

STANLEY®

Automatic Swinging Door Systems

Operation and Maintenance Manual

Including:

Magic-Force™, Magic-Swing™ and Magic-Access™

Contents

Section	Page
Caution Statement	2
To Our Customers	3
Service Availability	3
Limited Warranty	3
Compliance with Industry Standards	3
Functional Description	4
Operation and Daily Maintenance.....	5
Typical STANLEY Swing Door Decal Application	6
Typical STANLEY Low Energy Swing Door Decal Application.....	7
Troubleshooting and Hints	8
Swing Door Drawing	9
Swing Door Terminology	10
Daily Safety Check	11



CAUTION

Improperly Adjusted Door can cause injury and equipment damage.

- Inspect door operation daily using safety checklist in Owner's Manual and at door.
- Safety devices should be in place and operational.
- Have door adjusted as recommended in Owner's Manual if necessary.
- Have door inspected at least annually by a STANLEY AAADM-certified technician.

*In this manual, the word "Caution" means that injury or property damage can result from failure to follow instructions.

*The word "note" is used to indicate important steps to be followed or important differences in equipment.

To Our Customers:

The purpose of this Owner's Manual is to familiarize you with your automatic door system. It is essential that you "know your system", how it operates, and that you recognize the importance of maintaining your door system in compliance with the industry standards for safety.

It is your responsibility, as owner or caretaker of the equipment, to inspect the operation of your door system on a daily basis to insure that it is safe for all users of the door.

This manual will provide you with a description of the operation and maintenance requirements of your door system. It also provides the instructions for the "Daily Safety Check" procedure. It is recommended by STANLEY Access Technologies LLC that the "Daily Safety Check" be performed at least once a day and after any power outage. Occasional observance of the doors as they are in use is also recommended.

Should the door fail to operate as prescribed in the "Daily Safety Check", or at any other time for any reason, do not attempt to repair or adjust the door. Discontinue operation of the door and call for service by a STANLEY AAADM-certified service technician. Our technicians are trained to service your door in accordance with applicable industry safety standards.

Service Availability:

STANLEY Access Technologies LLC products are distributed through a nationwide network of STANLEY-owned branch locations and authorized distributors that specialize in Sales, Installation and Service of automatic door systems. Our Service programs offer you ongoing support such as regularly scheduled preventive maintenance, or if required, emergency service 24 hours a day, 365 days a year. No matter where you are located, our technicians are only a phone call away. Should you need service on your door system **our customer support hotline is available 24/7 at 888-DOOR-444**.

Limited Warranty

STANLEY Access Technologies, LLC a Division of The STANLEY Works, warrants the installed door system against failure due to manufacture of substandard material or workmanship for one-year beginning on the completed date of installation. Please review your Certificate of Warranty Agreement for your full Warranty.

Compliance with Industry Standards

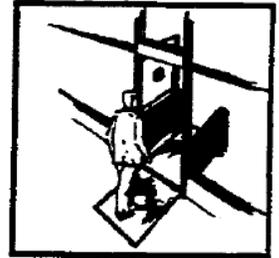
Your door system was designed to the latest operating and safety standards as prescribed by ANSI/BHMA 156.10 and 156.19 and UL® (Underwriters Laboratories) 325 requirements. It is important that:

- Your door system be maintained in compliance with the standards of the industry.
- Proper decals and labels be applied and maintained on your doors. If decals have been removed or cannot be read, request that the labels be replaced when calling for service.
- Safety devices are checked by a trained technician annually and each time a door is serviced.

Functional Description

For years, STANLEY swing door operators have set the standard for high-volume and high-performance. Today, the Magic-Force™, Magic-Swing™ and Magic-Access™ operators combine this tradition of excellence with the latest in material and electronic technology to give you the most advanced swing door operator made.

The electro-mechanical design on the Magic-Force™, Magic-Swing™ and Magic-Access™ operators convert electrical energy directly into mechanical motion. Their permanent magnet DC motor, ball screw actuator and high-strength steel rack and pinion gear system combine to provide controlled, smooth and extremely quiet door operation. The control box features an advanced solid-state design with no moving parts and a motor control system to minimize heat for increased electronic component life.

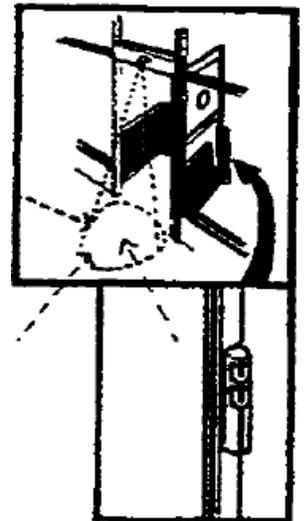


The Magic-Force™, Magic-Swing™ and Magic-Access™ operators are power-open, spring-close operators that have built-in emergency door release capabilities with controlled swing door return. Spring energy closes the door, with the speed controlled by using the motor as a dynamic brake.



In case of power failure, the Magic-Force™, Magic-Access™ and Magic-Swing™ operators function as manual door closers in the direction of swing. Magic-Force™ and Magic-Access™ are also available with a light-duty spring for applications that require a lower force for manual exit.

The Magic-Force™, Magic-Swing™ and Magic-Access™ operators can be used with controls that STANLEY offers including activation sensors (matless controls), push plates, pull cords, wireless and wired push plates and access control.



The safety system uses a combination of active infrared technology and microprocessor technology to provide maximum user safety at all times without the use of mats. Door-mounted sensors continually monitor the swing path area. The microprocessor interprets this information and prevents the door from opening and closing, if any pedestrians or other obstructions are present. The microprocessor and sensors are tuned in to establish safety zones by the trained service technician.

An activation sensor and/or wall switch is used as an activating device with the system. The entire system is programmed for “fail-safe” operation.

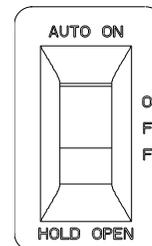
An automatic door is a complicated assembly of mechanical, electrical and electronic components that make up a system that you depend on to provide convenience and safety to all users. Lack of maintenance on your door equipment can have significant implications on the cost of ownership. STANLEY's total service and properly scheduled maintenance will extend the life of your equipment and keep it performing to its full potential.

Operation and Daily Maintenance

The Magic-Force™ and Magic-Swing™ operators have been equipped with a power and function switch assembly for customer convenience. The switch assembly is mounted either on the underside of the header or in some cases, on the jamb of the stationary panel.

The functions of the switch are:

- AUTO ON - Allows the door to function automatically
- OFF - Switch should not be turned off unless the door is being serviced
- HOLD OPEN - Allows the door to remain in the full open (hold open) position.



Magic-Access™ only utilizes a power “on/off” switch.

The Magic-Force™, Magic-Swing™ and Magic-Access™ operators have been designed with user safety as a priority. A built-in emergency release feature allows the doors to be manually operated in either direction in the event of an emergency or power failure. While the door is in the emergency release mode, a disconnect switch will disable the automatic door system. The doors will not function automatically unless the panels are closed completely to their normal position.

General housekeeping maintenance should be provided by the owner or responsible person in charge. Check the door area for tripping or slipping hazards. Check that guide rails are firmly anchored. There should be no bulletin boards, literature racks, merchandise displays, or other attractions in the door area where people could possibly be hit by the door. The track assembly must be maintained free of debris. It is recommended that any debris in the door track be vacuumed out.

Inspect the finger guard to see that it is secure and in good repair. Check all door panels for broken or cracked glass. Panels should be made of a safety type material. The door glass can be cleaned with commercial glass cleaners. Clean the lenses of the sensors with a dampened cloth. Do not spray cleaners directly at the lens.

Inspect the door(s) to make sure the decals are properly displayed. See diagram on page 6.

A “Daily Safety Check” of the doors should be completed at a minimum of once a day. Please see the attached “Daily Safety Check” list for procedures. When performing a “Daily Safety Check”, pay attention to how your door system works. If you encounter a difference in performance, whether it be mechanical or sensor issues, discontinue the door operation and call for service.

TYPICAL STANLEY SWING DOOR DECAL APPLICATION

ONE WAY TRAFFIC

Swinging doors serving only ingress or egress. An "ARROW" sign must be visible from the approach side and an international "DO NOT ENTER" must be visible from the non-approach side. Locate and affix the decals on the door 58" +/- 5" from the finished floor. Place "AUTOMATIC DOOR" decal directly below both signs.

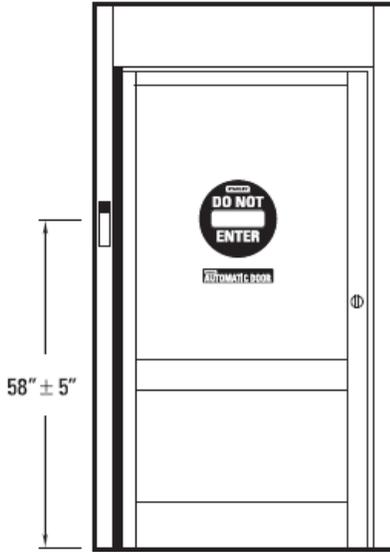
KNOWING ACT DOORS

The door shall have signage that states "ACTIVATE SWITCH TO OPERATE" along with other signage. The "ACTIVATE SWITCH TO OPERATE" sign(s) should be on the side(s) of the door having the Knowing act switch.



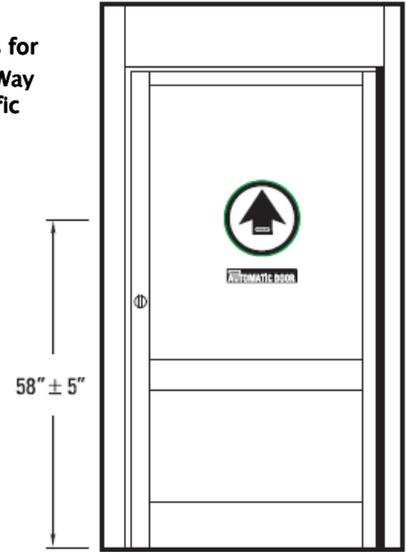
TWO WAY TRAFFIC

Swinging doors serving both ingress and egress must be marked with "CAUTION AUTOMATIC DOOR" decal visible from the swing side of the door. Locate and affix the decals on the door 58" +/- 5" from the finished floor. An "ARROW" sign shall be visible from the approach side of a swinging door mounted on the door also at a height of 58" +/- 5" from the finished floor.



Non-Approach Side

Decals for One-Way Traffic



Approach Side - IN/OUT



Swing Side

Decals for Two-Way Traffic



Non-Swing Side - IN/OUT

DECALS

A "Daily Safety Check" decal has also been provided as a reminder that your automatic swing door equipment must be checked daily for safe operation. Affix this decal to the inside jamb tube. For egress doors with key-operated locking devices on the egress side, signage stating "THIS DOOR TO REMAIN UNLOCKED WHEN THE BUILDING IS OCCUPIED" must be posted on or next to the door on the egress side. This decal is not supplied as part of the decal kit.

P/N 713834

THIS DOOR TO REMAIN UNLOCKED WHEN THE BUILDING IS OCCUPIED



P/N 511164



SIDE 1



SIDE 2

P/N 511165



SIDE 1



SIDE 2

TWO SIDED P/N 410796



SIDE 1 and SIDE 2

TWO SIDED P/N 413743



SIDE 1 and SIDE 2

AUTOMATIC DOOR

P/N 412615

P/N 412266

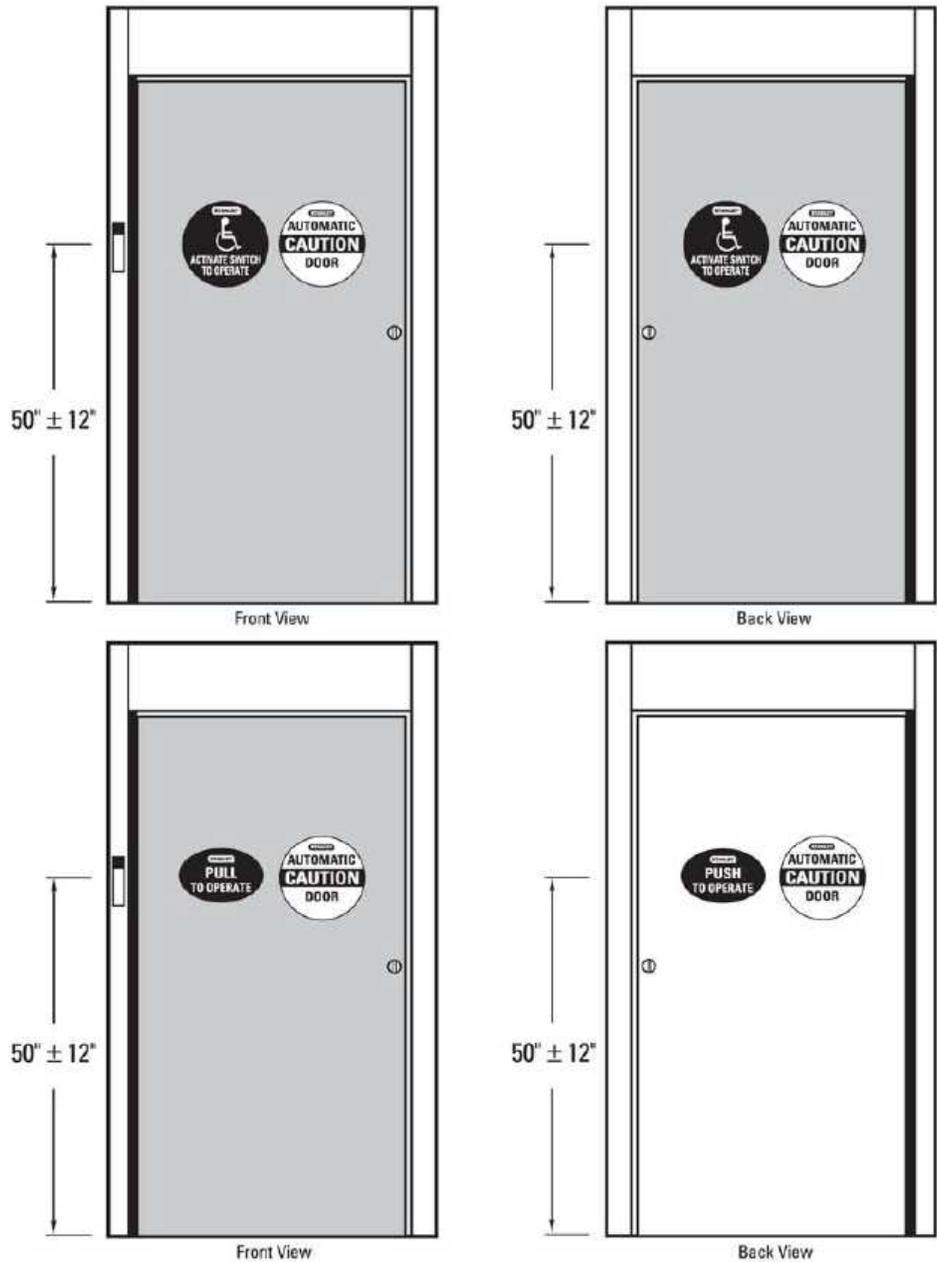
TYPICAL STANLEY LOW ENERGY SWING DOOR DECAL APPLICATION

All low energy doors shall be marked with a sign, visible from both sides of the door, with the words **"CAUTION AUTOMATIC DOOR"**. The sign shall be mounted on the door at a height $50" \pm 12"$ from the floor to the center line of the sign.

When a separate wall switch is used to initiate the operation of the door operator, the doors shall be provided with signage that states **"ACTIVATE SWITCH TO OPERATE"** along with other required signage. The **"ACTIVATE SWITCH TO OPERATE"** sign(s) should be on the side(s) of the door having the Knowing Act switch.

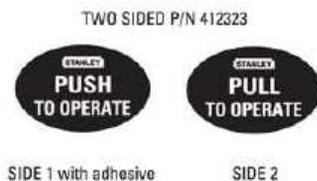
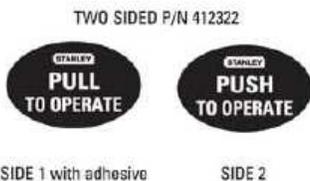


When door motion is used to initiate the operation of the door operator, the doors shall be provided with the message **"PUSH TO OPERATE"** on the push side of the door and **"PULL TO OPERATE"** on the pull side of the door.



DECALS INCLUDED

A **"Daily Safety Check"** decal has also been provided as a reminder that your automatic swing door equipment must be checked daily for safe operation. Affix this decal to the inside jamb tube.



P/N 412266 OR
P/N 417616 (D-4990)

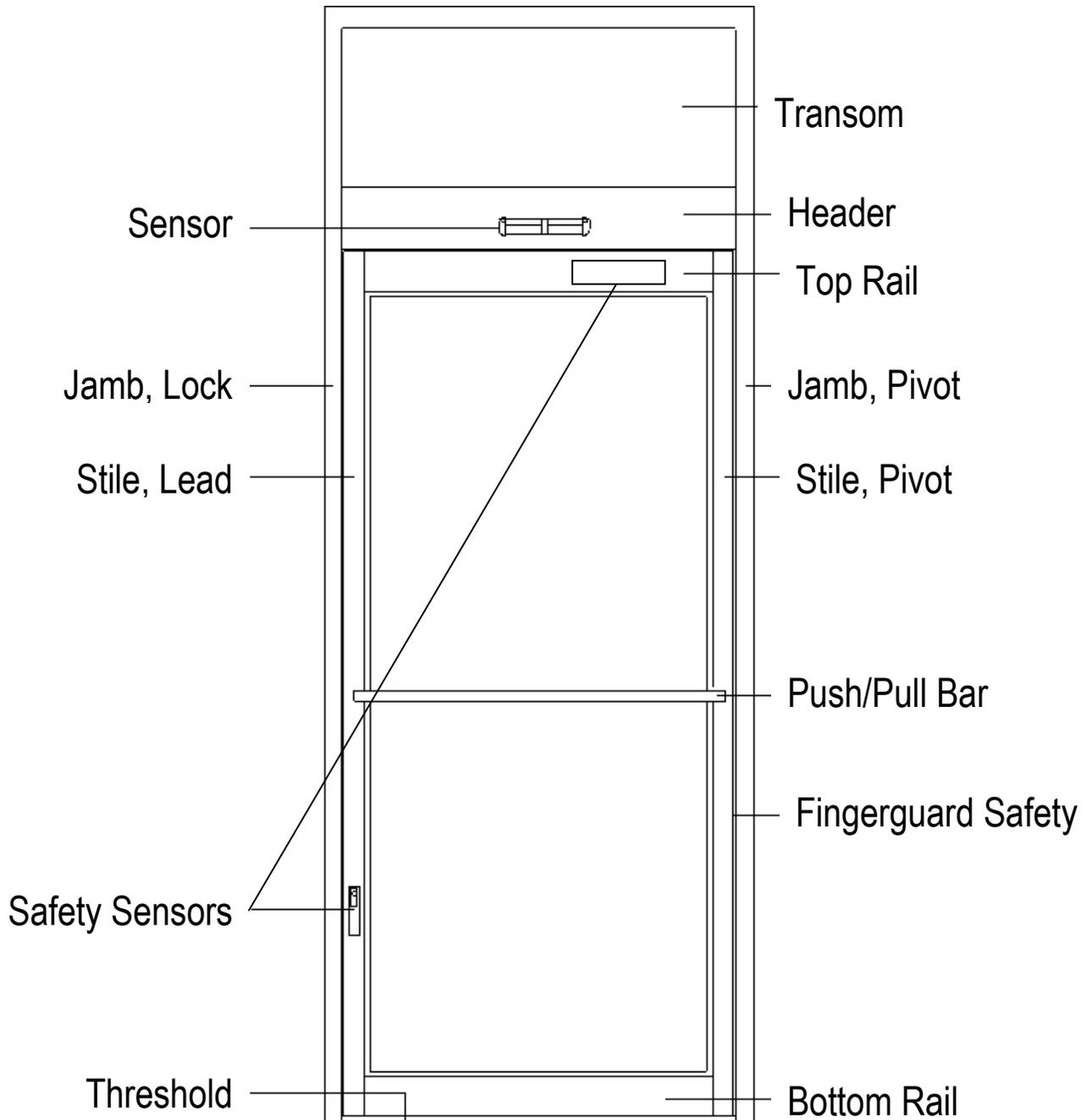
Troubleshooting and Hints

PROBLEM	CAUSE	REMEDY
Door will not open	No power Door locked Jamb switch off Power failure	Turn on circuit breaker Unlock door Turn switch on Turn on/off switch to "off" position for 15 seconds. Turn switch to "on" position Reset panel
	Door(s) broken out	Call for service if all the checks have been made and the door still does not open.
Door will not close	Obstruction Bad Activation Sensor	Remove obstruction in swing path Move the door panel manually. Door must move freely Turn off power – does the door close? <i>If not – call for service.</i>
Door opens too far	Broken door stop	<i>Call for service</i>
Door opens too soon or too late	Sensor not working	<i>Call for service</i>
Door slams at full open or full close	Door not adjusted	<i>Call for service</i>

NOTES:

1. Turn off door if not working properly and call for service – **1-888-DOOR-444**
2. A "Daily Safety Check" of the doors should be completed once a day. Please see attached "Daily Safety Check" list for procedures.
3. STANLEY recommends a semi-annual inspection/adjustment for your automatic door equipment to optimize its performance and to extend the lifetime of your purchase.

SWING DOOR DRAWING



SWING DOOR TERMINOLOGY

<u>Active Door</u>	The door that includes the locking mechanism.
<u>Bi-Swinging Pair</u>	A simultaneous pair of swinging doors.
<u>Breakout</u>	The ability to allow emergency egress through the door in a manner different from its normal operations – an IN door swinging out.
<u>Butt Hung</u>	Swinging door on butt hinges.
<u>Center Pivot</u>	Condition of pivoting a swing door about a point on the centerline of the door panel, 3 ¾” from the pivot jamb. Required for breakout.
<u>Concealed Application</u>	Operator and casing contained within framing system.
<u>Door Arm</u>	Member which mechanically links operator output spindle to door. May be single piece located in the rail of the door (concealed application), or complex device utilizing connecting rods and slides (visible application).
<u>Double Egress</u>	A pair of swinging doors swinging simultaneously in opposite directions.
<u>“In” Door Application</u>	Door swings toward ingress of building.
<u>Left Hand Operator</u>	As the user approaches the door from the push side, the door swings to the left.
<u>Offset Pivot</u>	Condition of pivoting a swinging door off of the centerline of the door panel.
<u>“Out” Door Application</u>	Door swings toward egress of building.
<u>Reveal</u>	Dimension from surface upon which operator will be mounted to face of door being automated. Often applying to visible, swinging applications.
<u>Right Hand Operator</u>	Opposite to left hand (see left hand operation)
<u>Side Clearance</u>	Distance from the face of the door in the full open 90 degree position to the outer most point on the operator linkage.
<u>Swing Clear</u>	Butt hinge that allows the swinging panel to swing clear of the jamb allowing more clear door opening.
<u>Visible Application</u>	Operator contained in a case, surface-mounted to the door frame.

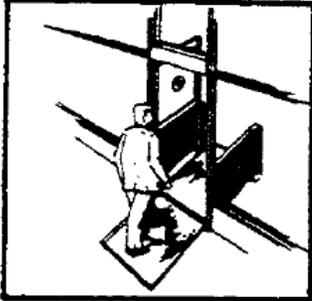
DAILY SAFETY CHECK

For Your Customers' Safety and Your Own Protection

Perform This Safety Check on Each Automatic Swinging Door

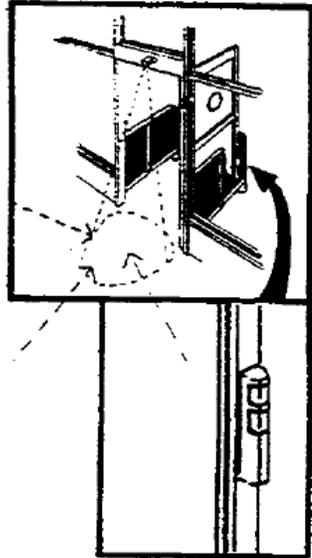
Daily

And After Any Power Outage or Generator Test



SWING DOOR SYSTEMS WITH MAT CONTROLS

1. Step on the "opening" or "activating" mat several times in different spots. Door should swing open smoothly to full open position and stop without impact.
2. Step through the doorway onto the mat on the other side and stand on several different spots for about ten (10) seconds in total. Door should remain open.
3. Step off the safety mat. After a brief time delay, the door should close to the fully closed position and stop without impact.
4. With the door fully closed, step on the "safety" mat. Have a second person step on the "opening" mat. Door should remain closed as long as you remain on the safety mat.
5. Check the mat molding and threshold strip. It should be complete and secured with all required screws.

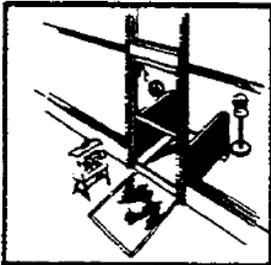


SWING DOOR SYSTEMS WITH SENTREX™ OR OTHER RELATED MATLESS ELECTRONIC SENSORS

When electronic sensors are used, the detection zones will be similar to those created by "opening" and "safety" mats, but they will be invisible to the eye. A walk-test of the zones will give an indication of proper sensor operation.

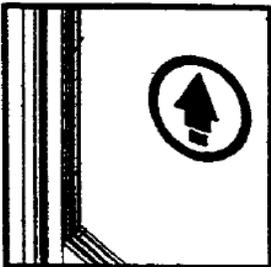
1. Walk towards the door from several angles. When you are about five feet from the door, you will enter the "opening" or "activating" zone. The door should swing open smoothly to the full open position and stop without impact.
2. Walk through the doorway into the "safety" zone. While standing in the "safety" zone, the door should remain open.
3. Walk out of the safety zone. After a brief time delay, the door should close to the fully closed position and stop without impact.
4. With the door closed, walk into the "safety" zone (the area the door swings through while opening). Have a second person enter the "opening" zone. The door should remain closed as long as you are in the "safety" zone.
5. STANLEY matless electronic sensor include "Stall Logic", to test the STANLEY matless electronic sensor including "Stall Logic", stand just outside of the safety zone. Have a second person walk into the "opening" zone. As the door starts to move, enter the safety zone. The door should come to an immediate controlled stop and stay in the "stall" position until you step out of the safety zone. When the "safety" zone is clear, the door should resume opening to the full open position.
6. For paired doors with Sentrex, each door must be checked independently of the other. Repeat steps 1 through 5 for each panel to verify individual sensor function.

If you have a problem you cannot correct, turn off the door operating equipment and call your service representative.



DOORS, FRAMES, FINGER GUARDS

1. Check the door area for tripping or slipping hazards.
2. Check that rails are firmly anchored.
3. Check all door panels for broken or cracked glass. There should be no bulletin boards, literature racks, merchandise displays, or other attractions in the door area where people could be hit by the door.
4. Door should have decals properly displayed.
5. Inspect finger guard if there is one. It should be secure and in good repair.



FOR SERVICE, CALL TOLL FREE

1-800-DOOR-444

STANLEY®