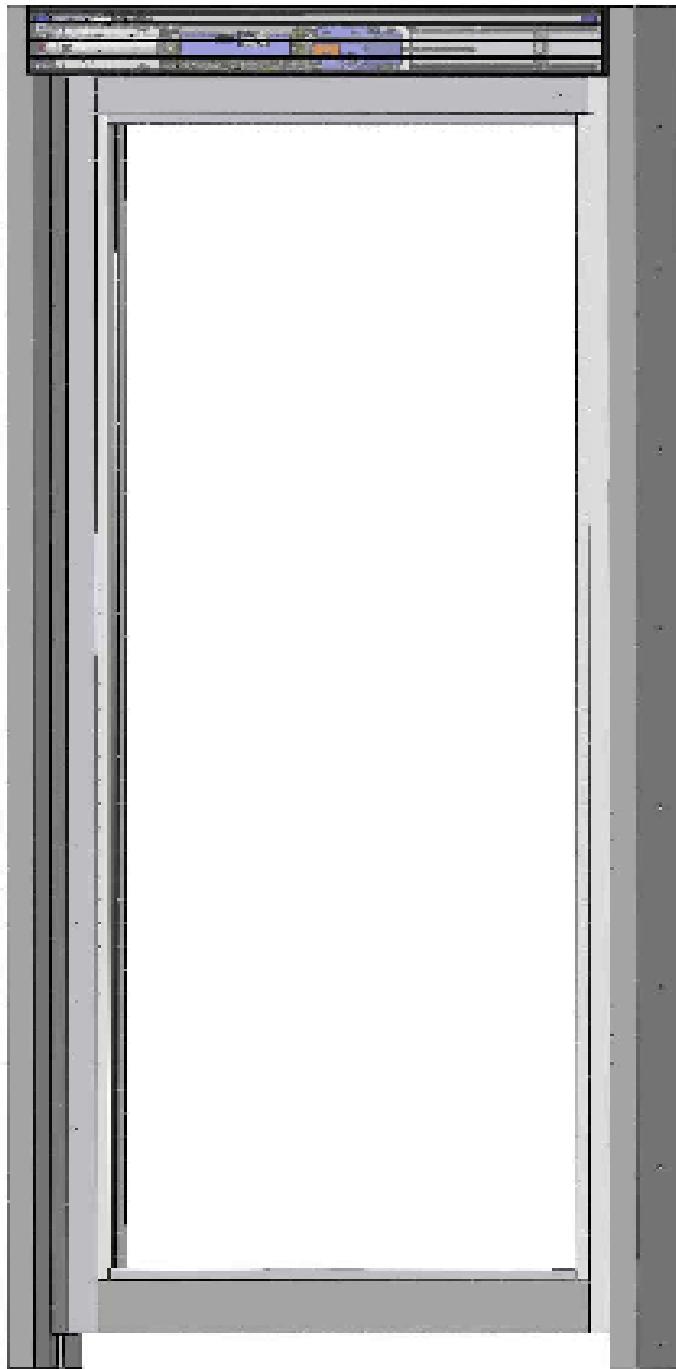




8500/8600/8700 Series OHC Swing Door Installation Instructions





8500/8600/8700 Series OHC Swing Door Installation Instructions

The record-usa 8500/8600 Operator Package has been carefully designed, built, and tested to provide years of service.

The life of the operator package is directly related to how carefully the installation is accomplished and how accurately the instructions are followed. Installation of this operator package should be done by properly trained and knowledgeable installers with a knowledge of local code requirements and the requirements of ANSI A156.10 Standards for Power Operated Pedestrian Doors and A156.19 Standards for Low Energy and Power Assisted Pedestrian Doors. The authorized service / installation dealer must perform all measurements for forces, speeds, and times to insure proper and safe operation.

record-usa is not responsible for improperly adjusted or maintained automatic doors or activation / safety systems and assumes no responsibility for damages caused by automatic door systems that have not been properly installed, tested, and adjusted.

OWNER INFORMATION TO BE PROVIDED BY THE DISTRIBUTOR / INSTALLER

- * After the installation instruct the owner on the safe operation of the door.
- * Location and proper use of the power switches.
- * Location of the main cutoff breaker.
- * Necessary warnings not covered in general instructions.
- * Owners Manual and Daily Safety Checklist.
- * Phone number(s) for the local servicing dealer.
- * What to do in the event that a dangerous situation should occur, and how to shut the doors down and call for service.

READ INSTALLATION INSTRUCTIONS BEFORE INSTALLING.

The sequence of installation and adjustment is in order, however some sections will not apply. Review this instruction manual and determine those sections that do apply. Be sure all doors swing freely and clear all objects before creating an activation.

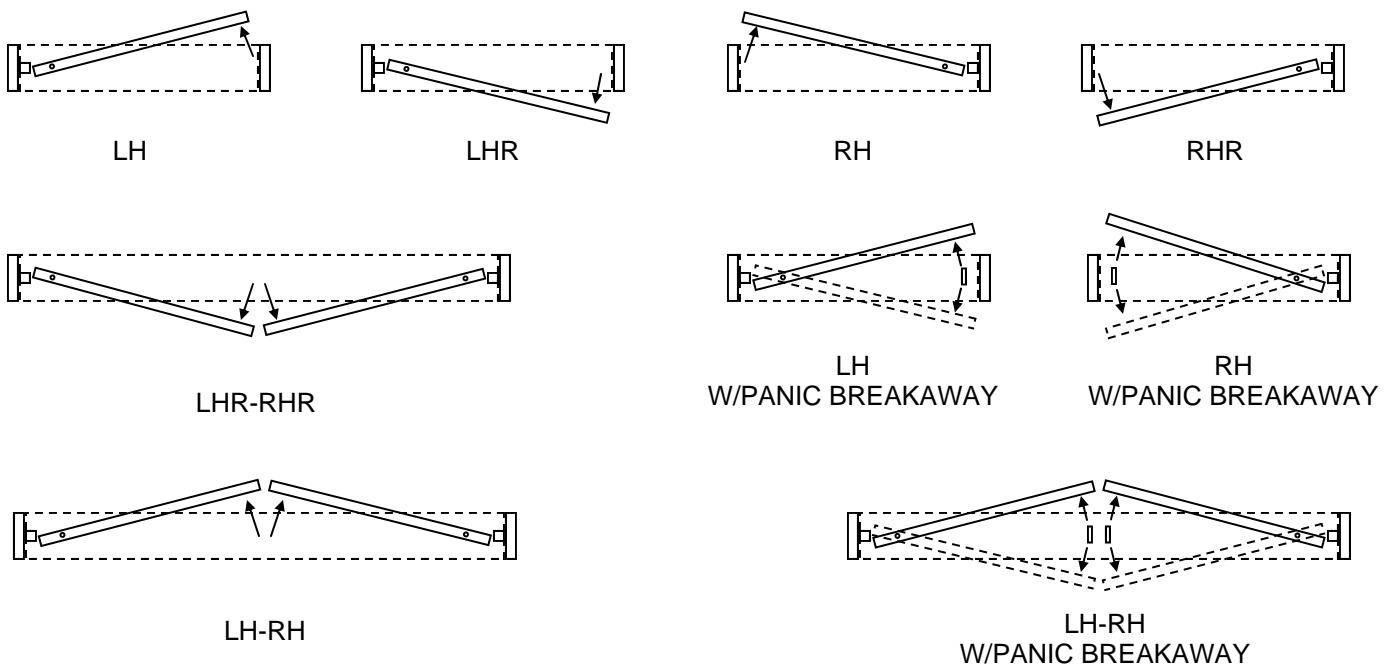
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8500/8600 Series OHC Swing Door Installation Instructions

OPERATOR HANDING IDENTIFICATION



AS VIEWED FROM THE EXTERIOR

Electrical preparation

Before preparing jambs, determine the method and requirements for the electrical wiring involved and whether mats or other type of activation is used.

Mounting the Header 8500

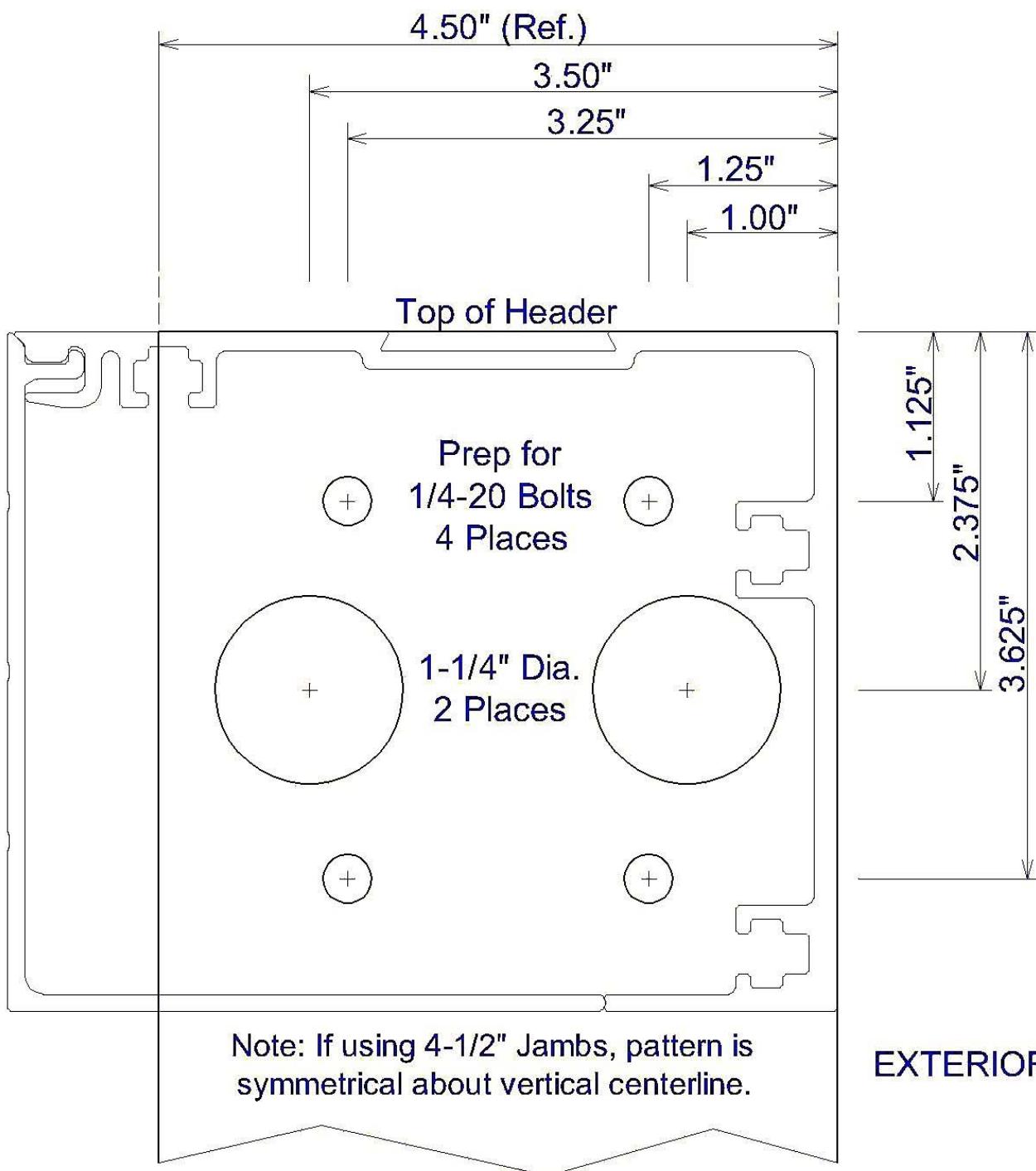
Measure opening to insure correct dimension for door height plus header size before placing and securing in position. Secure the Header through each end of header to door frame with the appropriate fasteners as indicated in diagrams of Header to Jamb Prep on following page.

Door Prep 8600 Door Package

See Page 5 for Top & Bottom Door Prep.



8500/8600 Series OHC Swing Door Installation Instructions

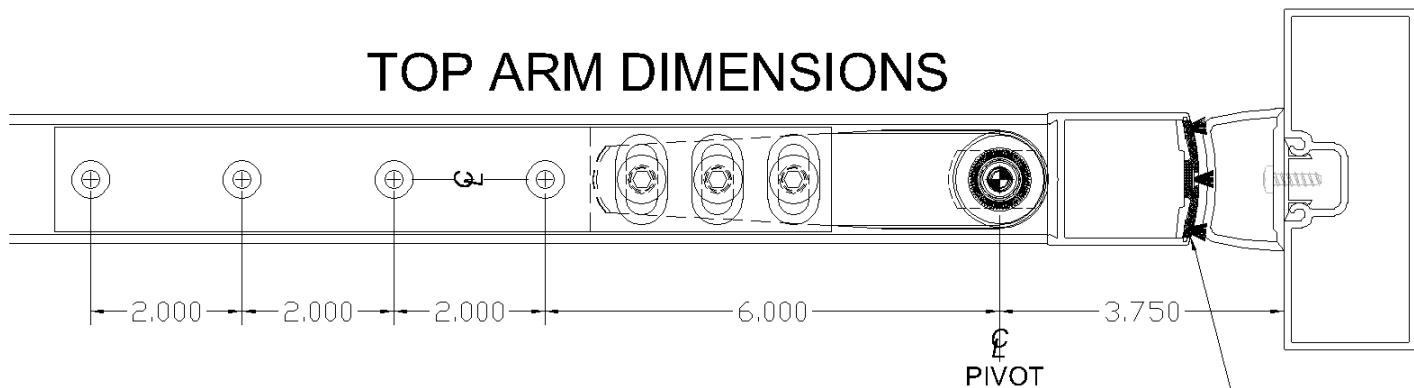


Recommend Rivnuts or Nutserts
for 1/4-20 Prep for adequate support.



8500/8600 Series OHC Swing Door Installation Instructions

TOP ARM DIMENSIONS

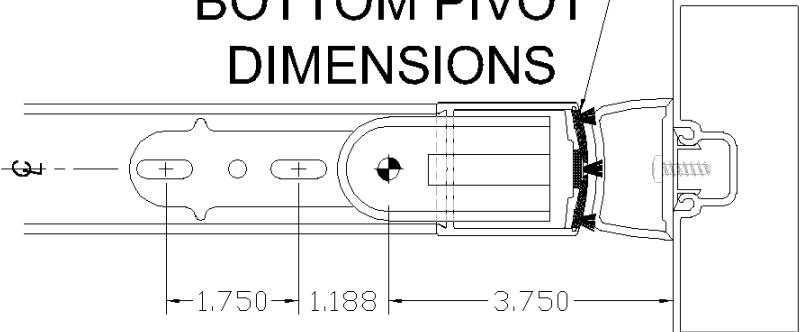


PREP FOR 1/4-20 BOLT - 4 PLACES
IF DOOR WEB DOES NOT HAVE 1/4"
THICK WALL TO RECEIVE 1/4-20 BOLTS,
USE OF RIVNUTS OR NUTserts IS
RECOMMENDED.

THE VERTICAL PIVOT RAIL OF THE DOOR
SHOULD BE NOTCHED AT THE TOP AND
BOTTOM 1-1/2" WIDE X 1" DEEP TO
ACCOMODATE END LOADING THE DOOR ONTO
THE DRIVE ARM AND BOTTOM PIVOT.

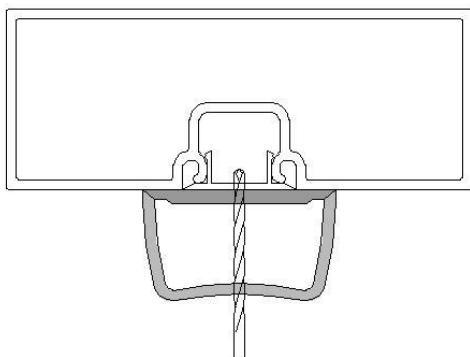
1" DEEP WEB
REQUIRED - TOP
AND BOTTOM
HORIZONTALS

BOTTOM PIVOT DIMENSIONS

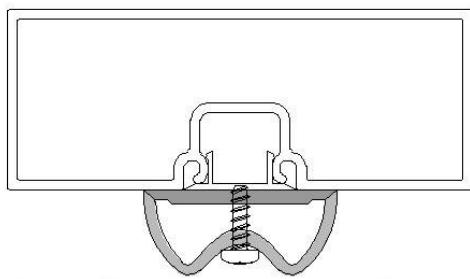




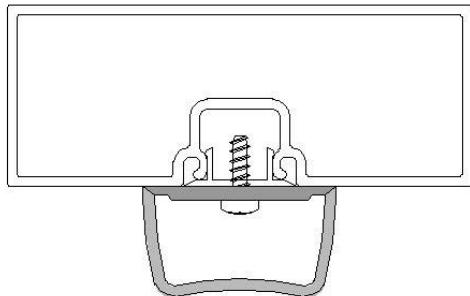
8500/8600 Series OHC Swing Door Installation Instructions



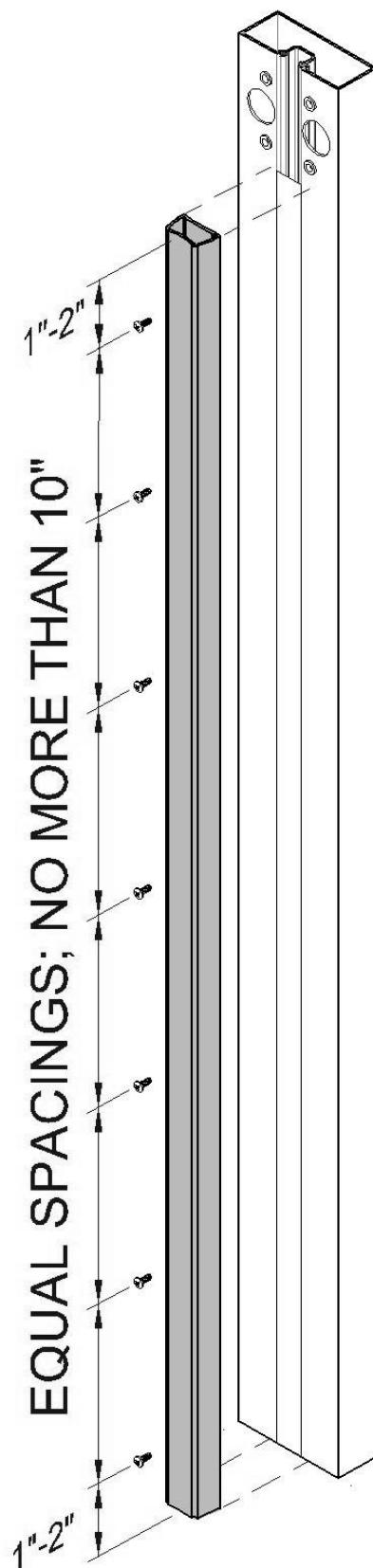
Drill 9/64" through center of finger guard on spacings shown at right.



Insert screw, compressing finger guard until screw contacts aluminum, then tighten slowly and allow head to swage through flexible section of finger guard.



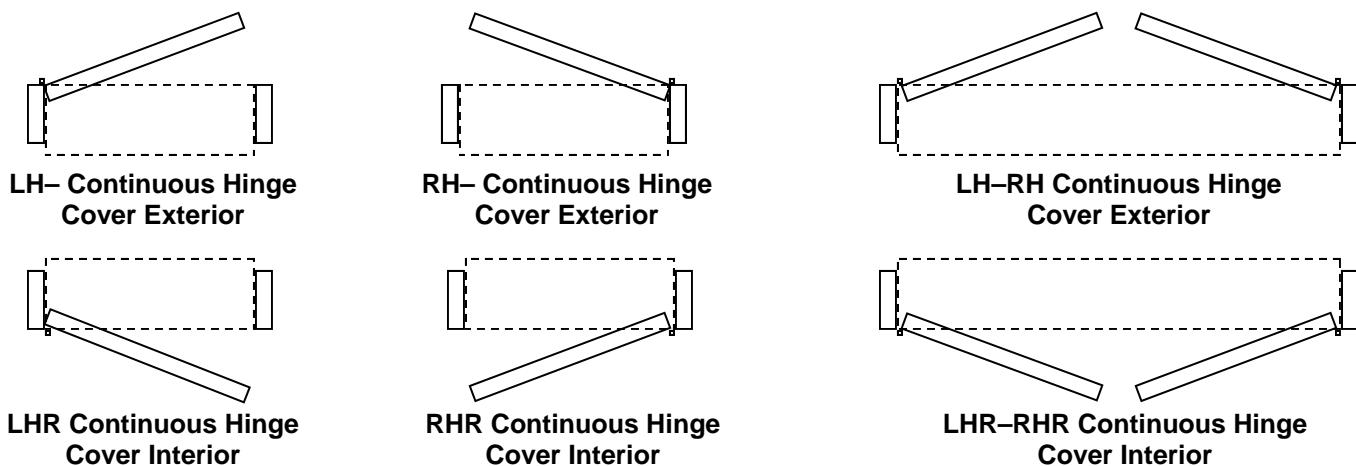
Continue to tighten screw to secure in place. Do not over-tighten as screw head will compress pinch rigid section of finger guard, resulting in pulling away from aluminum.





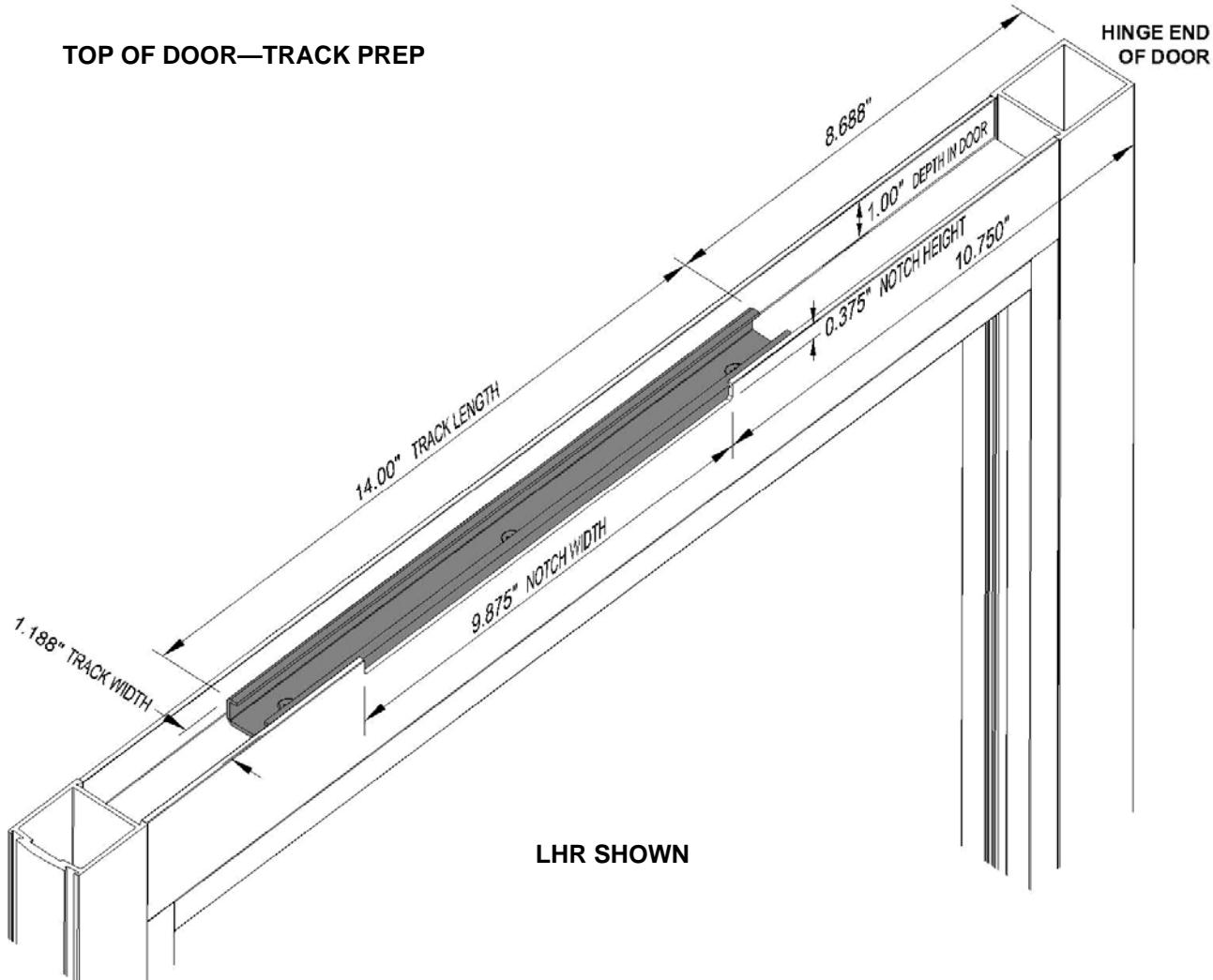
8500/8700 Series OHC Swing Door Installation Instructions

8700 OPERATOR HANDING IDENTIFICATION—CONTINUOUS HINGE



AS VIEWED FROM THE EXTERIOR

TOP OF DOOR—TRACK PREP

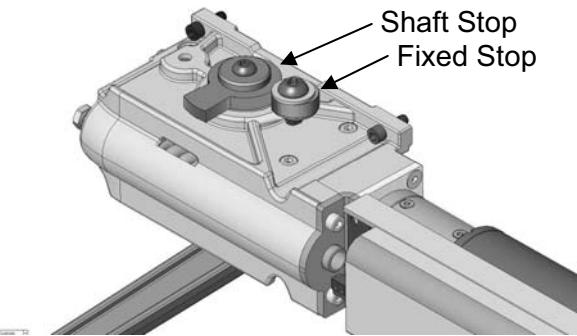




8500/8600/8700 Series OHC Swing Door Installation Instructions

Open Stop

The unit is provided with an adjustable full open stop. Rotate the door to the full open position; mount the Shaft Stop onto the upper output shaft and against the Fixed Stop. The spline of the output shaft allows indexing in 6° increments. For finer adjustment, the Fixed Stop is slightly eccentric; loosen and rotate until the desired stop location is achieved and re-tighten.

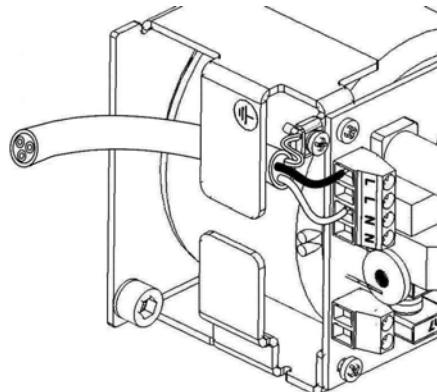


For installations where severe physical abuse may occur (such as extreme wind conditions), it is suggested a floor mounted stop be installed at full open. Additionally, the operator full open stop can be set at 100 degrees or more of opening, and program the operator to electronically stop at the 90 degree full open position. This can be accomplished by manually stopping the door at 90 degrees during a calibration run, or by reducing the opening angle under the parameter "Drive / Opening angle" (using an FPC902 Hand Terminal or a Display Control Panel).

Power Supply Connection

Connect 115VAC, 60 Hz, 10A, to Power Supply terminal strip

- 115VAC "Hot" (Line) to "L" terminal;
- 115VAC "Neutral" to "N" terminal



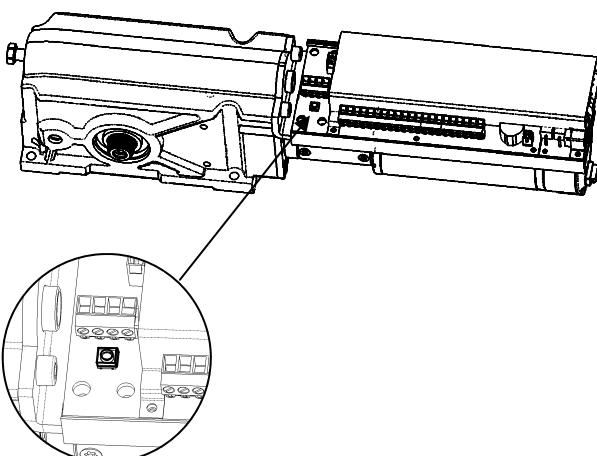
The second "L" and "N" terminals provide a convenient junction for dual operator systems.

Proper grounding must be provided for the unit. A grounding tab and screw are located adjacent to the Power Supply terminal strip.

The power supply cover must be installed after connecting 115VAC primary service.

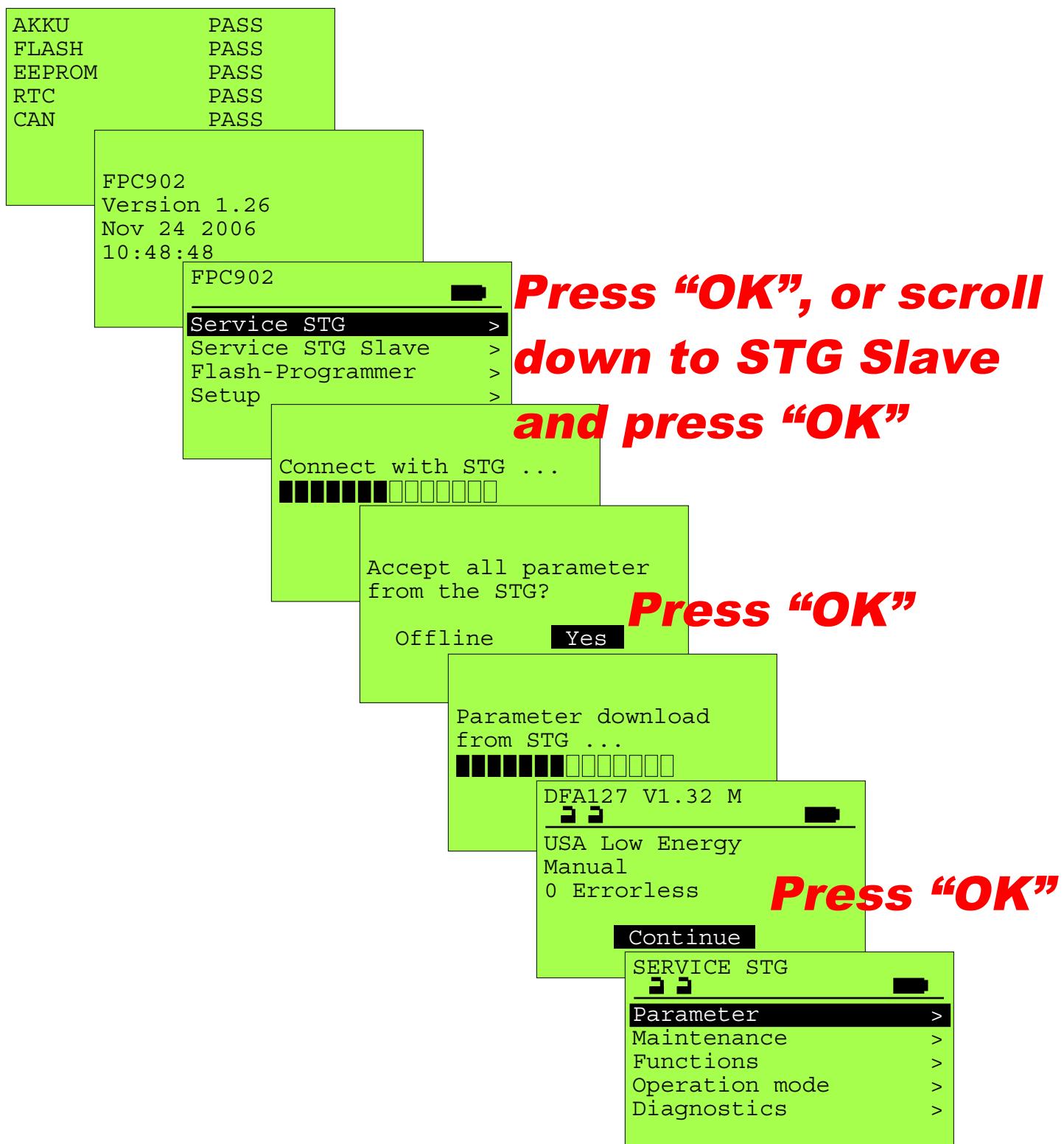
The **multifunction pushbutton** can be used for the following functions:

- 1 flash of the red LED will actuate a standard open cycle (if the rocker switch is on).
- 3 flashes of the red LED will initiate a calibration run.
- 4 flashes of the red LED will initiate the parameter adjust mode of a Display Control Panel.
- 8 flashes of the red LED will reset the unit's parameters to factory defaults.
- 15-17 flashes will cause the unit to reset without affecting any of the field set parameters.



After completion of the mechanical installation and prior to adjusting the parameters, always initiate a calibration run by pressing and holding the pushbutton for 3 flashes of the red LED. This will insure proper door operation by calibrating the unit to the installation conditions.

After the operator has been mechanically installed, the arms attached to the door, and 120VAC connected to the power supply, connect the FPC902 Hand Terminal to the operator control. The following sequence of screens will occur. The final screen shown below is the base point from which various settings for the operator are accessed and modified.



The following page indicates suggested parameter configurations for a typical installation. For a detailed description of all the parameters, consult the instructions with the FPC-902.

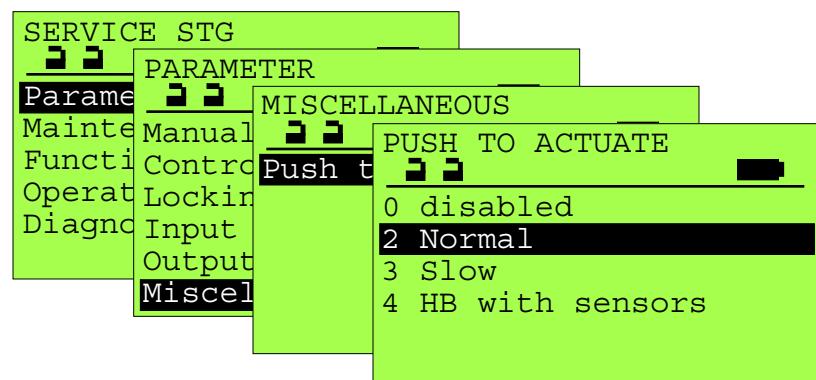
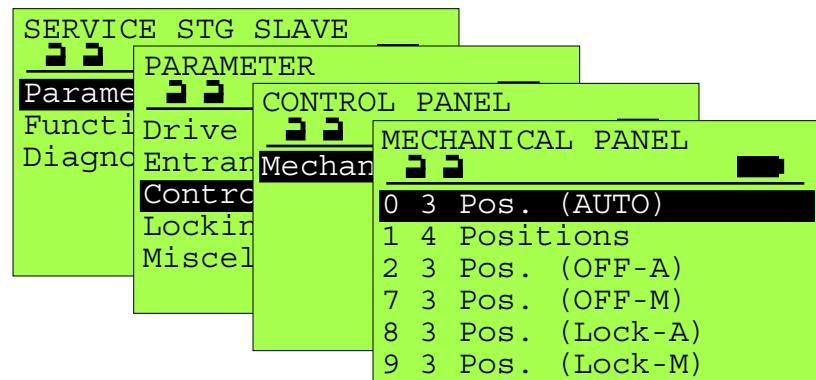
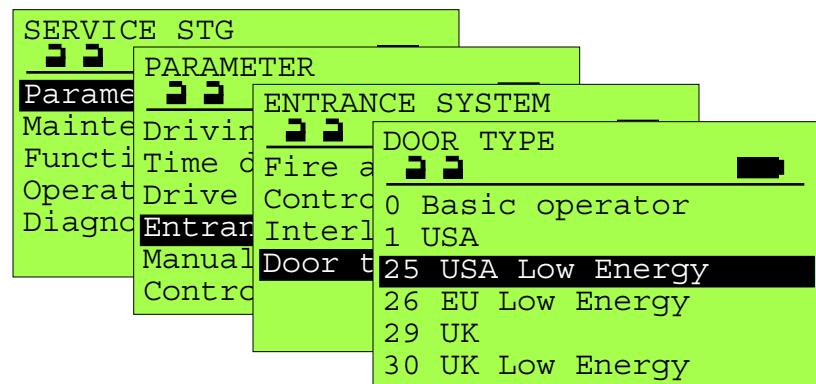
The following documents the suggested sequence of programming the operator:

The Series 8500 is shipped configured for a combination operation designated as "USA Low Energy". If manual operation of the door is not desired (with 120VAC power present), this should be changed to "USA", as shown in the sequence at right.

If a pair of operators are to be operated simultaneously, and only one rocker switch is to be used, it should be connected to the master control, and the slave control must be set as shown at right, allowing it to function without a rocker switch.

If automatic operation in response to pushing the door is desired (Push-To-Start), select "Miscellaneous", then "Push to Actuate" and enable by selecting "2 Normal". Note on paired units, this option must be set individually for both operators.

The unit is defaulted to include support for an automatic lock. If one is not provided, select the "Locking" parameter, then "Locking Functions", and change from "3 Always locked" to "1 Night locked" to eliminate the delay before opening.



The unit(s) are now ready to be placed into operation. Turn the control panel "on", press and hold the Control Button on the door control for 3 blinks of the adjacent LED. This will initiate a calibration cycle of the operator. After a few seconds the operator should open slowly, with a short pulse during mid-opening. It should be allowed to complete this cycle without interruption.

Note: Calibration must be performed individually on both operators of a pair.

The Series 6100 and 8000 Instructions included with the FPC-902 Terminal will have a complete listing of the screens, options, and adjustments available for this operator.

8500/8600/8700 SIGNAGE REQUIREMENTS



Full Power & Low Energy
"Knowing Act" doors



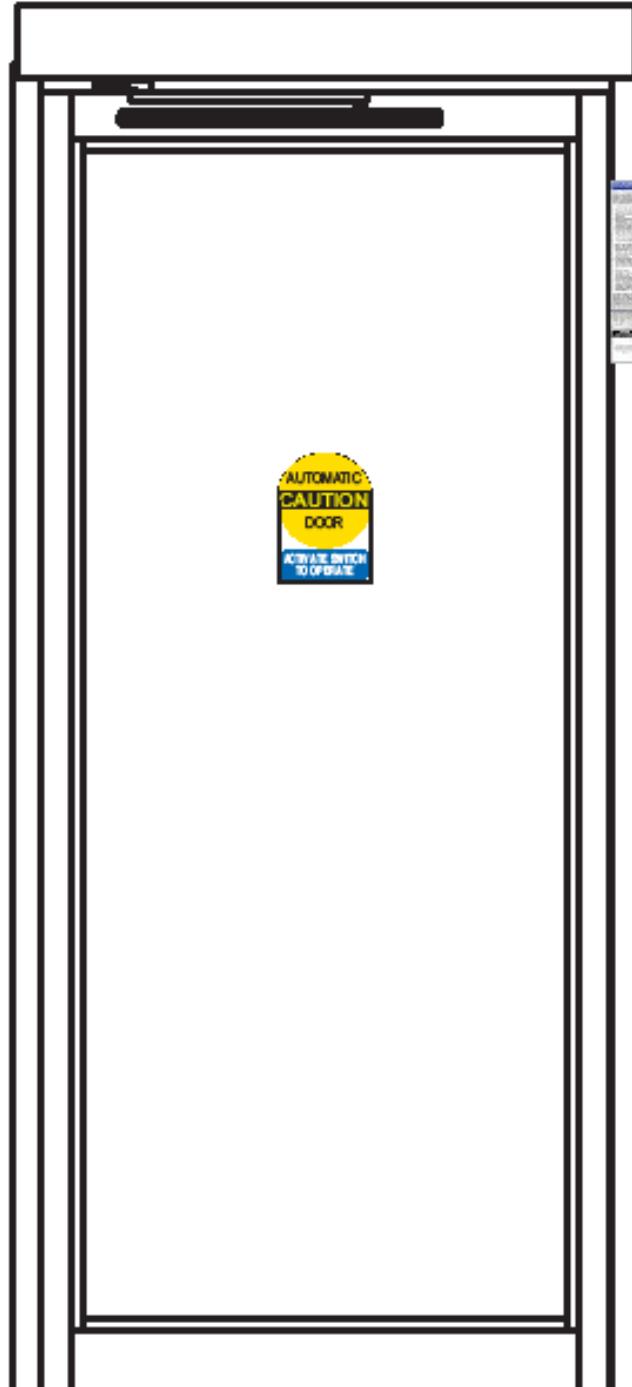
Full Power - Swing Side, 2-Way Traffic;
Low Energy - Sensor Activation



Full Power
Approach Side



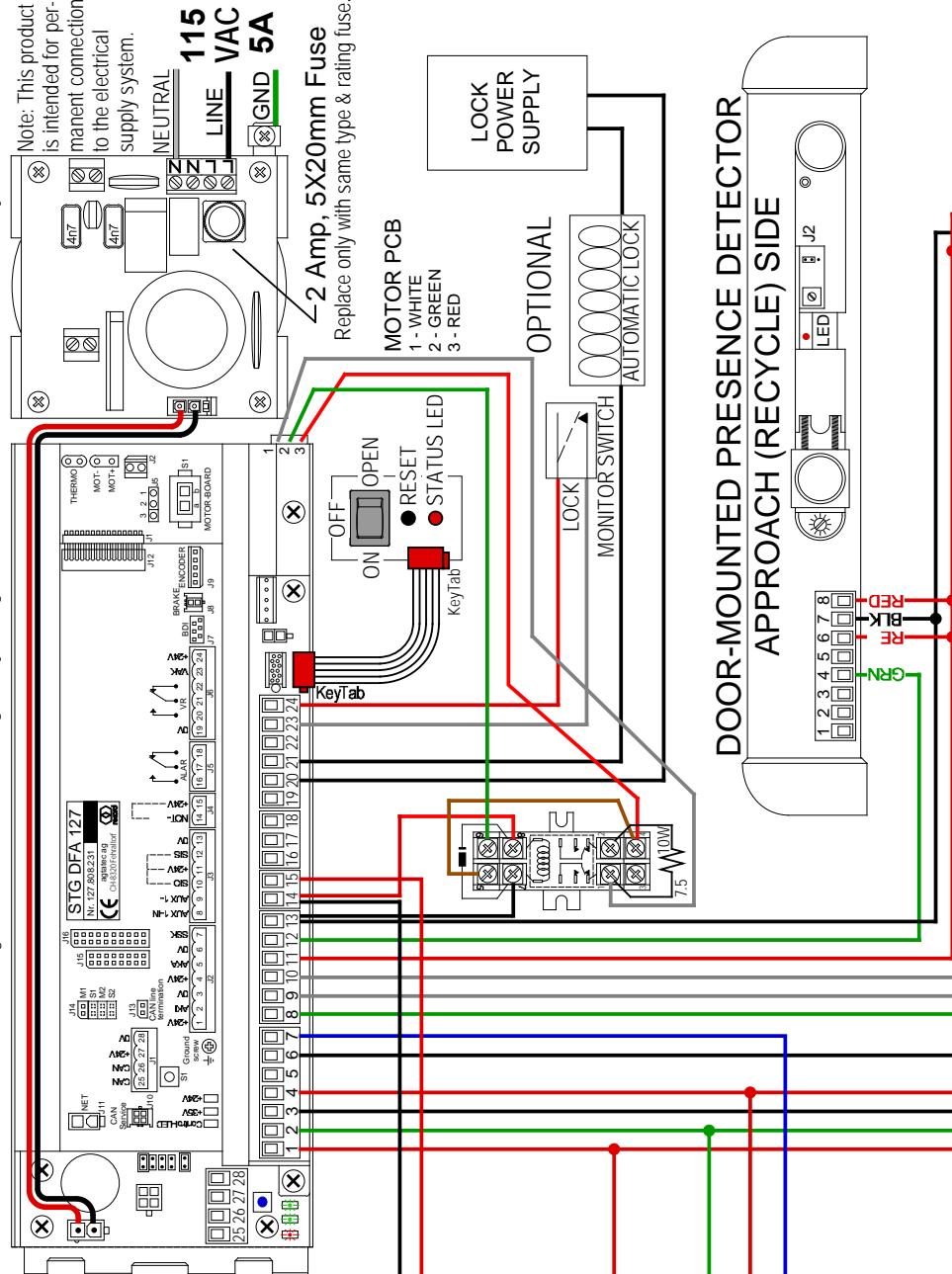
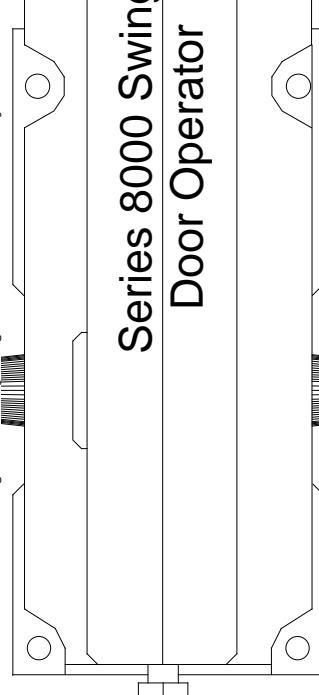
Full Power
Non-Approach Side



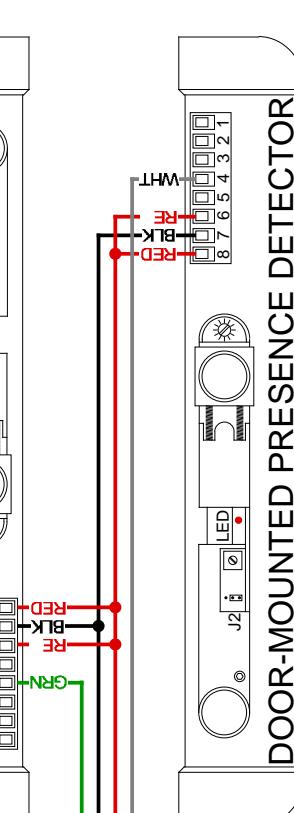
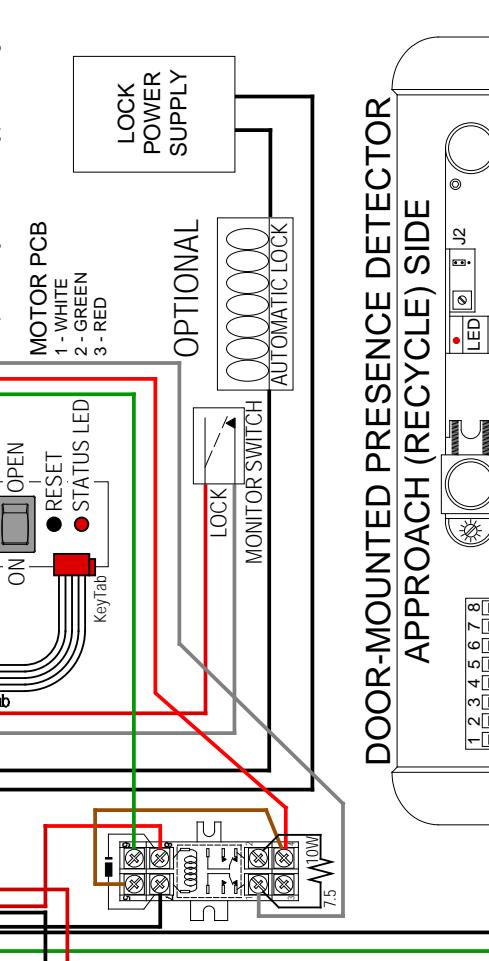
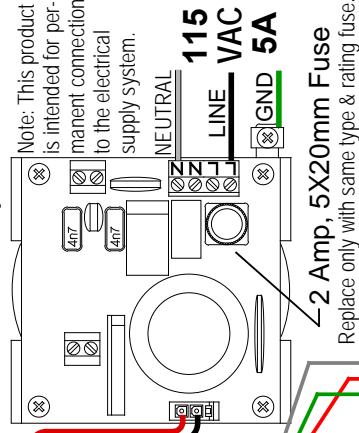
**SAFETY DECAL
REQUIREMENTS**
Oct06

CONTROL TERMINAL BLOCK CONNECTIONS

- 1 - Approach Sensor - Power/Signal - +24V
- 2 - Approach Sensor - Signal
- 3 - Approach Sensor - Power - 0V
- 4 - Guide Rail Beam - Power/Signal - +24V
- 5 - Guide Rail Beam - Signal
- 6 - Guide Rail Beam - Power - 0V
- 7 - Remote Switch - Signal
- 8 - Header Mounted Swing Side Safety - Signal
- 9 - BodyGuard Data Line - Data +
- 10 - Door Mounted Swing Side Safety - Signal
- 11 - Door Mounted Sensors - Power/Signal - +24V
- 12 - Door Mounted Approach Side Recycle - Signal
- 13 - Door Mounted Sensors - Power - 0V
- 14 - Fire Alarm Signal (Jumper to 15 if not used)
- 15 - Fire Alarm - +24V
- 16 - Door Alarm Relay - N.O.
- 17 - Door Alarm Relay - COM
- 18 - Door Alarm Relay - N.C.
- 19 - Automatic Lock Power - 0V (0.5A Max.)
- 20 - Automatic Lock Control Relay - N.O.
- 21 - Automatic Lock Control Relay - COM
- 22 - Automatic Lock Control Relay - N.C.
- 23 - Automatic Lock Monitor Signal - +24V
- 24 - Automatic Lock Power/Signal - +24V



There are three levels of resetting an operator. To reset without changing any operating parameters, press & hold the black reset button (next to the ON/OFF rocker switch) for 6 seconds, until relay "clicks" occur. To reset and restore typical operating parameters (speed, master/slave, etc.), press & hold the blue button (on the door control) for 8 flashes of the red LED. To fully reset the unit, eliminating all parameter modifications (including Series 6100/8000 setting), press & hold the blue button on the control for 9 flashes of the red LED, then immediately remove the jumper between terminals 14 & 15. After a full reset, the parameter "Entrance System / Door Type" must be changed from "0 Basic Operator" to "25 USA Low Energy". Additional parameters, including factory settings, will also have to be re-entered. Consult factory for additional details.



Series 8000 Wiring Diagram with Frame-Mounted Breakout

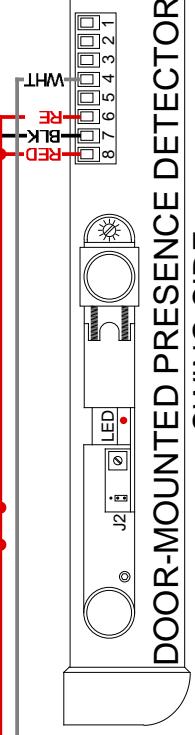
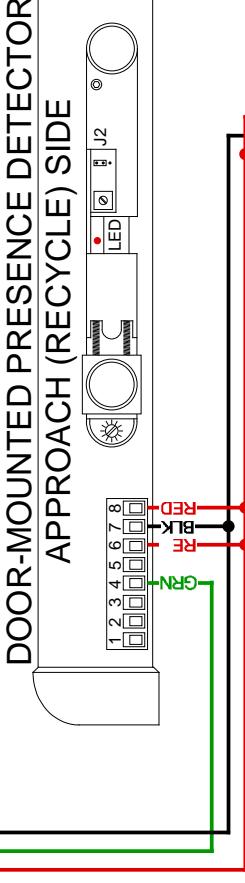
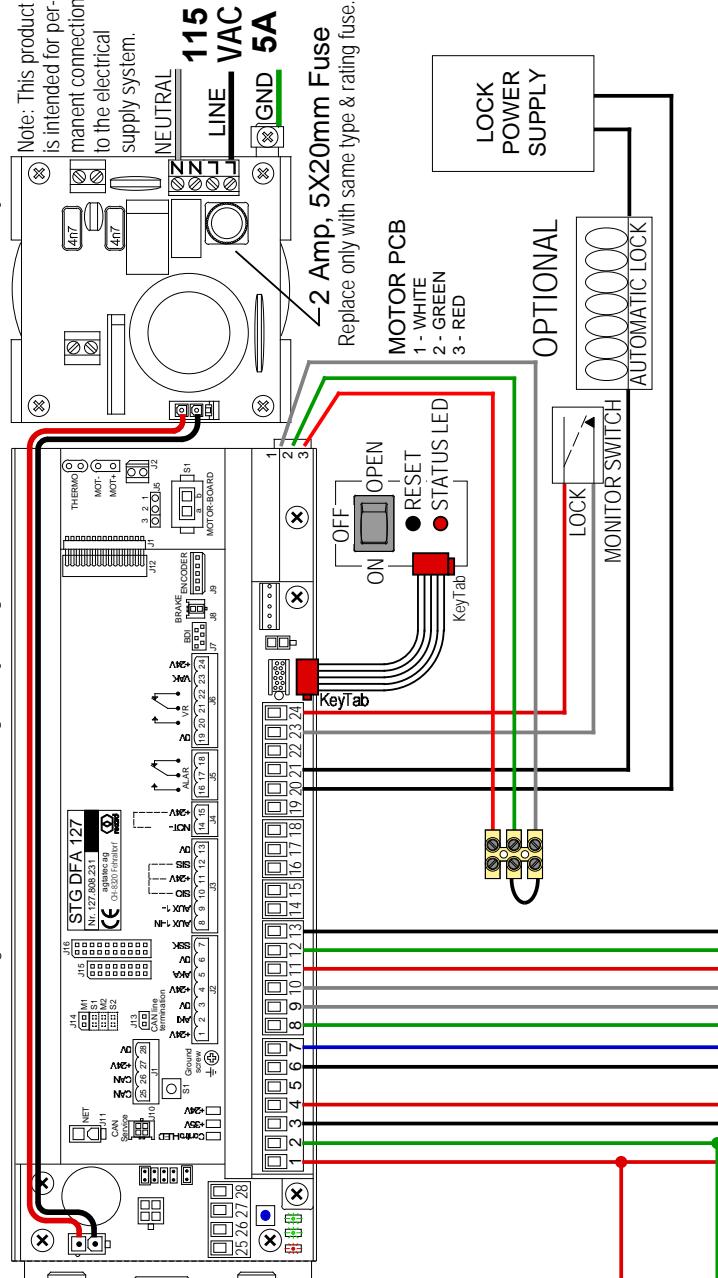
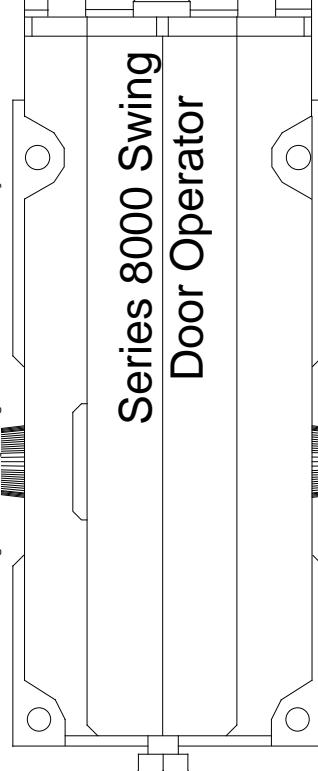
12/JAN09 DPH

INSWING

HEADER-MOUNTED PRESENCE DETECTOR SWING SIDE

CONTROL TERMINAL BLOCK CONNECTIONS

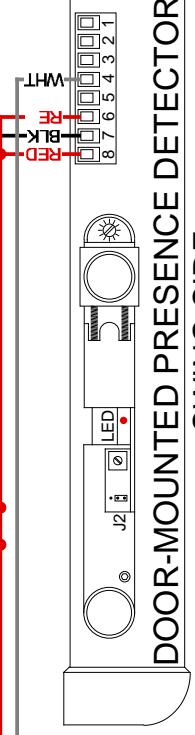
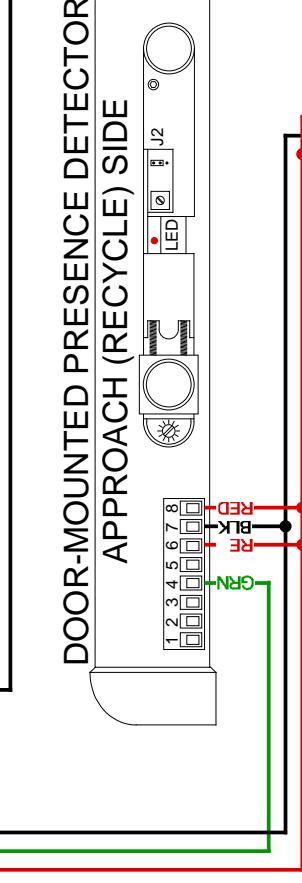
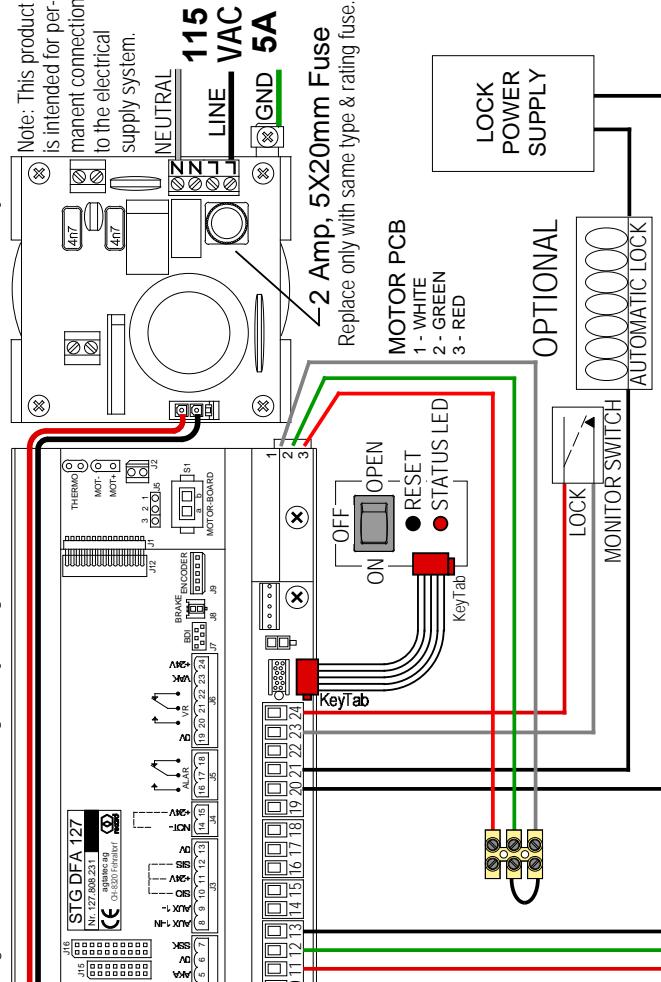
- 1 - Approach Sensor - Power/Signal - +24V
- 2 - Approach Sensor - Signal
- 3 - Approach Sensor - Power - 0V
- 4 - Guide Rail Beam - Power/Signal - +24V
- 5 - Guide Rail Beam - Signal
- 6 - Guide Rail Beam - Power - 0V
- 7 - Remote Switch - Signal
- 8 - Header Mounted Swing Side Safety - Signal
- 9 - BodyGuard Data Line - Data +
- 10 - Door Mounted Swing Side Safety - Signal
- 11 - Door Mounted Sensors - Power/Signal - +24V
- 12 - Door Mounted Approach Side Recycle - Signal
- 13 - Door Mounted Sensors - Power - 0V
- 14 - Fire Alarm Signal (Jumper to 15 if not used)
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- 21 - Automatic Lock Control Relay - COM
- 22 - Automatic Lock Control Relay - N.C.
- 23 - Automatic Lock Monitor Signal
- 24 - Automatic Lock Power/Signal - +24V



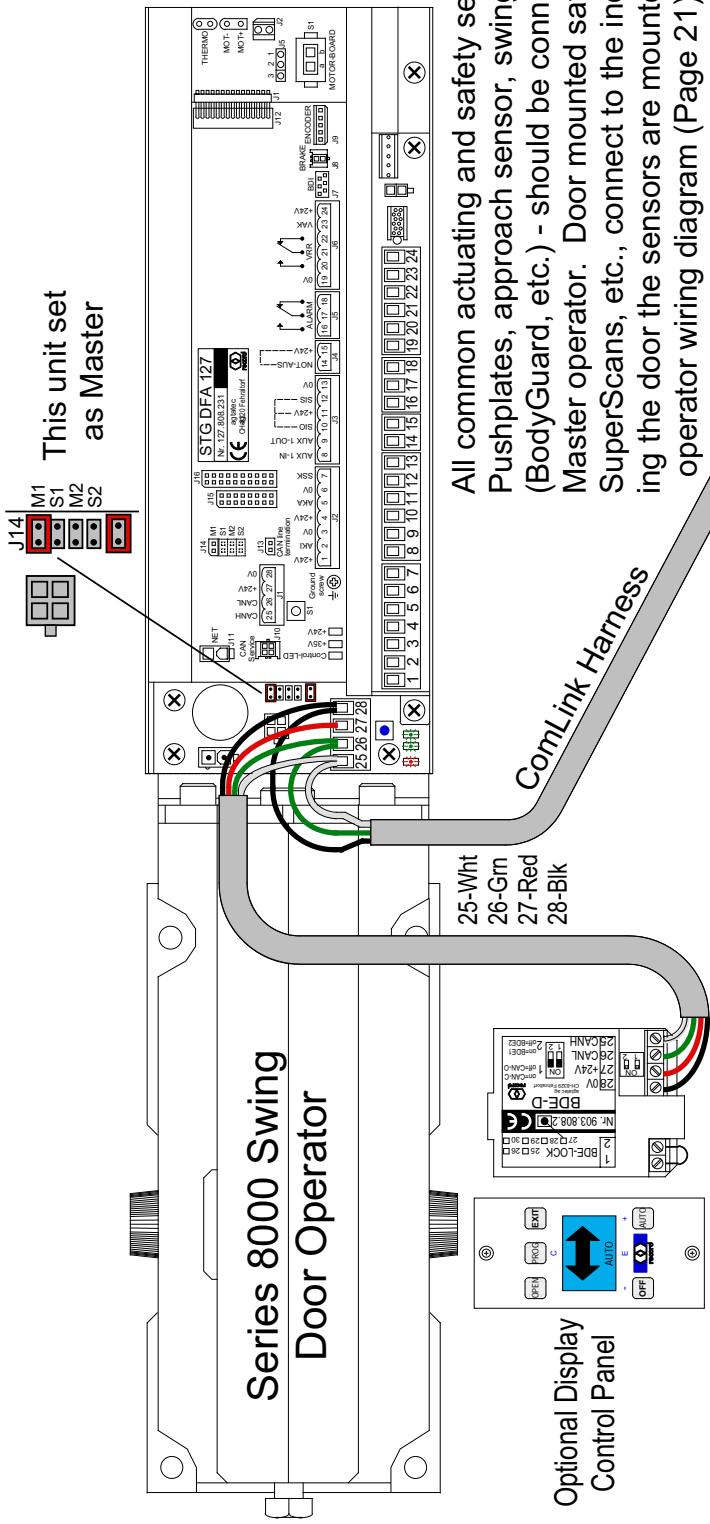
**Series 8000 Wiring Diagram
with Motor Harness for Breakout**

12JAN09 DPH

There are three levels of resetting an operator. To reset without changing any operating parameters, press & hold the black reset button (next to the ON/OFF rocker switch) for 6 seconds, until relay "clicks" occur. To reset and restore typical operating parameters (speed, master/slave, etc.), press & hold the blue button (on the door control) for 8 flashes of the red LED. To fully reset the unit, eliminating all parameter modifications (including Series 6100/8000 setting), press & hold the blue button on the control for 9 flashes of the red LED, then immediately remove the jumper between terminals 14 & 15. After a full reset, the parameter "Entrance System / Door Type" must be changed from "0 Basic Operator" to "25 USA Low Energy". Additional parameters, including factory settings, will also have to be re-entered. Consult factory for additional details.



record



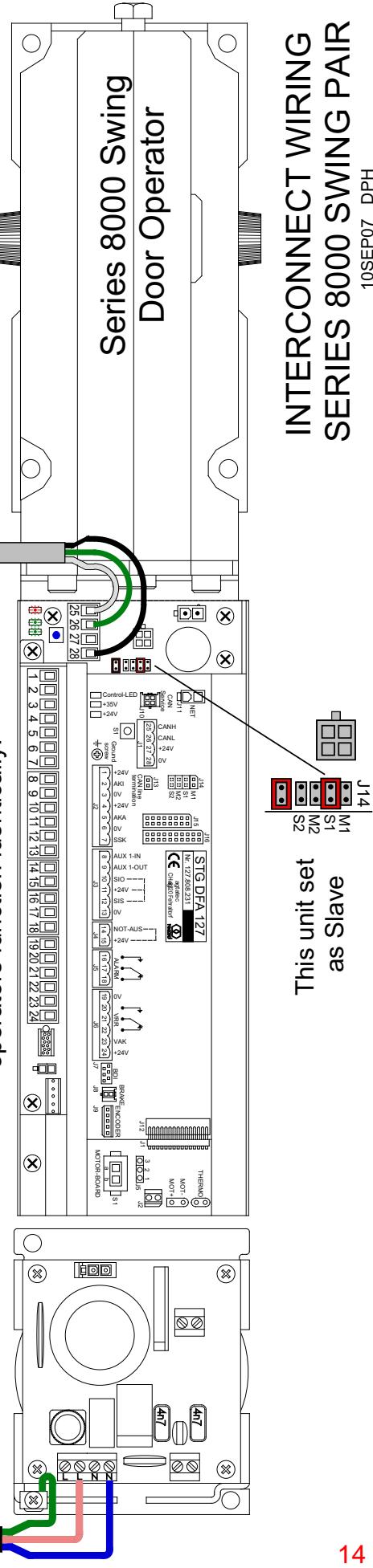
All common actuating and safety sensors and switches - Pushplates, approach sensor, swing area safety sensors (BodyGuard, etc.) - should be connected to the Series 8000 Master operator. Door mounted safety sensors - Optex Elite, SuperScans, etc., connect to the individual operator power-ing the door the sensors are mounted on. Consult the single operator wiring diagram (Page 21) for more details.

120VAC HARNESS

If no Rocker Switch is connected to the Slave Operator, its parameter "Control Panel / Mechanical Panel" must be set to "0 3 Pos. (AUTO)"

The Lock Relay Output of both operators function identically.

With this harness connected between the operator controls, the FPC902 Hand Ter-minal can be plugged into either control and access both units (Master & Slave) for parameter adjustment and unit setup.



INTERCONNECT WIRING SERIES 8000 SWING PAIR

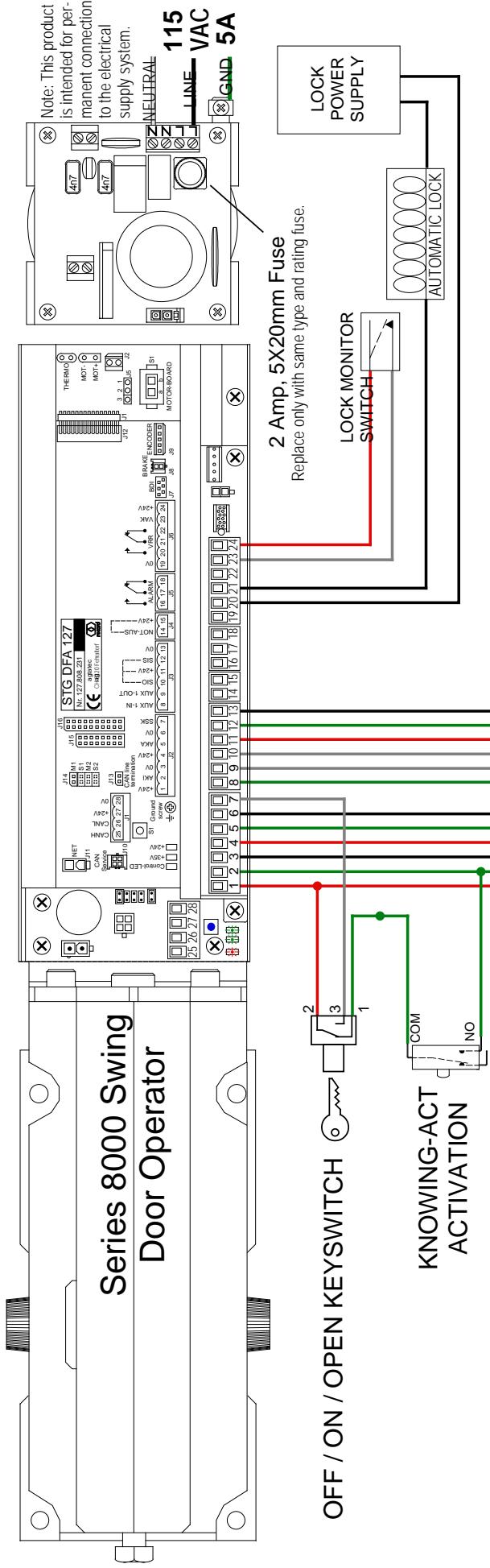
10SEP07 DPH



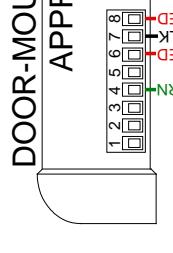
CONTROL TERMINAL BLOCK CONNECTIONS

- 1 - Approach Sensor - Power/Signal - +24V
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- 4 - Guide Rail Beam - Power/Signal - +24V
- 5 - Guide Rail Beam - Signal
- 6 - Guide Rail Beam - Power - 0V
- 7 - Remote Switch - Signal
- 8 - Header Mounted Swing Side Safety - Signal
- 9 - BodyGuard Data Line - Data +
- 10 - Door Mounted Swing Side Safety - Signal
- 11 - Door Mounted Sensors - Power/Signal - +24V
- 12 - Door Mounted Approach Side Recycle - Signal
- 13 - Door Mounted Sensors - Power - 0V
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- 20 - Automatic Lock Control Relay - N.O.
- 21 - Automatic Lock Control Relay - COM
- 22 - Automatic Lock Control Relay - N.C.
- 23 - Automatic Lock Monitor Signal
- 24 - Automatic Lock Power/Signal - +24V

Series 8000 Swing Door Operator



DOOR-MOUNTED PRESENCE DETECTOR APPROACH (RECYCLE) SIDE



Note: This product is intended for permanent connection to the electrical supply system.

NEUTRAL

LINE VAC

GND

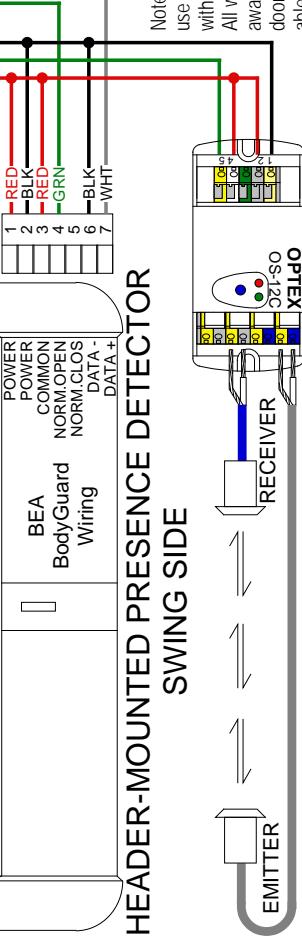
115

5A

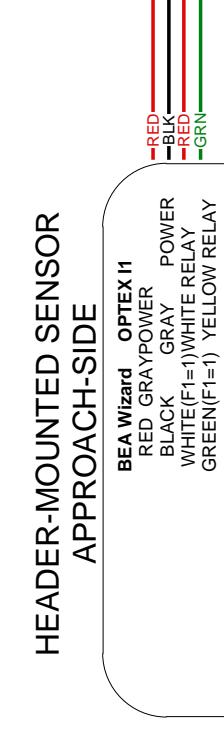
2 Amp, 5X20mm Fuse

Replace only with same type and rating fuse.

DOOR-MOUNTED PRESENCE DETECTOR SWING SIDE



HEADER-MOUNTED PRESENCE DETECTOR APPROACH SIDE



NEUTRAL

LINE VAC

GND

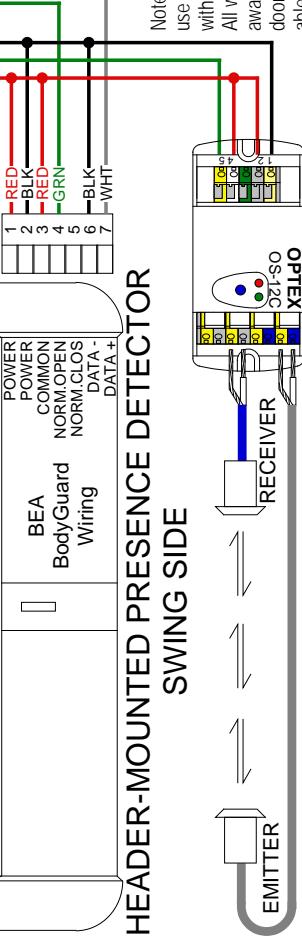
115

5A

2 Amp, 5X20mm Fuse

Replace only with same type and rating fuse.

DOOR-MOUNTED PRESENCE DETECTOR SWING SIDE



Note: For proper operation, use the harness provided with sensors to be installed. All wiring should be routed away from moving parts in door operator. Power available from operator for sensors is 24VDC, 1A.

**OFF/ON/OPEN KEYSW on
SERIES 8500/8600 SWING**

30JUL07 DPH

GUIDE RAIL MOUNTED PHOTOELECTRIC BEAM