

# HES 9400/9500/9600/9700 Electric Strike

ASSA ABLOY

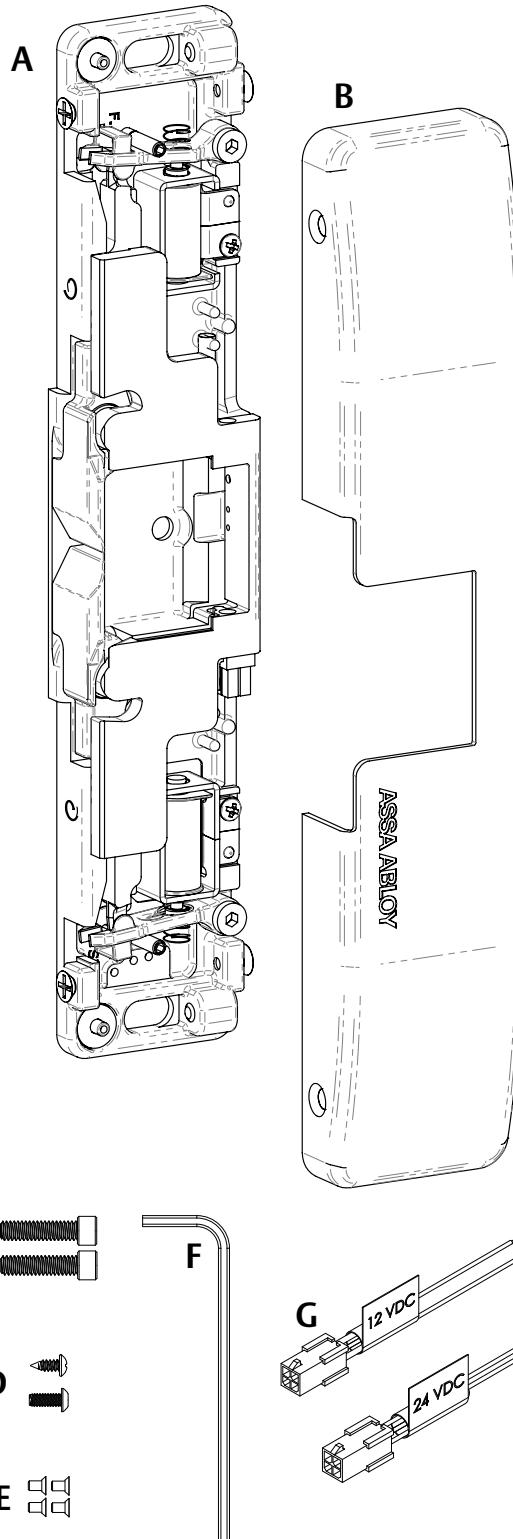
## Installation Instructions and Frame Preparation

The global leader in  
door opening solutions

### Product Components

- A** 9400/9500/9600/9700 Strike Body
- B** 9400/9500/9600/9700 Cover
- C** 1/4"-20 x 1" Mounting Screws
- D** #10-32 & 10-24 Lockdown Screws (optional)
- E** #6-32 x 1/4" Cover Screws
- F** 5/64" Hex Key
- G** 12-Volt and 24-Volt Pigtailed

Diagram 1: Product Components



### Electrical Specifications

#### Electrical Ratings for Solenoid

|                    |        |        |
|--------------------|--------|--------|
| Continuous Duty    | 12 VDC | 24 VDC |
| Resistance in Ohms | 24     | 96     |
| mA Continuous Duty | 500    | 250    |

Solenoids are rated at +/- 10% indicated value.

| Minimum Wire Gauge Requirements<br>(Based on Round Trip) | Solenoid Voltage |          |
|--|------------------|----------|
|  | 12 VDC           | 24 VDC   |
| 200 feet or less   | 18 gauge         | 22 gauge |
| 200 – 300 feet   | 16 gauge         | 22 gauge |
| 300 – 400 feet   | 16 gauge         | 20 gauge |

#### UL1034

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

#### UL294 Performance Levels

- Destructive Attack: Level I
- Line Security: Level I
- Endurance: Level IV
- Standby Power: Level I

**NOTE:** Installation wiring for the product and wiring methods shall be in accordance with the National Electrical Code, ANSI/NFPA70

**▲ CAUTION ▲** 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 and will void the warranty.

## Preparing the Strike

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

- 1 SELECT the appropriate pigtail that matches system power and electrically CONNECT as illustrated in Diagram 1.
- 2 IF no connector is present, THEN CONFIGURE the wires as shown in Diagram 2.
- 3 IF using the Latchbolt Monitor (LBM) or Latchbolt Strike Monitor (LBSM), THEN REFER to Diagrams 5 and 6 to complete wiring (see page 3).

## Verifying the Operation Mode

The HES 9400/9500/9600/9700 Electric Strike is pre-set for FAIL SECURE OPERATION as shown in Diagram 3.

- 1 VERIFY that both keepers are in FAIL SECURE OPERATION.

## Converting the Operation Mode

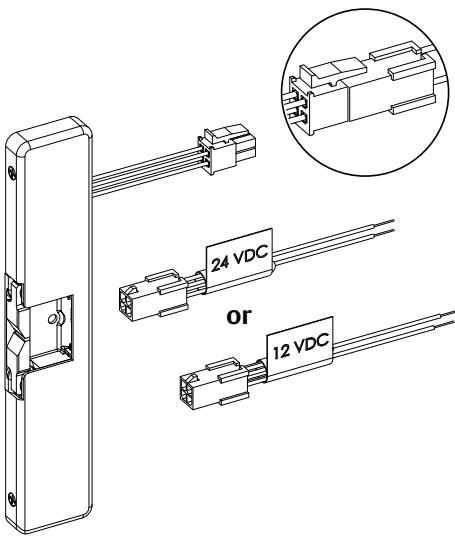
There are two Selector Stop Pins, one on the left side and one on the right side. Both Selector Stop Pins must be repositioned (as shown in Diagram 4) to convert the strike to FAIL SAFE OPERATION.

IN FAIL SAFE OPERATION: Both keepers should be unlocked without power and locked when power is applied.

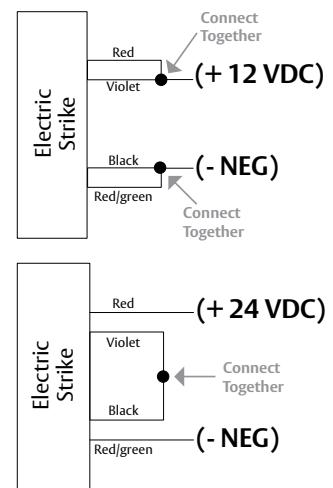
- 1 To convert to FAIL SAFE OPERATION, REMOVE the Selector Stop Pins on each side of the strike body using the provided 5/64" hex key.
- 2 MOVE the Selector Stop Pins to the FAIL SAFE OPERATION position (towards the center of the strike) as shown in Diagram 4.
- 3 TIGHTEN both Selector Stop Pins after they have been moved to the FAIL SAFE OPERATION position using the 5/64" hex key.

**▲ CAUTION ▲** FAIL SAFE OPERATION mode should not be used in fire rated or windstorm resistant applications.

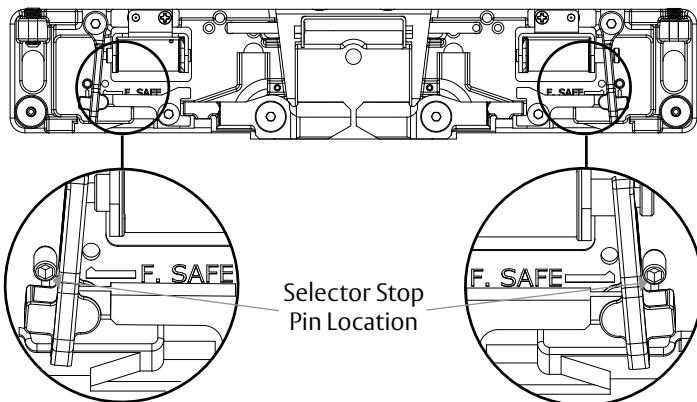
**Diagram 1: 12V to 24V Conversion**



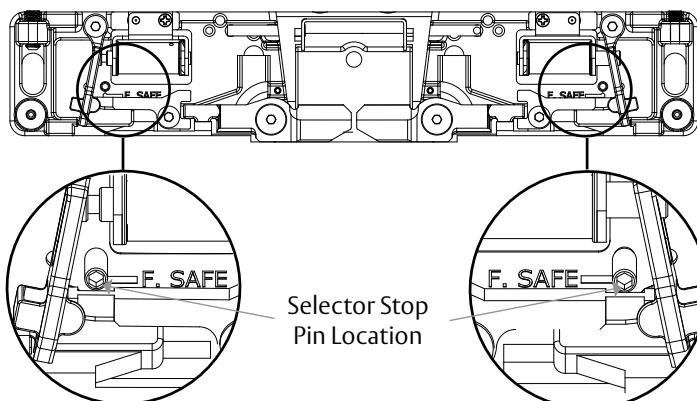
**Diagram 2: If Connector Is Missing**



**Diagram 3: Fail Secure Operation**



**Diagram 4: Fail Safe Operation**



# Preparing the Frame

NOTE: When using a Corbin Russwin Series 5000 or Yale 7000 Series equipped with an offset deadlatch, the deadlatch is located just above the vertical alignment line as shown in the dimesions on page 4.

- IDENTIFY and MARK the latchbolt centerline on the frame.
  - Using the dimensions provided on page 4, MARK all appropriate holes. If using a HES 9000-ASB\*, reference the installation instructions provided with that product.
- NOTE: In retrofit applications this may require the exit device to shift horizontally towards the hinge side of the door to compensate for the HES 9000-ASB.
- PUNCH, DRILL and TAP the marked holes as required.

\*When mounting on an aluminum frame, with a blade stop, an HES 9000-ASB (sold separately) is necessary to provide a secure installation. The HES 9000-ASB is shown installed in Diagrams 8 and 9.

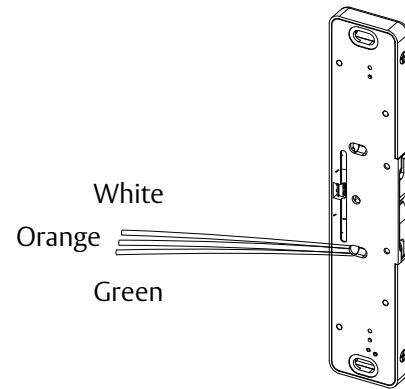
# Finishing the Installation

- ELECTRICALLY CONNECT the HES 9400/9500/9600/9700 to the Plug In Connector, and ATTACH the electric strike to the jamb using the 1/4"-20 x 1" mounting screws provided.
- CHECK the latchbolt interaction with the keepers to ensure proper engagement and clearance. If horizontal adjustment is needed, ADJUST the strike and LOCKDOWN the horizontal adjustment using the 10-32 set screws illustrated on Diagram 7.
- TIGHTEN the two 1/4"-20 x 1" mounting screws.
- OPTIONAL LOCKDOWN FEATURE: INSTALL the #10-24 UNC or 10-32 UNF lockdown screw if additional security is required; however, REMOVE the strike before drilling hole. If using a HES 9000-ASB it will require drilling and tapping of the lockdown hole.
- INSTALL the cover plate, and SECURE in place using the #6-32 x 1/4" Cover Screws.

**⚠ CAUTION ⚠** IF no LOCKDOWN SCREW is used the elctric strike WILL NOT be windstorm rated. This pertains ONLY to the HES 9600 and 9700.

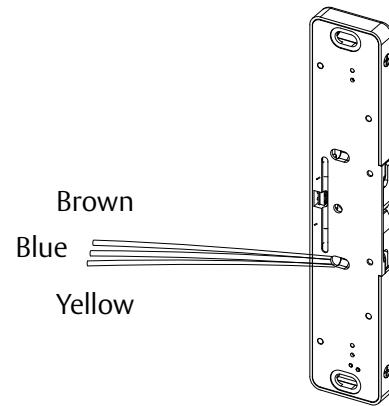
**Diagram 5**  
Latchbolt Monitor

|        |                 |
|--------|-----------------|
| White  | Common          |
| Orange | Normally Open   |
| Green  | Normally Closed |

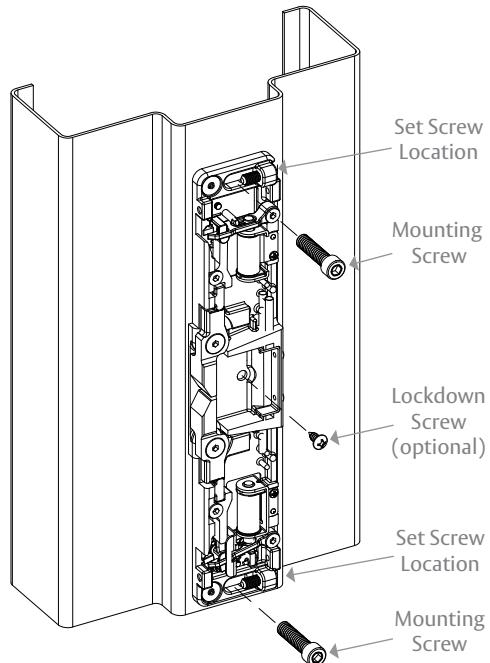


**Diagram 6**  
Latchbolt Strike Monitor

|        |                 |
|--------|-----------------|
| Brown  | Common          |
| Blue   | Normally Open   |
| Yellow | Normally Closed |

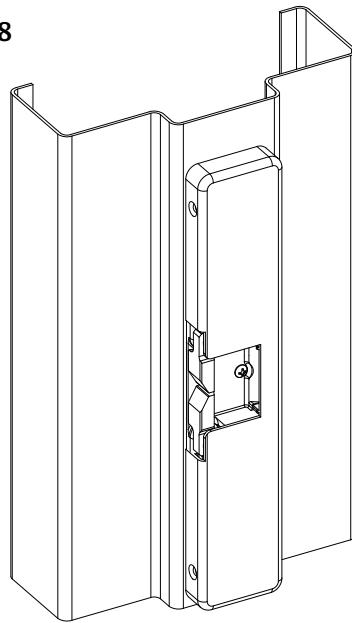


**Diagram 7**



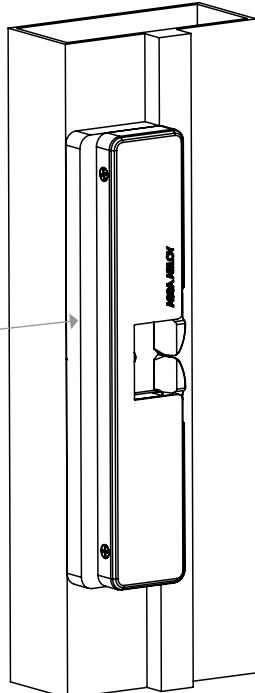
# Frame Preparation

Diagram 8



HES 9400 Mounted on  
Hollow Metal Frame

Diagram 9



HES 9400 Mounted on  
Aluminum Frame with Blade Stop

## Dimensions

**NOTE:** Not to scale. For easy installation, the HES 9000-MTK should be ordered.

