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 overtighten).
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 Mounting Pad

   Retainer Ring

   15/16" Cylinder with 0.800" cam

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) #6-32 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.

Insert cylinder assembly into cutout.

#6-32 x 1-15/16" FHMS
OPTIONAL TRIM

1686 CONCEALED EXIT DEVICE LEVER HANDLE TRIM ASSEMBLY/INSTALLATION INSTRUCTIONS:

1) Trim mounting base is non-handed to accommodate a left or right handle application. To construct a left hand (LH) lever handle, rotate cam clockwise making sure the cam pin aligns with slot on left side of cam guide. (See illustration below.) Once the pin is in position, slightly push up and hold cam guide and cam while inserting lever handle firmly into place within the trim mounting base. To construct a right hand (RH) lever handle, follow the same procedure as above to accommodate opposite handing.

2) Assemble (1) 1/4" x 1/4" x 1/2" Phillips pan head fastener with (1) steel flat washer and (1) lock washer to secure lever handle to trim mounting base.

3) Insert 15/16" key cylinder (dummy cylinder on inactive door leaf) into top hole of trim mounting base. Align mounting guide plate to key cylinder and secure with retaining ring.

4) When using a key cylinder longer than 15/16", cylinder rings will be required to maintain a 1/8" cylinder projection. When using a dummy cylinder on inactive door leaf, place the lock arm switch in a lock position to disable the lever handle function.

5) Prior to installation of trim mounting base, the cylinder dogging pawl must be removed on both active and inactive door leafs. (See page 1 for cylinder dogging pawl removal)

6) Find (1) 1/4" x 1/4" x 3/4" Phillips pan head fastener and apply several drops of thread locker liquid to lower threads. Install Phillips pan head fastener into trim mounting base and set to accommodate a 1/8" (Standard/Thermal door) or 3/16" (Heavy Wall) wall thickness. (Fastener may require additional adjustment to ensure that trim mounting base is fully secured into position.)

7) On exterior side of door stile, position lever handle trim assembly into cutout, just below the fastener slot cutout. Being careful not to scratch the exposed finish surface, slide lever handle trim assembly up to engage fastener into slot.

8) On interior side of door stile, install (1) fastener (see below) through door to secure lever handle trim assembly in position.

9) Lever handle trim assembly should be tightly secured to ensure that hardware is placed square upon door stile and cannot be moved.

10) Upon completion, insert cylinder key and turn clockwise to unlock, then counter-clockwise to lock.

1686 CONCEALED EXIT DEVICE TRIM HANDLING GUIDE:

- Lever Handle (Shown as LH)
- Lever Handle (Shown as RH)
- Trim mounting base
- Cylinder retaining ring
- 15/16" cylinder with 0.800" cam
- Mounting guide plate
- Steel flat washer & lock washer
- Push Up and Hold Cam Guide

Lock Arm Switch
Cam Lift Pin
Exit Device Engagement Pin
Left Slot
Lever (LH)
Lever (RH)
EXIT DEVICE WITH PUSH PAD DOGGING:

TO DOG EXIT DEVICE
Insert the hex key and turn clockwise until it stops.
Fully depress touch bar and release the key.
With touch bar retracted remove hex key.

TO UNDOG EXIT DEVICE
Push on touch bar. Insert hex key and turn clockwise until it stops.
Release touch bar, when the touch bar is in the extended position release hex key and remove.
**DEVICE ATTACHMENT:**

1) Undog exit device before attaching to door.
2) Attach exit device onto pivot stile and lock stile of door with fasteners provided, as indicated below.
3) Install cover brackets (on top & bottom of device) onto exit device with fasteners provided.

**EXIT DEVICE WITH CYLINDER DOGGING**

1) Install pivot stile filler plate into exit device.

2) Install cylinder as pictured, making sure cylinder is tight against filler plate.

3) Tighten set screw in dogging mechanism with a phillips head screw driver, through hole in end of base bracket.

**MAKE SURE CYLINDER IS ORIENTED AS PICTURED**

**DO NOT OVER TIGHTEN SET SCREW**
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 bolts 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, adjust 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 push 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 or door and header/transom.
**BOTTOM BOLT FABRICATION:**

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.

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**SINGLE DOOR**
(R.H. Shown)

**C/L OF THRESHOLD**
PAIR OF DOORS
**NOTE:** For 350/500 Heavy Wall Doors installation, remove items #20 and #21. In addition, the extended trigger top bolt guide part number 133-028 must be used to accommodate 5/16" (0.188) wall thickness.

### Concealed Rod Exit Device Parts Breakdown

<table>
<thead>
<tr>
<th>ITEM #</th>
<th>QTY</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 EA</td>
<td>EXIT DEUCE BASE ASSEMBLY (SEED ACCORDING TO PART NUMBER)</td>
</tr>
<tr>
<td>2</td>
<td>1 EA</td>
<td>FINGERPRINT FILLER PLATE</td>
</tr>
<tr>
<td>2</td>
<td>1 EA</td>
<td>TOP FILLER PLATE</td>
</tr>
<tr>
<td>4</td>
<td>1 EA</td>
<td>M-6.32 PAN HEAD ATTACHMENT FASTENER</td>
</tr>
<tr>
<td>6</td>
<td>1 EA</td>
<td>4-12-24 PAN HEAD ATTACHMENT FASTENER</td>
</tr>
<tr>
<td>12</td>
<td>1 EA</td>
<td>METAL HOUSING COVER (BLACK MATT FINISH)</td>
</tr>
<tr>
<td>7</td>
<td>4 EA</td>
<td>HOUSING COVER ATTACHMENT FASTENERS (BLACK)</td>
</tr>
<tr>
<td>2</td>
<td>1 EA</td>
<td>FINGERPRINT STYLE ATTACHMENT FASTENER</td>
</tr>
<tr>
<td>0</td>
<td>1 EA</td>
<td>END CAP MOUNTING BRACKET</td>
</tr>
<tr>
<td>10</td>
<td>1 EA</td>
<td>FINGERPRINT END CAP (BLACK MATT FINISH)</td>
</tr>
<tr>
<td>11</td>
<td>2 EA</td>
<td>END CAP FASTENERS (BLACK)</td>
</tr>
<tr>
<td>12</td>
<td>1 EA</td>
<td>TOP/ZRC GUIDE BLOCK</td>
</tr>
<tr>
<td>13</td>
<td>1 EA</td>
<td>BOTTOM/ZRC GUIDE BLOCK</td>
</tr>
<tr>
<td>14</td>
<td>1 EA</td>
<td>LIGHTER RUG ASSEMBLY INSTALLED TOP BOLT AND FLAT HEX BOTTOM BOLT</td>
</tr>
<tr>
<td>15</td>
<td>2 EA</td>
<td>90 DEGREE HOUSING ACCESSORY ATTACHMENT FASTENERS</td>
</tr>
<tr>
<td>16</td>
<td>4 EA</td>
<td>TOP AND BOTTOM GUIDE ATTACHMENT FASTENERS</td>
</tr>
<tr>
<td>17</td>
<td>1 EA</td>
<td>STANDARD LIFT PIN FOR 1 3/4&quot; AND 2&quot; THICK DOOR</td>
</tr>
<tr>
<td>18</td>
<td>1 EA</td>
<td>EJECTION KEY</td>
</tr>
<tr>
<td>19</td>
<td>1 EA</td>
<td>ROD ADJUSTMENT WRENCH</td>
</tr>
<tr>
<td>20</td>
<td>1 EA</td>
<td>GRAND PLATE HEADED STEEL</td>
</tr>
<tr>
<td>21</td>
<td>2 EA</td>
<td>3/8-32 x 1 1/4&quot; FLAT HEAD SCREW</td>
</tr>
<tr>
<td>22</td>
<td>2 EA</td>
<td>HOUSING COVER BRACKET</td>
</tr>
<tr>
<td>23</td>
<td>1 EA</td>
<td>HOUSING COVER BRACKET FASTENERS</td>
</tr>
</tbody>
</table>

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

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NOTE: FOR WM PAIR OF DOORS ONLY. THE CYLINDER DOGGING MECHANISM MUST BE ACTIVATED BEFORE THE DOOR AND CENTER CASE ASSEMBLY IS INSERTED INTO THE ACTIVE DOOR STYLE. THE CENTER CASE ASSEMBLY MUST BE SECURED WITHIN THE ACTIVE DOOR STYLE. INADVERTENTLY, THE INDEX HAT PLATE FASTENERS THAT PROJECT INTO THE ACTIVE DOOR STYLE SHOULD BE CUT FLUSH WITH PLATE.

NOTE: FOR WM800W HEAVY WALL DOORS INSTALLATION, REMOVE ITEMS # 25 AND # 43. IN ADDITION, THE EXTENDED THUNDER TOP SOLE GUIDE PART NUMBER 13686 MUST BE USED DUE TO WM800W (8-5/8") WALL THICKNESS.

KAWNEER 1686 CONCEALED ROD EXIT DEVICE WITH CYLINDER DOGGING PARTS BREAKDOWN

CONCEALED ROD EXIT DEVICE PACKAGE TO INCLUDE:

SHOP NOTE:
ON DOORS WITHOUT CYLINDERS REMOVE THE CYLINDER DOGGING PIVOT AS NOTED BELOW.

1) LOOSEN TWO BRACKET RETAINING FASTENERS.
2) DISCONNECT DOGGING PIVOT.
3) REINSTALL THE BRACKET AND RETAINING FASTENERS WITHIN THE EXIT DEVICE HOUSING.

KAWNEER FINISH MANUFACTURER FINISH
17 CLAR(1) USD900
48 BRASS NS92315

TOUGHENED GLAS DVD CONCEALED ROD EXIT DEVICE
12082100 3-3/4" RIGHT HAND
12082102 3-3/4" LEFT HAND
12082300 3-3/4" RIGHT HAND
12082302 3-3/4" LEFT HAND
12084010 4" RIGHT HAND
12084012 4" LEFT HAND
11382500 4-1/2" RIGHT HAND
11382502 4-1/2" LEFT HAND

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