INSTALLATION INSTRUCTIONS
FS23M, 1090, 1190 SERIES

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 center line 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 cutout area.

SIDEJAMB INSTALLATION VERTICAL

3. 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.

4. Locate center line of door thickness on the jamb and attach adhesive cutout template to jamb, lining up the top of the cutout with the horizontal mark on the jamb. Center punch the tab mounting screw locations and counter sink for #10 screw. Saw or rout the cutout 1-1/2" x 8".

5. Attach the mounting tabs inside.

6. (FS23M only) bore 5/16" hole for pilot lamp on inside face of frame as shown.

7. 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 cutout.

8. 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.


10. The automatic relock switch is set for 1/8" clearance between the top of the door and transom bar or head jamb. Any additional gap may be compensated for by loosening the lock nut and turning the switch 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 cutout, attaching the wiring, inserting the lock, and bolting it into position with two attaching tabs. Cutting studs is no longer a problem or expense.

Auto Relock Switch Adjustable for Wide Door Gap

Loosen nut. Turn assembly clockwise for wide door gap. Tighten nut.

Fig. 1

Fig. 2

1. Mortise cutout 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.
**SPECIFICATIONS**

**FS23M**

Face plate: 8” x 1-1/2” x 1/8” (203.2mm x 38.1mm x 3.175mm)

I.D. Requirements: 8” x 1-1/2” x 1-1/2”

(203.2mm x 38.1mm x 38.1mm)

Solenoid: Continuous duty

Standard voltage: 24VDC, 0.5 Amp

12VDC, 1 Amp

 Strike: M-Mortise 4” x 1-1/2” x 0.125” (101.6mm x 38.1mm x 3.175mm)

For wood 1-3/8” deep (44.45mm)

Bolt: 5/8” (15.88mm) dia. nylon with magnet insert, 5/8” (15.88mm) throw. Red pilot lamp standard to indicate door locked.

**1091A/1091ADC (Deadlocking)**

Face plate: 8” x 1-1/2” x 0.125” (35.1mm x 35.1mm x 3.175mm)

1091STA: 4-7/8” x 1-1/4” x 0.0937” ANSI

(123.53mm x 31.75mm x 2.28mm)

I.D. Req. 8” x 1-1/2” x 1-1/2”

(203.2mm x 38.1mm x 38.1mm)

Solenoid: Continuous duty

Standard voltage: 24VDC, 0.5 Amp

12VDC, 1 AMP

Strike: M-Mortise 4” x 1-1/2” x 0.125” (101.6mm x 38.1mm x 44.45mm)

Bolt: 5/8” (15.88mm) dia. S.S., 3/4” (6.35mm) throw

**1190A**

Face plate: 8” x 1-1/2” x 0.125”

(203.2mm x 38.1mm x 3.175mm)

I.D. Requirements: 8” x 1-1/2” x 1-1/2”

(203.2mm x 38.1mm x 38.1mm)

Solenoid: Continuous duty

Standard voltage: 24VDC, 0.7 Amp

Strike: M-Mortise 4” x 1-1/2” x 0.125” (101.6mm x 38.1mm x 3.175mm)

Bolt: 3/4” (6.35mm) dia. S.S., 3/4” (6.35) throw

**TROUBLE SHOOTING**

<table>
<thead>
<tr>
<th>Problem</th>
<th>Solution</th>
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<tbody>
<tr>
<td>Bolt does not project</td>
<td>Check voltage and alignment</td>
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<td>of strike.</td>
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<tr>
<td>Bolt projects but chatters</td>
<td>Voltage too low.</td>
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<tr>
<td>Bolt will not retract</td>
<td>Strike misaligned</td>
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**DOOR IS SHOWN CLOSED AND LOCKED.**

UNLOCKING MAY BE CONTROLLED BY MULTIPLE SWITCH LOCATIONS.

**BOLT POSITION SENSOR (MAGNETIC)**

No. 6 SPDT  Indicates bolt locked or unlocked   .25 Amp

**DOOR POSITION SENSOR (MAGNETIC)**

No. 9 SPDT  Indicates door opened or closed   .25 Amp

**DOOR POSITION SWITCH (MECHANICAL)**

DPS SPDT  Indicates door opened or closed  5 Amp

**DIMENSIONS:**

<table>
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<th>INCHES</th>
<th>MILLIMETER</th>
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**TROUBLE SHOOTING**

- **Problem:** Bolt does not project
  - **Solution:** Check voltage and alignment of strike.

- **Problem:** Bolt projects but chatters
  - **Solution:** Voltage too low.

- **Problem:** Bolt will not retract
  - **Solution:** Strike misaligned

**WHEN INSTALLED VERTICALLY THIS END UP HINGE STILE**

**LOCK STILE**

**DOOR POSITION SWITCH (OPTIONAL)**

**TO MONITOR PANEL**

**DRILL FOR PILOT LAMP (FS SERIES ONLY)**

**DRILL FOR (7.938)**

**IF DOOR CLEARANCE IS MORE THAN [3.175] SEE STEP 10 ON INSTRUCTION SHEET**