

The manufacturer's specifications for this product require the installation to be approved by an AAADM certified inspector.

The record-usa 8600/8700 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.

Verify that the door may be opened without power applied to the unit.

Verify that the force required to open the door with the power disconnected shall not be greater than 50 pounds.

Verify that the door does not close with a force greater than 40 pounds at the latch side of the closing stile, and does not close the final 10 degrees in less than 1.5 seconds.

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.

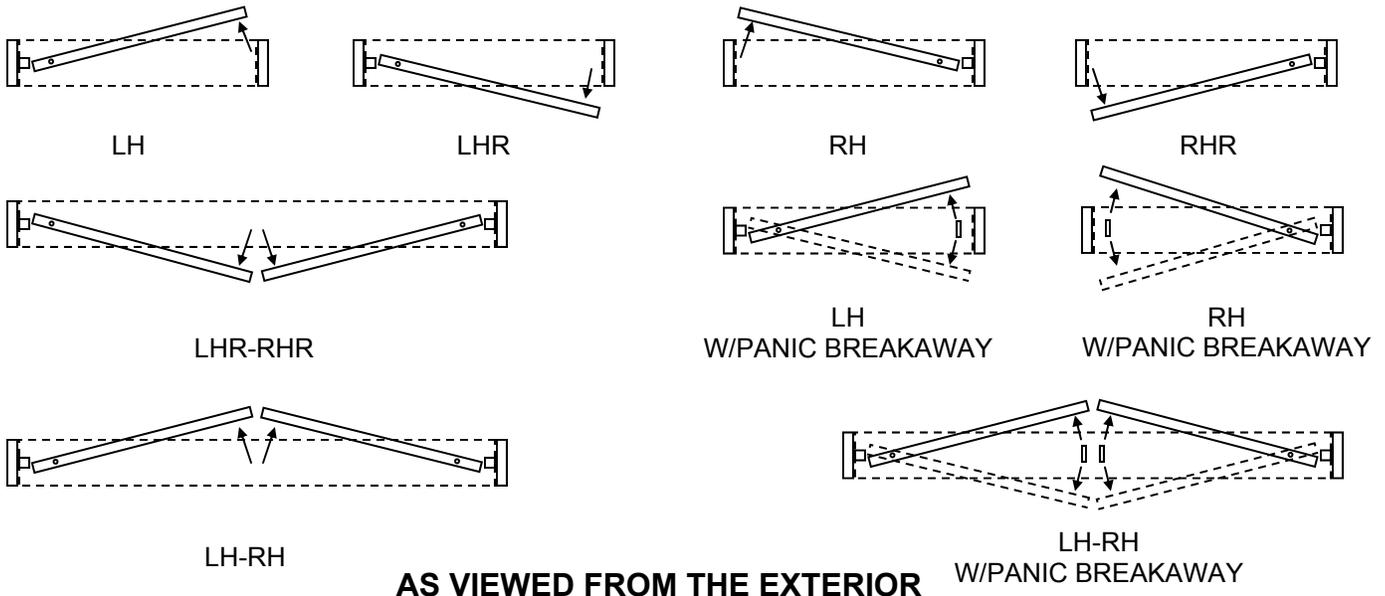
READ INSTALLATION INSTRUCTIONS BEFORE INSTALLING.

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.

INDEX

INTRODUCTION, OWNER INFORMATION & INDEX.....	2
HANDING ID, ELECTRICAL PREPARATION, OPERATOR VIEW.....	3
8600/8700 HEADER TO JAMB PREP / 8600 DOOR PREP.....	4
8600 OPERATOR & POWER SUPPLY TECHNICAL.....	5
8600 MULTIFUNCTION BUTTON / FINGERGUARD INSTALLATION.....	6
ROCKER SWITCH INFO / 8700 HANDING ID	7
8700 DOOR PREP AND ARM INFO.....	8
8600/8700 SERVICING WITH THE FPC902.....	9,10
8600/8700 PARTS LISTS.....	11,12
SIGNAGE REQUIREMENTS.....	13
WIRE DIAGRAMS.....	14,15,16,17

OPERATOR HANDING IDENTIFICATION—CENTER PIVOTED



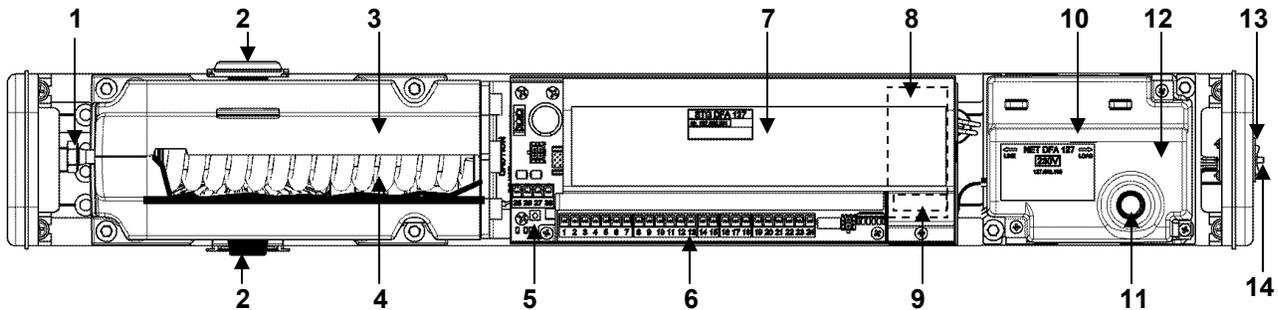
AS VIEWED FROM THE EXTERIOR

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. Power Req.-115 VAC, 60Hz, 15 Amp service.

Product Description

The record Series 8600/8700 Swing Door Operator is a power-open, spring-close unit providing full functionality conforming to either ANSI A156.10 or ANSI A156.19 requirements. The self-monitoring microprocessor-based control maintains precise regulation throughout the door open / close cycle. Two operators can be connected together in a master/slave configuration providing synchronized operation. Safety is additionally increased by the use of a redundant force limitation.



- | | |
|--------------------------------------|--|
| 1 Adjusting screw for spring tension | 8 Motor Drive Circuit Board |
| 2 Output Shafts for Arms & Stop | 9 Slide switch S1 (rotating direction) |
| 3 Drive Unit | 10 Power Supply |
| 4 Closing Spring | 11 Fuse (2.0A, 5X20mm, Slo-Blo) |
| 5 Multifunction Pushbutton / Control | 12 Power Supply Circuit Board |
| 6 Terminal Blocks for I/O | 13 On / Off / Open Rocker Switch |
| 7 Microprocessor Control | 14 Status LED and Reset Pushbutton |

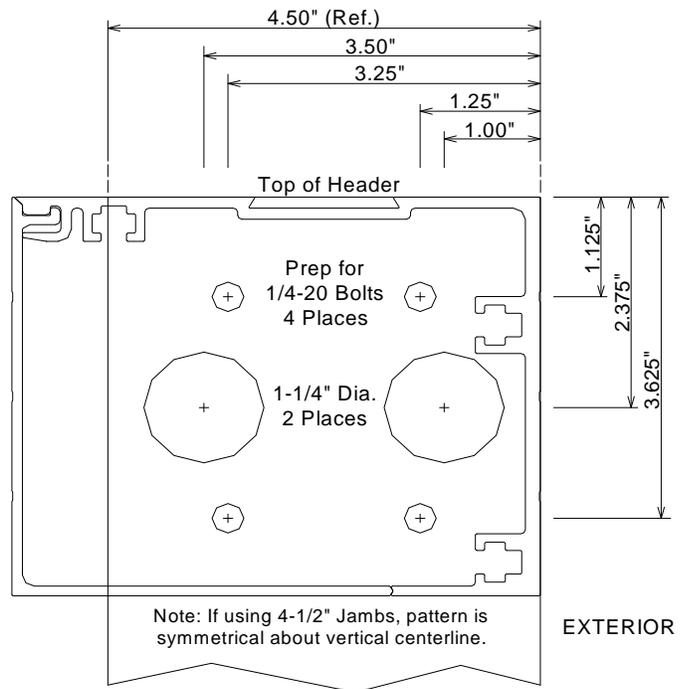
8600 Series OHC Swing Door Installation Instructions

Mounting the Header 8600

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 below.

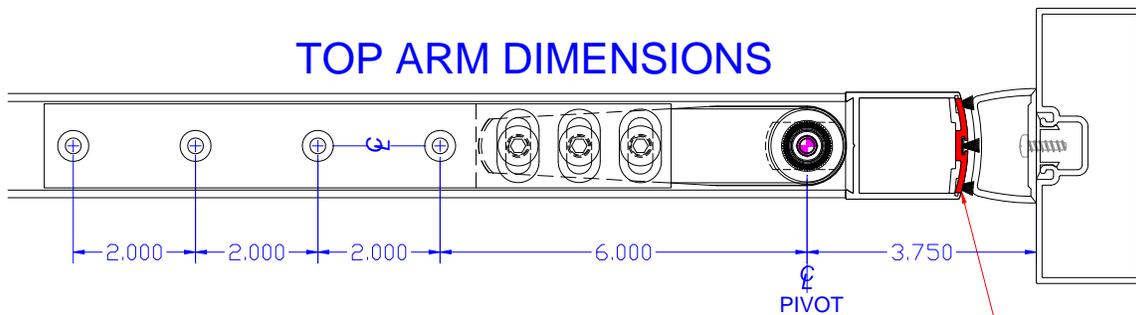
Door Prep 8600 Door Package

See below for Top & Bottom Door Prep.



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

TOP ARM DIMENSIONS



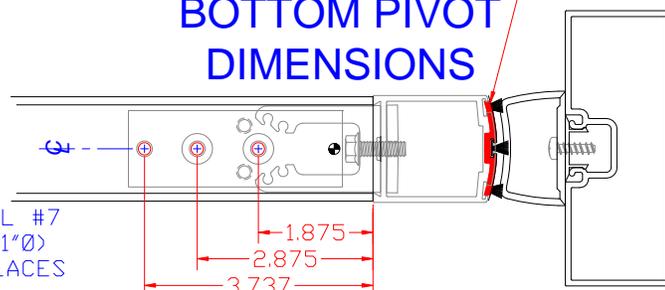
PREP FOR 1/4-20 BOLT - 4 PLACES
IF DOOR WEB DOES NOT HAVE 1/4"
THICK WALL TO RECEIVE 1/4-20 BOLTS,
USE OF RIVNUTS OR NUTSERTS IS
RECOMMENDED.

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

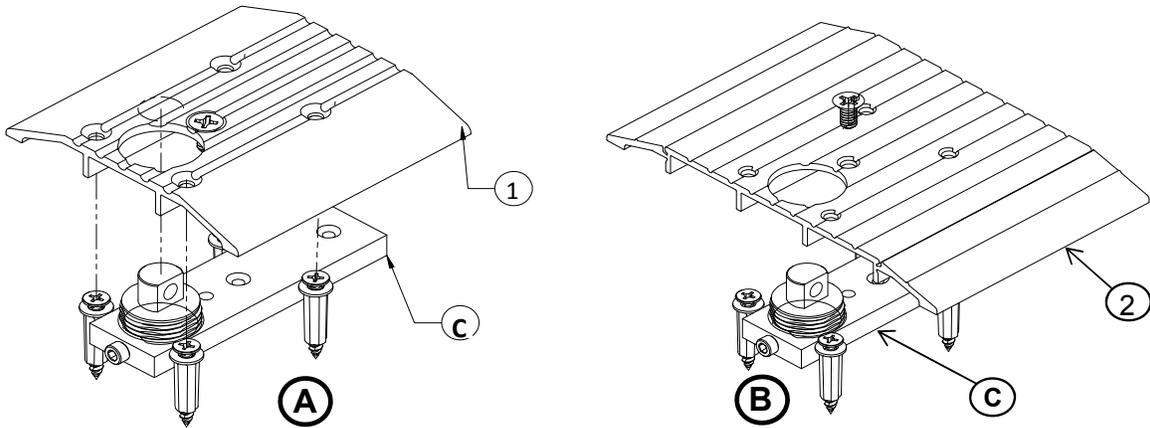
BOTTOM PIVOT DIMENSIONS

1" DEEP WEB
REQUIRED - TOP AND
BOTTOM HORIZONTALS

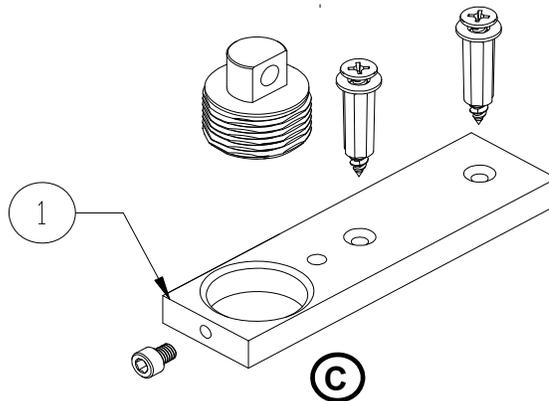
DRILL #7
(0.201"Ø)
3 PLACES



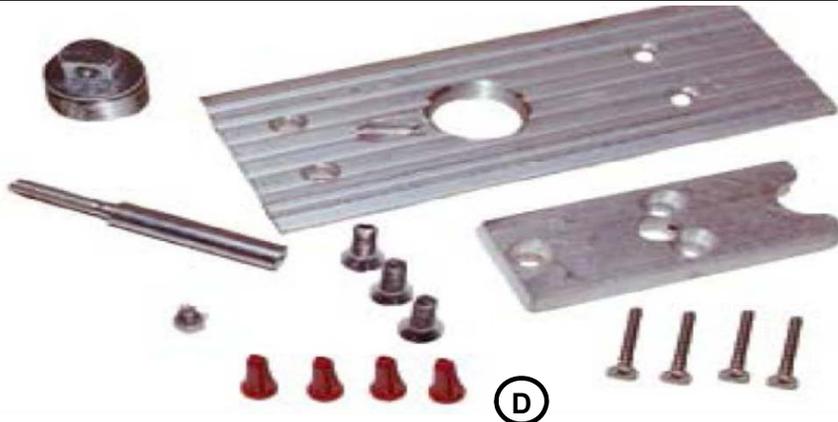
8600 OHC SWING DOOR HEAVY DUTY BOTTOM PIVOT ASSEMBLIES



ITEM	PART NUMBER	DESCRIPTION	QTY.	U of M
A	4-40-0028-HD	Bottom Pivot Kit- w/1/2"x4 1/2"Threshold HD	1	ea
B	4-40-0029-HD	Bottom Pivot Kit- w/1/2"x7"Threshold HD	1	ea
C	202-005812669	Pivot,Bottom,Assy.,HD,SA w/oThreshold	1	ea
1	4-40-4057-HD	Threshold,Pivot,HD,SA, 1/2" X 4 1/2"	1	ea
2	4-40-4139-HD	Threshold,Pivot,HD,SA, 1/2" X 7"	1	ea



ITEM	PART NUMBER	DESCRIPTION	QTY.	U of M
C	202-005812669	Pivot,Bottom,Assy.,HD,SA w/oThreshold	1	ea
1	202-005120781	Bearing Block, Pivot, HD	1	EA

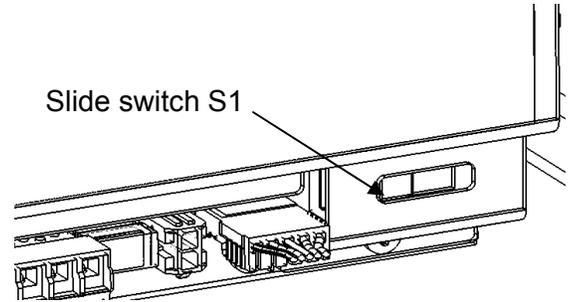


ITEM	PART NUMBER	DESCRIPTION	QTY.	LIST PRICE
D	9-99-2832	Threshold & Bottom Pivot (Recessed in Flr.)	1	ea

Operator Swing Direction

If the operator does not close slowly, the handing selection switch should be changed. It is located behind a slot in the sheet metal cover for the operator control –

With no power applied, the operator should be capable of being easily pushed open and when released, will close the door at a controlled speed.

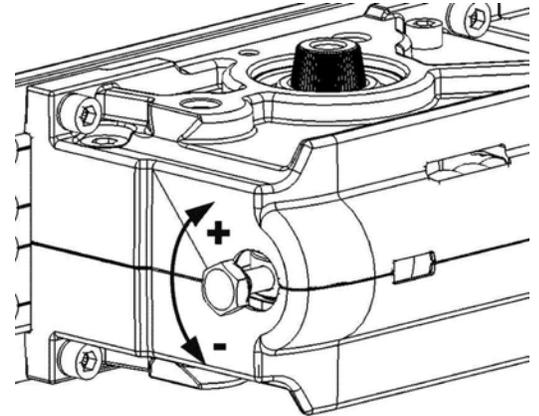


Closing Spring Adjustment

The closing force provided by the spring is adjustable.

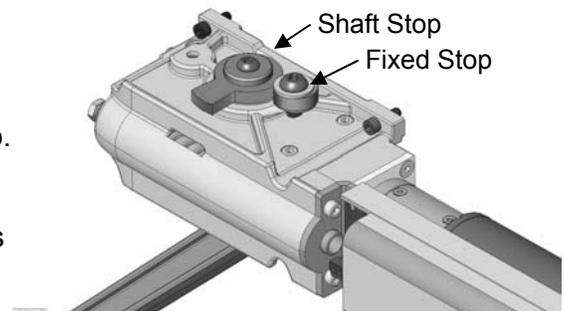
Do not adjust the force so low that the door will not consistently close under spring power.

On a typical 3'-0" door with a standard arm assembly, the spring closing force can be adjusted from less than 5 pounds force to more than 20 pounds force, measured at the leading edge of the door.



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).

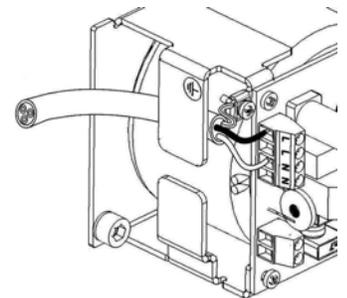
Power Supply Connection

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.



8600 Series OHC Swing Door Installation Instructions

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

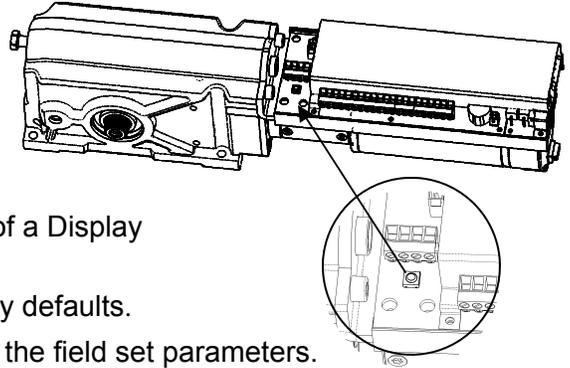
1 flash of the red LED will actuate a standard open cycle (if the rocker switch is on).

3 flashes of the red LED will initiate a calibration run.

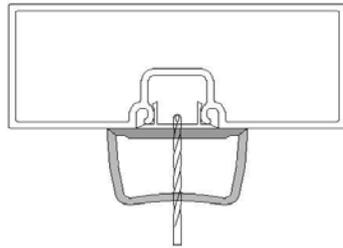
4 flashes of the red LED will initiate the parameter adjust mode of a Display Control Panel.

8 flashes of the red LED will reset the unit's parameters to factory defaults.

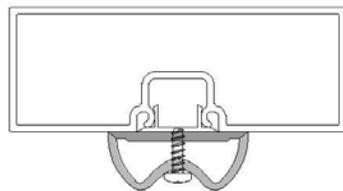
15-17 flashes will cause the unit to reset without affecting any of the field set parameters.



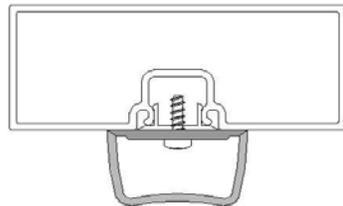
After completion of the mechanical installation and prior to adjusting the parameters, always initiate a calibration run by pressing and holding the pushbutton for 3 flashes of the red LED. This will insure proper door operation by calibrating the unit to the installation conditions.



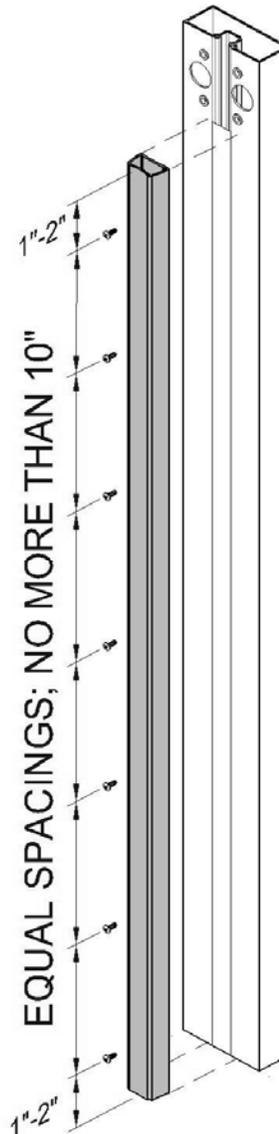
Drill 9/64" through center of fingerguard on spacings shown at right.

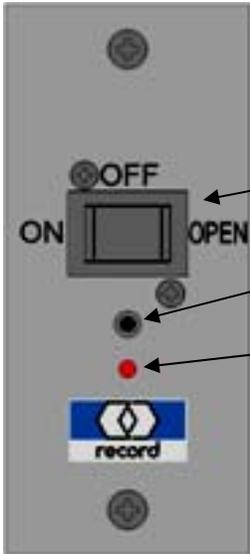


Insert screw, compressing fingerguard until screw contacts aluminum, then tighten slowly and allow head to swage through flexible section of fingerguard.



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





The Series 8600 Standard Rocker Switch Control Panel includes:

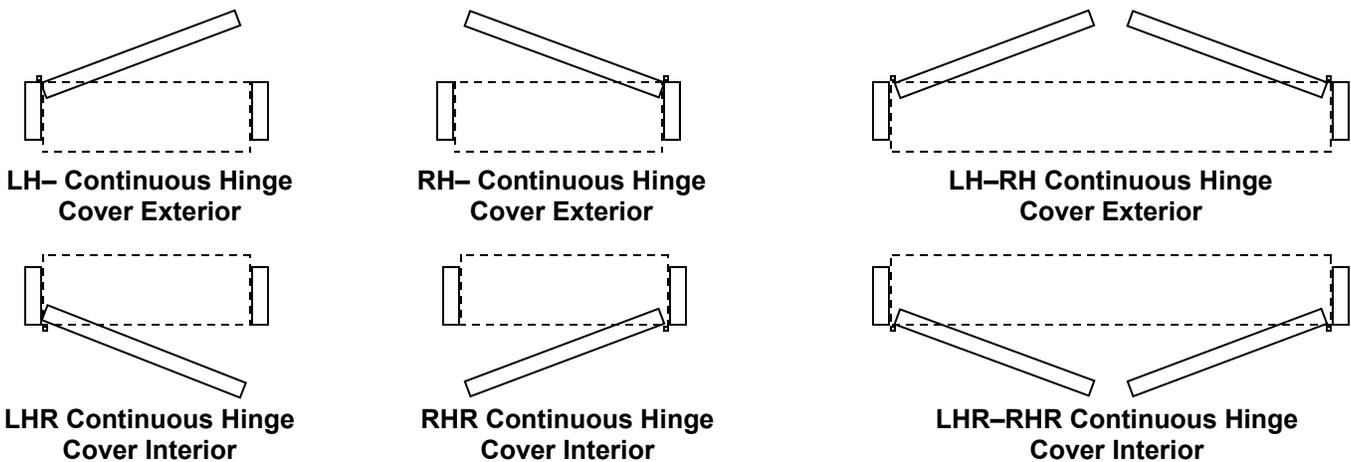
3 Position Rocker Switch - ON / OFF / OPEN mounted to Jamb mount Faceplate.

Pushbutton - To reset the operator, press and hold for 8 seconds

LED (red) - Normally off; flashing indicates either the unit is performing a calibration run, or an error has been encountered.

To clear an error, press & hold the pushbutton for approximately 8 seconds, or until the LED turns off.

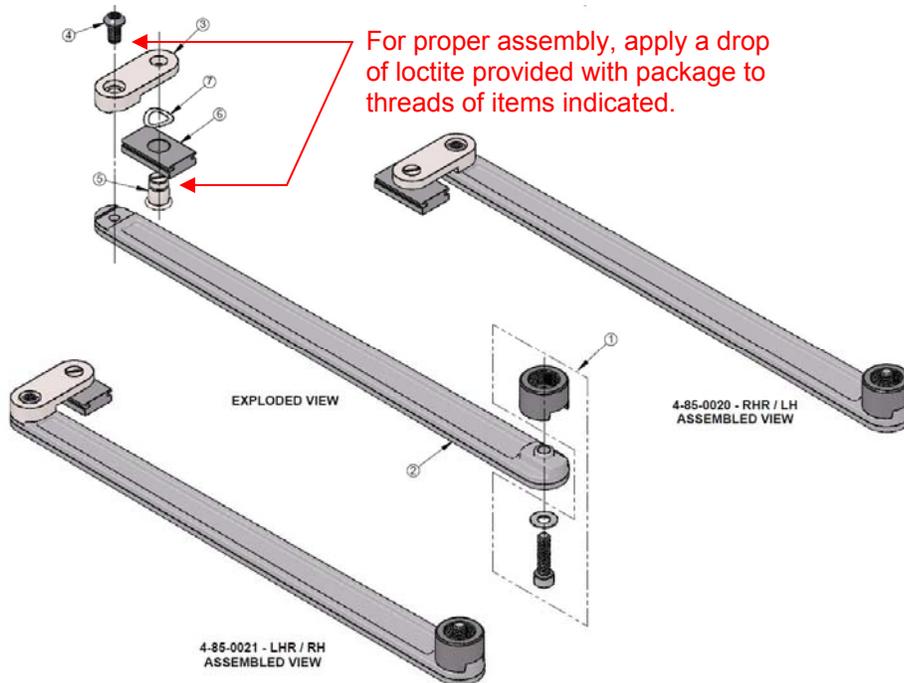
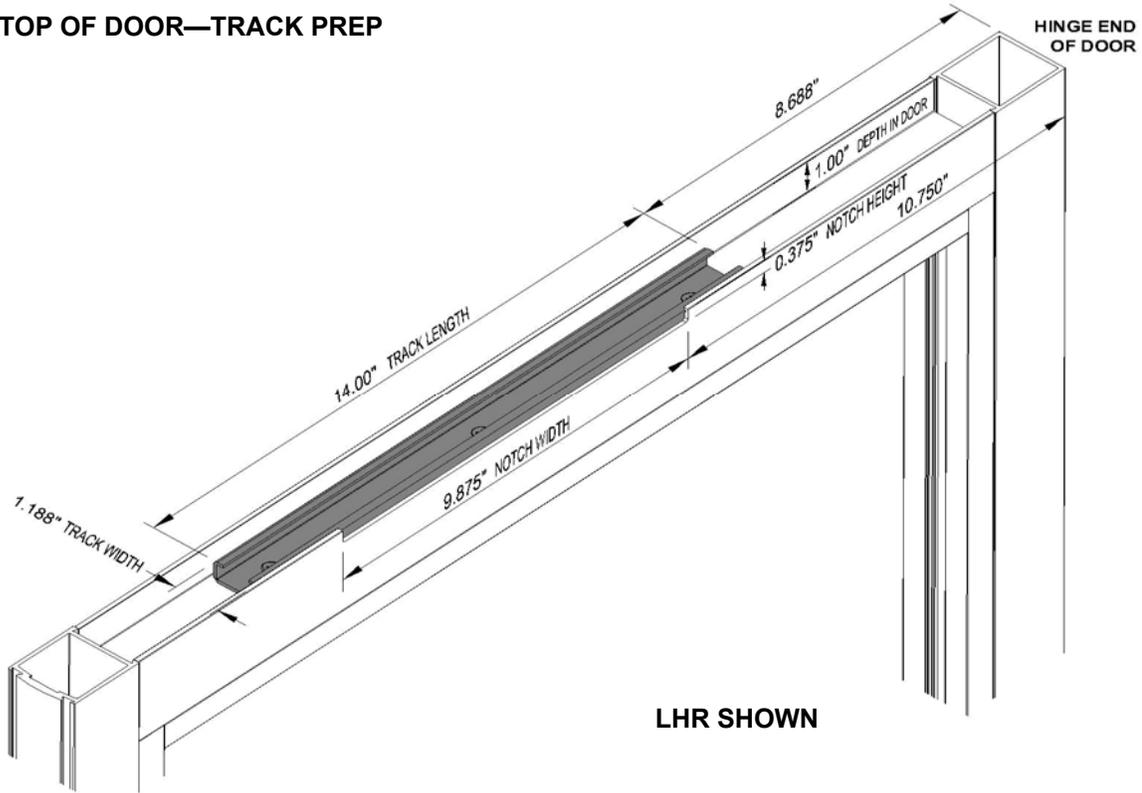
8700 OPERATOR HANDING IDENTIFICATION—CONTINUOUS HINGE



AS VIEWED FROM THE EXTERIOR

8700 Series OHC Swing Door Installation Instructions

TOP OF DOOR—TRACK PREP



1	9-80-0006	Adaptor, Drive Arm, 20 mm	5	4-20-1090	Arm, Stud
2	4-85-1009	Slide Arm, (Butt Hung)	6	4-24-9003	Slide Block
3	4-85-1008	Extension, Slide Arm, (Butt Hung)	7	9-99-7356	Washer, Wave Spring
4	9-99-1822	M8 - 1.25 x 16 BSHCS	8	9-01-0001	Loctite 222, Purple Threadlocker

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.

```
AKKU      PASS
FLASH    PASS
EEPROM   PASS
RTC      PASS
CAN      PASS
```

```
FPC902
Version 1.26
Nov 24 2006
10:48:48
```

```
FPC902
Service STG >
Service STG Slave >
Flash-Programmer >
Setup >
```

Press "OK", or scroll down to STG Slave and press "OK"

```
Connect with STG ...
■■■■■■■■□□□□□□
```

```
Accept all parameter
from the STG?

Offline Yes
```

Press "OK"

```
Parameter download
from STG ...
■■■■■■■■□□□□□□
```

```
DFA127 V1.32 M
USA Low Energy
Manual
0 Errorless
Continue
```

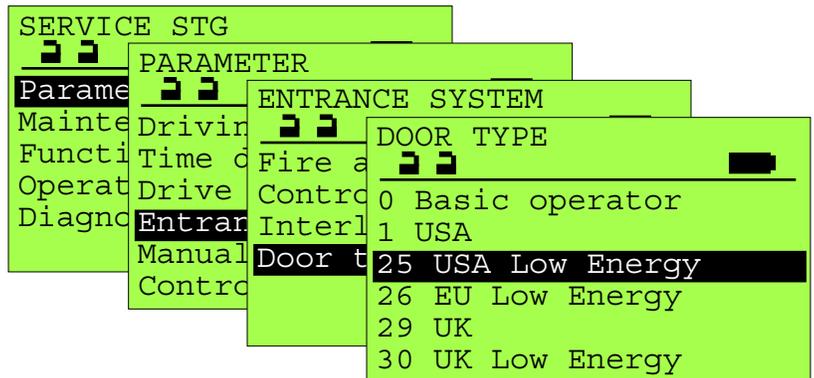
Press "OK"

```
SERVICE STG
Parameter >
Maintenance >
Functions >
Operation mode >
Diagnostics >
```

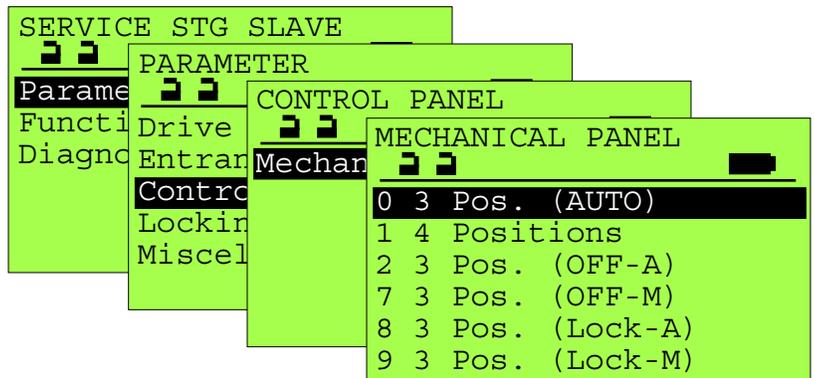
The following page indicates suggested parameter configurations for a typical installation. For a detailed description of all the parameters, consult the instructions with the FPC-902.

The following documents the suggested sequence of programming the operator:

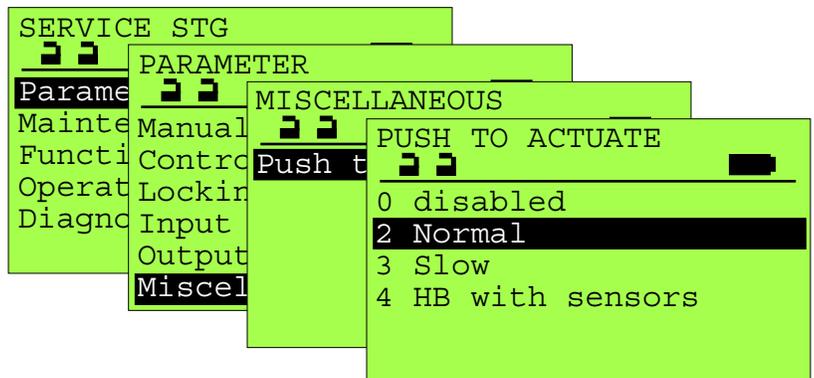
The Series 8500 is shipped configured for a combination operation designated as "USA Low Energy". If manual operation of the door is not desired (with 120VAC power present), this should be changed to "USA", as shown in the sequence at right.



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.

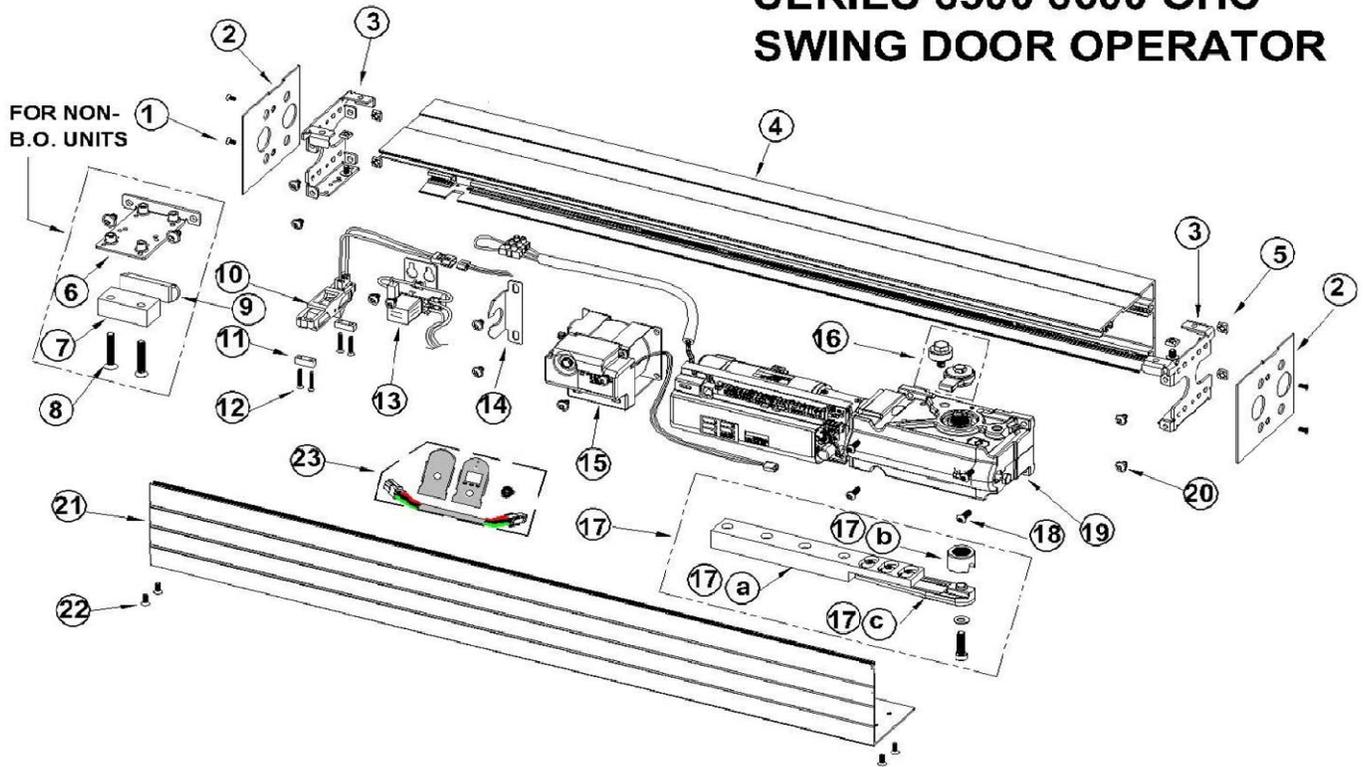


The unit(s) are now ready to be placed into operation. Turn the control panel "on", press and hold the Control Button on the door control for 3 blinks of the adjacent LED. This will initiate a calibration cycle of the operator. After a few seconds the operator should open slowly, with a short pulse during 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.

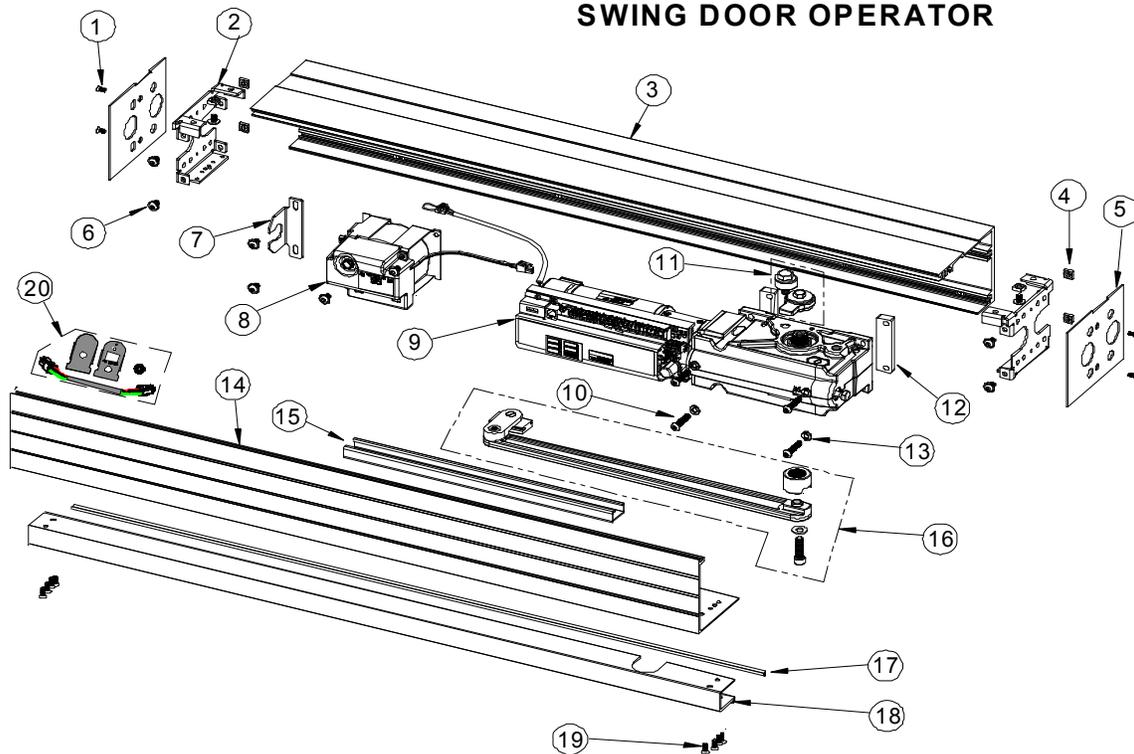
SERIES 8500 8600 OHC SWING DOOR OPERATOR



1	81-0012-0404	Screw, 8-32x1/4" Ph, FH,UC,MS	17	4-85-0019	Drive Arm Assy., OHC, Complete
2	4-85-1010	End Cap, Header, OHC	17a	4-85-1007	Door Arm, OHC
3	4-85-1002	Bracket, Header to Jamb	17b	9-80-0006	Arm Adaptor, 20mm (1/2")
4	5-85-4003	Header Extrusion, OHC, CL-DB	17c	4-85-1006	Drive Arm, OHC
5	9-99-3507	Nut Plate, 1/4-20	18	81-0014-2666	Screw, 1/4-20x3/4" BH, CS
6	4-85-0022	Bracket Assy., Door Closed Stop	19	4-85-0101	Drive Module w/ Control, OHC
7	4-85-4020	Block, Door Closed Stop	19a	4-85-0102	Drive Module w/ Control, OHC w/Brake
8	81-0011-0676	Screw, 1/4-20x1 1/2" Ph,FH,MS	20	81-0017-2658	Screw, 1/4-20x3/8", BH, CS
9	9-99-2594	Pad, Foam Rubber	21	5-85-4004	Cover Extrusion, OHC, CL-DB
10	9-73-0074	Breakout Stop w/Switch	22	81-0012-0562	Screw, 10-32x1/2", Ph, FH, MS
11	4-85-9003	Block, Breakout Stop Mounting	23	4-80-0811	Kit, Harness Extension, FPC902
12	81-4811-0420	Screw, 8-16x1" Ph, FH, Plastite	~	4-85-0803	Kit, Fixed Stop, OHC, # 6,7,8,9
13	4-80-0101	Relay Assy., Panic Breakout	~	4-85-0804	Kit, Breakout, Panic Stop, OHC #10,11,12,13
14	4-51-1004	Bracket, Conduit Anchor	~	9-90-0000	Pivot Assy., Bottom, Center, OHC
15	9-80-0102	Power Supply	~	4-85-0806	Kit, On/Off/Open, Rocker Switch, Jamb
16	9-80-0103	Kit, Hard Stop	~	4-80-0809	Kit, On/Off/Open, Keyswitch, Dual
			~	4-85-9001	Fingerguard, 7' S/L

8700 Series OHC Swing Door Installation Instructions

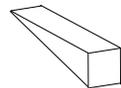
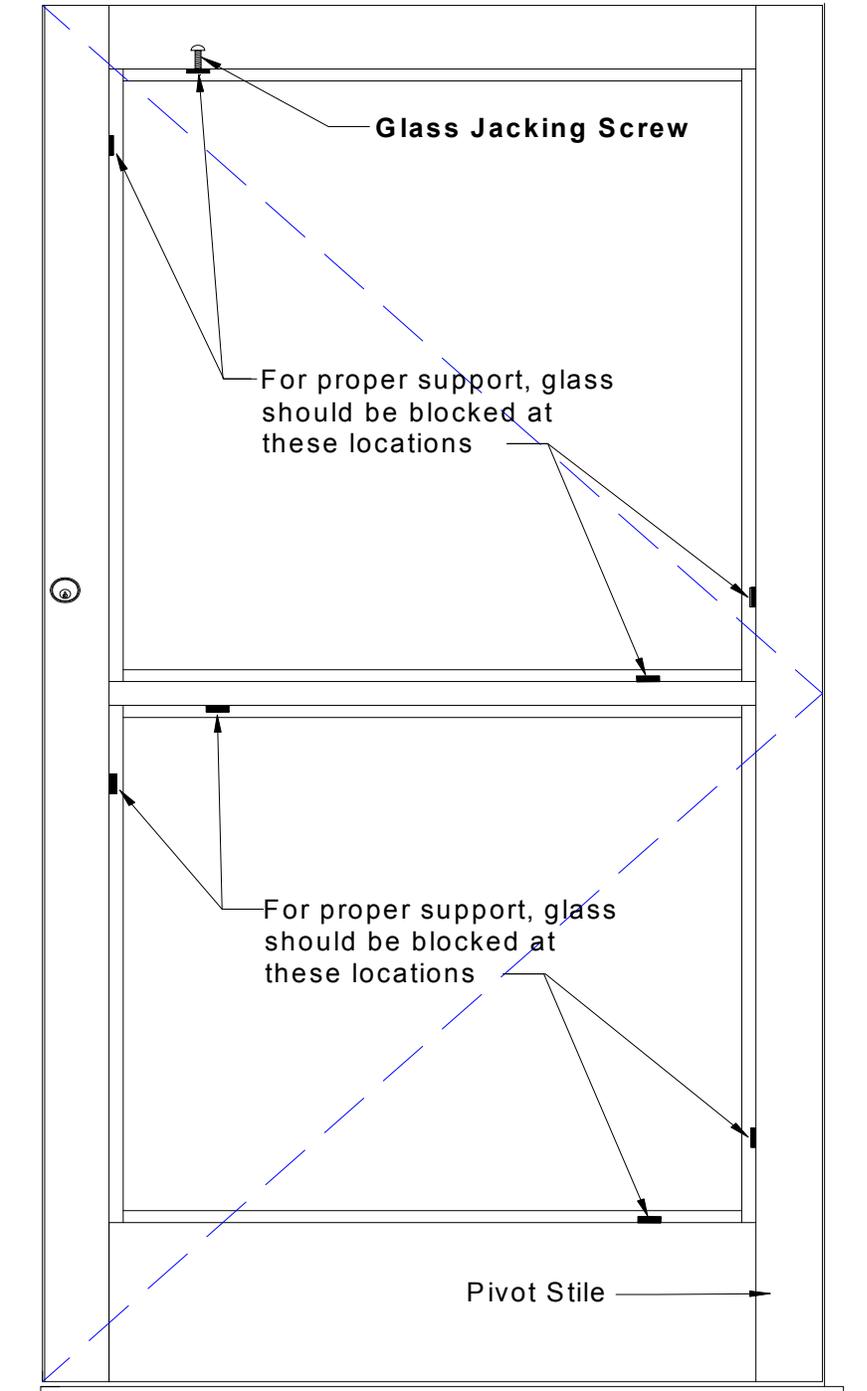
SERIES 8500/8700 BUTT-HUNG SWING DOOR OPERATOR



1	81-0012-0404	Screw, 8-32x1/4" Ph, FH,UC,MS	12	4-85-4021	Spacer, Operator Body
2	4-85-1002	Bracket, Header to Jamb	13	9-99-7182	Washer, Lock, 1/4"
3	5-85-4003	Header Extrusion, OHC, CL-DB	14	5-85-4004	Cover Extrusion, OHC, CL-DB
4	9-99-3507	Nut Plate, 1/4-20	15	4-30-1010	Track, Slide Arm
5	4-85-1010	End Cap, Header, OHC	16	4-85-0021	Slide Arm Assy., Butt Hinge, RH
6	81-0017-2658	Screw, 1/4-20x3/8", BH, CS	16a	4-85-0020	Slide Arm Assy., Butt Hinge, LH
7	4-51-1004	Bracket, Conduit Anchor	17	9-99-7318	Weatherpile, Door Catch, DB
8	9-80-0102	Power Supply	18	4-85-4022	Cover, Slide Arm, CL-DB, RH
9	4-85-0101	Drive Module w/ Control, OHC	18a	4-85-0023	Cover, Slide Arm, CL-DB, LH
9a	4-85-0102	Drive Module w/ Control, OHC w/Brake	18b	4-85-0024	Cover, Slide Arm, CL-DB, Dual
10	81-0014-2674	Screw, 1/4-20x1 1/4", BH CS	19	81-0012-0562	Screw, 10-32x1/2", Ph, FH, MS
11	9-80-0103	Kit, Hard Stop	20	4-80-0811	Kit, Harness Extension, FPC902
~	9-99-2801	Continuous Hinge, CL-DB,83"	~	4-24-9003	Slide Block, Arm Assy.
~	9-99-2802	Continuous Hinge, CL-DB,95"	~	4-85-0805	Kit, Header Accessories, OHC, Butt Hung

8700 Series OHC Swing Door Installation Instructions

8600/8700 - To increase the lift and prevent the door from dropping



Place wedge or shim under lock stile to aid in lifting the door leaf to adjust.

8600/8700 SIGNAGE REQUIREMENTS



Full Power & Low Energy
"Knowing Act" doors



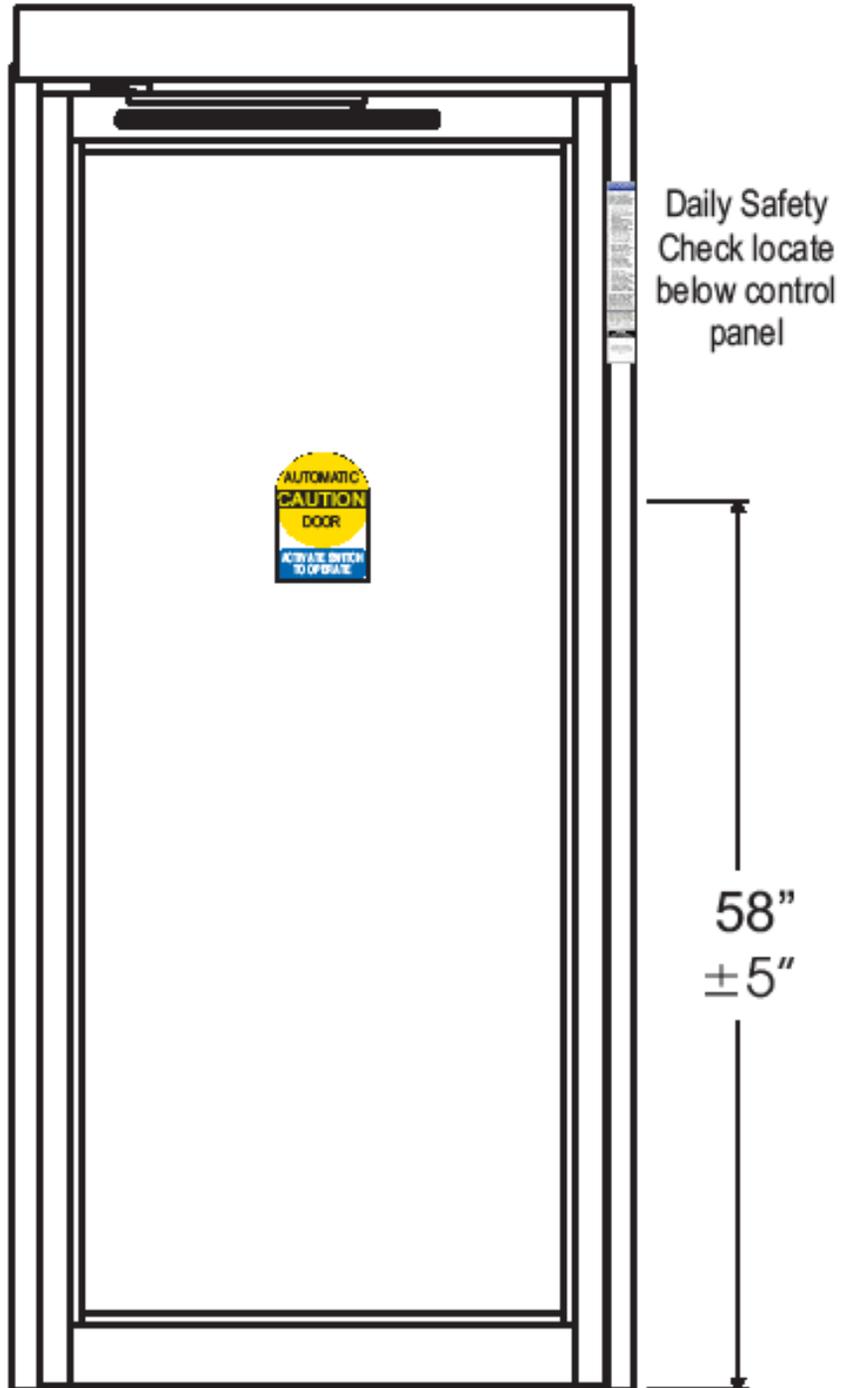
Full Power - Swing Side, 2-Way Traffic;
Low Energy - Sensor Activation



Full Power
Approach Side



Full Power
Non-Approach Side



SAFETY DECAL REQUIREMENTS

Oct06

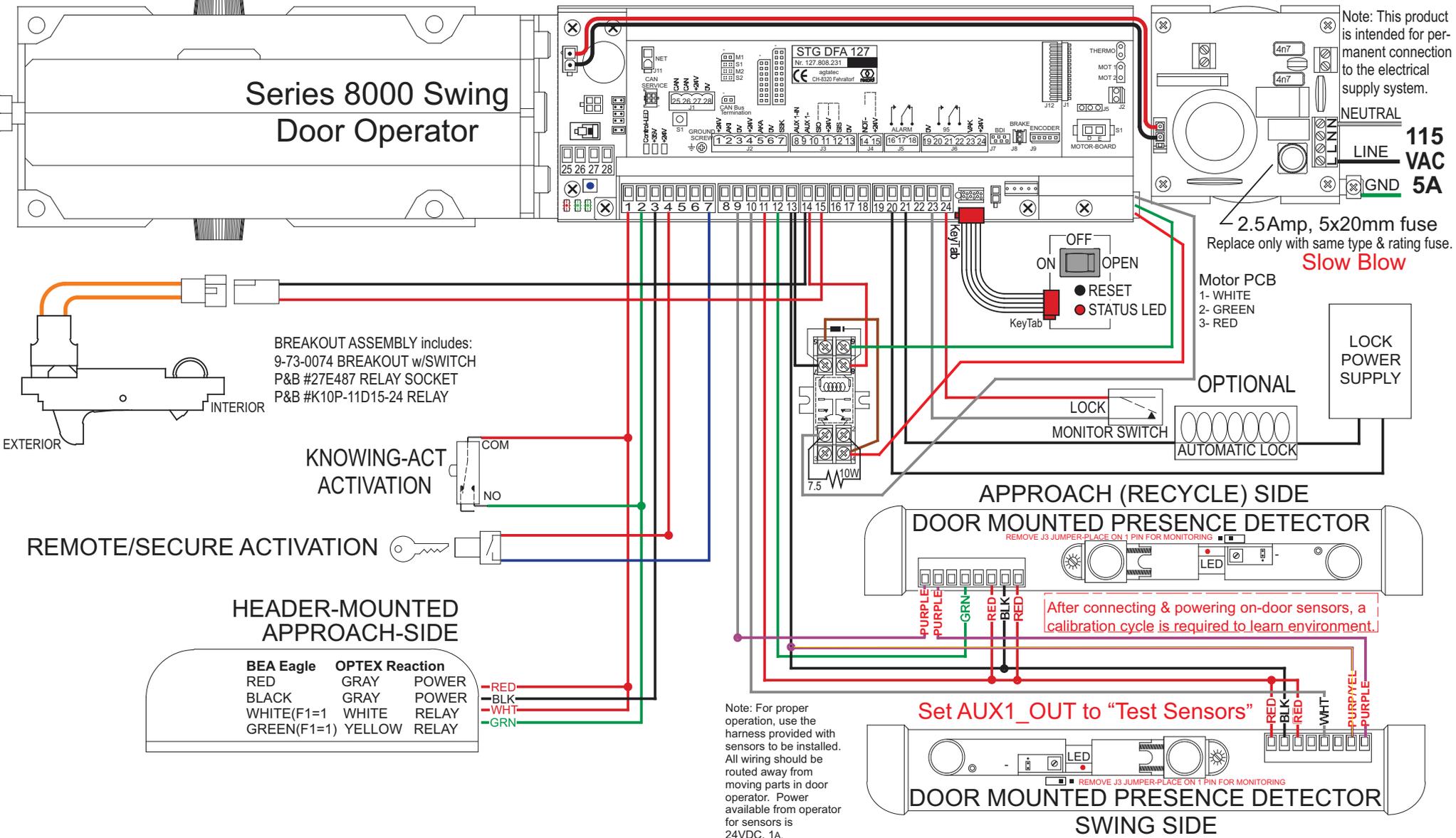
ALARM CODES AND ERROR MESSAGES

No.	Display text	Type	Res	Comments and possible troubleshooting
3	AKI > 60 sec. active			Inside radar longer than 60 sec. active and door remains open. Check that no moving objects are activating the radar.
5	AKA > 60 sec. active			Outside radar longer than 60 sec. active and door remains open. Check that no moving objects are activating the radar.
6	Unlocking error		X	Unlocking error: it is impossible to unlock the door. <u>Repeat unlocking attempt after changing the BDF operating mode.</u>
7	No redundancy test	RED	X	When no „redundancy“ test could happen within the last 24 h or the „redundancy“ test was not correctly performed on a <u>door not locked. Reset Control settings.</u>
9	Battery fuse open		X	Battery fuse is disconnected or battery is not plugged in.
9	Open. unsuccessful			Door does not open or only slowly. <u>SIO might possibly be active or motion be mechanically hindered (e.g. dirt in floor track).</u>
10	Locking error			Locking error and door remains approx. 10 cm open → depending on parameterising door remains closed. Door might possibly be hindered or locking device might need to be adjusted.
11	Difference AKI	RED	X	Error in the interpretation of the inside radar signal. Check inside radar.
12	Low BAT voltage		X	Battery is missing or is not plugged in. Door works if mains voltage is provided.
12	BAT capacity		X	Battery no longer meets minimum power requirements. Replace Battery.
14	VAK defective		X	Locking device hampered. Adjust door leaves and locking device.
15	EMERG. OPEN.	RED		On RED installations emergency opening switch has been actuated.
17	Timeout open. time	RED	X	80% of escape route opening not reached within 3 sec. Control with FPC, adjust opening speed. Under „Status“, <u>opening time + 400 ms.</u>
18	VAK closed automatic		X	Adjust locking device. Make contact (NOC) of locking device is active with Automatic. Locking is set on „wrong“ position. Change operating mode on BDE-D to Locked and again to Automatic. Actuate manual unlocking, or rather completely reset it.
29	TOS not locked	TOS with DV		TOS not locked (rotary switches) on Locked. Turn rotary switches onto Locked position (above).
30	TOS locked	TOS with DV		Automatic mode, TOS locked, but door stays in manual mode.
31	EMERGENCY STOP			Emergency stop key has been pressed or manual unlocking has been actuated.
33	Error ELS1		X	Light barrier signal is not identified. Inform after-sales service. Calibrate ELS with 2 light pulses.
36	VOK closed I.		X	Locking device does not work properly. On BDE-D change operating mode to Automatic and again to Locked. <u>Wrong locked position or VRR faulty.</u>
37	Motor current		X	Possibly wrong motor type parameterised or motor is overloaded.
38	Motor 1 overheat		X	Motor 1 is too warm. Door works sluggishly.
39	Overload 24V		X	24 volts supply for peripheral units is overloaded. Check wiring.
41	Temp. sensor 1		X	With motor 1: temperature sensor is faulty or motor cable is disconnected.
42	Temp. sensor 2		X	With motor 2: temperature sensor is faulty or motor cable is disconnected.
43	Encoder fault		X	Encoder or cable is faulty or not plugged in. Reset.
44 W	T. motor high			Warning message; Time Delays will be extended. <u>Door might work sluggishly. Check for presence of mechanical hindrance.</u>
46	STG defective		X	Control unit is defective. Reset. If no success, then replace control unit.
47	SIO > 60 sec active		X	Door does not open or slides at reduced speed. Check Safety Sensor SIO.
48	NSK or SOK activated			Remote Alarm has just received. Control safety alarm. Control external signal.
50	Watchdog fault			Replace control unit.
51	VOK op n unl.		X	Repeat locking and unlocking procedures. <u>Connection cable might be missing or is not properly plugged in. Check locking settings.</u>
52	No run param.		X	Door must be calibrated (perform teach-in run).
53	Interrupt. mot. 1		X	Motor is not plugged in. Motor is faulty.
54 W	Calibrating run		X	Warning message: Calibration run is performed.
55	Power failure			No mains supply. Door works in battery service provided that there is a battery and <u>„Basic escape route“ has been configured.</u>
57	Interrupt. mot. 2		X	2nd motor is not plugged in. Motor is faulty.
59	ELS > 60 sec. active			Light barriers interrupted or disconnected and door remains open. Check that safety barriers are not covered or <u>extremely dirty.</u>
59	SIS > 60 sec. active		X	Door does not close. Check Safety Sensor SIS.
60	EEPROM defective		X	Load factory settings. 9 light pulses with MFT and reset within 10 seconds. Afterwards language selection has to be displayed on BDE-D. Attention! All programmings are reset. Reconfigure door. Replace control unit if door still fails to <u>function.</u>
61	SSK > 60 sec. active			Key-operated contact stays active. Door remains open. <u>Check Remote Switch (SSK) wiring connections and switch.</u>
62	BDE no priority			BDE is locked e.g. by a clock timer on input SURV/SURA accordingly configured.
92	STG relay defect.		X	Change control unit.
93	Overvoltage 24V		X	Wiring error. Check connections.
96	EEPROM void		X	Load factory settings. See error 60.
97 W	Maintenance time exceeded		X	Warning message: Acknowledge message. Alarm is reset for 13 days. Actual value = 105% of target value of cycles or operating hours. <u>Inform after-sales service and have installation serviced. Set Targets to 0 to avoid alert.</u>
98 W	Maintenance due		X	Warning message: Acknowledge message. Alarm is reset for a short time. Repeats at 100% Actual value = 95% of target value of cycles or operating hours. <u>Inform after-sales service and have installation serviced. Set Targets to 0 to avoid alert.</u>
112	Batt. not charged complet.			Battery is not fully charged. Message disappears from display in case of full charge.
2132	FPC Can blocked ***** BDE Can blocked ***** ERROR by saving in the STG			On a locked door the CAN-Bus will be blocked for devices like the BDE-D(Display) or FPC if they were not connected BEFORE the door was locked. When reading either of the 3 messages from the left column, to unblock, the door needs to be unlocked or the emergency switch has to be activated or the multi-function switch on the control has to be pressed for 1 flash.

&21752/7(50,1\$%/2&. &211(&7,216

- 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
- 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.



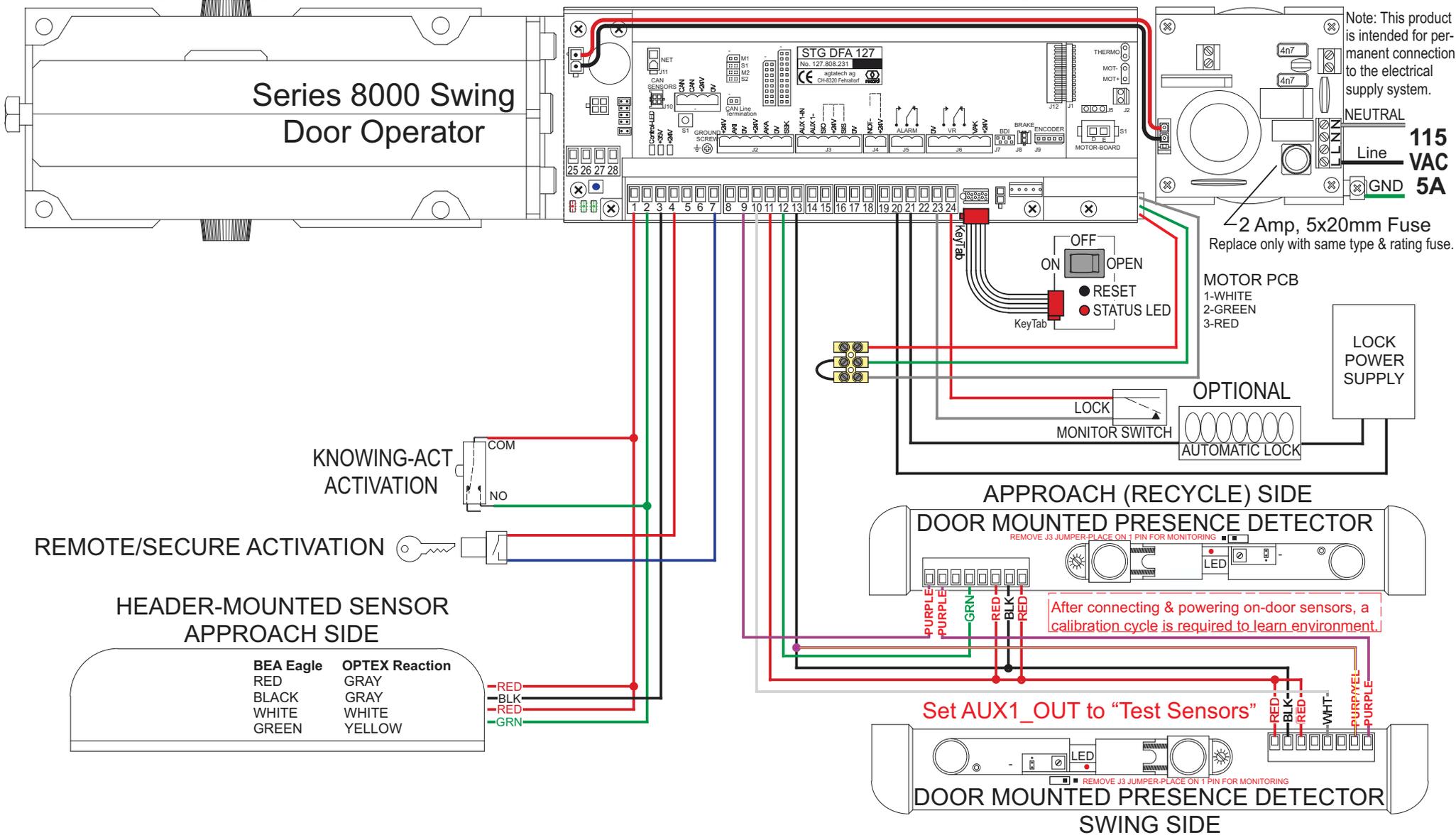
INSWING Series 8000/8500 Wiring Diagram w/Frame Mounted Breakout & BEA SSTII (Mon.)



CONTROL TERMINAL BLOCK CONNECTIONS

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

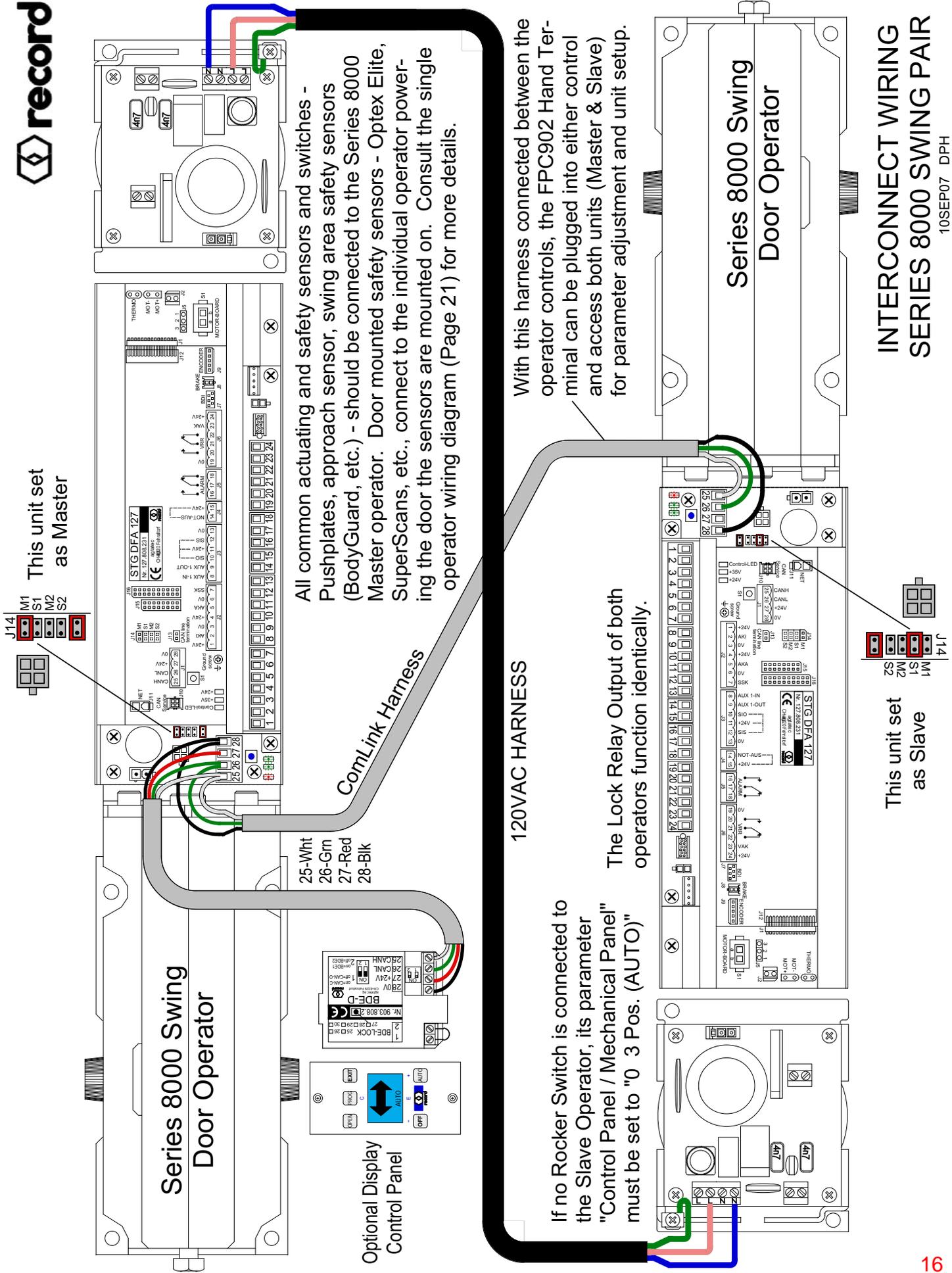


OUTSWING

SERIES 8000/8500 WIRING DIAGRAM
w/Motor Harness for Breakout & BEA SSTII

DEC2018 BG





This unit set as Master

This unit set as Slave

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 powering 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.

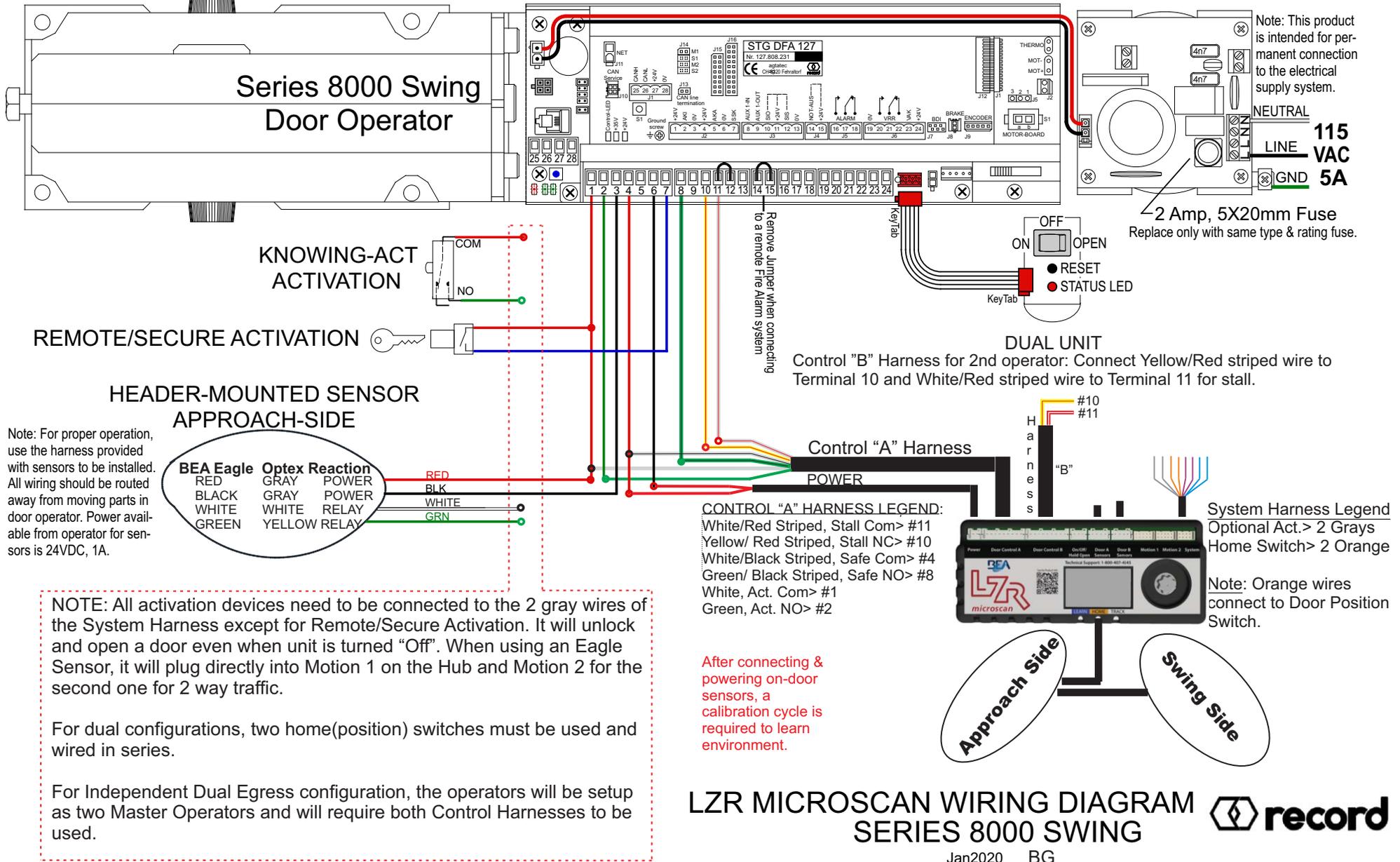
With this harness connected between the operator controls, the FPC902 Hand Terminal can be plugged into either control and access both units (Master & Slave) for parameter adjustment and unit setup.

INTERCONNECT WIRING
SERIES 8000 SWING PAIR
10SEP07 DPH

CONTROL TERMINAL BLOCK CONNECTIONS

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



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.

NOTE: All activation devices need to be connected to the 2 gray wires of the System Harness except for Remote/Secure Activation. It will unlock and open a door even when unit is turned "Off". When using an Eagle Sensor, it will plug directly into Motion 1 on the Hub and Motion 2 for the second one for 2 way traffic.

For dual configurations, two home(position) switches must be used and wired in series.

For Independent Dual Egress configuration, the operators will be setup as two Master Operators and will require both Control Harnesses to be used.

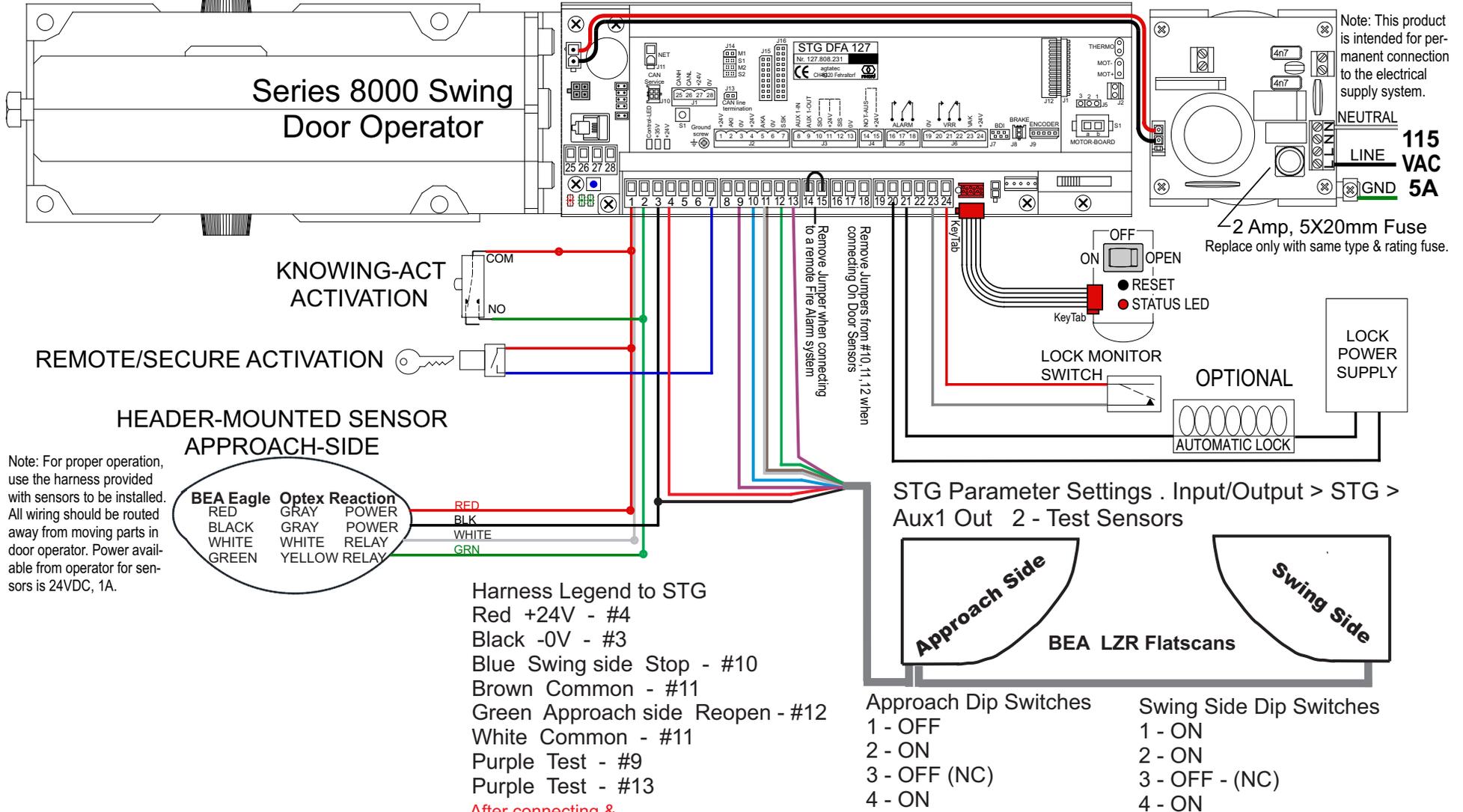
LZR MICROSCAN WIRING DIAGRAM SERIES 8000 SWING



CONTROL TERMINAL BLOCK CONNECTIONS

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



BEA LZR FLATCANS WIRING DIAGRAM SERIES 8000 SWING

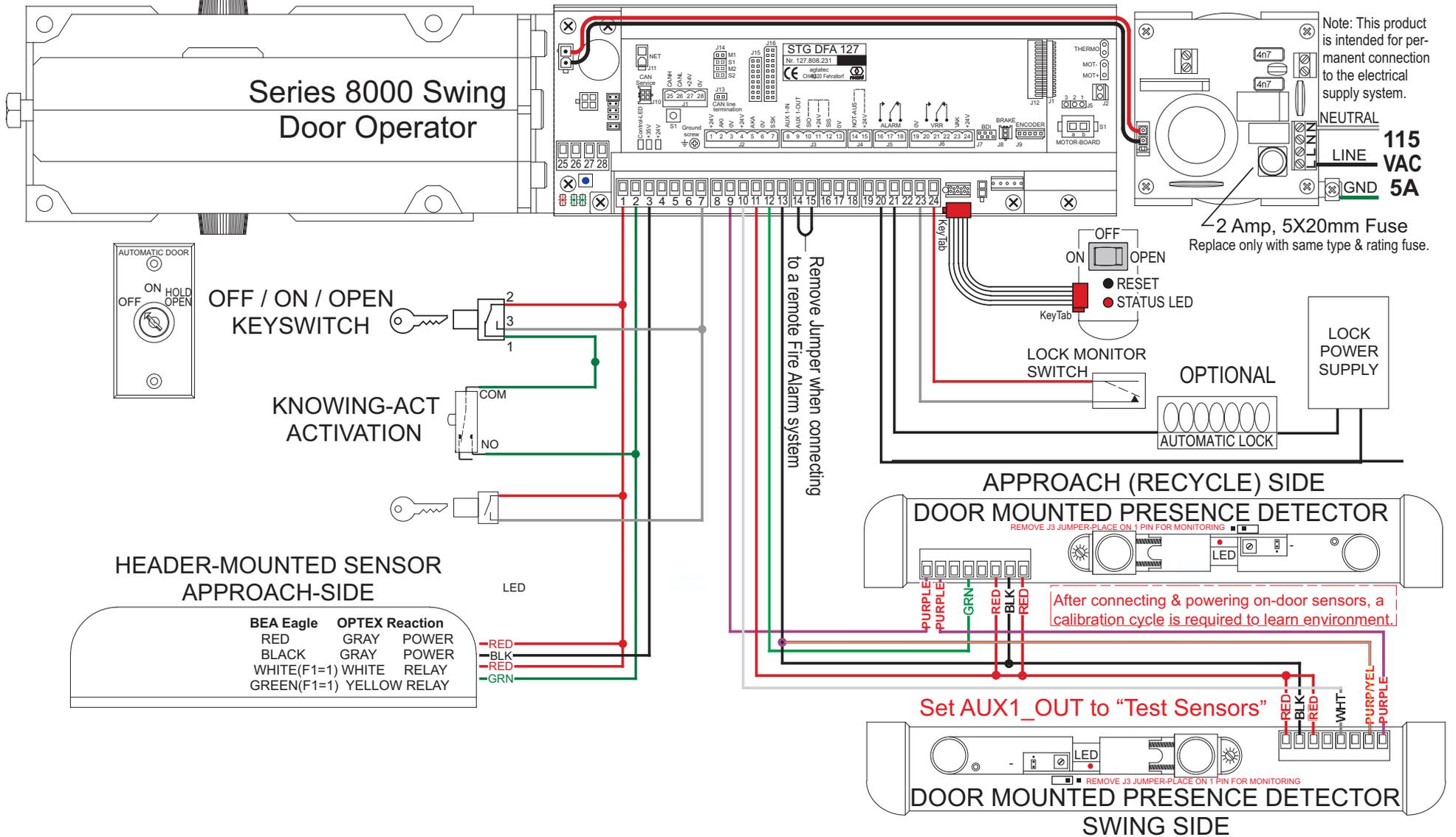
AUG 2018 BG



CONTROL TERMINAL BLOCK CONNECTIONS

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



ON / OFF / OPEN KEYSWITCH

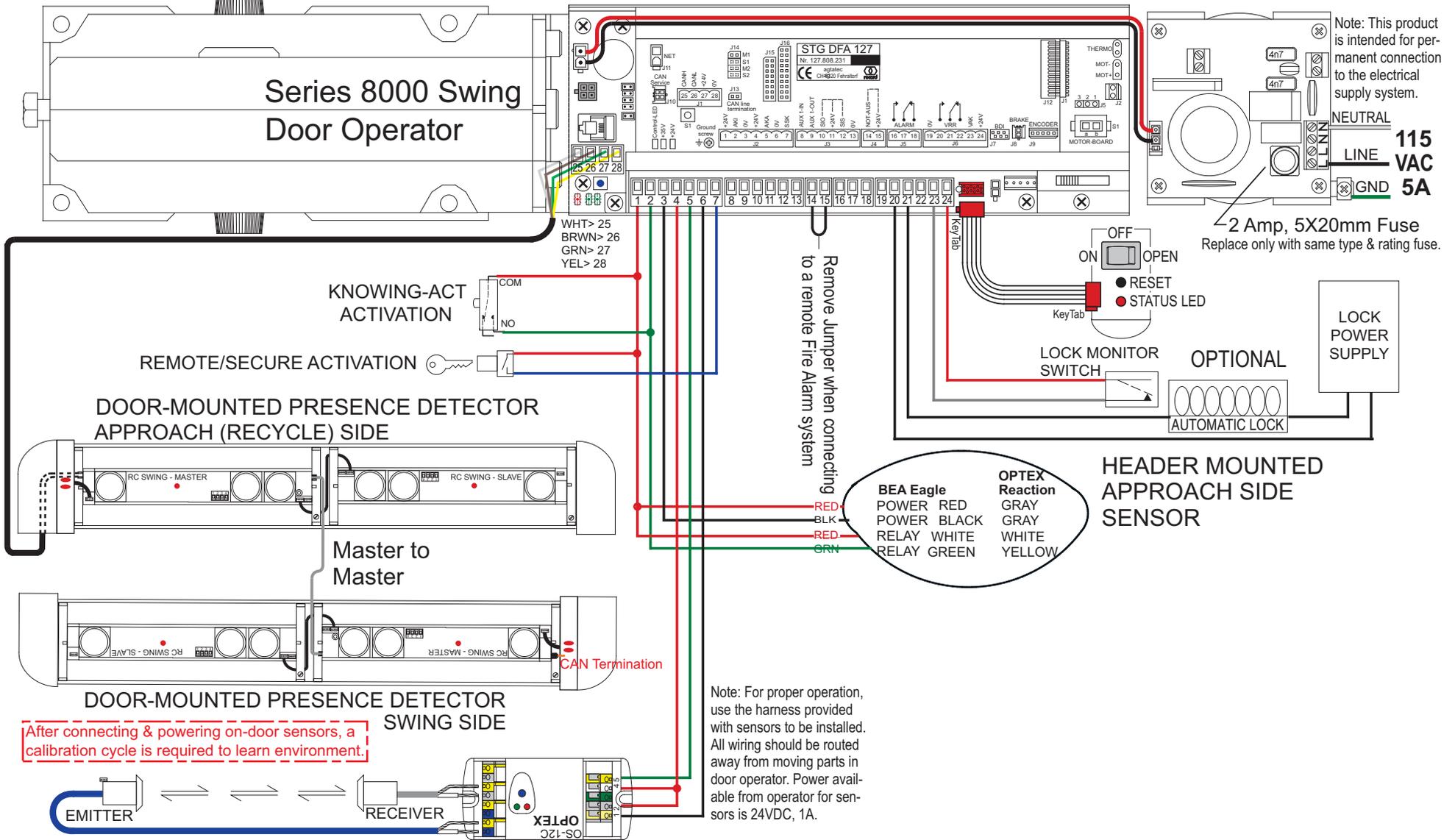
SERIES 6100/8100/8600 SWING & BEA SSIIT



CONTROL TERMINAL BLOCK CONNECTIONS

- | | | |
|---|---|--|
| 1 - Approach Sensor - Power/Signal - +24V | 9 - BodyGuard Data Line - Data + | 17 - Door Alarm Relay - COM |
| 2 - Approach Sensor - Signal | 10 - Door Mounted Swing Side Safety - Signal | 18 - Door Alarm Relay - N.C. |
| 3 - Approach Sensor - Power - 0V | 11 - Door Mounted Sensors - Power/Signal - +24V | 19 - Automatic Lock Power - 0V (0.5A Max.) |
| 4 - Guide Rail Beam - Power/Signal - +24V | 12 - Door Mounted Approach Side Recycle - Signal | 20 - Automatic Lock Control Relay - N.O. |
| 5 - Guide Rail Beam - Signal | 13 - Door Mounted Sensors - Power - 0V | 21 - Automatic Lock Control Relay - COM |
| 6 - Guide Rail Beam - Power - 0V | 14 - Fire Alarm Signal (Jumper to 15 if not used) | 22 - Automatic Lock Control Relay - N.C. |
| 7 - Remote Switch - Signal | 15 - Fire Alarm - +24V | 23 - Automatic Lock Monitor Signal |
| 8 - Header Mounted Swing Side Safety - Signal | 16 - Door Alarm Relay - N.O. | 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 8000/8500 WIRING DIAGRAM with RC SWING CANbus On Door Sensors

Dec 2018 BG

