# INSTALLATION INSTRUCTIONS 

2090<br>HEAVY DUTY CONCEALED MORTISE BOLT LOCK<br>FAIL-SECURE

## OVERHEAD INSTALLATION HORIZONTAL

1. Examine the top rail of the door for the most suitable location for the strike. Mark the door for the end of the strike closest to the lock stile, and make a corresponding mark on the header to line up with the first mark.
2. Locate centerline of door thickness on the header and attach adhesive cut-out template to header. Lining it up with marks, center punch the tab-mounting screw locations and counter-sink for \#10 screw. Saw or rout out the cut-out area.

## SIDE JAMB INSTALLATION VERTICAL

1. Examine the lock stile jamb for the point nearest the center of the door height, with space available for the lock and strike. Mark the door stile horizontal for the top end of the strike and make a corresponding mark on the jamb.
2. Locate centerline of door thickness on the jamb and attach cut-out template to jamb, lining up the top of the cut-out with the horizontal mark on the jamb. Center punch the tab mounting screw locations and counter-sink for \#10 screw. Saw or rout out the cut-out 1-1/2" $\times 8$ ".
3. Attach the mounting tabs inside frame.
4. Attach power supply leads to lock leads as shown. Handle the lock carefully; do not hang it by the wire leads. Insert wires into the header cavity carefully so they do not interfere with proper locating of the lock in the cut-out.
5. Insert lock. Horizontally, the bolt end is nearest the lock stile. Vertically, the bolt must be at the top end of the cutout. Secure with \#10-32 machine screw.
6. Using strike for a template, mark screw hole location and drill holes for screws supplied. Mortise as required. Attach strike.
7. The automatic relock switch $(A)$ is set for $1 / 8$ " clearance between the top of the door and the transom bar or head jamb. Any additional gap may be compensated for by loosening the lock nut and turning the assembly clockwise until proper adjustment is reached. Be sure to tighten lock nut when adjustment is satisfactory.


## Easy installation or servicing

All Space Saver locks are easily installed in any existing entrance merely by mortising out a cut-out, attaching the wiring, inserting the lock, and bolting it into position with two attaching tabs. Cutting studs is no longer a problem or expense.


1. Mortise cut-out in tube for face plate (fits flush with surface of tube).
2. Position screws for attaching tabs, drill holes, attach tabs.

3. Connect wiring to lock.
4. Slide lock into position, attach to tabs.


## WIRING INFORMATION



## SPECIFICATIONS

Face plate: $\quad 8^{\prime \prime} \times 1-1 / 2^{\prime \prime} \times 1 / 8^{\prime \prime}$ for wood door frames: $11-1 / 2^{\prime \prime} \times 1-3 / 4 " \times 1 / 8 "$

Strike: $\quad$-mortise $4 " \times 1-1 / 2 " \times 1 / 8 "$
Bolt: $\quad 3 / 4$ " dia. stainless steel, $3 / 4$ " throw
Solenoid: Continuous duty, fail secure type
INRUSH 2.5 AMPS MAX.
SEATED . 4 AMP MAX. @ 24VDC
I.D. Requirements 2090A: $10 " \times 1-1 / 2^{\prime \prime} \times 1-1 / 2^{\prime \prime}$

## MAGNETIC BOLT POSITION SENSOR

B SPDT: Indicates bolt locked or unlocked
RED $=\mathrm{N} / \mathrm{C}$
.25 amp
WHT = COM BPS polarity shown with bolt retracted. $B L U=N / O$

MECHANICAL DOOR POSITION SENSOR
D SPDT: Indicates door open or closed 5A@125VAC (Resistive)
RED $=\mathrm{N} / \mathrm{C}$
WHT = COM DPS polarity shown with door open
$B L U=N / O$

TROUBLE SHOOTING

## Problem

Bolt will not retract
Bolt does not project

Solution
Check voltage and alignment of strike
Strike misaligned

## NOTE:

Electrical boxes are available for most SDC mortise locks. We recommend electrical boxes whenever locks are installed in wood frames. (Request template).


