

## Installation Instructions

## Tools Required:

## Screwdrivers

Small Straight (Flat Blade) - for Terminal Block wiring
\#2 Phillips (Crosspoint) - for various \#8, \#10, and \#14 screws
Wrenches / Sockets
7/16" - for \#1/4-20 Hex Head bolts attaching header to jambs
1/2" (13mm) - for \#5/16 Hex Head bolts attaching end stops and operator parts
15/16" wrench - for carrier and anti-rise roller adjustment
Allen Wrenches
3mm - for "SX" roller catch adjustment
1/8" - for breakout arm deadstop bracket
7/32" - for "SX" breakout adjustment
5/16" - for carrier and ant-rise roller adjustment
Electric Drill with the following drill bits -
$1 / 8$ " - for attaching fixed sidelites to header
9/64"(or \#28) - for installing sensors
5/32" (or \#22) - for installing \#10 sheet metal screws into adjacent storefront
13/64" (or \#7) - for installing \#14 sheet metal screws into adjacent storefront
1/4" - for clearance holes in jambs
Impact Drill with the following masonry bits -
1/4" - for \#10 screw anchors
5/16" - for \#14 screw anchors
Level - suggested 4' minimum
Step Ladder - 4' or 6'
Tape Measure
Caulking and Application Gun
Electrical Wire Strippers /Cutters - for sensor wiring
BEA Universal Remote Control - for adjusting sensors

## Suggested Fasteners Required - (Not supplied)

Jamb Attachment Screws -
\#14 X 2-1/2" PHSMS (Pocket Jambs)
\#14 X 3" FHSMS (Tube Jambs)
Optional Anchors for masonry
Threshold Attachment Screws
\#10 X 1-1/2" FHSMS
Optional Anchors for masonry
Header Attachment Screws
\#14 X 1-1/2" HHSMS
\#14 Flat Washer
Construction Shims - for squaring door frame in opening
Glass Shims - for blocking glass in door panels


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## Components - Overview

(1) Header Unit
(4) Fixed Sidelight ("O" Panel)
(2) Jamb
(5) Sliding Panel ("SX" Panel)
(3) Jamb Filler
(6) Sensor

## ESA-200 Fixed Sidelite



## Header to Jamb Assembly

Fasten the header unit to the jambs using (5) 1/4-20 x 1 " hex bolts per side. $7 / 16$ " socket/wrench required.


## Assembly

(1) Place the header \& jamb assembly into the rough opening.The mounting of the operator to the rough opening must meet applicable building codes and standards.
(2) Level all sides and shim as required.
(3) Fasten assembly into rough opening, after verifying unit is level and plumb in all directions.


## Sidelite Mounting

Feed the safety beam cables through the pre-drilled holes in the header and lay in the radiused trough as shown above.
Stand the sidelite in place and plumb all sides. If necessary use shims below the track to level any unevenness in the flooring.
Secure the sidelite in position using clamps or similar means.


## Securing the Sidelite

(1) Verify that the sidelite is plumb in all directions and properly seated against the jamb.
(2) Pre-drill holes through header and sidelite on top with $1 / 8^{\prime \prime}$ drill.
(3) Use screws to attach the sidelite on top, to the header.
(4) Secure the bottom of the sidelite by drilling through the holes in the floor rail, shim as necessary, then fasten into place.

Verify that the sidelite is plumb in all directions and make any necessary adjustments.


## Hanging the Sliding Panel

(1) Fasten the bottom guide wheel to the sliding panel(s). Phillips screwdriver required.
(2) Place each sliding panel next to the fixed sidelite, but oriented $90^{\circ}$ to the sidelite and lead the guide wheel into the track at the bottom of the sidelite.
(3) Rotate the panel so that it is parallel to the fixed sidelite and place carrier wheels onto header track.
(4) Insert and fasten the cover angle bracket. Phillips screwdriver required.


## Vertical Alignment for SX panel

Using the eccentric carrier wheel (CW), and the anti-riser wheel (AW), level the sliding panel. Tighten hex nuts to secure the adjustment.

$\triangle$
Adjustment of the anti-riser roller:
The anti-riser roller should not contact the top track anywhere along the slide path of the door.


## SX Panel Centerline Adjustment

1. With the lower belt bracket securely fastened and the upper belt bracket in its loose position, the SX panels can be properly adjusted to their center position.
2. After panels are centered, fasten upper belt bracket to carrier. 7/16" socket or wrench required.


## Glazing

(1) Remove the glass stops from interior ("SO" panel), or exterior ("SX" panel) side (4 per opening).
(2) Center the glass in opening.
(3) Properly block and/or cushion glass edges.
(4) Press the glass stops into place starting with the horizontal stops, then follow with the vertical stops.


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## Adjustment of the Breakout-Unit

1. Loosen the set screws ( $a, b \& c$ ) to prevent interference while adjusting door. $7 / 32$ " Allen wrench required.
2. Use the adjustment screw (d) to lift (CW), or lower (CCW), the leading edge of door.
3. Continue adjustment until the re-latch profiles are properly aligned.
4. Tighten all set screws ( $a, b \& c$ ) until tight and secure.

Recheck the latched position alignment and readjust as necessary.


## Adjustment of the Roller Catch

Align the roller catches as illustrated using the adjustment screws. 3 mm Allen wrench tool required.
Pay close attention to the disengagement or breakout force.
Do not exceed ANSI A156.10 Standards.


## Adjustment of the End Stops

End stops are installed at the factory. Adjustments should be made by loosening the bolt and sliding the stop to the appropriate position. Be sure adjustments are made symmetrically to the door opening, while providing proper finger safety perANSIA156.10 standards. $1 / 2^{\prime \prime}$ socket or wrench required.


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## Mounting of Program Panel and Routing of Cable

Route cable as illustrated.
Insert program panel as illustrated and fasten into place using Phillips screwdriver.

## ESA-200 Fixed Sidelite



## Electrical Termination of Program Panel

Connect program panel as illustrated
The cord should not be:
Routed through doorways, window openings, walls, ceilings, floors, or the like; attached, or otherwise secured to the building structure, or concealed behind walls and the like.

## ESA-200 Fixed Sidelite



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Wiring of Safety Beams (See Appendix 1 for more details)
If optional safety beams are used, Connect BEA Microcell 3D monitored safety beams as illustrated.


## Mounting of Motion Sensor (See Appendix 2 for more details)

Mount the sensor as illustrated.
Caution: Be careful when drilling for sensor attachments so as not to damage internal wiring.
Note: Recommended mounting locations may not work in all door configurations.


## Wiring of the Motion Sensors (See Appendix 2 for more details)

Connect the motion detector body as follows: \#1-RED (24v), \#2-BLACK (24v), \#3-WHITE (Common), \#4-
GREEN (N.O.).
Connect the motion sensors to the interface board, according to the wiring diagram.


## Overload Circuit / Line Power Connection

Connect the line power as illustrated.
Fuse: Use only T2A/120VAC ( $5 \mathrm{~mm} \times 20 \mathrm{~mm}$ )
Use only Copper conductors.

## ESA-200 Fixed Sidelite



## Adjustments

(1) Deadstop adjustable between $80^{\circ}$ and $120^{\circ}$ maximum using $1 / 8^{\prime \prime}$ allen wrench.

The deadstop helps to prevent damage to the door and wall when the door is opened normally.
(2) Closing speed adjustable between $0^{\circ}$ and $120^{\circ}$ using 3 mm allen wrench.
(3) Latch check adjustable between $0^{\circ}$ and $7^{\circ}$ using 3 mm allen wrench.

Never remove closer or any of its bolts from the door panel.

## Input Voltage

## Line Fuse

Power Supply for external devices
Power consumption
maximum
standby
Average Power consumption
Ambient Temperature

```
120 VAC / }60\textrm{Hz +/- 10%
    2A(5mm x 20mm)
        24 V DC / 2 A
```


## 2A ( $5 \mathrm{~mm} \times 20 \mathrm{~mm}$ ) 24 V DC / 2 A

150 W, Peak 255W for 2 seconds 25 W $45 \mathrm{~W} /$ hour
$70^{\circ} \mathrm{F}$

Program - Inputs
OFF
AUTOMATIC
HOLD OPEN
PARTIAL OPENING
EXIT

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## Data and Features

Opening width, single panel
Opening width, double panel
Door weight, single panel
Door weight, double panel

OW/2-10\% max 47 inch OW/2-10\% max 84 inch

220 lbs (100 kilos)
$2 \times 190 \mathrm{lbs}$ ( 86 kilos)

| Hand Terminal Adjustments | Factory | Performance Range |  |
| :--- | :---: | :---: | :---: |
| Default | Minimum | Maximum |  |
| Opening Speed | $75 \%$ | $3.8 \mathrm{in} / \mathrm{sec}$ | $22.3 \mathrm{in} / \mathrm{sec}$ |
| Closing Speed | $100 \%$ | $3.8 \mathrm{in} / \mathrm{sec}$ | $11.0 \mathrm{in} / \mathrm{sec}$ |
| Crawl Speed OPEN | $50 \%$ |  |  |
| Crawl Speed CLOSE | $50 \%$ |  |  |
| Brake Rate OPEN | $50 \%$ |  |  |
| Brake Rate CLOSE | $50 \%$ |  |  |
| Brake Rate Reverse | $80 \%$ |  |  |
| Hold Open Time | 1 sec |  |  |
| Partial Open Distance | $52 \%$ | $9.875 "$ | 1 sec |
| Hold Open Time Night / Bank | 10 sec |  | 10 sec |
| Open Delay Night / Bank | $0 \%$ |  |  |
| Crawl or Slow Open distance | $10 \%$ |  |  |
| Crawl or Slow Close distance | $10 \%$ |  |  |
| Open Acceleration | $77 \%$ |  |  |
| Close Acceleration | $50 \%$ |  |  |
| Force Setting | $67 \%$ |  |  |

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1. Controller Technical Data <br> Line power: <br> Line Fuse: <br> Motor connection: <br> Position Encoder: Connected to Motor shaft <br> Service Button: Start learn cycle and activation signal by pressing button <br> Operation Signal: LED light signal indicates operation or learn cycle
}

For the Phoenix Connector on the right side, the following pin numbers and coding apply.


| 1.1 Terminal Designations |  |  |
| :---: | :---: | :---: |
| Program switch / Vestibule switch |  |  |
| 5 | GND |  |
| 6 | NIGHT / BANK | - Input |
| 7 | GND |  |
| 8 | Program switch: HOLD OPEN | - Input |
| 9 | Program switch: PARTIAL OPEN | - Input |
| 10 | Program switch: EXIT | - Input |
| 11 | Program switch: AUTOMATIC | - Input |
| 12 | Program switch: OFF | - Input |


| Special |  |  |
| :--- | :--- | :--- |
| Functions, Normally Open Contacts |  |  |
| 13 | GND |  |
| 14 | Vestibule | - Input |
| 15 | GND |  |
| 16 | Emergency Close | - Input |
| 17 | Door Status | output |
| 18 | Door Status | output |
| 19 | Bell, Alarm | - output |
| 20 | Bell, Alarm | - output |

## Serial Port

1 GND
2 BUSA
3 BUS B
4 +24V

```
Line
ESA = 120V / AC
```

The plugs on the left side have no additional labels, since, with the exception of the Emergency-OFF, no un-
terminated cables connect here; only plug ready cables are connected.
Position Encoder
Plug, 5 pin, for connecting a position encoder.

## Parallel Port

Plug, 26 pin, for connecting a flat cable.

Battery Back Up Module
Plug, 20 pin, for connecting a flat cable.

## EMERGENCY-OFF

Plug, 2 pin, bridge when not in use.

## Motor

Plug, 2 pin, mating plug is found on the motor cable.

## Additional Plug Information

## Night/Bank

- Terminals 5 \& 6 - see page 27, Item 7 .


## Card Reader

Activation uses the normally open circuit on the main controller, ports 5 \& 6 (labeled "Night bank"). The open and close time delay occurring before \& after activation can be adjust via the hand terminal (see hand terminal instructions).

## Push Plate

-In lieu of motion detector, wire into ground \& Radar 1, or 2 on the sensor interface board.
-In addition to motion detectors, wire into ports $5 \& 6$ on main controller (labeled "Night bank"). The open \& close time delay occurring before \& after activation can be adjusted via the hand terminal (see hand terminal instructions).

## Vestibule Input

- Terminals $13 \& 14$ - requires dry contact, 1.5 mA load.
- In the default mode, when a contact is closed between these terminals, the door sensors, (but not the safety beams), are ignored. If the door is closed, the door will not open in response to a signal from the sensors. If the door is open, the sensors will then be ignored and the door will close, unless a safety beam is interrupted. The door will resume closing when the safety beams are cleared. The mode of operation can be modified with the hand terminal. Further description is provided in the hand terminal instructions.


## Emergency Close Input

- Terminals 15 \& 16 - requires dry contact, 1.5 mA load.
- This function is defaulted to OFF, and as such has no affect on normal operation. To turn ON, a hand terminal is required . In the main menu, select "4-Door Variants", then select submenu " 8 - Special Unit", and scroll down to "Panic Closing". It will indicate a setting of " 0 " - press " 1 ", then "Enter", then "Break". Now, when a contact is closed between the terminal, all sensors are ignored and the door immediately closes and remains closed until the 3 position rocker switch AUTO/OFF/ON - it is turned "OFF", then back to "AUTO", and normal operation is resumed.


## Door Status Output

- Terminals 17 \&18 - Normally Open dry contact, 1A @ 24V max.
- Contacts close when door is open: remains functional when 3 position rocker switch - AUTO/OFF/ON - is in the "OFF" mode. It is not functional if 120 V power is removed from the operator.


## Bell, Alarm Output

- Terminals 19 \&20 - Normally Open dry contact, 1A @ 24V max.
- Contacts close when safety beams are interrupted AND the door is open. It is not functional if AUTO/OFF/ON rocker switch is "OFF", or if 120 V power is removed from the operator. Does not respond to Presence input.


## Commissioning / Adjustments / Functional Test

## Preparation for Commissioning

## Basic Requirements

-The operator installation is complete.

- The circuit breaker is on.
- The safety beams are active.
- Those components delivered separately, such as the program switch and motion detectors, are installed and connected.
- The end stops are installed such that each sliding door panel contacts an end stop in the fully open position and when the door is fully closed neither the fixed sidelites, nor the sliding door panels, impact the weatherstrip extrusion.


## Commissioning

1. Make sure the Program Switch located on the jamb is in the "Automatic" mode with the "Exit Only" and "Partial Open" switches in the off position.
2. Open sliding panel(s) approximately 5 " to $6 "$. Note: Single Slide door panels configured as P-SX, O-SX and SX-SO must be closed for this process, as they have reverse motor leads.
3. Plug power cord into the ESA controller.
4. Immediately press and hold the black service button on the front of the controller until the door(s) begin to move. This takes approximately 25 seconds. Release the button after the door(s) start to move.
5. The controller will now go through a self-learn cycle. This self-learn process is described as follows:

- The door will automatically close.
- The door will "jerk" open a small distance to measure inertia.
-It will then creep to a full open position, which also determines the stroke.
-From here the door will close.
-After closing, the door(s) will slightly open and close three times to test the closed position and reconfirm the start-up inertia.
-The door has now programmed its stroke, inertia and the factory default settings.
-IMPORTANT: Do not disrupt this process! If interrupted, disconnect power, then return to step 3 above.

6. After the doors have completed the initialization procedure, you can then change the factory defaults by way of the HandTerminal.

## Adjustment

The controller has default settings, which are optimized for the majority of applications. If different settings are desired, these are set using the Hand Terminal (HT). This procedure is explained in the instructions for the Hand Terminal.

## To reestablish the default settings

Follow the instructions given above under Commissioning.

## Setting the Partial Opening Width

The partial opening width can be set either by the hand terminal, or by using the rocker switch control panel. With the door fully closed and the "Partial Open" switch "OFF", turn on the 3 position - AUTO/OFF/ON - rocker switch to "OPEN". The door will begin opening at a slow speed. When it reaches the desired partial open position, turn the rocker switch from "OPEN" to "OFF". Turn the Partial Open rocker switch from "ON", then change the 3 position rocker from "OFF" to "AUTO". The door will pause, then resume opening at a slow speed to fully open, time out, then close normally. With the Partial Open rocker switch "ON", the door will stop at the desired position in further operation (until the switch is returned to the "OFF" position).

## Functional Test

## Safety Beams

While the doors are closing, interrupt each safety beam. The LED on the board, to which the safety beams are wired, will light up and the door will reverse.
With the door in the open position, interrupt each safety beam for a variable time. The door remains open as long as the beam is broken.
When the safety beam is cleared, then the door closes after a delay, which corresponds to the setting of the hold open time. An automatic test of the safety beams is executed immediately prior to each close cycle of the door.

## Activation Devices

Test all activation and safety devices in each position of the program switch. Refer to the respective installation manuals for instructions on adjusting these devices.

## Emergency-Off

Normally on ESA-200 operators, the Emergency Off twopin connector is jumpered. If an Emergency Off switch is desired, use a Normally Closed contact. When the contacts are opened, the door will immediately stop moving and remain so, until the contacts are closed again.

## Training

Once the commissioning and functional testing are completed, the owner's manual is handed over to the key operator, or the authorized representative, and this person is appropriately trained on the operation and maintenance of the system.

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If the door fails to respond properly, either during commissioning, or during normal operation, first check the following:

- Is line power available?
- Is the Emergency-Offfunction released ?
- Is the motion sensor actuation installed ?
- Safety beams are clear, not interrupted and free of dirt and debris ?
- Is the door blocked by an obstacle?
- Does the door panel slide easily (track rollers, floor guides)?
- Are the safety devices in proper working order (LED-controller is on)?
- Are all external activation devices, Emergency-OffSwitch, and electric locking devices properly wired?
- Are all plugs, quick connects, and connections secure?
- Is the Rocker Switch Control Panel set to the desired operating mode?

If all of the above are in order and the problem persists, then use the Hand Terminal (HT) for further troubleshooting.

| Problem |  | Remedy |
| :---: | :---: | :---: |
| Door runs rough and uncontrolled | Plug Cabte on Position Encoder | Ensure connector is properly plugged in or change the cable. |
| The door remains open for all positions of the program switch | Safety Beams (LS) <br> Emergency-OffSwitch | Check the safety beam function including the LED indicator using the Hand Terminal <br> Bridge Inputs on connector. If the problem is thereby corrected, check and, if necessary, replace the Emergency-OffSwitch |
| The door does not open when the Program Switch is in the EXIT position, or the PARTIAL OPEN position. | Activation Devices (Motion Sensors) Interior / Exterior | Remove the connector for the activation devices and replace with a bridge. If this corrects the problem, check the 24 V power supply, if OK then check the activation device and replace, if necessary. |
| The door does not open when the Program Switch is in the AUTOMATIC position, or the HOLD OPEN position. <br> The door stays open | Emergency-OffSwitch | Bridge the Inputs of the connector. If this corrects the problem replace the EMERGENCY-OFF Switch. |
| (Service indicator is off) | Short Circuit* | Disconnect the controller from the line power, about 2 seconds, then reconnect. |

*Warning! Behavior of the controller in the event of a short circuit.
The 24 volt power supply for the motion sensors and the locking devices are short circuit protected. In the event of a short circuit, the main power supply switches off all secondary supplies and indicator lights. The main power supply does not automatically reset when the short circuit is removed. Remove the plug to the power, wait approximately 5 minutes, then reconnect the power plug.

## Operation Instructions

The electro-mechanical sliding door operator can be installed with any one of the following three Program Switch types:

1. Program Panel - (Standard)
2. Mechanical Program Switch - (Optional)
3. Control Panel 90-(Optional with separate instructions)

### 1.1 Program Panel

The program panel is installed in one of the vertical door jambs. The following functions can be selected using the three toggle switches:


Main Switch Switch is in position:

AUTO
 When an activation signal is received at either Radar1, (assuming the EXIT ONLY switch described below is "OFF"), and/or Radar2 inputs, the door will open. After opening, signals received from the Presence input or the Safety Beams, will cause the door to remain open, or re-open the door if received while the door is closing. After all the sensors have cleared, the hold open delay is initiated, and when it expires, the door will close.

Continuous Open Operation The door opens to the full opening width and remains in this position. Manual operation of the door is possible, with some resistance from the operator.

The door stops immediately when the switch is placed in this position. Manual operation of the door is possible, with some resistance from the operator.

## Switch - EXIT ONLY

## (Main Switch is in AUTO position)

EXIT ONLY Switch is in position:
In this position, the exterior motion detector is switched off for activation, the door can only be activated from the interior motion detector (e.g. one way traffic function after a store has closed). The exterior Radar1 is active while the door is open, and cuts off in the closed position.
When an activation signal is detected from the interior (Radar2), the door opens, delays according to the hold open time setting, then closes. If, in addition, the Partial Open Switch is

set to the ON position, the door opens only to the predetermined partial open position and closes after the expiration of the hold open delay.

The Exit Only function is switched off.

## Switch - PARTIAL OPEN

(Main Switch is in the AUTO position)
PARTIAL OPEN Switch is in position:
If the Partial Open Switch is set to the ON position, the door opens only to the predetermined partial open position and closes after the expiration of the hold open delay. If, in addition, the EXIT ONLY switch is in the ON position, then the door can be activated only from the interior devices; the exterior motion detector is switched off.

ON


## 3. EMERGENCY OFF Switch (Optional)

When the EMERGENCY OFF Switch is depressed, the motor connection is disrupted. The door can be easily moved manually.

## 4. Exterior Motion Sensor

Program Switch is in position:
AUTOMATIC, or PARTIAL OPEN.
Upon detection of an activation signal from a motion sensor, the door opens and then closes after expiration of the preset hold open delay.

## 5. Interior Motion Sensor

## Program Switch is in position:

AUTOMATIC, EXIT, or PARTIAL OPEN.
Upon detection of an activation signal from the interior motion sensor, the door opens and then closes after expiration of the preset hold open delay.
6. Presence-Sensor (Optional)

If a person or object is in the detection zone of the presence sensor, an activation signal is generated and the door opens and closes after the detection zone is clear, and the preset hold open delay has expired.
7. Activation Device Night / Bank (Optional - key switch or card reader)
Program Switch is in position:

## AUTOMATIC, PARTIAL OPEN, or EXIT

Upon detection of an activation signal from a key switch, or card reader, the door opens and then closes after expiration of the preset hold open delay.

## Program Switch is in position:

OFF
Upon detection of an activation signal from a key switch, or card reader, the door opens then closes, after expiration of the preset hold open delay (maximum 10 seconds) , or immediately after passing through the opening (adjustable by service technician).
8. Panic Button or Switch (Optional)

All Program Switch positions:
Upon detection of an activation signal from the button or switch, all motion and presence sensors are switched off and the door closes immediately.
Release the Panic Function:
Switch the Program Switch through the positions AUTOMATIC - OFF - AUTOMATIC. The panic function is released, and the operator is again in the AUTOMATIC mode.

## 9. Restart after power failure

When power returns, the control board starts automatically a self test due to safety reasons. (ca. 25 secs)
Finishing the test, after appr. 25 secs. the door closes in slow speed and runs in the set program mode.

## Attention!

The above sequence will not activate when the emergency button is activated, or if the main switch is off.

## 10. Safety Functions

10.1 System Safety Test

The controller performs continuous safety checks for the internal hardware (RAM, ROM, CPU).
The safety beams are automatically tested prior to each closing cycle of the door. If the test result indicates that a problem exists, the door remains in the open position. The system must then be checked andommissioned by a Service Technician.
10.2 Closing- / Opening force monitoring

If the closing door encounters an obstacle, it reverses its motion and opens to the full opening width. Then it closes at the crawl speed. This procedure is repeated until the obstacle is cleared.
If the door encounters an obstacle during the opening cycle, it stops.
After approximately 10 seconds, the door attempts another opening, but this time at the crawl speed. If an obstacle is again encountered, the door stops again.
After approximately 6 attempts , the door closes. At the next opening cycle, the door opens normally to just before the obstacle position, then continues opening at the crawl speed. If the obstacle is still present, the door closes immediately. When the obstacle is cleared, the door opens to the full opening width and assumes its normal operation function.

### 10.3 Safety Beams / Presence-Sensor (Optional)

The threshold area between the open door panels is monitored by the safety beams and optionally by a presence sensor. If a person, or obstacle, is detected in this area during the closing cycle of the door, the door reverses and then opens to the full opening width and remains in this position. When the threshold area is again clear and the preset hold open delay has expired, the door closes. For the Program Switch settings, except OFF, and with the door in the closed position, the door will NOT open upon detection of an activation signal from the safety beams or from the presence sensor.

## 11. Care and Maintenance

Prior to first use, and periodically thereafter, but at least once a year, the system must be checked and maintained by a qualified.
During the cleaning operation, the Program Switch must be either in the OFF, or HOLD OPEN position to avoid automatic movements of the door panels.
Disconnect the line power cord before servicing.
The entire sliding door assembly (Aluminum, Glass, Covers) can be cleaned with a moist towel and common commercial non-brasive cleaners. The safety beams are to be cleaned with a dry, soft, non- abrasive towel.
The floor area near the sliding door panels, including the threshold must be kept clean.

## 12. Troubleshooting of Problems

If the door does not open, or close, check the following:

- Is the line power connected and active?
- Is the EMERGENCY-OFF released?
- Is the Program Switch in the proper position?
- Is the safety beam path clear and clean?
- Is the door blocked by obstacles?

If all of the above checks out OK call a qualified Service Technician.

