

Fax: 704-289-2024



The record-usa 5100 slider has been carefully designed, built, and tested to provide years of service.

The life of the door package is directly related to how carefully the installation is accomplished and how accurately the instructions are followed. Installation of this door 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. The authorized service / installation dealer must perform all measurements for forces, speeds, and times to insure proper and safe operation.

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

NOTE: GLASS AND GLAZING ARE NOT INCLUDED IN THE PACKAGE.
THE GLAZING MATERIALS IN BOTH THE DOORS AND SIDELITES
SHALL COMPLY WITH THE REQUIREMENTS IN THE AMERICAN
NATIONAL STANDARD PERFORMANCE SPECIFICATIONS AND
METHODS OF TEST FOR SAFETY GLAZING MATERIALS USED IN
BUILDINGS, Z97.1.1975

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.

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TOOL LIST

· Wire Ties

· Tape Measure
· Electrical Tape

· Hammer Drill

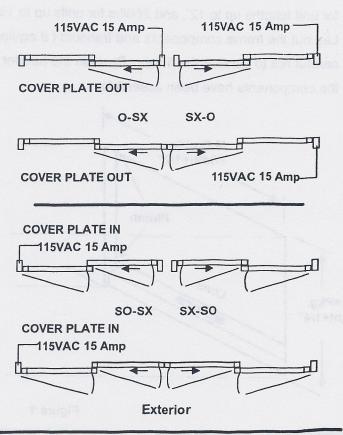
- Extension Cord3/8" Cordless Drill
- Wire Cutter
 Vise Grip Pliers
 Multi-Meter
 Channel Lock Pliers
- · 4'or 6' Ladder · Caulking & Gun

- · Shim Material (shingles)
- · Flat & Rat tail files
- · Combination wrench set (standard & metric)
- · Screwdrivers (#2 & #3 Philips, Sm. & Med.)
- · Allen Hex wrench set (standard & metric)
- · Ratchet & Socket set (standard & metric)
- · Drill bit set up to 3/8" & 1/4" & 5/16" masonry bits

GENERAL REQUIREMENTS

- Power: 120VAC. 60Hz., 15 Amp Service to inside of header of each unit
- Non-North American voltages can be 240VAC, if so be sure the operator has a 240VAC power supply.
- Power may be brought in through the top of the jamb on perimeter mount units or in through the back of surface mount units.
- For remote switch locations, routing of low voltage wiring to the operator controls will be required and there locations should be predetermined and wired before installation begins.
- Door Panels may be glazed before or after installation.

POWER INPUT LOCATIONS





PRODUCT INVENTORY AND PREPARATION

There are several different type packages built. Make sure the package you are installing meets the needs of the opening intended. (Inside slide, outside slide, or surface mount)

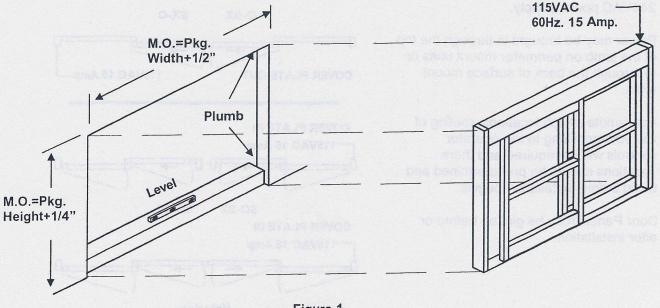
1. Once the material has been received inspect all cartons for completeness of order.

There should be at least six cartons for a standard bi-part package.

The following items should be present.

- A. Header Assembly (contains sensors and parts bag)
- B. Side Jambs (contains side jambs and transom)
- C. Door panels (contains vinyl)
- 2. Check the door opening for plumb and level. The floor must be checked for any high spots. The header can be used for the straight edge to detect any variation in the floor surface. Fill the low areas to make the floor level. See the **Figure 1** below for additional information.
- 3. Do not allow over 8' of unsupported header. (The fixed panel is considered as suitable support for the header.) If the unit is equipped with a transom, and the unit length is greater than 8', the frame of the existing structure must support the weight of the transom, glass, and an additional 130 lbs. for unit lengths up to 12', and 260lbs.for units up to 16'.

Lay out the frame components and transom (if equipped) on the floor along side the door opening. Be careful not to scratch the finish. Position the header so as to allow for lifting into the opening once all the components have been assembled.





FRAME TO HEADER ASSEMBLY

Please find located in the header assembly, a small parts bag, the 1/4-20 x 1" Hex Head Bolts with 1/4" flat and 1/4" lock washers to attach side jambs to header through the end bracket as shown in Figure2.

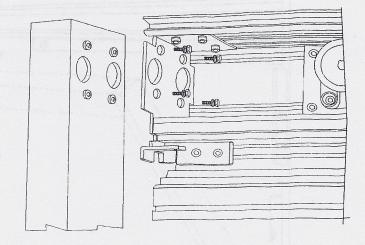
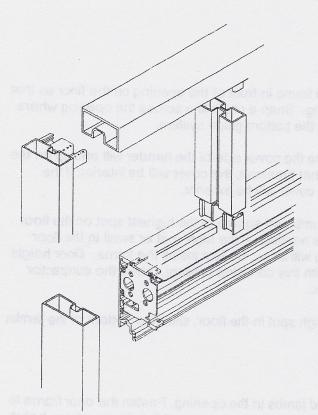


Figure 2

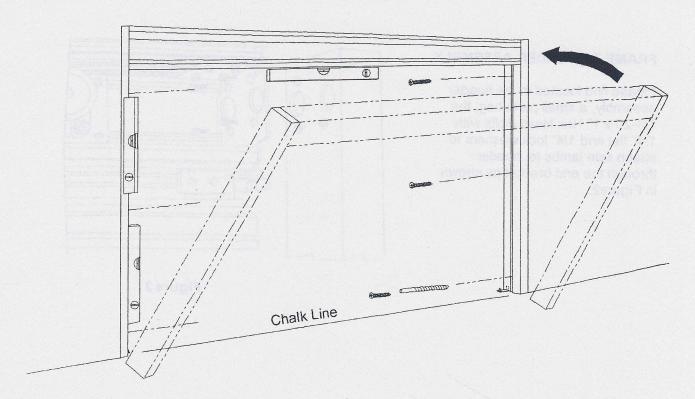


TRANSOM ASSEMBLY

If the unit is supplied with transom, see Figure 3 for view of assembly. It is suggested that the frame members be prepped for attachment and attach with a screw; suggested size 10-24 x1/2" flat head machine or sheet metal thread.

Figure 3





SETTING FRAME

Once the door frame has been assembled, place the frame in front of the opening on the floor so that the bottom of the jambs are at the base of the opening. Snap a chalk line across the opening where the jamb line is going to be. This line will also locate the bottom guide system.

Before lifting the frame into place, check to make sure the cover side of the header will end up on the correct side of the opening. If the unit has sidelites that breakout, the cover will be interior; if the sidelites are fixed or the unit is surface mounted, the cover will be exterior.

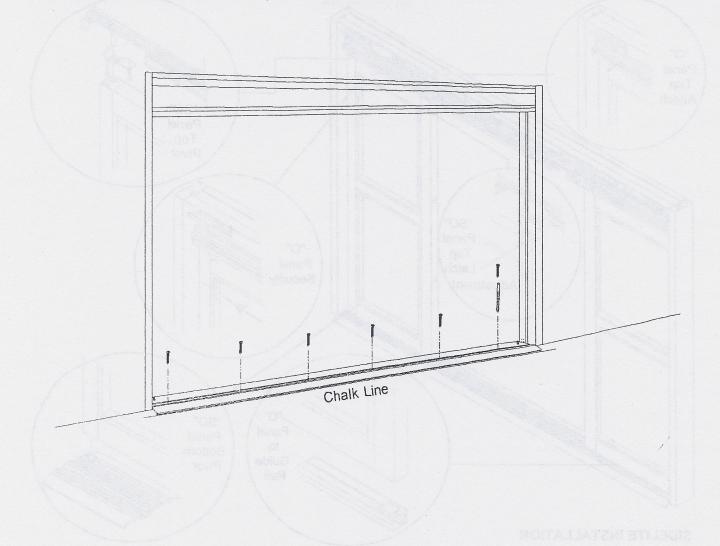
Lift door frame into the opening and set the frame plumb and square to the highest spot on the floor and position the frame within the 4-1/2" dimension as needed. If the high spot or swell in the floor forces the frame to go higher than the rough opening will allow, Do Not install the frame. Door height adjustment will be reduced if the frame is installed with this condition present. Have the contractor rework the floor so the doors can be properly installed.

If there is room to raise the frame up even with the high spot in the floor, shim the bottom of the jambs to the high spot.

FRAME ATTACHMENT

Using wood shims, plumb and square the header and jambs in the opening. Fasten the door frame to the opening with the appropriate type and number of fasteners for the size of the door package being installed. Fasten the header overhead every 36" or less.



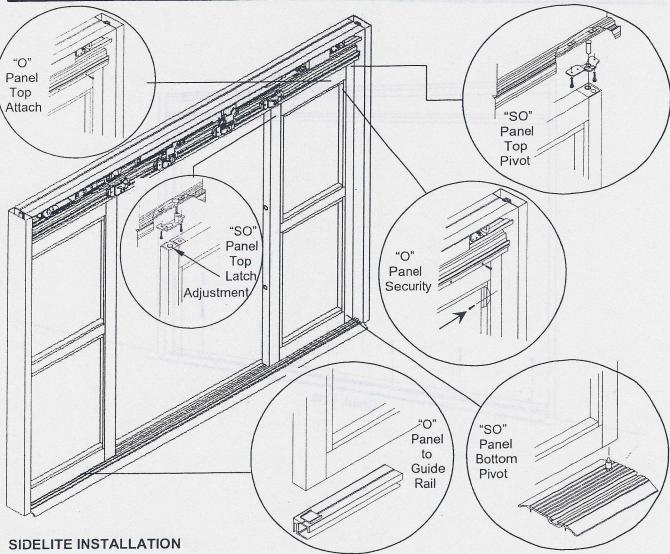


BOTTOM GUIDE INSTALLATION

The bottom guide rails or track must be installed level and in line with the frame for the door package to properly function. If the high spots referred to on page 6 were not corrected as indicated, proper location of the guide rails will be extremely difficult. Correct high spots and continue.

Identify the type of guide system being used with the door package. The standard guide for a fixed panel unit (o-sx-sx-o) is a guide rail with or without threshold; for full breakout units (so-sx-sx-so), the standard bottom guide is a pin guide track which is the same with or without threshold.

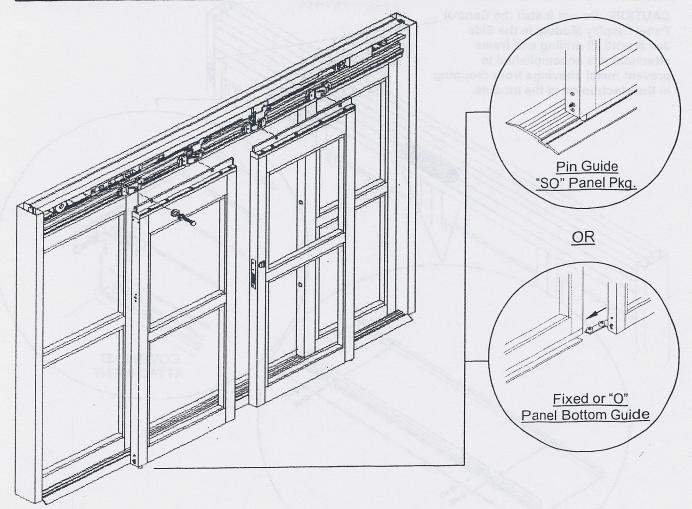




To install a full breakout sidelite that has a jamb or floor mounted bottom pivot, remove the top pivot bracket with clevis pin and install it in the top pivot angle of the sidelite. Proceed by feeding the safety beam wires through the third hole in the pivot bracket. Install the sidelite on the bottom pivot first, rotate the sidelite into the 90°open position and tilt the top toward the header, aligning the pivot bracket to it's original position on the underside of the header and reinstall the screws while continuing to feed the wires inside the header. Push the sidelite into a vertical position with the top pivot against the jamb. Tighten the allenhead screws securing the top pivot in place. After the safety beam wires are completely fed into the header, connect to the matching connectors. Note the safety beams are pre-wired in the door panels, jambs, and header, with small connectors provided between each assembly. No additional wiring should be required. Refer to the included operator wiring diagram.

To install a fixed sidelite to the header, insure the bottom guide rail is set properly to the floor. Install the sidelite to the top of the guide rail. Secure the sidelite to the header with the #10 screws provided after feeding the safety beam wires into the header and making the connections. Additional screws can be installed through the vertical stile and into the jamb before the sidelite is glazed for full security on a fixed panel unit as shown above.





SLIDING DOOR INSTALLATION

Position the door so that it will panic to the exterior of the building when broken out. Install the door portion of the bottom guide in the pivot stile of the door using four 10-32 screws provided, and one 1/4-20 set screw to lock guide pin at proper height.

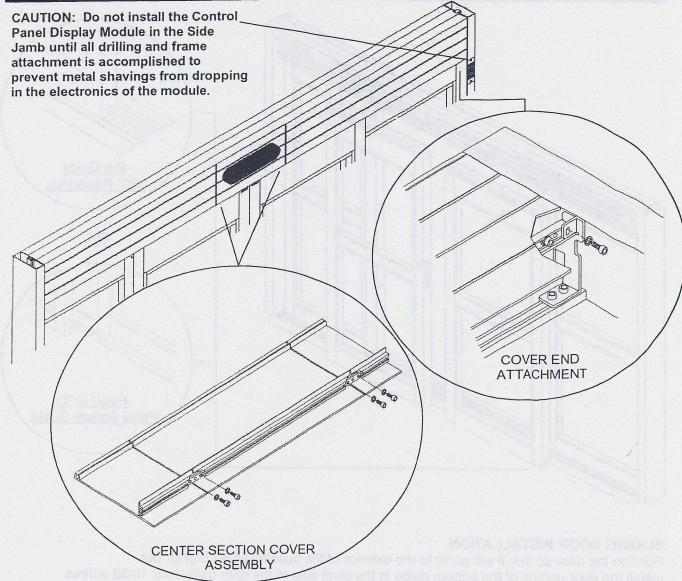
Position the door portion of the bottom guide into the guide rail or the pin guide track (depending on the type bottom guide used).

Place the door so that the slots in the hanger catch rail are lined up with the 5/16" tapped holes in the door carrier brackets. Thread the two 5/16"-18 x 1-1/4" hardened hex head hanger bolts with the flat washer and split washer through the slots into the door carriers. Tighten the hanger bolts until the door does not sag, but do not tighten all the way.

Adjust the door height (floor clearance) by adjusting the 1/4-20 hex head bolts above the slots in the top catch rail.

Once proper height has been adjusted insure there are no gaps between doors or door and jamb from top to bottom. It may be necessary to readjust height adjustment screws. Complete by tightening the hanger bolts.





ACCESS COVER ATTACHMENT

If the unit is a bi-part, there will be a short center section that will be held in alignment to the RH and LH covers with two nut plates and four 10-32 Allen cap screws with washers. To remove RH or LH cover, loosen the screws and slide the nut plates with screws to the center section, allowing removal. At either end of the unit, please find a 10-32 Allen cap screw with washer to remove completely, for it attaches through the header to jamb bracket. (See views above)

WIRING THE DOOR

The safety beams were covered in the previous section. For sensors, refer to the installation instructions provided with the sensor and the enclosed wiring diagram. The Control Panel is connected to the microprocessor control with a four conductor cable.

COMMISSIONING THE DOOR

Refer to the enclosed instructions for commissioning.



record-usa

5100 Series Sliding Door Installation Instructions

To increase the "lift" of the breakout mechanism and prevent the door from dropping when broken out, perform the following instructions: 1. Insure the glass is blocked properly and in the locations shown at right. Please see location of Glass Jacking Screw to adjust and aid in blocking and preventing the door from dropping when "SX" Panel is in breakout. Glass Jacking Screw 2. Breakout the "SX" Panel 6"-8" as shown. Eor brober suppor dises should be plocked at these 3. Using a 5/32" Allen hex wrench, loosen the two 1/4-20 Button Head socket cap screws located on the back of the vertical pivot stile locations. 18" from the top. 4. Insert a 3/16" Allen hex wrench in the center hole between the two screws and tighten the concealed cap screw clockwise until snug. 5. Using your foot, apply force to the pivot stile below the screws in the direction of the lock stile, lifting the lock stile and the front of the For proper support panel. plocked at these 6. Place a shim/wedge under the lock stile to remain elevated & re-tighten the two 1/4-20 locations. Button Head screws. Note: Do not over tighten as this may cause distortion in the aluminum stile. 7. Remove shim/wedge and check for adequate To adjust the force required to initiate a breakout, STEP 6 locate the ball catch at the top of the vertical lock stile and rotate it counterclockwise to increase the force required. STEP 5

11

10/05



Series 5100 - Remote Control of Door Operating Mode

Enter the *parameter adjust* mode at the operator control module and, using the Display control panel, scroll down to and select the "Control Panel" parameter. Select "Mech. Panel", scroll down to and select "Standard 1Way" (factory default is "disabled"). Exit parameter adjust mode. The door operational mode will now be "Off" until a jumper is placed between terminals 15 and 16 on the operator control module.

Remote Control of Automatic / Exit Only modes only -

A single set of dry contacts (rated 0.2A minimum) is required and connected between terminals 15 and 17 on the operator control module. When the contact is open, the door will be in "Automatic" mode; when the contact is closed, the door will be in "Exit" only mode, and the exterior sensor (connected to terminal 3) is disabled when the door is fully closed. As required by code, the exterior sensor will be active when the door is open &/or closing.

Remote Control of Automatic / Exit Only / Open / Off (or Locked) modes -

Two sets of dry contacts are required. One set will be connected between 15 and 17 as above, and the second set will replace the jumper between 15 and 16. The following table lists the *door operational* mode as defined by the contacts:

Mode	Contact 15/16	Contact 15/17
Off	Open	Open
Automatic	Closed	Open
Exit Only	Closed	Closed
Full Open	Open	Closed

If the door has a Fail Secure automatic lock, the door will be locked when in the "Off" mode.

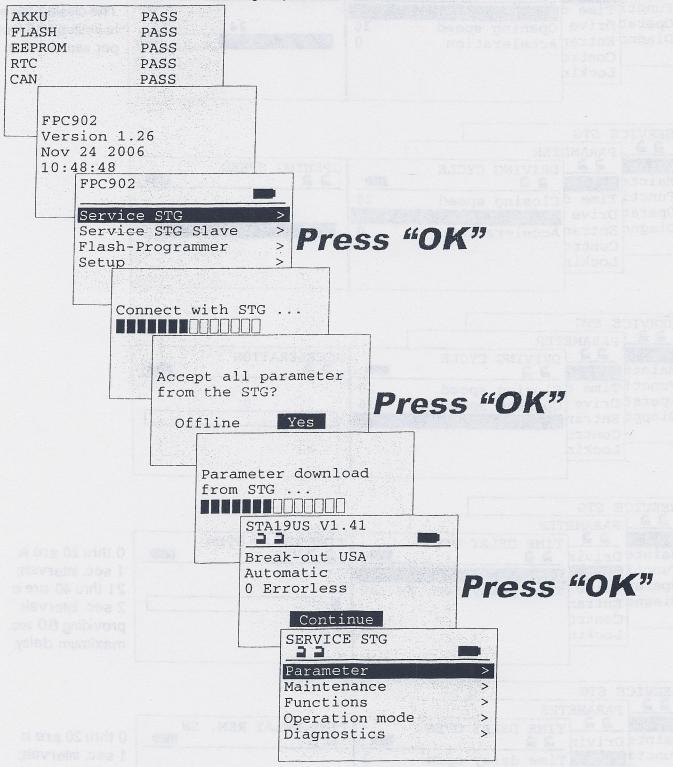
If the door has a Fail Safe automatic lock, the door will not be locked in the "Off" mode. This can be changed from "Off" to "Lock" (locking the Fail Safe lock) by changing an additional parameter. Enter the parameter adjust mode at the operator control module and, using the Display control panel, scroll down to and select the "Control Panel" parameter. Scroll down to and select the "Display Panel", then scroll down and select "Keyboard". Change the setting from "OFF-Mode" to "Locked Mode". Exit the parameter adjust mode. "Off" will now be replaced with "Lock" when the Off button is pressed, or when the above contacts are opened. When using "Lock" mode in place of "Off" mode, when the Off button is pressed (or the above contacts opened), the door, if not closed, will always drive closed then lock. This is also true if using "Lock" mode with a Fail Secure automatic lock.

Note: Priority between the remote contacts and the Display control panel follows a safety / security tier. If either is Off (or Locked), the door will be "Off" ("Lock"). If the remote contacts are set for Automatic mode, the Display control panel has full functionality. If the remote contacts are set for Exit Only, only the Display's Off and Exit buttons function. If the remote contacts are set for Open, only the Display's Off, Exit, and Open buttons function.

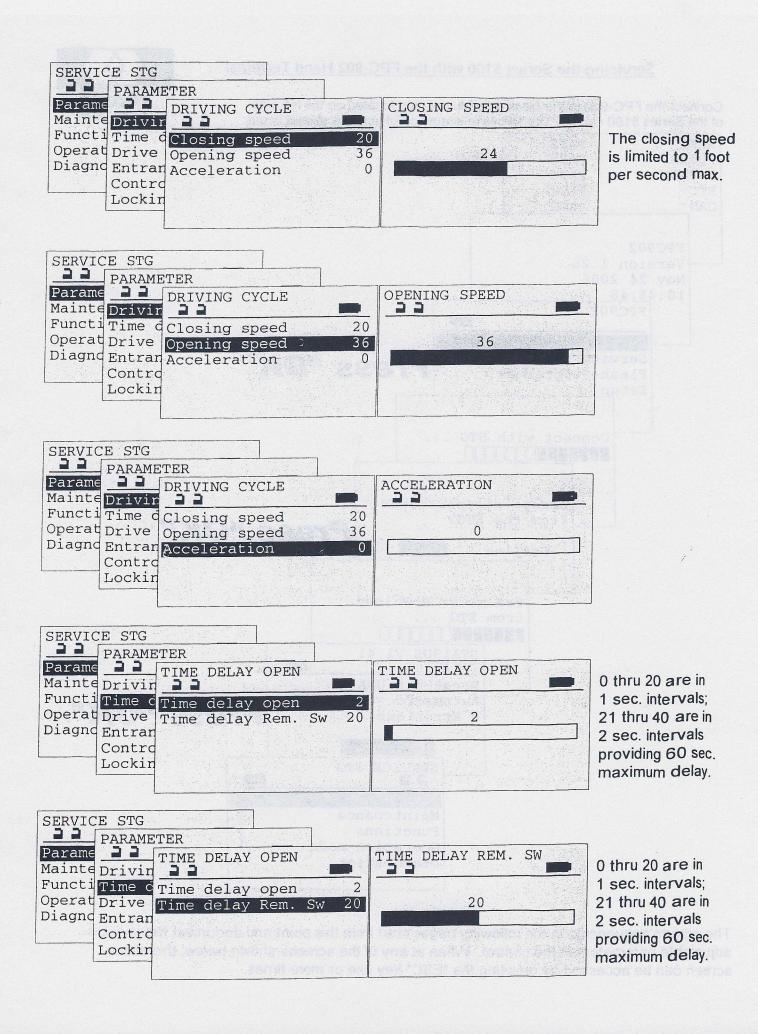
Servicing the Series 5100 with the FPC-902 Hand Terminal

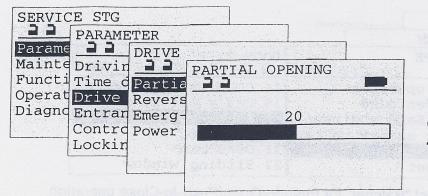


Connect the FPC-902 to the black 4 conductor plug located on the left side of the Series 5100 control. The following sequence of screens should occur.

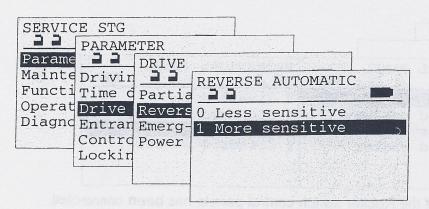


The screen sequences on the following pages start from this point and document the various adjustable parameters in the control. When at any of the screens shown below, the above screen can be accessed by pressing the "ESC" key one or more times.

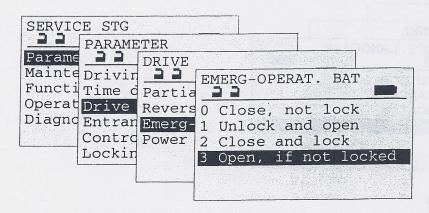


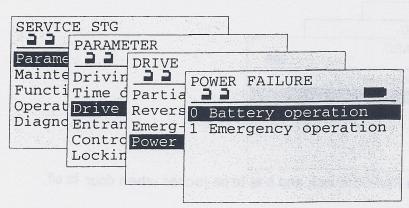


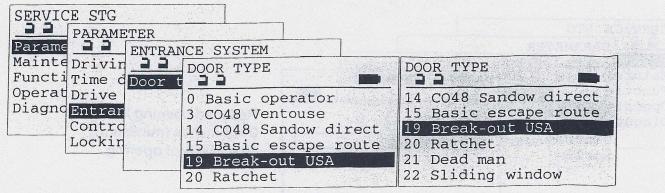
Reduced opening limits: 0 = 8 inches (minimum); 40 = 100% of opening.



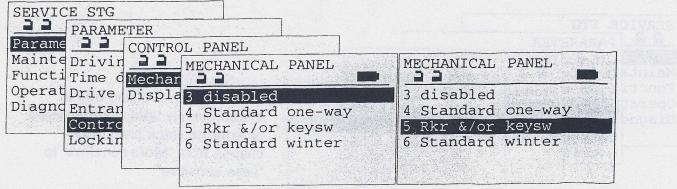
If the door is reversing due to extraordinarily tight weather seals or extreme stack pressures, change from "More sensitive" to "Less sensitive".



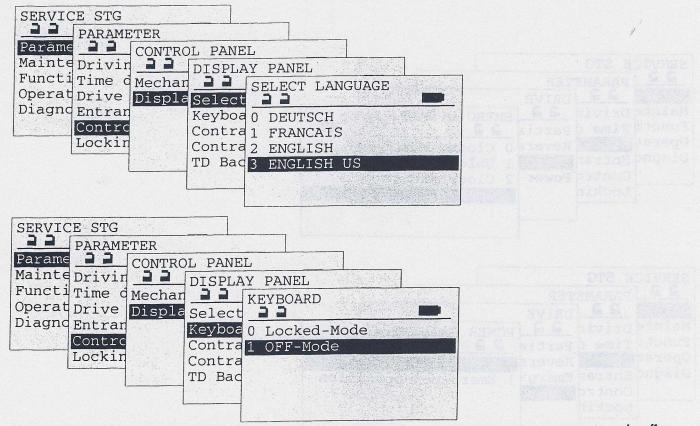




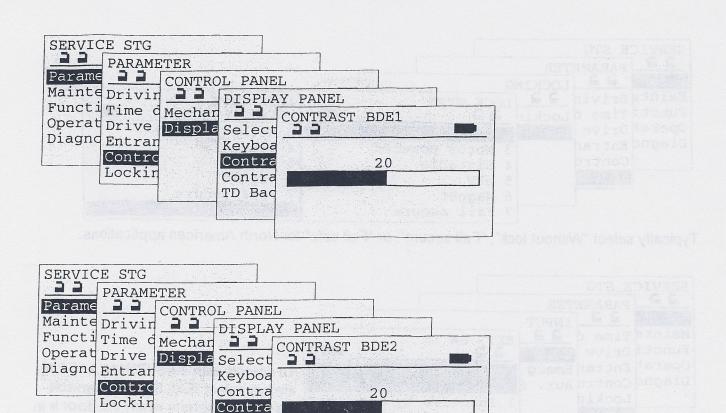
Typically select "Break-out USA"; select "Ratchet" for Push-to-Open/Push-to-Close operation.

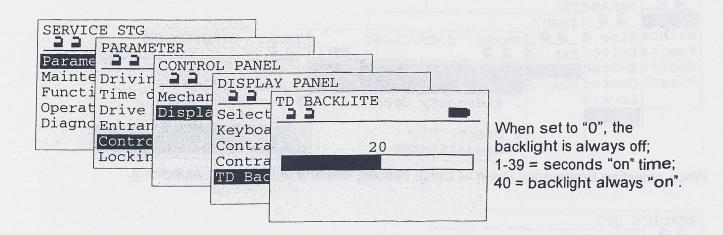


Typically select "disabled" unless one of the Rocker switch control panels has been connected.

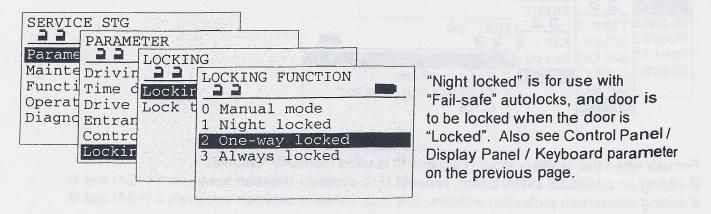


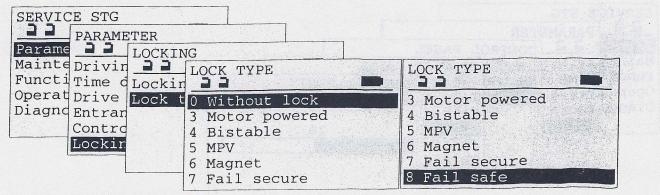
Typically select "OFF-Mode" unless using a Fail-Safe lock and it is to be locked when door is off.



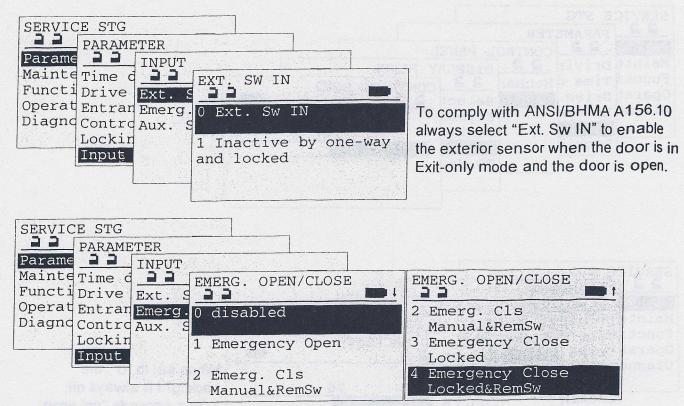


TD Bad

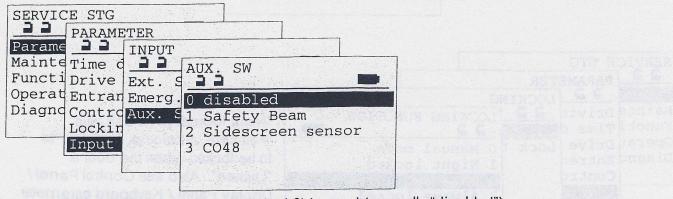




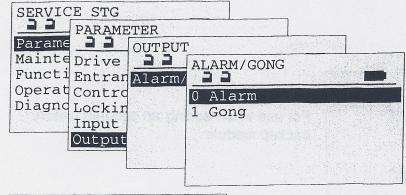
Typically select "Without lock", "Fail secure", or "Fail safe" for North American applications.



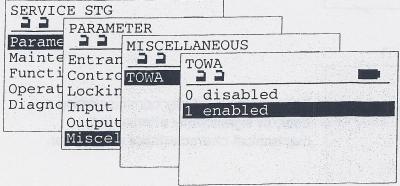
When selecting Emergency Open or Close options, use one of the above selections.



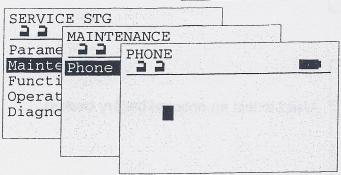
For use when the auxiliary input (Terminal 6) is used (normally "disabled"). If adding an additional safety beam, connect N.C. contacts between terminals 5 (+24) and 6. If adding sidescreen protection sensors, use N.C. contacts between terminals 5 (+24) and 6.



Determines what the auxiliary contacts (Terminals 8, 9, & 10) will respond to: "Alarm" is response to any abnormal door status (except "Obstruction"); "Gong" is response to interruption of the safety beams when the door is open; the contacts are momentarily switched every 10 seconds.

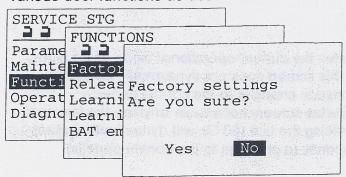


If the door-is in "Partial Open" mode, enabling TOWA will provide full door opening if traffic approaches on both sides, or occurs for more than 10 sec.

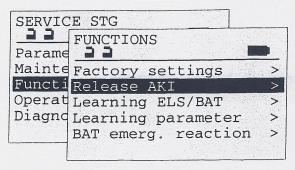


This parameter is used to replace the factory telephone number with a custom telephone number. This number will be momentarily displayed when the unit is switched from "OFF" mode, and will periodically flash when an Alarm screen is displaying. Removal of a custom number will reinstate the factory 800 number.

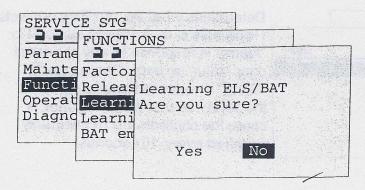
The following screen sequences are not used to modify parameters, but are used to reset various door functions as described.



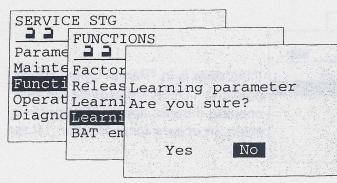
When selecting "Yes" and pressing "OK", all parameters are reset to the factory settings.



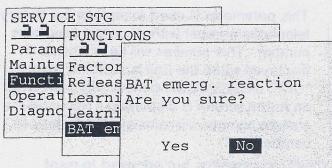
Selecting "Release AKI" and pressing "OK" will simulate an actuation from the Interior Sensor.



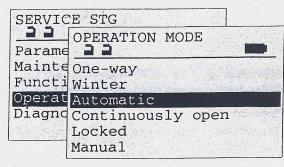
For use when adding an optional battery backup module.



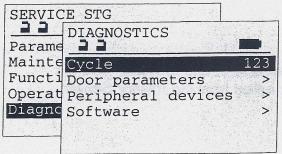
For use when initially commissioning a door, or significantly altering the mechanical characteristics of the door.



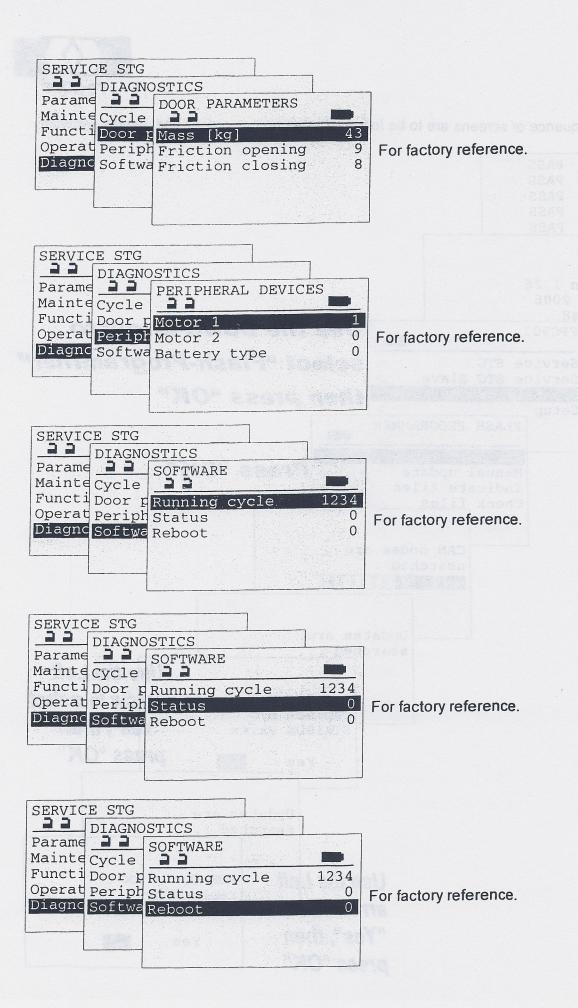
Used to test an optional battery backup.



Indicates the current operational mode of the door. Note this screen does not dynamically update in response to changes to the control panel. The Status screen, accessible anytime the terminal is servicing the unit (STG), will dynamically update in response to changes to the control panel(s).



Indicates the total number of door cycles.





The following sequence of screens are to be followed when updating door and display software.

