1) MAKE SURE THE CORRECT DEVICE IS BEING USED.
2) MAKE SURE DEVICE IS CORRECT HANDING. IF NOT, SEE PAGE 10 (FIGURE 1 OR FIGURE 2).
3) MAKE SURE ALL NEEDED PARTS ARE ON HAND.
   **NOTE:** LIST DOES NOT REFLECT ALL POSSIBLE APPLICATIONS.

### 1 PARTS CHECK

1) **(F) 19-V DEVICE**
   - **NOTE:** DEVICE IS FIELD REVERSIBLE

2) **STRIKE**
   - 4163/3788
   - 2126A
   - 4155
   - **FIRE**
     - TOP 3788
     - BOTTOM 2130
   - **PANIC**
     - TOP 4163
     - BOTTOM 2130
     - OPT. BOTTOM 2126A
     - OPT. BOTTOM 4155

3) **LATCHES & BOTTOM BOLTS**
   - **TOP LATCH**
   - **BOTTOM LATCH**
   - **BOLT ASSEMBLY**

4) **SCREW PACK FOR PANIC DEVICE**
   - DOGging KEY (1 QTY.)
   - MOUNTING BRACKET (1 QTY.)
   - SEX BOLT – 1/4”-20 Thread (3 QTY.)
   - 1/4”-20 x 3/4” TPHMS (1 QTY.)
   - 1/4”-20 x 3/4” FHMS (2 QTY.)
   - #10 x 1-1/4” FPHMS (6 QTY., 2 FINISHED)

5) **SCREW PACK FOR FIRE DEVICE**
   - MOUNTING BRACKET (1 QTY.)
   - SEX BOLT – 1/4”-20 Thread (3 QTY.)
   - 1/4”-20 x 3/4” TPHMS (1 QTY.)
   - 1/4”-20 x 3/4” FHMS (2 QTY.)
   - #10 - 24 X 3/4” FHMS (6 QTY.)
   - CHANNEL END CAP (1 QTY.)
   - #10 - 24 x 3/8” UPHMS w/Nylon Patch (2 BLACK)
   - #10 - 1.1/4” PPHMS (6 QTY., 4 BLACK)
   - 1/8” x 3/4” COTTER KEY (2 QTY.)
   - ROD GUIDE (2 QTY.)

6) **VERTICAL RODS (LENGTHS FOR 7’0” OPENINGS)**
   - **TOP ROD** = 36-7/8”
   - **BOTTOM ROD** = 34-5/8”

**NOTE:** MAKE SURE OUTSIDE TRIM (IF BEING USED) HAS BEEN PROVIDED AND IS THE CORRECT HANDING. SEE PAGE 10, NOTE #4 FOR TRIM CAM POSITION.
2 DOOR LAYOUT

(NOTE: FOR FACTORY PREPARED DOORS, VERIFY LAYOUT.)

1) DOOR MUST BE FITTED AND HUNG PROPERLY BEFORE PROCEEDING.
2) MARK VERTICAL \( \text{\textregistered} \) AND DEVICE REF. \( \text{\textregistered} \) ON DOOR AND FRAME (SEE FIGURES & CHARTS BELOW).

A) VERTICAL \( \text{\textregistered} \):

<table>
<thead>
<tr>
<th>INSTALLATION</th>
<th>1-3/4&quot; MIN.</th>
<th>3&quot; MIN.</th>
</tr>
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<tbody>
<tr>
<td>(F)19-V x (F)19-V</td>
<td>-</td>
<td>2-1/4&quot;</td>
</tr>
<tr>
<td>T5-V x 19-H (w/</td>
<td></td>
<td>2-5/16&quot;</td>
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<tr>
<td>STRIKE)</td>
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<tr>
<td>T5-V x 19-H (w/</td>
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<td>1-13/16&quot;</td>
</tr>
<tr>
<td>STRIKE)</td>
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</tbody>
</table>

B) DEVICE REF \( \text{\textregistered} \) (HORIZONTAL):

NOTE: 571 & 571-A ARE NOT APPROVED FOR FIRE RATED APPLICATIONS.

CAVITY PREPARATION FOR 2130 BOTTOM STRIKE
5 REVERSING INSTRUCTIONS

TO CHANGE THE HANDING OF A 19-V DEVICE
1) REMOVE CHASSIS COVER (2 SCREWS, COVER IS NOT SHOWN).
2) REMOVE HOUSING A (2 SCREWS).
3) REMOVE SLIDEBAR LEVER B AND DRAWBAR LEVER C.
4) ROTATE RETRACTOR CAM D TO CORRECT POSITION, SEE FIGURE 1 (RHR) OR FIGURE 2 (LHR).
   NOTE: FOR INSTALLATIONS WITH NO TRIM, RETRACTOR CAM D SHOULD POINT TOWARDS BOTTOM OF DOOR.
5) INVERT SLIDEBAR LEVER B AND INSTALL ON OPPOSITE PIVOT PIN E. SEE FIGURES BELOW.
6) INSTALL SLIDEBAR LEVER B MAKING SURE TEETH ARE ENGAGED WITH DRAWBAR LEVER C AND THAT NUB ON B
   FITS WITHIN SLOT IN F.
7) REASSEMBLE HOUSING A (2 SCREWS).
8) PROCEED WITH DEVICE INSTALLATION.

NOTE: RETRACTOR CAM D AND DRAWBAR LEVER C SHOULD POINT IN THE SAME DIRECTION AND TOWARDS THE TOP
OF THE DOOR WHEN DEVICE IS INSTALLED WITH TRIM.
NOTE: A RHR DEVICE REQUIRES RHR TRIM, SEE TRIM INSTALLATION SHEET FOR TRIM REVERSING PROCEDURES.
4) DETERMINE DEVICE LENGTH.
   A) LOCATE VERTICAL C ON DOOR.
   B) MEASURE DISTANCE "Y" FROM VERT. C TO STOP SURFACE ON HINGE SIDE.
   C) SUBTRACT 1" FOR RECOMMENDED CLEARANCE (FOR DOOR STILES LESS THAN 2-3/4" WIDE; SUBTRACT 3/4").
   D) LENGTH OF DEVICE FROM VERT. C TO CUT-OFF LENGTH IS "X".

   VERT C

   LHR SHOWN

   "X" CUT-OFF LENGTH

   "Y"

   NOTE: FOR STANDARD DOGGING: 3" MIN.
   FOR CYLINDER DOGGING: 4-1/2" MIN.
   FOR EXIT ALARM AND ELECTRIC DOGGING: 7" MIN.

5) IF DEVICE IS LONGER THAN "X", CUT THE DEVICE.
   A) MARK DEVICE CHANNEL AND COVER TO LENGTH "X".
   B) CUT BOTH CHANNEL AND CHANNEL COVER TO MARKED DIMENSION AND REMOVE BURRS.

   SEE ABOVE

   3" MINIMUM
   (4-1/2" FOR CYLINDER DOGGING & EXIT ALARM)

   LHR SHOWN

   NOTE: FACTORY RECOMMENDS SAWING RATHER THAN GRIND CUT TO SIZE. GRINDING CAN DAMAGE THE FINISH OF THE DEVICE AND SAWING RESULTS IN LESS DAMAGE TO THE DEVICE'S FINISH.

6) DRILL MOUNTING HOLE.
   REMOVE CHANNEL COVER AND DRILL 5/16" DIA. HOLE ON DEVICE REF. C 5/16" FROM END OF CHANNEL.

   5/16" DIA. HOLE

   DEVICE REF. C

   LHR SHOWN

   #8-32 x 1/4" UFPHM (2 QTY.)

   #8-32 x 5/16" UFPHM (2 QTY.)

   #10-24 x 3/4" UFPHS (2 QTY.)

   #8-30 x 1/4" UFPHM (2 QTY.)

10) APPLY STRIKES & COVERS (NOTE: ALL SCREWS ARE BLACK).
   A) ATTACH COVERS TO CHASSIS AND LATCHES.
   B) INSTALL ROD GUIDES.
   C) SLIDE IN CHANNEL COVER.
   D) ATTACH CHANNEL END CAP.
   E) INSTALL STRIKES TO TOP OF DOOR FRAME AND TO FLOOR OR THRESHOLD.
   F) CHECK FOR SMOOTH OPERATION.

11) CHECK DOGGING OPERATION: (PANIC APPLICATION ONLY)
   A) DEPRESS TOUCHBAR, INSERT AND TURN DOGGING KEY CLOCKWISE TO DOG DEVICE.

   B) REMOVE DOGGING KEY; TOUCHBAR WILL REMAIN DEPRESSED.
   C) REINSERT DOGGING KEY AND TURN IT IN OPPOSITE DIRECTION (COUNTER-CLOCKWISE).
   D) PUSH ON TOUCHBAR AND IT WILL "POP OUT."

   LHR SHOWN

   FOR DEVICES ON DOORS OVER 8'0" TALL, TWO ROD GUIDES SHOULD BE PLACED EQUALLY BETWEEN THE TOP LATCH AND DEVICE HEAD.

   #10-24x3/8" UFPHM (2 QTY.)
9) VERTICAL ROD ADJUSTMENT.
A) TOP LATCH ADJUSTMENT.
1) RELEASE TOP LATCHBOLT USING RELEASE TRIGGER.
2) CHECK TOP LATCHBOLT PROJECTION. LATCHBOLT PROJECTION SHOULD BE 5/8" TO 3/4".
3) IF THE TOP LATCHBOLT DOES NOT PROJECT THIS MUCH, REMOVE THE COTTER KEY FROM THE TOP ROD AND TURN THE TOP ROD ONE FULL TURN (SEE BELOW). RE-INSERT THE COTTER KEY.
RECHECK THE INCREASED LATCHBOLT PROJECTION. REPEAT UNTIL TOP LATCHBOLT PROJECTION IS 5/8" TO 3/4".
4) SLOWLY DEPRESS TOUCHBAR. LATCHBOLT SHOULD REMAIN IN RETRACTED POSITION.
5) IF LATCHBOLT DOES NOT REMAIN IN RETRACTED POSITION, REMOVE COTTER KEY. DECREASE TOP LATCHBOLT PROJECTION BY ROTATING ROD 1/2 TURN (SEE BELOW).
B) BOTTOM BOLT ADJUSTMENT (TOP LATCH SHOULD REMAIN IN RETRACTED POSITION).
1) REMOVE COTTER KEY. ROTATE ROD 1/2 TURN UNTIL BOTTOM BOLT REMAINS IN RETRACTED POSITION.
2) RE-INSERT COTTER KEY.
C) IF TRIM IS BEING USED, OPERATE TRIM AND CHECK FOR FULL LATCHBOLT RETRACTION. IF TOP LATCHBOLT DOES NOT REMAIN IN RETRACTED POSITION, DECREASE TOP AND BOTTOM LATCHBOLT PROJECTION (SEE BELOW).
D) BEND COTTER KEYS AROUND RODS AND RELEASE TOP LATCHBOLT USING RELEASE TRIGGER.

7) PREPARE ACCESS SLOT IN CHANNEL COVER. DRILL AN 11/16" DIA. HOLE 5/16" FROM JUST CUT END OF CHANNEL COVER. REMOVE REMAINING MATERIAL TO COMPLETE SLOT USING A SAW OR FILE.

8) IF DOOR OPENING IS NOT 7'0", DETERMINE TOP ROD LENGTH BASED ON A 40-5/16" DEVICE REF. Q FROM FINISHED FLOOR.
A) FOR DOOR OPENINGS UNDER 7'0":
1) SUBTRACT DOOR OPENING FROM 7'0" OPENING.
2) ADD ANSWER FROM PART 1 TO 36-7/8" TO DETERMINE TOP ROD LENGTH.
(E. X.: 6'8" DOOR OPENING - 7'0" - 6'8" = 4" 36-7/8"+4"= 42-7/8" TOP ROD)
B) FOR DOOR OPENINGS ABOVE 7'0":
1) SUBTRACT 7'0" FROM DOOR OPENING.
2) ADD ANSWER FROM PART 1 TO 36-7/8" TO DETERMINE TOP ROD LENGTH.
(E. X.: 8'10" DOOR OPENING - 8'10"-7'0"=22" 36-7/8"+22"=58-7/8")

9) MODIFY TOP ROD TO REQUIRED LENGTH.
A) FOR RODS THAT ARE TOO LONG, FOLLOW PROCEDURE BELOW TO CUT ROD TO SIZE.
1) MARK RODS TO REQUIRED LENGTH.
NOTE: ROD MUST BE MEASURED FROM THREADED PORTION OF ROD.
DO NOT CUT ROD AT END WITH INTERNAL THREADS.
2) CUT ROD AT MARKED LOCATION.
3) DRILL COTTER KEY CONNECTION HOLE.
DRILL 1/8" DIA. HOLE THRU ON VERTICAL ROD 7/16" FROM END OF ROD JUST CUT.

CALCULATED ROD LENGTH MEASURED FROM THREADED END OF ROD.

11/16" DIA. HOLE 5/16"
Hardware Installation

1) Mount Outside Trim (when required) per directions in Trim Box, or install outside sex bolts.
2) Mount device - throughbolt device to trim or sex bolts.
3) Locate, mark and drill end cap mounting hole:
   A) Level device.
   B) Mark Center of 5/16" Dia. hole at end of channel.
   C) Drill 9/32" Dia. hole thru door.
   D) Drill 3/8" Dia. hole on trim side of door using 9/32" Dia. hole as guide.

4) Install channel cover.

5) Install End cap mounting bracket using sex bolt and screw

6) Follow instructions to mark, cut & drill top rod (see Step 1 of Part A of previous page).

7) Install top & bottom latches.

8) Thread rods onto device centerslide. Insert rod connectors from top latch into opposite end of top rod and insert (but do not bend) cotter key through rod and rod connector. Insert bolt assembly into opposite end of bottom rod and insert (but do not bend) cotter key through rod and bolt assembly.
TOP LATCH

2/16"

4/1-1

2-1/8"

CUT HERE

3/4" DIA. HOLE

DEVICE REF CL

4-1/2"

CUT HERE

3/4" DIA. HOLE

3/8"

CUT HERE

5/8"

CUT HERE

1/4-20 THPM

5/8" (2 HOLES)

FOR ALL OTHER APPLICATIONS:
DRILL & TAP FOR 1/4"-20 THPM AT LOCATION "A" (2 HOLES)

FOR THRU-BOLTING AT LOCATION "A" (2 HOLES)

FOR KIL, KIK & CENTRON TRIM:
DRILL 9/32" DIA. HOLE FOR THRU-BOLTING OR DRILL & TAP FOR 1/4-20 THPM AT LOCATION "B" (2 HOLES)

3/4" DIA. HOLE (X 3/4" DEEP ON EXIT)