Security Door Controls

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INSTALLATION INSTRUCTIONS
30-4 ELECTRIC STRIKE

The following instructions cover all models of the 30-4 Electric Strike.

INSTALLATION:

1. For proper installation of the 30-4 Electric Strike, refer to the appropriate template drawing. The centerline of the latch bolt must be aligned with the centerline of the strike.
   NOTE: *Not compatible with SDC 6000 Series Rim Devices. Check manufacturers exit device template for compatibility.*
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 +/-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, up or toward the back of the hollow metal frame, making sure that it stays completely out of the way of the strike to avoid being pinched during installation.
   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) #12-24 x 3/8” hex washer head cap screws.
   D) Reposition strike and re-tighten cap screws.

OPERATION:

The SDC 30-4 Electric Strike is a solenoid operated device.

1. **NON-FAIL SAFE**
   When power is applied the solenoid pulls 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. **FAIL SAFE:**
   When the 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.

OPERATION NOTE: This product may be provided fail safe or non-fail safe. Fail safe versions allow exit in the event of a power failure. Fail secure version do not. Consult with the local authority having jurisdiction concerning the installation of this type of product and whether listed panic hardware is required to allow emergency exit from the secured area.

INSTALLATION INSTRUCTIONS 30-4 ELECTRIC STRIKE

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. **LCBM SWITCH** (Locking Cam and Latch Bolt Monitor) – A switch operated by the LCM switch tripper and the LBM switch tripper that signals that the strike is locked and the latch bolt is engaged.

4. **LCBMA SWITCH** (Locking Cam and Latch Bolt Monitor, wired separately) – This is the same as the LCBM with an additional switch operated by the LBM switch tripper.

5. **KEEPERS** – There is a standard type for each model 300 strike. Optional keepers are available for some models.

6. **SOLENOID VOLTAGE** – 24VDC is standard. Optional voltages available are: 12 or 115VDC, 6, 12, 24, 48 or 115VAC. NOTE: UL requires that a junction box be use with 48 and 120 volt strikes if they are not installed in a back box.

7. **SILENT OPERATION (SO)** – Silent operation is recommended for AC non-fail safe strikes that are to be energized for extended periods of time. All silent operation strikes are operated by DC solenoids. When control power source is AC, the strike is supplied with an externally attached bridge rectifier.

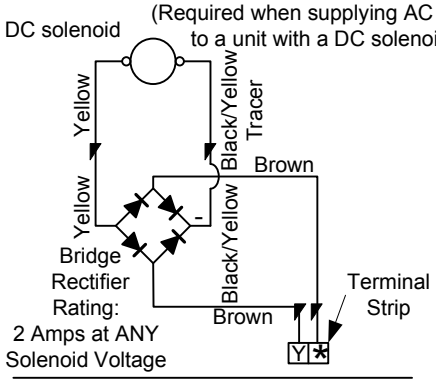
8. **FAIL SAFE** – The strike is locked when energized. This feature should be used for applications that require automatic unlocking in case of power failure. All fail safe strikes are operated by DC solenoids and are silent operation.
   CAUTION: Fail safe is not permitted with the UL Fire Door Accessory label.

9. **MOUNTING TAB –** The mounting tab is designed to be used with the 30 series electric strikes when mounting in metal frames.

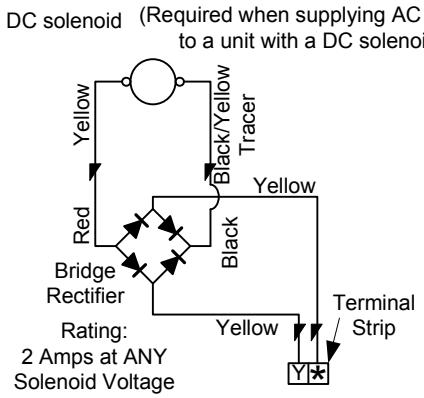
10. **ASTRAGAL -** A lock guard designed to prevent tampering with the strike keeper and the latch bolt.

30-4 SERIES ELECTRIC STRIKE WIRING DIAGRAMS

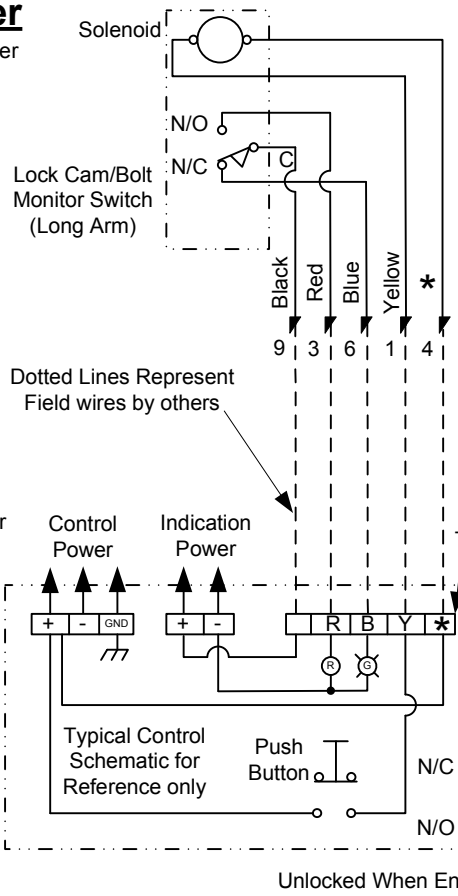
Attachment of New Rectifier



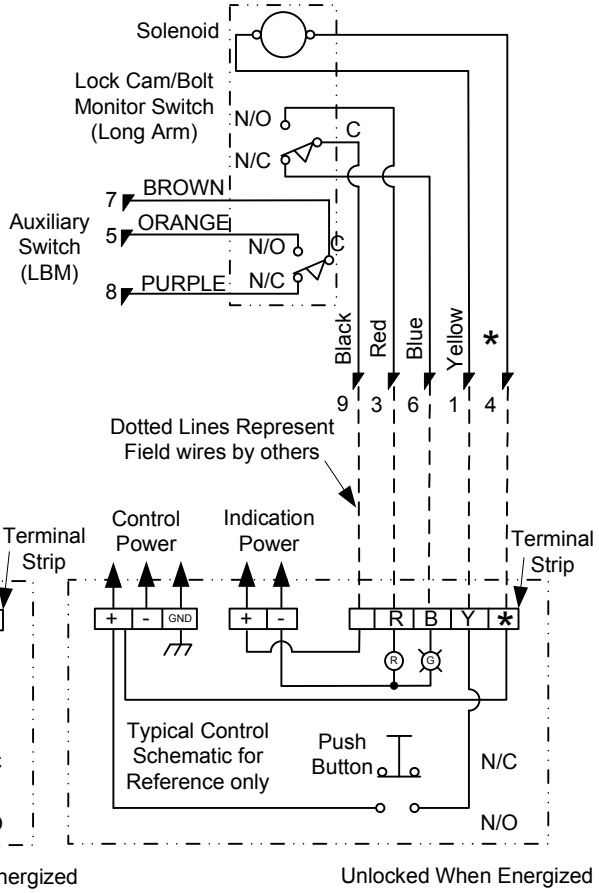
Attachment of Old Rectifier



30-4 Series LCBM Wiring Diagram



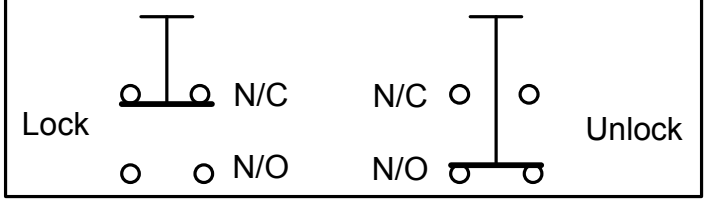
30-4 Series LCBMA Wiring Diagram



Electrical Ratings for ALL 30-4 Electric Strike Solenoids	VOLTAGE							
	AC			DC				
	12	24	120	6	12	24	48	120
Resistance in OHMS +/- 10%	6.2	23.5	500	6.2	23.5	96.0	380	1200
Watts Seated	5.4	5.8	6.3	5.8	6.1	6.0	6.1	6.3
Amps Seated	.45	.24	.06	.97	.51	.25	.13	.06
Amps Inrush	1.33	.69	.16	N/A	N/A	N/A	N/A	N/A

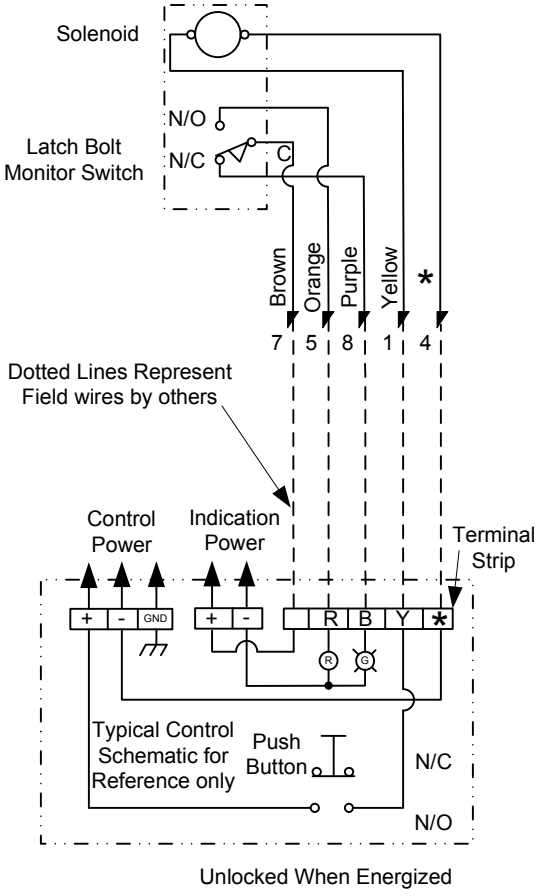
Notice:
Wiring subject to change without prior notice. Not responsible for controls furnished by others.

Push Button Switch Conditions

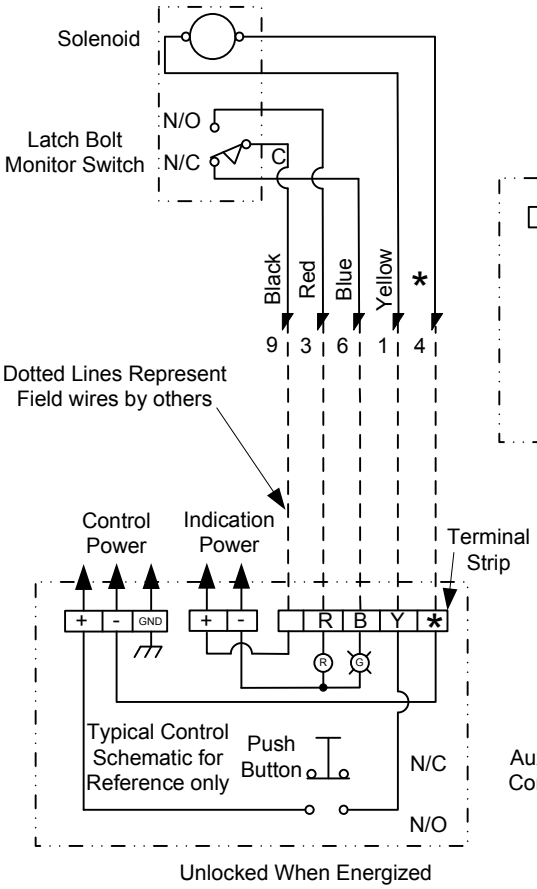


30-4 ELECTRIC STRIKE WIRING DIAGRAMS

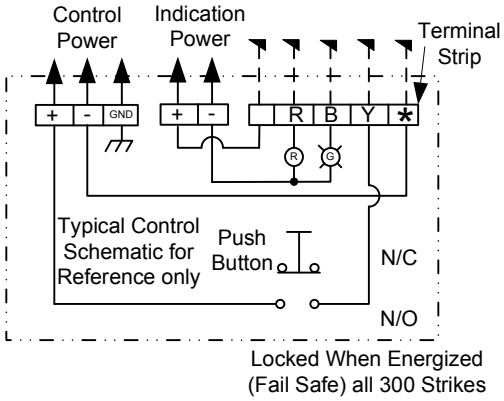
30-4 LBM wiring diagram



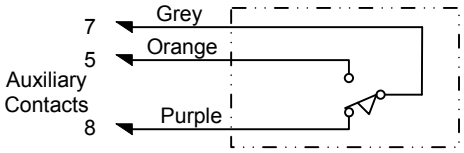
30-4 LCM wiring diagram



Fail Safe Controls



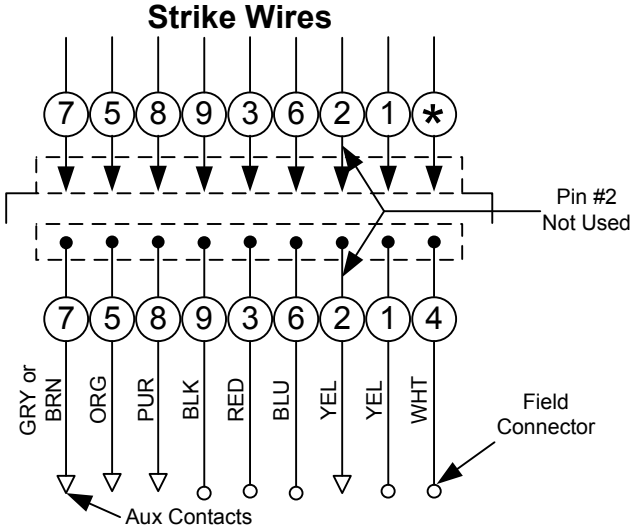
Optional DBS Switch (not available with LCBMA)



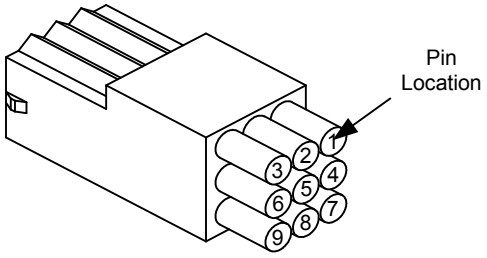
Door shown closed and locked.
Dead Bolt Extended into Face Plate

Optional 9-Pin Field Wiring Conn.

Strike Wires



Field Receptacle



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 INSTRUCTIONS

Under normal usage the 30-4 Electric Strike should be cleaned and lubricated once a year to maintain it's reliability. In applications with high usage or dirty conditions more frequent service may be necessary. Lubrication points are identified in the illustration. When servicing the 30-4 Electric Strike, inspect the internal parts for excess wear or breakage and lightly lubricate per instructions below. Lubricate with lightening 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 (2) #12-24 X 3/8" Hex Washer Head Cap SCREWS).

2. Remove the upper cover held on by (2) #4-40 X 3/16" PHMS. Removal of the upper cover should be done slowly because the locking cam spring may snap out of place. Also, care should be taken to insure that the locking cam spacer and locking lever spacer are not lost.

3. Remove the cam spring spacer, cam spring and locking lever spacer.

4. Loosen the (2) #6-32 X 1/8" SSSC holding the solenoid, then remove the solenoid and locking cam.

5. Remove the locking lever spring and locking lever. In some versions of the strike, there is a recess in the locking lever and the case for this spring. In cases with the recess, the locking lever spring must be compressed into the lever before it can be removed.

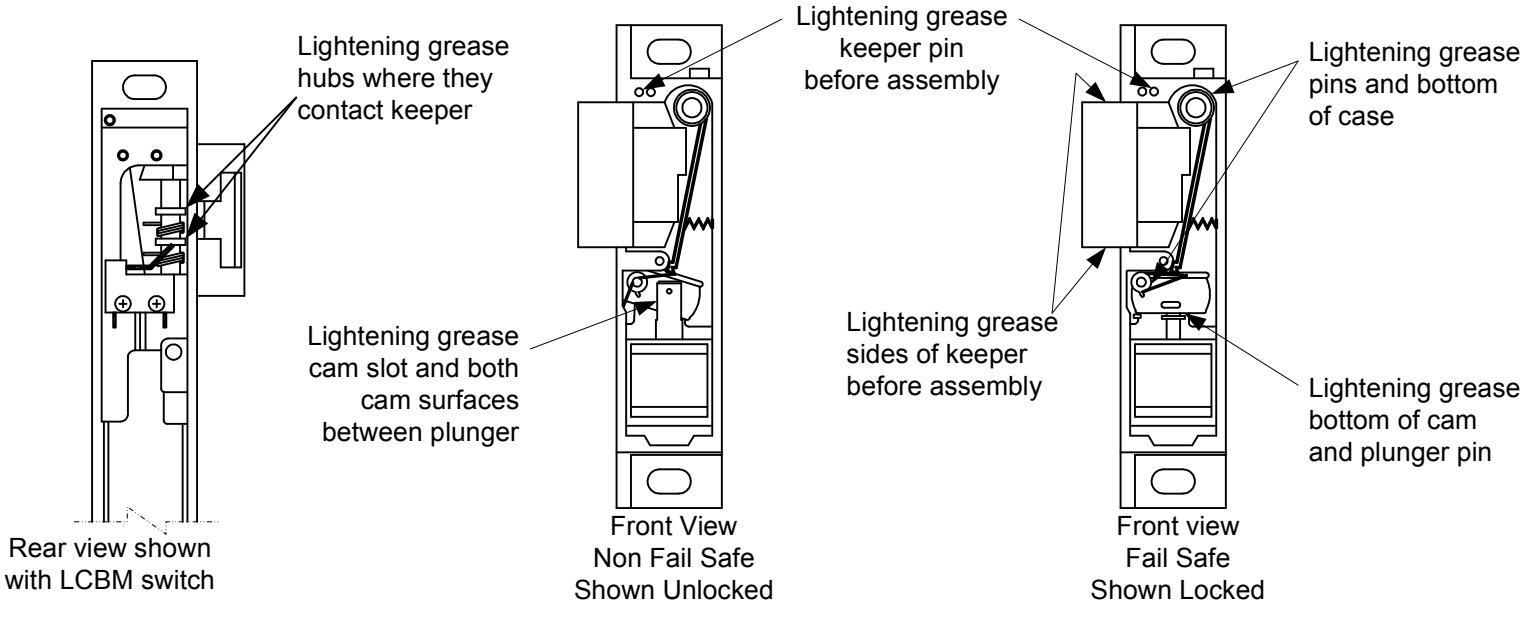
6. Lubricate the area in the case where the locking lever and locking cam rest (be careful not to get any lubricant on the solenoid or switches). Lubricate the cam pin and lever pin.

7. 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).

8. Reinstall the locking lever and a new locking lever spring. CAUTION: Make sure the locking lever is placed back into the recesses of the locking lever and the case.

9. Check the solenoid, plunger and plunger guide for excess wear, dirt, grime or oil. If present, wipe clean.
   FAIL SAFE: Remove the retaining ring for inspection of the plunger guide. Reassemble the solenoid and plunger with a new retaining ring.
   NON-FAIL SAFE: Lubricate the bottom edge of the locking cam (contact point of the solenoid plunger).

10. **NON-FAIL SAFE:** Lubricate the slot in the locking cam
    FAIL SAFE: Lubricate the bottom edge of the locking cam (contact point of the solenoid plunger).



MAINTENANCE AND LUBRICATION INSTRUCTIONS

11. **Installation and positioning of the solenoid.**

NON-FAIL SAFE

1) Install the solenoid and locking cam assembly
2) Install the locking cam spring (with the long leg of the spring on the locking cam and the short leg in the groove on the case).
3) Before tightening the set screws, energize the solenoid and check the position of the locking cam and locking lever.
4) Adjust the solenoid position to where the locking lever will clear the locking cam and tighten set screws.

FAIL SAFE

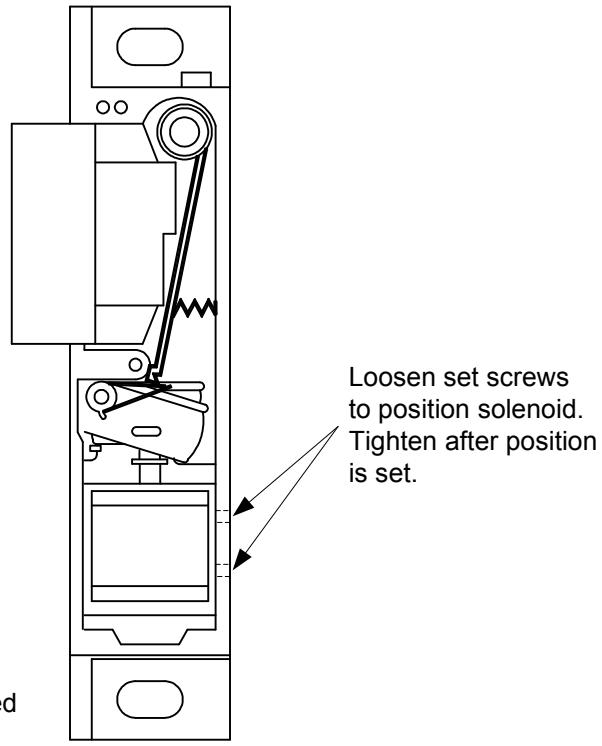
1) Install the solenoid and locking cam.
2) Install the locking cam spring (with the long leg of the spring on the locking cam and the short leg in the groove on the case).
3) Before tightening the set screws, energize the solenoid and check the position of the locking cam.
4) Adjust the position of the solenoid to where it pushes the locking cam into the fully locked position (be careful not to position the solenoid too high or the solenoid plunger will not seat).
5) De-energize and make sure the locking cam falls to a level to be unlocked. Tighten set screws.

12. Check all screws, tighten if necessary. CAUTION: Do not over tighten the switch screws. Over tightening could damage the switch.

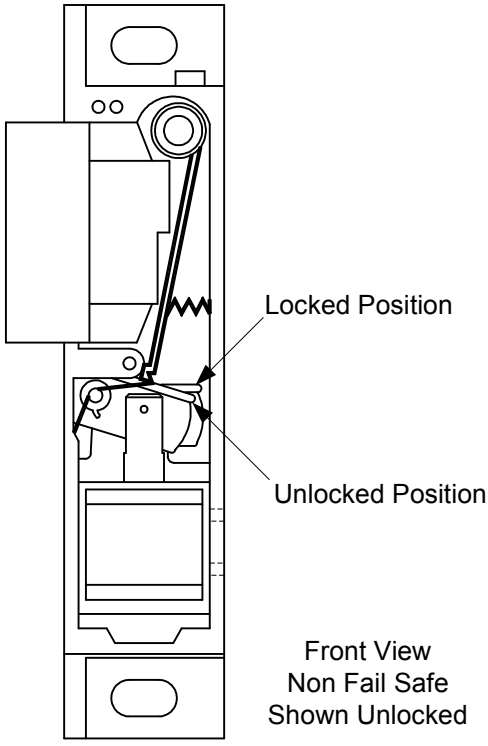
13. Reinstall the cam spring spacer and the locking lever spacer.

14. Reinstall the upper cover.

15. Reassemble the strike to the face plate.



Front View
Fail Safe
Shown Locked



Front View
Non Fail Safe
Shown Unlocked