

7400 Series Electric Strike



Installation Instructions

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PRODUCT COMPONENTS

- Strike Assembly
- Sticky Template (not included with 74R1, 74R2)
- Mounting Hardware
- Shim Kit and MOV (optional)
- Installation Instructions

RECOMMENDED TOOLS

- Multimeter/Volt Meter
- Crimp Wire Connectors
- Wire Strippers/Cutters
- Fish Tape or Lead Wire
- Phillips Screwdriver

SPECIFICATIONS

Electrical Ratings for Solenoid			
Voltage	12 VDC	16 VDC*	24 VDC
Resistance in Ohms	24.5	24.5	96
mA Continuous Duty	440	440	230

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

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

*Operation at 16 VDC requires an external 8 Ohm resistor
or VA7400-16VDC adapter (sold separately)

CERTIFICATIONS & LISTINGS

UL Performance Specifications			
Destructive Attack	Line Security	Endurance	Standby Power
Level 1	Level 1	Level 4	Level 1

BHMA Performance Specifications			
Fail Secure Static Strength	Dynamic Strength	Fail Safe Static Strength	Endurance
1500 LBS	70 FT-LB Force	1000 LBS	500,000 Cycles

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; for 16 VDC the VA7400-16VDC should be used (sold separately).

- 1 SELECT the appropriate voltage adapter that matches system power and CONNECT the adapter to the strike.
- 2 IF no connector is present, THEN CONFIGURE the wires as shown in **Diagram 2**.
- 3 IF using the Latchbolt Monitor (M) or Strike Monitor (M2), THEN REFER to **Table 1** and **Diagrams 1 & 5** to complete wiring.
- 4 ATTACH Subcover and Faceplate to the Strike Assembly using 8-32 x 1/4” Flat Head Machine Screws

NOTE: The 74R1 and 74R2 models are assembled complete at the factory, no modification is necessary.

CONVERTING THE OPERATION MODE

The 7400 Series Electric Strike is pre-set for Fail-Secure operation. To convert the strike to FAIL SAFE OPERATION (strike will be UNLOCKED without power), perform the following steps (**Diagram 3**):

- 1 LOOSEN screw A (2 turns only!)
- 2 SHIFT screw A to the LEFT and tighten.
- 3 LOOSEN screw B (2 turns only!)
- 4 SHIFT lower plate to RIGHT and tighten screw B.

To convert back to FAIL SECURE OPERATION (strike will be LOCKED without power), perform the following (**Diagram 4**):

- 5 LOOSEN screw B (2 turns only!)
- 6 SHIFT lower plate to LEFT and tighten screw B.
- 7 LOOSEN screw A (2 turns only!)
- 8 SHIFT screw A to the RIGHT and tighten.

NOTE: FAIL SAFE OPERATION mode should not be used in fire rated or windstorm-resistant applications.

Table 2: Optional Monitor Switch Wiring

Monitor Switch Wire Colors	
Contact Rating	500mA @ 30V
Black	Common
Red	Normally Closed
White	Normally Open

Note: Switch states as shown when door is closed and strike is unpowered

Diagram 1: Wiring Reference

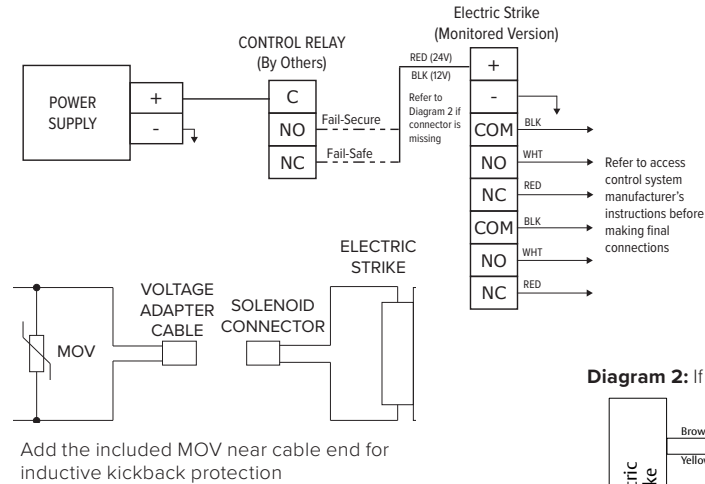


Table 1: Adapter Cable Part Numbers

Voltage Adapter Cable		
Part No.	Wire Color	Application
VA7400-12	Black	12VDC
VA7400-24	Red	24VDC
VA7400-16VDC	White	16VDC

Note: Voltage adapter wires are NOT polarized

Diagram 3: Fail Safe Configuration

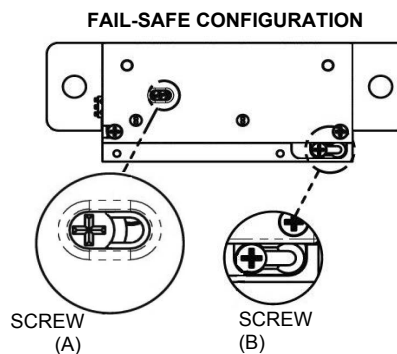


Diagram 4: Fail Secure Configuration

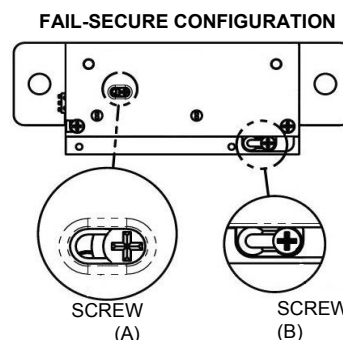


Diagram 2: If Connector Is Missing

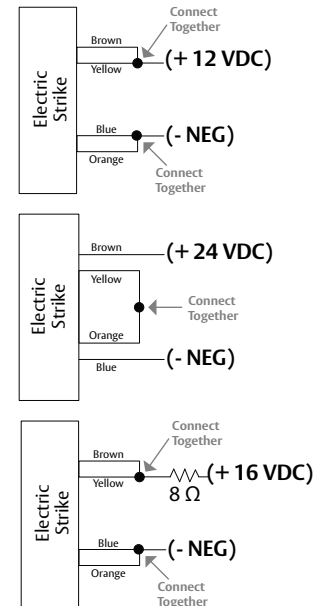
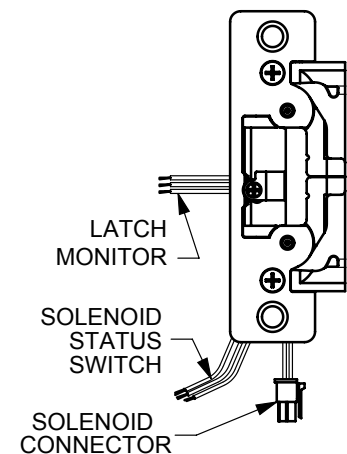


Diagram 5: Switch and Power Wires

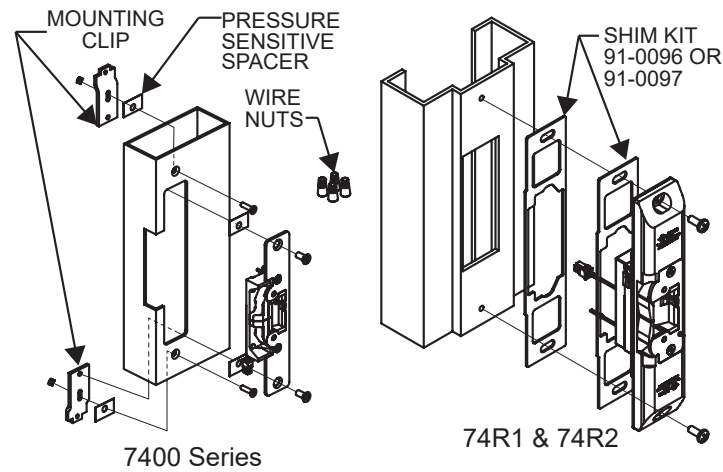


PREPARING THE FRAME

Prepare door jamb/stile per applicable drawings and dimension tables. If using OPTIONAL mounting clips:

- 1 INSTALL mounting clips to jamb/stile using 8-32 x 5/8" Flathead Machine Screws and Keps Nuts (Diagram 6).
NOTE: Leave screws/nuts slightly loose to allow easier alignment of clips with faceplate holes.
- 2 TEST FIT strike assembly to jamb/stile after prep.
- 3 INSTALL provided spacers as required to ensure faceplate and jamb/stile surface are flush.
NOTE: Spacers are approx. 1/64" [4] thick after adhesive backing is removed.
- 4 REMOVE protective coating and adhesive backing from spacer, then CENTER over desired hole and surface in mounting clip, then PRESS and HOLD to affix.
IF Faceplate sits proud of the jamb/stile: add spacer(s) between inside wall of jamb/stile and mounting clip.
IF Faceplate sits behind the jamb/stile: add spacer(s) between the faceplate and mounting clip.

Diagram 6: Optional Mounting Clip Installation



SHIM INSTALLATION (OPTIONAL)

Shim plates are pre-installed at the factory. A thinner set of shims is also included if necessary (part number 91-0933). The shims can be removed altogether to correct misalignments between the strike and the latch (Diagram 7).

FINISHING THE INSTALLATION

For METAL:

- 1 INSERT strike into prep and ATTACH using two (2) provided 12-24 x 1/2" Flat Head Machine Screws.
- 2 TIGHTEN the 8-32 x 5/8" Flat Head Machine Screws to secure the mounting clips (if used) to the jamb/stile.

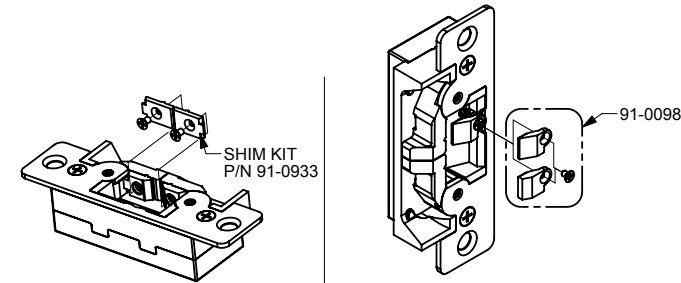
For WOOD:

- 3 INSERT strike into prep and ATTACH using two (2) provided #12 x 1-1/4" Flat Head Wood Screws.
- 4 IF door is loose when closed, INSTALL included keeper shims to remove excessive play (Diagram 7).

Monitored version only:

Two additional trigger shims are included to accommodate variable door gaps and bolts (part number 91-0098).

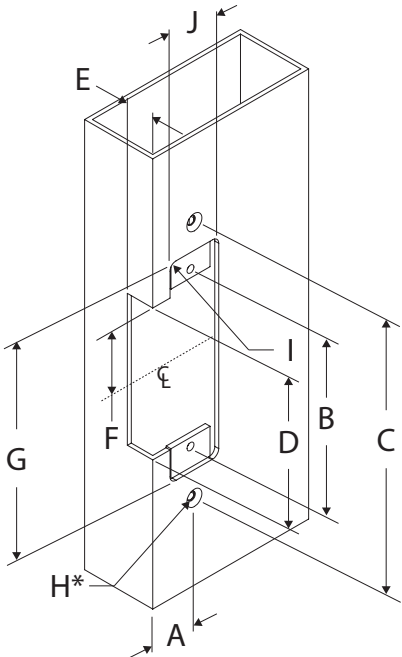
Diagram 7: Optional Keeper Shim Installation



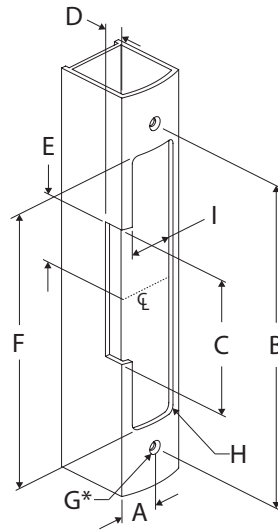
Aluminum Jamb Prep			
Measurement	7400	7410	7430
A	Door Centerline to Jamb Edge		
B	4-1/8" [104.8]	7-7/16" [189.0]	6-1/8" [155.6]
C	6-1/8" [155.6]	9-3/16" [233.4]	8-1/8" [206.4]
D	3-3/8" [85.7]	3-3/8" [85.7]	3-3/8" [85.7]
E	21/32" [16.7]	21/32" [16.7]	21/32" [16.7]
F	1-11/16" [27.0]	1-11/16" [27.0]	1-11/16" [27.0]
G	4-7/8" [123.8]	7-15/16" [201.6]	6-7/8" [174.3]
H	8-32*	8-32*	8-32*
I	5/32" [4.0]	5/32" [4.0]	5/32" [4.0]
J	1-1/4" [31.8]	1-7/16" [36.5]	1-1/4" [31.8]

Measurements in [] are mm

* When using provided mounting clips and hardware

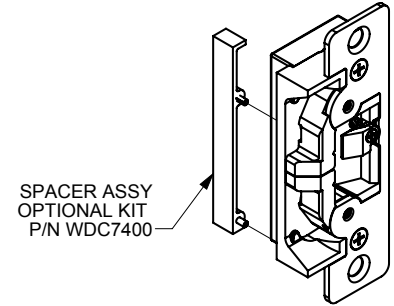


Aluminum Stile Prep		
Measurement	7401	7431
A	Door Centerline to Jamb Edge	
B	6-1/8" [155.6]	8-1/8" [206.4]
C	3-3/8" [85.7]	3-3/8" [85.7]
D	21/32" [16.7]	21/32" [16.7]
E	1-1/16" [27.0]	1-11/16" [27.0]
F	4-7/8" [123.8]	6-7/8" [174.3]
G	8-32*	8-32*
H	5/32" [4.0]	5/32" [4.0]
I	1-1/4" [31.8]	1-1/4" [31.8]

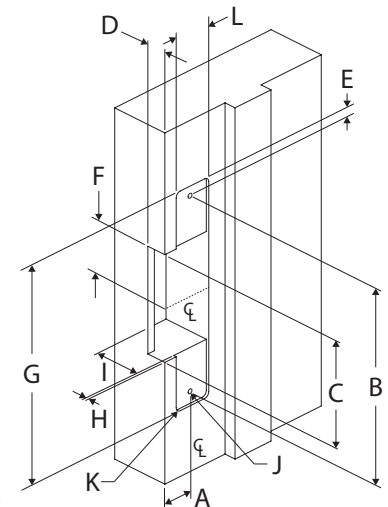


FOR WOOD DOOR APPLICATIONS

The WDC7400 spacer is designed to simplify mortising on wood door applications (sold separately)



Wood & Hollow Metal Jamb/Stile Prep				
Measurement	7410 (Wood)	7411 (Wood)	7440 (Wood)	7440 (Hollow Metal)
A	Door Centerline to Jamb Edge			
B	7-7/16" [188.9]	9-29/64" [240.1]	4-1/8" [104.8]	4-1/8" [104.8]
C	3-3/8" [85.7]	3-3/8" [85.7]	3-3/8" [85.7]	3-3/8" [85.7]
D	21/32" [16.7]	21/32" [16.7]	21/32" [16.7]	21/32" [16.7]
E	1/4" [6.4]	3/8" [9.5]	3/8" [9.5]	3/8" [9.5]
F	1-11/16" [42.9]	1-11/16" [42.9]	1-11/16" [42.9]	1-11/16" [42.9]
G	7-15/16" [201.6]	10-1/4" [260.4]	4-7/8" [123.8]	4-7/8" [123.8]
H	3/32" [2.4]	3/32" [2.4]	3/32" [2.4]	-
I	1-3/8" [34.9]	1-3/8" [34.9]	1-3/8" [34.9]	-
J	#12	#12	#12	12-24
K	5/32" [4.0]	5/32" [4.0]	5/32" [4.0]	5/32" [4.0]
L	1-7/16" [36.5]	1-7/16" [36.5]	1-1/4" [31.8]	1-1/4" [31.8]



74R1 & 74R2 Prep		
Measurement	74R1	74R2
A	15/16"	7/8"
B	8-1/4"	8-1/4"
C	4-1/2"	4-1/2"
D	2-1/4"	21/32"
E	1-5/8"	9-1/16"
F	12-24	12-24
G	1-23/32"	-

