9100 Series
Electric Strikes

Installation & Operating Instructions

ASSA ABLOY

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Product Components

A 9100 Strike Body

B 9100 Cover

C 9100 1/8" Spacer

D 5/16"–18 x 3/4" Mounting Screws

E #12 Self Drilling Lockdown Screws

F #6-32 x 1/4" Cover Screws

G Door Stop/Rubber Bumper Kit

H Blind Nut

I Power Pigtail

J LM/LMS Pigtail (included with LM and LMS only)

K LMS In-Line Adapter

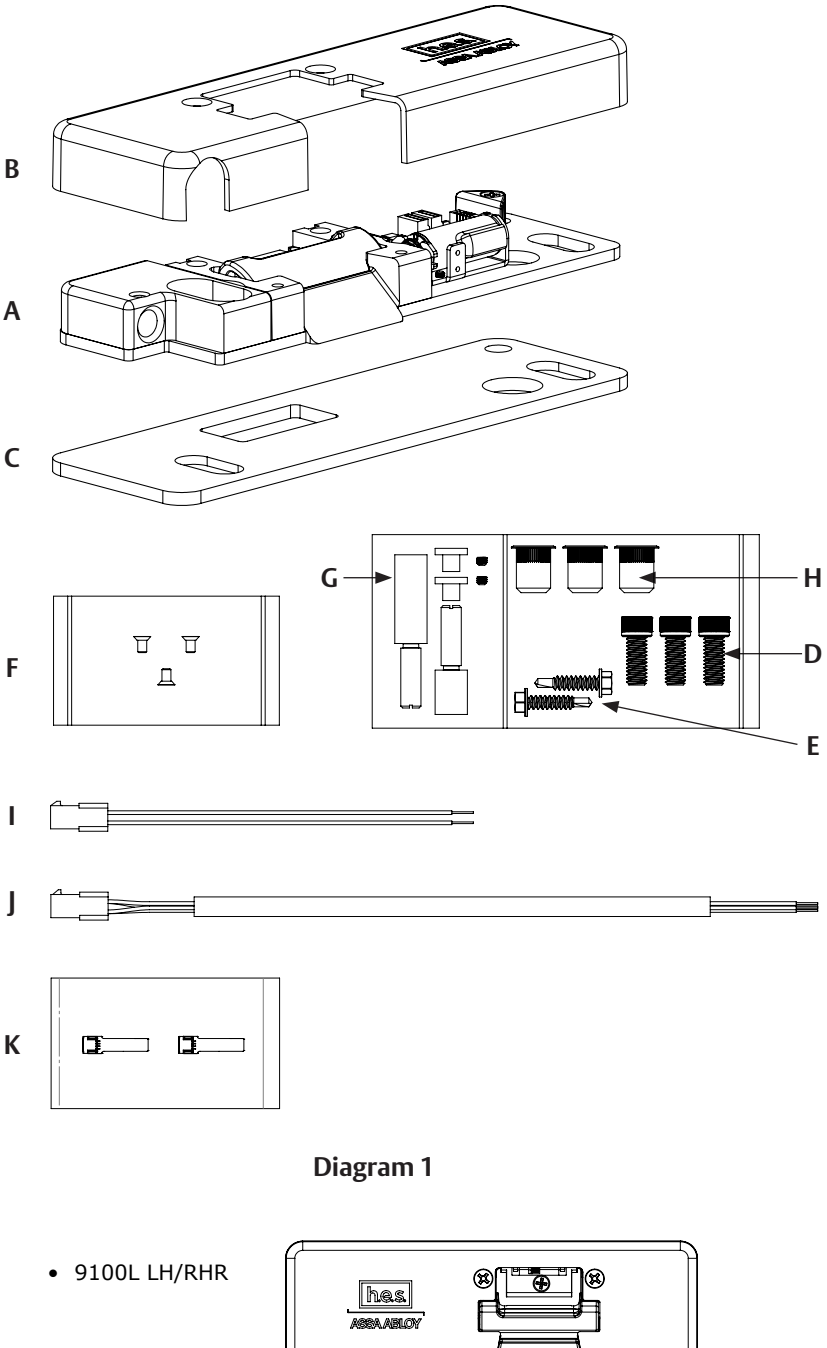


Diagram 1

Specifications

Recommended Wire Gage For Distance				
Voltage	Current	200 Feet or Less	200–300 Feet	300–400 Feet
12 VDC	240 mA	22	22	20
16 VDC	320 mA	20	18	18
24 VDC	120 mA	26	26	24

UL1034

- Static Strength: 1500 lbs
- Dynamic Strength: 70 ft–lbs
- Endurance: 250,000 cycles
- Outdoor Use

UL294 Performance Levels

- Destructive Attack: Level I
- Line Security: Level I
- Endurance: Level IV
- Standby Power: Level I
- Outdoor Use
- CAN/ULC 60839-11-1
- Listed for use with Grade 1 and Grade 2 Access Control
- Humidity: 93 %
- Temperature: -40° to 66° C

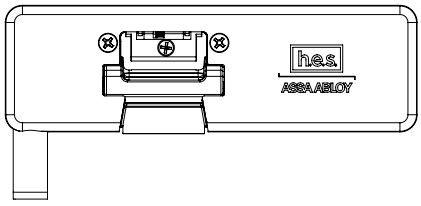
ANSI BHMA A156.31*

- Grade 1
- Function #: E09361

NOTE Installation wiring for the product and wiring methods shall be in accordance ANSI/NFPA70 National Electrical Code, Canadian Electrical Code, part 1 and Local Authority Having Jurisdiction (AHJ). For ULC60839-11-11 and UL294 complaint systems, DC power shall be provided through a UL/cUL listed access control, or burglar alarm power supply with class 2 limited output.

- 9100L LH/RHR

- 9100R RH/LHR



Preparing the Strike

Factory Configuration

The HES 9100 Electric Strike is pre-configured from the factory for FAIL SECURE operation as shown. To SWITCH from fail-secure to fail safe for either configuration, loosen screws and move solenoid closer to the keeper pocket and secure. **Diagram 1a**

The HES 9100 Electric Strike can be converted for FAIL SAFE operation as shown. **Diagram 1b**

SELECT correct Door Stop length for application. Long stop for use with full glass doors without a rail. Short for use with solid door or glass door with rail. INSTALL Door Stops with Rubber Bumper. **(part G, page 1)**

Product must be installed according to all applicable building and life safety codes.

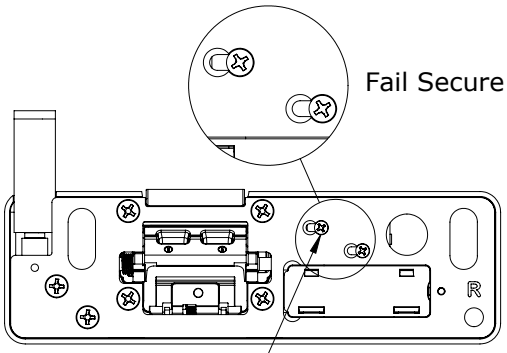


Diagram 1a

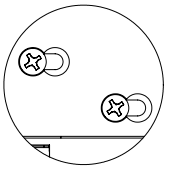


Diagram 1b

Shift #2-56 screws as shown and tighten

Preparing the Frame

Pre-Installation Survey

1 PERFORM an initial on-site survey to determine the mounting method and review the installation plan. **Diagram 2** Take the following into consideration:

- Physical strength of mounting areas should be strong enough to meet or exceed the holding force of the existing strike.
- Placement of the strike wiring and protection from potential damage due to intruders or vandal's external attack.

2 MEASURE height of existing strike. Use included shim if height is 3/4". Do not use shim if height is 5/8". **Diagram 3**

3 MARK the front edge of the existing strike for proper alignment of the new strike. **Diagram 3**

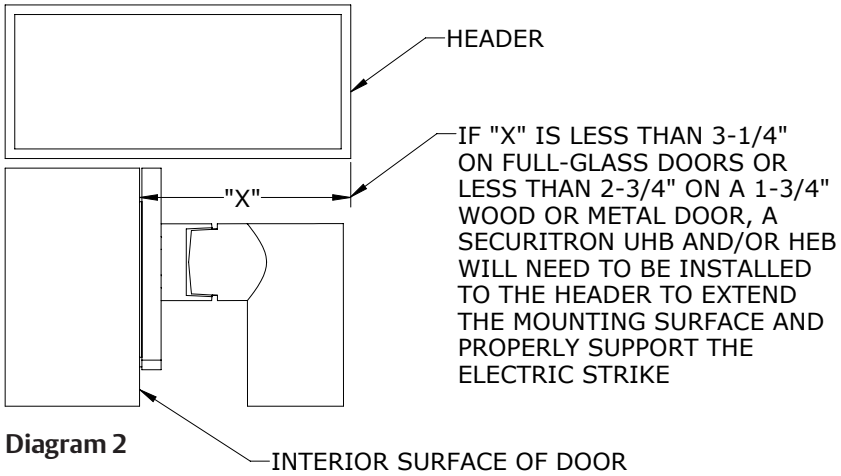


Diagram 2

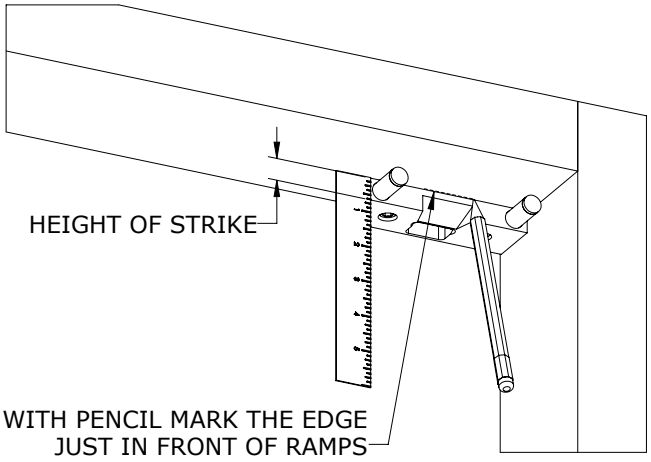


Diagram 3

Preparing the Frame (CONTINUED)

If replacing an existing manual strike the HES 9100 should mount directly to the header using the existing strike mounting hole closest to the latching frame side. One wire hole and one mounting hole will need to be drilled. If it is a new install, use the following steps:

1 MARK centerline of latchbolt to header.

2 PUNCH, DRILL the marked mounting holes as required. **Diagram 4a**

3 PUNCH, DRILL the marked wire access holes as required. **Diagram 4b**

4 INSTALL mounting Blind Nuts (if needed). INCREASE hole size to "17/32" if using blind nuts. **Diagram 4a**

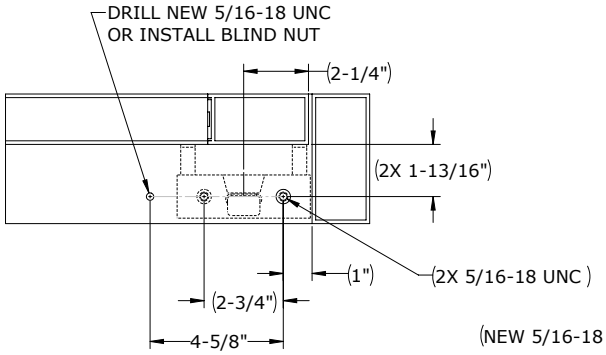


Diagram 4a

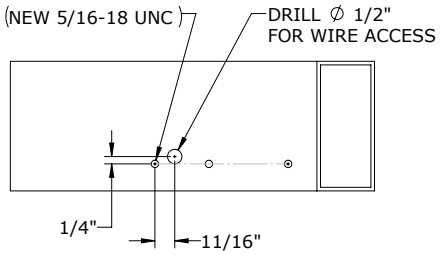


Diagram 4b

Finishing the Installation

1 Connect power pigtail and LM/LMS pigtail (if equipped) wires to existing wiring coming out of the frame. **Diagram 5**

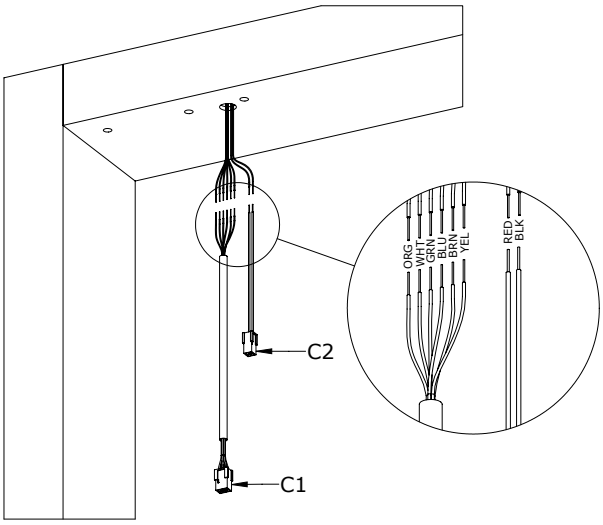


Diagram 5

Connector Pin-Outs	
C1 — Latchbolt Monitor	
WHT	Common
ORG	Normally Closed
GRN	Normally Open
C1 — Latchbolt and Strike Monitor	
BRN	Common
BLU	Normally Closed
YEL	Normally Open
C2 — 12/24 V Power	
BLK	12/24 V–
RED	12/24 V+

If using the C1 — Latchbolt Monitor (LM) or C1 — Latchbolt and Strike Monitor (LMS), use the LM/LMS 6-pin Plug In Connector (pigtail) and REFER to chart to complete wiring.

"Secure" means latch is detected & secured within strike pocket for LM and the strke is also in a locked state for LMS.

NOTE: Monitor options were not evaluated by UL294/ UL1034/ULC60839-11-1.

LM Input	LM Output	Wire Condition	
Door	LM State	Open	Closed
Unsecure	Unsecure	GRN & WHT	ORG & WHT
Secure	Secure	ORG & WHT	GRN & WHT

LMS Fail Secure			
LMS Input	**LMS Output**	**Wire Condition**	
Solenoid	LMS State	Open	Closed
Retracted	Unsecure	YEL & BRN	BLU & BRN
Extended	Secure	BLU & BRN	YEL & BRN

LMS Fail Safe*			
LMS Input	**LMS Output**	**Wire Condition**	
Solenoid	LMS State	Open	Closed
Retracted	Secure	BLU & BRN	YEL & BRN
Extended	Unsecure	YEL & BRN	BLU & BRN
*Adapter (K) must be used in this configuration.			

Finishing the Installation

1 ELECTRICALLY CONNECT the 9100 (9100R Shown) to the pigtails, and ATTACH the electric strike to the header using the 5/16"-18 x 3/4" mounting screws provided. **Diagram 6**

2 ALIGN front edge of latchbolt ramps with marked line from **Diagram 3**.

3 CHECK the latchbolt interaction with the keepers to ensure proper engagement and clearance. If front and back, MACRO adjustment is needed, ADJUST the strike and RETIGHTEN the two 5/16"-18 x 3/4" mounting screws.

4 Check door play and adjust Door Stop as needed for MICRO adjustment using a slotted driver on the back of the strike. **Diagram 7**

5 ADJUST the latchbolt depth into the keeper pocket per the exit device manufacturer's instructions. Ensure the latchbolt clears the keeper pocket when the exit device bar is manually depressed.

6 TEST the mechanical and electrical operation to confirm the ability to release, capture and detect the door.

7 LOCKDOWN Door Stop with included 8-32 set screw. (5/64 Allen Wrench) **Diagram 8**

8 LOCKDOWN the front and back adjustment using the #12 self threading screw illustrated. **Diagram 9**

9 INSTALL the cover, and SECURE in place using the #6-32 x 1/4" Cover Screws. **Diagram 10**

CAUTION Take care to not damage any of the flex cables or printed circuit board and remove all metal debris before installing the cover.

10 Finished Installation. **Diagram 11**

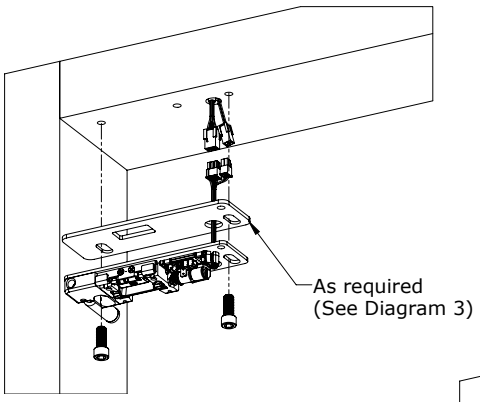


Diagram 6

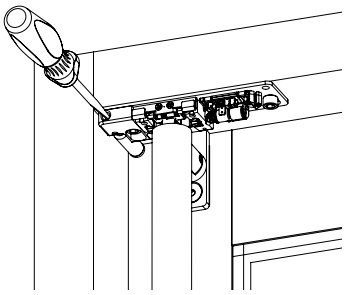


Diagram 7

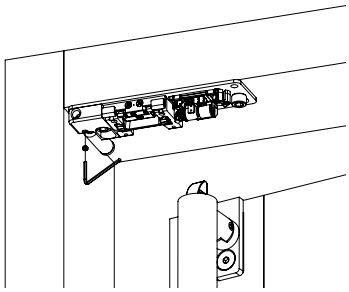


Diagram 8

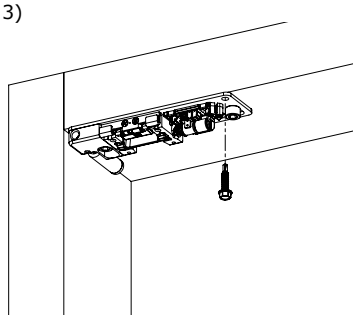


Diagram 9

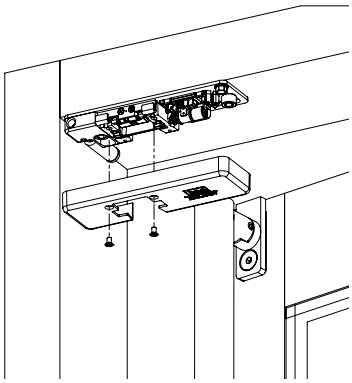


Diagram 10

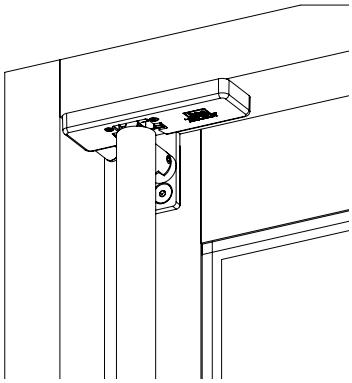


Diagram 11

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