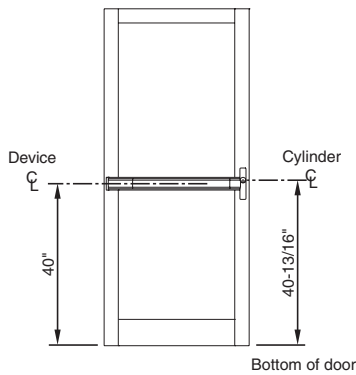


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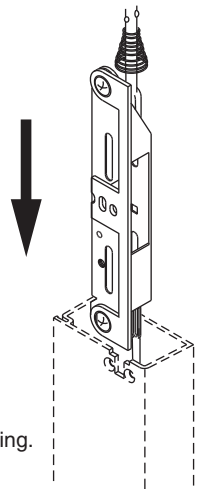
ROD AND CENTER CASE ASSEMBLY:

- 1) For inactive doors or doors without exterior cylinder, or doors without the need for exterior cylinder dogging, the removal of the cylinder dogging pawl is required. (See removal of Dogging Pawl below)

All active doors with cylinder locking will require the cylinder dogging mechanism to be activated before rod and center case assembly is inserted into the active door stile.

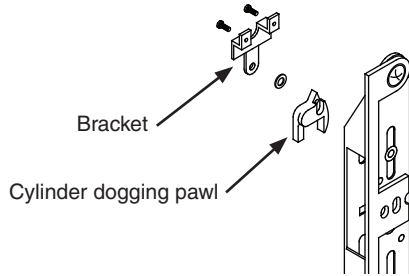
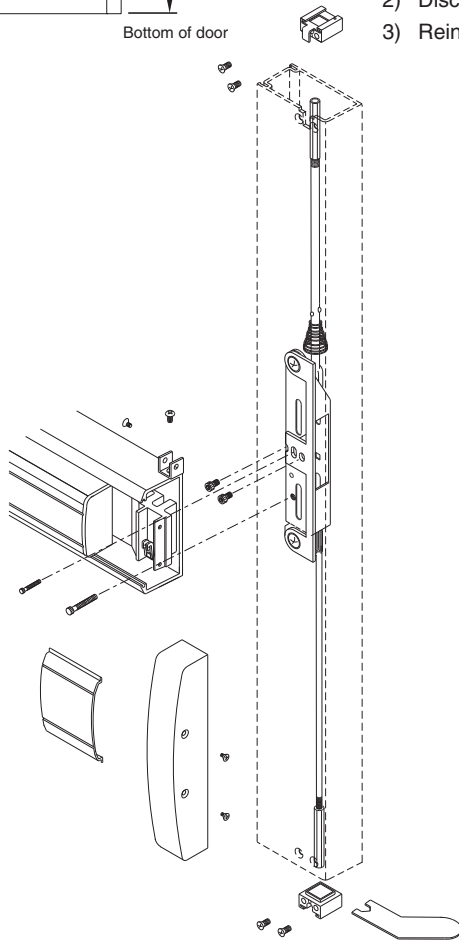
Slide rod and center case assembly into active door stile.

The 190 active pair door will require the weld nut plate fasteners to be cut flush with nut plate to allow center case assembly to insert into a 190 door stile extrusion.



REMOVAL OF CYLINDER DOGGING PAWL:

- 1) Loosen two bracket retaining fasteners.
- 2) Discard dogging pawl.
- 3) Reinstall the bracket and retaining fasteners within the exit device housing.



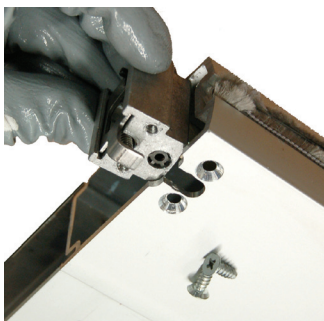
CENTER CASE INSTALLATION:

- 1) Using a hook tool, align center case with holes provided.
- 2) Attach center case with (2) #8 x 1/4" cap screws (don't over tighten).
- 3) Adjust top and bottom bolts with wrench provided allowing bolt to extend beyond stile. Turn top and bottom bolts counterclockwise to lengthen and clockwise to shorten.



TOP GUIDE INSTALLATION:

- 1) Install top guide over top bolt and slide into door stile.
- 2) Attach guide with (2) #10 x 1/2" FH undercut fasteners.



BOTTOM GUIDE INSTALLATION:

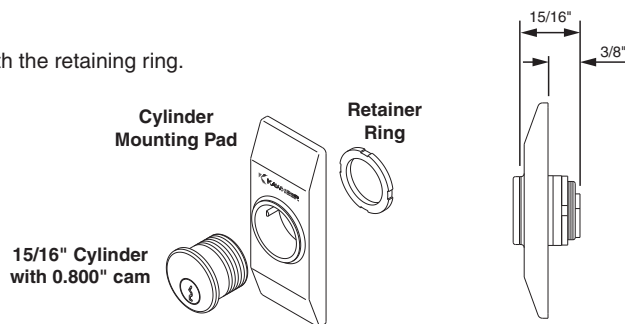
- 1) Install bottom guide over bottom bolt and slide into door stile.
- 2) Attach guide with (2) #10 x 1/2" FH undercut fasteners.



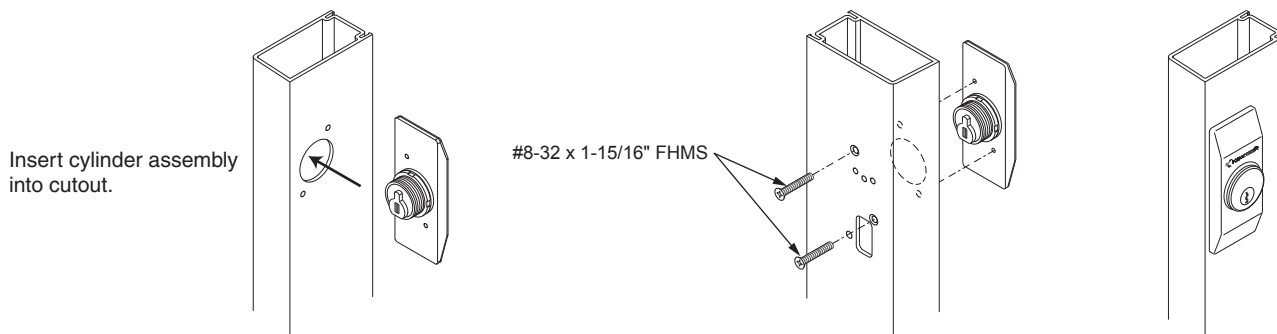
CYLINDER PAD ASSEMBLY:

- 1) Insert a 15/16" cylinder into the mounting pad and secure with the retaining ring.

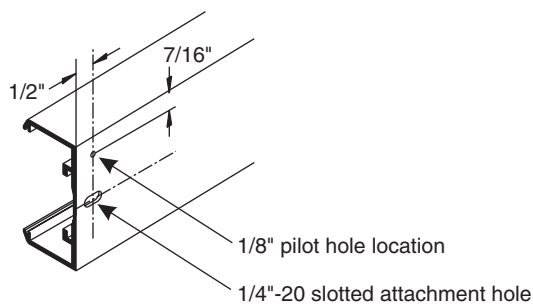
Note: If using a cylinder longer than 15/16", cylinder rings will be required to maintain the 3/8" projection.

**CYLINDER INSTALLATION:**

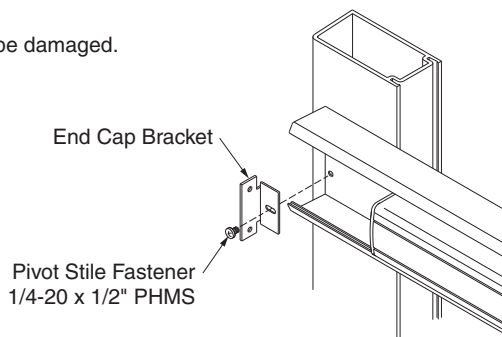
- 1) On exterior side of door, install the cylinder assembly into cutout on the door stile.
- 2) On interior side of door, install (2) #8-32 x 1-15/16" FHMS through door stile to secure cylinder assembly in position.
- 3) Cylinder assembly should be tightly secured to ensure that mounting pad is placed square upon door stile and cannot be moved.
- 4) Once the center case assembly and mounting pad is secured on the active door stile, insert cylinder key and turn counterclockwise to deactivated exterior cylinder dogging mechanism.

**ELECTRICAL WIRE ACCESS**

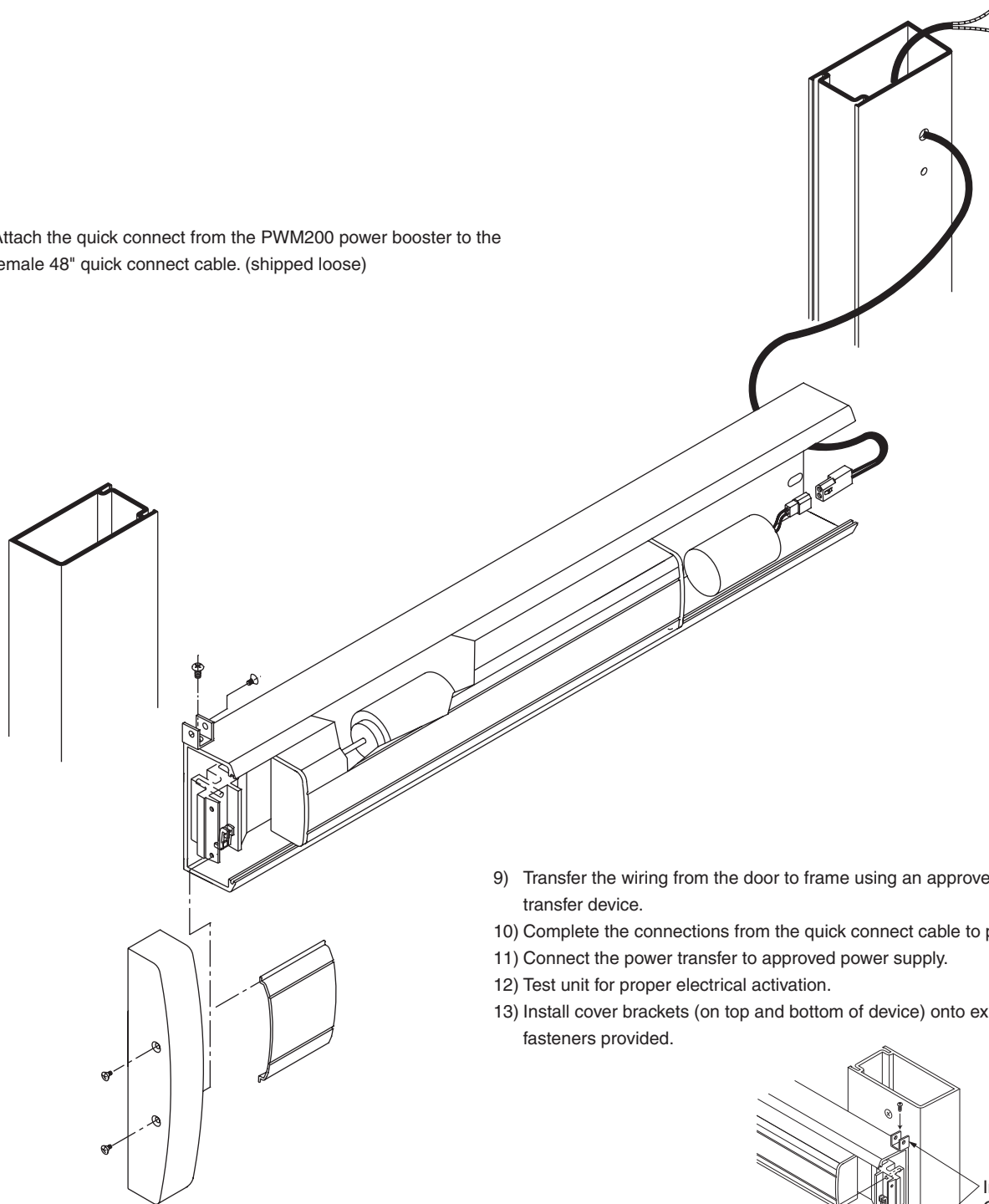
- 1) After completion of adjustments and installation of center case and guides.
- 2) To prep for quick connect wire access hole, flip exit device over exposing the back side upon a protective surface to prevent damaging finish.
- 3) Locate the 1/4"-20 slotted attachment hole, positioned on the pivot stile of exit device. As a reference point, the wire access hole position is located at corner of exit device housing toward the top of door.
- 4) Mark and prep a 1/8" pilot hole 7/16" from top of exit device directly above the 1/4"-20 slotted attachment hole. The 1/8" pilot hole will be centered approximately 1/2" from edge of exit device housing.



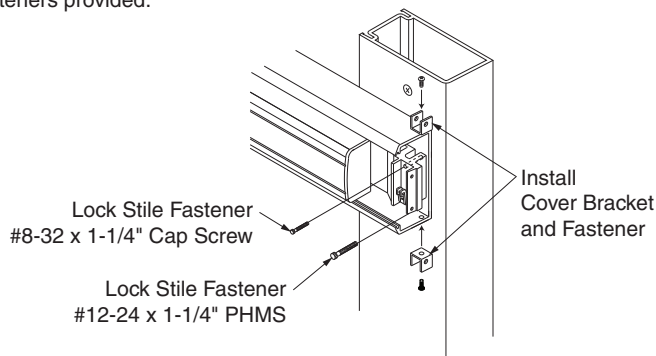
- 5) Attach exit device onto pivot and lock stile of door with fasteners and end cap bracket provided, as indicated below.
- 6) Using the 1/8" pilot hole as a guide to complete the wire access prep, (at a slight angle) drill a 5/16" hole directly thru the exit device housing and door stile for wire access.
- 7) Remove all burrs inside and outside to prevent wire from be damaged.



- 8) Attach the quick connect from the PWM200 power booster to the female 48" quick connect cable. (shipped loose)



- 9) Transfer the wiring from the door to frame using an approved power transfer device.
 10) Complete the connections from the quick connect cable to power transfer.
 11) Connect the power transfer to approved power supply.
 12) Test unit for proper electrical activation.
 13) Install cover brackets (on top and bottom of device) onto exit device with fasteners provided.



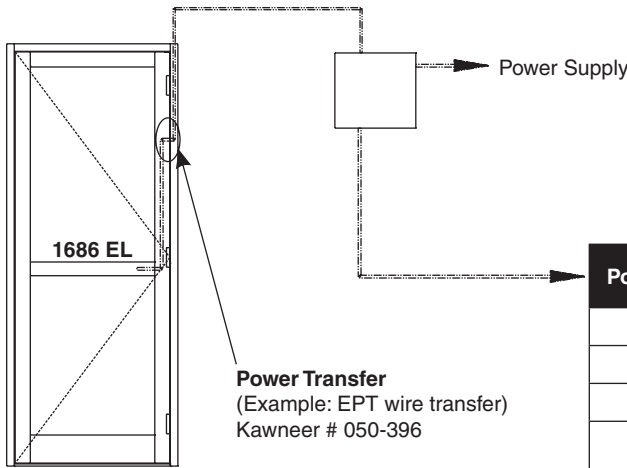
Note:

- a. All wiring to be coordinated with a licensed electrical installer.
- b. The PS1, PS5-4 or PS5-6 is the approved power supply for this exit device.
- c. Allows wire run from power supply to exit device of up to 700' with 18/2 wire.

ELECTRICAL SPECIFICATION

Voltage: 24 VDC

BASIC WIRING DIAGRAM

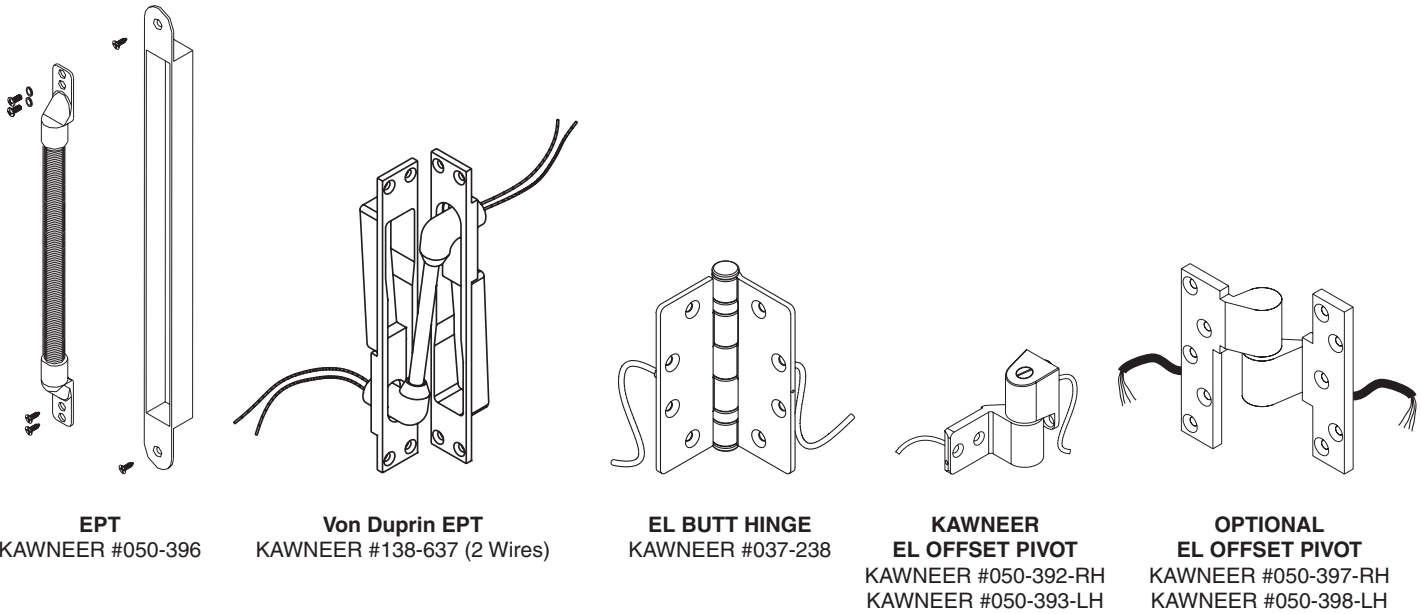


Power Supply	Kawneer Part Number	Exit Device Application
PS1	050409	2
PS5-4	050410	4
PS5-6	050411	6
Reference power supply specifications for additional features.		

Note:

- a. All wiring to be coordinated with a licensed electrical installer.
- b. The PS1, PS5-4, and PS5-6 is the approved power supply for this exit device.
- c. Allows wire run from power supply to exit device of up to 700' with 18/2 wire.

POWER TRANSFERS



AVAILABLE WITH	EPT	KAWNEER EL BUTT HINGES	KAWNEER EL OFFSET PIVOT	OPTIONAL EL OFFSET PIVOT
190/350/500 STANDARD	X	X	X	X
HEAVY WALL	X	X		X
AA®250/AA®425	X	X	X	X

FINAL ASSEMBLY:

- 1) Slide pivot stile filler into device, attach pivot stile end cap with fasteners provided.
- 2) Slide lock stile filler into device, install cover over brackets on lock stile and attach with fasteners provided.
- 3) Stand door in the vertical position and place on blocks to test operation.
- 4) Factory supplied doors will be adjusted per the following requirements. Top bolt should extend approximately 9/16" beyond door stile when utilizing the header/transom "hump back" strike plate in conjunction with exterior cylinder dogging. Bottom bolt should extend approximately 1/2" beyond door stile. Applying the header/transom "hump back" strike plate will allow the top and bottom bolts to remain retracted within the bolt guide trigger mechanism when push pad is not completely depressed.
Doors produced prior to 2012 without the header/transom "hump back" strike plate prep can adjust the top bolt approximately 7/16" to allow the top and bottom bolts to remain retracted within the bolt guide trigger mechanism when push pad is not completely depressed.
Note: This adjustment may cause the exterior cylinder dogging function to be inoperable. If exterior cylinder dogging is required readjust the rods to extend approximately 1/2" to 9/16" beyond the door stile. Field conditions may cause these dimensions to vary slightly.
- 5) Depress push bar, the top bolt will lock in the retracted position. If locking does not occur readjust top bolt with half turn increments until locking occurs.
- 6) Bottom bolt should be flush with end of stile to approximately 1/16" projection beyond the end of door stile in a retracted position.
- 7) Release the bolts by depressing the trigger at top bolt guide.

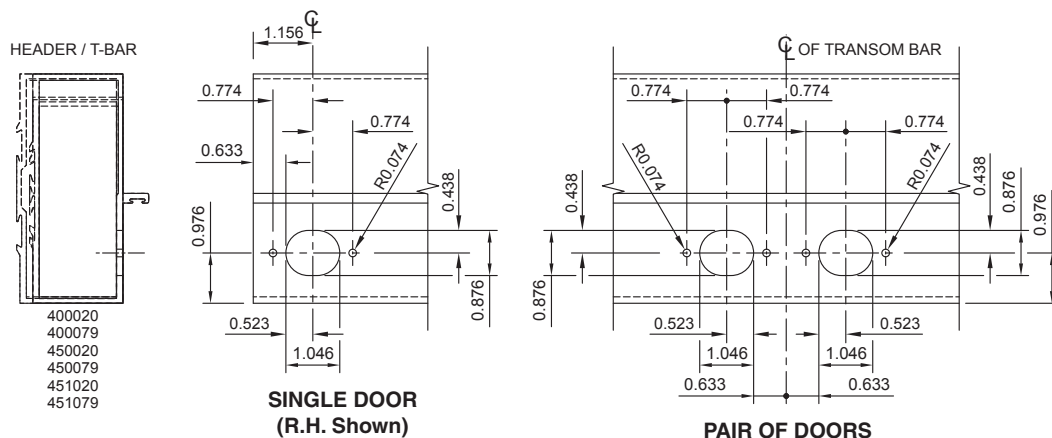
EXTERIOR CYLINDER DOGGING:

- 1) Door must be in an open position with top bolt in a retracted position.
- 2) Insert key, turn counterclockwise until rods are retracted, top bolt should be captured within the trigger mechanism.
- 3) Return key to vertical position.
- 4) With rods in the retracted position, turn key clockwise approximately 1/8" of a turn to activate exterior dogging. If exterior dogging does not function, readjust top bolt with half turn increments until locking occurs.
- 5) Return to vertical position and remove key.
- 6) Turn key counterclockwise to unlock position to release exterior dogging, remove key.

TOP BOLT FABRICATION (for 190, 350, and 500 door only):

- 1) Fabricate header/transom for top bolt cutout as indicated below, for single or pairs of doors.
- 2) The "hump back" strike plate will be positioned upon the header/transom with the hump facing toward exterior side of framing system.
- 3) Insert "hump back" strike plate and attach with fasteners provided.

Note: Once the top bolt passes beneath the "hump back" strike plate, this will force the top bolt to be pushed down an additional 3/32" allowing the top and bottom bolts to remain retracted within the bolt guides when push pad is not completely engaged. This strike plate is designed to accommodate a 1/8" gap between top of door and header/transom.

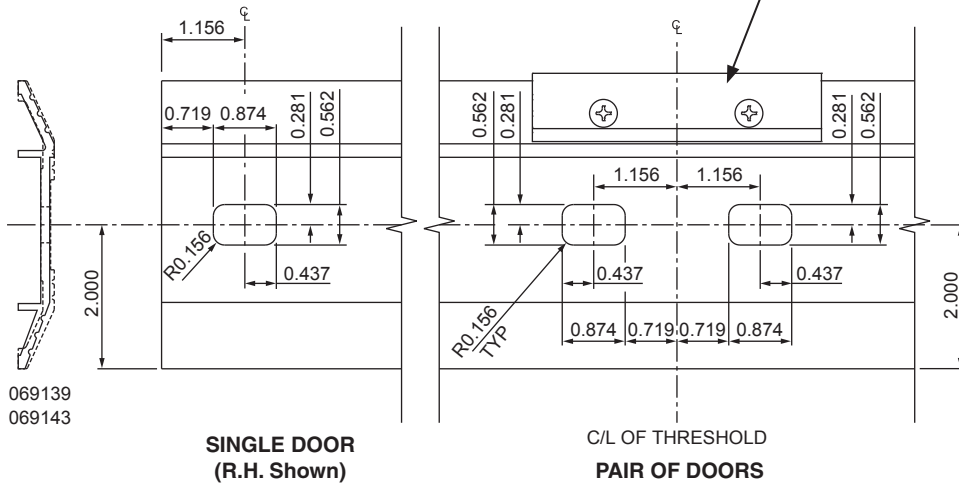


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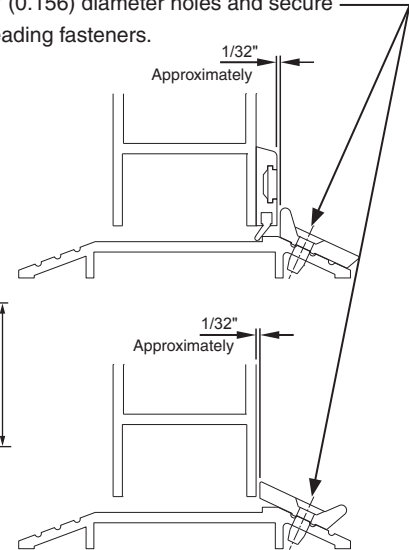
BOTTOM BOLT FABRICATION
(for 190, 350, and 500 door only):

- 1) Fabricate threshold for bottom bolt cutout as indicated below, for single or pair of doors.



DOOR STOP INSTALLATION:

Using 033-981 threshold stop package as a template, drill (2) 5/32" (0.156) diameter holes and secure with self threading fasteners.



069139
069143

SINGLE DOOR
(R.H. Shown)

C/L OF THRESHOLD
PAIR OF DOORS

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KAWNEER 1686 EL CONCEALED ROD EXIT DEVICE PARTS BREAKDOWN

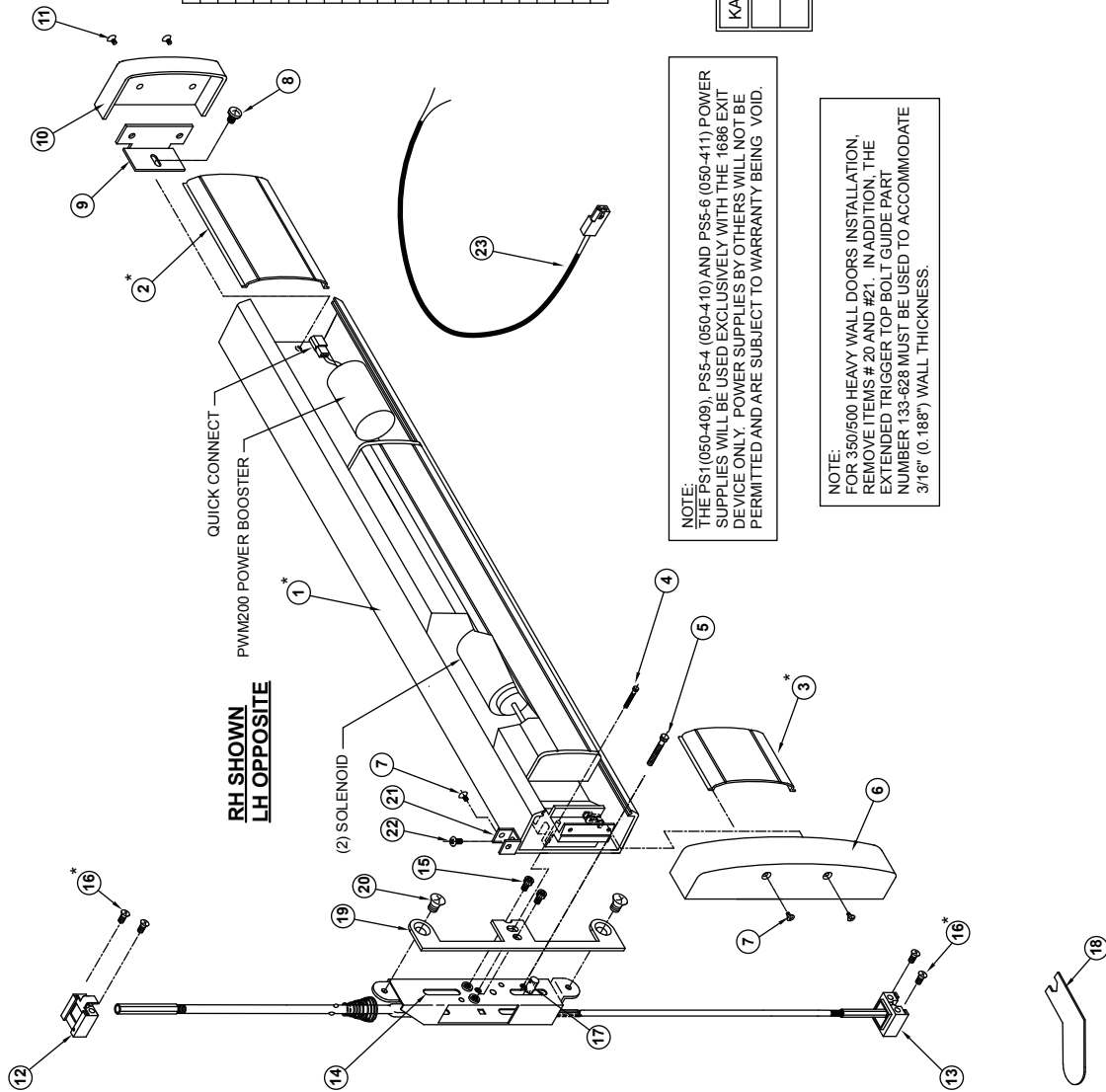
CONCEALED ROD EXIT DEVICE PACKAGE TO INCLUDE:

ITEM #	QTY	DESCRIPTION
1 *	1EA.	EXIT DEVICE BASE ASSEMBLY (SIZED ACCORDING TO PART NUMBER)
2 *	1EA.	HINGE/PIVOT FILLER PLATE (SIZED ACCORDING TO PART NUMBER)
3 *	1EA.	LATCH FILLER PLATE
4	1EA.	# 8-32 PANIC ATTACHMENT FASTENER
5	1EA.	# 12-24 PANIC ATTACHMENT FASTENER
6	1EA.	METAL HOUSING COVER (BLACK MATT FINISH)
7	4EA.	HOUSING COVER ATTACHMENT FASTENERS (BLACK)
8	1EA.	HINGE/PIVOT STILE ATTACHMENT FASTENER
9	1EA.	END CAP MOUNTING BRACKET
10	1EA.	HINGE/PIVOT END CAP (BLACK MATT FINISH)
11	2EA.	END CAP FASTENERS (BLACK)
12	1EA.	TOP ZINC GUIDE BLOCK
13	1EA.	BOTTOM ZINC GUIDE BLOCK
14	1EA.	CENTER ROD ASSEMBLY W/STANDARD TOP BOLT AND FLAT HEX BOTTOM BOLT
15	2EA.	# 8-32 HOUSING ASSEMBLY ATTACHMENT FASTENERS
16 *	4EA.	TOP AND BOTTOM GUIDE ATTACHMENT FASTENERS
17	1EA.	STANDARD LEFT PIN FOR 1.3/4" AND 2" THICK DOOR
18	1EA.	ROD ADJUSTMENT WRENCH
19	1EA.	SPACER PLATE -PLATED STEEL
20	2EA.	1/4"-20 x 1/4" L.G. FLAT HEAD SCREW
21	2EA.	HOUSING COVER BRACKET
22	2EA.	HOUSING COVER BRACKET FASTENERS
23	1EA.	48" QUICK CONNECT CABLE (SHIPPED LOOSE)

* INDICATES PART TO BE IN COLOR TO BLEND WITH THE DOOR FINISH

TOUCHBAR CONCEALED ROD EXIT DEVICE	
133-620EL	3'-0" RIGHT HAND
133-621EL	3'-0" LEFT HAND
133-622EL	3'-6" RIGHT HAND
133-623EL	3'-6" LEFT HAND
133-624EL	4'-0" LEFT HAND
133-625EL	4'-0" RIGHT HAND

KAWNEER FINISH	MANUFACTURER FINISH
17 CLEAR	US28/628
40 BRONZE	DBZ 313



NOTE:
THE PS1 (050-409), PS5-4 (050-410) AND PS5-6 (050-411) POWER SUPPLIES WILL BE USED EXCLUSIVELY WITH THE 1686 EXIT DEVICE ONLY. POWER SUPPLIES BY OTHERS WILL NOT BE PERMITTED AND ARE SUBJECT TO WARRANTY BEING VOID.

NOTE:
FOR 350/500 HEAVY WALL DOORS INSTALLATION, REMOVE ITEMS # 20 AND #21. IN ADDITION, THE EXTENDED TRIGGER TOP BOLT GUIDE PART NUMBER 133-628 MUST BE USED TO ACCOMMODATE 3/16" (0.188") WALL THICKNESS.

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