



**Record SimpleSwing**  
**Low Energy Swing Operator**  
Installation Manual



# SimpleSwing Series Swing Door Operator Installation Instructions

The Record SimpleSwing Operator 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 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 30 pounds.

Verify that the door does not close with a force greater than 15 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 attaching arms.

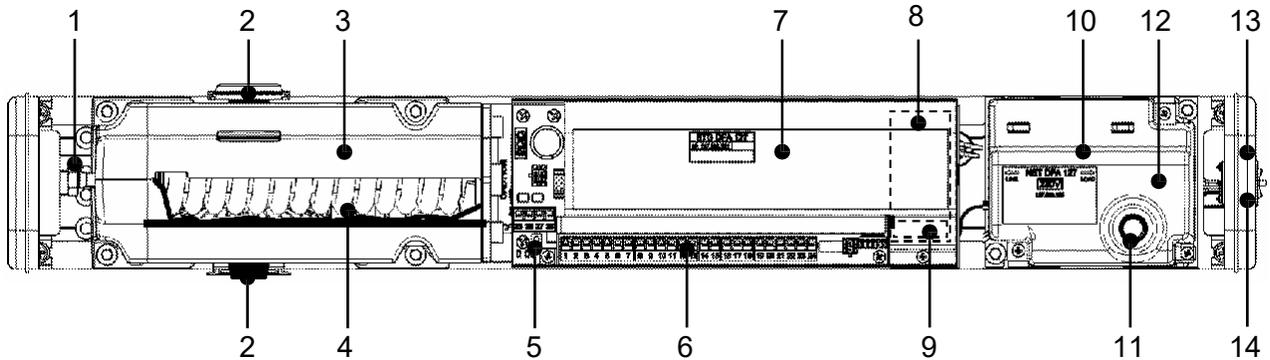
Special attention needs to be given to installations with parallel and slide arms when an adjacent wall is perpendicular to the door frame.

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## Product Description

The Record Series SimpleSwing Operator is a power-open, spring-close unit providing full functionality conforming to 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 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      |

## Drive Arms

Three types of drive arms are available:

The Standard Arm provides the most flexibility –  
Outswing (push) reveals to 12"  
Inswing (pull) reveals up to 6"

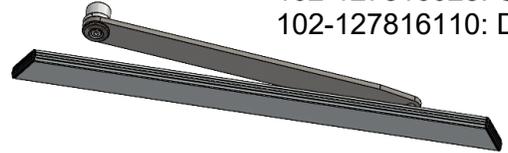
The Slide Track Arm – (Supplied Standard)  
Inswing (pull) reveals to 6"  
Outswing (push) reveals to 3"

The Offset Slide Track Arm –  
Suitable for center-pivoted doors with  
breakout capability;  
Allow double-egress installations in a  
common header.

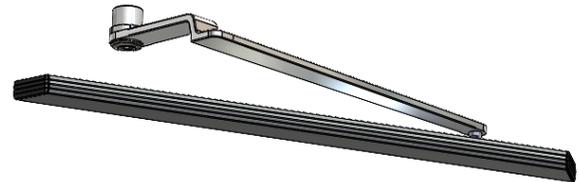
102-127815969: CL  
102-127816107: DB



102-127816028: CL  
102-127816110: DB



Right Hand	Left Hand
102-127816079: CL	102-127816078: CL
102-127816112: DB	102-127816111: DB



An extension adapter is included with each arm assembly, connecting the drive arm to the operator output shaft. The Standard Arm is provided with a 35mm adapter which mounts the drive arm approximately 1-1/8" below the bottom of the header. The Slide Track Arm includes a 20 mm adapter, mounting the drive arm approximately 1/2" below the bottom of the header. Optional adapters are available that will increase the distance below the header to approximately 1-3/4" (50mm - P/N 102-127816016/102-127816087)(CL/DB), or approximately 3" (80mm - P/N 102-127816017/102-127816089). For double-egress installations, a standard arm, offset arm a 50mm adapter for the standard arm will be provided, accommodating a double-rabbit frame.

Layouts for the different arm / installation configurations are attached. Check the arm assemblies prior to unit installation and verify dimensions and clearances.

### Instructions to the Installer

This unit is to be installed and commissioned by a technician with knowledge of A156.19 Standards for Power Operated Doors, applicable local codes, and record-USA installation recommendations.

### Information to provided to the owner

The Owners Manual with training and explanation of the daily safety check.  
Location of the operator control panel (On / Off / Hold Open).  
Specific information pertinent to the proper operation of the installation.

### 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 requirements — 115 VAC, 60 Hz, 15 Amp Service.

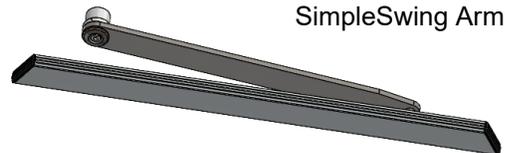
## Mechanical Installation

The door panel must move freely throughout its entire opening and closing rotation. The door frame must provide a stable base, structurally sufficient to support automatic operation. Typically the operator baseplate will overlap the door jambs by 1-1/2".

Verify the installation conditions and select the arm configuration that most closely matches the installation. As a general rule, the operator output shaft will mount 4" away from the hinge jamb, measured parallel to the closed door. For Slide Track arm assemblies, the door mounted track will mount with one end located 4" from the hinge jamb. Consult the attached layout drawings for additional details.

Securely attach the unit baseplate to the door frame; Hex Head Tek Screws are included - #14 X 2" for unit mounting to door frame, and #10 X 1-1/2" for Arm mounting to door.

Typically, the drive arm is attached to the operator with the unit in the closed position. Additionally, the arm is positioned on the splined output shaft with a slight pre-load, pushing the door against the door closed stop. The spline provides incremental adjustment of 6°; typically, one spline index for pre-loading is sufficient.



The drive arm is attached to the lower operator output shaft using the extension adapter supplied with the arm assembly. Track arms, install the arm with the outer end of the arm against the closed door. Do not tighten the bolt; using the arm, pull the operator open and during the slow, controlled closing, insure the splines seat correctly and tighten the 6mm socket head bolt.

Verify all fasteners are securely tightened.

## Operator Swing Direction

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

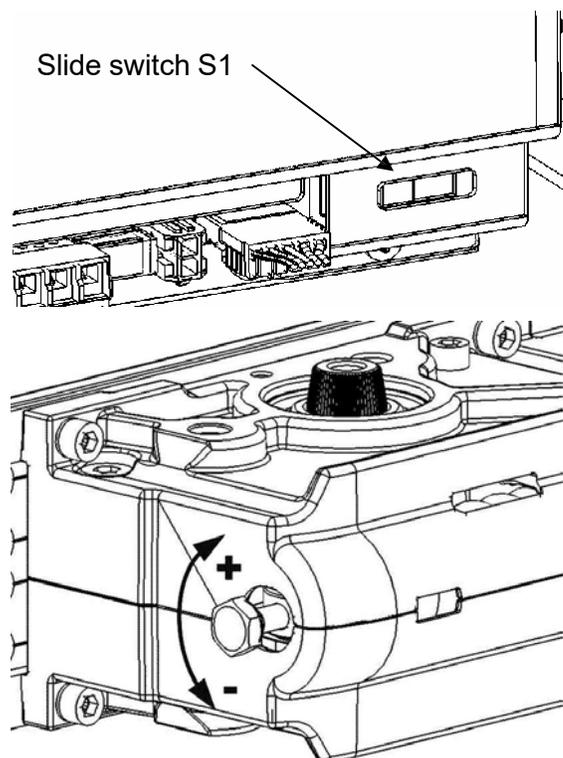
With no power applied, the operator should be capable of being easily pushed open and when released, will close the door at a controlled speed.

## Closing Spring Adjustment

The closing force provided by the spring is adjustable.

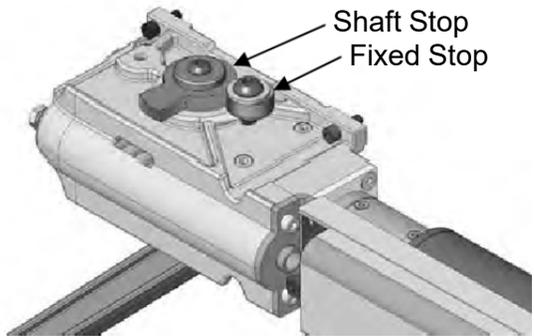
Do not adjust the force so low that the door will not consistently close under spring power.

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 the SimpleLyнк Control Panel).

## Power Supply Connection

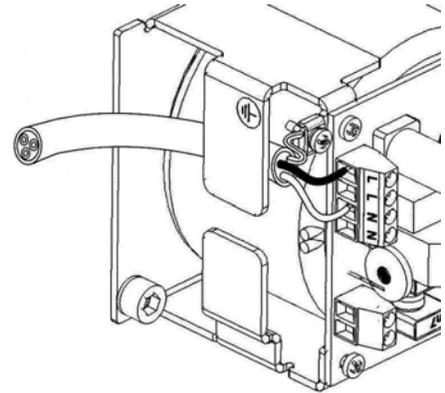
Connect 115VAC, 60 Hz, 15A, to Power Supply terminal strip

- 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.

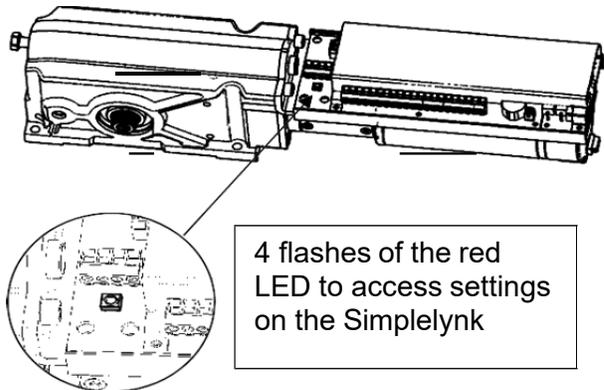
Proper grounding must be provided for the unit. A grounding tab and screw are located adjacent to the Power Supply terminal strip.

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



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

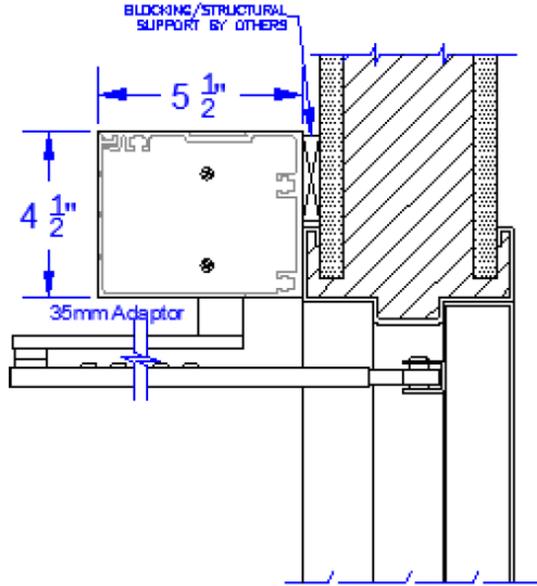
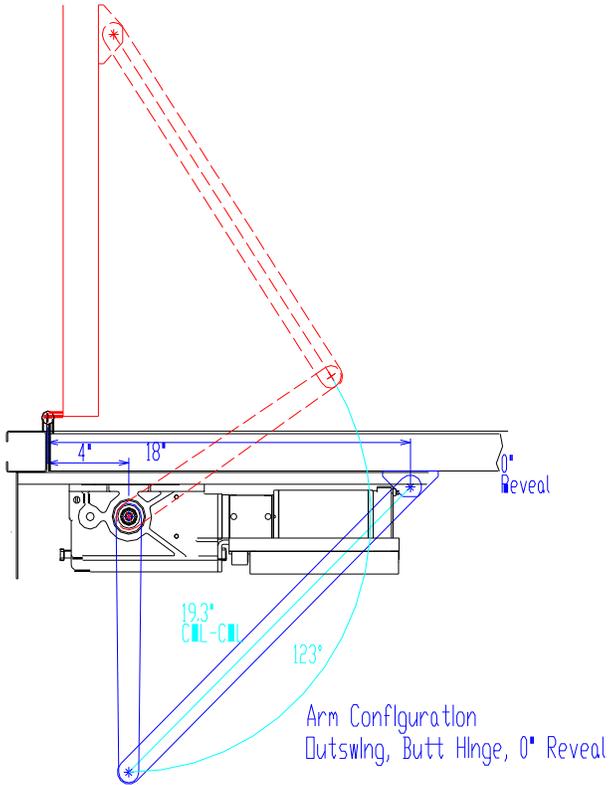
- 1 flash of the red LED will actuate a standard open cycle (if the rocker switch is on).
- 3 flashes of the red LED will initiate a calibration run.
- 8 flashes of the red LED will reset the unit's parameters to factory defaults.
- 15-17 flashes will cause the unit to reset without affecting any of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



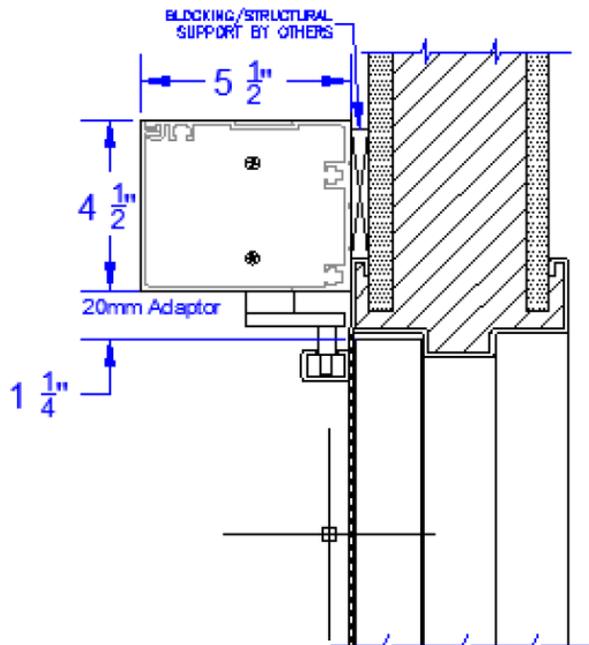
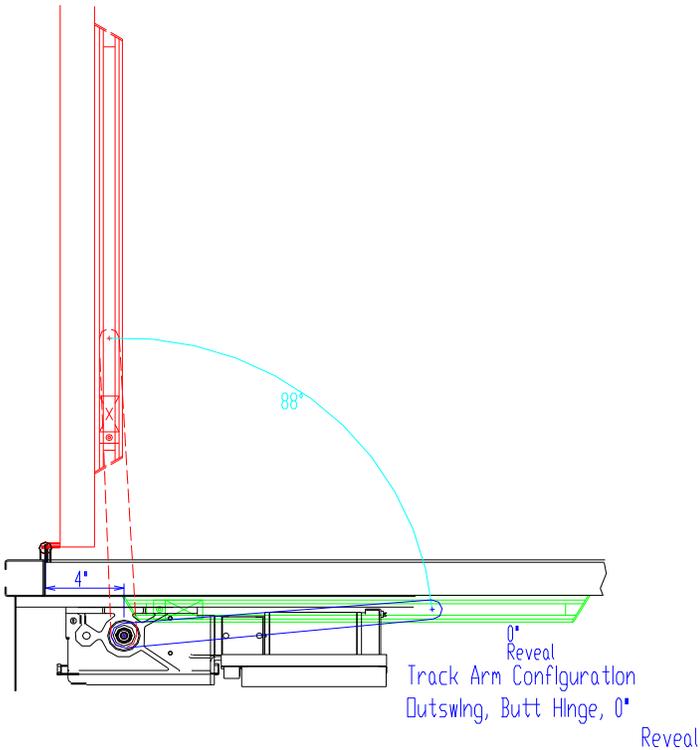
**After completion of the mechanical installation and prior to adjusting the parameters, always initiate a calibration run by pressing and holding the pushbutton for 3 flashes of the red LED. This will insure proper door operation by calibrating the unit to the installation conditions**

# SimpleSwing Arm Installation

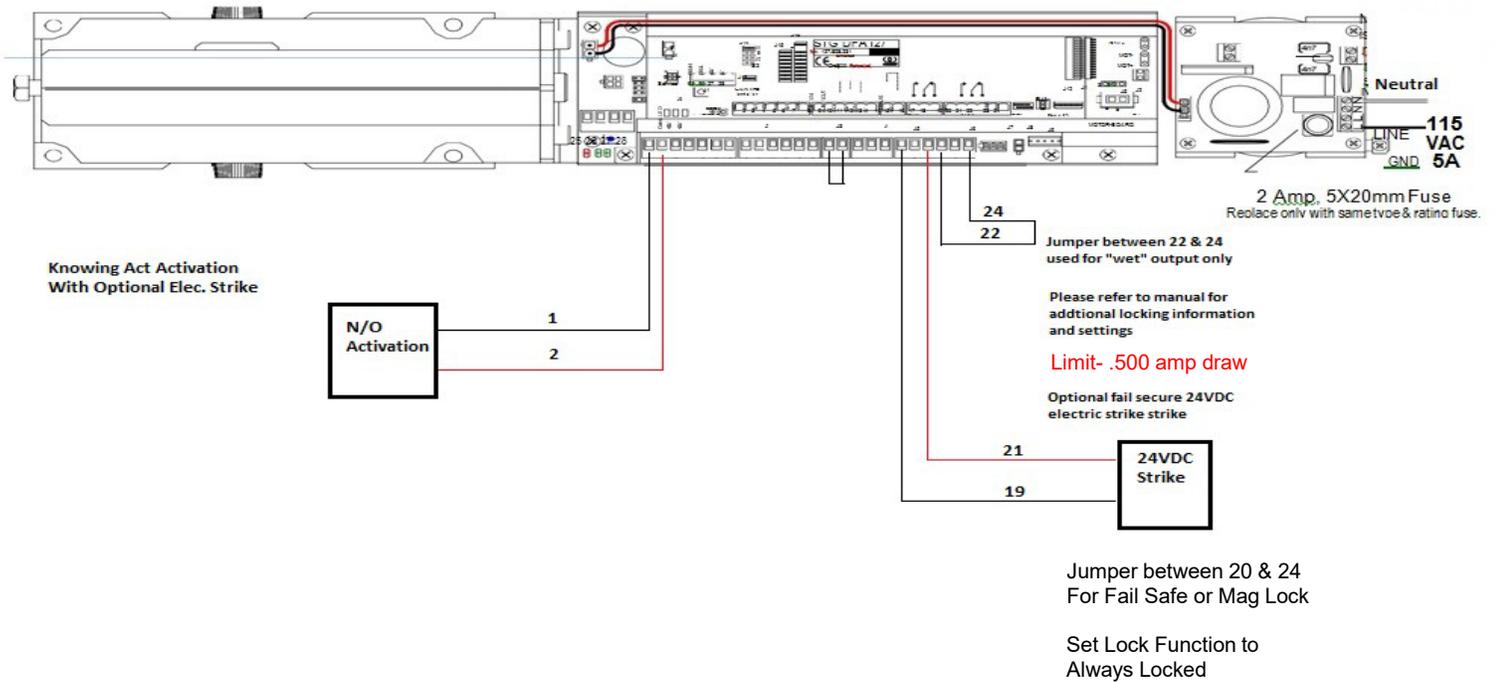
## Typical arm installation for outswing (push side) application



## Typical arm installation for inswing (pull side) application

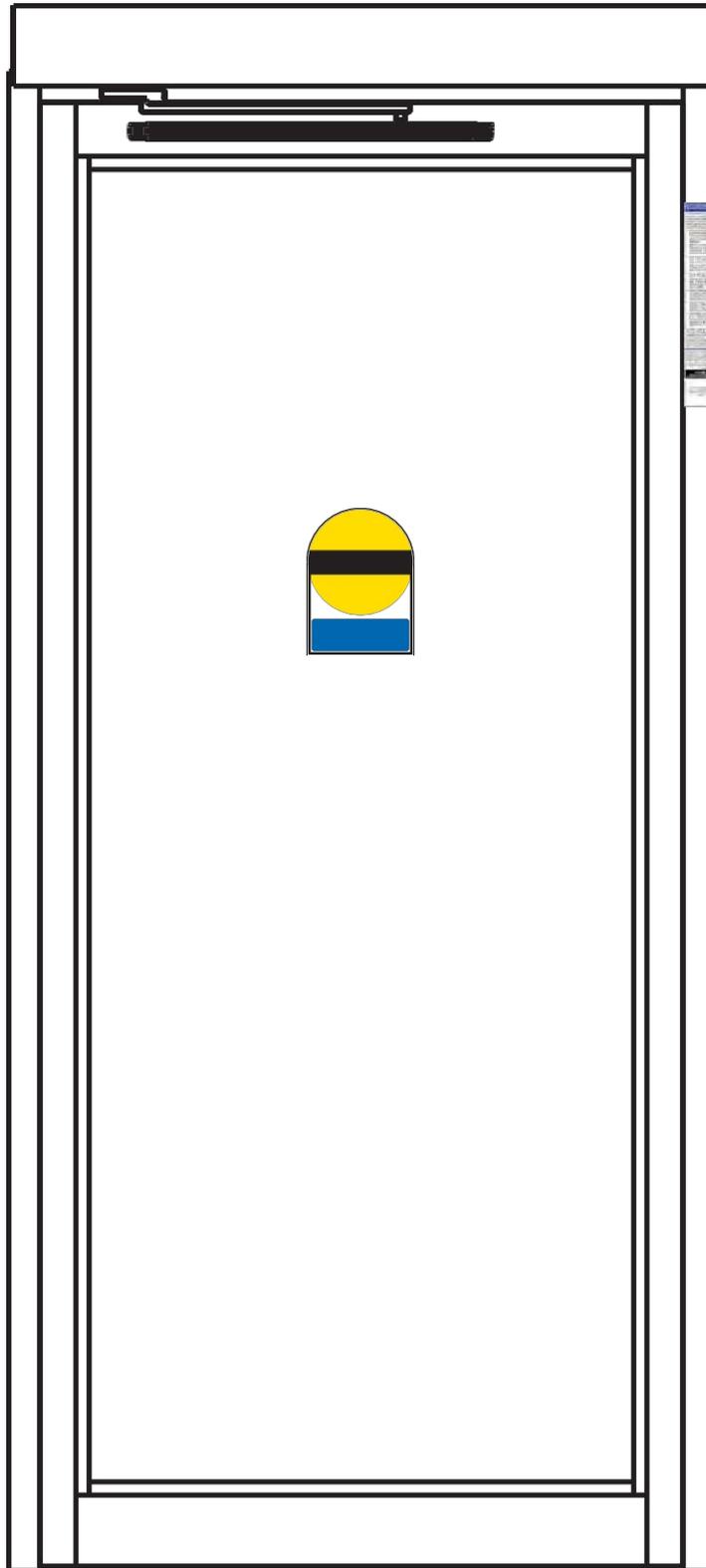


# SimpleSwing Typical Wiring Diagram





Installed at 58" +/- 5" from floor  
on both sides of the door



# SimpleSwing - SimpleSetup

Make sure mechanical installation and wiring is complete. Test the door manually!

## Basic Set Up

1. Perform a calibration run. (press and hold blue button on main control in header for 3 flashes) Door will open and door will go through a complete learn cycle and door weight check.
2. Test door with push plates. Insure both push plates cycle the door fully open and closed.
3. Test Compliance with ANSI A156.19

## Advanced Set Up

1. Panel is shipped in unlocked
  - a. Off - off
  - b. Auto – Normal Operation mode
  - c. Exit – Not used
  - d. Open – Hold open
  - e. record button – locking unlocking display pad / used during programing / and information. “ +/- “ button used with record button for programming
  - f. Sequence for locking display panel – “record-Program –Off”
  - g. Sequence to unlock display panel – “record-program-off”
  - h. Display panel will show a “X” when to indicate when locked.
2. Enter programming mode on the SimpleLynk pad. (press and hold the blue button on main control in header for 4 flashes) SimpleLynk is now in programming mode.
3. Scroll down to **“Parameters”** (the + button moves down, the – button moves up, the E button is for select, C button is for go back)

### Locking

4. Inside parameters scroll down to select **“locking”**. Select **lock function** . Then select **“always locked”**. This will engage the electric lock functions. Now scroll down to select **VRR Start Delay**. Change this setting to **1**. **Note: lock type should be Standard for electric strikes and Magnet for magnetic locks.**

### Adjusting Speeds

5. Inside Parameters scroll down to select **“Driving Cycle”**. Here you will find both **opening** and **closing** speeds. Adjust if needed but make sure ANSI A156.19 standards are met. 40 is the fastest speed and 0 is the slowest.

### Adjusting Time Delay

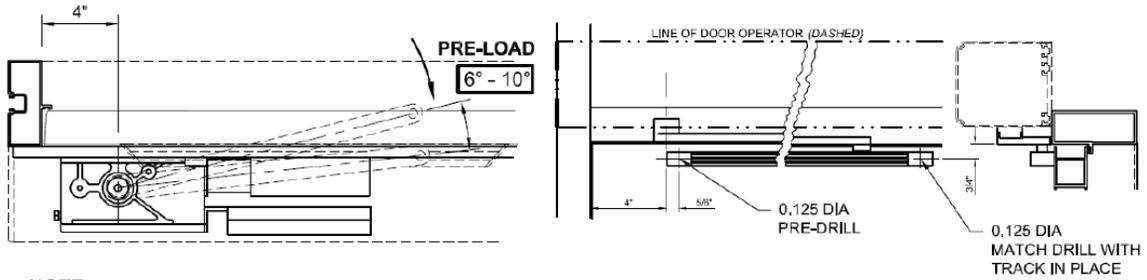
6. Inside Parameters scroll down to select **“Time Delay Open”**. Select **“Time Delay Open”** and adjust the time delay. The minimum setting is 5 seconds. Adjust up as needed.  
**\*Once all settings are complete the SimpleLynk will default back to standard mode functions.**



SimpleLynk

# Record 8100SP operator Quick Start Instructions for Pull Track Arm

## **STEP 1 - ARM PRE-LOAD** - Arm installation to be completed prior to powering up the operator



**NOTE:**

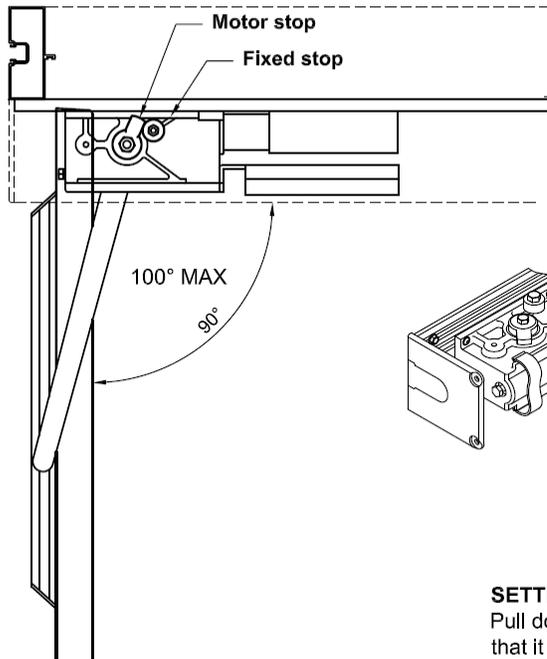
With **NO** power applied to the operator, attach the main arm to the motor allowing for a minimum of 6° pre-load and push with motor resistance to make the final connection to the door portion. Arm spindle adaptor has splines to allow for adjustment in 6° increments.

## **STEP 2 - SWING DIRECTION**



After attaching the arm if the operator does not close slowly when opened manually, the handing direction will need to be changed. With no power applied, slide switch to to change direction.

## **STEP 3 - OPEN STOP** - Set the adjustable stop prior to conducting a calibration run.



**Fixed stop** is slightly eccentric; loosen fastener and rotate for smaller adjustments.

**Motor stop** is splined allowing for indexing in 6° increments. Rotate the fixed stop for smaller adjustment.



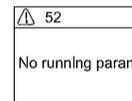
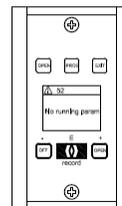
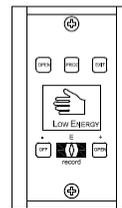
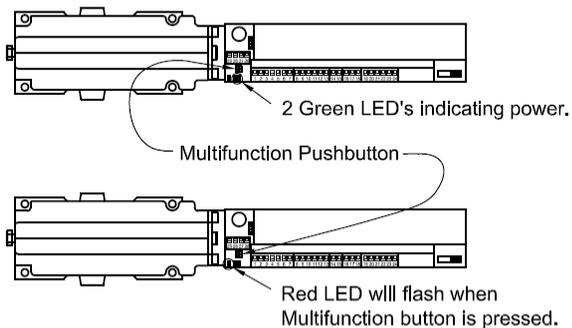
### **SETTING THE OPENING STOP**

Pull door to desired open angle and set the spindle stop so that it contacts the fixed stop on the top of the motor.

## STEP 4 - RESET and CALIBRATION

- Verify arm installed correctly and door operates properly mechanically.
- Apply 120VAC power to operator to allow for reset and calibration of operator.

Upon powering up the display at the end of the operator should read "LOW ENERGY" and two green LED's will light up.



### RESET:

- Press and HOLD multifunction button for (8) red flashes.
- Display will reset and message ⚠ 52 "No run param" will appear.

### NOTE:

- If pair operator reset master first then slave.

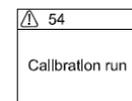
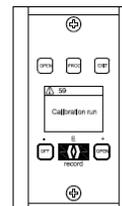
**NOTE :** On pair units you will need to set the slave control in programming after the resetting process. Press and hold multifunction button for (4) red flashes. The display will change to the programming menu. Using "+" button scroll down to "Param Slave" / press Record button then scroll down to "Control Panel" / press Record button / Mech Panel - press Record button / scroll up to 3 POS Auto and press Record button to select / press "PROG" button until the exit programming screen is displayed / press Record button to exit.

### CALIBRATION:

- Door MUST be calibrated before applying an activation.
- Verify the door is unlocked.
- Press and HOLD multi function button for (3) red flashes.
- Display will read ⚠ 54 "Calibration run".
- Door must complete one complete cycle with no obstructions.
- Display will show hand and "Low Energy"

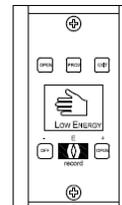
### NOTE:

- If pair operator calibrate master first then slave.



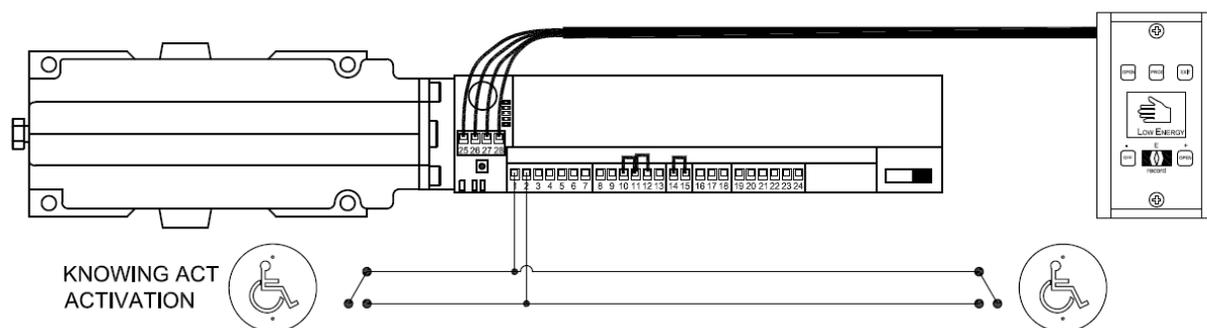
### VERIFY CALIBRATION:

- With the door unlocked Press the multifunction button for (1) red flash.
- Door will swing to full open and return to closed position.



### ACTIVATION:

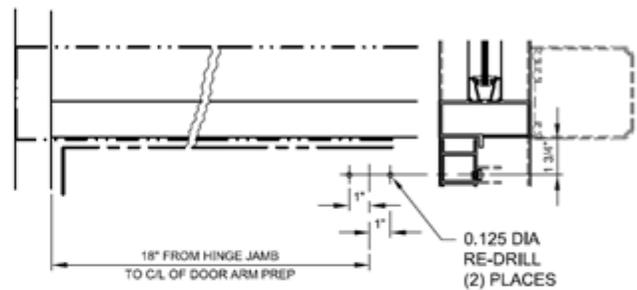
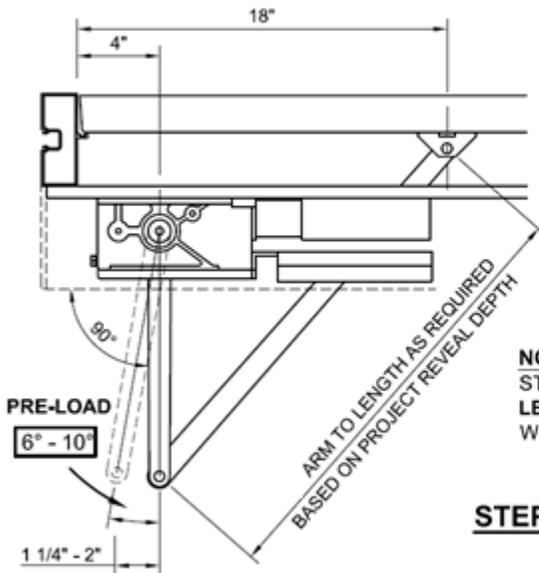
- Connect wires from push button to terminals 1 and 2.



# Record 8100SP operator Quick Start Instructions for Push Arm

## STEP 1 - ARM PRE-LOAD

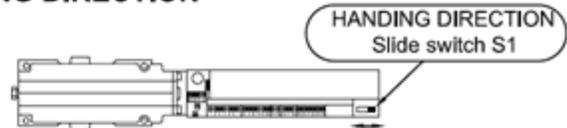
Arm installation to be completed prior to powering up the operator



**NOTE:**  
STANDARD ARM ACCOMMODATES UP TO A 12" REVEAL. **MUST BUILD TO LENGTH AS REQUIRED TO MAINTAIN 90° ANGLE FOR INSTALLATIONS WITH SMALLER REVEALS.**

## STEP 2 - SWING DIRECTION

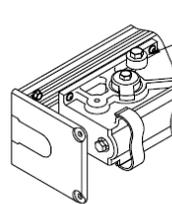
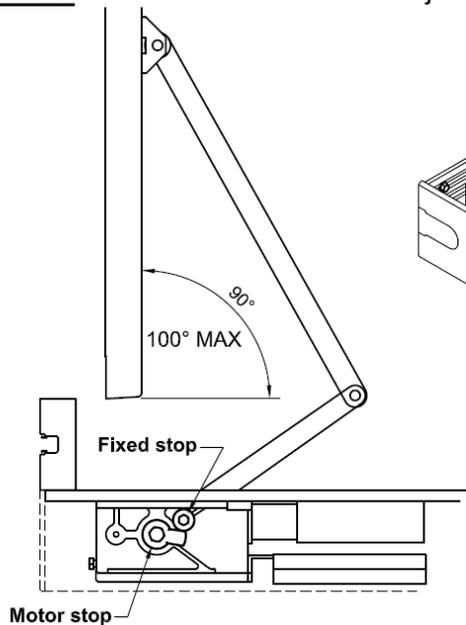
**NOTE:**  
With **NO** power applied to the operator, attach the main arm to the motor allowing for a minimum of 6° pre-load and pull against motor resistance to make the final 90° connection to the door portion. Arm spindle adaptor has splines to allow for adjustment in 6° increments.



After attaching the arm if the operator does not close slowly when opened manually, the handing direction will need to be changed. With no power applied, slide switch to to change direction.

## STEP 3 - OPEN STOP

Set the adjustable stop prior to conducting a calibration run.



**Fixed stop** is slightly eccentric; loosen fastener and rotate for smaller adjustments.



**Motor stop** is splined allowing for indexing in 6° increments. Rotate the fixed stop for smaller adjustment.

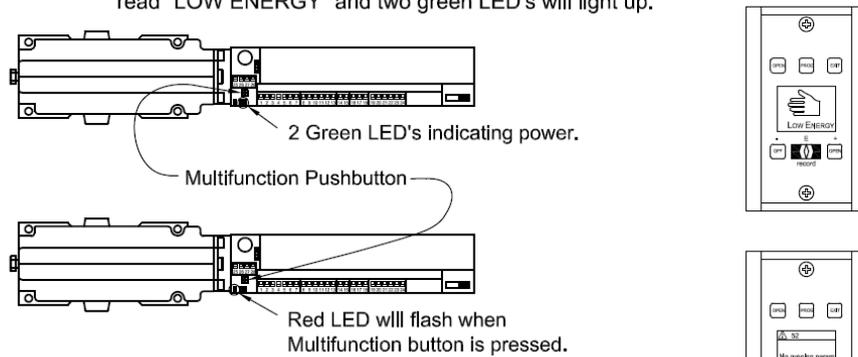
### SETTING THE OPENING STOP

Pull door to desired open angle and set the spindle stop so that it contacts the fixed stop on the top of the motor.

## STEP 4 - RESET and CALIBRATION

- Verify arm installed correctly and door operates properly mechanically.
- Apply 120VAC power to operator to allow for reset and calibration of operator.

Upon powering up the display at the end of the operator should read "LOW ENERGY" and two green LED's will light up.



### RESET:

- Press and HOLD multifunction button for (8) red flashes.
- Display will reset and message ⚠ 52 "No run param" will appear.

#### NOTE:

- If pair operator reset master first then slave.

**NOTE :** On pair units you will need to set the slave control in programming after the resting process. Press and hold multifunction button for (4) red flashes. The display will change to the programming menu. Using "+" button scroll down to "Param Slave" / press Record button then scroll down to "Control Panel" / press Record button / Mech Panel - press Record button / scroll up to 3 POS Auto and press Record button to select / press "PROG" button until the exit programming screen is displayed / press Record button to exit.

### CALIBRATION:

- Door **MUST** be calibrated before applying an activation.
- Verify the door is unlocked.
- Press and HOLD multifunction button for (3) red flashes.
- Display will read ⚠ 54 "Calibration run".
- Door must complete one complete cycle with no obstructions.
- Display will show hand and "Low Energy"

#### NOTE:

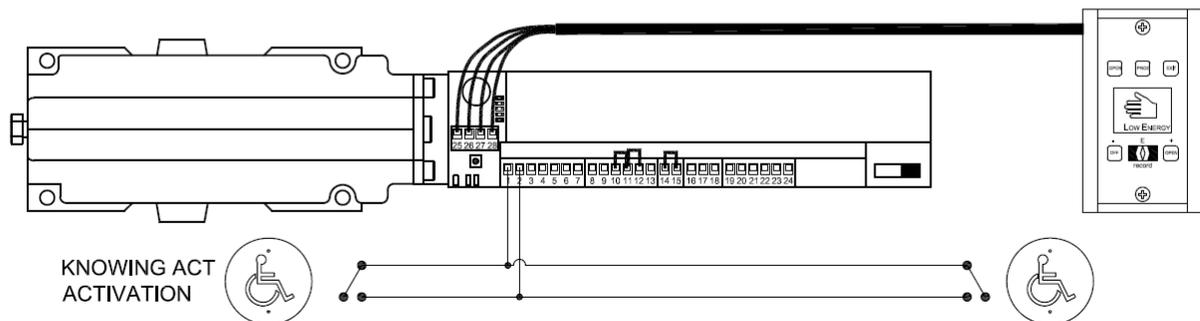
- If pair operator calibrate master first then slave.

### VERIFY CALIBRATION:

- With the door unlocked Press the multifunction button for (1) red flash.
- Door will swing to full open and return to closed position.

### ACTIVATION:

- Connect wires from push button to terminals 1 and 2.



## FREQUENTLY ASKED QUESTIONS

**Q. How do I properly preload the arm?**

A. Arms should have a 6 degree preload. To achieve this the output shaft has 6 degree notches in the spindle. Preload exactly 1 notch and you are properly preloaded.

**Q. How do I put the SimpleLink into programming?**

A. Press the multifunction button on the control for 4 flashes.

**Q. How do I engage power assist close?**

A. In programming under parameters...manual control...support during closing - you will find the power assist close settings.

**Q. Why do I get an error saving in the STG or 2132 Can Node Blocked error?**

A. The door is set to always locked and must be cleared by pressing the multifunction button for 1 flash.

**Q. How many amps can a lock pull when powered from the control?**

A. 0.5 Amps or 500 milliamps max. This must be combined with any sensors, timer, or relays for total power consumption.

**Q. Where does a wireless receiver tie into on the control?**

A. Terminals 1,2,3.

1. Power (+24v ) and 1 leg of activation. 2 wires usually red and white.
2. Other leg of activation. Usually Green wire.
3. -24VAC usually Black wire.

# PARAMETER ADJUST SCREENS

Parameter adjustment is accessed by pressing & holding the control switch on the operator control thru 4 flashes of the adjacent red control LED.

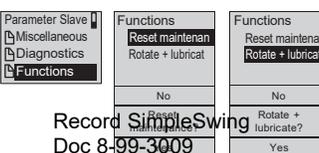
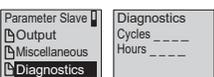
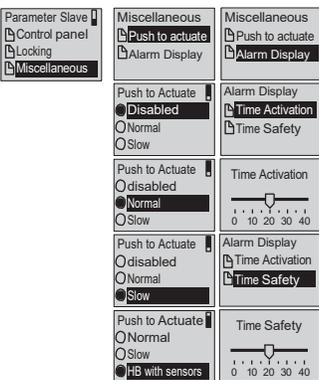
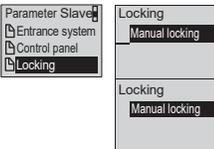
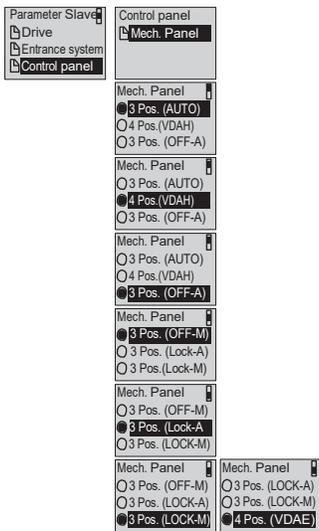
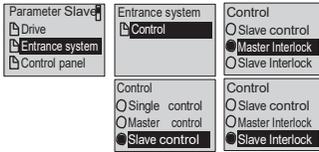
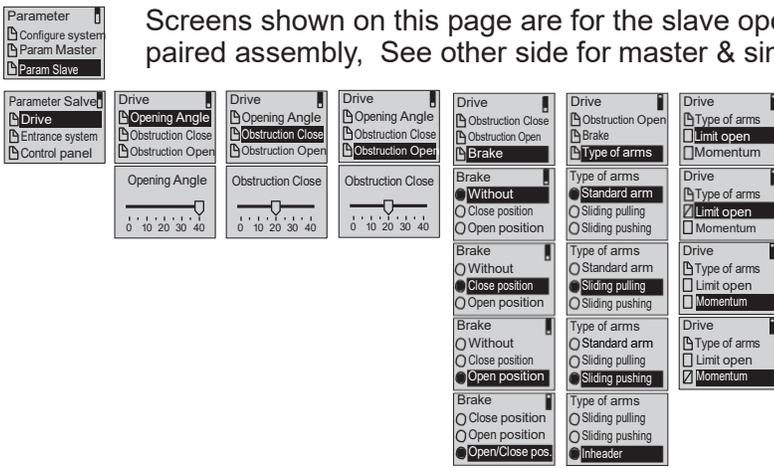
The image displays a comprehensive set of parameter adjustment screens for a door operator. The screens are organized into several main sections:

- Driving cycle:** Includes settings for Closing speed, Opening speed, Acceleration, Latch Check, and Force when closing.
- Time delay open:** Includes settings for TD Remote Sw and TD open.
- Drive:** Includes settings for Opening Angle, Obstruction close, Obstruction open, Obstruction open, Brake, Types of arms, Inverse, Limit open, and Momentum.
- Entrance system:** Includes settings for Control, Interlock type, Door type, Single control, Master control, Slave control, and Interlock.
- Interlock:** Includes settings for Without, All operation mod, Only one way lock, and Door type.
- Door type:** Includes settings for Basic operator, USA, Airport Brussels, USA Low Energy, and EU Low Energy.
- MS 2-leaves:** Includes settings for Funct. Ext. Sw, Overlap, Open sequence, and Close sequence.
- Manual control:** Includes settings for During closing, When locked, When One way, When auto, Obstruction, Active sensors, and Closing speed.
- Input/Output:** Includes settings for STG, AUX1\_IN, AUX1\_OUT, and FEM1.
- STG:** Includes settings for Ext. Sw IN, Ext. Sw IN F, and Sequential.
- FEM1:** Includes settings for FEM Type, Input, Output, and FEM Type.
- Locking:** Includes settings for Lock function, Lock type, Lock type, Lock function, Lock type, Lock function, and Lock type.
- Lock type:** Includes settings for Night locked, Standard, Locking bolt, Magnet, and Lock type.
- Lock function:** Includes settings for Night locked, 1way locked, Always locked, and Lock function.
- CAN-Bus:** Includes settings for FEM1, AKI 1, SI 1, SA 1, AKI 2, and SA 2.
- Miscellaneous:** Includes settings for Push to actuate, Alarm Display, Alarm display, Time activation, Time safety, and Alarm display.
- Diagnostics:** Includes settings for Output, Cycles, Hours, and Diagnostics.
- Functions:** Includes settings for Reset maintain, Rotate + lubricat, and Reset maintain.

This set of parameters only appear when adjusting the master unit in a synchronized pair.

**Series 8000**  
Screens shown on this page are for the master operator in a paired assembly, and for single units (except MS 2-leaves menus). See other side for slave menus.

Screens shown on this page are for the slave operator in a paired assembly, See other side for master & single menus.



In the parameter adjust mode the following keys are active.

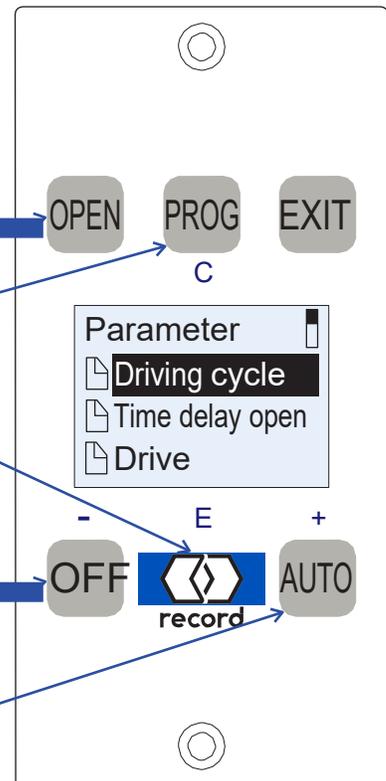
Initiates an "Open" command

Returns to previous screen

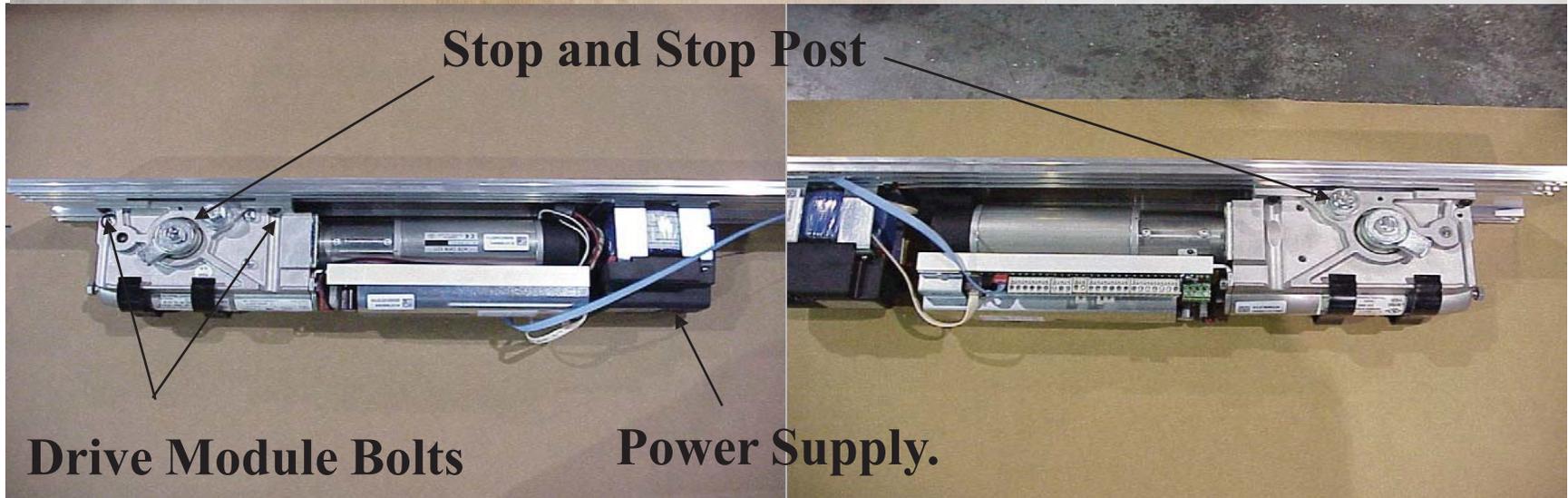
After selecting item / value confirms and stores entry

Scrolls up in menus or decreases value

Scrolls down in menus or increases value



# SimpleSwing Rehanding Instructions



LH

Operator Top View-  
Cutaway

RH

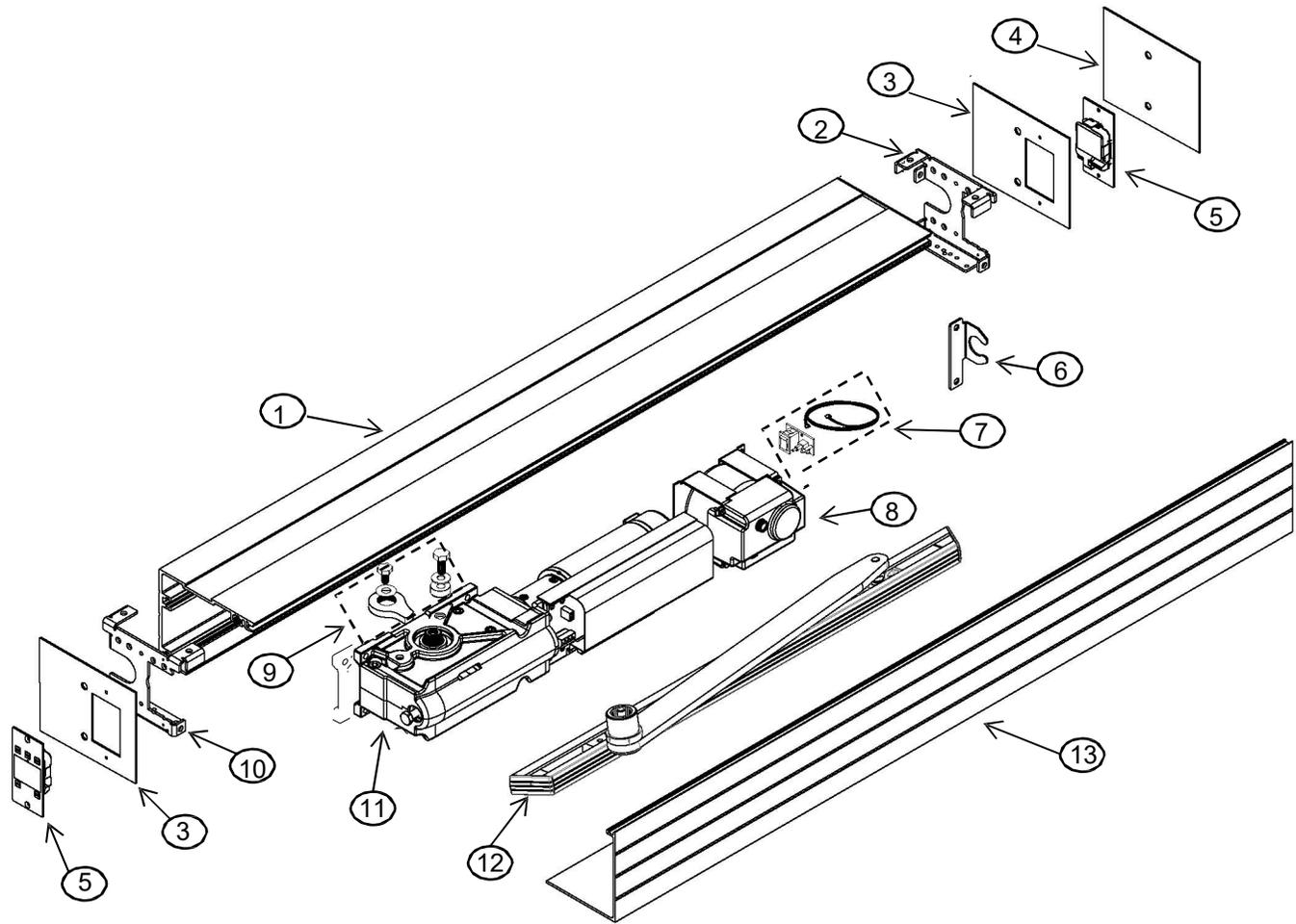
## SimpleSwing Rehanding Instructions

1. Unplug the Power Supply.
2. Loosen 2 bolts to remove Power Supply
3. Remove 4 bolts to remove Drive Module. Set it on a flat surface.
4. Remove bolts on Stop and Stop Post.
5. Remove both the stop and stop post completely.
6. Turn Drive Module over.
7. Reinstall Stop and Stop Post on opposite side.
8. Remount the flipped drive module to the other end of the header.
9. Remount power supply with bl/rd wire closest to unit..
10. Change S1 Slide control switch.

The Cover will be prepped both sides to accommodate a hand change.

**Note:** Once unit mechanically installed, door will open easy & close controlled, if not move S1 Slide Switch on Control for proper rotation.





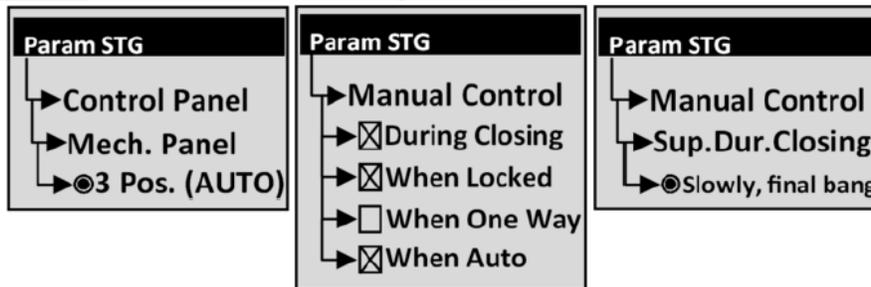
ITEM	PART NUMBER	DESCRIPTION	U of M
1	5-85-4003-CL	HEADER, OHC CL-DB	ft
2	202-005121579	BRACKET,HEADER to JAMB,BDE-D,Simpleswing,RH	ea
3	202-005121570	END CAP,HEADER,8000,BDE-D Cutout,Simpleswing	ea
4	4-85-1011	END CAP, HEADER, (BLANK)	ea
5	9-99-1321	CONTROL MODULE, DISPLAY	ea
6	4-51-1004	BRACKET, CONDUIT ANCHOR	ea
7	9-80-0106	KIT, ROCKER SWITCH ASSY. w/CABLE	ea
8	9-80-0102	POWER SUPPLY, 6100/8100	ea
9	9-80-0103	KIT, HARD STOP	ea
10	202-005121578	BRACKET,HEADER to JAMB,BDE-D,Simpleswing,LH	ea
11	9-80-0101	DRIVE MODULE w/CONTROL, S8000	ea
12	102-127816028	SLIDE TRACK ARM ASSY. w/20mm ADAPTOR - CL	ea
13	5-85-4004-CL	COVER, OHC CL-DB	ft

## 8-FLASH RESET INSTRUCTIONS

### **WARNING**

After an 8 flash reset you **must** enable the "Manual Control" parameters. Follow the steps below:

1. Enter the programming mode on the SimpleLynk. With the header open, press, and hold the multifunction button on the master control until the red LED flashes 4 times.
2. Program the settings with the SimpleLynk. Use (+) AUTO to scroll down, (-) OFF to scroll up, "record" to enter your selection, and "PROG" (c) to go back to the previous screen.
3. Highlight "Param STG" ("Param Master" for dual units) press "record" and enable the settings below:



Once the settings are restored, press the "PROG" button repeatedly to exit each level until "Quit menu item" is displayed. Press (e) for "YES" to save settings and exit menu.

