8500 Series
Electric Strike

Installation Instructions

h.e.s.
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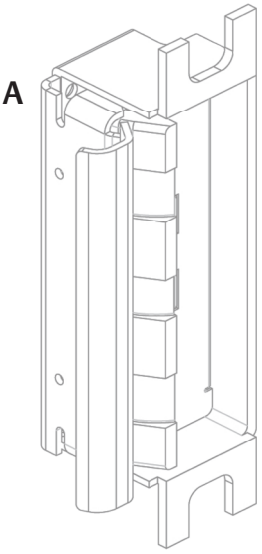
Product Components

A 8500 Series Electric Strike Body

B Horizontal Lockdown Shims

C #4–40 Screws (2)

D 12 & 24 Volt Plug In Connectors



Electrical Specifications

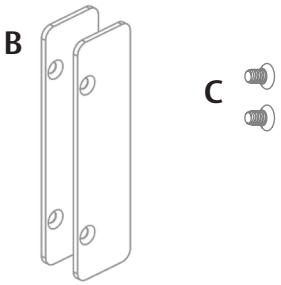
Electrical Ratings for Solenoid	Continuous Duty		Intermittent Duty*	
Voltage	12 VDC	24 VDC	12–16 VAC	24 VAC
Resistance in Ohms	50	200	50	200
Amps	.24	.12	.24–.32	.12

Solenoids are rated at +/– 10% indicated value.
** 10% max duty cycle (2 min. max on time)*

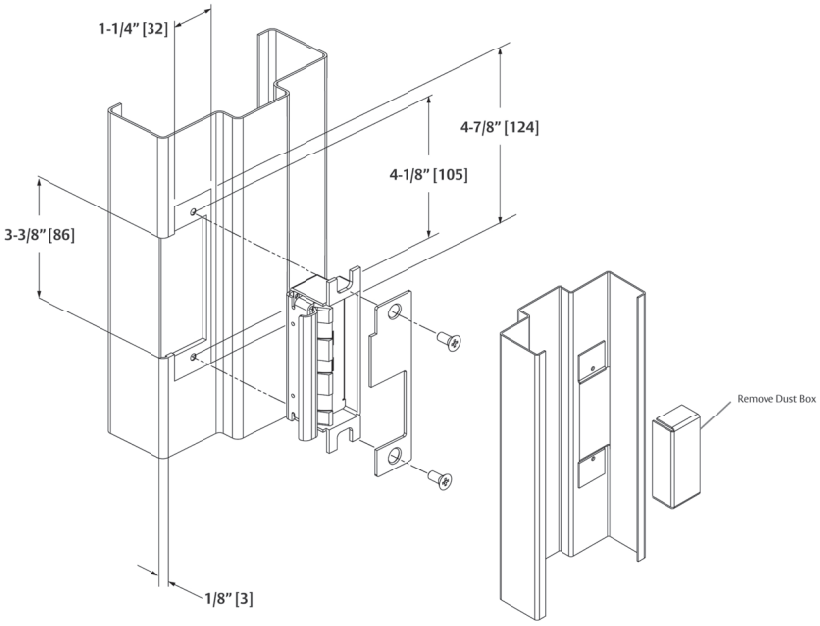
For inductive kickback protection, consider using with the HES 2005M3 SMART Pac® III or 2001M Plug-in Bridge Rectifier with built-in MOV.

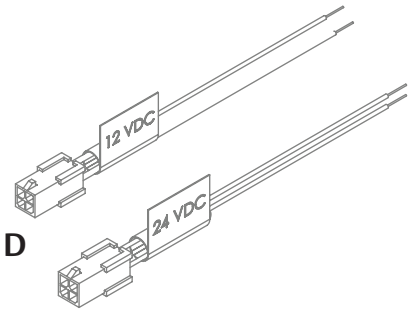
Minimum Wire Guage Requirements		
Voltage	12 VDC	24 VDC
200 feet or less	18 guage	20 guage
200–300 feet	16 guage	18 guage
300–400 feet	14 guage	16 guage

Lengths based on round trip.



Frame Preparation





Installation

WARNING: Before connecting any device at the installation site, verify input voltage using a multimeter. Many power supplies and low voltage transformers operate at higher levels than listed. Any input voltage exceeding 10% of the solenoid rating may cause severe damage to the unit.
Installation wiring for the product and wiring methods shall be in accordance with the National Electrical Code, ANSI/NFPA 70.

Evaluate Opening

Verify opening is plumb and square and evaluate latch bolt condition. Reference Appendix for important details and "Troubleshooting Tips".

Preparing the Frame

Remove dustbox and prepare door jamb per the template detail (see page 1). Be sure to allow enough room behind the electric strike in the cut out to avoid pinching the wires.

1 PREPARE the frame for lockset using appropriate cutout template, as shown (see page 4).

Preparing & Installing the Strike

For 12 VAC, 12 VDC, or 16 VAC, the Plug In Connector (pigtail) marked "12 VDC" should be used; for 24VAC or 24 VDC, the pigtail marked "24 VDC" should be used.

1 SELECT the appropriate plug in connector that matches system power and electrically CONNECT as shown in Diagram 1, "12 VDC to 24 VDC Conversion."

2 IF using a Latchbolt Monitor (LBM) or Latchbolt Strike Monitor (LBSM), THEN COMPLETE wiring in accordance with Diagram 2, "Latchbolt Monitor" and Diagram 3, "Strike Monitor" (see page 3).

3 VERIFY that the strike is in the correct mode of operation.

4 IF the 8500 Series Electric Strike must be converted to Fail Safe mode, THEN CONVERT in accordance with Diagram 4, "Fail Safe Conversion" (see page 3).

Installing the Deadlatch

1 SELECT correct option. Determine platform position appropriate for the lockset (see page 3).

2 INSERT deadlatch platform into the keeper slot as shown in Diagram 5 (see page 3) ensuring that the screw holes in the deadlatch platform foot and outer casing are aligned. It may be necessary to slightly retract the keeper in order to properly seat the deadlatch platform fastening foot.

3 FASTEN the deadlatch platform to the electric strike using the #4-40 screw provided.

Deadlatch Plaform

1 SELECT deadlatch platform style and mounting position as detailed in Diagram 5 (see page 3).

2 INSTALL deadlatch platform as detailed in Diagram 6 (see page 3).

3 INSTALL horizonal lockdown shims (if needed) as shown in Diagram 7 (see page 3).

Wiring

Diagram 2: Latchbolt Monitor (LBM)	
White	Common
Orange	Normally Open
Green	Normally Closed

Diagram 3: Latchbolt Strike Monitor (LBSM)	
Brown	Common
Blue	Normally Open
Yellow	Normally Closed

NOTE: The state of switch is listed for an unpowered strike and LBM in unactuated (door open) position.

Diagram 1:
12 VDC to 24 VDC Conversion

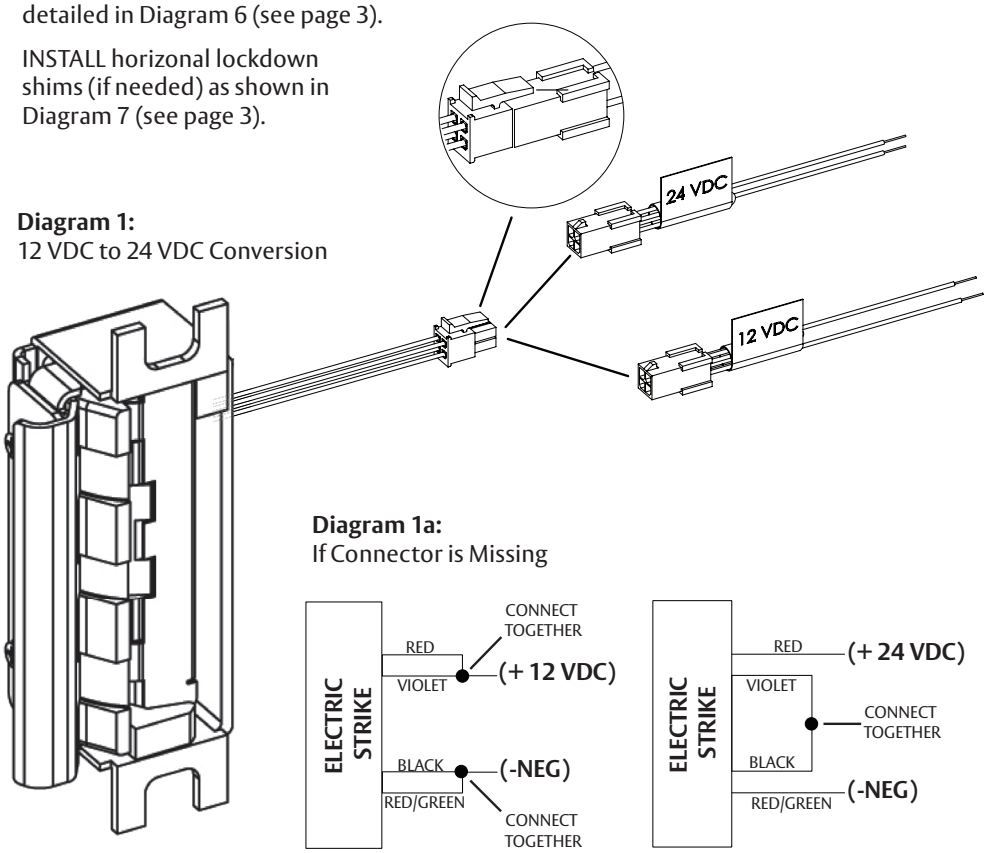


Diagram 1a:
If Connector is Missing

Converting the Operation Mode

1. REMOVE and discard the fire screw (Located under the UL fire label).
2. LOOSEN the two #2-56 screws located on the back of the strike, but DO NOT REMOVE them.
3. MOVE screws from the bottom of the hole (Fail Secure mode position) to the top hole (Fail Safe mode position).

> **WARNING**: This unit ships in Fail Secure mode. Converting the 8500 Series Strike to Fail Safe Mode negates the unit's fire rating.

4. TIGHTEN the bottom screw first (wire side), and THEN TIGHTEN the top screw.
5. Discard the UL Label that's located over the screw, as well as the UL label located inside the strike pocket.
6. VERIFY the strike is now in the Fail Safe operation mode.
7. IF the strike still operates as Fail Secure, THEN ENSURE the screws are fully seated in the top position.

NOTE: If you are using LBSM and you want to convert to Fail Safe mode, follow Steps 1, 2 and 3. Then move the switch to the Fail Safe position as shown in Diagram 4.

Adjusting the Horizontal

1. OPEN the door. Pull the electric strike flush with the inside face of the frame (in the direction of the opening), and tighten screws.
2. CLOSE the door. If excessive movement (door play) when latched, remove strike from the jamb cutout, and add one or two of the horizontal lockdown shims to the front face of the electric strike.. Ensure the horizontal lockdown shim is making contact with the inside face of the frame. Check again and add or remove additional shims until proper horizontal adjustment is achieved.

NOTE: The gap between the door and the frame at the strike plate varies. Verify latchbold guarding with door closed.

Diagram 2:
Latchbolt Monitor

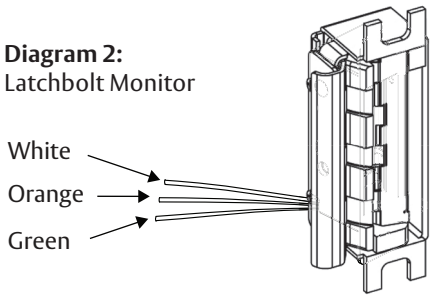


Diagram 3:
Strike Monitor

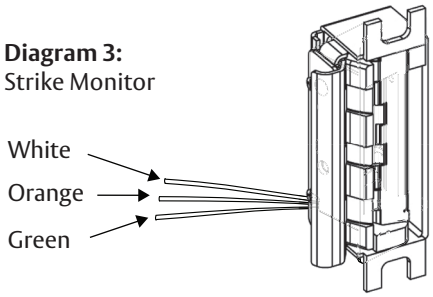


Diagram 4: Fail Safe Conversion

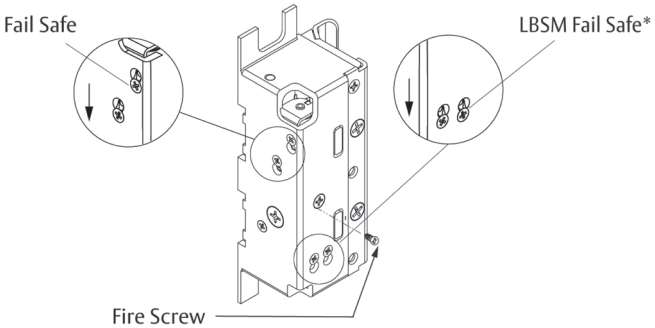


Diagram 5: Deadlatch Platform Position

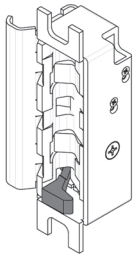
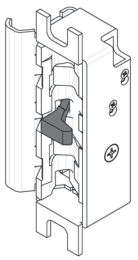
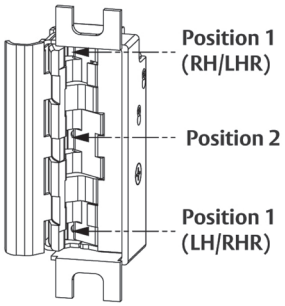
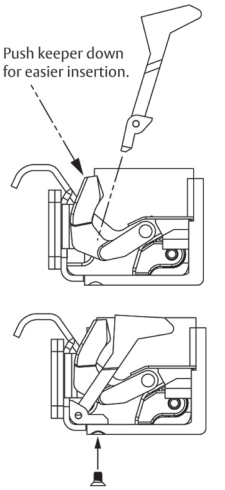
Lockset	Platform Style	Platform Position
Sargent 8100, 8200, 9200; ASSA ABLOY ACCENTRA™ 8800 *(formerly Yale Commercial)*, Accurate, Falcon, Kaba Ilco/Unican	M	
Corbin Russwin ML 2000	K	
ASSA ABLOY ACCENTRA™ 8700 *(formerly Yale Commercial)*	M	
Schlage L9000	L	

Diagram 6:
Deadlatch Platform Installation



Strike shown in LH/RHR position



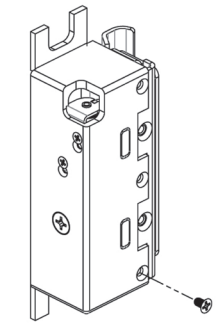
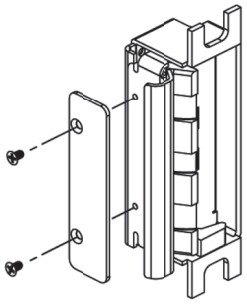


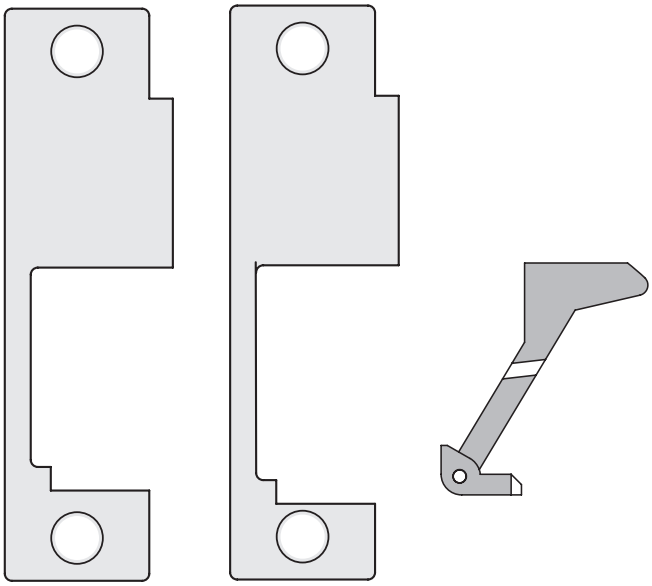
Diagram 7:
Horizontal Lockdown Shim Installation
1 Shim = 1/16" (1.6mm)
2 Shims = 1/8" (3.2mm)



8500 Options

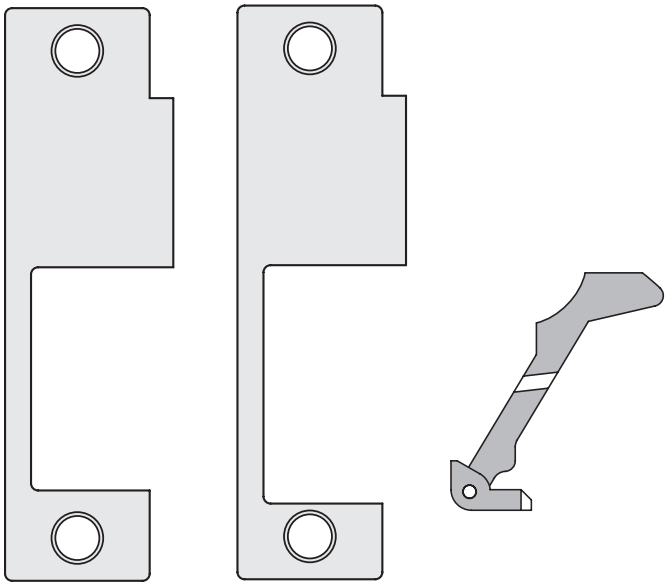
851M

Compatible with mortise locksets:
Sargent (8100, 8200, 9200)



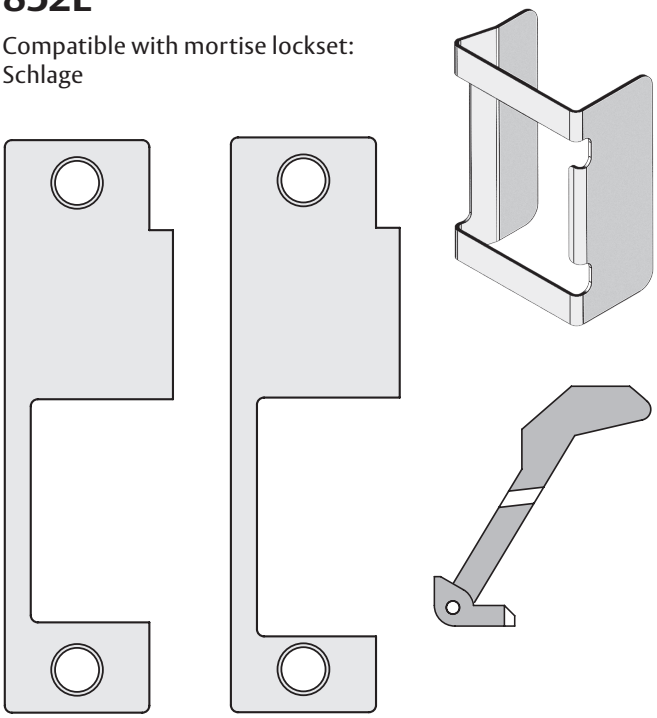
852K

Compatible with mortise lockset:
Corbin Russwin (ML 2000)



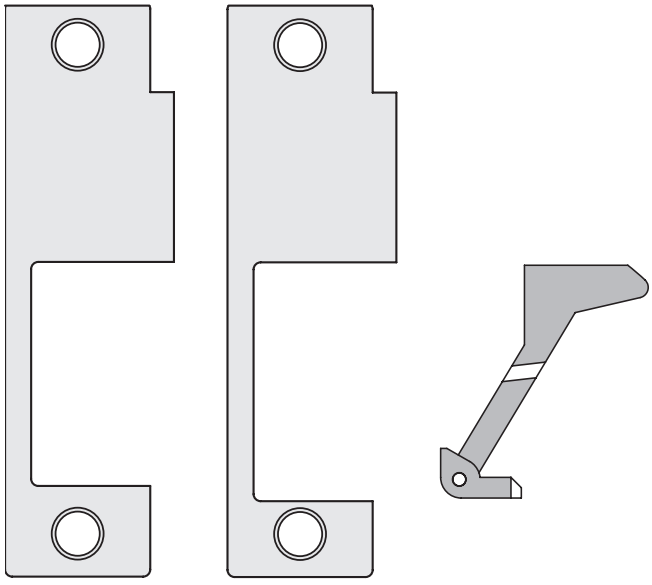
852L

Compatible with mortise lockset:
Schlage



852M

Compatible with mortise lockset: ASSA ABLOY
ACCENTRA™ 8700 & 8800 *(formerly Yale Commercial)*
Accurate, Falcon, Kaba Ilco/Unican



Warranty For information on warranty coverage and replacement options, please visit hesinnovations.com/warranty

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Patent pending and/or patent www.assaabloydss.com/patents

8500 Install Instructions Appendix

WARNING: In order to ensure proper catch and release of the latchbolt, the 8500 electric strike requires that the opening be plumb and square .

Important TroubleShooting Tips

Door sag and latchbolt wear are two common conditions that may prevent an electric strike from working properly. Here are some quick tips to ensure the HES 8500 performs at its best:

Evaluating Latch Bolt Condition

Poorly constructed, worn or damaged latchbolts may not interact properly with the ramp of an electric strike. Check the condition of your latchbolt by lightly pressing the tip of the latchbolt at a 45 degree angle to the door face (See Figure 1). The latchbolt should be pushed easily into the door.

If abnormal resistance is encountered, apply a lubricant to the inside of the latchbolt opening while pressing the latchbolt (See Figure 2). If this does not correct the friction, additional maintenance on the latchbolt may be required.

NOTE: Check with the latchbolt manufacturer regarding proper latchbolt maintenance and approved lubricants.

Accommodating Door Sag

Most doors experience some sagging over time. To check for door sag, look at the location of the lock's deadlatch in relation to the 8500's deadlatch platform. The deadlatch should rest on the deadlatch platform. If the deadlatch contacts the faceplate or the edge of the 8500's body, the latchbolt may not be fully released when the strike is activated causing the door not to be released.

To correct this condition, remove the 8500 and cut material from the bottom edge of the frame opening and possibly the mounting tabs (See Figure 3).

NOTE: Note: make sure to sure to retain the mounting hole). This allows the 8500 to be shifted down slightly in the frame. Reinstall the 8500, using the SD faceplate instead of the standard faceplate.

If this does not correct the issue, additional maintenance on the door may be necessary.

Strike Lubrication

Lubrication of the 8500 electric strike is not necessary.

Figure 1:
Apply Force to L:atch Bolt

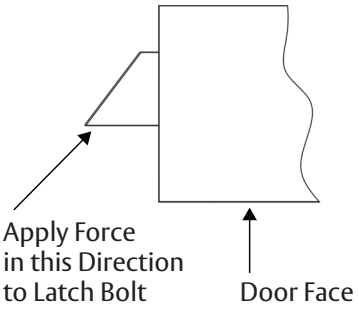

Figure 2:
Lubricate Latch Bolt as Required

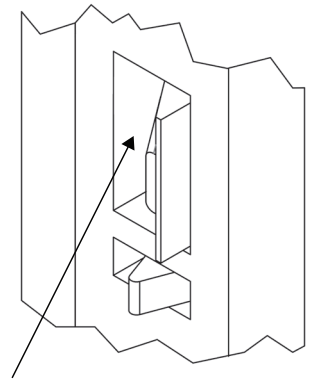

Figure 3:
Door Sag Adjustment