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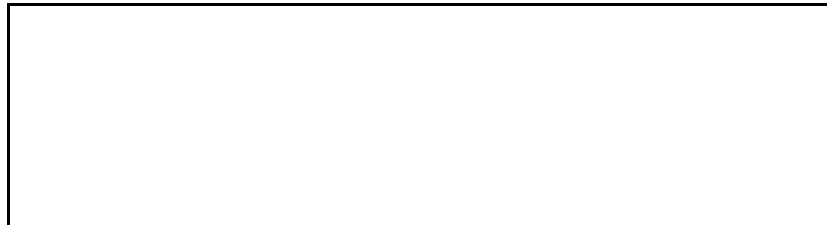
**AAADM**

American Association of Automatic Door Manufacturers

## AUTOMATIC SLIDING DOOR

### OWNER'S MANUAL

Distributed by:



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# CAUTION

**An Improperly Adjusted Door** can cause injury and/or equipment damage.

Inspect door operation daily using safety checklist in Owner's Manual and at door.

Have door adjusted as described in Owner's Manual.

Safety devices should be in place and operational.

Have door inspected at least annually by an *AAADM* certified inspector.

In the following manual, the word:

**Caution** means that injury or property damage can result from failure to follow instructions.

**Note** is used to indicate important steps to be followed or important differences in equipment.

## To Our Customers

The purpose of this manual is to familiarize you with your automatic door system. It is essential that you "know your system" 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 ensure that it is safe for use by your invitees, customers, or employees.

This manual will provide you with a description of the operation and maintenance requirements of your door. It also provides the instructions for the *Daily Safety Check*.

Should the door fail to operate as prescribed in the *Daily Safety Check*, or at any other time for any other reason, **do not attempt to repair or adjust the door**. Call an AAADM Certified service technician. These technicians are trained to service your door in accordance with applicable industry safety standards.

## Service Availability

Automatic door products are distributed through a nationwide network of authorized automatic door suppliers for sales, installation, and service.

Should you need service on your door system, consult the respective door manufacturer or its authorized representative.

## Compliance with Safety Standards

Your door system was designed to the latest operating and safety standards. In order to ensure the continued safe operation of your door, 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 are removed or cannot be read, request labels to be replaced when calling for service.
- All doors should be checked by an AAADM certified inspector at least annually.

**AAADM**, the American Association of Automatic Door Manufacturers, has established a program to certify automatic door inspectors. Through this program, the inspectors are trained to check your door systems for compliance with the appropriate version of the American National Standards Institute standard ANSI/BHMA A156.10.

## What You Should Know

Be sure that an automatic door supplier has provided the following for each door:

1. Instruction on how to conduct the *Daily Safety Check*<sup>\*</sup> (by walk-through example).
2. Location of function switches and instruction in their use.
3. Circuit breaker or main power disconnect location for each door system.
4. Number to call for service or questions about your system if you are uncertain of any condition or situation.
5. AAADM inspection form or a work order signed by an AAADM certified inspector.
6. A completed Annual Compliance Inspection label, located at the bottom of the Safety Information label affixed to the door.
7. Warranty information for each door.

**Note:** If there are any problems, or if you are unsure about the safe performance of the door, **discontinue door operation immediately** and secure the door in a safe manner. Call your authorized automatic door professional for repairs.

<sup>\*</sup>  
**Note:** AAADM Daily Safety Check videos are available. Contact an automatic door supplier or AAADM.

Automatic sliding doors are installed in a variety of combinations.

- Single, Bi-parting and Telescopic
- Sliding Door Swings out in emergency with fixed sidelite
- Sliding Door Swings out in emergency and sidelite also swings out
- One-Way Traffic or Two-Way Traffic
- Activated by Floor Mat, Sensors, or Push Switches

They always require the following safety items:

- A Safety Zone to cover the area the door travels.
- Guide Rails on the swing side of the door (unless a wall is in the same position).

## DOOR OPERATION

### Activation Switches

#### A. ON or OFF switch

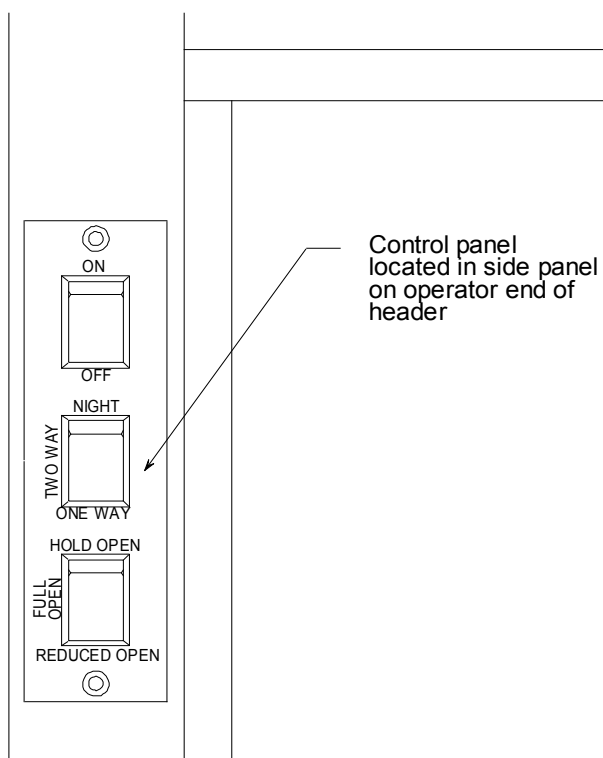
1. When the switch is in the **ON** position, all signals are accepted and the door is ready for operation.

Note: To shut off the power, turn off the circuit breaker in the building's electrical box.

2. When the switch is in the **OFF** position, the activation signal is not accepted by the control box. The OFF position does not shut off the power. The door may need to be closed manually to its full closed position if the switch is turned off in mid cycle. Gently pull on the edge of the door.

#### B. TWO-WAY, ONE-WAY or NIGHT

1. When the switch is in **TWO-WAY** position, both sensors are activated for two way traffic.
2. When the switch is in the **ONE-WAY** position, the electric lock (if equipped) will lock when the door is fully closed. The signal from the exterior sensor will not open the door. The system will still allow people to exit the building by using interior sensor. Both sensors then provide threshold protection during the door cycle.
3. When the switch is in the **NIGHT** position, the electric lock (if equipped) will lock when the door is fully closed. Neither sensor will open the door. Door activation must be generated from a wall switch or card reader. Both sensors then provide threshold protection during the door cycle.



#### C. HOLD OPEN, FULL OPEN and REDUCED OPEN

1. When the switch is in **HOLD OPEN** position, doors are held open as long as the switch remains in this position. The doors should be held open in this manner. Do not prop open the doors with any object.

2. When the switch is in FULL OPEN position, doors are allowed to open all the way.
3. When the switch is in REDUCED OPEN position, doors open to specification preset during installation. Reduced Open is used, for example, in bad weather or while air conditioning is on. The width of the opening in the reduced open mode is adjustable. Contact a qualified service technician for adjustment.

| Control Panel Switches | Option  | Function   |
|------------------------|---|--|
| Top                    | 1. ON<br>2. OFF                                 | 1. Turns the unit on.<br>2. Turns the unit off.  |
| Middle                 | 1. NIGHT<br><br>2. TWO-WAY<br>3. ONE-WAY        | 1. Limits access to the door by turning off the sensors on the door but allowing the door to be activated by a push plate, card reader or other source. Electric lock is activated if equipped.<br>2. Sets the door to open in both directions.<br>3. Sets the door to open in only one direction. Electric lock is activated if equipped. |
| Bottom                 | 1. HOLD OPEN<br>2. FULL OPEN<br>3. REDUCED OPEN | 1. Sets the door to open and remain open.<br>2. Sets the door to fully open.<br>3. Sets the door so that it does not open completely.  |

### Descriptions of Switch Functions on Rocker or Key Switches

#### IX. ACUSENSOR OPERATION

- A. Acusensors are latest in pedestrian traffic sensing technology. Acusensors cause the door to open by sending door opening signals to the sliding door control.
- B. In simple terms when power is supplied to the Acusensor, it “sees” its environment including the floor and memorizes its appearance. When the appearance changes (when someone walks into the volume), the Acusensor sends a “door open” signal.
- C. Appearance changes include:
  1. A person, cart or forklift.
  2. When common objects are left or moved into the sensing area, such as:
    - \* Carpets or mats
    - \* Boxes
    - \* Displays or merchandise
    - \* large pieces of paper
- D. If the background changes and remains constant for thirty seconds, the Acusensor will re-memorize it. The doors will remain open until the re-memorization takes place.

## Daily Safety Check (All figures and diagrams are for purposes of illustration only)

Perform the following safety checks *daily* on each automatic sliding door to ensure your customers' safety and your own protection. Perform these tests while traffic is restricted from all detection and sensing zones.

### Sensor Activation

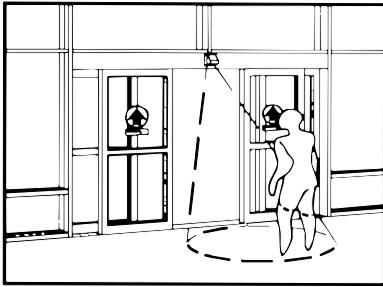


Figure 1



Figure 2

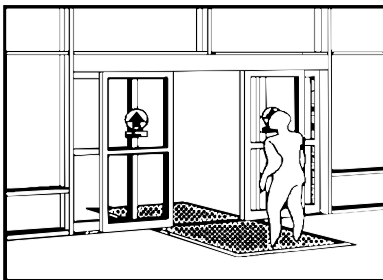


Figure 3

1. Check electronic sensor by walking toward the door opening at a moderate speed. The door should start opening when you are about four feet from the door, should slide open smoothly, and stop without impact. Repeat on other side of opening. Move slowly through the door opening (6 inches per second). The door should remain open. (See Figures 1 and 2)

**NOTE:** If your door is set up for one-way traffic, the sensor on the side not intended for approach should be active until the door is within 6 inches of fully closed. The sensor should re-open the closing door if a person is detected a minimum of 24 inches from the door.

2. Step out of the sensor zone. After a brief time delay (at least 1 1/2 seconds) the door should slide closed smoothly and should close fully without impact. Doors should be adjusted so they do not close faster than 1 foot per second.
3. Observe traffic routing to the door. Plan traffic routing so persons will approach the door straight on and not from an angle.
4. Walk parallel to the door face and towards the center of the door opening to check that the detection pattern is at least as wide as the door opening. This test should be performed within approximately 12 inches from the door face. Repeat this test in both directions.
5. Open the door. Crouch motionless in threshold for at least 10 seconds to check safety zone. The door should not close.

### Floor Mat Activation

1. Step on the "opening" (activating) mat in several places. Door should slide open smoothly and stop without impact. (See Figure 3)



Figure 4



Figure 5



Figure 6



Figure 7



Figure 8

2. Step through the doorway onto the mat on the other side. Door should remain fully open without interruption.

**Note:** If there is more than one mat on each side, each mat should be tested.

3. Step off the mat. After a brief time delay (at least 1 1/2 seconds), the door should close slowly and smoothly without impact. Doors should be adjusted so they do not close faster than 1 foot per second.

4. Check the mat molding and threshold. It should be complete and secured with all screws required.

### General Safety

Pay attention to the following general safety items and conduct checks periodically where noted.

1. Signage. Door should have decals properly displayed. There should be decals that include the statements: "AUTOMATIC DOOR" (in letters 1/2 in. high, minimum) and "IN EMERGENCY - PUSH TO OPEN". An adjacent sidelite or wall should have a "STAND CLEAR" or similar decal in the slide path of the door (See Figures 4, 5, 6, 7, and 8 for examples of some decals that may be used.). An AAADM safety information label should be affixed to the door frame in a visible, protected location
2. Closing Speed. The closing time of the door must not be less than the minimum time as shown in the following table. This closing time is taken from full open to a point six inches from fully closed. Example: If a single slide door with a nominal opening of 36 inches closes in 2.3 seconds it is too fast and must be slowed down. If it closes in 3.0 seconds it is in compliance.

| Maximum Closing Speed - 1 Foot Per Second |         |   |
|---|---------|---|
| Nominal Door Opening                      |         | Minimum Closing Time to Within 6 inches of Closed |
| Single Slide                              | Bi-Part |   |
|   | 48"     | 2 Sec   |
|   | 60"     | 2½ Sec  |
| 36"                                       | 72"     | 3 Sec   |
| 42"                                       | 84"     | 3½ Sec  |
| 48"                                       | 96"     | 4 Sec   |

3. Force. Force to prevent the door from closing should not exceed 30 pounds. This can be measured with a force gauge.





Figure 9

4. Activating Switch. (Knowing Act) Doors equipped with a manual operate switch shall, when activated, hold the door open for five seconds minimum after release of activating switch.

Doors equipped with manual activating switch shall have a decal as follows: "AUTOMATIC DOOR. ACTIVATE SWITCH TO OPERATE". The sign should be visible from both sides of the door or the side with the knowing act switch if there is only one. (See Figure 9)

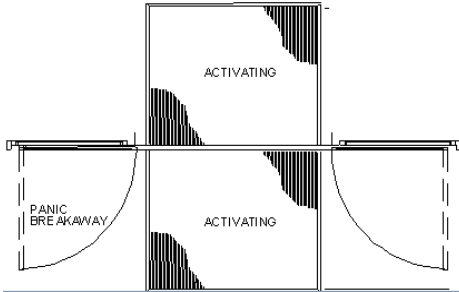


Figure 10

5. Emergency Breakout. Test by manually pushing door at lock area in direction of emergency exit. Release door. The door should either stop operation or spring to closed position. Make sure door panel or panels are properly re-latched.

If the door is equipped with breakaway sidelites, door operation should stop when sidelites are broken out. (See Figure 10).

6. Housekeeping. Be sure floor guides are kept clean and free of any debris which could prevent proper door slide.

Check the door area for tripping or slipping hazards.

Check all door panels for damage. Make sure that all hardware and overhead covers are properly secured. There should be no bulletin boards, literature racks, merchandise displays, or other attractions that would interfere with the use of the door or invite people to stop or stand in the door area.

7. Traffic Patterns. Observe traffic patterns. Plan routing so people enter and exit in a straight approach, directly towards the center of the door opening.

IF YOU HAVE A PROBLEM, TURN OFF THE DOOR OPERATING EQUIPMENT AND CALL AN AUTOMATIC DOOR SUPPLIER FOR PROMPT REPAIRS TO BE MADE.

## **Operation**

Please refer to NABCO/Gyro-Tech Installation Manual for details of operation.

## **Limited Warranty**

NABCO Entrances Inc., for its Gyro-Tech product line, provides to its purchasing distributor a limited warranty on the equipment supplied by NABCO Entrances Inc. The warranty is:

NABCO Entrances Inc. will exchange or repair, F.O.B. the NABCO Entrances Inc. plant any unit component found defective in workmanship and/or material, subject to NABCO inspection, for a period of one (1) year from date of installation. Warranty does not include field service labor. The installing contactor/distributor shall be responsible for installation and field service.

This warranty does not cover loss or damages resulting from causes beyond the manufacturer's control, or misuse, neglect, accident, wind storm, acts of terrorism or acts of God. Warranty is for normal use and service. The warranty will not apply for equipment which has been repaired or altered so as to adversely affect conditions of operation. Warranty will not obligate NABCO for damages resulting from such alterations, misuse, neglect, terrorism or acts of God.