3M

Detection Systems

Model 3500 Series and Model 3800 Series

Operator's Manual

3M Library Systems
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060–A

78-8123–7814–5 Rev E

Section 1. Introduction

People who remove materials from libraries without authorization are much like your average patron. Library materials are usually placed within book bags, briefcases or concealed under clothing. 3M detection systems have been designed to detect the unauthorized removal of materials concealed in this manner. While a 100% electronic net does not exist, the 3M system provides effective protection and significant reduction in the loss of library materials.

With a little attention and care, your 3M system should provide you with many years of service and help to protect your library against thousands of dollars in losses.

Call our toll–free 800 number any time of day or night for service, to order supplies, or to leave messages for your sales representative:

1–800–328–0067

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Section 2. Training Your Staff

A key element of any media loss prevention effort is a successful staff training program. Your 3M™ Detection System will be much more effective with the active cooperation and participation of your entire library staff. We recommend that you periodically conduct formal training sessions, including the following elements to ensure its success:

2–1 Familiarization with the Operator's Manual

2-2 Hands-on practice marking materials with security strips and labels and desensitizing and resensitizing security strips

2-3 Review of your library's security policies

2-4 What to do when the alarm sounds

2-5 System Alarm Log

2-6 Addressing patron concerns

2.1 Operator's Manual

This manual contains the information necessary to operate your 3M Detection System, as well as supplemental information on handling alarms, ordering supplies, and training your staff. It also contains important information about security strips and circulation accessories.

Library personnel should be familiar with the manual and where to locate it so they can refer to it when necessary.

2.2 Hands-on Practice

After reviewing the Operator's Manual, your staff will benefit from actual hands-on experience with the 3M Materials Flow Management products they are expected to use. We suggest you start by demonstrating the proper techniques for each stripping procedure. You may wish to conduct the actual practice as follows:

- Set up your circulation accessories on a table along with security strips and a few bayonets.
- Let each staff member practice installing the security strips that you use:

B1 Strips	– in the spine of books
B2 Strips	– in the gutter of books
102 Strips	– in the spine of books; used when a B1 strip is too long.
103 Strips	– in the spine of books; used when a B2 strip is too long.
R2 Strips	– in the gutter of books
DCD-2 Overlays	– on compact discs
DAC-1 Cassette	– on audio cassettes
DVM-1 Strips	– on video tapes

- Let each staff member practice desensitizing and resensitizing materials with the appropriate circulation accessories.

2.3 Review Library's Security Policies

Before practicing how to respond to alarms, your staff should be familiar with your library's security policies as they relate to theft of materials. Your policy should be put in writing and kept with your training kit in addition to any procedures you already follow to keep your staff informed of security measures. It is particularly important for staff members to know what procedures your library follows when theft is suspected or when it is necessary to contact a local law enforcement agency.

A critical phase of staff training concerns the proper steps to take when the security system alarm sounds. The value of tact and courtesy when handling this delicate situation cannot be overemphasized. Your staff members should receive as much preparation as possible to make them feel comfortable. With the proper training, your staff will be more likely to deal effectively with patrons who activate the alarm.

2.4 What To Do When The Alarm Sounds

Note

The steps that follow are suggestions only. All staff should develop a complete understanding of their management's policies and follow them as directed. The response should be consistent for all patrons caught in an alarm. Staff should also be familiar with state and local laws governing patrons' rights and responsibilities.

Sooner or later, it's bound to happen. The audible alarm goes off. In multiple corridor systems, the light at the top of the panel will indicate in which corridor the alarm occurred. What you and your staff do in response to the alarm will depend on your library's policy and the laws in your community. Always follow your library's specific procedures. 3M offers these guidelines as a suggested supplement:

First, don't panic. Remain calm and courteous. Second, never accuse anyone of theft by word, facial expression, or tone of voice. You can't be positive that the person who triggered the alarm is stealing. The alarm may have been triggered accidentally, so always respond in a positive, non-threatening manner.

Scenario #1

*The library staff person **does not** desensitize a marked item when checking out the patron's materials, or the patron accidentally removes marked materials from the library.*

After asking the patron to return to the counter, a typical response might be, "Excuse me, did I forget to check out one of your items?" — or — "Did you perhaps pick up one of the library's books with your own things?" These are courteous questions, and they don't accuse the patron of theft. Be sure to smile and ask the questions in a friendly, non-threatening manner.

Process and desensitize all items again. If you discover an item that hasn't been properly checked out, **never** accuse the patron of stealing. Simply act as if the error was an oversight — it more than likely was. If the patron causes the alarm to sound again, follow the policy that your library has established for possible theft of materials.

Scenario #2

If a patron denies having any library materials after sounding the alarm, follow your library's policy for theft.

Scenario #3

If a patron bolts and runs out of the library after sounding the alarm, follow your library's policy for theft.

Responding to alarms is a sensitive situation, but can be handled confidently and effectively as long as your library has established procedures **AND** your staff has been fully trained in following them.

Unwanted Alarms

3M detection systems are virtually free of false alarms. Occasionally your detection system may alarm and your staff may find that the patron does not have unauthorized library materials. The patron may have carried items with active strips into the library. “Unwanted alarms” may be caused by active security strips on items carried into the library. If the following items have active security strips, they may cause unwanted alarms:

- Books from another library or book store
- Audio and video cassettes from video rental and music stores
- Other items from retail stores

Users of other security systems may check out, lend, or sell protected items without desensitizing the security strips. These items will cause unwanted alarms as the patron enters or exits your library. Unwanted alarms will cause concern and added work for the library staff. Unwanted alarms are generally infrequent and will vary depending on the patrons and on the proximity of your library to locations that are releasing materials containing active security strips.

Because it is not possible to distinguish between unwanted alarms and alarms with potential book loss, all responses to alarms must be consistent and follow your management policies. If patrons see no response to alarms, the detection system becomes less effective. When you decide that an active strip on an item from outside your library caused an alarm, follow these steps:

1. Explain the problem to the patron.
2. Verify that all of the patron’s library materials are properly checked out.
3. Allow the patron to exit the library.

Many patrons will learn from the experience and will not carry items that may cause alarms into the library.

2.5 System Alarm Log

The System Alarm Log is used to keep a record of alarms that occur. Refer to the end of this manual.

For each alarm, record the information on the log. Keeping this log up-to-date provides a key tool for monitoring system activity. An up-to-date alarm log provides useful information for your management and your 3M service representative.

2.6 Telling users that security is in use

Included with this manual are labels you may choose to post on or near your electronic security device, as suggested by the U.S. Food and Drug Administration.

We suggest that you post these labels both near, and directly on, your electronic security device so they are visible before an individual enters the monitored area.

Section 3. How the System Works

Your 3M™ Detection System consists of several components, including 3M™ Tattle-Tape™ Security Strips, circulation accessories, and the detection system(s).

The key to the effectiveness of your system is protecting your materials with 3M Tattle-Tape security strips. Only when materials are protected can your 3M Detection system detect someone trying to leave your library without properly checking out items.

The primary zone of detection between the lattices extends from the surface of the floor to 72 inches [1,82 m] above the floor. The electronic coverage in this area is not 100% and it will vary with the options you have and the type of 3M security strips/markers you use. However, the rate of detection from the surface of the floor to 72 inches [1,82 m] above the floor is effective to deter the loss of protected materials.

Checking out materials is accomplished using desensitizers to “turn off” the strips while resensitizers are used to “turn on” the strips when materials are returned to the library. This allows for full circulation of all library materials.

The 3M detection systems are designed to detect sensitized 3M Tattle-Tape security strips and then sound an alarm, thus preventing unauthorized removal of library materials.

It is this simple:

- Mark materials as described in this manual.
- Circulate materials using desensitizers and resensitizers.
- Listen for the 3M detection system alarm to sound when unauthorized removal of materials occurs. Of course, it is also important to watch for suspicious actions such as holding materials above the head or moving items around the lattices when passing through the detection system.

3M offers several models of detection systems to meet your library’s needs. See the next section for details on the various models you have.

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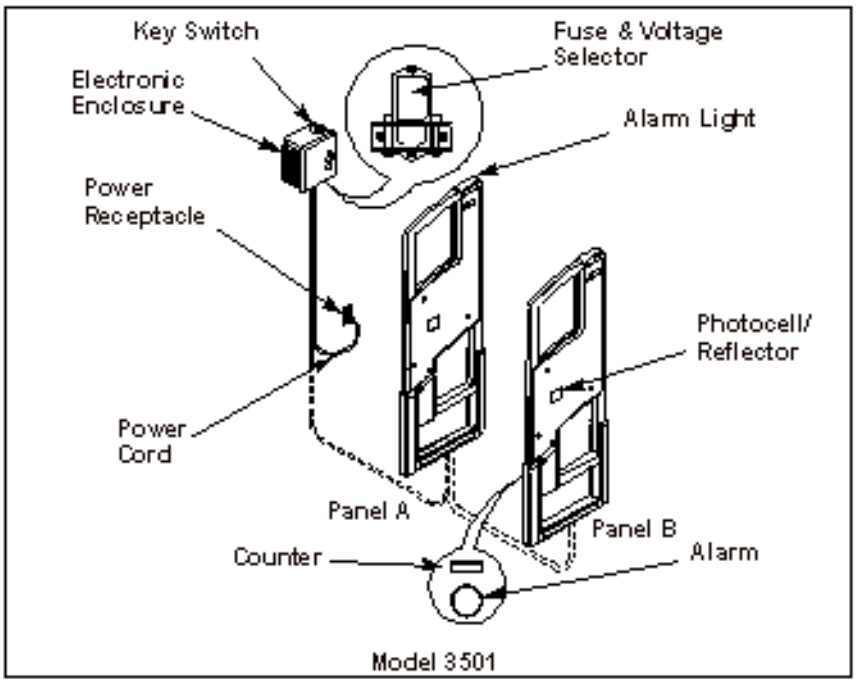
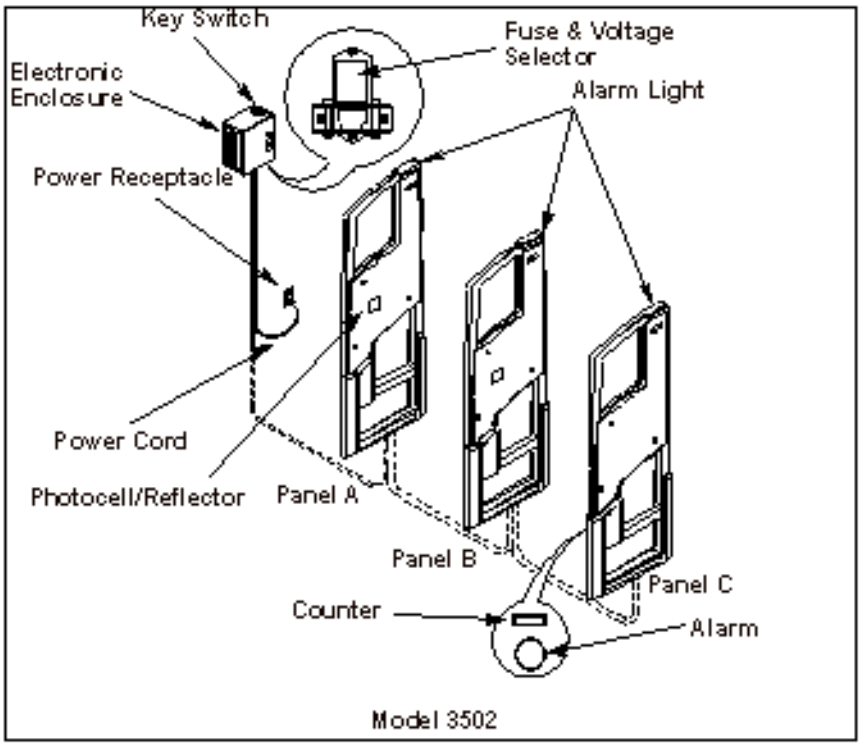
Section 4. System Configurations

4.1 Models 3501 and 3502

The Detection Panels are shown below:



Model 3501



Model 3502

4.1.1 Intended Use Statement

The 3M™ Detection System Model 3501 and 3502 (Model 3500 systems) are intended to provide security protection for library materials. The Model 3501 and 3502 detection systems ensure that no materials leave the library without being checked out.

The Model 3501 detection system is available in a one–corridor configuration consisting of two detection panels. The Model 3502 detection system is available in a two–corridor configuration consisting of three detection panels. Both systems provide audible and visible alarms, and can be combined with video security and voice alarms.

As patrons exit the library with materials to be checked out, they must pass through the Model 3501 or 3502 detection panels. An exiting patron activates the security system by blocking photocells in the detection panels.

If a sensitized security strip is detected in the detection corridor, an audible alarm as well as a visible alarm light located at the top of the lattice corridor is activated (and, optionally, video security and voice alarm).

The Model 3501 and 3502 detection systems are available in two direct mount configurations:

- **Direct Mount with Threshold**: Lattices are mounted directly to the floor and a threshold covers the cables between the lattices.
- **Direct Mount with Buried Cable**: Lattices are mounted directly to the floor and cables between the lattices are buried in conduit.

The Model 3501 and 3502 detection systems are completely safe for magnetic media. The detection systems will not harm videocassettes, audiocassettes, or computer diskettes. The detection systems are designed to be resistant to electronic noise interference emitted by devices such as CRTs and energy management systems.

The Model 3501 and 3502 detection systems can be located as near as 18 inches to metal objects. By comparison, the recommended distance from metal objects for the Model 2300 and Model 3800 is 36 inches. The Model 3501 and 3502 detection systems are not designed to detect 3M™ Tattle–Tape™ Security Labels or 3M QuadraTag Security Markers.

4.1.2 Safety Labels

The 3M™ Detection System Model 3501 and 3502 is designed to detect the unauthorized removal of media from the library. It is designed to be positioned inside the library at the library exit. All exiting traffic should be directed through the Model 3501 and 3502 to maximize effectiveness. This system is designed for continuous operation. For maximum protection of the library media, use 3M™ Tattle-Tape™ Security Strips and 3M™ Accessories.

Warning Labels

⚠ WARNING

High Voltage

Personal Injury Hazard. Risk of electrical shock present. Not operator servicable. Refer all servicing to 3M factory trained personnel. Do not open panels or electronics enclosure.

⚠ Caution

Possible personal injury or equipment damage. Incorrect configuration and installation of the 120/240 voltage selector may cause personal injury or equipment damage.

Install the fuse holder/voltage selector in the correct orientation. See additional information in this manual on voltage configuration and fuses.

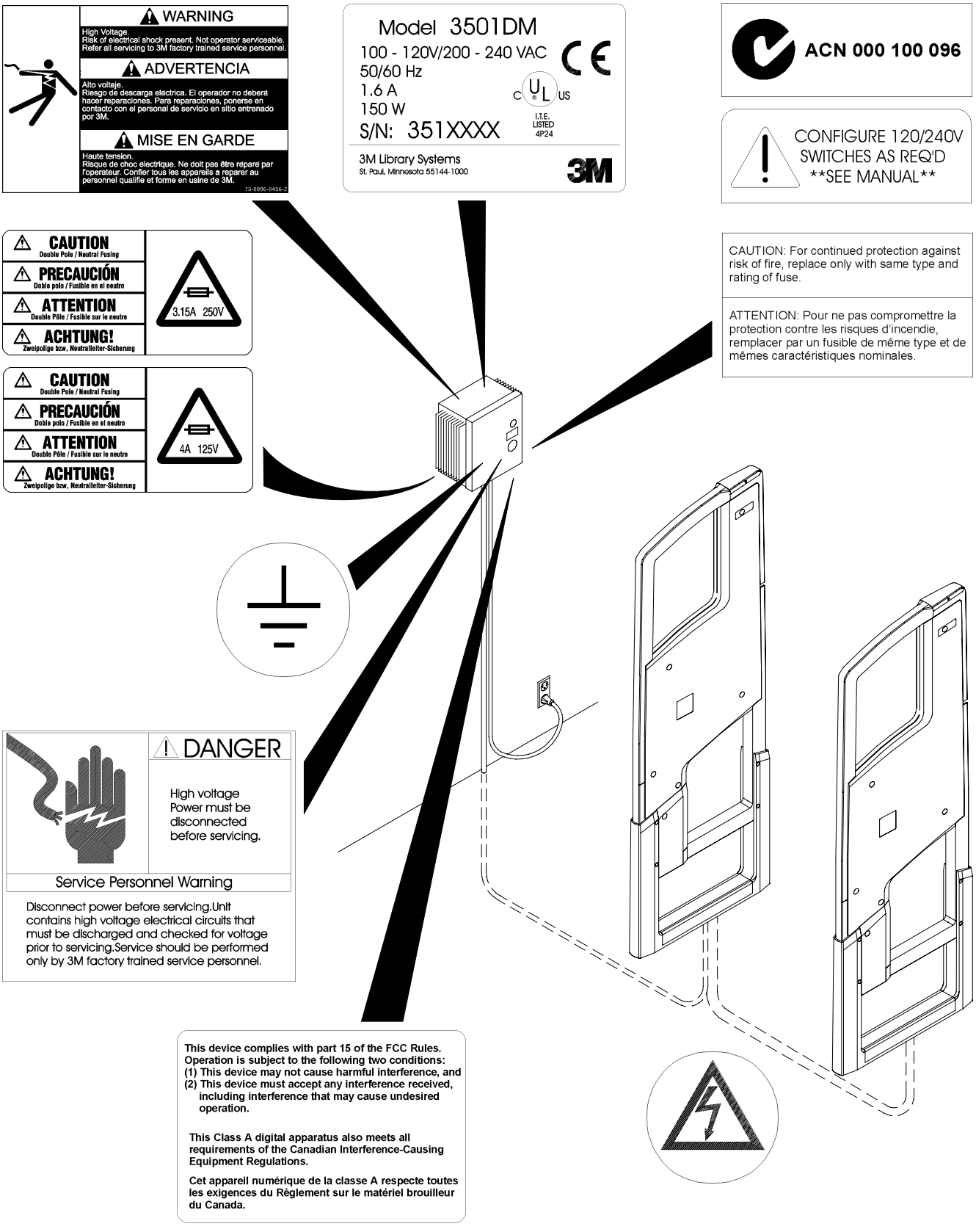
⚠ WARNING

High Voltage

Personal Injury Hazard.

Attempting to change fuses without unplugging the Detection System may cause personal injury. Inserting the fuse holder in the incorrect direction could blow the fuse.

To avoid any possibility of injury, disconnect the power before attempting to change the fuse. To avoid blowing the fuse, insert the fuse holder in the correct direction. For continued protection against risk of fire, replace only with the same type and rating of fuse.



This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.

This Class A digital apparatus also meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

3500–17L

4.1.3 Agency Approvals – EMC Compliance

The safety related fire, shock, and injury aspects of the Model 3501 and 3502 detection systems have been investigated to UL 1950, CSA 22.2 No. 950, and EN 60950 standards by Underwriters Laboratories Inc. The Model 3501 and 3502 detection systems also comply with European CE requirements. Burglary and theft protection features have not been evaluated.

FCC Radio Frequency Rules and Regulations

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can emit radiated radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Industry Canada Radio Frequency Rules and Regulations

This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numerique de la classe A respecte toutes les exigences du Reglement sur le materiel brouilleur du Canada.

Australia Rules and Regulations

This unit complies with the EMC requirements for Australia.

4.1.4 Power Requirements

A decicated power line is recommended, but not required. The socket–outlet should be installed near the equipment and should be easily accessible.

Voltage: 100/120/220/240 VAC 50 or 60 Hz

Amperes: 2.0 A @ 100/120 VAC

1.0 A @ 220/240 VAC

4.1.5 Environmental (Operation)

Typical ambient temperature range: 50° F [10°C] to 104° F [40° C].

Humidity: 0% to 85% RH, non–condensing

4.1.6 Security Strips

3M has a wide range of security strips to protect your library materials. Any of the security strips listed below may be used effectively with the Model 3501 and 3502 detection systems.

3M Tattle-Tape security strips

B1	-	for print materials
B2	-	for print materials
R2	-	for print materials
102	-	for print materials
103		for print materials
DCD-2	-	for audio CDs and CD-ROMs
DAC-1	-	for audio cassettes
DSA-1	-	for audio cassettes
DVM-1	-	for video cassettes

4.1.7 Accessories

A variety of accessories are available for use with your 3M™ Detection System Model 3501 and 3502. However, it is unlikely that any one customer will use every accessory.

Desensitizers

The 3M™ Desensitizers are designed to desensitize (“turn off”) 3M™ Tattle-Tape™ Security Strips. Security strips on protected items must be properly desensitized so the items can be carried through the detection system without causing an alarm.

3M Desensitizers used with 3M Tattle-Tape security strips:

Model 325	For all material, except audio tapes
Model 763	On-counter, magnetic media
Model 930	On-counter

Model 995	Staff Workstation
Model 940	Bookcheck

Resensitizers

Security strips on protected items must be properly resensitized (“turned on”) to ensure items carried through the detection system will cause an alarm.

3M™ Resensitizers used with 3M Tattle-Tape security strips:

Model 325	For all material, except audio tapes
Model 2011	On-counter, magnetic media
Model 764	On-counter, for printed material and compact discs
Model 940	Bookcheck

3M™ SelfCheck™ System

3M™ SelfCheck™ Systems are used by patrons to check out their own library materials. The systems complete library loan transactions by desensitizing 3M Tattle-Tape security strips and recording the transaction in the library circulation system.

3M™ Staff Workstation Model 995

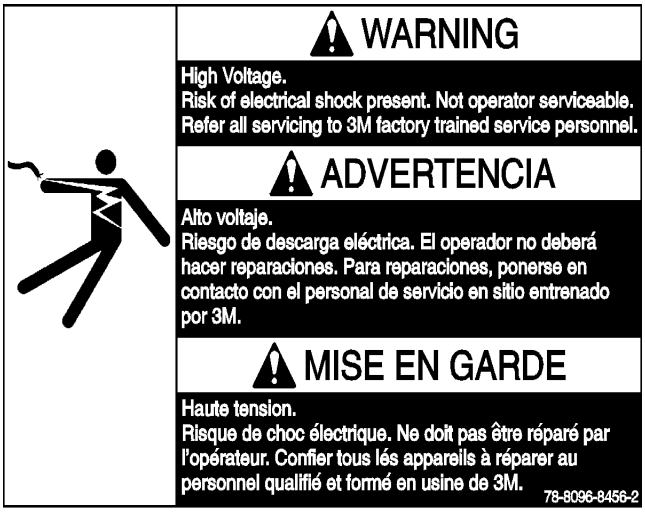
The 3M™ Staff Workstation Model 995 enables library staff to check items in or out at the same time as they desensitize or resensitize items’ 3M™ Tattle–Tape™ Security Strips. The Model 995 can process print materials; scan barcodes on magnetic media (but the security strips cannot be sensitized or desensitized); and identify items that lack security strips or have defective or out–of–place barcodes.

4.1.8 Turning Your System On

The 3M™ Detection System Model 3501/3502 is designed to be left on continuously.

To turn on, connect the Electronics Enclosure power cord to a power outlet. Turn the On/Off key switch to ON. The Power On indicator light should be on.

Allow 15 seconds for the system to start up.



4.1.9 Turning Your System Off

Remove power from the system by one of the following methods:

Method 1

1. Turn On/Off Key Switch to **OFF**.

Method 2

1. Disconnect the power cord from the outlet.
2. If step 1 is not possible, set the facility circuit breaker for the system to **OFF**.

4.1.10 How to Verify System Operation

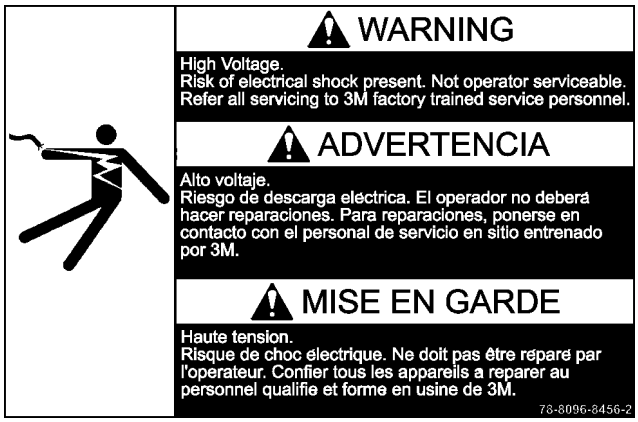
Your 3M™ Detection System Model 3501/3502 should be inspected daily for proper operation.

Proper system operation is indicated when the red power indicator light is illuminated. System operation may be verified by passing through the system with a marked book, which should result in an audible alarm and the light on at the top of the panels. Each pass through the system should also increment the patron counter by one. The alarm/inhibit light on the Electronics Enclosure should also be illuminated

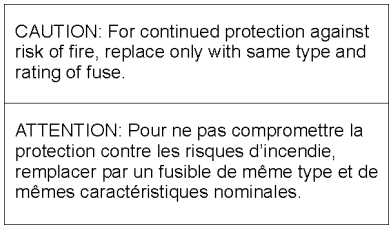
(green) at the time of alarm. If the system does not respond, see the Troubleshooting Guide.
There is no need for repetitive walk-through testing.

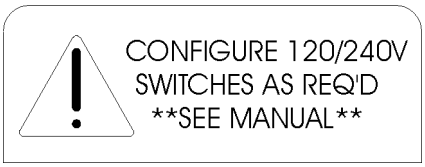
4.1.11 Fuse Replacement

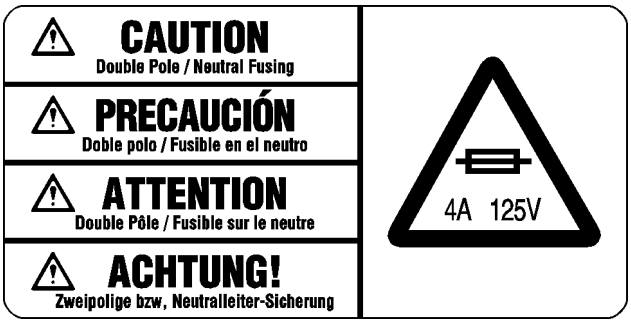
The fuses are located on the bottom of the Electronic Enclosure in the power entry connector.

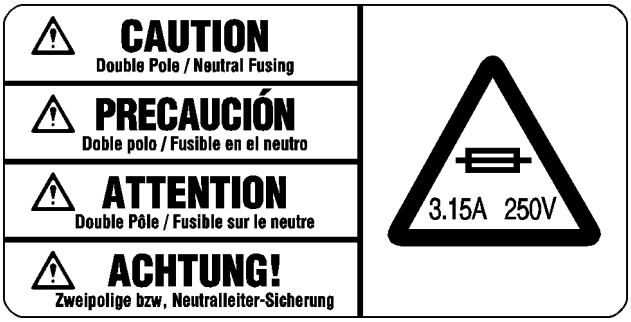


1. Turn the key switch to **OFF** and disconnect the power cord from the power source.
2. Using a small flat blade screwdriver, remove the fuse block from the power entry connector.
3. Do not remove the voltage selection block as this has been set by the installer at the correct voltage.
4. Replace the failed fuses with the correct fuse for your operating voltage:
   a. Up to 100 to 120 VAC, use a 4A fuse.
   b. Voltages over 220 to 240 VAC, use a 3.15A fuse.









5. Reinstall the fuse block, connect the power cord to the power source, and turn the key switch to ON.

4.1.12 Troubleshooting

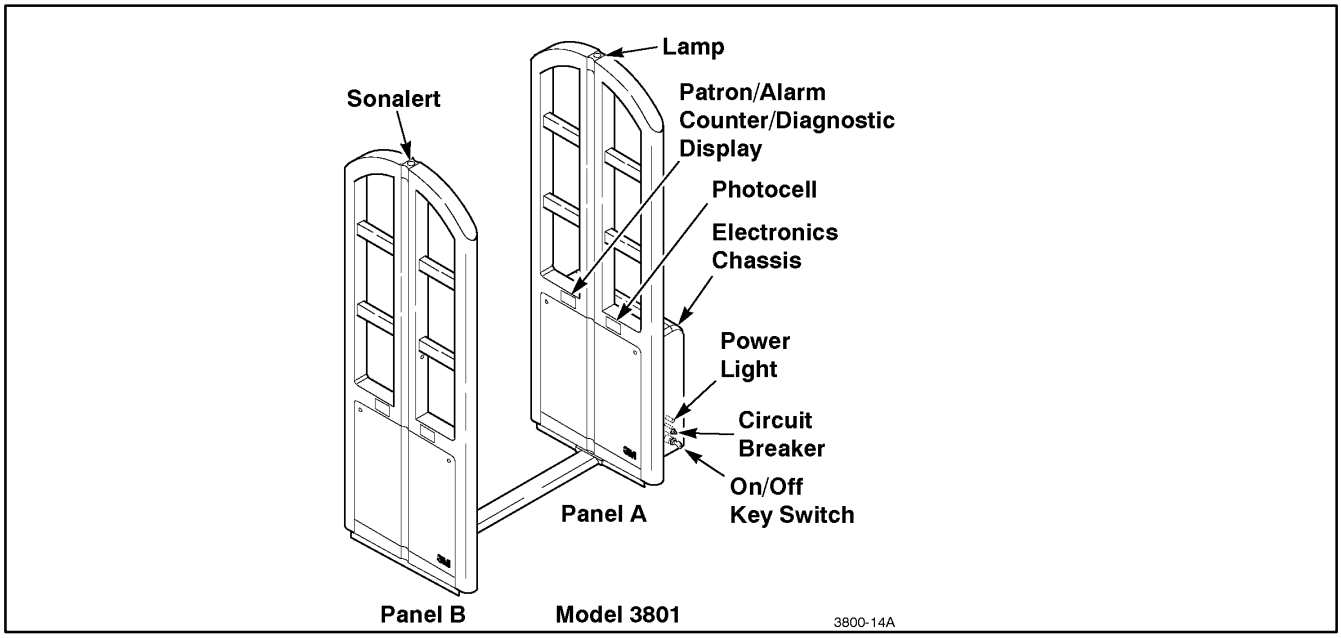
Model 3501, 3502

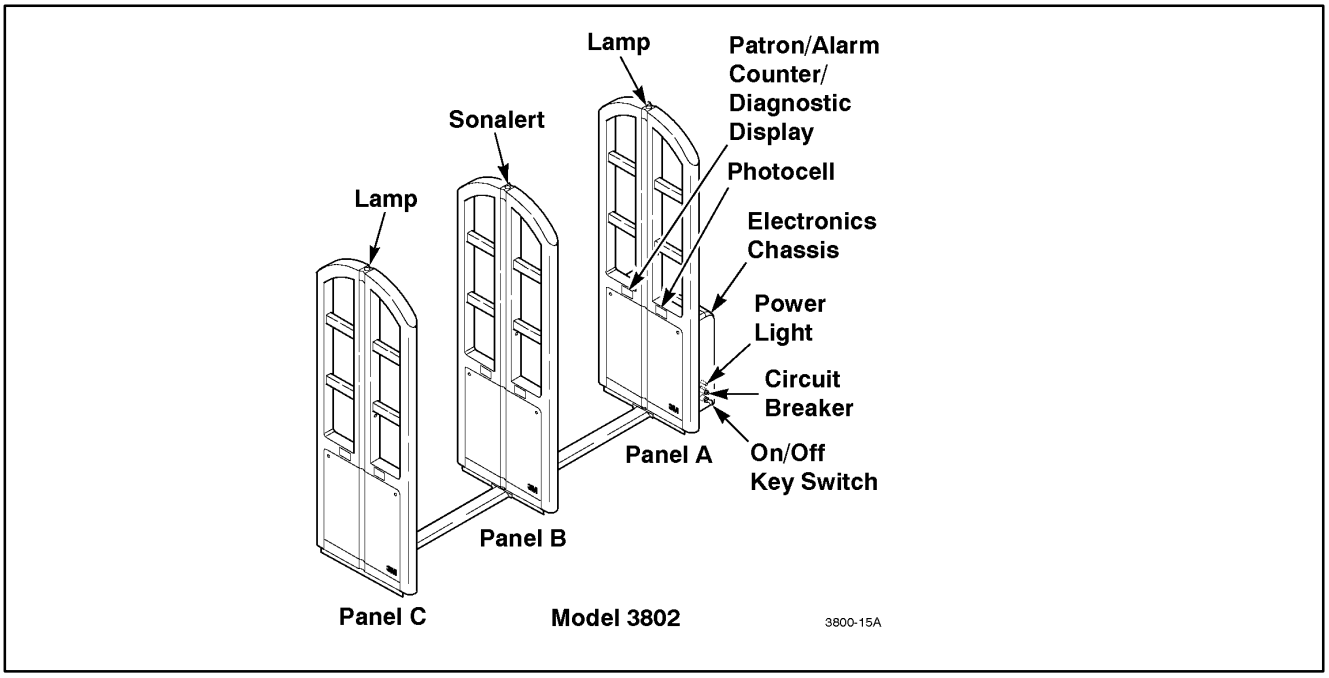
Problem	Cause	Action
No alarm, no mechanical counter, no red power indicator on the Electronic Enclosure.	No power at receptacle.	Reset facility circuit breaker.
	Power cord disconnected at receptacle.	Plug power cord into receptacle.
	System fuse open.	Replace fuse in power entry connector. See **Fuse Replacement** procedure.
	Power turned off at Electronics Enclosure.	Turn key switch to **ON**.
	System failure.	Place a service call.
No alarm, no mechanical counter, power indicator **ON**.	Processor requires reset.	Turn the key switch **OFF**, wait 5 seconds, then turn the switch **ON**.
	System failure.	Place a service call.

Problem	Cause	Action
No alarm, patron counter works.	Strips in book desensitized or missing.	Resensitize books, or install a 3M™ Tattle–Tape™ Security Strip in the book.
	System failure.	Place a service call.
	Metal objects too close to panel.	Move all metal to minimum distance of 18 inches from the panels.
Unwanted alarms.	Protected material from another library or a retail store.	Identify material that caused the alarm.
	Failure to desensitize strips properly.	Check desensitizing process and training.
	Miscellaneous metallic objects.	Infrequent unwanted alarms from some metal objects are possible.
	System failure.	Place a service call.
Reduced coverage, no alarm, patron counter works.	Metal objects too close to a system panel.	Move all metal objects to a minimum distance of 18 inches from panels.
	Electrical interference.	Remove possible sources of electrical interference such as computers, copiers, TVs, electronic devices, or energy management systems.
	Incomplete walk-through test.	Test the system by walking completely through the corridor.
	Books not properly resensitized.	Resensitize book, check sensitizing method and staff training.
	System failure.	Place a service call.
Alarm/Inhibit indicator illuminated or intermittent with no traffic in corridor.	Metal objects too close to a panel.	Move all metal objects to a minimum of 3 feet from the panel.
	Marked book or strips too close to panel.	Move the marked books to a minimum of 3 feet from the panel.
	Electrical interference.	Eliminate source of interference.
	System failure.	Place a service call.

4.2 Models 3801 and 3802

The Detection Panels are shown below:





The Model 3800 System is also available in the three-corridor Model 3803 and the four-corridor Model 3804.

4.2.1 Intended Use Statement

The 3M™ Detection System Model 3801, 3802, 3803, and 3804 (Model 3800 systems) are intended to provide security protection for library materials. The Model 3800 systems ensure that no materials leave the library without being checked out.

The Model 3800 systems are available in either the Model 3801 (a one–corridor configuration consisting of two detection panels), the Model 3802 (a two–corridor configuration consisting of three detection panels), the Model 3803 (a three–corridor configuration consisting of four detection panels), and the Model 3804 (a four–corridor configuration consisting of five detection panels). Both the Model 3801 and 3802 systems and the Model 3803 and 3804 systems provide audible and visible alarms, and can be combined with video security and voice alarms.

As patrons exit the library with materials to be checked out, they must pass through the Model 3800 systems detection panels. An exiting patron activates the security system by blocking photocells in the detection panels.

If a sensitized security strip is detected in the detection corridor, an audible alarm—as well as a visible alarm light located at the top of the lattice—is activated (and, optionally, video security and voice alarm).

The Model 3800 systems are available in three direct mount configurations:

- **Direct Mount**: Lattices are mounted directly to the floor and wire mold covers the cables between the lattices.
- **Baseplate**: Lattices are mounted on a baseplate and cables are contained in a channel in the bottom of the baseplate.
- **Direct Mount with Buried Cables**: Lattices are mounted directly to the floor and cables between the lattices are buried in conduit.

The Model 3800 systems are completely safe for magnetic media. The 3800 series will not harm videocassettes, audiocassettes, or computer diskettes.

The Model 3800 systems are designed to be resistant to electronic noise interference emitted by devices such as CRTs and energy management systems. The Model 3800 systems are not designed to detect 3M™ Tattle–Tape™ Security Labels or 3M QuadraTag Security Markers.

4.2.2 Agency Approvals

The safety related fire, shock, and injury aspects of the Model 3800 series have been investigated to UL 1950, CSA 22.2 No. 950, and EN 60950 standards by Underwriters Laboratories Inc. Models also comply with European CE requirements. Burglary and theft protection features have not been evaluated.

FCC Radio Frequency Rules and Regulations

This device complies with Part 15 of the FCC rules. Operation is subject to the following conditions: (1) this device may **not** cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

DOC Radio Frequency Rules and Regulations

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus as set out in the radio inteference regulations of the Canadian Department of Communications.

4.2.3 Power Requirements

A dedicated power line is recommended, but it is not an absolute requirement. The socket–outlet should be installed near the equipment and should be easily accessible.

Voltage:	105/120	60 Hz
	220/240	50 Hz
Amperes:	3801	4.0A @ 120 VAC
	3801	2.0A @ 240 VAC
	3802	5.0A @ 120 VAC
	3802	2.5A @ 240 VAC
	3803	5.5A @ 120 VAC
	3803	2.8A @ 240 VAC
	3804	6.0A @ 120 VAC
	3804	3.0A @ 240 VAC

The system must not be connected to an outlet that is controlled by switches (for example, light switches).

4.2.4 Environmental (Operation)

Typical ambient temperature range: 50° F [10° C] to 104° F [40° C].

Humidity: 0% to 85% RH, non–condensing

4.2.5 Security Strips

3M has a wide range of security strips to protect your merchandise. Any of the security strips listed below may be used effectively with the Model 3801 and 3802 and Model 3803 and 3804.

3M Tattle-Tape Security Strips

B1	-	for print materials
B2	-	for print materials
R2	-	for print materials
102		for print materials
103		for print materials
DCD-2	-	for audio CDs and CD-ROMs
DAC-1	-	for audio cassettes
DSA-1	-	for audio cassettes
DVM-1	-	for video cassettes

4.2.6 Accessories

A variety of accessories are available for use with your Model 3800 systems. However, it is unlikely that any one customer will use every accessory.

Desensitizers

The 3M™ Desensitizers are designed to desensitize 3M™ Tattle-Tape™ Security Strips. Security strips on protected items must be properly desensitized so the items can be carried through the system without causing an alarm.

3M desensitizers used with 3M Tattle-Tape security strips:

Model 325	For all material, except audio tapes
Model 763	On-counter, magnetic media
Model 930	On-counter
Model 995	Staff Workstation
Model 940	Bookcheck

Resensitizers

Security strips on protected items must be properly resensitized to ensure items carried through the system will cause an alarm.

3M™ Resensitizers used with 3M Tattle-Tape security strips:

Model 325	For all material, except audio tapes
Model 2011	On-counter, magnetic media
Model 764	On-counter, for printed material and compact discs
Model 995	Staff Workstation
Model 940	Bookcheck

Gates

Locking exit gates and an entrance gate can be installed only on a Model 3801 or 3802 detection system.

3M™ SelfCheck™ System

The 3M™ SelfCheck™ System is a library system used by patrons to check-out their own library materials. It completes library loan transactions by desensitizing 3M Tattle-Tape security strips and recording the transaction in the library circulation system.

3M™ Staff Workstation Model 995

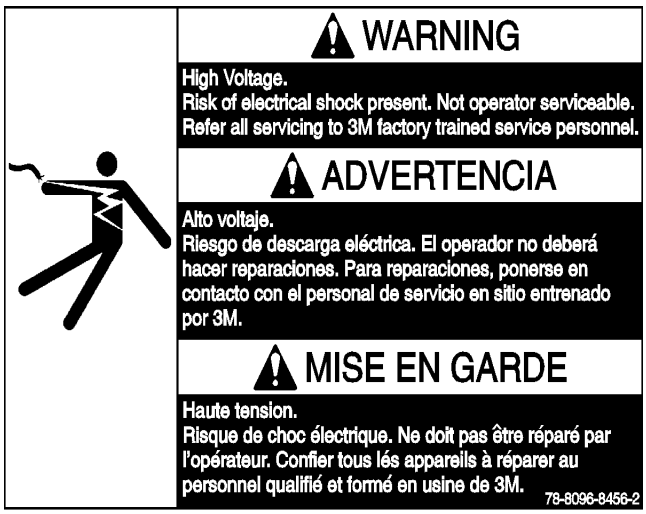
The 3M™ Staff Workstation Model 995 can check items in or out as it desensitizes or resensitizes 3M™ Tattle–Tape™ Security Strips on non–magnetic items. The Model 995 can process print materials; scan barcodes on magnetic media (although the security strips cannot be sensitized or desensitized); and identify items that lack security strips or have defective or out–of–place barcodes.

4.2.7 Turning Your System On

The power On/Off switch is a key switch located on one end of the corridor at the base of the electronics chassis. The Model 3800 systems are designed to be left on continuously.

To turn the system on, insert the key and turn the key switch to the ON position. The green light above the key switch will light, indicating the system is on. They key should always be removed from the system to prevent tampering.

Allow two minutes for the system to warm up. A "DIAG9" will appear in the "Patron Counter/Diagnostic Display" during warm-up. Thereafter, the patron count or alarm count will be displayed.



2300-85R

4.2.8 Turning Your System Off

Remove power from the system by one of the following methods:

Method 1

Turn On/Off Key Switch to **OFF**.

Method 2

Disconnect the power cord from the outlet.

If step 1 is not possible, set the facility circuit breaker for the system to **OFF**.

Note: **Australia Only**

We recommend that this system be turned off at the end of each day or after 20 hours of usage within each 24 hour period.

4.2.9 How to Verify System Operation

Your 3M detection system Model 3801, 3802, 3803, and 3804 should be inspected daily for proper operation.

System operation may be verified with the built-in Diagnostic Display located on one security panel. During normal operation, the current patron count or alarm count will be alterately displayed at 15 second intervals. A leading "P" indicates a patron count (for example, P123456). A leading "A" indicates an alarm count (for example, A123456).

If a system problem should occur, a code number will appear in the Diagnostic Display. Refer to the Troubleshooting Guide, 4.2.10, if a code number is present.

An alarm condition is indicated by an audible signal. The specific corridor in which an alarm condition exists is indicated by the light built into the top of panel A or C.

There is no need for repetitive walk-through testing.

4.2.10 Troubleshooting

Model 3801, 3802, 3803, and 3804

Problem	Cause	Action
No alarm, no diagnostic code in the display window.	No power at the wall outlet.	Reset the facility circuit breaker.
	The system power cord is unplugged.	Plug the power cord in and wait five minutes for full operation.
	The system circuit breaker is tripped.	Reset the circuit breaker. Call 3M Service if problem persists.
	The system power switch is turned off.	Turn the system key switch to ON.
	System failure.	Place a service call.
No alarm, DIAG 3, or Clean Filter diagnostic code in the display window.	Dirty fan filter.	Turn the system OFF. Clean the fan filter. Turn the system ON.
	System failure.	Place a service call.
No alarm, DIAG 5 diagnostic code in the display window.	Metal objects such as metal carts or metal trash cans next to the system.	Remove the interfering objects. If these objects are the source of the problem, the code 5 will go away by itself.

No alarm, alternating, DIAG 5 and SYS FAIL diagnostic code in the display window.	Metal object on or close to a detection panel.	Remove the metal object, power OFF the unit, wait for 10 seconds, and then power ON the unit. Call 3M Service if the problem persists.
No alarm, DIAG 6 diagnostic code in the display window.	High level of electronic noise from devices such as computers, monitors, laser scanners, etc.	Move interfering objects away or turn off suspected source of interference. Remove power. Apply power. Retest the system.

Problem	Cause	Action
No alarm, DIAG 1, 2, 4, 7, or 8 diagnostic code in the window.	System failure.	Place a service call. The diagnostic code number will be needed.
No alarm, patron count in window.	Desensitized strip in the book.	Test the system with another marked object having a sensitized strip.
Infrequent unwanted alarms.	Metallic object located too close to the system.	Unwanted alarms are possible. Keep metallic items at least three feet from detection system panels.
	Protected material from another library or a retail store.	Identify material that caused the alarm.
	Failure to desensitize strips properly.	Check operator training procedures.
Frequent (daily) unwanted alarms.	Failure to desensitize strips properly.	Follow correct check-out procedures outlined in 3M literature. Check operator training procedures.
	Photocell or reflector lens dirty.	Clean with soft cloth and water.
	System failure.	Place service call. Code number will be needed.
	Metallic object located too close to the system.	
Reduced coverage, no alarm.	Metallic object located too close to the system.	Remove the object, maintain a minimum distance of 2 feet from the detection system panels.
	Incomplete walk-through test.	Retest by walking completely through the corridor.
	Books not properly resensitized.	Retest with a properly resensitized book.
No alarm, DIAG 9 diagnostic code in the window.	System is in warm-up mode.	Wait approximately 1 minute.

4.3 Cleaning Instructions

Lattice and Base

General Maintenance

Turn off the security system prior to using liquid cleaners. Remove dirt and greasy buildup using towels or soft cloths which have been dampened with a common household grease-cutting liquid cleaner. We suggest a monthly cleaning to retain the best equipment appearance.

Photocell Lens and Reflector

At least once a month, wipe the photocell lens and reflector with a soft cloth dampened with water.

Accessories (Desensitizers)

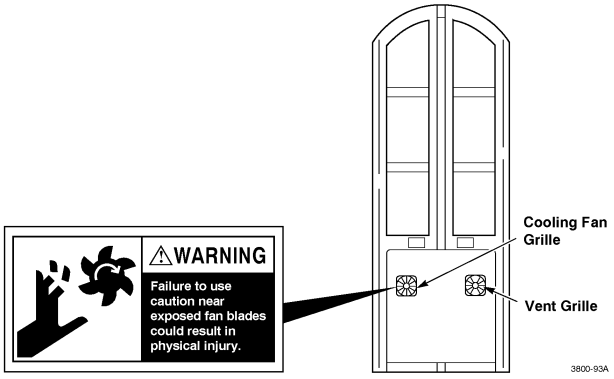
Over time, areas on accessories that come in constant contact with adhesive-backed tapes and labels will accumulate a build-up of adhesive. To remove adhesive build-up, clean the surface with a cloth dampened with rubbing alcohol (ethyl or isopropyl).

4.3.1 Model 3801, 3802, 3803, 3804

Fan Filter on Electronics Chassis

At least once every six months, clean the fan filter as follows:

1. Turn the key switch to **OFF**.
2. Wait until the fan stops.
   - Steps 3 through 6 are for washing the fan filter. Instead of washing the filter, it may be vacuumed without removing the grille. Washing is preferred because it results in a more thorough cleaning.
3. Remove the four thumb screws holding the fan grille.
4. Remove and wash the fan filter in water.
5. Thoroughly dry the fan filter.
6. Reinstall the fan filter, grille, and four screws.
7. Return the key switch to ON.
8. Wash or vacuum the filter. (You can vacuum the filter without removing it.)



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Section 5. Service

5.1 Obtaining Service

For guarantee and warranty claims, and for service, contact

In the U.S.:
1/800-328-0067 (toll-free, 24 hours a day)
Press 1 when instructed to do so.

In Canada:	English	**1-800-268-6235**
	Français	**1-800-567-3193**
In your area:	Sales_____	
	Service_____	
	Supplies_____	

1. Your name, name of your library or school, address, and phone number.
2. Model number and serial number of the equipment to be worked on (see the two columns below).
3. Description of the problem. For example:
   a. Is the malfunction in the detection system or desensitizer/resensitizer?
   b. Symptoms of the problem: poor or no detection; system alarms for no apparent reason; Bookcheck will not desensitize/resensitize; light does not work, etc.
   c. What is the diagnostic code indicated in the Status Display Window located on the side of the detection panel?

The service representative will discuss the problem with you and attempt to solve it on the telephone. If a service call is necessary, a 3M service technician will be quickly dispatched to your library.

When you call for service, please have the following information available:

Model Number	**Serial Number**
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

5.2 Ordering Supplies

Be sure to budget annually for any supplies you might need. You should also budget for your Service Agreement renewal each year so that you are assured of getting the most cost-effective service for your 3M™ Detection System.

Remember: Only when all of your library materials are marked with 3M™ Tattle-Tape™ Security Strips are you effectively protecting your materials from loss and ensuring that all of them are available to your patrons when they're needed.

To renew your supply of 3M Tattle-Tape strips and bayonets, simply call our customer service number.

In the U.S.:
1/800-328-0067 (toll-free).
Press 2 when instructed to do so.

In Canada:	English	**1-800-268-6235**
	Français	**1-800-567-3193**
In your area:	Sales	
	Service	
	Supplies	

You can use this number if you want to order additional circulation accessories, detection equipment, or other supplies.

To renew your Service Agreement, simply follow the instructions on the renewal notice you receive in the mail 90 days prior to the expiration of your current Service Agreement.

5.3 Warranties and Performance Guarantees

One Year Library Systems Product Performance Guarantee: Subject to the Limitation of Liability below, 3M guarantees your satisfaction with the performance of any 3M Library System Product for 12 months from the date of installation provided that a) you are the original purchaser: b) you have executed a one (1) year 3M Service Agreement for maintenance of the Library System product; and c) the product has not been subjected to abuse, misuse, accident or neglect. Performance means the product meets 3M published product specifications. If you are not completely satisfied with the performance of your Library System Product, you may return the Library System product for a prompt refund. 3M will pay all reasonable de–installation and shipping charges to return the product to 3M. Note that all claims under this guarantee must be submitted to 3M within 12 months from the date of installation of the 3M Library Systems Product. Failure to submit a claim within this time frame will invalidate this guarantee. IMPORTANT: Consumables and non–3M branded products are excluded from this Guarantee.

Warranty and Limited Remedy for Non–Software Library Systems Products Not Covered by Performance Guarantee: Unless stated otherwise in 3M product literature or packaging, 3M warrants that each 3M Library Systems Product meets the applicable specifications for a period of ninety (90) days from the date of shipment (or, in the case of hardware installed by 3M, from the date of installation). Any warranties related to 3M software are contained in separate 3M software licenses. Consumables and non–3M branded products are excluded from this Warranty and Limited Remedy.

3M MAKES NO OTHER GUARANTEES, WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OF TRADE. You are responsible for determining whether the 3M product is fit for a particular purpose and suitable for your application. If the 3M product is defective within the warranty period and provided that a) the product has not been subjected to abuse, misuse, accident or neglect and b) you have notified 3M within thirty (30) days after the defect was discovered, your exclusive remedy and 3M's and seller's sole obligation will be, at 3M's option, to replace or repair the defective 3M product.

Limitation of Liability: EXCEPT WHERE PROHIBITED BY LAW, 3M AND SELLER WILL NOT BE LIABLE FOR ANY LOSS OR DAMAGE ARISING FROM 3M LIBRARY SYSTEMs, WHETHER DIRECT, INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL, REGARDLESS OF THE LEGAL THEORY ASSERTED, INCLUDING WARRANTY, CONTRACT, NEGLIGENCE OR STRICT LIABILITY.

Guarantee and Warranty Claims: For guarantee and warranty claims, and for service, contact

In the U.S.:
1/800-328-0067 (toll-free, 24 hours a day)
Press 1 when instructed to do so.

In Canada:	English	**1-800-268-6235**
	Français	**1-800-567-3193**

3M™ Tattle–Tape™ Security Strips Guarantee and Limited Remedy: 3M guarantees that each Tattle–Tape Security Strip will be free from defects in materials and manufacture for the life time of the library loan materials to which the strip is applied provided that a) you are the original purchaser; b) the strips have been applied to the library materials in accordance with instructions within two (2) years from the date of manufacture; and c) the product has not been subjected to abuse, misuse, accident or neglect.

3M MAKES NO OTHER GUARANTEES, WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OF TRADE. You are responsible for determining whether the 3M product is fit for a particular purpose and suitable for your application. If the 3M product is proven to be defective within the guarantee period and provided that you have notified 3M within thirty (30) days after the defect was discovered, your exclusive remedy and 3M's and seller's sole obligation will be to replace the defective 3M product.

Limitation of Liability: EXCEPT WHERE PROHIBITED BY LAW, 3M AND SELLER WILL NOT BE LIABLE FOR ANY LOSS OR DAMAGE ARISING FROM TATTLE–TAPE SECURITY STRIPS, WHETHER DIRECT, INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL, REGARDLESS OF THE LEGAL THEORY ASSERTED, INCLUDING WARRANTY, CONTRACT, NEGLIGENCE OR STRICT LIABILITY.

Guarantee Claims: For guarantee claims, and for service, contact:

In the U.S.:
1/800-328-0067 (toll-free, 24 hours a day)
Press 1 when instructed to do so.

In Canada:	English	**1-800-268-6235**
	Français	**1-800-567-3193**

Section 6. 3M Detection Systems Alarm Log

(1) **Reason for Alarm:**

1. Test
2. Upon entering
3. Failure to desensitize
4. Undetermined
5. Real alarm

Alarm Date	Alarm Time	Patron Count	Reported by:	Alarm Reason (1)	Materials Recovered? Yes	Materials Recovered? No	$ Value of Recovered Materials	Description of Recovered Materials