



# Swing Gate Installation Manual Eagle-200 Series Eagle-100 Series

## Eagle Access Control Systems, Inc.

(800)708-8848

Distributed by:

**AFW Access Systems**

[www.AnchorMiami.com/afwas](http://www.AnchorMiami.com/afwas)

**Operator Installation and Instructions for the  
Eagle-200 and Eagle-100 Series.**

**Eagle-100**



**Eagle-200**



**UL325 and UL991 Compliant**

## Table of Contents

Contents:	Page(s):
UL Listings	Page 3/4
Installing the Warning Sign / Precautions	Page 5
Methods of Installation / Compact Installation	Page 6
Mounting the Secondary Entrapment	Page 7
Welding the Gate Arm	Page 7
Mounting Operator(s) to Concrete Pads	Page 8
Selecting the Opening Direction of Gate	Page 8
Connecting the Power	Page 9
Reverse / Exit Loop Installations	Page 9
Two Way Adjustable Reverse Sensors / ERD	Page 10
The Feature Selector	Page 11
Master and Slave Operation	Page 12
Master Control Options	Page 12
Slave Control Options	Page 13
Selecting the Delay Functions	Page 13
Output Connections	Page 14
MAG Lock Solenoid	Page 14
Alarm	Page 14
24 VAC Auxiliary Power	Page 14
Connecting the Accessories	Page 15
Description of Inputs	Page 16
Receiver Connections	Page 17
Gate Travel Distance / Setting the Limit Switches	Page 17
Emergency Release	Page 18
Resetting the Motor	Page 18
Adjusting the Operator's Clutch	Page 18
Control Board LED Indicators	Page 19
Troubleshooting	Page 20
Parts Breakdown / Eagle-200	Page 21
Parts Breakdown / Eagle-100	Page 22
Operator Parts List / Eagle-200 & Eagle-100	Page 23

**© 2002 Eagle Access Control Systems, Inc.**

All rights reserved. No part of this manual may be reproduced in any means: graphics, electronics, or mechanical, including photocopying without the expressed written permission of the publisher. Materials, components and specifications are subject to change without notice.

# UL Listings

## Gate Operators Installation Instructions

- 1) Install the gate operator only when:
  - The operator is appropriate for the construction and the usage Class of the gate.
  - All openings of a horizontal slide gate are guarded or screened from the bottom of the gate to a minimum of 4 feet (1.2 m) above the ground to prevent a 2 ¼ inch (57.15 mm) diameter sphere from passing through the openings anywhere in the gate, and in that portion of the adjacent fence that the gate covers the open position.
  - All exposed pinch points are eliminated or guarded.
  - Guarding is supplied for exposed rollers.
- 2) The operator is intended for installation only on gates used for vehicles. Pedestrians must be supplied with a separate access opening.
- 3) The gate must be installed in a location so that enough clearance is supplied between the gate and adjacent structures when opening and closing to reduce the risk of entrapment. Swinging gates shall not open into public access areas.
- 4) The gate must be properly installed and work freely in both directions prior to the installation of the gate operator.
- 5) Controls must be far enough from the gate so that the user is prevented from coming in contact with the gate while operating the controls. Controls intended to be used to reset an operator after two sequential activations of the entrapment protection device(s) must be located in the line of sight of the outdoor gate or easily accessible controls shall have a security feature to prevent unauthorized use.
- 6) All warning signs and placards must be installed where visible in the area of the gate.
- 7) For a gate operator utilizing a non-contact sensor such as a photo beam:
  - See instructions on the placement of non-contact sensor for each type of application.
  - Care shall be given to reduce the risk of nuisance tripping such as when a vehicle trips the sensor while the gate is still moving.
  - One or more non-contact sensors shall be located where the risk of entrapment or obstruction exists, such as the perimeter reachable by a moving gate or barrier.
- 8) Gate operators utilizing a contact sensor such as an edge sensor:
  - One or more contact sensors shall be located at the leading edge, trailing edge, and post mounted both inside and outside of a vehicular horizontal sliding gate.
  - One or more contact sensors shall be located at the bottom edge of a vehicular lift gate.
  - One or more contact sensors shall be located at the pinch point of a vehicular vertical pivot gate.
  - A hardwire contact sensor shall be located and its wiring arranged so that the communication between the sensor and the gate operator is not subject to mechanical damage.
  - A wireless contact sensor such as one that transmits radio frequency (RF) signals to the gate operator for entrapment protection functions shall be located where the transmission of the signals are not obstructed or impeded by building structure, natural landscaping, or similar obstruction. A wireless contact sensor shall function under the intended end use conditions.

# UL Listings

## Essencial Safety Procedures

AND FOLLOW ALL INSTRUCTIONS:

- Never let children operate or play with gate controls. Keep the remote control away from children.
  - Always keep people and objects away from gate while the gate is in operation. **NO ONE SHOULD CROSS THE PATH OF A MOVING GATE.**
  - Test the gate operator monthly. The gate must reverse on contact with a rigid object or stop when an object activates the non-contact sensors. After adjusting the force or the limit of travel, retest the gate operator. Failure to adjust and retest the gate operator properly can increase the risk of injury or death.
  - Use the emergency release only when the gate is not moving. Make sure the power for the gate operator is off.
  - **KEEP GATES PROPERLY MAINTAINED.** Read and follow the manual. Have a qualified service person make repairs to the gate or gate hardware.
  - The entrance is for vehicles only. Pedestrians must use separate entrance.
- BE SURE TO CONTINUE TO KNOW & PRACTICE THESE INSTRUCTIONS •

---

## UL Listings

**Vehicular Horizontal Slide Gate Operator or System** - A vehicular gate operator (or system) that controls a gate which slides in a horizontal direction that is intended for use for vehicular entrance or exit to a drive, parking lot, or the like.

**Gate** - A moving barrier such as a swinging, sliding, raising, lowering, rolling, or like barrier that is a stand-alone passage barrier or is that portion of a wall or fence system that controls entrance and/or egress by persons or vehicles and completes the perimeter of a defined area.

---

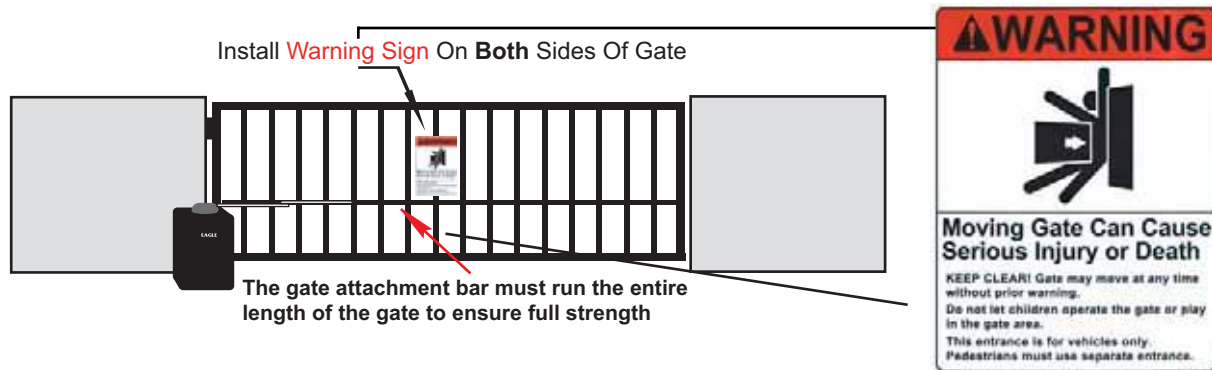
**Residential Vehicular Gate Operator - Class I**  
A vehicular gate operator (or system) intended for use in a home of one to four single family dwellings, or a garage or parking area associated therewith.

**Commercial /General access vehicular gate operator - Class III** - A vehicular gate operator (or system) intended for use in an industrial location, loading dock area, or other location not intended to service the general public.


**Commercial /General access vehicular gate operator - Class II** - A vehicular gate operator (or system) intended for use in a commercial location or building such as a multi-family housing unit (five or more single family units), hotel, garages, retail store, or other buildings servicing the general public.

**Commercial /General access vehicular gate operator - Class IV** - A vehicular gate operator (or system) intended for use in a guarded industrial location or buildings such as airport security area or other restricted access locations not servicing the general public, in which unauthorized access is prevented via supervision by security personnel.

## Installing the Warning Sign

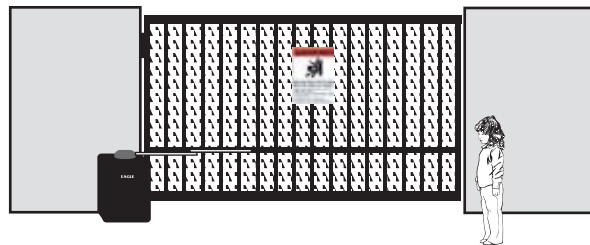



## Precautions

 Eagle swing gate operators are for vehicular use only!  
They are not for pedestrian use!



Regarding Ornamental Grill Styled Gates: Injuries may be avoided if a mesh or screen is installed on the gate. Injuries resulting from hands and feet becoming stuck in gate or children riding the gate while in movement, can be greatly reduced if this "screen" or "mesh" is applied to gate as a safety precaution.



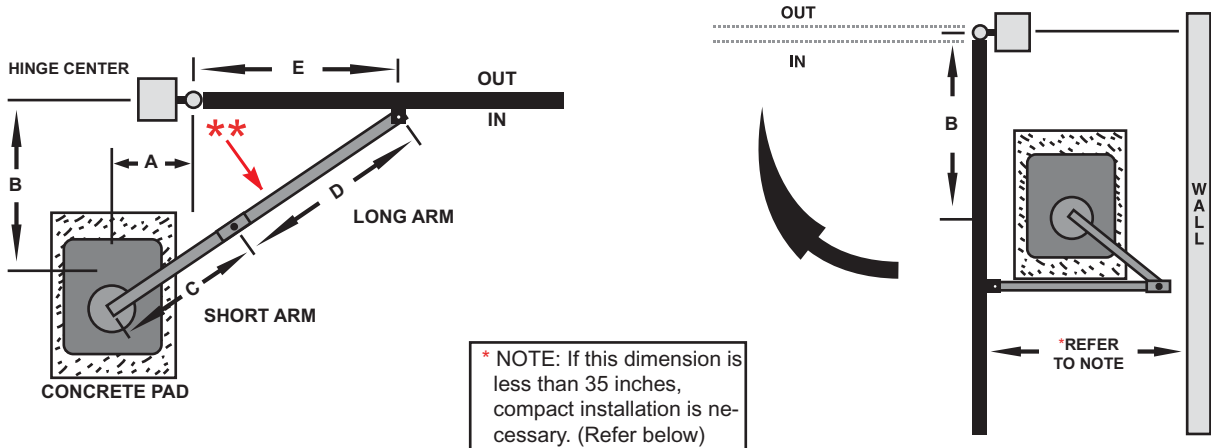
 **CAUTION!** Be sure to read and follow all the Eagle Access Control Systems, Inc. and UL instructions before installing and operating any Eagle Access Control Systems, Inc. products. Eagle Access Control Systems, Inc. is not responsible for any improper installation procedures caused by failure to comply with local building codes.

## Methods of Installation



An experienced installer should perform the installation of all operators. Improper installation may result in property damage, severe injury, or death. Read entire manual before proceeding with the installation.

Installation for the Eagle-200 Series & Eagle-100 operators:



Eagle-200 Series

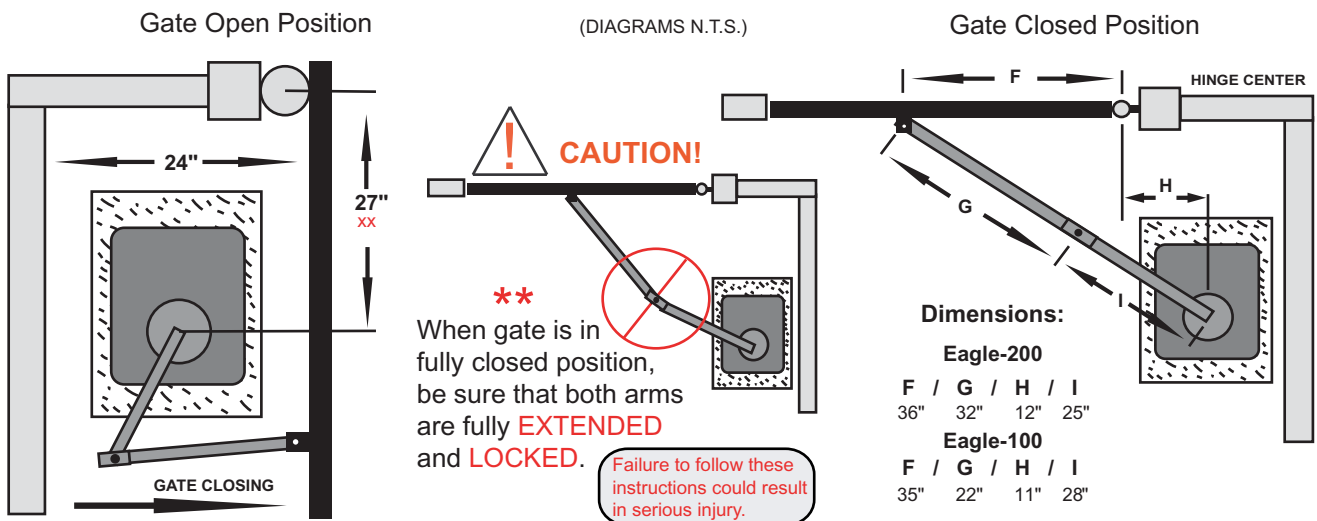
	A	B	C	D	E
1	13.5	35	31	38	46
2	13.5	33	30	37	42
3	13.5	31	29	36	40
4	13.5	29	28	35	38
5	13.5	27	27	34	36

Eagle-100

	A	B	C	D	E
1	13	35	36	30	45
2	13	33	34.5	28.5	43
3	13	31	33	26	41
4	13	29	31.5	24.5	39
5	13	27	30	23	37

## Compact Installation

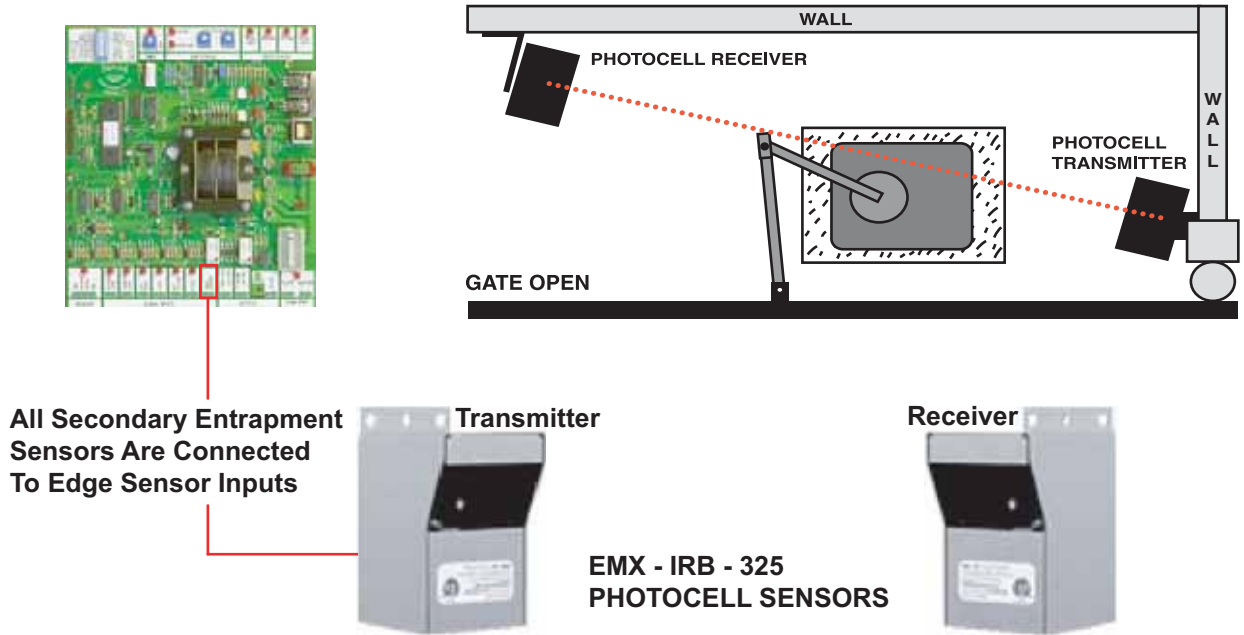
The following dimensions are for **COMPACT INSTALLATIONS** only!



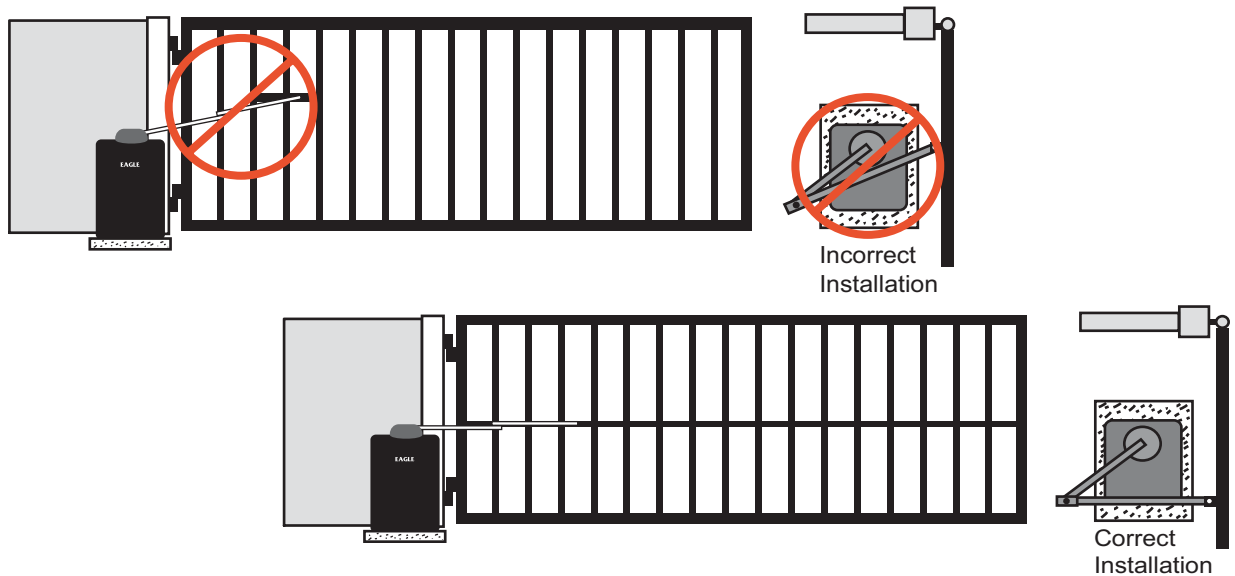
xx - Change dimension to 26" for the Eagle-100

## Mounting The Secondary Entrapment

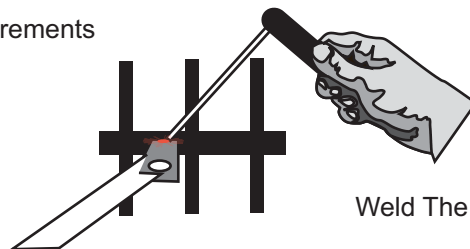
Note: Eagle Access Controls, Inc. recommends the installation of a reflective photocell sensor.



## Welding The Gate Arm



Once The Gate Arm Measurements Are Calculated:



Weld The Bracket On The Gate

## Mounting Operator(s) To A Concrete Pad



Be sure that the operator is installed in a level position and is properly secured. Improper installation could result in property damage, injury, or death.

### Note:

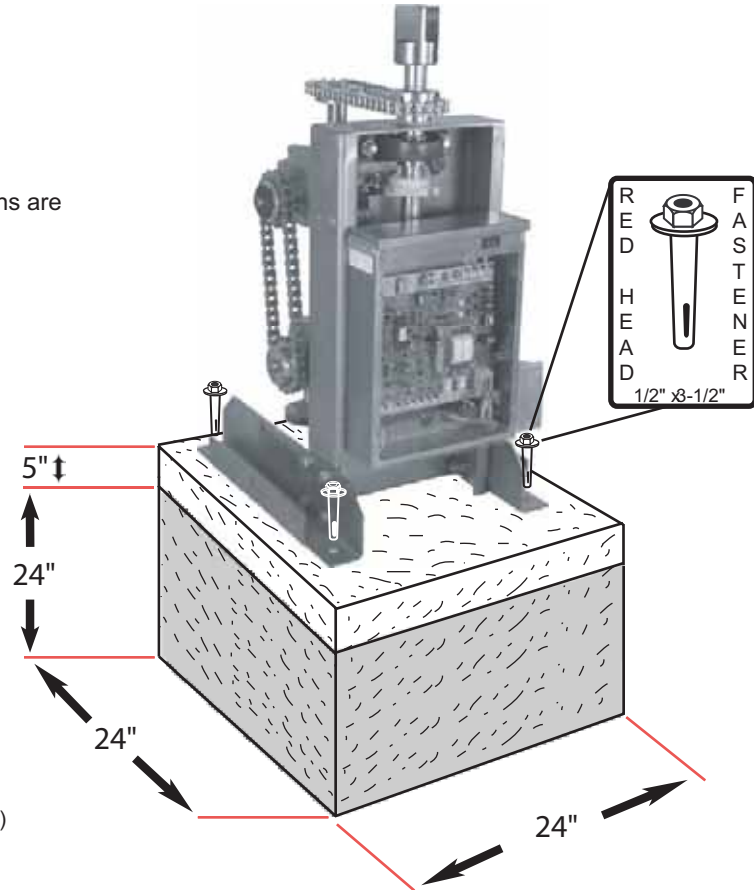
The following concrete recommendations are installation suggestions only. Please consult local codes for actual requirements in your area.

### Recommended Dimensions

### IMPORTANT!

The concrete dimensions shown are for the Eagle-200 only. For the Eagle-100 the recommended concrete pad dimensions are 24" x 20"

(Concrete Pad Diagram N.T.S.)



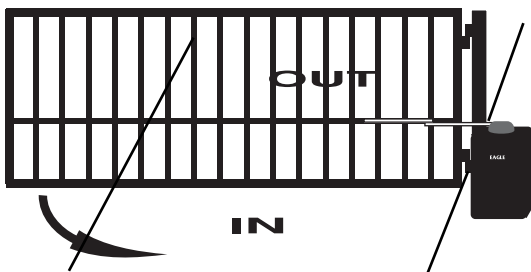
## Selecting Opening Direction of Gate



To select the opening direction of the gate, use the Feature Selector (as shown). Use switch #2 to the "open left" position for left opening. Use switch #2 to the "open right" position for right opening.



OPEN TO THE RIGHT



OPEN TO THE LEFT





## Connecting The Power



Be sure that the circuit breaker for the line input power is turned off before connecting the input power to the unit.

Connect 120 VAC, 15A, 60HZ, line input power to the wires provided in the power switch junction box located near the bottom of the operator.

**Warning:** Eagle Access Control Systems, Inc. is not responsible for researching and complying with local building codes. Be sure to check these codes before installation.



All units must be properly grounded

The wires are color coded as follows:

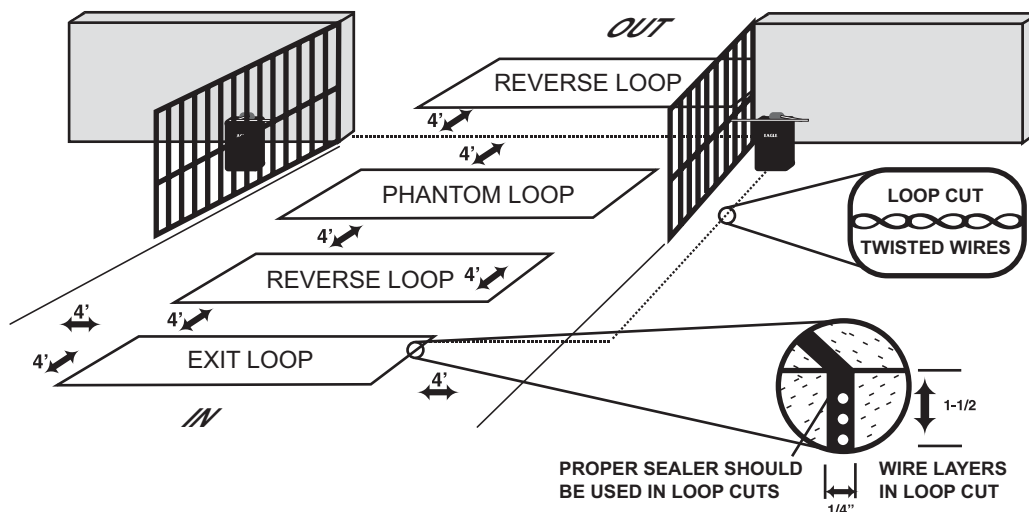
- Black - 120 VAC / Line Input Power
- White - Neutral Input
- Green - Ground Input (from an approved grounding method)

14 AWG	12 AWG	10 AWG	8 AWG	4 AWG
250 ft.	400 ft.	650 ft.	1000 ft.	2000 ft.

## Reverse / Exit Loop Installation

The Purpose for a reversing loop is to prevent the gate from closing on a vehicle while it is exiting or stopped in the middle of the gate area. The purpose of the exit loop is to automatically open the gate when a vehicle approaches to exit.

### Exit Loop Operation



Wires must be wrapped inside the groove three times. Once you have completed the process, fill up the grooves with a proper seal.

## Two Way Adjustable Reverse Sensor / ERD

**CAUTION!**



Only a qualified service technician must make all adjustments to the sensor .:

The Eagle DiamondControl Board has two separate pots for adjusting sensitivity. One is for opening the gate, and the other is for closing the gate.



**IMPORTANT**

The level of sensitivity has to do with the weight of the gate and the conditions of the installation.

There is an LED OVERLOAD warning that will light up when the gate is heavier than normal for the operator. During this warning, the operator will not function properly.

### When Adjusting Sensors Remember...

Too Sensitive = if the gates stops or reverses by itself

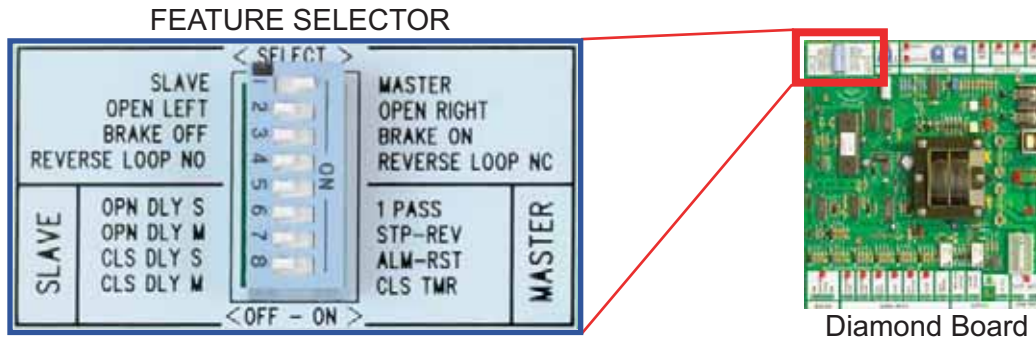
Not Sensitive enough = if the gate strikes an object and does not stop or reverse



## The Feature Selector

The selector uses an eight-station switch system that allows selection of the standard features and customized installation settings. The switch description is as follows:

**Note:** The power should always be turned off when designating feature selector switches



Switch 1: Slave/Master - Sets the operator to work as Master or Slave.

Switch 2: Gate Opening - Designates left or right opening.

Switch 3: Motor Brake - If the "on" position is selected, the gate will stop instantly when on the limit switches. This is useful on uphill / downhill applications and on all Fail-Safe operators.

Switch 4: Reverse Loop - Sets the reverse loop to be normally open or to normally close. It is useful in Fail-Safe applications.

Switch 5: One Pass (On/Off) - This tailgating feature works with the reverse loop to allow only one car to pass. After the car passes, the gate closes instantly. If a second car approaches the gate stops. The operator resumes closing after the car leaves.

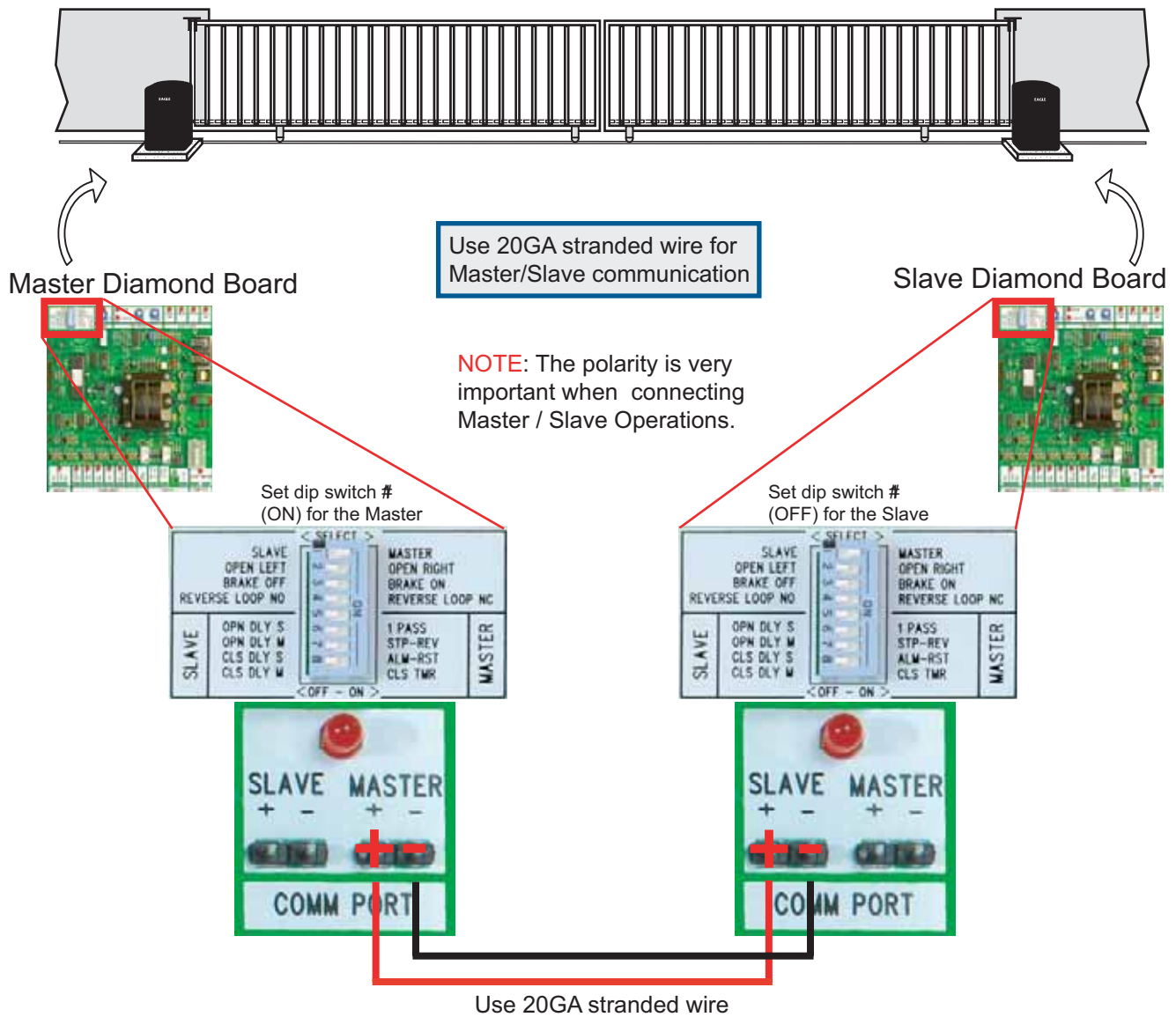
Switch 6: Stop-Reverse (On/Off) - This radio feature allows the transmitter to work as a three-button station and is useful for a partial opening. If selected, the first command will open the gate, the second will stop the gate, and the third will close the gate.

Switch 7: Alarm Reset (On/Off) - If the "on" position is selected, after the five minutes "shut down" time period the operator will reset and any input will be accepted. Normally, the power must be turned off to reset.

Switch 8: Close Timer (On/Off) - Sets the Close Timer to the "on" or "off" position.

## Master and Slave Operation

**Important:** Be sure that the 120 VAC power (for the Master and the Slave) are connected to the same circuit breaker.

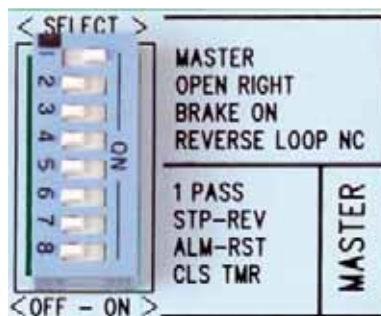


## Master Control Options

Use the feature selector to choose available features by designating the various switches (1 through 8).

Gate opening direction, motor brake, reverse loop, one pass, stop reverse, alarm reset, and close timer.

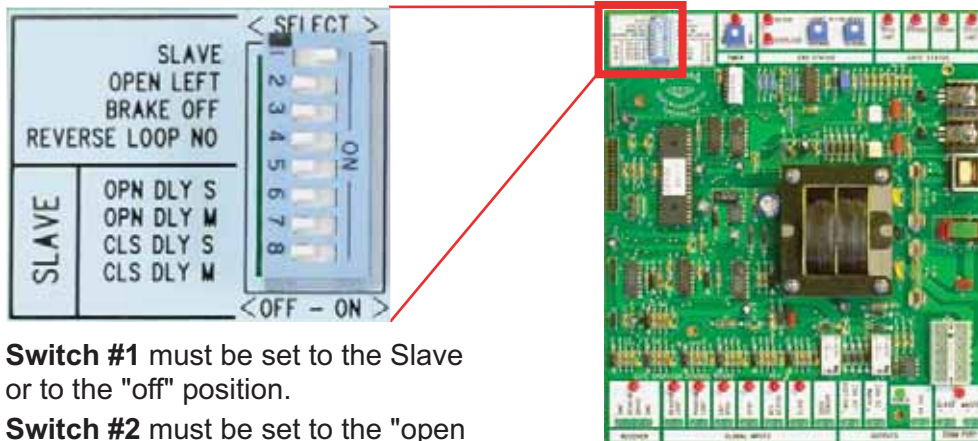
Please refer to pages 10 & 11 for more information on individual switch functions.



**NOTE:** Please remember the Eagle Diamond Control Board allows you to connect accessories to the Master or Slave operators.

These accessories include:  
Reverse Loop, Phantom Loop, Exit Loop, 3 Button Station, Key Switch Lock Box, Fire Dept. Box, Edge Sensors, Telephone System...Etc.

## Slave Control Options



**Switch #1** must be set to the Slave or to the "off" position.

**Switch #2** must be set to the "open left" or to the "open right" position.

**Switch #3** brake on / off.

**Switch #4** Not in use.

## Selecting The Delay Functions

The Eagle "Diamond" Control board was uniquely designed to allow the slave control to communicate to the master board all of the "Open-Delay" and "Close Delay" functions.

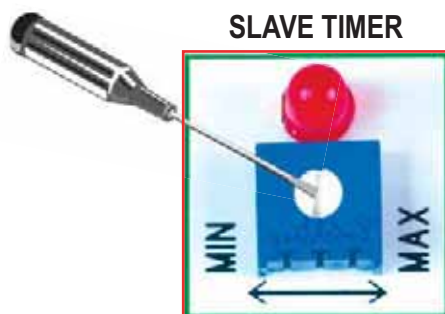
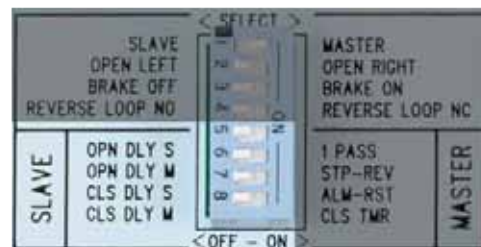
If no delay functions are needed, switches 5 through 8 must be in the off position.

### Setting The Open Delay Function

Switches 5 & 6: Open Delay Slave (On/Off) - Selecting the switch to the "on" position delays the Slave (Sw. 5) or Master (Sw. 6) operator by 1 1/2 seconds on the open cycle. This is useful with magnetic lock applications.

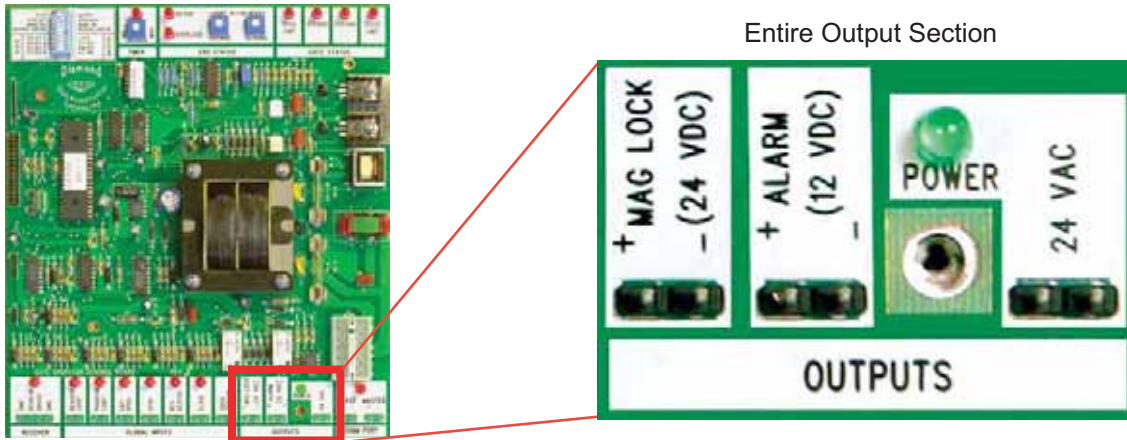
### Setting The Close Delay Function

Switches 7 & 8: Close Delay Master (On/Off) - Selecting the switch to the "on" position delays the Slave (Sw. 7) or Master (Sw. 8) operator by 1 - 6 seconds on the close cycle (adjustable by the Slave Timer shown below).



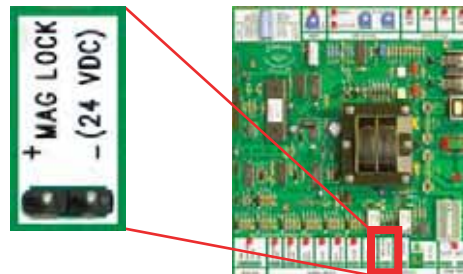
Diamond Control Board

## Describing The Output Connections

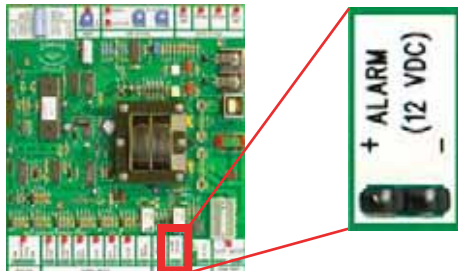


### MAG Lock Solenoid Connections (24 VDC)

The Eagle Diamond Control Board provides a 24 VDC and relay output for MAG Locks or Solenoids.



### Alarm (12 VD)



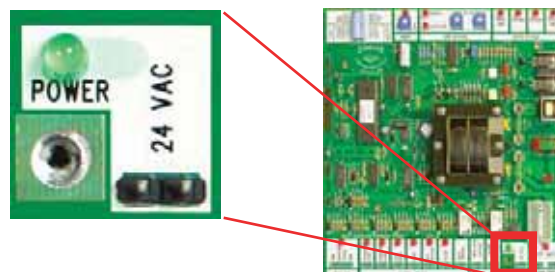
**Safety Alarm:** If the gate hits an obstruction twice while closing or opening, the system will shut down for 5 minutes. On the Diamond Board, you have two options of reset mode.



Selecting the "off" position will require a "manual reset" of the board if the previous happens. However, by selecting the "on" position, the system will automatically reset itself.

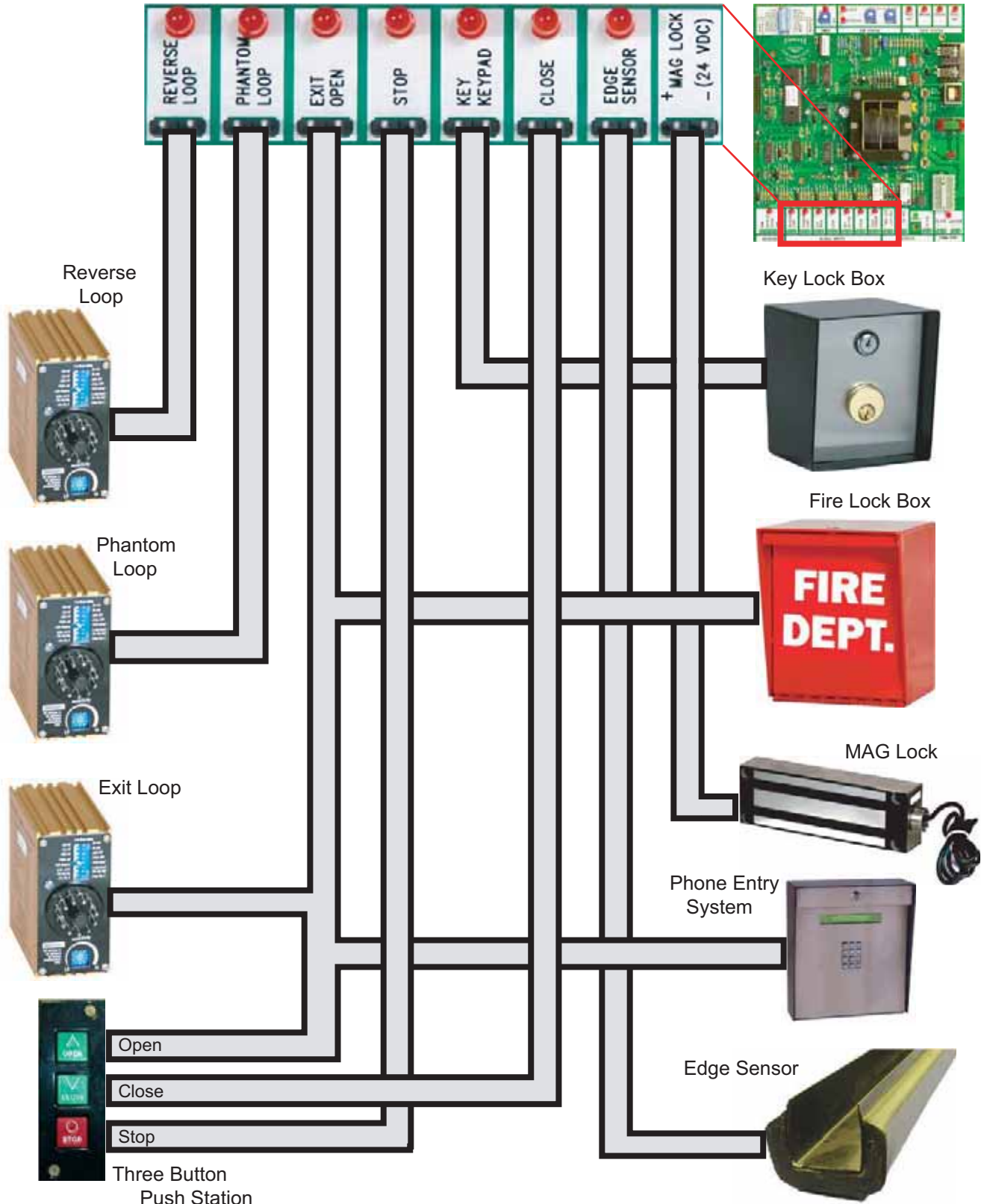
### Power (24 VAC)

The Eagle Diamond Control Board provides 24 VAC Power, which can be used for loop detectors and receivers.

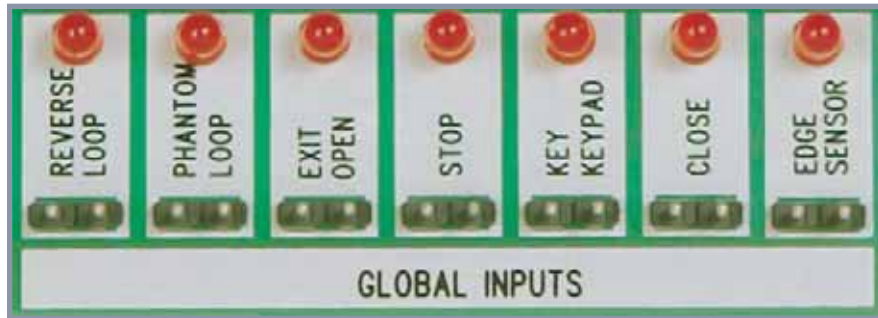


## Connecting The Accessories

With the exception of the MAG Lock, all of these accessories can be installed on the Master or Slave operator.



## Description of Inputs



1.

### Reverse Loop - Momentary or Continuous Signal

This input is active only when the gate is closing or when its fully open. If this input is active, the close timer is disabled. All vehicle detectors and photo-eyes should be connected here. Multiple devices may be connected in parallel.

2.

### Phantom Loop - Momentary or Continuous Signal

This input is active only when the gate is at rest in the fully open position. The input has no effect on the gate when fully closed or while closing or opening. Continuous activation will prevent the gate from moving in the close direction. When the input is removed normal operation is resumed. This input is intended for a vehicle loop detector to sense a vehicle in the gate path. Multiple devices may be connected in parallel.

3.

### Exit Open / Loop - Momentary or Continuous Input

Once activated the gate will fully open. Activation while the gate is closing will cause the gate to reopen. Continuous activation while the gate is open will disable the timer to close function from automatically closing the gate.

4.

### Stop - Momentary or Continuous Signal

This function overrides all other signals. Once activated, the gate will immediately stop and await a new command. If the stop input is continuously activated, the gate will not move.

5.

### Key / Keypad

#### Timer On - Momentary or Continuous Input

Once activated the gate will fully open. Activation while the gate is closing will cause the gate to reopen. Continuous activation while the gate is open will disable the timer to close function from automatically closing the gate.

5.

### Key / Keypad (Continued)

#### Timer Off - Momentary Input

This function must be released and reentered to be recognized. This input is to be used for COMMAND/OPEN / COMMAND/CLOSE applications. The first signal will cause the gate to begin opening. The second signal will close the gate only when the gate is in the fully open position.

6.

#### Close - Momentary or Continuous Signal

Once activated the gate will fully close. Activation while the gate is opening has no effect.

7.

#### Edge Sensor - Momentary or Continuous Signal

*This signal is active when the gate is opening and/or closing.*

#### If activated when the gate is opening:

The gate will stop, pause and reverse in the close direction for 1 1/2 seconds and stop. Continuous activation will prevent the gate from moving in the opening direction. If the second activation occurs before the limit switch is activated, the gate will stop and reverse direction for 1 1/2 seconds and stop, thus activating the alarm mode. At this point the operator must be manually reset (ON/OFF) before normal operation can resume.

#### If activated when the gate is closing:

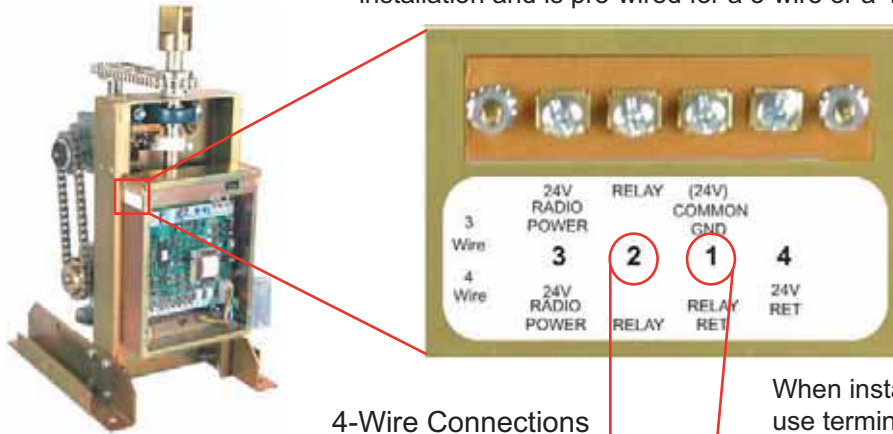
The gate will stop, pause and fully reopen. During this mode the timer to close, reverse loop, exit loop and phantom loop are disabled. The KEY/ KEYPAD and Receiver will cause the gate to close if a second activation occurs before the limit switch is activated. The gate will then stop and reverse direction for 1 1/2 seconds, stop again, thus activating the alarm mode. At this point the operator must be manually reset (ON/OFF) before normal operation can resume.

*Multiple devices may be connected in parallel to the Edge Sensor Input.*



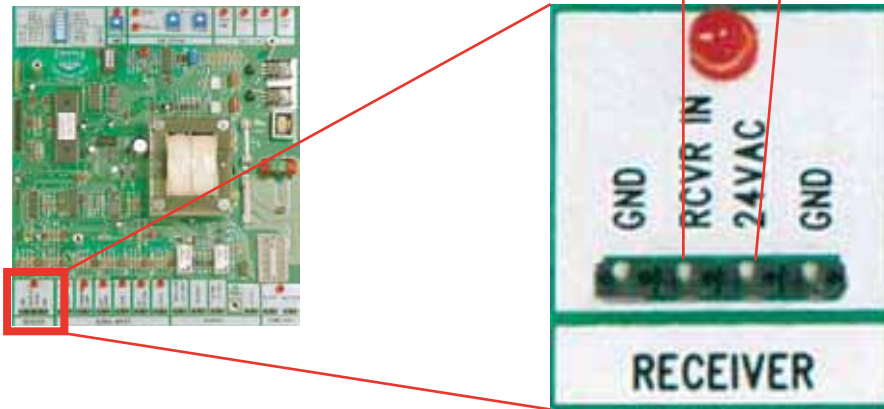
## Receiver Connections

Receiver terminal is mounted on the control box for easy installation and is pre-wired for a 3-wire or a 4-wire receiver.



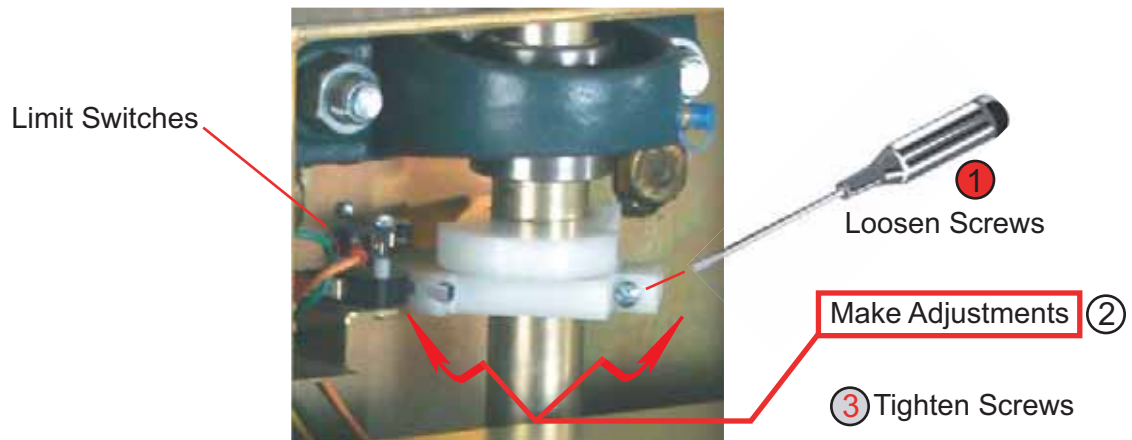
4-Wire Connections  
3-Wire Connections

When installing 4-wire, use terminals 1 & 2. For relay connection and 24 VAC Power, use terminals 3 & 4



## Gate Travel Distance / Setting The Limit Switches

The limit switches must be set so that the gate stops at the proper position. Follow these instructions to appropriately set the limit switches.



## Emergency Release



EAGLE-200



EAGLE-100

To release operator, simply unscrew bolt, remove the top cap, and lift the arm.

## Resetting The Motor

Emerson Motor



Leeson Motor



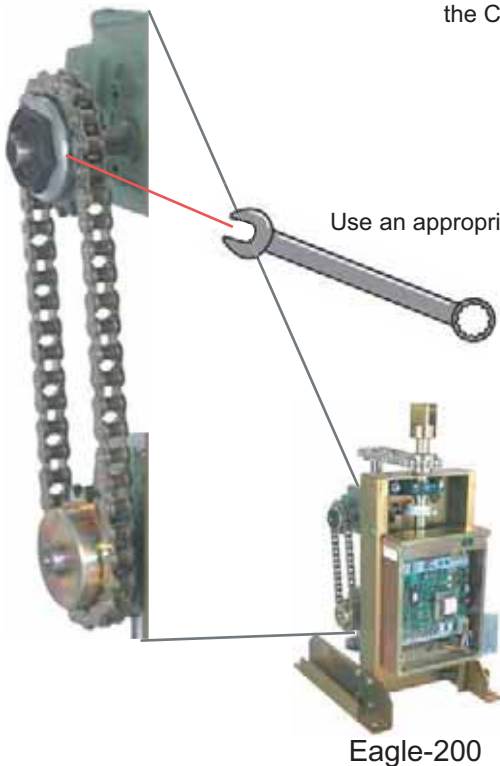
On all Eagle Access motors, a red reset button is available for resetting the motor. If operator ceases to function:

**TURN THE POWER TO THE OPERATOR OFF AND ALLOW FOR THE MOTOR TO COOL DOWN...**

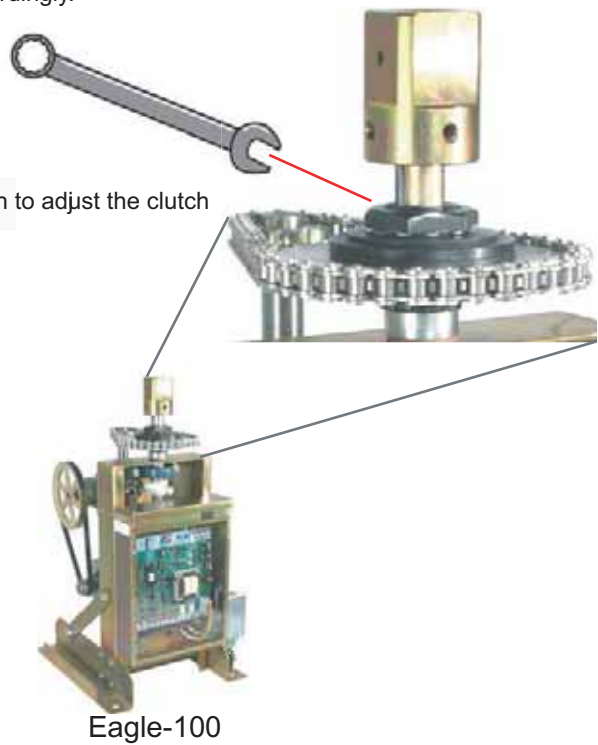
then simply locate the reset button and press.

## Adjusting the Operator's Clutch

Depending on the weight of the gate clutch slippage may occur. Typical Clutch slippage is about 1/4 turn. If it does not slip, readjust the Clutch accordingly.



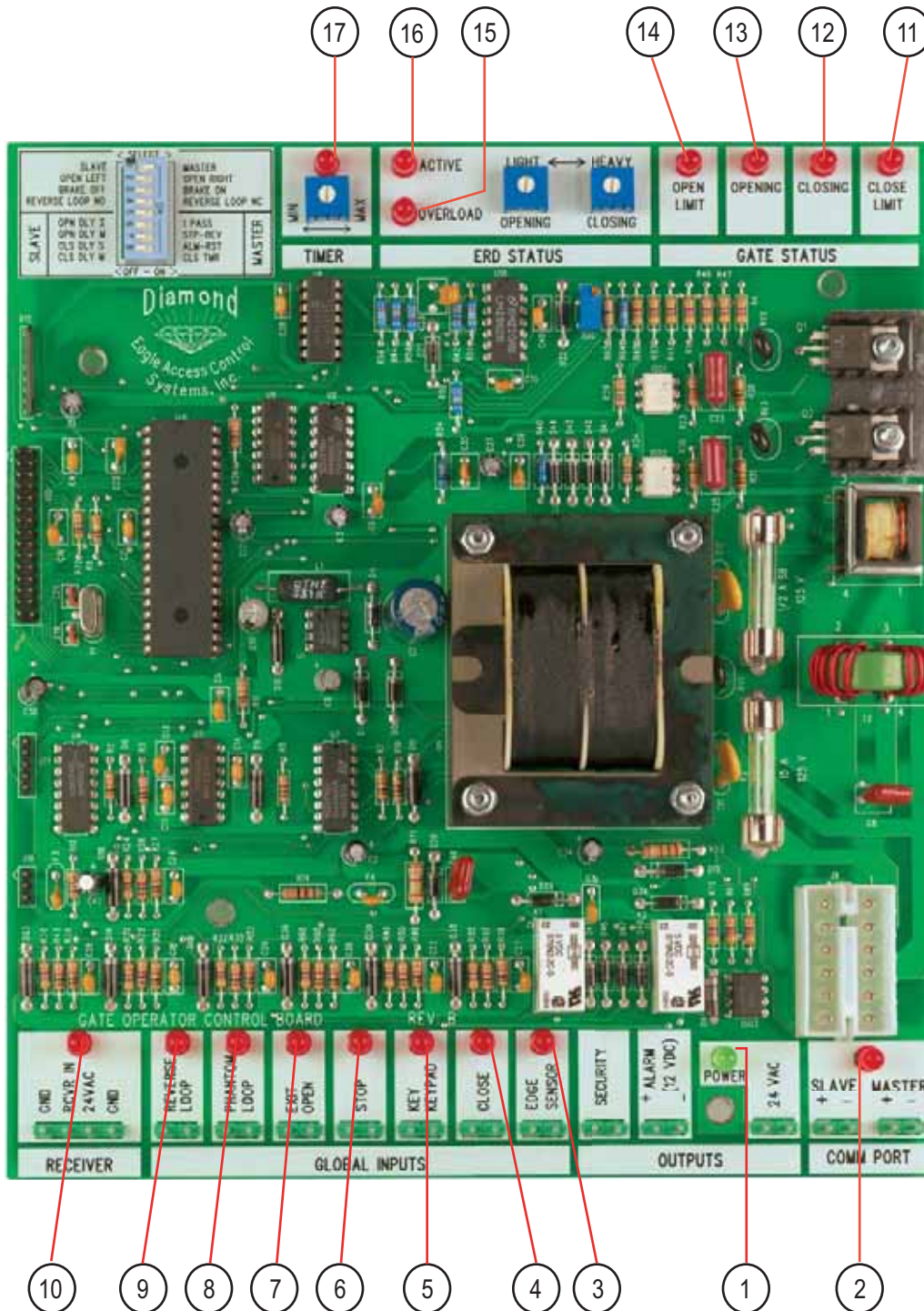
Eagle-200



Eagle-100

Use an appropriate wrench to adjust the clutch

## Control Board LED Indicators



- |                                 |                 |                 |              |
|---------------------------------|-----------------|-----------------|--------------|
| 1. Power On                     | 5. Key / Keypad | 10. Receiver    | 15. Overload |
| 2. Master / Slave Communication | 6. Stop         | 11. Close Limit | 16. Active   |
| 3. Edge Sensor                  | 7. Exit / Open  | 12. Closing     | 17. Timer    |
| 4. Close                        | 8. Phantom Loop | 13. Opening     |              |
|                                 | 9. Reverse Loop | 14. Open Limit  |              |

## Troubleshooting

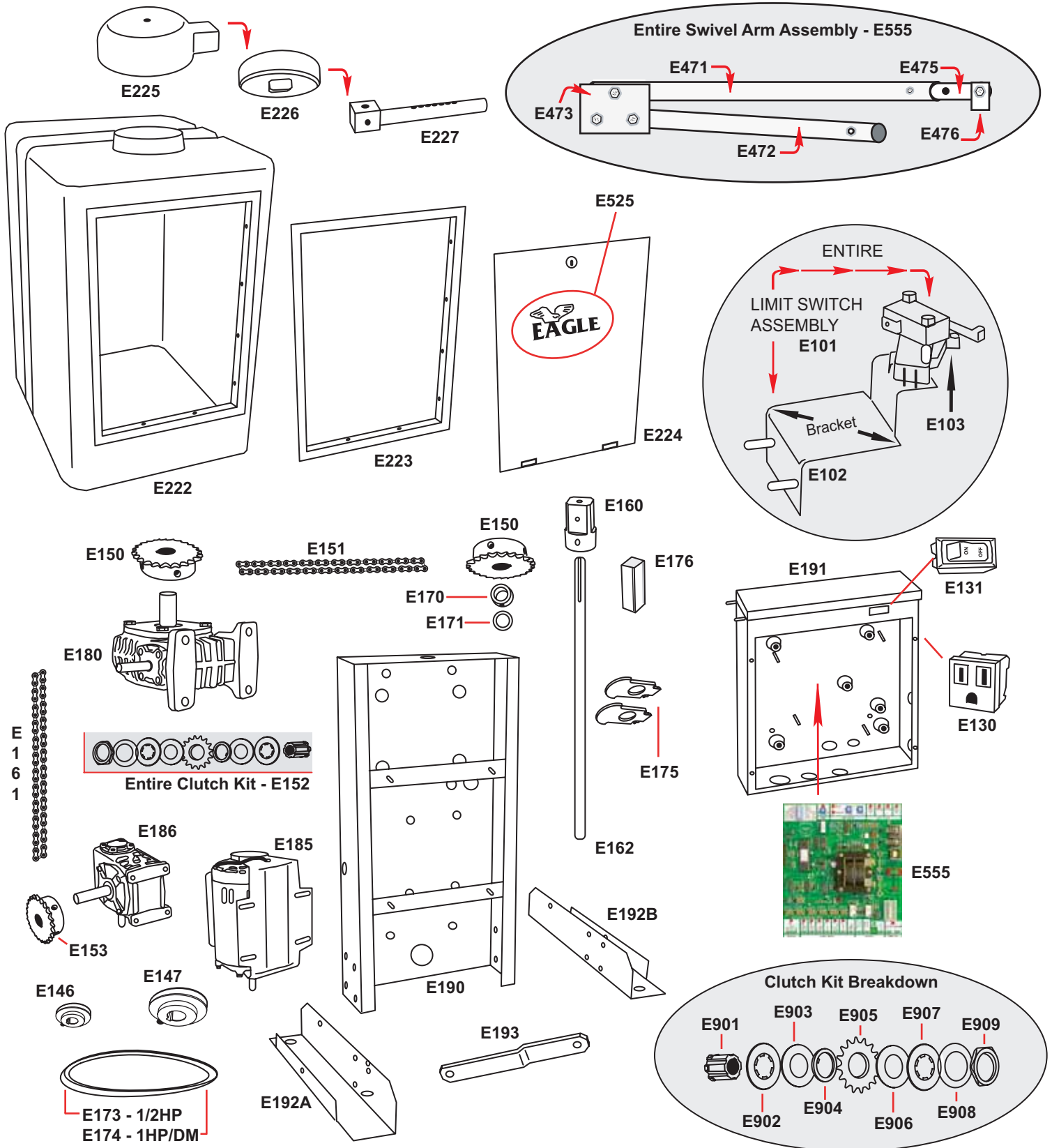
SYMPTOMS	PROBABLE CAUSES	REMEDY
Gate stops and reverses direction in mid travel and the OVERLOAD LED remains ON.	(A) Gate operator is not plumb and level. (B) ERD current sense may be set to sensitive. (C) Gate encountered an obstruction while in travel.	(A) Remount operator or chain brackets. (B) Turn the ERD sensor slightly in the clockwise direction. (C) Check and remove all obstructions.
Gate will not CLOSE.	(A) The Radio Receiver's LED remains on. (B) One or more of the global input LED(S) remain active. (C) Gate has reopened because it encountered an obstruction while closing. (D) The Loop Detector LED is on. (E) Switch #8 is not functioning.	(A) Remote or receiver has malfunctioned in the "on" position. (B) Check any Global Inputs for a possible short circuit. (C) Only key/keypad and receiver will resume normal operation. (D) Reset Loop Detector, verify correct wiring, set to a different frequency and/or change the sensitivity of the Loop Detector. (E) Be sure that the "Close Timer" (switch #8) is set to the "on" position.
Gate will not OPEN.	(A) Motor overload. (B) Radio Receiver is not "on" when the remote control is activated. (C) The green LED is "off." (D) Fuse blown.	(A) Reset thermal breaker on motor. (See page 18) (B) The receiver in the gate operator has malfunctioned in the "off" position. (C) Turn "on" the power switch and/or reset the main circuit breaker. (D) Check and/or replace with a proper fuse.

### COMMON OVERSIGHTS TO BE AWARE OF:

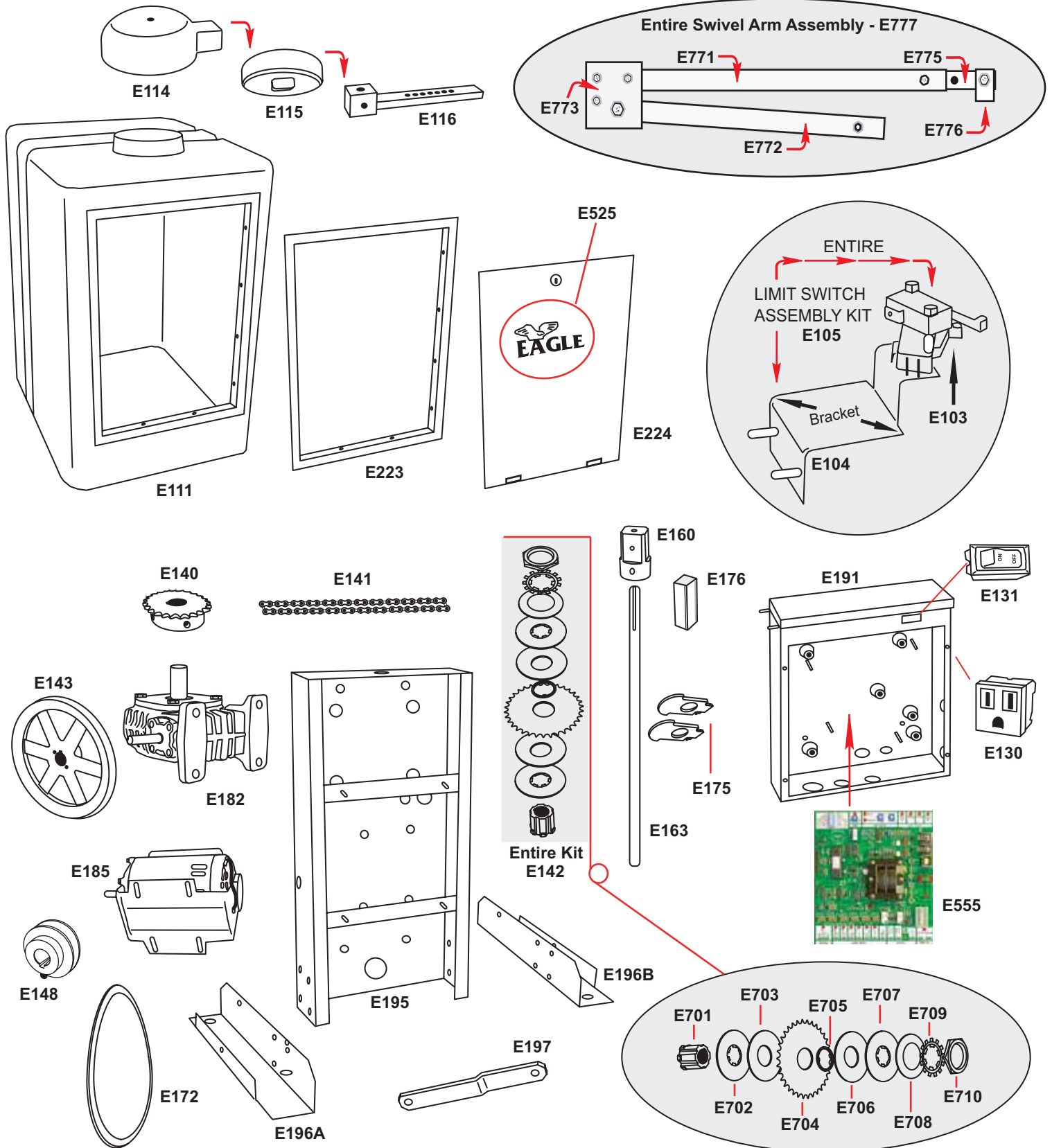
- (A) Switch #1 must be set to the "Master On" position, unless the operator is being used as a "Slave unit.
- (B) Safety Loop Detectors must be connected to the Reverse Loop input. (See pages 15 & 16)
- (C) If the "Timer to Close" function is desired, switch #8 must be set to the "on" position.
- (D) It is Ok to call the Eagle Access Customer Service Department with any questions...we are here to serve YOU!

1-800-708-8848

## Parts Breakdown / Eagle-200



## Parts Breakdown / Eagle-100



## Operator Parts List

### Eagle-200 Swing Operator

- E222 - Operator Cover
- E223 - Operator Cover Door Frame
- E224 - Operator Cover Door
- E225 - Release Cover
- E226 - Release Cover Cap
- E227 - Main Swing Arm
- E101 - Limit Switch (LS) Assembly (Complete)

E102 - Limit Switch Bracket  
E103 - Limit Switches

- E191 - Control Board Box
- E555 - Diamond Control Board
- E130 - Electrical Outlet
- E131 - Power Switch
- E190 - Eagle-200 Chassis
- E192A - Right Chassis Leg
- E192B - Left Chassis Leg
- E193 - Leg Bracket
- E185 - 1/2 HP Motor
- E180 - Primary Gear Reducer (PGR)
- E186 - Secondary Gear Reducer (SGR)
- E150 - (PGR) Sprocket
- E153 - (SGR) Sprocket
- E152 - Clutch Kit (CK) Complete

Left and Right  
Determined By Facing  
Out From the Operator.

E901 - Main Bushing  
E902 - Metal Disk  
E903 - Fiber Disk (Clutch)  
E904 - Spacer  
E905 - Sprocket  
E906 - Fiber Disk (Clutch)  
E907 - Metal Disk  
E908 - Spring Washer  
E909 - Nut

- E146 - (SGR) Pulley
- E147 - Motor Pulley
- E173 - 1/2HP V-Belt
- E174 - 1HP/DM V-Belt
- E161 - Drive Chain (Side)
- E151 - Drive Chain (Top)
- E160 - Arm Hub
- E162 - Shaft
- E170 - Sprocket Collar
- E171 - Collar Washer
- E175 - Limit Switch Activators
- E176 - Shaft Key
- E525 - Plastic Eagle Logo
- E555 - Swivel Arm Assembly (SAA) Complete

E471 - Large Arm  
E472 - Small Arm  
E473 - Arm Attachment Plate  
E475 - Extension Arm  
E476 - Weld Plate

### Eagle-100 Swing Operator

- E111 - Operator Cover
- E223 - Operator Cover Door Frame
- E224 - Operator Cover Door
- E114 - Release Cover
- E115 - Release Cover Cap
- E116 - Main Swing Arm
- E105 - Limit Switch (LS) Assembly (Complete)

E104 - Limit Switch Bracket  
E103 - Limit Switches

- E191 - Control Board Box
- E555 - Diamond Control Board
- E130 - Electrical Outlet
- E131 - Power Switch
- E195 - Eagle-200 Chassis
- E196A - Right Chassis Leg
- E196B - Left Chassis Leg
- E197 - Leg Bracket
- E185 - 1/2 HP Motor
- E148 - 2" Motor Pulley
- E182 - Gear Reducer (GR)
- E140 - (GR) Sprocket
- E143 - (GR) Pulley
- E142 - Clutch Kit (CK) Complete

Left and Right  
Determined By Facing  
Out From the Operator.

E701 - Main Bushing  
E702 - Metal Disk  
E703 - Fiber Disk (Clutch)  
E704 - Sprocket  
E705 - Spacer  
E706 - Fiber Disk (Clutch)  
E707 - Metal Disk  
E708 - Spring Washer  
E709 - Locking Washer  
E710 - Nut

- E141 - Drive Chain
- E172 - 1/2HP V-Belt
- E160 - Arm Hub
- E163 - Shaft
- E175 - Limit Switch Activators
- E176 - Shaft Key
- E525 - Plastic Eagle Logo
- E777 - Swivel Arm Assembly (SAA) Complete

E771 - Large Arm  
E772 - Small Arm  
E773 - Arm Attachment Plate  
E775 - Extension Arm  
E776 - Weld Plate

If you are uncertain of a specific part  
you need, please call us at the number  
below for assistance.