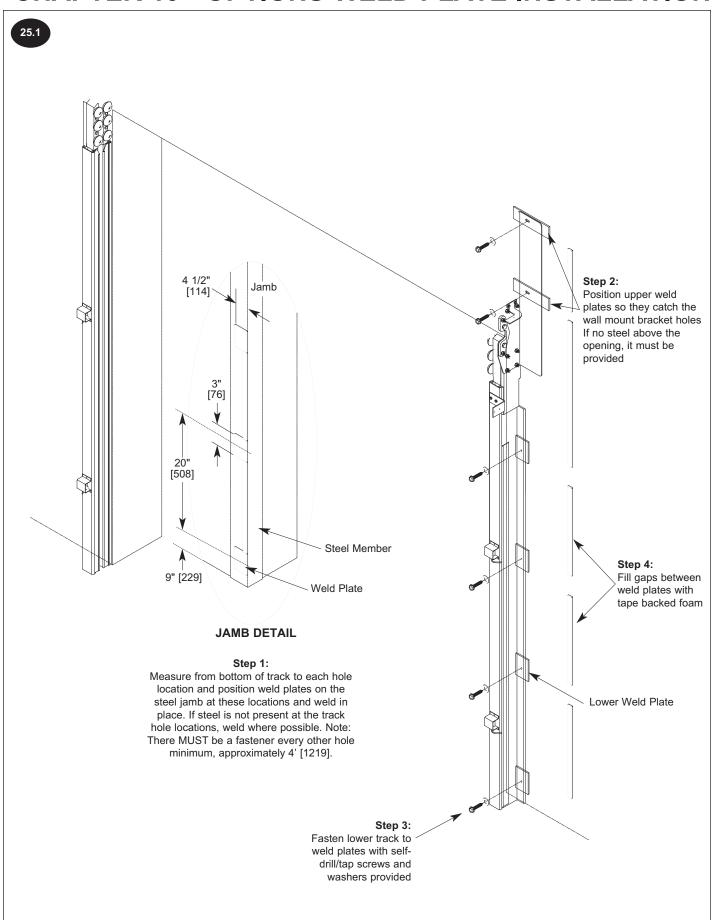




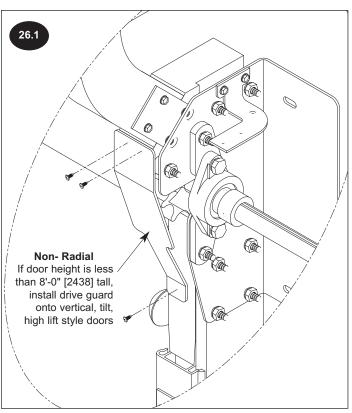


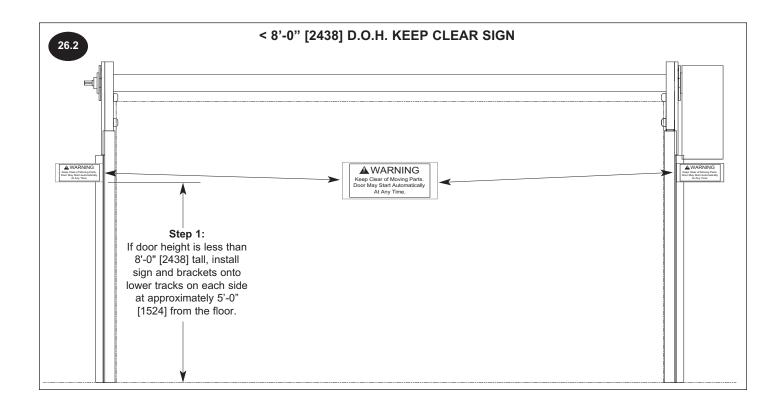
24

# **CHAPTER 10 - OPTIONS WELD PLATE INSTALLATION**



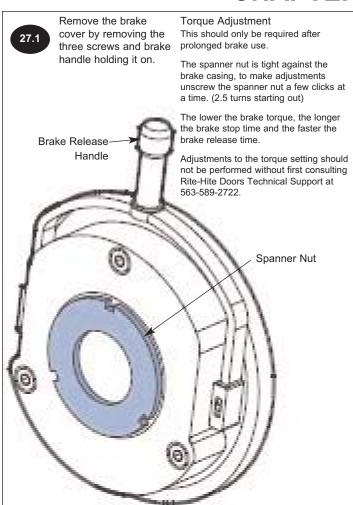
# CHAPTER 10 - OPTIONS <8'- 0" [2438] D.O.H.

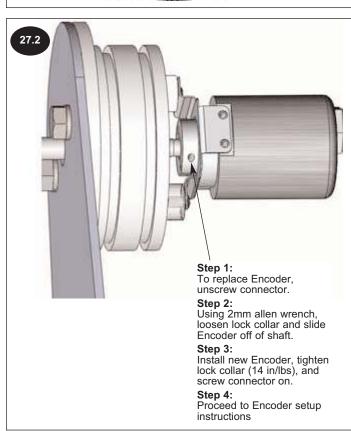


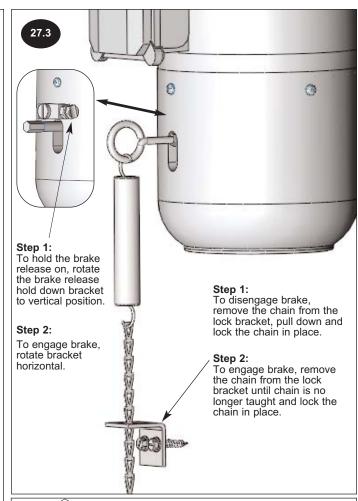


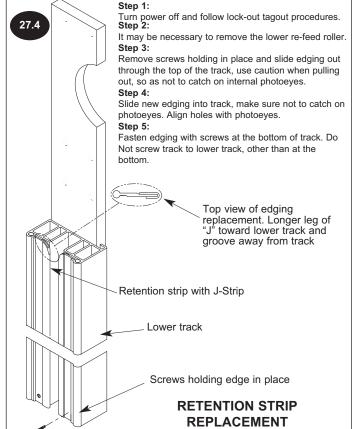
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#### **CHAPTER 11 - MAINTENANCE ITEMS**









#### CHAPTER 11 - 230/460V INVERTER PROGRAMMING

#### 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."

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

	FasTrax - Status Modes						
Left Display	eft Display Status Explanation						
	Drive ready	The drive is enabled and ready for a start command. The output bridge is inactive.					
ih	Drive inhibited	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.					
	Drive has tripped	The drive has tripped. The trip code will display in the right hand display.					
	Injection braking	DC injection braking current is being applied to the motor.					
Fr		Drive output frequency in Hz					
SP		Motor speed in RPM					
Ld		Load current as a % of motor rated load current					
A		Drive output current per phase in A					

# **CHAPTER 11 - 230/460V INVERTER PROGRAMMING**

Trin Codo	Condition	FasTrax - Inverter Error Codes
tr UU	Condition DC bus under voltage	Possible Cause Low AC supply voltage, check power source.
11 00	DC bus under voltage	Low AC sulpriy voltage, check power source.
tr OV	DC hus over veltage	Low DC voltage when supplied by an external DC power supply.  The DC bus (Pr. 84) has exceeded \$000/ 4600/ or 4000/ 3200/AC sheek the following:
trOv	DC bus over voltage	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.
tr It.br	I <sup>2</sup> C on braking resistor	Check door closing speed. If fault is while door is closing, add breaking resistor.
		See tr OV for more troubleshooting.
tr It. AC	I <sup>2</sup> C on drive output	Check that radial spacing and that they are square, or lower track spacing.
/	l o on anvo output	Motor wiring, check for loose connections or shorts.
		Make sure door cannot move if brake is engaged.
tr OI.AC	Drive output instantaneous	Door is mechanical binding or jammed.
li Ol.AO	over current	Check radial spacing and that they are square, or lower track spacing.
	Over current	Motor wiring, check for loose connections or shorts.
		Make sure door cannot move if brake is engaged. Disconnect CE filter with power off.
		Insufficient ramp times. Phase to phase or phase to ground short circuit on the drives
		output. Drive requires autotuning to the motor.
		Motor or motor connections changed, re-auto tune drive to motor
		MILEST wait 10 compete to report offer trip course
Ol.br	Proking register	MUST wait 10 seconds to reset after trip occurs
Ol.bi	Braking resistor	Excessive braking current in braking resistor  Proking resistor value to a small MIST wait 10 accorde to react offer trip accure
O CD4	instantaneous over current	Braking resistor value too small. MUST wait 10 seconds to reset after trip occurs
O.SPd	Over speed	Excessive motor speed (typically caused by mechanical load driving the motor)
tunE	7	Run command removed before autotune complete
lt.br	I <sup>2</sup> -t on braking resistor	Excessive braking resistor energy
It.AC	I <sup>-</sup> t on drive output current	Excessive mechanical load. Drive requires re-auto tuning to motor.
		High impedance phase to phase or phase to ground short circuit at drive output.  Overheat software thermal model
O.ht1	IGBT over heat based on	Overheat software thermal model
-	drives thermal model	
O.ht2		Heatsink temperature exceeds allowable maximum
th	Motor thermistor trip	Excessive motor temperature
O.Ld1	User +24V or digital output overload	Excessive load or short circuit on +24V output
		The Enable/Reset terminal will not reset an O.Ld1 trip. Use the Stop/Reset key.
OUL.d	I x t overload	Reduce motor current
hot	Heatsink/IGBT temp is high	Reduce ambient temperature or reduce motor current
br.rS	Braking resistor overload	See Advanced user guide
EEF	Internal drive EEPROM failure	Possible loss of parameter values
PH	Input phase imbalance or	One of the input phases has become disconnected from the drive
	input phase loss	
rS	Failure to measure motors	Motor too small for drive
	stator resistance	Motor cable disconnected during measurement
O.cL	Overload on current loop input	Input current exceeds 25mA
tr HF ##	Hardware Fault	The drive has detected a hardware problem, verify wiring is correct. This cannot be
		fixed in the field, replace the drive.
HF 05 trip		No signal from DSP at start up
HF 06 trip		Unexpected Interrupt
HF 07 trip		Watchdog failure
HF 08 trip		Interrupt crash (code overrun)
HF 11 trip		Access to the EEPROM failed
HF 20 trip		Power stage - code error
HF 21 trip		Power stage - unrecognized frame size
HF 22 trip		Ol failure at power up
HF 25 trip		DSP Communications failure
HF 26 trip		Soft start relay failed to close, or soft start monitor failed or braking IGBT short circuit at power up
HF 27 trip		Power stage thermistor fault
HF 28 trip		DSp software overrun
	1	Dop contrare overrain
HF xx trip		HF 1-4, 9-10,12-19,23,24,29,30 Are not used

#### 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.

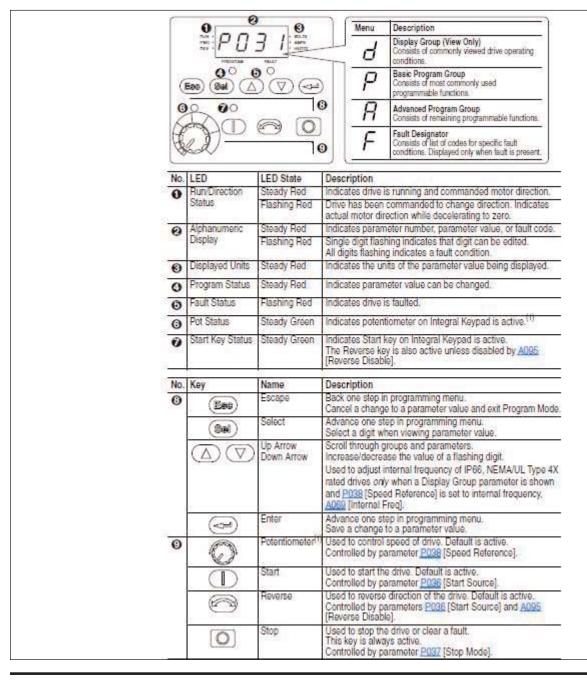
Press "Enter" or "Sel" to enter a group. Press "UP" or "DOWN" arrow to scroll through the group menu.

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."

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



# **CHAPTER 11 - MAINTENANCE PROCEDURES**

RITE-HITE DOORS, INC. PLANNED MAINTENANCE  Model FASTRAX® FR								
CUSTOMER:	JOB#	JOB# SERIAL#					DATE:	
Planned Maintenance Task		Recommended P.M. Intervals (Time Shown In Months)			hs)		Inspect and Perform the Following	
	1	6	12	18	24	30	36	
Activation Curtain Fans		Х	Х	Х	Х	Х	Х	Operate all devices to verify proper operation.
		х	х		х		х	Verify that Curtain Fans are powered and working.  Make sure that the fans are positioned properly and are removing condensation from the curtain.
Auto Re-Feed		х	Х		Х		Х	Verify auto re-feed is operational.
Brake	х		x		x		X	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.
Controls / Wiring			x		x		x	Clean, check all connections with disconnect off.  Make sure all wires are free from moving parts.
Curtain		х		х	х		x	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.
Door Assembly			х		х		х	Perform visual inspection for damage. Tighten all hardware. Replace any worn labels. Use air hose to remove dust and debris.
Door Operation			x	х	х	х	х	Operate door and make sure all operations are functioning properly.
Drive Tube			х		х		х	Verify drive tube gear is centered over track groove. Make sure bearing set screws and mounting bolts are tight.
Gearbox			х		х		х	Check gearbox fluid level, fill with 90 weight if low. Check lock collar set screws.
Encoder / Chain / Sprockets			х		x		х	Verify Encoder chain and sprocket set screws are tight. Check open and close positions, adjust as required.
Lintel Seal (not on FR doors)			х		х		Х	Verify lintel seal is sealing wall properly.
Motor			х		х		Х	Check junction box and plug connections.
Non-Powered Opening Option			x		х		х	With power off, verify chain hoist opens door. Lubricate chain, sprockets and check alignment.
Photoeyes		х	х	х	х	х	х	Verify both photoeyes reverse the curtain. LED's on receiver should go on/off. Clean emitter and receiver lens.
Thermal Air Seal		х	х		х		х	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.
Tracks / Radial (upper and lower)	х	х	х	х	х	х	х	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.
Track Retention Edging			х		х		х	Inspect track retention edging, replace if cracked.
Virtual Vision			х	х	х	х	х	Verify virtual vision is functioning properly. Red LED's should be lit if movement on opposite side.
Vision (not on FR doors)		х	х		х	х		Inspect vision for tears or separation. Clean with warm soapy water.
Radial and Track Lubrication	requir	ed mo	e than	every	6 mon	ks may ths, bas	sed or	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.

#### **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

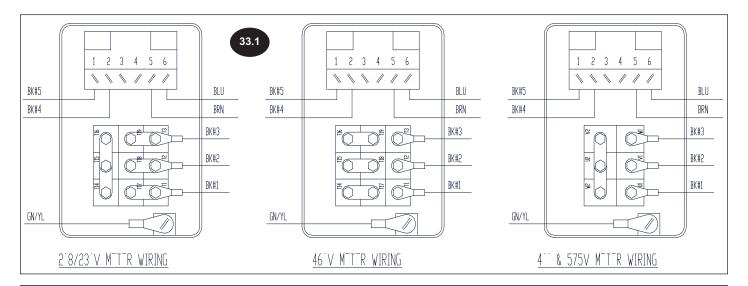
# **CHAPTER 11 - TROUBLESHOOTING**

DEFINITION	FUNCTION
Activation	It is preferred not to wire activation devices until after the door is functioning properly. (Refer to Activation Manual)
Brake	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 <i>Page 27</i> . Brake will have approx. 267 ohms on normal readings, disconnect rectifier.
Breakaway	If the curtain is separated from the lower tracks, simply press the green open/reset button and the door will auto-refeed
Breakaway	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.
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.
Curtain	Contact local Representative for replacement.  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, <b>check for proper track spacing</b> , 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
Drive Side Switch	reversals, photoeye and other issues due to either static electricity or electrical noise and void warranty.  The drive can be switched from right hand to left hand by performing the following:
Drive Side Switch	a) Remove and switch conduit mounting bracket to opposite side.
	b) Remove and switch motor mount bumper bracket.
	b) Remove and swint mount mount parties. 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 SPLICED 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 <i>Page 19</i> for Encoder errors.
	F1, F2, F3: Incoming power fuses, must have line voltage across all 3 legs. (Transformer, Inverter, motor)
Fuses	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).
i-COMM 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.
	6) 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 <i>Pages 28 -30</i> for proper parameter settings.
Motor	If door will not run will 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.
Non-Powered Opening	Make sure the motor is properly grounded to prevent electrical noise.  If issues arise with the non-powered opening chain hoist, check the following:
14011-1 Owered Opening	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. = Ordered Door Height or O.D.W. = Ordered Door 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].
	If mounted wider, excessive curtain wear may occur, if too narrow, curtain buckling or billowing will be greater.
	b) Check to make sure the curtain has all the drive spheres in place.
Photoeves	c) Exterior doors are equipped with a garnet bag in the bottom loop to protect from the elements.  The photoeyes are wired to the 24VDC circuit and are wired as normally closed when there is power to the unit and the
Photoeyes	emitter 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 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.
	b) internal protocyc relay wires black / blue should be closed when briotocyc is alluned and oben when not alluned.
	c) When open, i-COMM verifies photoeye inputs are off. If on, door will fault. If off, test is ok, emitter's turn on.
	c) When open, i-COMM verifies photoeye inputs are off. If on, door will fault. 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.
	c) When open, i-COMM verifies photoeye inputs are off. If on, door will fault. If off, test is ok, emitter's turn on. d) Orange and yellow light on the Receiver should be on when aligned.

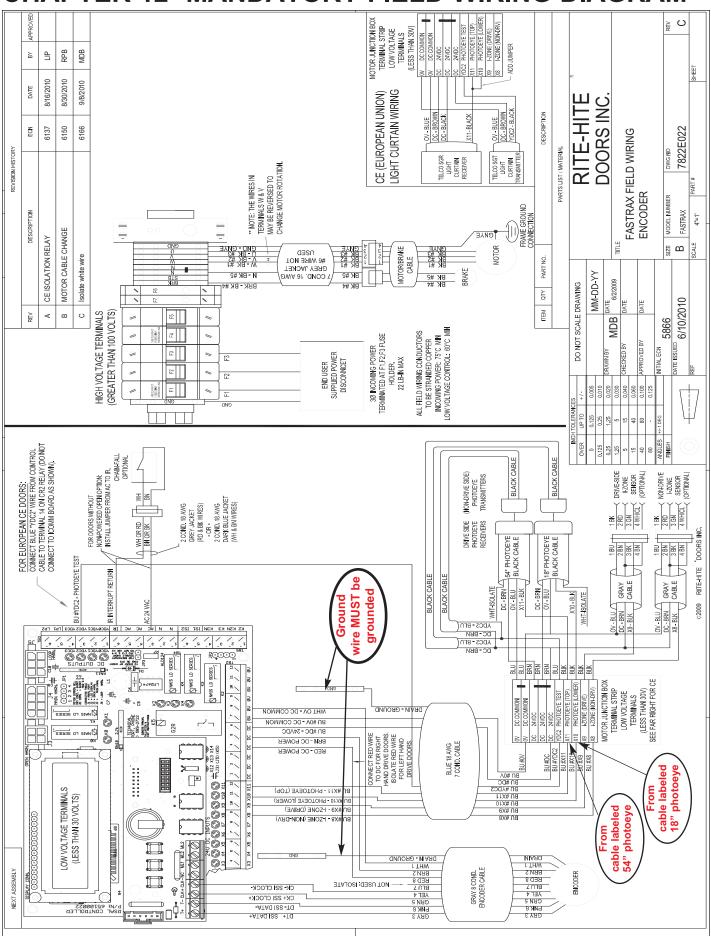
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# **CHAPTER 11 - TROUBLESHOOTING**

DEFINITION	FUNCTION
Power Supply	Power Supply is powered by 120VAC from the F1 fuse and delivers 24VDC to the i-comm.
Tracks	a) Verify tracks are properly spaced b) Lubricate as required per Maintenance Schedule. Page 31.
Virtual Vision	b) Lubricate as required per Maintenance Schedule, <i>Page 31</i> .  Virtual Vision is standard on the FasTrax FR door. When motion is sensed via Falcon motion sensors, the Virtual Vision related 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) If curtain reverses at photoeyes, verify that the photoeye wiring is not reversed.
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.

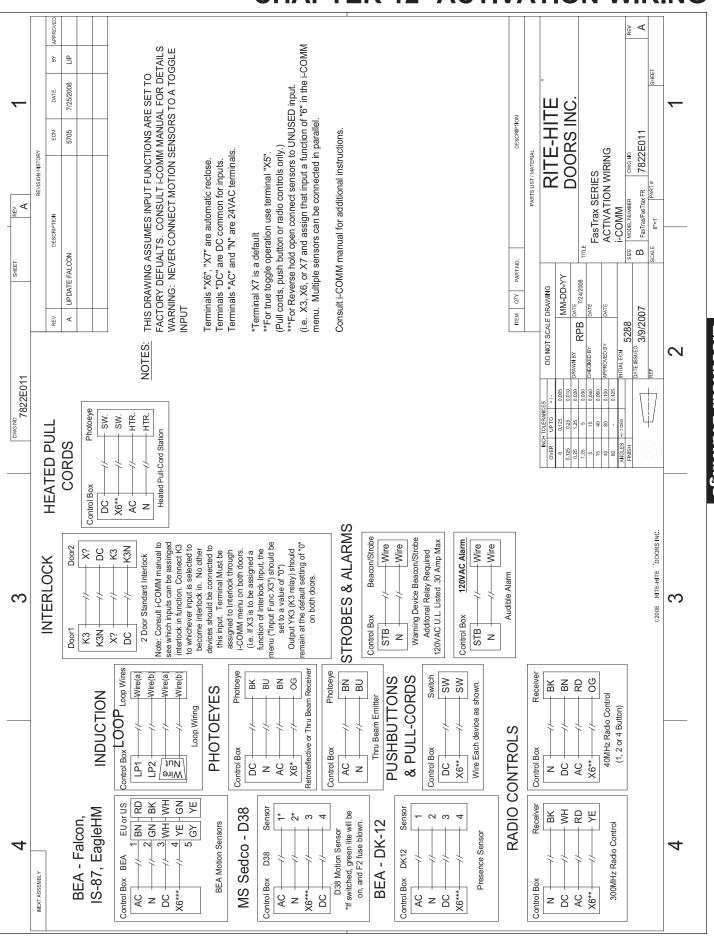


# CHAPTER 12- MANDATORY FIELD WIRING DIAGRAM

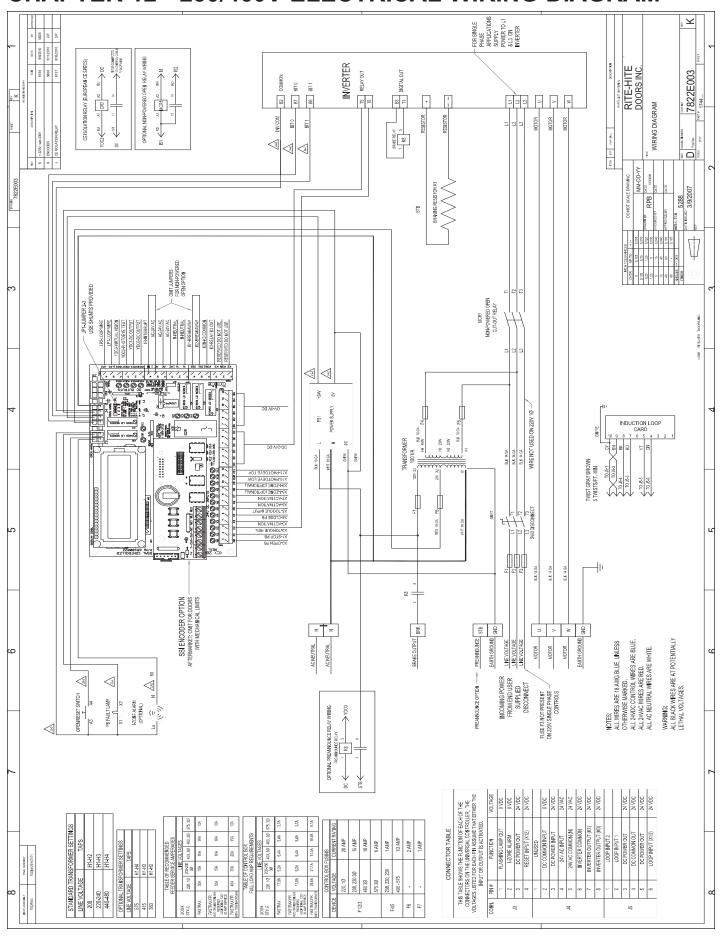


# **Electrical Drawings**

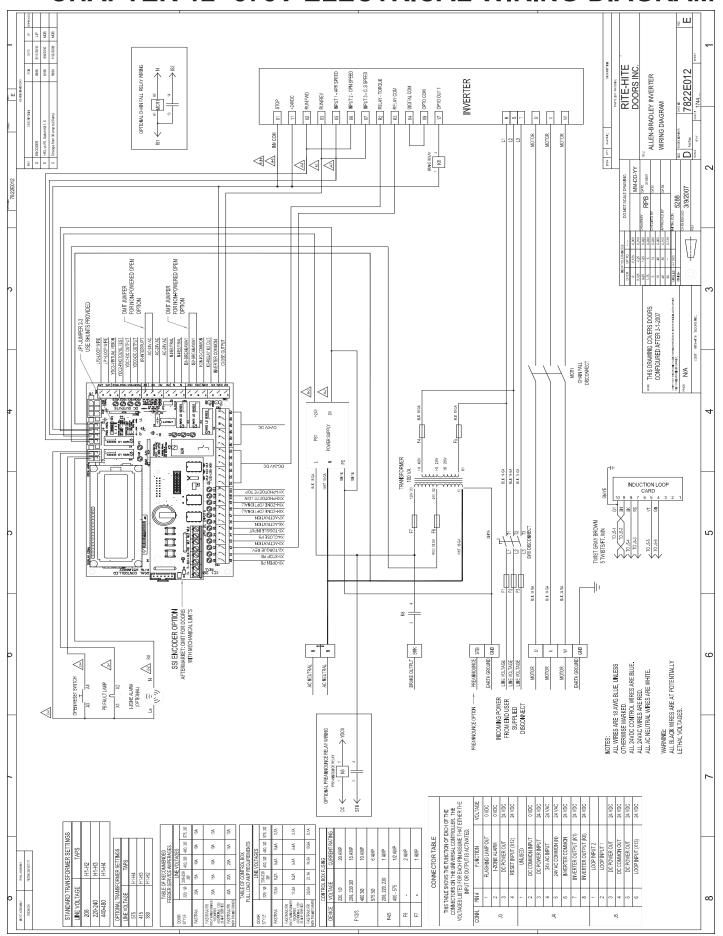
# **CHAPTER 12- ACTIVATION WIRING**



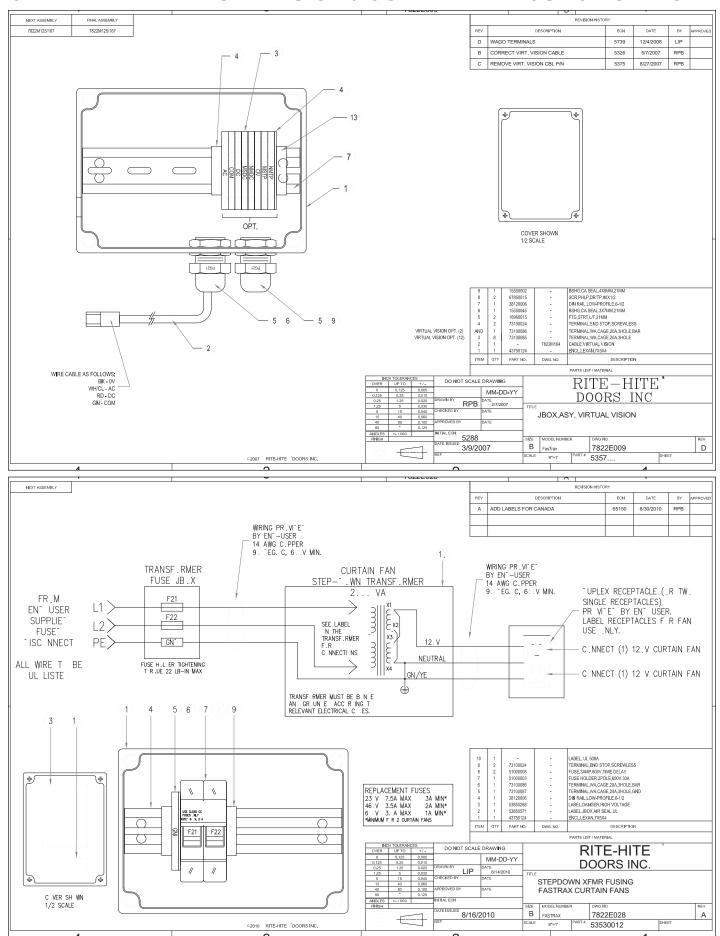
#### **CHAPTER 12 - 230/460V ELECTRICAL WIRING DIAGRAM**



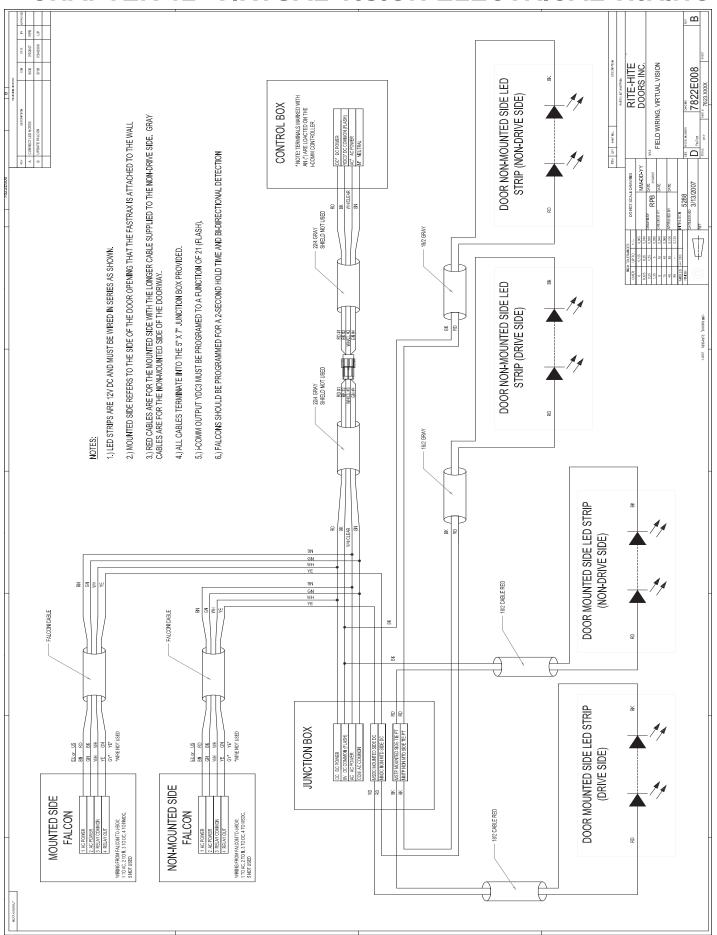
### **CHAPTER 12-575V ELECTRICAL WIRING DIAGRAM**



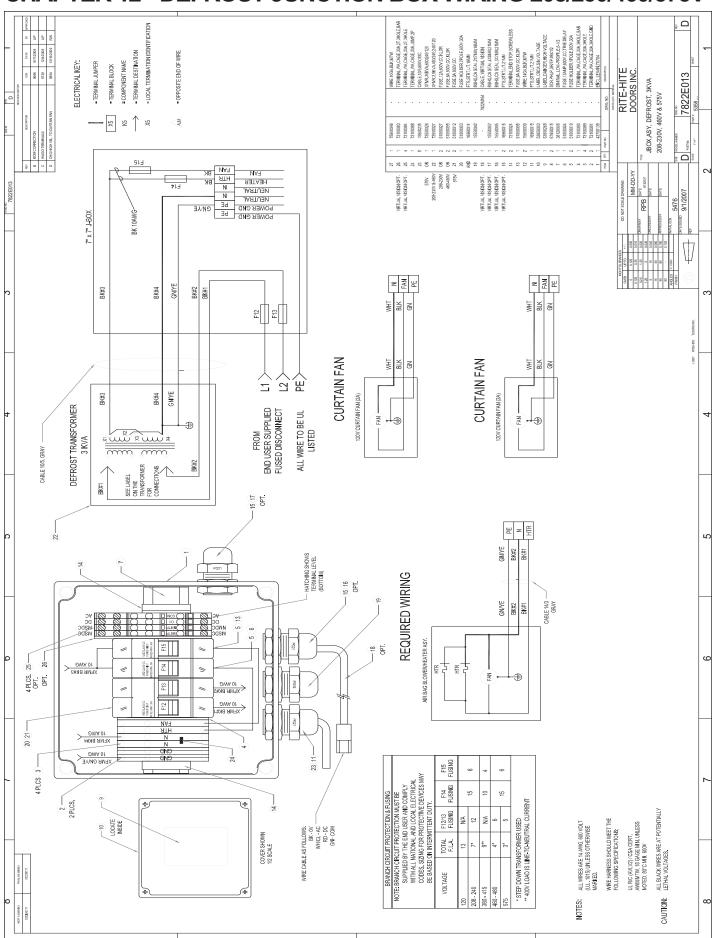
### **CHAPTER 12- VIRTUAL VISION / CURTAIN FAN JUNCTION BOX**



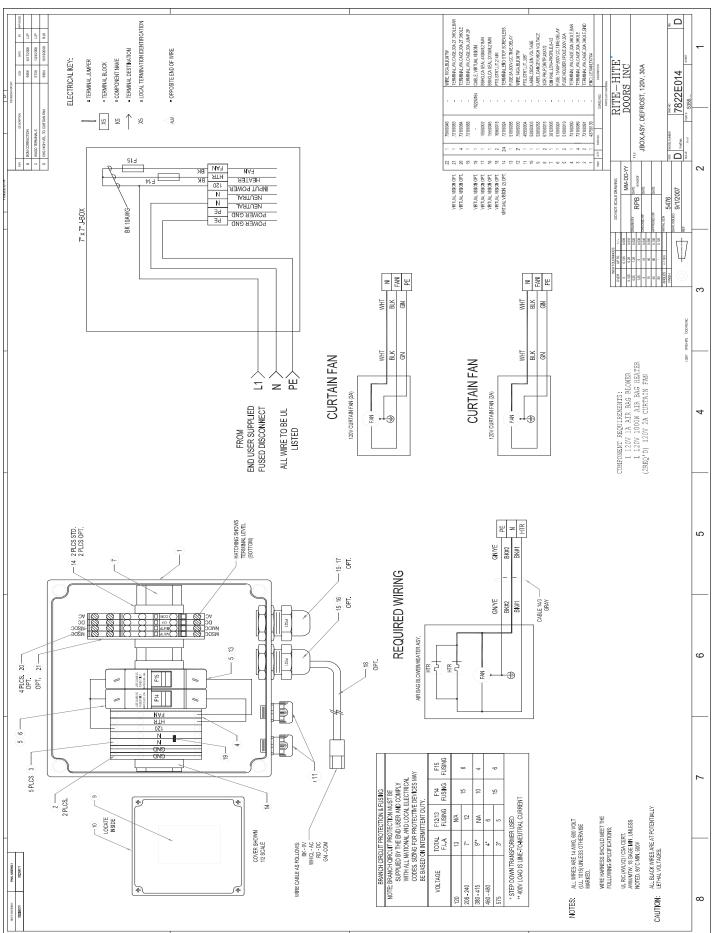
## **CHAPTER 12- VIRTUAL VISION ELECTRICAL WIRING**



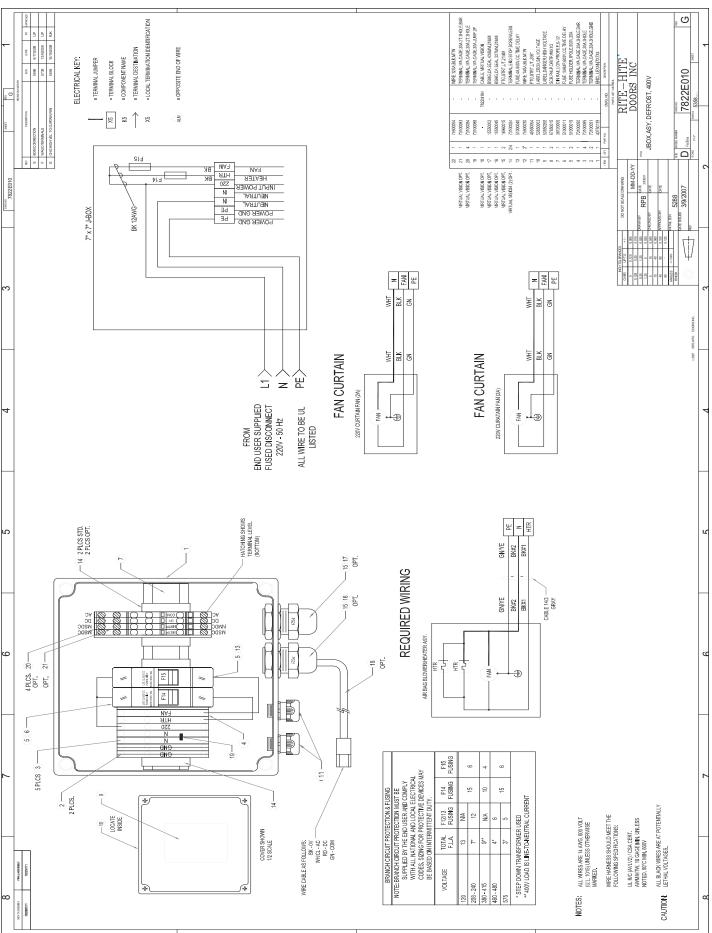
### CHAPTER 12 - DEFROST JUNCTION BOX WIRING 208/230/460/575V



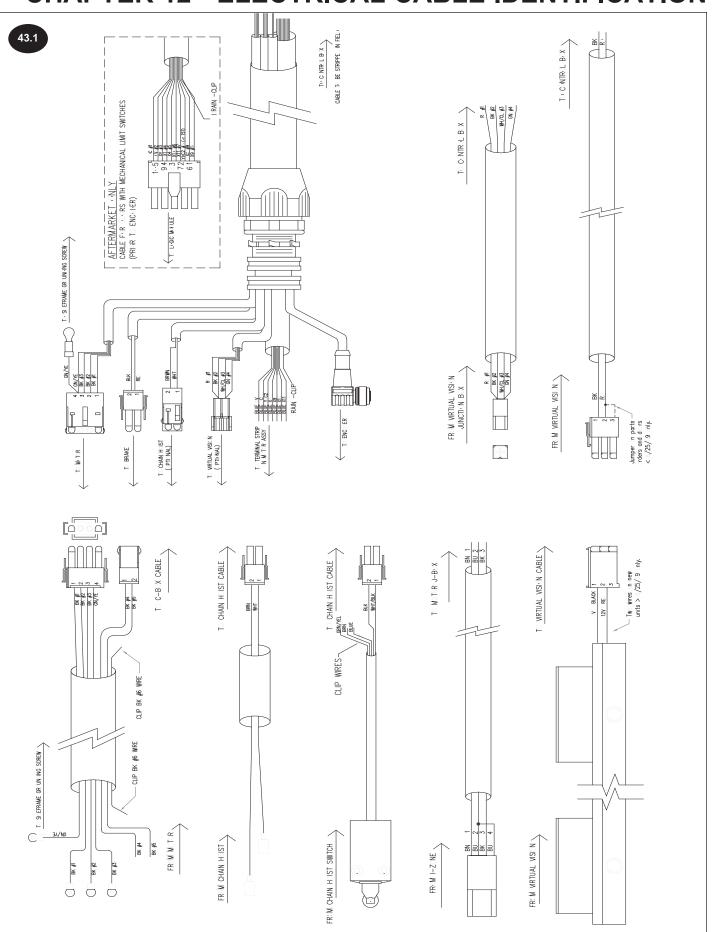
## **CHAPTER 12- DEFROST JUNCTION BOX WIRING 120V**



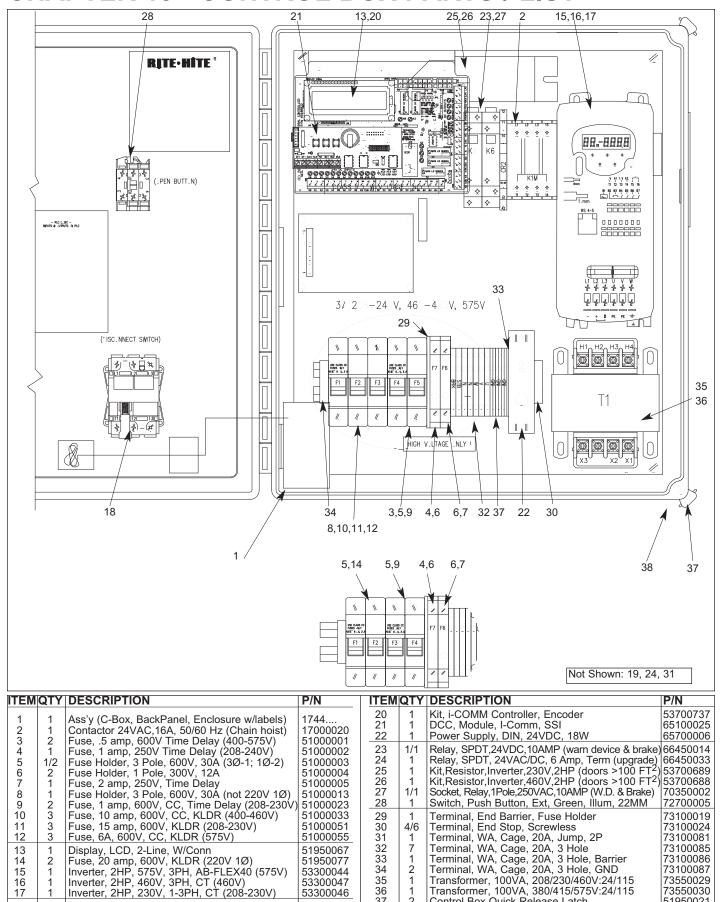
## **CHAPTER 12 - DEFROST JUNCTION BOX WIRING 400V**



### **CHAPTER 12 - ELECTRICAL CABLE IDENTIFICATION**



### CHAPTER 13 - CONTROL BOX PARTS /



Kit, Disconnect Switch, w/ Handle

Kit, FasTrax Inverter Relay (not shown)

Transformer, 100VA, 208/230/460V:24/115

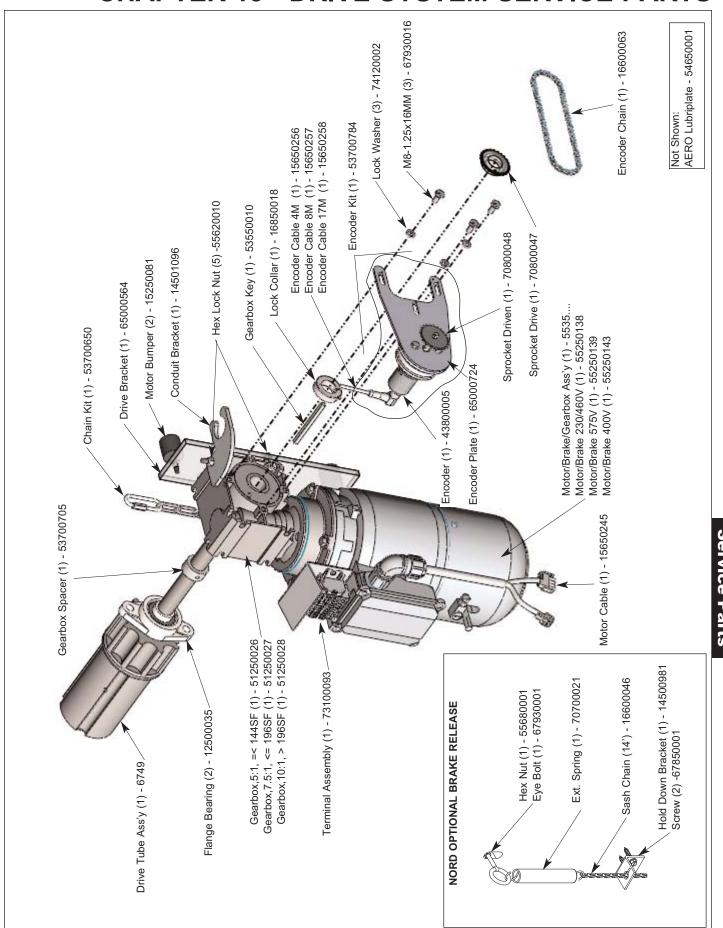
Transformer, 100VA, 380/415/575V:24/115

Control Box Quick Release Latch

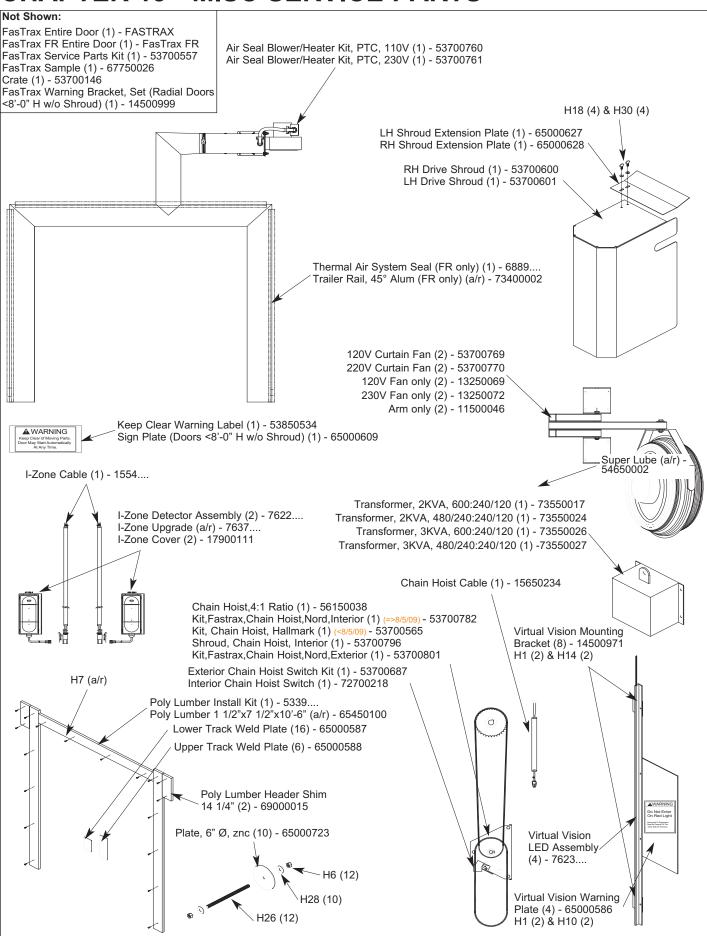
Control Box Mounting Tab

# **Service Parts**

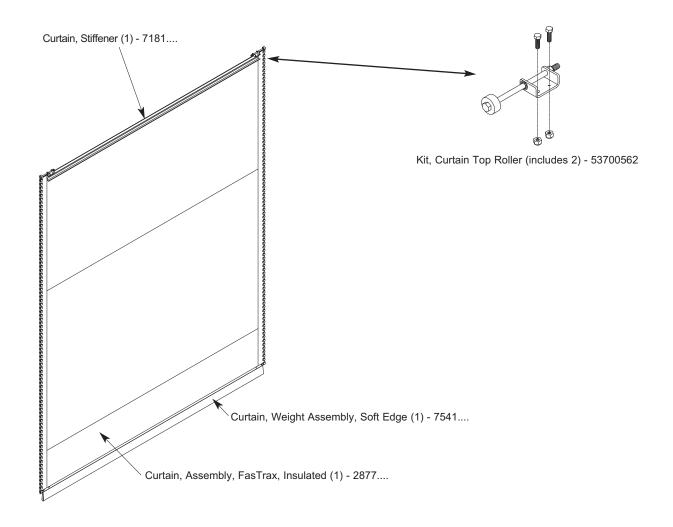
## **CHAPTER 13 - DRIVE SYSTEM SERVICE PARTS**

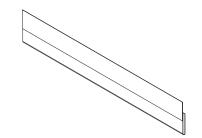


### **CHAPTER 13 - MISC SERVICE PARTS**

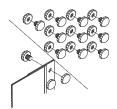


## **CHAPTER 13 - CURTAIN SERVICE PARTS**





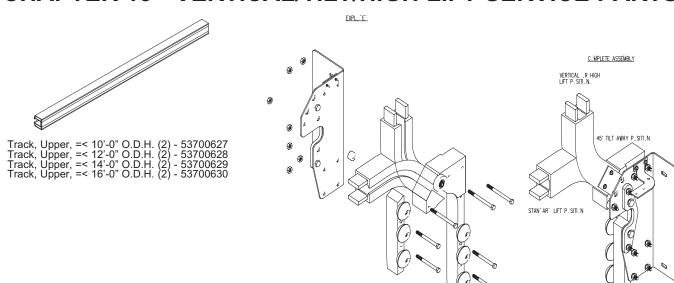
Kit, Bottom Loop Seal Replacement (1) - 6893....



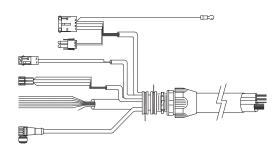
Curtain, Kit, Drive Sphere, Qty 10 (a/r) - 53700561

PATCH KIT PARTS LIST	
Curtain, Patch Kit, PVC, 27 oz, Blue (a/r) Curtain, Patch Kit, PVC, 27 oz, Green (a/r) Curtain, Patch Kit, PVC, 27 oz, Gray (a/r) Curtain, Patch Kit, PVC, 27 oz, Orange (a/r) Curtain, Patch Kit, Urethane, 27 oz, Blue (FR) (a/r)	53700558 53700667 53700668 53700669 53700774

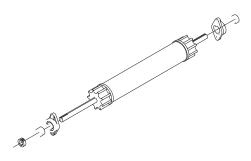
# **CHAPTER 13 - VERTICAL/TILT/HIGH LIFT SERVICE PARTS**



Upper Track, VL, High, Stand, Tilt (1/2) - 7368....



Cable, Control Box Conduit, 10', 20', 30', 50' (1) - 1555....



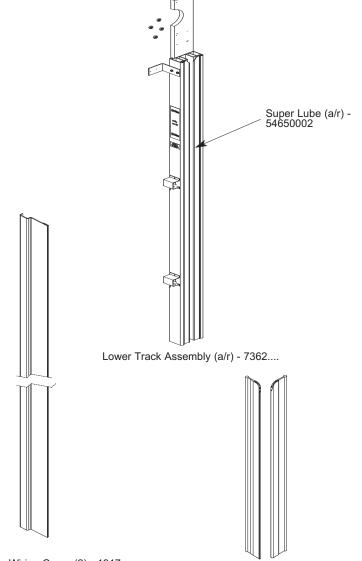
Drive Tube Ass'y (1) - 6749



Kit, Photoeye, Thrubeam Source, 13M (2) - 53700702 Photoeye, Bracket Cover (4) - 14501207



Kit, Photoeye, Thrubeam Receiver (2) - 53700703 Photoeye, Bracket Cover (4) - 14501207

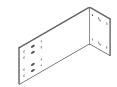


Photoeye, Wiring Cover (2) - 1917....

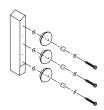
48

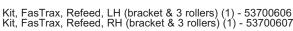
Breakaway Retention Strips (a/r) - 1481....

### **CHAPTER 13 - MISC SERVICE PARTS**



Track, Upper, Wall Mount Bracket (a/r) - 14500980

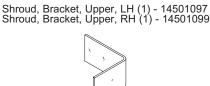






Label, Warning, Stand Clear, 2" x 9" (2) - 53850516

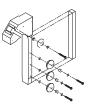
Kit, Radial Nylon Roller (2) - 53700632



Shroud, Bracket, Lower (1) - 14501098



Tube, Plate, Bearing (2) - 65000563

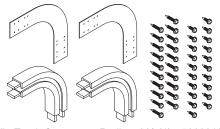


Kit, Bracket, Drive Cage, Non Radial, L (1) - 53700645 Kit, Bracket, Drive Cage, Non Radial, R (1) - 53700646

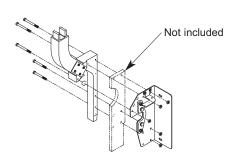
Guard, Drive Non-Radial (2 - <8' d.o.h) - 51300057



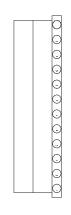
Kit, FasTrax/FR, Refeed Roller (2) (a/r) - 53700611

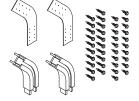


Kit, Track Connector, Radius,  $90^{\circ}$  (1) - 53600185



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





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



Track, Joiner, Drive Cage (2) - 65000576

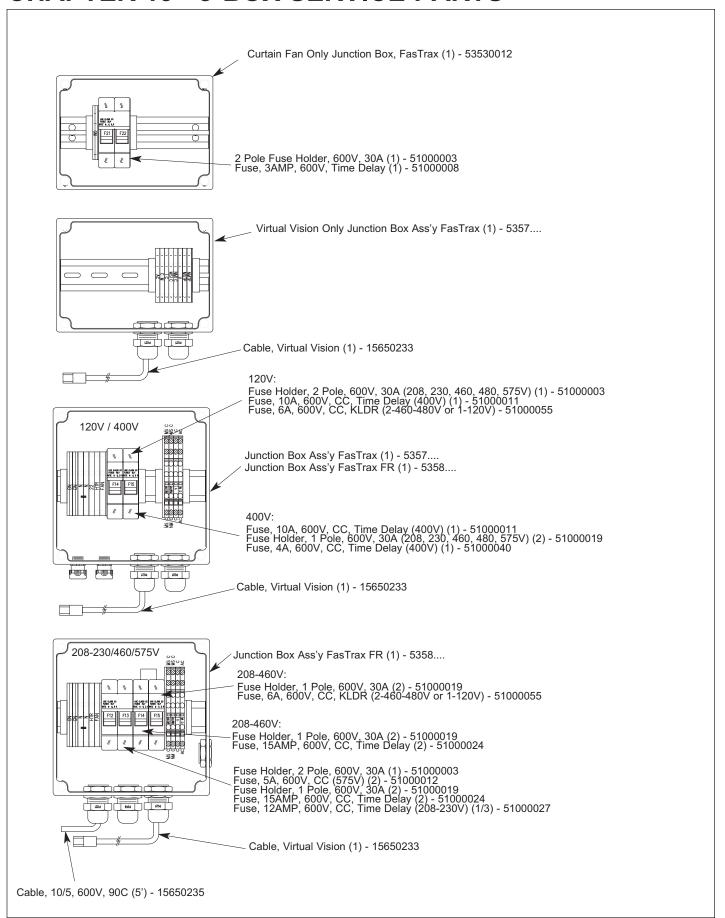




Kit, Universal Track Connector (a/r) - 53600186

Track, Perforated, Angle, 2"x2"x13', 12GA (13') - 71500030

### **CHAPTER 13 - J-BOX SERVICE PARTS**

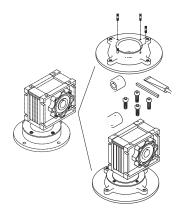


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### **CHAPTER 13 - HARDWARE & PREV GEN SERVICE PARTS**

#	Hardware List:	Part #
H1	#10-24, Nylon Hex Lock Nut zinc	55600004
H2	Nut, Hex, Nylon, Lock, 1/4-20, znc	55610001
H3	Nut, Hex, Nylon, Lock, 5/16-18, znc	55620010
H4	Nut, Hex, 3/8-16, znc	55630003
H5	Nut, Hex, Nylon, Lock, 3/8-16, znc	55630005
H6	3/8-16 S.S. Hex Nut	55630006
H7	5/16" x 1.807 Fablok Blind Rivet	66840016
H8	Ring, Retaining, External, 5/16" Shaft	67020051
H9	Screw, HWHSMS, #14 x 1 1/4", znc	67850001
H10	#10-24 x 1/2" Phillips RHMS zinc	67850008
	Screw, Phlp, Dr/Tap, #8 x 1/2"	67850015
	Screw,PHSMS,Phillips,Tap,#8-18x3/4"	67850026
	Screw, PHSMS, Phillips, #10 x 1", znc	67850029
H14	#10-24 x 3/4" Phillips RHMS zinc	67850030
	Screw,FHWH,#8x9/16",BLK,K-LATH	67850065
	Screw,PH,Phillips,Plstite,#8-16x3/8"	67850088
	Screw, Phillips, Drill/Tap, #8 x 1/2"	67850115
1	1/4-20 x 1/2" Thumb Screw GR2 znc	67860019
	Screw, HWH, Drill/Tap, #14x3/4", znc	67860094
	Screw, HHMS, 5/16-18x6", GR5, znc	67870111
	Screw, HHMS, 3/8-16 x 1", GR5, znc	67880002
	Screw, HHMS, 3/8-16x1 1/4",GR5,znc	67880004
	Screw, HHMS, 3/8-16 x 3 1/2", znc	67880017
	Screw, HHMS, 3/8-16 x 4", GR5, znc	67880029
	Screw, HHMS, 1/2-1 x 1", GR5, znc	67900003
	3/8-16 x 12" S.S.Threaded Rod	67900047
	Tape, Foam, Double Sided	72800044
	13/64" x 1/2 x .036 Flat Washer zinc	74100002
	Washer, Flat, 1/4 x 3/4 x 1/16, znc	74110001
	Washer,Flat,1/4x9/16"x3/32",Neoprene	74110007
	Washer, Lock, Split, 3/8", znc	74130002
	Washer, Lock, Split, 1/2", znc	74150005
H33	Self Tap/Drill #12 Screw	67850004

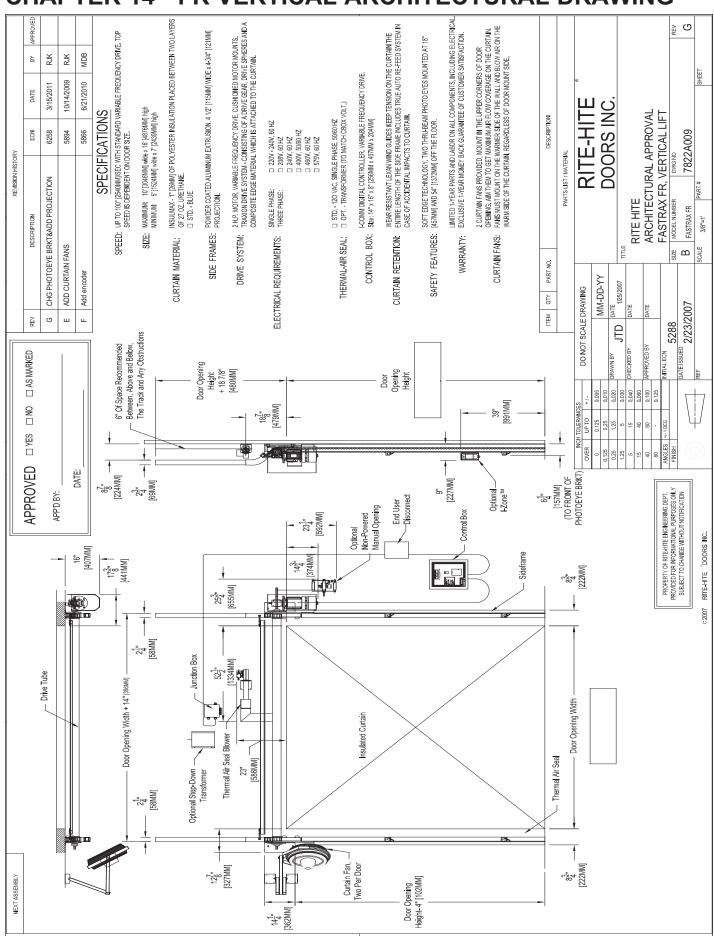
ITEM	QTY	DESCRIPTION	P/N
1P 2P 3P 4P 5P 6P 7P 8P 9P	1 1 1 1 1 1 1	Kit, FasTrax, / FR, L/S, Ass'y, RH Kit, FasTrax, / FR, L/S, Ass'y, LH Kit, FasTrax, / FR, L/S, Chain Kit, FasTrax, / FR, L/S, Ass'y, Spanish, RH Kit, FasTrax, / FR, L/S, Ass'y, Spanish, LH Kit, FasTrax, / FR, L/S, Ass'y, German, RH Kit, FasTrax, / FR, L/S, Ass'y, German, LH Kit, FasTrax, / FR, L/S, Ass'y, Dutch, RH Kit, FasTrax, / FR, L/S, Ass'y, Dutch, LH	53700555 53700556 53700644 53700677 53700679 53700680 53700681 53700682



Kit,FasTrax,Gearbox,Retrofit, Hallmark,5:1 (<8/5/09) - (1) 53700779 Kit,FasTrax,Gearbox,Retrofit, Hallmark,7.5:1 (<8/5/09) - (1) 53700780 Kit,FasTrax,Gearbox,Retrofit, Hallmark,10:1 (<8/5/09) - (1) 53700781

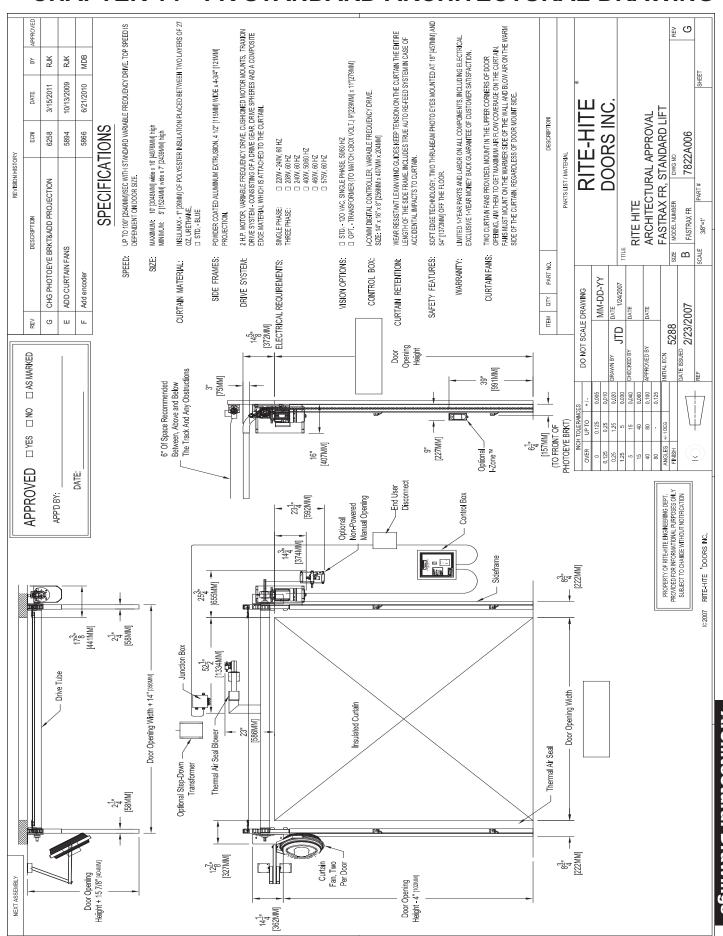
Refer to Partslist Manual for exploded views and part numbers on doors prior to 8/13/10.

### **CHAPTER 14 - FR VERTICAL ARCHITECTURAL DRAWING**

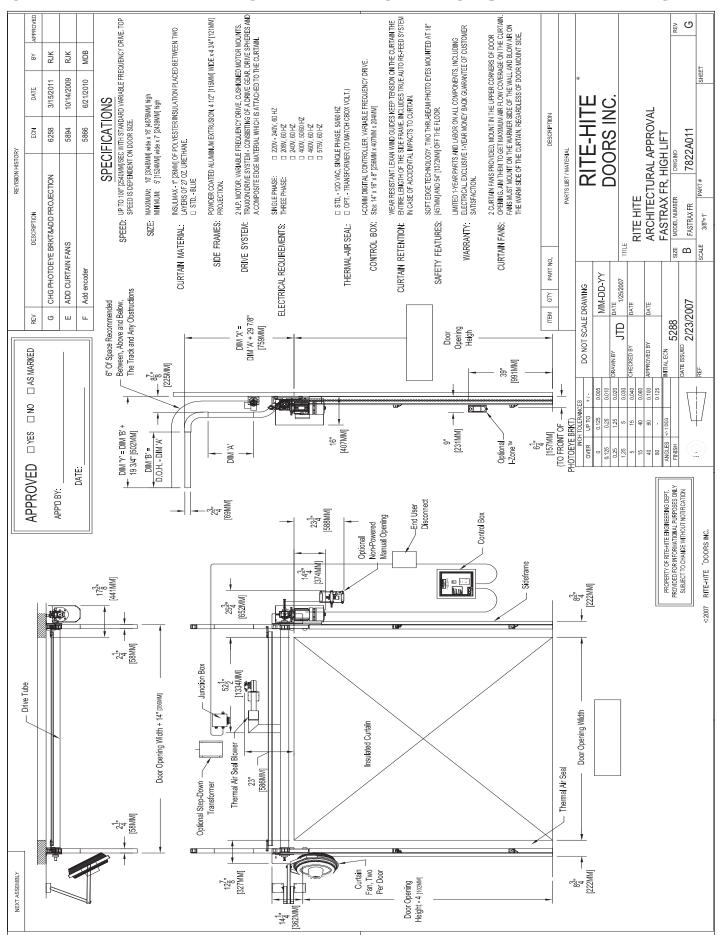


# **Architectural Drawings**

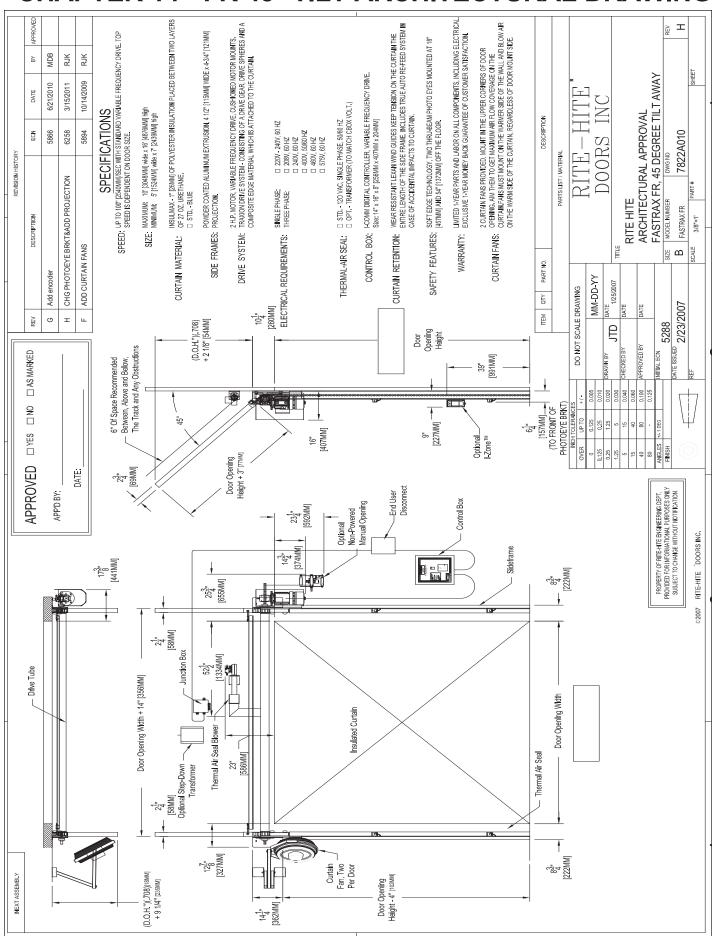
### **CHAPTER 14 - FR STANDARD ARCHITECTURAL DRAWING**



## **CHAPTER 14 - FR HIGH LIFT ARCHITECTURAL DRAWING**



# **CHAPTER 14 - FR 45° TILT ARCHITECTURAL DRAWING**



### WARRANTY

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.

**RITE-HITE DOORS INC** 

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