- 9) CHECK DOGGING OPERATION (PANIC APPLICATION ONLY)
  - A) DEPRESS CROSSBAR, INSERT AND TURN DOGGING KEY IN BOTH THE ACTIVE AND INACTIVE
  - B) REMOVE DOGGING KEY, CROSSBAR SHOULD REMAIN DEPRESSED.
  - C) REINSERT DOGGING KEY AND TURN IN OPPOSITE DIRECTION. CROSSBAR WILL "POP OUT".
  - D) FOR CYLINDER DOGGING, REFER TO D-4085.
- 10) CHECK FOR SMOOTH OPERATION AND SECURE LATCH BOLT ENGAGEMENT.



D-1010

### **FALCON**®

### XX-M Series Mortise

**Exit Devices** 

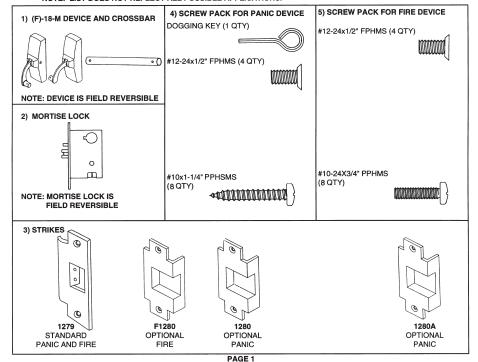
Installation Instructions



### **PARTS CHECK**

- 1) MAKE SURE THE CORRECT DEVICE, MORTISE LOCK, AND TRIM (IF APPLICABLE) ARE BEING USED, AND ARE THE CORRECT HAND.
- 2) EDGE OF DOOR SHOULD BE PREPARED FOR MORTISE LOCK (SEE PAGE #5)
  3) FRAME SHOULD BE PREPARED FOR MORTISE STRIKE (SEE PAGE #5)
- 4) MAKE SURE ALL NEEDED PARTS ARE ON HAND.

NOTE: LIST DOES NOT REFLECT ALL POSSIBLE APPLICATIONS.





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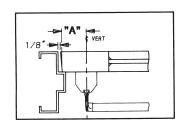
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# **DOOR LAYOUT**

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

- 1) DOOR MUST BE FITTED AND HUNG PROPERLY BEFORE PROCEEDING. 2) MARK VERTICAL  $\wp$  AND DEVICE REF.  $\wp$  ON DOOR AND FRAME. (SEE FIGURES & CHART BELOW)

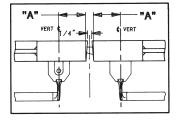
#### A) VERTICAL Q: SINGLE DOOR APPLICATION



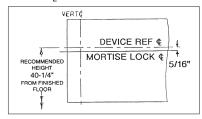
INSTALLATION	"A"	MIN.
	BACKSET	STYLE
SINGLE DOOR MORTISE		
DOUBLE DOOR: MORTISE x VERTICAL DEVICES	2-3/4"	4-1/2"
DOUBLE DOOR: MORTISE x CONCEALED DEVICES		

NOTE: VERTICAL Ç TAKEN FROM CENTER OF DOOR THICKNESS

#### B) VERTICALÇ: DOUBLE DOOR APPLICATION WITH MULLION



#### C) DEVICE REF. Ç (HORIZONTAL)



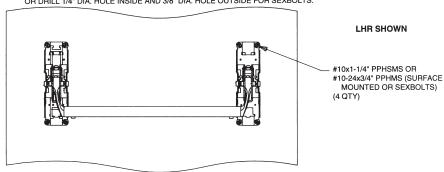
FOR FACTORY PREPARED DOORS: USE MORTISE LOCK C TO FIND DEVICE REF. Ç

5) LOCATE, MARK, AND DRILL INACTIVE HEAD MOUNTING HOLES

A) LEVEL CROSSBAR ON DOOR

B) MARK CENTER OF FOUR MOUNTING HOLES

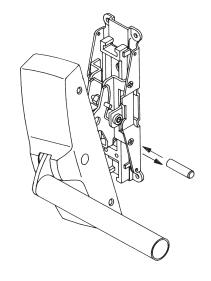
C) DRILL 9/64" DIA. HOLES IF USING SHEET METAL SCREWS OR DRILL AND TAP #10-24 IF USING MACHINE SCREWS OR DRILL 1/4" DIA. HOLE INSIDE AND 3/8" DIA. HOLE OUTSIDE FOR SEXBOLTS.



- 6) TIGHTEN ALL DEVICE AND MORTISE LOCK MOUNTING SCREWS.
- 7) INSTALL STRIKE.
- 8) ATTACH CHASSIS COVER
  - A) REMOVE AXLES FROM BOTH ACTIVE AND INACTIVE CHASSIS.
  - B) REMOVE CROSSBAR AND CROSSBAR ARMS FROM BOTH CHASSIS.
  - C) SLIDE CROSSBAR ARMS INTO RECTANGULAR CUT-OUT IN TOP OF CHASSIS COVER

NOTE: THE 1/2" DIA. HOLE IN THE CHASSIS COVER ON BOTH COVERS SHOULD FACE EACH OTHER

- D) INSERT CROSSBAR ARMS INTO CHASSIS AND INSERT AXLES.
- E) SLIDE CHASSIS COVER OVER CHASSIS AND ATTACH WITH 4 (PER HEAD) #-32x1/4" UFPHMS.



#### LHR ACTIVE HEAD SHOWN

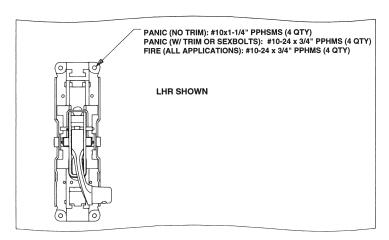
NOTE: 1/2" DIA. HOLE IN EACH CHASSIS **COVER SHOULD FACE AWAY FROM** DOOR STOPS WHEN ASSEMBLED TO CHASSIS (HOLES WILL FACE TOWARDS EACH OTHER)

PAGE 7 PAGE 2

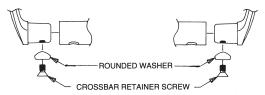


### HARDWARE INSTALLATION

- 1) INSTALL MORTISE LOCK WITH TWO #12-24x1/2" UFPHMS SCREWS.
  - (NOTE: LEAVE SCREWS LOOSE FOR EASIER DEVICE AND TRIM INSTALLATION)
- 2) IF USING OUTSIDE TRIM OR SEXBOLTS, MOUNT TRIM PER DIRECTIONS IN TRIM BOX, OR INSTALL OUTSIDE SEXBOLTS.
- 3) EITHER SURFACE MOUNT DEVICE, OR THROUGHBOLT DEVICE TO TRIM OR SEXBOLTS.

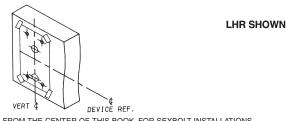


4) REMOVE CROSSBAR RETAINER SCREW AND ROUNDED WASHER FROM XX CROSSBAR ARMS. SLIDE CROSSBAR OVER BOTH ACTIVE AND INACTIVE CROSSBAR ARMS AND ATTACH WITH CROSSBAR RETAINER SCREW AND ROUNDED WASHER.

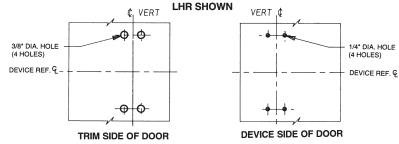


## **DOOR & HARDWARE PREPARATION**

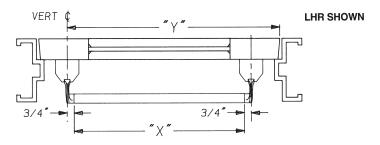
- 1) CHOOSE CORRECT DRILLING TEMPLATE FROM THE CENTER OF THIS BOOK.
- 2) TAPE DRILLING TEMPLATE ON DOOR USING VERTICAL QAND DEVICE REF. Q (REFER TO 2), CENTERPUNCH AND DRILL HOLES, TAP IF REQUIRED, FOR DEVICE MOUNTING. AFTER DRILLING HOLES, REMOVE DRILLING TEMPLATE.



3) CHOOSE CORRECT DRILLING TEMPLATE FROM THE CENTER OF THIS BOOK. FOR SEXBOLT INSTALLATIONS, DRILL 3/8" DIAMETER HOLES ON TRIM SIDE OF DOOR ONLY. (SEE DIAGRAM BELOW)

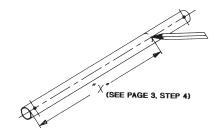


- 4) DETERMINE CROSSBAR LENGTH:
  - A) MEASURE DISTANCE BETWEEN VERTICAL  $\P$  AND EDGE OF DOOR. (DIMENSION "Y" BELOW) B) CALCULATE CROSSBAR LENGTH "X" USING FORMULA BELOW.

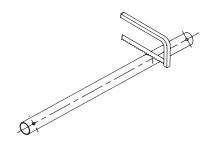


"X" = "Y" - 4-1/4"

### 5) IF CROSSBAR IS LONGER THAN "X", CUT THE CROSSBAR TO THE CORRECT LENGTH. A) MARK CROSSBAR TO LENGTH "X".

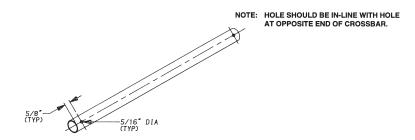


#### B) CUT CROSSBAR TO MARKED DIMENSION AND REMOVE BURRS.

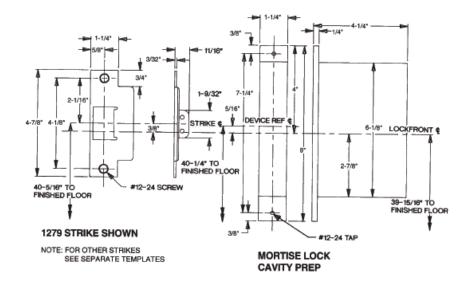


NOTE: FACTORY RECOMMENDS SAWING RATHER THAN GRIND CUT TO SIZE. GRINDING CAN DAMAGE THE FINISH OF THE DEVICE AND SAWING RESULTS IN LESS DAMAGE TO THE DEVICES'S FINISH.

#### C) DRILL A 5/16" DIA. HOLE 5/8" FROM THE JUST CUT END OF THE CROSSBAR.



#### 6) VERIFY MORTISING FOR MORTISE LOCK AND STRIKE



#### NOTE:

THIS PRODUCT IS FACTORY HANDED. IF YOU HAVE RECEIVED THE WRONG HANDING, A REPLACEMENT MUST BE ORDERED.

