



# SECURITY DOOR CONTROLS

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## Installation Instructions 70 Series Electric Strike

The following instructions cover all models of the 70 Series Electric Strike: 70-12-12U, 70-12-24U, 70-32-12U and 70-32-24U.

### INSTALLATION

1. For proper installation of the 70 Series Electric Strike refer to the appropriate template drawing.
2. Prior to installation make the necessary wire connections per the appropriate wiring diagram.
3. Proper operating voltage must be supplied to the strike if it is to function correctly. Voltage at the strike must be within + or - 10% of the required voltage listed on the strike label.
4. To install the strike into the frame opening:
  - A) Position the wiring either down or up or toward the back of the hollow metal frame, making sure that it stays completely out of the way of the strike so as not to pinch it when installing.
  - B) Mount the strike using the screws supplied.
5. After installation check the horizontal alignment, be certain that the centerline of the latch bolt is aligned with the centerline of the strike.
6. In case of misalignment there is a 3/16" horizontal adjustment between the strike mechanism and the face plate. To adjust:
  - A) Remove mounting screws.
  - B) Remove strike from frame.
  - C) Loosen the two (2) 8-32 PHPMS.
  - D) Reposition strike and retighten PHPMS screws.
  - E) Reinstall strike in frame.
  - F) Reinstall mounting screws.

### OPERATION

The SDC 70 Series Electric Strike is a solenoid operated device.

1. **70-12 NON-FAIL-SAFE**  
When power is applied the solenoid pushes the locking cam into the unlocked position allowing the door to be opened. If power fails the strike will remain locked.  
  
NOTE: Non-fail-safe strikes for use in fire rated doors can only be operated by momentary contact switching (energized only when the push button is held depressed) and can not be held in the unlocked position.
2. **70-12 FAIL-SAFE**  
When power is applied the solenoid pushes the locking cam into the locked position and the door can not be opened. If power fails the strike will unlock.
3. **70-32 NON-FAIL-SAFE**  
When power is applied the solenoid pushes the locking cam into the unlocked position allowing the door to be opened. If power fails the strike will remain locked.  
  
NOTE: Non-fail-safe strikes for use in fire rated doors can only be operated by momentary contact switching (energized only when the push button is held depressed) and can not be held in the unlocked position.
4. **70-32 FAIL-SAFE**  
When power is applied the solenoid pulls the locking cam into the locked position and the door can not be opened. If power fails the strike will unlock.

## OPTIONAL FEATURES

1. **LBM SWITCH (Latch Bolt Monitor)**  
A switch operated by the switch tripper that signals whether or not the latch bolt is extended into the strike.
2. **LCM SWITCH (Locking Cam Monitor)**  
A switch operated by the roll pin on the locking cam that monitors the position of the locking cam and signals that the strike is either locked or unlocked.
3. **LBMLCM SWITCH (Locking Cam and Latch Bolt Monitor)**  
A combination of the LCM and LBM switches. By wiring these two switches together, externally, they will indicate that the strike is locked (LCM) and the latch bolt is extended (LBM) into the strike.

4. **SOLENOID VOLTAGE**  
24VDC is standard. Optional voltages available are 6, 12, 16, 48, or 115VDC or VAC.

When control power source is AC, the strike is supplied with an externally attached bridge rectifier.

When control power source is DC, the strike is supplied without the bridge rectifier.

NOTE: UL requires that a junction box be used with 48 and 120 volt strikes, if they are not installed in a back box.

5. **FAIL-SAFE**  
The strike is locked when energized. This feature should be used for applications that require automatic unlocking in case of power failure.

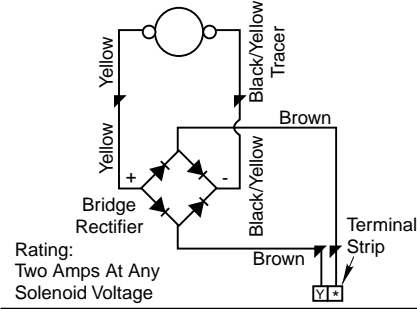
CAUTION: Fail-safe is not permitted with the UL Fire Door Accessory label.

6. **MOUNTING TAB**  
The mounting tab is designed to be used with 70-12 electric strikes when mounting in metal frames.
7. **ASTRAGAL**  
A lock guard, designed to prevent tampering with the strike keeper and the latch bolt.

# 70 SERIES ELECTRIC STRIKE WIRING DIAGRAMS

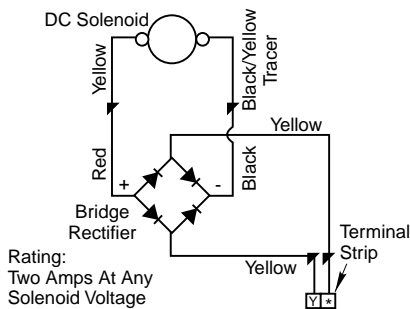
## Attachment of New Rectifier

(Required when supplying AC power to a unit with a DC solenoid)

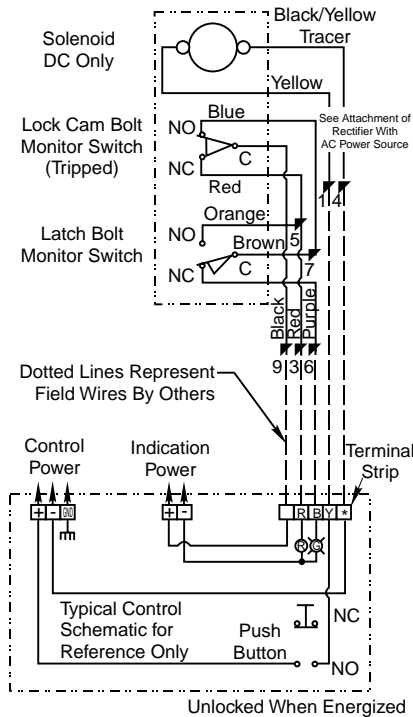


## Attachment of Old Rectifier

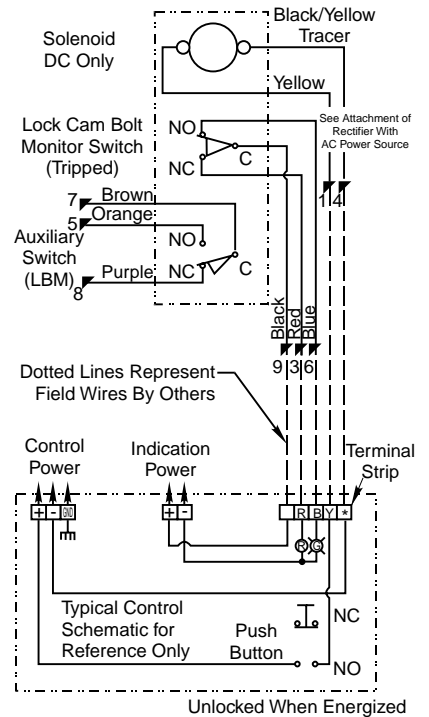
(Required when supplying AC power to a unit with a DC solenoid)



## 70 Series LBMLCM Wiring Diagram



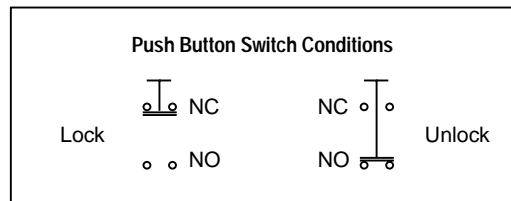
## 70 Series LCMA Wiring Diagram



Electrical Ratings for All 70 Series Electric Strike Solenoids	Voltage					
	DC					
	6	12	16	24	48	120
Resistance in OHMS $\pm$ 10%	10	41	73	160	640	3700
Watts	3.60	3.48	3.52	3.60	3.60	3.84
Amps	.6	.29	.22	.15	.075	.032

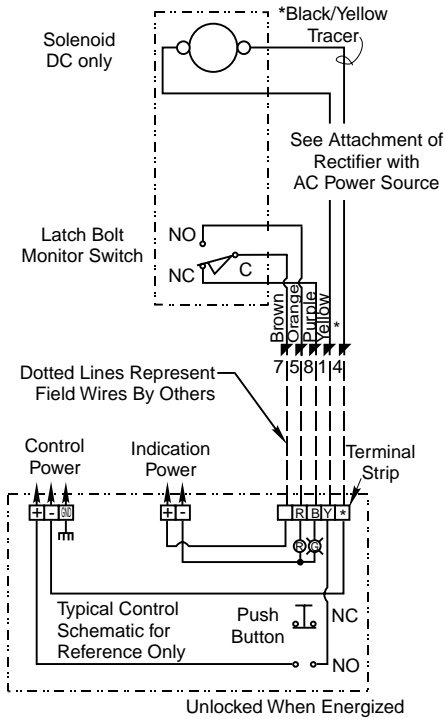
### Notice:

Wiring Subject To Change without Notice. Not Responsible when Controls Furnished By Others.

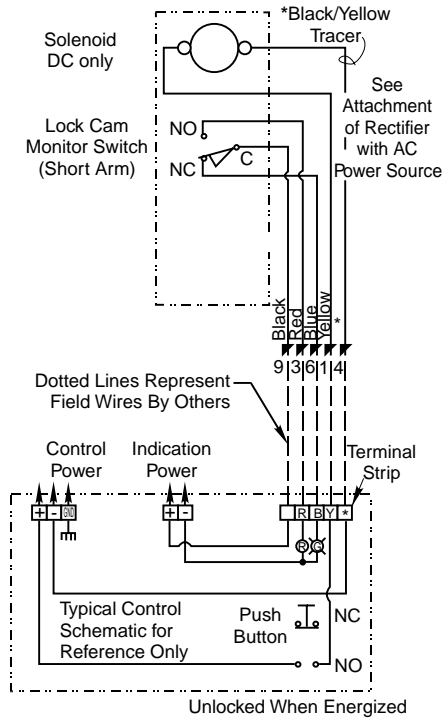


# 70 SERIES ELECTRIC STRIKE WIRING DIAGRAMS

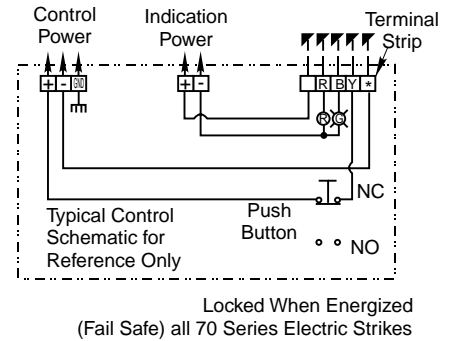
70 Series LBM Wiring Diagram



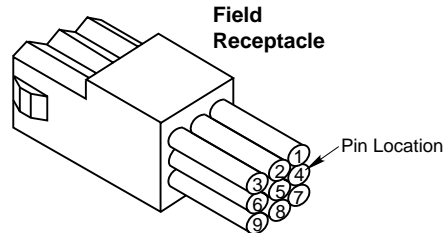
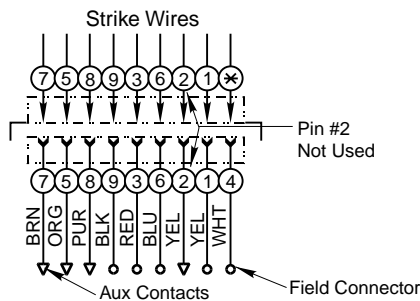
70 Series LCM Wiring Diagram



Fail Safe Controls



## Optional 9-Pin Field Wiring Conn.



Installation Must Be Properly Grounded Per National Electrical Code Article 250

## NOTES:

- 1) \* = Wires color code:  
6 thru 120 VDC  
Yellow/Black Tracer  
12 & 24 VAC-Grey  
120 VAC-White
- 2) Unused wires to be individually isolated with a wire nut or equal.
- 3) Numbered field connections refer to pin location in field receptacle.

## MAINTENANCE AND LUBRICATION

Under normal usage the 70 Series Electric Strike should be cleaned and lubricated once a year to maintain its reliability. In applications with high usage or dirty conditions more frequent service may be necessary. When servicing a 70 Series Electric Strike inspect the internal parts for excess wear or breakage and lightly lubricate. Lubricate with Lightning Grease, available from SDC. Never lubricate any strike with oil, such lubrication collects dirt and forms an abrasive and sticky compound that may affect the function of the strike.

### TO INSPECT AND LUBRICATE THE STRIKE:

1. Remove the strike from the face plate, held on by two (2) 8-32 x 3/8 PHPMS.
2. Remove the front cover, held on by two (2) 4-40 x 3/16 FHMS. Removal of the front cover should be done slowly because the locking cam spring may snap out of place. Also, care should be taken to insure that the baffle is not lost.
3. Remove the cam spring and the baffle.
4. PULL TYPE: Loosen the lock nut holding the solenoid, then remove the solenoid and then the plunger.  
PUSH TYPE: Loosen the lock nut holding the solenoid, then remove the solenoid and plunger assembly.
5. Remove the locking cam.
6. Remove the locking lever spring and locking lever.
7. Lubricate the area in the case where the locking lever and locking cam rest. (Be careful not to get any lubricant on the solenoid or switches.) Lubricate the cam pin and lever pin.
8. Check the locking angle of the keeper and locking lever for wear. Replace the keeper and/or lever if worn. (If the keeper is disassembled for replacement or adding of a switch, lubricate the keeper pin.)
9. Reinstall the locking lever and the locking lever spring, the spring must be held compressed into the hole in the locking lever for installation.
10. Check the solenoid, plunger and plunger guide for excess wear, dirt, grime or oil, if present wipe clean.  
PUSH TYPE: Remove the retaining ring for inspection of the plunger guide. Re-assemble the solenoid and plunger with a new retaining ring.
11. PULL TYPE: Lubricate the roll pin and the locking cam surfaces between the solenoid plunger (contact points of the solenoid plunger).  
PUSH TYPE: Lubricate the edge of the locking cam (contact point of the solenoid plunger).
12. Reinstall the locking cam. If the strike has a LCM or LBMLCM switch make sure the roll pin on the locking cam is positioned in front of the switch actuator arm.

