TIMER CLOSE
EXPANSION MODULE

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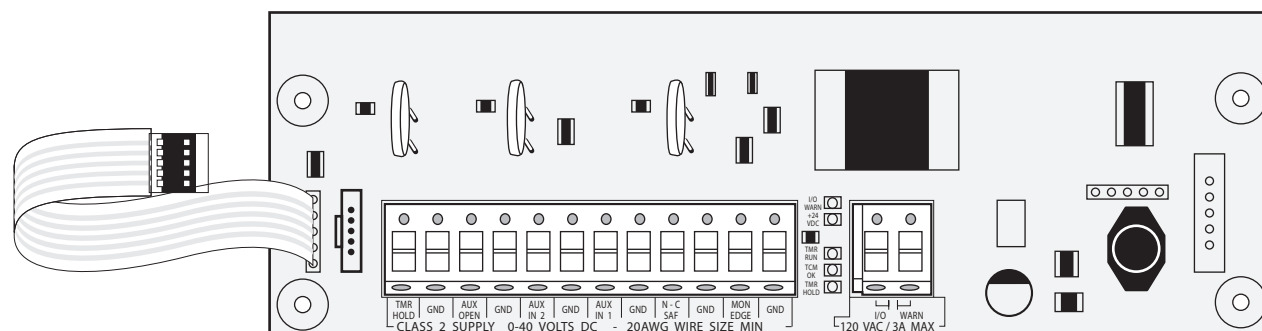
NOT FOR RESIDENTIAL USE

This Installation Manual provides the information required to install, troubleshoot and maintain the
**TIMER CLOSE MODULE** **for commercial/industrial door operators.**

Section 1:
Safety Information & Instructions

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⚠ WARNING

Overhead Doors are large, heavy objects that move with the help of springs under high tension and electric motors. Since moving objects, springs under tension, and electric motors can cause injuries, your safety and the safety of others depend on you reading the information in this manual. If you have any questions or do not understand the information presented, call for Factory Technical Advice at 800-275-6187.

In this Section and those that follow, the words Danger, Warning, and Caution are used to stress important safety information. The word:

⚠ **DANGER** indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

⚠ **WARNING** indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ **CAUTION** indicates a potentially hazardous situation which, if not avoided, may result in injury or property damage.

*The word **NOTE** is used to indicate important steps to be followed or important considerations.*
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IMPORTANT
READ PRIOR TO ANY DOOR OPERATION

1. **Read manual and warnings carefully.**

2. **Keep the door in good working condition. Periodically lubricate all moving parts of door.**

3. **If door has a sensing edge, check operations monthly. Make any necessary repairs to keep it functional.**

4. **AT LEAST twice a year, manually operate door by disconnecting it from the operator. The Door should open and close freely. If it does not, the door must be taken out of service and a trained service representative must correct the condition causing the malfunction.**

5. **The Operator Motor is protected against overheating by an internal thermal protector. If the operator ceases to function because motor protector has tripped, a trained service technician may need to correct the condition which caused the overheating. When motor has cooled, thermal protector will automatically reset and normal operation can be resumed.**

6. **In case of power failure, the door can be operated manually by pulling the release cable to disconnect the operator drive system.**

7. **Keep instructions in a prominent location near the pushbutton.**

HAZARD POTENTIAL	EFFECT	PREVENTION
MOVING DOOR	⚠ **WARNING** Could result in Serious Injury or Death	**Do Not** operate unless the doorway is in sight and free of obstructions. Keep people clear of opening while door is moving. **Do Not** allow children to play with the door operator. **Do Not** change operator control to momentary contact unless an external reversing means is installed. **Do Not** operate a door that jams or one that has a broken spring.
ELECTRICAL SHOCK	⚠ **WARNING** Could result in Serious Injury or Death	Turn off electrical power before removing operator cover. When replacing the cover, make sure wires are not pinched or near moving parts. Operator must be electrically grounded.
HIGH SPRING TENSION	⚠ **WARNING** Could result in Serious Injury or Death	**Do Not** try to remove, repair or adjust springs or anything to which door spring parts are fastened, such as, wood block, steel bracket, cable or any other structure or like item. Repairs and adjustments must be made by a trained service representative using proper tools and instructions.

Your TCM package includes two (2) of the Warning Placards shown below.

PLEASE PLACE ONE OF THE PLACARDS ON EACH SIDE OF THE DOOR THAT WILL BE CONTROLLED BY THE TCM. They must be in plain view and immediately adjacent to the door.

⚠ **WARNING**

MOVING DOOR can cause serious injury or death.

Watch Door!

It Closes Automatically.

Do Not stop or stand in doorway

Section 2:
General Information

Timer Close Module Entrapment Protection Requirements

This module provides the operator with an automatic door closing feature with a user selectable time delay, auxiliary control inputs and auxiliary reversing inputs.

The Timer Close Module allows the connection of any combination of the following **Reversing Devices**:

- A 2-wire Monitored Edge Sensor.
- A 2-wire Monitored Photocell (ODC Series II STB) on the operator control board.
- A Normally-Closed Reversing Device.

NOTE: AT LEAST ONE OF THE ABOVE DEVICES **MUST** BE INSTALLED and enabled for the automatic closing feature to function.

NOTE: The Monitored Edge Sensor input can detect open or shorted wiring to the Edge Sensor using a 2-wire connection. No relay kit is required to provide this feature.

⚠ WARNING
DO NOT use with resister style 2-wire monitored edges

NOTE: Any Miller Edge Sensor Series desired may be used as long as the **2-wire output** is specified along with the suffix "**DC**."
For example: Model number MT21-2R-16DC signifies an MT21 Series sensor with a 2-wire output from the Right, that is 16 feet long and has the monitoring option required by the Timer Close Module — "DC." Contact Miller Edge at 1.800.220.EDGE.

The timed closing feature is programmed with the operator keypad to start the timer when the door is operated from any combination of the following inputs:

- Open button on the 3-Button Wall Console.
- Radio Control Input.
- Auxiliary Open Input (provided on the Timer Close Module).

The time delay is adjusted using the calibration display on the keypad. This delay can be adjusted from 1 second to 5 minutes, plus 2-10 seconds for the Impending Operation Warning Delay. (A set of dry relay contacts are provided that signal the impending closing of the door prior to the beginning of the close cycle. It is used in combination with a signaling device, such as a light, horn, etc.) The module also provides terminals for an input that suspends and resets the timer when activated.

The Timer Close Module includes LED's that indicate when power is applied, the normal functioning of the module, when the Impending Operation Warning is active, when the timer is timing, and when the timer is being held.

NOTE - Successive activations of an input that is programmed to start the timer or an active reversing input will reset the timer and hold the timer until the input is de-activated.

Pressing the STOP wall button or STOP keypad key while the Timer Close Module is timing down will cancel the Timer Close operation. Additional activations of inputs selected to start the timer will start a new timing cycle. For each initiating input, the Timer Close Module will attempt to close the door 3 times before stopping, if another input prevents the close cycle.

NOTE - The Normally-Open Reversing Input on the operator control board may be used in combination with any of the required Timer Close reversing devices.

Job Site Issues to Consider/Concerns

The following list of items should be considered prior to installing the Timer Close Module at any job site.

- Door activation requirements for Timer Close Module. Examples of devices to initiate the Timer are: 3 button control stations (open button), radio controls, pull cords, loop detectors, photoelectric controls, key switches, etc.
- Accessory equipment requirements. Examples include: horns, lights sirens, etc.

⚠ WARNING
The installation of an Impending Operation Warning Device is strongly recommended on every door equipped with a timer controlled automatic closing feature. These signaling devices may include, but are not limited to: lights, annunciators, voice modules, etc.

Section 3:
Installation *Timer Close Module*

⚠ WARNING
Door repairs and adjustments, including cables and spring assemblies MUST be made by a qualified service representative using proper tools and instructions.

⚠ WARNING
RISK OF ELECTRICAL SHOCK. Be sure that electrical power to the operator has been disconnected. There should be no live circuits inside the electrical box while installing this Timer Close Module. An appropriate lock-out/tag-out procedure is recommended. DO NOT APPLY POWER UNTIL INSTRUCTED TO DO SO.

⚠ WARNING
All wiring to the operator must meet all local building codes. Overhead Door Corporation recommends that all work involving electrical circuits and line voltage wiring be performed by a qualified electrician.

⚠ CAUTION
Check working condition of door and operator before installing the Auxiliary Output Module.

Fig. 3A **Install TCM**

1. Turn off supply power to the operator.
    -   Locate supply power disconnect.
    -   Disconnect supply power.
    -   Use proper lock-out/tag-out procedure.
2. Open and/or Remove Operator Electric Box Cover.
    -   Loosen screw on front of cover, door swings open. (Door is removed by sliding it out of the hinges).
3. Install Timer Close Module. (**Fig. 3A**)
    -   Secure with 1/4" hex head screws (2 ea.) provided.
    -   Connect ribbon cable to main control board as shown.

NOTE: If another expansion module is already installed and connected in the electric box, the Timer Close Module ribbon cable should be connected to the expansion port connector on the existing expansion module.
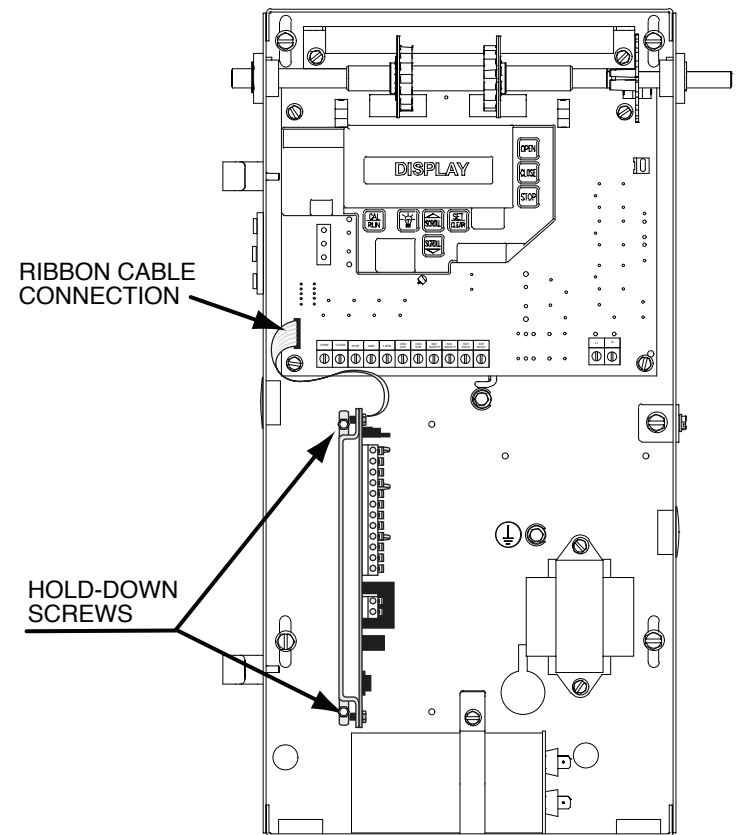
Section 4:
Wiring
General Procedures

Fig. 4A Strip wire

.42"
(10-11 mm)

Fig. 4B Attach wire

> ⚠ **WARNING**
> RISK OF ELECTRICAL SHOCK. Be sure that electrical power to the operator
> has been disconnected. There should be no live circuits inside the electrical box
> while installing this Timer Close Module. An appropriate lock-out/tag-out
> procedure is recommended.
> DO NOT APPLY POWER UNTIL INSTRUCTED TO DO SO.

To Connect Wires to Accessory Modules

1. Strip wire insulation .42" as shown. (**Fig. 4A**).

2. Using a screwdriver or your finger, press the plunger down and hold it.

3. Insert 20AWG - 12 AWG solid or stranded wire into the connector. (**Fig. 4B**).

NOTE: Connect only one wire per terminal.

4. Release the plunger.

5. Tug on the wire to make sure it is secured.

Control Wires

1. Route control wiring as per **Fig. 4C**.

2. Access ports have been provided so that wires can be routed into and secured to the
control board. Use appropriate conduit and/or fittings to provide proper strain relief and
wiring protection.

3. Make control, warning and reversing device connections using the information above and
on pages 6 & 7.

NOTE: If wiring connected to the I/O Warning Output applies low voltage class 2
voltages/currents, route the wiring with control wiring shown in gray.

If wiring connected to this output applies line voltage, route the wiring as shown in black.

> ⚠ **WARNING**
> LOW VOLTAGE/CONTROL WIRING MUST BE KEPT SEPARATE FROM LINE VOLTAGE WIRING!

RADIO CONTROL TERMINALS

LOW VOLTAGE CONTROL WIRE TERMINALS

LOW VOLTAGE INPUT PLUGS

ROUTE LOW VOLTAGE WIRING IN SHADED AREA AS SHOWN

Fig. 4C Wiring to TCM

Wiring (cont')   Terminal Designations

TWO POSITION TERMINAL BLOCK

NOTE — MAXIMUM WIRE SIZE = 12AWG   MINIMUM WIRE SIZE = 20 AWG

Impending Operation Warning (I/O WARN) — Activates 2 to 10 seconds (adjustable) before beginning the close cycle. One set of SPST contacts rated at 3A, 120 VAC(Maximum).

TWELVE POSITION TERMINAL BLOCK

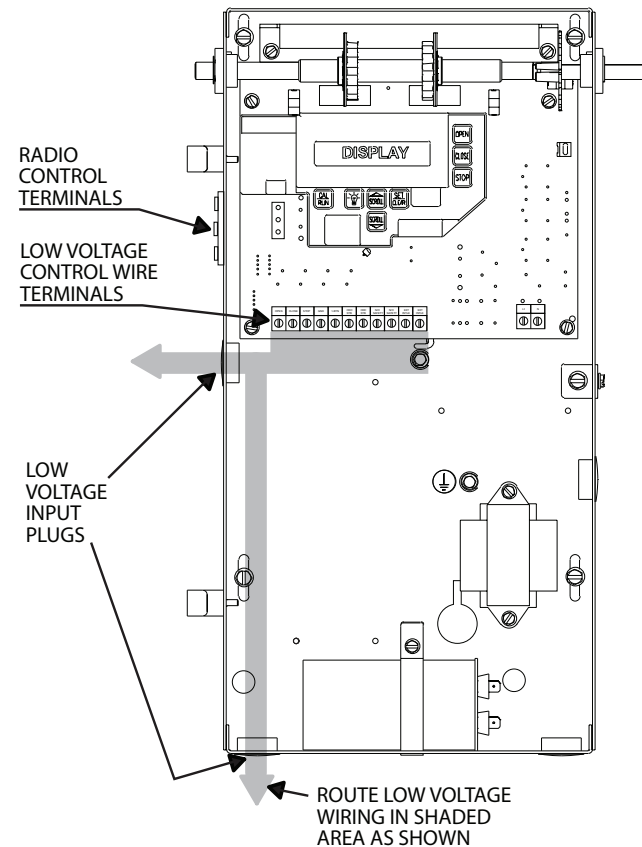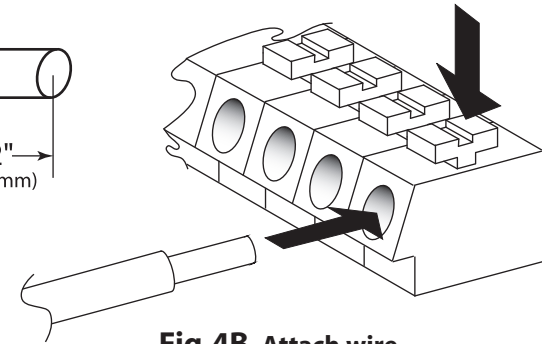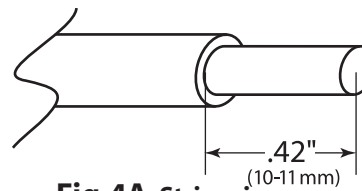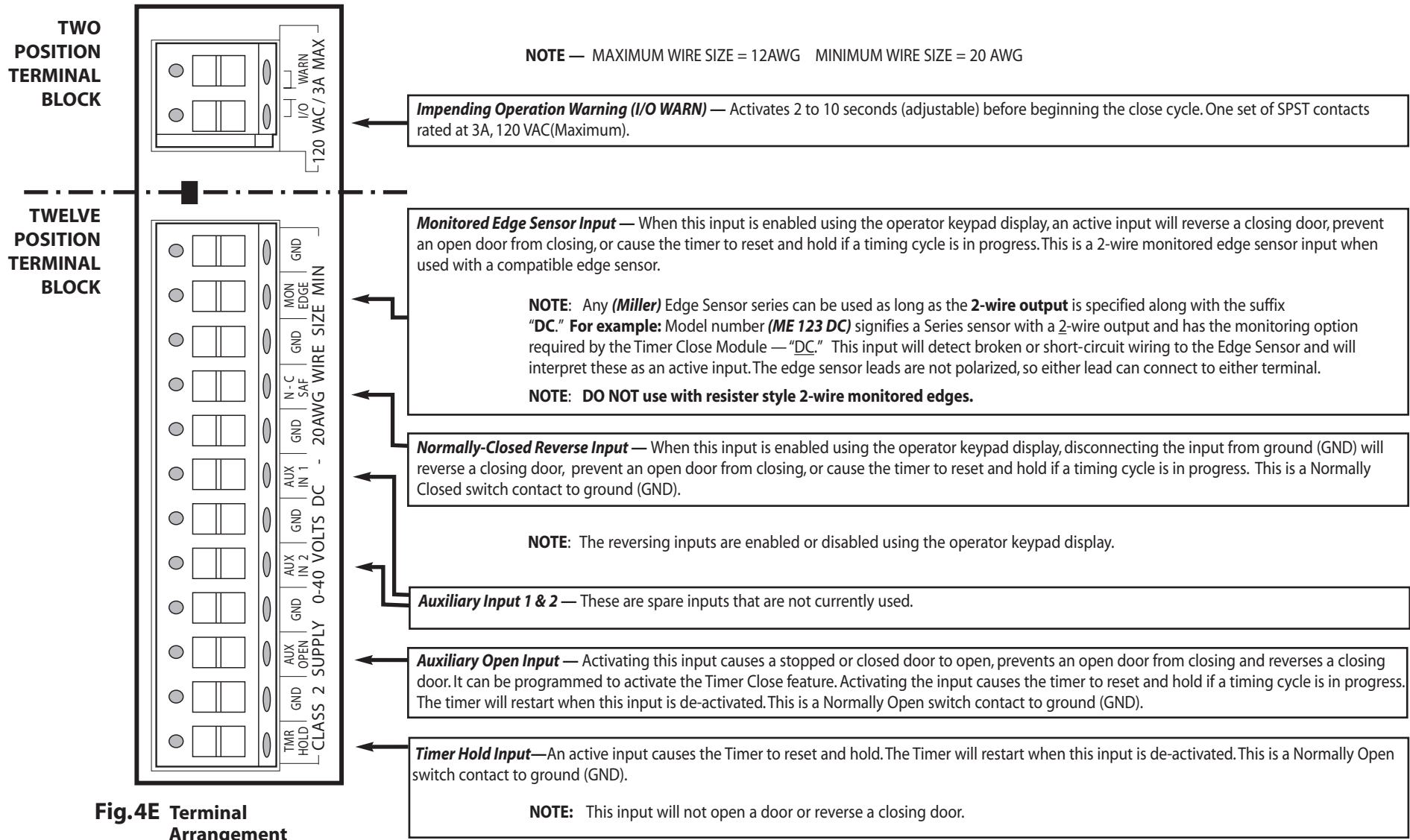*Monitored Edge Sensor Input —* When this input is enabled using the operator keypad display, an active input will reverse a closing door, prevent an open door from closing, or cause the timer to reset and hold if a timing cycle is in progress. This is a 2-wire monitored edge sensor input when used with a compatible edge sensor.

> **NOTE:** Any *(Miller)* Edge Sensor series can be used as long as the **2-wire output** is specified along with the suffix "**DC.**" **For example:** Model number *(ME 123 DC)* signifies a Series sensor with a 2-wire output and has the monitoring option required by the Timer Close Module — "DC." This input will detect broken or short-circuit wiring to the Edge Sensor and will interpret these as an active input. The edge sensor leads are not polarized, so either lead can connect to either terminal.

NOTE: **DO NOT use with resister style 2-wire monitored edges.**

Normally-Closed Reverse Input — When this input is enabled using the operator keypad display, disconnecting the input from ground (GND) will reverse a closing door, prevent an open door from closing, or cause the timer to reset and hold if a timing cycle is in progress. This is a Normally Closed switch contact to ground (GND).

> **NOTE:** The reversing inputs are enabled or disabled using the operator keypad display.

Auxiliary Input 1 & 2 — These are spare inputs that are not currently used.

Auxiliary Open Input — Activating this input causes a stopped or closed door to open, prevents an open door from closing and reverses a closing door. It can be programmed to activate the Timer Close feature. Activating the input causes the timer to reset and hold if a timing cycle is in progress. The timer will restart when this input is de-activated. This is a Normally Open switch contact to ground (GND).

Timer Hold Input— An active input causes the Timer to reset and hold. The Timer will restart when this input is de-activated. This is a Normally Open switch contact to ground (GND).

> **NOTE:** This input will not open a door or reverse a closing door.

Fig.4E **Terminal Arrangement**

Terminal labels (top to bottom): WARN, I/O — 120 VAC / 3A MAX

GND, MON EDGE, GND, N-C SAF, GND, AUX IN 1, GND, AUX IN 2, GND, AUX OPEN, GND, TMR HOLD — 20AWG WIRE SIZE MIN — 0-40 VOLTS DC SUPPLY — CLASS 2

Wiring (cont')

(EXAMPLES)

120 VAC powered device

I/O   WARN
120 VAC / 3A MAX

WARNING DEVICE

L1
N

EXTERNAL RADIO TERMINAL STRIP

PWR	RAD	GND

I/O   WARN
120 VAC / 3A MAX

WARNING DEVICE

(OPTIONAL)

24 VDC (18-40 VDC) powered device 300mA max.

A. I/O Warning Device wiring

GND	N - C SAF	GND	MON EDGE	GND

20AWG WIRE SIZE MIN

I/O   WAR
120 VAC / 3A M

SENSING DEVICE

Connecting Industry Standard Photocells to Normally-Closed Safety Input

18-40 VDC @ 300mA EXTERNAL RADIO TERMINAL STRIP

PWR	RAD	GND

GND	N - C SAF	GND	MON EDGE

20AWG WIRE SIZE MIN

+
-

+
-

C. Normally-Closed sensing device wiring

GND	AUX IN 2	GND	AUX IN 1	GND	N - C SAF	GND	MON EDGE	GND

LY 0-40 VOLTS DC - 20AWG WIRE SIZE MIN

EDGE SENSOR

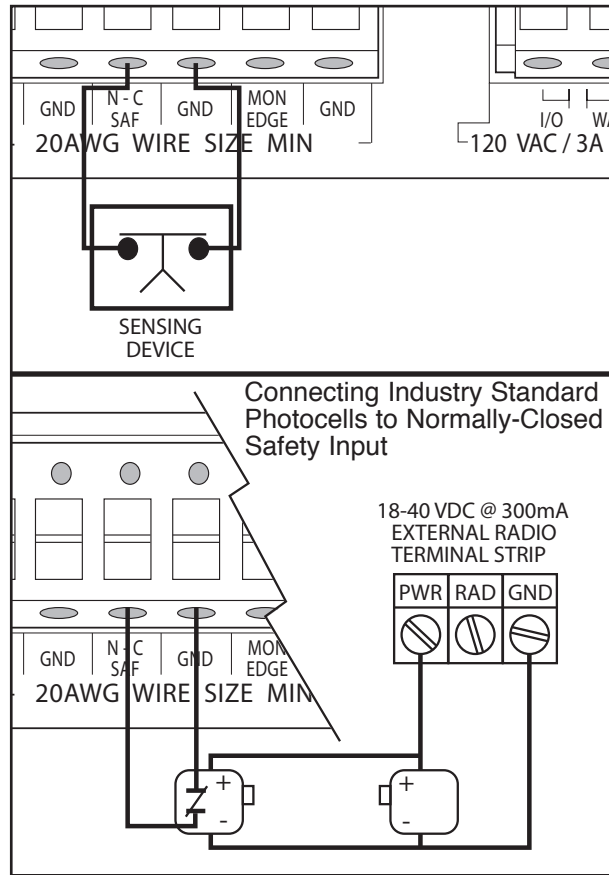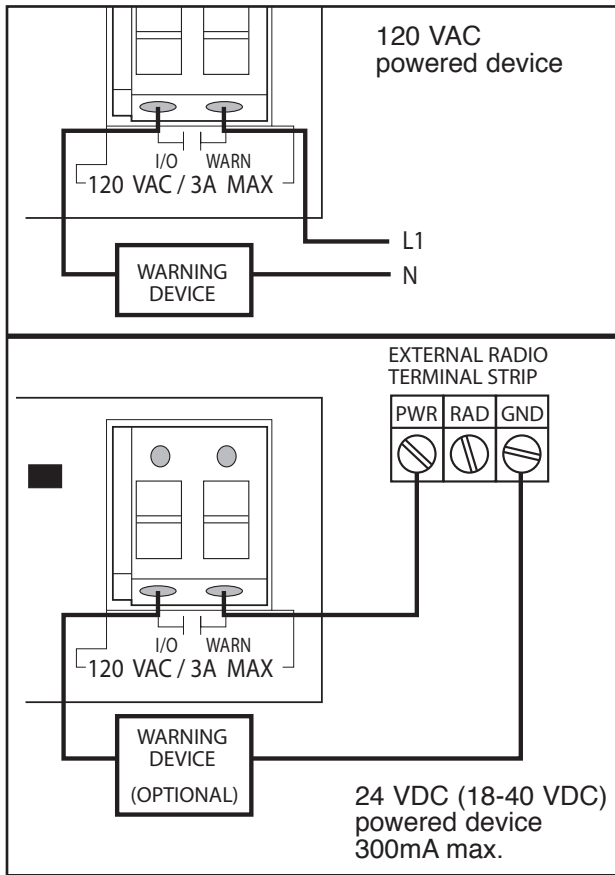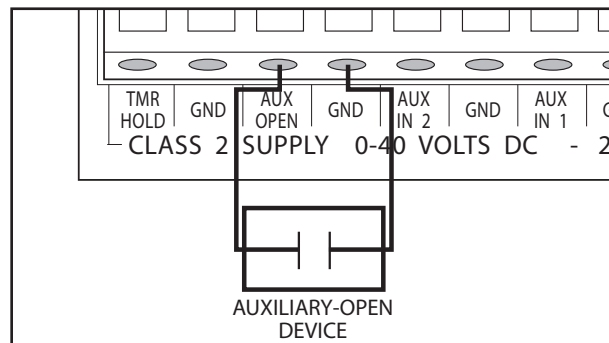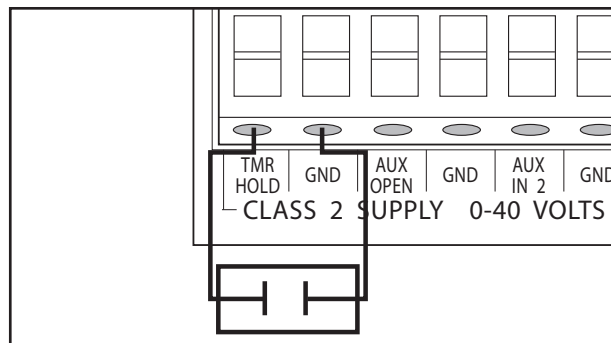**EDGE SENSOR**

MONITORING CIRCUIT (INSIDE EDGE SENSOR)

Fig. E Monitored Edge Sensor
(Edge sensor leads are not polarized. Either lead can connect to either terminal.)
DO NOT use with resister style 2-wire monitored edges.

TMR HOLD	GND	AUX OPEN	GND	AUX IN 2	GND

CLASS 2 SUPPLY   0-40 VOLTS

B. Timer Hold wiring

TMR HOLD	GND	AUX OPEN	GND	AUX IN 2	GND	AUX IN 1	GN

CLASS 2 SUPPLY   0-40 VOLTS DC   - 20

AUXILIARY-OPEN DEVICE

D. Auxiliary Open device wiring

Section 5:
Setup Procedure
Setting Timer Close Operation and I/O Warning Delay

> ### ⚠ WARNING
> RISK OF ELECTRICAL SHOCK. After power is applied to the Operator, DO NOT make contact with components inside the Control Panel, except for the Keypad Display Buttons.

1. Turn on power to door operator.
    *   If Timer Close Module is properly installed, several Timer Close Module LED's will flash, then "+24V" and "TCM O.K." will stay on. (**Fig. 5A**) (See also page 9 —*Troubleshooting Section*.)

        NOTE — One or more of the following Reversing devices must be installed to use the Timer Close feature:
        *   Monitored photocell (ODC Series II STB) (on control board).
        *   Monitored Edge Sensor
        *   N-C Reversing Input

Fig. 5A Timer Close Module LED's

2. Using the operator keypad and display, press the CAL/RUN key to enter the CAL Mode.

3. Press the SCROLL ▼ key to select the installed reversing device(s), ODC *STB > ON/OFF, MON EDGE > ON/OFF, or N-C SAFETY > ON/OFF*.

4. Press the SET/CLEAR key to turn the selected reversing device on or off.

5. Press the SCROLL ▼ key to select the inputs that will initiate a Timer Close operation. (**Fig. 5B**). *TIMER CLOSE W/OPEN BUTTON, TIMER CLOSE W/RADIO or TIMER CLOSE W/AUX OPEN.)*

NOTE: One or more of the ODC STB, MON EDGE, or N-C SAFETY must be turned on before the Timer Close activation modes can be turned on.

6. Press the SET/CLEAR key to turn each timer-initiate input on or off.

7. Press the SCROLL ▼ key until display reads "TIMER DELAY> 0:01 " display. (**Fig. 5C**).

8. Press SET/CLEAR key to select the first time digit (minutes). The cursor will blink in the minutes column.
    *   Press SET/CLEAR key to increase the delay 1 minute at a time until you reach the desired delay.
    *   Press the SCROLL ▼ key to shift to the next digit(10 seconds). The curser will blink in the 10 seconds column.
    *   Press SET/CLEAR key to increase the delay 10 seconds at a time.
    *   Press SCROLL ▼ key again to shift to final digit (seconds). The cursor will blink in the seconds column.
    *   Press SCROLL ▼ key again to lock the delay set.

NOTE: When setting the time delay you can move left and right through the Time Delay digit columns by using the SCROLL ▼ or SCROLL ▲ keys as necessary.

Fig. 5B Select Mode

9. Press SCROLL ▼ key again to shift to "I/O WARN DELAY > 02." (**Fig. 5D**).
    *   Press SET/CLEAR key to adjust the delay between 2 and 10 seconds.
    *   Press the SCROLL ▼ key to lock the setting.

10. Press the CAL/RUN key to exit Cal Mode.

11. If you are done using the keypad display, close the Electric Box Cover.
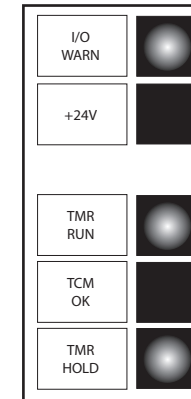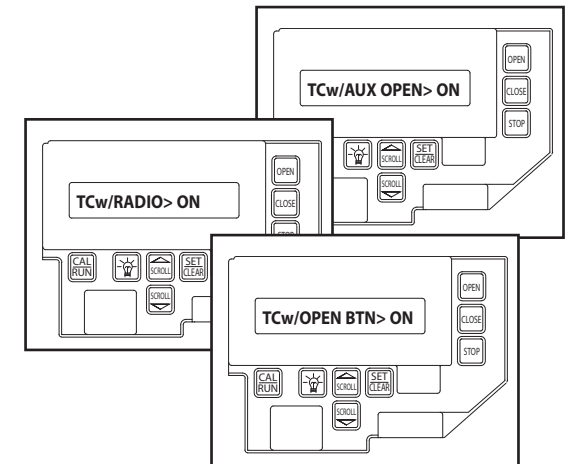

Fig. 5C Set Timer Delay
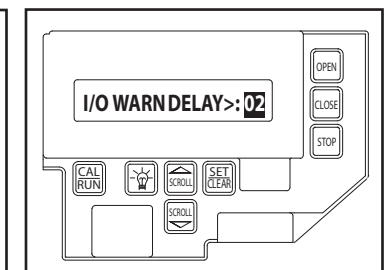
Fig. 5D I/O WARN Delay
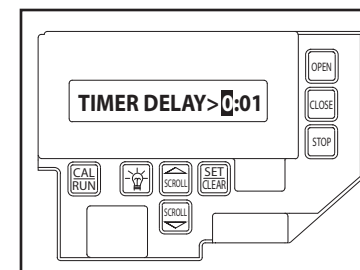
Section 6:
Troubleshooting

Status LED's

STATUS INDICATION

Fig. 6A

I/O WARN	ON — Impending Operation Warning delay is timing. Output is active.
	OFF — Impending Operation Warning delay is not timing. Output not active.
+24V	ON — Timer Close Module has power.
	OFF — No power to the Timer Close Module.
TMR RUN	ON — Timer Close delay is timing or pending
	OFF — No Timer Close delay in progress
TCM OK	ON — Timer Close Module is functioning normally.
	OFF — Timer Close Module is not functioning normally.
TMR HOLD	ON — Timer Close Module delay is pending but holding.
	OFF — Timer Close Module delay is not holding.

Troubleshooting Guide

PROBLEM	INDICATION	CHECK
1. TCM has no power.	+24V LED is **OFF**.	1. Check power to the operator.
		2. Check that TCM ribbon cable is connected to the operator control board or another accessory module that is connected to the operator control board..
		3. Check fuse F2 on the operator control board.
		4. Contact the factory.
2. TCM is not functioning properly.	+24 V LED is **ON**. TCM OK LED is **OFF**.	1. Check that TCM ribbon cable is connected to the operator control board or another accessory module that is connected to the operator control board.
		2. Check that operator display is working normally and not indicating a system problem.
		3. Turn power to the operator off, then back on.
		4. Contact the factory.

Troubleshooting Guide (cont')

PROBLEM	INDICATION	CHECK
3. I/O Warning Device won't work.	I/O WARN LED is **ON**	1. Check wiring between the warning device and the I/O WARN output terminals (see section 4).
		2. Check power to the Warning Device.
		3. Check Warning Device operation.
		4. Go to #2.
4. I/O Warning Device won't work.	I/O WARN LED is **OFF**	1. If TMR HOLD LED is on, go to #6.
		2. If TMR RUN LED is off, go to #5.
5. TCM will not start a timer cycle.	TMR RUN LED is **OFF**	1. If TMR HOLD LED is on, go to #6.
		2. Check that activation device(s) will open the door.
		3. Check that the Timer Close feature for the activation device is turned "ON" using the operator keypad and display (see section 5).
		4. Go to #2
6. TCM starts a timer cycle but won't close door.	TMR RUN LED is **ON** TMR HOLD LED is **ON**	1. Check that one or more devices set to start the Timer cycle is not active.
		2. Check that one or more reversing devices is not signaling an obstruction.
		3. Check that Timer Hold input is not active.
		4. Attempt to close the door using the Close keypad key. If the operator fails to close— or closes and then reverses, the Error Code will indicate which device may be holding the Timer operation
		3. Go to #2.
7. TCM starts a Timer cycle. but won't close door.	TMR RUN LED was **ON,** but is now off. TMR HOLD LED is **OFF**	1. STOP wall button or STOP keypad key was/is active.
		2. Go to #2.
8. Can't turn Timer Close feature "ON" for a given input.	On Calibration display, the feature will not toggle from "OFF" to "ON" when Set/Clear key is pressed.	1. One of the following reversing devices must be turned "ON" in Calibration Mode before you can turn the Timer Close feature "ON." ODC STB (Monitored Series II Photocells "_" on operator control board), MON. EDGE (Monitored Edge Sensor) or N-C SAFETY (Normally-Closed Reversing Input). (see section 5).
		2. Go to #2.
9. Door reverses on close attempts.	+24 V LED is **OFF**.	1. Check operator display. The Error Code should indicate what is causing the reversal.
		2. TCM is not functioning. If reversal is caused by an input to the TCM or a faulty TCM, normal door operation (except Timer Close), can be restored by turning off Monitored Edge Sensor (MON. EDGE) and Normally Closed Reversing Input (N-C SAFETY) in Calibration Mode (see section 5.)
		3. Or go to #1.

Troubleshooting Guide (cont')

PROBLEM	INDICATION	CHECK
10. Door reverses on close attempts.	+24V LED is **ON**. TCM OK LED is **OFF**.	**1.** Check operator display. The Error Code should indicate what is causing the reversal. **2.** TCM is not functioning properly. If reversal is caused by an input to the TCM or a faulty TCM, normal door operation (except Timer Close), can be restored by turning OFF Monitored Edge Sensor (MON. EDGE) and Normally-Closed Reversing Input (N-C SAFETY) in Calibration Mode (see section 5). **3.** Or go to #2.
11. Door reverses on close attempts.	TCM is not installed in the operator.	**1.** Check operator display. The Error Code should indicate what is causing the reversal. **2.** If caused by an input to the TCM or a faulty TCM, normal door operation (except Timer Close), can be restored by turning OFF Monitored Edge Sensor (MON. EDGE) and Normally-Closed Reversing Input (N-C SAFETY) in Calibration Mode (see section 5).
12. Door reverses on close attempts.	+24V LED is **ON**. TCM OK LED is **ON**.	**1.** Check operator display. The Error Code should indicate what is causing the reversal. **2.** Check wiring to all revering devises that are turned "ON," including Normally-Open Reversing Input. **3.** Check all reversing devices. **4.** Check wiring to all control inputs. **5.** Go to #2.
13. Timer will not hold when Timer Hold input activated.	TCM times out and closes. TMR HOLD LED is **OFF**.	**1.** Check wiring to Timer Hold Device. **2.** Check Timer Hold Device. **3.** Go to #2.
14. Timer will not hold when Timer activating device is being held on.	TCM times out and closes. TMR HOLD LED is **OFF**.	**1.** Check that Timer Close feature for the activation device is turned "ON" using the operator keypad and display (see section 5). **2.** Check that the activation device(s) will open the door. **3.** Check wiring to device for intermittent connections. **4.** Go to #2.
15. Timer will not hold when a reversing device is activated.	TCM times out and closes. TMR HOLD LED is **OFF**.	**1.** Check that the reversing feature is turned "ON" using the operator keypad and display (see section 5 or Operator Manual). **2.** Check that the reversing device will reverse a closing door. **3.** Check wiring to device for intermittent connections. **4.** Go to #2.

PROBLEM	INDICATION	CHECK
16. I/O Warn Output will not turn off.	I/O WARN LED is **ON**	**1.** I/O Warn Delay is still timing down (see section 5 for a description). **2.** Go to #2.
17. I/O Warn Output will not turn off.	I/O WARN LED is **OFF**	**1.** Go to #2.

***For continued Troubleshooting* — Refer to the main control board condition codes and error codes and procedures on the following pages.**

Run Codes

This operator includes a run code memory that stores the last 10 run events. These codes are stored with or without power. Each time the operator runs or stops, it generates a code that it stores in this memory (Why the operator ran or stopped). Used together with the error code memory, it becomes a powerful troubleshooting aid.

The run code memory stores the last 10 error codes in sequence. Once 10 codes are stored, the oldest code is erased to make room for the newest code. These codes are displayed in calibration mode. The display will flash the number of the run code and the 2-digit run code followed by a description of the run code. **Fig. 6B**.

To Display Run Codes

1. Press the CAL/RUN key to enter the Cal Mode (**Fig. 6B**).
   - Press the SCROLL▼ key to select RUN CODE 1 > "CODE."
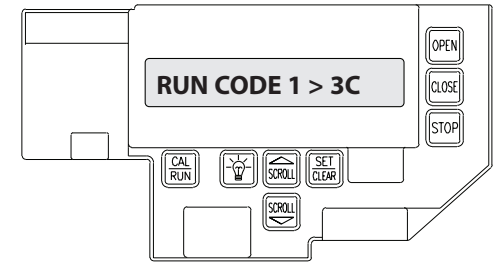   - Press the SET/CLEAR key to flip through the codes currently stored in memory.

RUN CODE 1 > 3C

Fig. 6B

Normal Operating Run Codes

The following Table is a listing of Normal Operating Condition Codes.

Condition Code	DISPLAY	Condition Code Description
0C	IDLE > DOWN LIMIT	STANDING BY AT DOWN LIMIT (NOTE: THIS MESSAGE IS DISPLAYED IF BOTH LIMITS ARE ACTIVE)
0D	IDLE > UP LIMIT	STANDING BY AT UP LIMIT
0E	IDLE > MID STOP	STANDING BY AT MID-STOP LIMIT
0F	IDLE > NO LIMIT	STANDING BY BETWEEN LIMITS
10	OPENING > OPEN BTN	OPENING FROM OPEN BUTTON
11	OPENING > ONE BTN	OPENING FROM 1 BUTTON
12	OPENING > RADIO	OPENING FROM RADIO
13	OPENING > AUX OPEN	OPENING FROM AUXILIARY OPEN INPUT
14	OPENING > OPEN KEY	OPENING FROM KEYPAD OPEN KEY
20	CLOSING > CLOSE PB	CLOSING FROM CLOSE BUTTON
21	CLOSING > ONE BTN	CLOSING FROM 1 BUTTON
22	CLOSING > RADIO	CLOSING FROM RADIO
24	CLOSING > CLOSE KP	CLOSING FROM KEYPAD CLOSE KEY
2A	CLOSING > TCM CLS	CLOSING FROM TIMER CLOSE MODULE
30	HALT > WALL BUTTON	GDO STOPPED BECAUSE STOP OR OPEN BUTTON WAS ACTIVATED, POSSIBLY STARTING A REVERSAL
31	HALT > ONE BUTTON	GDO STOPPED BECAUSE 1 BUTTON WAS ACTIVATED, POSSIBLY STARTING A REVERSAL
32	HALT > RADIO	GDO STOPPED BECAUSE RADIO INPUT WAS ACTIVATED, STARTING A REVERSAL
33	HALT > AUX. OPEN	GDO STOPPED BECAUSE AUXILIARY OPEN INPUT WAS ACTIVATED, STARTING A REVERSAL
34	HALT > KEYPAD KEY	GDO STOPPED BECAUSE KEYPAD STOP OR OPEN KEY WAS ACTIVATED, POSSIBLY STARTING A REVERSAL
35	HALT > N-O SAFETY	GDO STOPPED BECAUSE N-O REVERSING INPUT WAS ACTIVATED, STARTING A REVERSAL
36	HALT > ODC STB	GDO STOPPED BECAUSE ODC STB WAS BLOCKED, STARTING A REVERSAL
37	HALT > N-C SAFETY	GDO STOPPED BECAUSE N-C REVERSING INPUT WAS ACTIVATED, STARTING A REVERSAL
38	HALT > MON. EDGE	GDO STOPPED BECAUSE MONITORED EDGE SENSOR INPUT WAS ACTIVATED, STARTING A REVERSAL
39	HALT > DOOR FORCE	GDO STOPPED BECAUSE THE FORCE REQUIRED TO OPERATE THE DOOR WAS TOO HIGH, POSSIBLY STARTING A REVERSAL
3A	HALT > LOSS OF C/C	GDO STOPPED BECAUSE CONSTANT CONTACT ON THE CONTROL WAS REMOVED BEFORE REACHING A LIMIT, POSSIBLY STARTING A REVERSAL
3B	HALT > SHUTDOWN	GDO STOPPED BECAUSE THE GDO DETECTED A FAULT SUCH AS AN OPEN INTERLOCK, OVERHEATED MOTOR, ETC.
3C	HALT > DOWN LIMIT	GDO STOPPED BECAUSE IT REACHED THE DOWN LIMIT
3D	HALT > UP LIMIT	GDO STOPPED BECAUSE IT REACHED THE UP LIMIT
3E	HALT > MID STOP	GDO STOPPED BECAUSE IT REACHED THE MID-STOP LIMIT
3F	HALT > MODULE FAIL	GDO STOPPED BECAUSE AN EXPANSION MODULE WAS NOT WORKING PROPERLY

Error Code Recall

To aid in troubleshooting problems, this operator includes an error code memory that stores the last 10 error events. These codes are stored with or without power. The last error code detected is also displayed on the LCD until the stop button or key is pressed or the operator stops at the down limit.

The error code memory stores the last 10 error codes in sequence. Once 10 codes are stored, the oldest code is erased to make room for the newest code. These codes are displayed in calibration mode. The display will flash the number of the error code and the 2-digit error code followed by a description of the error code. **Fig. 6C**.

To Display Error Codes

1. Press the CAL/RUN key to enter the Cal Mode (**Fig. 6C**).
  - Press the SCROLL▼ key to select ERROR CODE 1 > "CODE."
 - Press the SET/CLEAR key to flip through the codes currently stored in memory.

Fig. 6C

Error Codes
The following Table is a listing of Error Codes.

CODES	DISPLAY	DESCRIPTION
40	REV > OPEN BUTTON	GDO REVERSED BECAUSE THE OPEN BUTTON WAS ACTIVATED
41	REV > ONE BUTTON	GDO REVERSED BECAUSE THE 1 BUTTON WAS ACTIVATED
42	REV > RADIO	GDO REVERSED BECAUSE THE RADIO INPUT WAS ACTIVATED
43	REV > AUX OPEN	GDO REVERSED BECAUSE THE AUXILIARY OPEN INPUT WAS ACTIVATED
44	REV > OPEN KEY	GDO REVERSED BECAUSE THE KEYPAD OPEN KEY WAS ACTIVATED
45	REV > N-O SAFETY	GDO REVERSED BECAUSE THE N-O REVERSING INPUT WAS ACTIVATED
46	REV > ODC STB	GDO REVERSED BECAUSE THE ODC STB WAS BLOCKED
47	REV > N-C SAFETY	GDO REVERSED BECAUSE THE N-C REVERSING INPUT WAS ACTIVATED
48	REV > MON. EDGE	GDO REVERSED BECAUSE THE MONITORED EDGE SENSOR WAS ACTIVATED
49	REV > DOOR FORCE	GDO REVERSED BECAUSE THE FORCE REQUIRED TO CLOSE THE DOOR WAS TOO HIGH
4A	REV > LOSS OF C/C	GDO REVERSED BECAUSE CONSTANT CONTACT ON THE CONTROL WAS REMOVED BEFORE REACHING THE DOWN LIMIT
4B	REV > MAX RUN TMR	GDO REVERSED BECAUSE THE CLUTCH SLIPPED OR SOME OTHER FAULT OCCURRED THAT ALLOWED THE GDO TO RUN TOO LONG
4F	REV > EXP MOD FAIL	GDO REVERSED BECAUSE AN EXPANSION MODULE WAS NOT WORKING PROPERLY
50	STOP > HOT MOTOR	GDO STOPPED BECAUSE THE MOTOR WAS OVERHEATED
51	STOP > OPEN MRT	GDO STOPPED BECAUSE THE CLUTCH SLIPPED OR SOME OTHER FAULT OCCURRED THAT ALLOWED THE GDO TO RUN OPEN TOO LONG
52	STOP > CLOSE MRT	GDO STOPPED BECAUSE THE CLUTCH SLIPPED OR SOME OTHER FAULT OCCURRED THAT ALLOWED THE GDO TO RUN DOWN TOO LONG
57	STOP > OPEN INTLK	GDO STOPPED BECAUSE THE HOIST INTERLOCK OR EXTERNAL INTERLOCK IS OPEN
58	STOP > WRONG GDO	GDO STOPPED BECAUSE THE BOARD IS SET FOR JACKSHAFT MODE, BUT INSTALLED IN A TROLLEY OPERATOR
59	STOP > DOOR FORCE	GDO STOPPED BECAUSE THE FORCE REQUIRED TO OPEN THE DOOR WAS TOO HIGH
5A	STOP > WRONG LIMIT	GDO STOPPED BECAUSE THE UP LIMIT ACTIVATED WHEN CLOSING OR THE DOWN LIMIT ACTIVATED WHEN OPENING
5C	STALL > DOWN LIMIT	GDO STOPPED BECAUSE IT COULDN'T LEAVE THE DOWN LIMIT DUE TO A SLIPPING CLUTCH OR OTHER PROBLEM
5D	STALL > UP LIMIT	GDO STOPPED BECAUSE IT COULDN'T LEAVE THE UP LIMIT DUE TO A SLIPPING CLUTCH OR OTHER PROBLEM
60	CHECK STOP BTN	GDO WON'T RUN BECAUSE THE STOP BUTTON IS ACTIVE
61	TCM DISABLED	TIMER CLOSE WON'T WORK BECAUSE NO SAFETIES ARE ENABLED
62	NO RADIO >> C/C	RADIO INPUT WON'T WORK WITH OPEN OR CLOSE FUNCTION IN CONSTANT CONTACT MODE
63	CHECK AUX OPEN	GDO WON'T CLOSE BECAUSE AUXILIARY OPEN INPUT IS ACTIVE
64	CHECK STOP KEY	GDO WON'T RUN BECAUSE THE KEYPAD STOP KEY IS ACTIVE
65	CHECK N-O SAFETY	GDO WON'T CLOSE BECAUSE THE N-O REVERSING IS ACTIVE
66	CHECK ODC STB	GDO WON'T CLOSE BECAUSE THE ODC STB IS BLOCKED

Error Codes continued on next page.
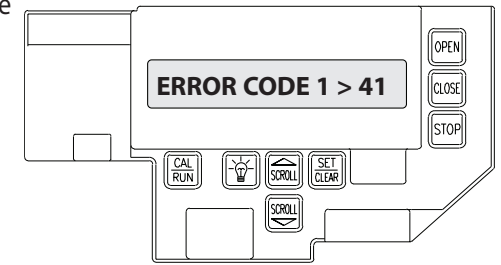
Error Codes (cont')

CODES	DISPLAY	DESCRIPTION
67	CHECK N-C SAFETY	GDO WON'T CLOSE BECAUSE THE N-C REVERSING INPUT IS ACTIVE
68	CHECK MON. EDGE	GDO WON'T CLOSE BECAUSE THE MONITORED EDGE SENSOR IS ACTIVE
69	OVERHEATED MOTOR	GDO WON'T RUN BECAUSE THE MOTOR IS OVERHEATED
6C	NO RUN > DOWN LIM	GDO WON'T CLOSE BECAUSE ITS ALREADY AT THE DOWN LIMIT
6D	NO RUN > UP LIMIT	GDO WON'T OPEN BECAUSE ITS ALREADY AT THE UP LIMIT
6E	NO RUN > MID STOP	GDO WON'T RUN BECAUSE ITS AT OR ABOVE THE MID-STOP LIMIT & CAN'T RUN UP & A REVERSING INPUT IS PREVENTING IT FROM CLOSING
6F	EXP MODULE FAIL	GDO WON'T RUN BECAUSE AN EXPANSION MODULE FAILURE IS PREVENTING IT
70	BOARD FAILURE 70	CONTROL BOARD FAILURE 70, CONTACT FACTORY TECHNICAL SERVICE DEPT.
71	BOARD FAILURE 71	CONTROL BOARD FAILURE 71, CONTACT FACTORY TECHNICAL SERVICE DEPT.
74	BOARD FAILURE 74	CONTROL BOARD FAILURE 74, CONTACT FACTORY TECHNICAL SERVICE DEPT.
75	BOARD FAILURE 75	CONTROL BOARD FAILURE 75, CONTACT FACTORY TECHNICAL SERVICE DEPT.
76	BOARD FAILURE 76	CONTROL BOARD FAILURE 76, CONTACT FACTORY TECHNICAL SERVICE DEPT.
77	BOARD FAILURE 77	CONTROL BOARD FAILURE 77, CONTACT FACTORY TECHNICAL SERVICE DEPT.
80	BOARD FAILURE 80	CONTROL BOARD FAILURE 80, CONTACT FACTORY TECHNICAL SERVICE DEPT.
81	BOARD FAILURE 81	CONTROL BOARD FAILURE 81, CONTACT FACTORY TECHNICAL SERVICE DEPT.
82	BOARD FAILURE 82	CONTROL BOARD FAILURE 82, CONTACT FACTORY TECHNICAL SERVICE DEPT.
83	BOARD FAILURE 83	CONTROL BOARD FAILURE 83, CONTACT FACTORY TECHNICAL SERVICE DEPT.
84	BOARD FAILURE 84	CONTROL BOARD FAILURE 84, CONTACT FACTORY TECHNICAL SERVICE DEPT.
85	EXP PORT PROBLEM	EXPANSION PORT IS SHORT CIRCUITED, TRY DISCONNECTING EXPANSION MODULES OR CONTACT FACTORY TECHNICAL SERVICE DEPT.
86	BOARD FAILURE 86	CONTROL BOARD FAILURE 86, DISCONNECT EXPANSION MODULES. IF NO CHANGE, CONTACT FACTORY TECHNICAL SERVICE DEPT.
88	TCM FAILURE	TIMER CLOSE MODULE (TCM) HAS FAILED
8A	AOM FAILURE	AUXILIARY OUTPUT MODULE (AOM) HAS FAILED
8E	REV INTERRUPTED	GDO LOST POWER OR ENCOUNTERED ANOTHER PROBLEM DURING THE REVERSAL PROCESS, REVERSAL IS COMPLETING NOW
8F	LIMIT MOD. FAIL	GDO WON'T RUN, LIMIT MODULE HAS FAILED
90	DIAGNOSTIC MODE	GDO IS IN DIAGNOSTIC MODE, NORMAL FUNCTIONS ARE NOT ALLOWED
A0	OPEN BTN BAD > PU	OPEN & CLOSE BUTTONS WON'T WORK, THE OPEN BUTTON WAS ACTIVE WHEN THE GDO WAS POWERED-UP
A1	CLOSE BTN BAD > PU	OPEN & CLOSE BUTTONS WON'T WORK, THE CLOSE BUTTON WAS ACTIVE WHEN THE GDO WAS POWERED-UP
A2	ONE BTN BAD > PU	1 BUTTON WON'T WORK, THE 1 BUTTON WAS ACTIVE WHEN THE GDO WAS POWERED-UP
A3	RADIO BAD > PWR UP	RADIO INPUT WON'T WORK, THE RADIO INPUT WAS ACTIVE WHEN THE GDO WAS POWERED-UP
A4	AUX OPEN BAD > PU	AUXILIARY OPEN INPUT WON'T WORK, THE AUXILIARY OPEN INPUT WAS ACTIVE WHEN THE GDO WAS POWERED-UP
A5	OPEN KEY BAD > PU	KEYPAD OPEN & CLOSE KEYS WON'T WORK, THE OPEN KEY WAS ACTIVE WHEN THE GDO WAS POWERED-UP
A6	CLOSE KEY BAD > PU	KEYPAD OPEN & CLOSE KEYS WON'T WORK, THE CLOSE KEY WAS ACTIVE WHEN THE GDO WAS POWERED-UP
A7	MULT KEYS BAD > PU	1 OR MORE KEYPAD CALIBRATION KEYS WON'T WORK, 1 OR MORE WERE ACTIVE WHEN THE GDO WAS POWERED-UP
AA	TCM BAD > POWER UP	TIMER CLOSE MODULE WON'T CLOSE DOOR, IT WAS ACTIVE WHEN THE GDO WAS POWERED-UP

Section 7:
Warranty

The authorized distributor of Overhead Door Products, whose name appears below ("Seller") warrants to the original purchaser of the Accessory Module specified on the right, subject to all the terms and conditions hereof, that the Accessory Module will be free from defects in material and workmanship under normal use and service for a period of two (2) years following the date of installation.

Seller's sole obligation under this warranty is specifically limited to repairing or replacing, at its option, any parts which shall be determined by Seller to be defective during the warranty period. Any labor charges are excluded and will be the responsibility of the owner.

This warranty applies only to an Accessory Module which is installed in commercial or industrial building applications. This warranty does not apply if the Accessory Module has been altered or repaired by any person not authorized by Overhead Door Corporation to do so, or if it has been damaged due to misuse or accident or failure to provide necessary maintenance. This warranty is made only to the original purchaser of the Accessory Module and is not transferrable or assignable.

THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTIES, EITHER EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL OVERHEAD DOOR CORPORATION BE RESPONSIBLE FOR, OR LIABLE TO ANYONE FOR, SPECIAL, INDIRECT, COLLATERAL, PUNITIVE, INCIDENTAL OR CONSEQUENTIAL DAMAGES, even if Overhead Door Corporation has been advised of the possibility of such damages. Such excluded damages include but are not limited to loss of goodwill, loss of profits, loss of use, interruption of business or other similar indirect financial loss.

Claims under this warranty must be made in writing promptly to the Seller whose name and address appears to the right, and must be made within the warranty period. (Proof of purchase and identification as the original purchaser may be required.)

Accessory Module Model No._____

Original Purchaser_____

Installation Address_____

Seller_____

Seller's Address_____

Date of installation_____

Signature of Seller_____

Accessory Module Return Material Authorization Procedure

The Manufacturer will only accept returned materials that are in warranty. Products being returned must be accompanied by a Return Authorization (RA) Tag. To obtain a Return Authorization Tag please use the following guidelines.

- To return an Operator Accessory Module during the warranty period, the Seller must contact the Technical Service Group at *1.800.275.6187*. The following information is required; Accessory Module Model Number, Date Code, and a description of the malfunction. The Technical Service Group will issue, via mail, an RA Tag for the Accessory Module.

- Upon receipt of the Accessory Module, the Manufacturer will evaluate the part for a defect in material and/or workmanship. If it is determined there is a defect, the Seller will be credited the cost of the Accessory Module. If it is determined there is not a defect in material and/or workmanship, no credit will be issued.

The Genuine. The Original.

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Operator Division
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Alliance, Ohio 44601

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Web: www.overheaddoor.com