

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* ^{*} (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.

^{*}**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 or Bi-parting
- 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 a Safety Zone to cover the area in or near the door travel.

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.

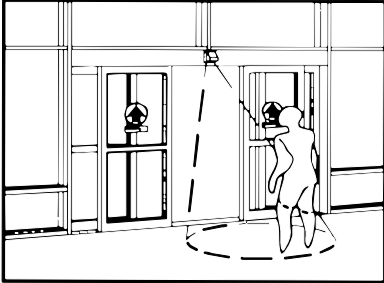


Figure 1



Figure 2

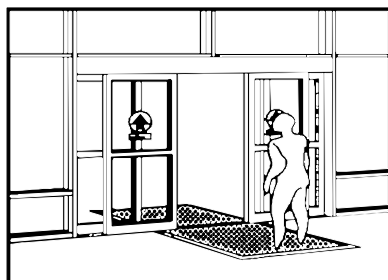


Figure 3

Sensor Activation

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

**AUTOMATIC DOOR
ACTIVATE SWITCH
TO OPERATE**

Figure 9

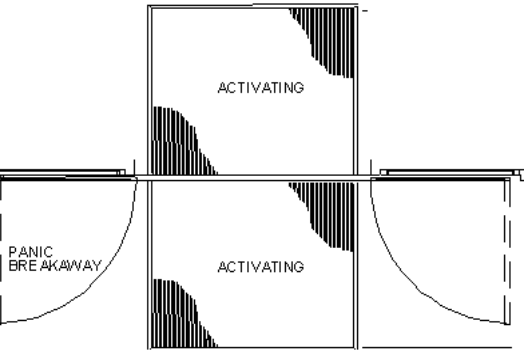


Figure 10

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)

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.

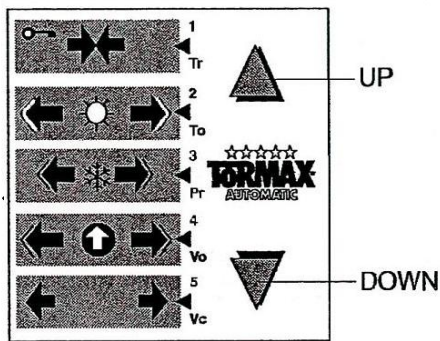
Check the door area for tripping or slipping hazards.

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 TO MAKE PROMPT REPAIRS.

Tormax FCP



OPERATING MODES

OFF – Used to de-activate the unit (sensors are turned off). The unit can still be operated via Key Switch inputs.

To use – Select OFF mode, move out of sensor detection zone and allow door(s) to close fully. Once closed, it is possible to approach and lock door(s). If opened manually the door(s) will cycle to the full open position and remain open until the detection zone is cleared. **Under no circumstance are the doors to be forced closed! Forcing doors will damage the drive belts!**

AUTO – Used when the door is intended to be fully automated (sensor activation/safety).

REDUCED OPENING – Used to minimize the loss of the inside environment. The door will operate normally, with the exception of the reduced opening, which can be set to your liking.

ONE WAY – Used to limit egress to one direction. The outside sensor inputs are de-activated. Upon activation from the inside sensor, both inside and outside sensors become active. The outside sensor will remain active until the door comes fully closed.

HOLD OPEN – Used for extended egress. The door will remain open until another mode is selected.

FREE WHEELING MODE (MANUAL OPERATION)

To enter free wheel mode press and hold either arrow for 10 seconds and release. The FCP will count by scrolling the LED in 1 second intervals. **DO NOT COUNT THE FIRST LIGHT.** The unit can be moved by hand, and fault code 43 (Free wheel mode) will flash on FCP. To reset the door press and hold either arrow for 5 sec. and release. A calibration run will begin automatically and fault code 2 (Calibration run – wait until door is closed) will flash on FCP.

ADJUSTING DOOR PARAMETERS

The following parameters can be customized with the FCP:

Tr Hold-open time (reduced opening)

To Hold-open time (full Opening)

Pr Reduced opening width

Vo Opening speed

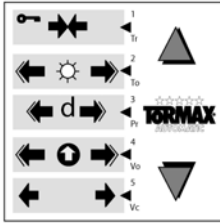
Vc Closing speed

To adjust use the following steps:

- Select the parameter you wish to adjust by pressing the UP or DOWN key to move the LED to the desired location.
- Press both UP and DOWN arrows simultaneously until LED begins to flash. Once flashing the parameter can be changed.
- Use UP/DOWN arrows to adjust desired setting. The flash frequency denotes time to complete operation. Fast flash = min. time, Slow flash = max. time.
- To save the setting press and release both the UP and DOWN keys simultaneously.

Fault Code Diagram

● flashing LED



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1	●																													
2		●	●																											
3																														
4																														
5																														

Explanation of Fault Codes

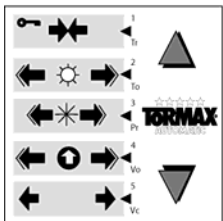
When a fault occurs, the corresponding fault code is displayed on the Function Control Panel. The Function Control Panel will flash a combination of LEDs alternating with the display of the current mode of operation.

Fault Codes 1 - 30:

- Fault Code flashes 6 times
- Current operating mode is displayed for 10 seconds

The matrix shows the LED combinations (codes) of the individual faults.

● flashing LED



	1x	43	45	49
1	●	●	●	●
2	↓	●		
3	↓		●	
4	↓	●	●	
5	↓			●

Fault Codes 43 - 49:

- Beginning with the operating mode "OFF" (LED 1), the LEDs will scroll down one after the other (named as run light) 1 time
- Fault Code Flashes 6 times
- Current operating mode is displayed for 10 seconds

The matrix shows the run light plus the LED combinations (codes) of the individual faults.

Explanation of Fault Codes & Trouble Shooting

1. Door lock faulty – possibly intervene by manual lock disengagement
2. Calibration run – wait until door is closed
3. Battery operation; mains failed
4. Light beam 1 faulty
5. Light beam 2 faulty
6. Light beam 3 faulty
7. Light beam 4 faulty
 - Possible reasons:
 - Transmitter, receiver, cable or power module faulty
 - Safety beams are not properly aligned
 - Cable is not properly shielded
8. In operating mode “OFF”; safety beam interrupted longer than 10 sec.
9. Operator type not defined or processor failure
10. “Emergency-Off” is activated – reset bush-button and select operating mode OFF”
11. Motor overheated – call for assistance
12. Power module faulty or shut down
13. No movement: encoder, cable, motor or belt faulty; possibly door blocked
14. Battery failure or signaling device faulty
15. Failure of night duty lock – possibly intervene by manual lock disengagement
16. Door in reversing mode; door encountered an obstacle – wait until door is closed
17. Panel key UP gives contact longer than 1 min. – panel or cable faulty
18. Panel key DOWN gives contact longer than 1 min. – panel or cable faulty
19. Burglary alarm – reset by means of key switch or system reset
20. Activator 1 gives contact longer than 1 min.
21. Activator 2 gives contact longer than 1 min.
22. Activator 3 gives contact longer than 1 min.
23. Activator 4 gives contact longer than 1 min.
 - Activator or cable faulty
24. Safety beam 1 interrupted for more than 1 min.
25. Safety beam 2 interrupted for more than 1 min.
26. Safety beam 3 interrupted for more than 1 min.
27. Safety beam 4 interrupted for more than 1 min.
 - Safety beam or cable faulty
 - Optical components possibly dirty
28. Key switch gives contact longer than 1 min.; possibly key turned on
29. External closing reversing
30. External opening reversing
43. Free wheeling mode
45. Support request; system needs maintenance – call for assistance
49. System is ready for automatic system configuration

Warranty Information

Limited Warranty

All new Tormax USA components are warranted to the original purchaser for one (1) year from the date of installation against defects in either material or workmanship provided the equipment has been installed by a factory trained and/or authorized Tormax USA Distributor. Although the warranty is for one year from the date of installation, any defective goods must be received at the factory within eighteen (18) months after the stamped shipping date, thus allowing up to six (6) months for shelf life and transportation times. Warranty will not be allowed on wearing components or goods abused or damaged after they leave the factory. Merchandise may not be returned unless the company has previously authorized the return in writing. Material returned under such authority will be subject to our regular inspection. Material, in warranty, found to be working properly, will be returned to the customer. Material, in-warranty, and found to be defective will be repaired or replaced at our discretion. No charges for field labor, transportation or expenses will be allowed since the Tormax USA Distributor is responsible for these. Tormax USA will not be liable for consequential damages. THERE ARE NO WARRANTIES EXPRESSED OR IMPLIED EXCEPT THOSE SPECIFICALLY STATED HEREIN

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