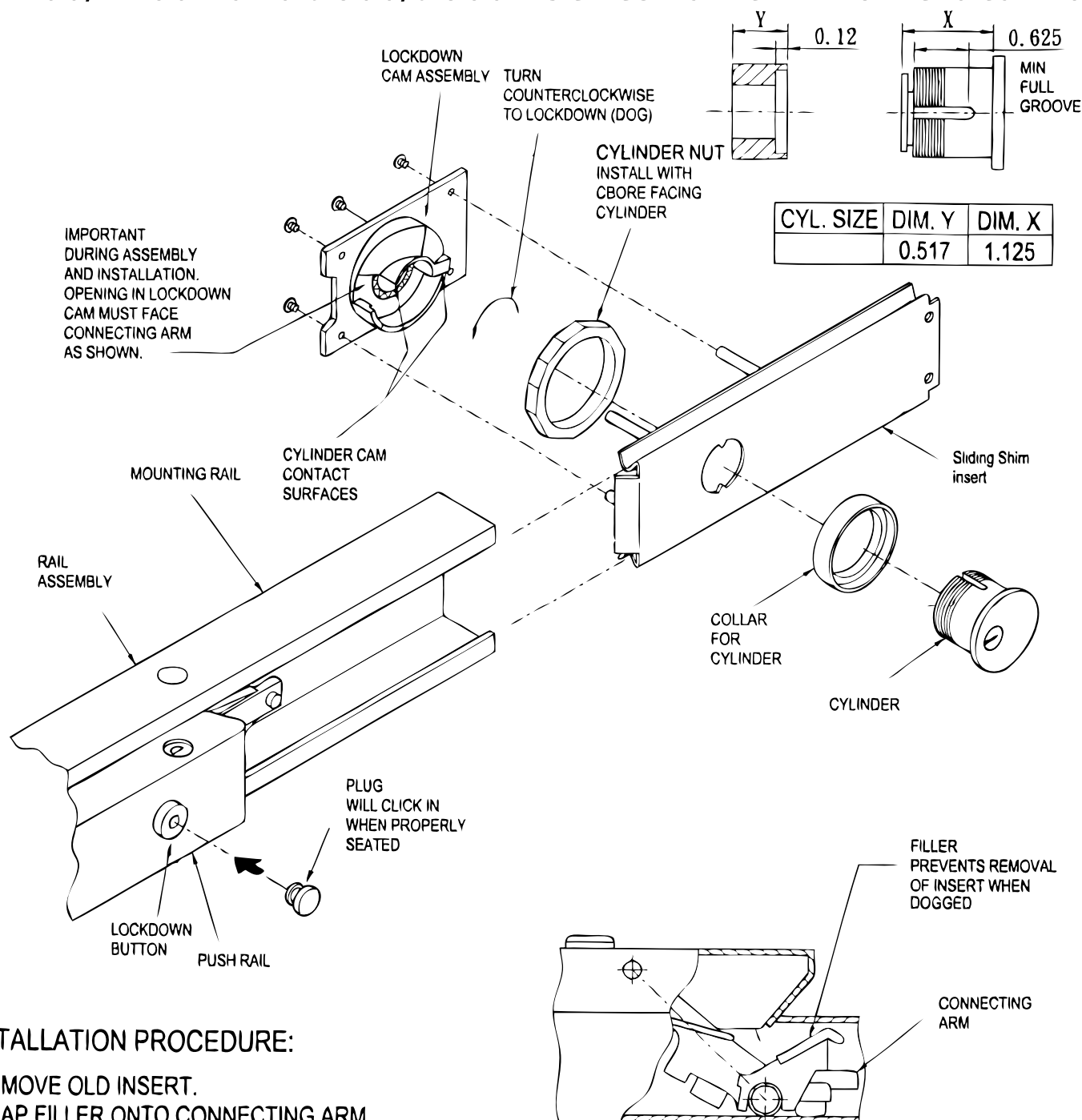


CAL-ROYAL PRODUCTS, INC.

Assembly and Installation Instructions

For 2200/2260V and 9800/9860V Series Panic Rim & Vertical Rod



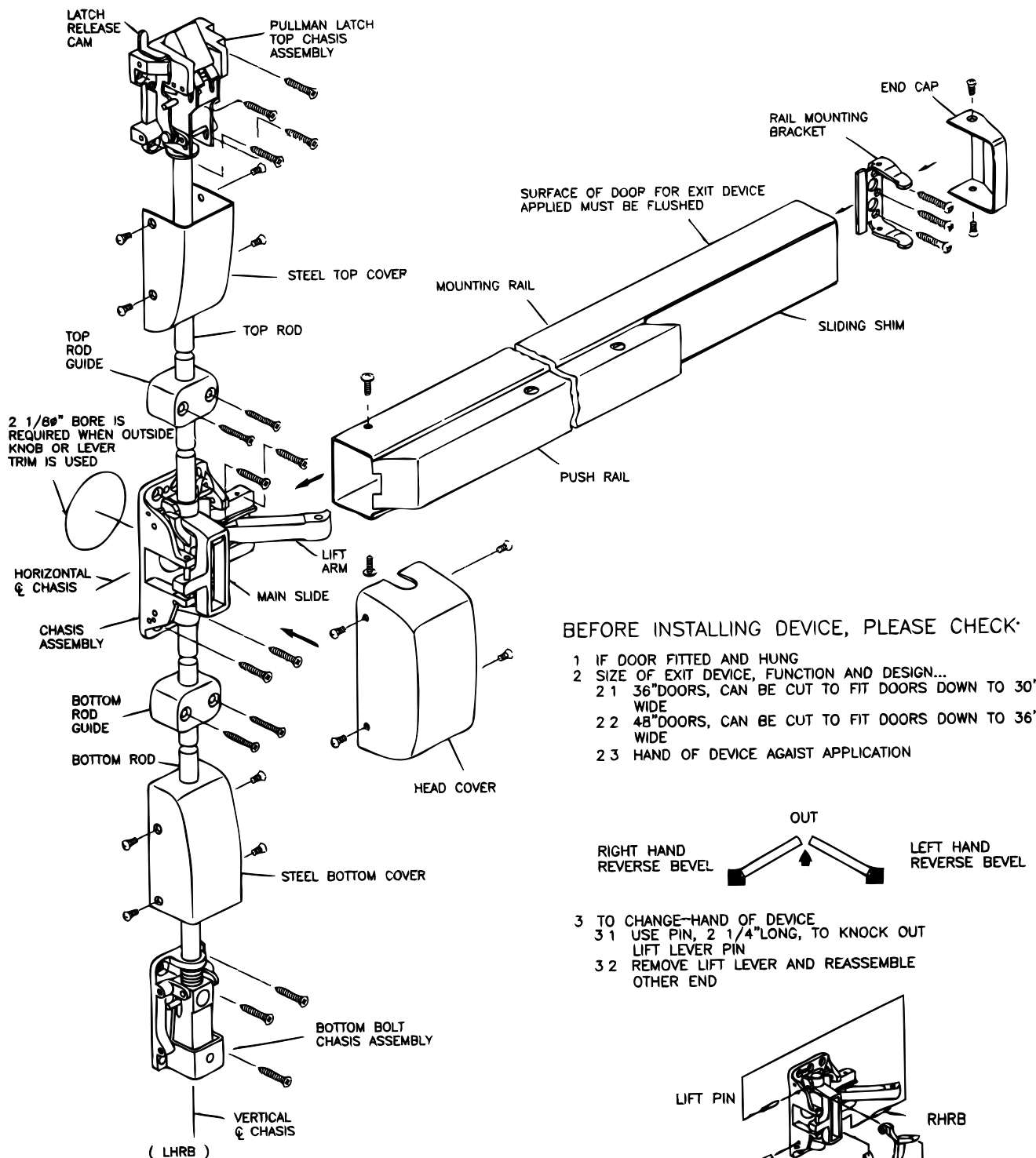
INSTALLATION PROCEDURE:

1. REMOVE OLD INSERT.
2. SNAP FILLER ONTO CONNECTING ARM.
3. ASSEMBLE CYLINDER AND COLLAR TO INSERT WITH CYLINDER NUT.
4. ASSEMBLE LOCKDOWN CAM ASSEMBLY TO INSERT WITH 4 SCREWS.
5. SLIDE INSERT INTO RAIL ASSEMBLY.
6. MAKE OPERATIONAL CHECK OF DOGGING (TURN COUNTERCLOCKWISE TO DOG).
7. PRESS PLUG INTO ALLEN WRENCH LOCKDOWN BUTTON.

NOTES: WHEN INSERT IS USED (1) SLIDE INSERT INTO RAIL, (2) DOG PUSH RAIL, (3) CUT OFF EXCESS FLUSH WITH MOUNTING RAIL.

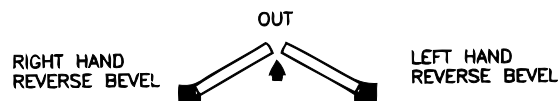


INSTALLATION INSTRUCTION FOR #2260V SERIES FIRE VERTICAL ROD EXIT DEVICE

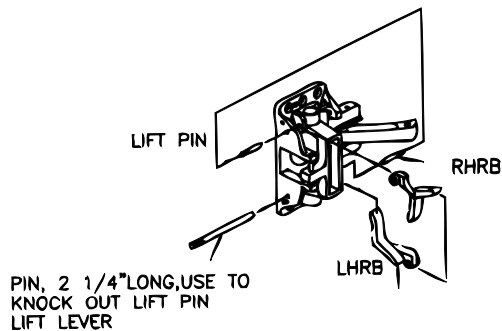


BEFORE INSTALLING DEVICE, PLEASE CHECK:

- 1 IF DOOR FITTED AND HUNG
- 2 SIZE OF EXIT DEVICE, FUNCTION AND DESIGN...
 - 2 1 36" DOORS, CAN BE CUT TO FIT DOORS DOWN TO 30" WIDE
 - 2 2 48" DOORS, CAN BE CUT TO FIT DOORS DOWN TO 36" WIDE
 - 2 3 HAND OF DEVICE AGAINST APPLICATION



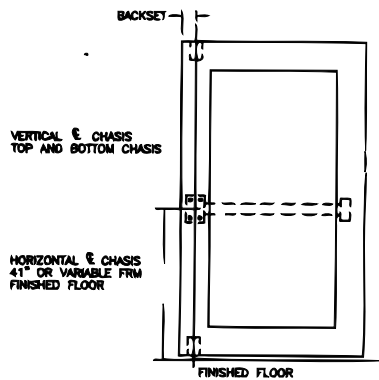
- 3 TO CHANGE-HAND OF DEVICE
 - 3 1 USE PIN, 2 1/4" LONG, TO KNOCK OUT LIFT LEVER PIN
 - 3 2 REMOVE LIFT LEVER AND REASSEMBLE OTHER END



1. MARK VERTICAL AND HORIZONTAL REFERENCE LINE ON DOOR

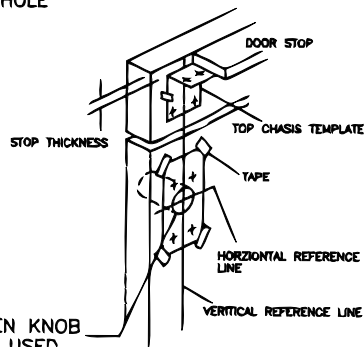
DETERMINE BACKSET TO LOCATE VERTICAL REFERENCE LINE

- 1 IF LOCK STILE IS 4 1/2" WIDE OR WIDER, BACKSET IS 2 3/4"
- 2 IF LOCK STILE IS LESS THAN 4 1/2" WIDE, BACKSET IS HALF OF THE EXPOSED WIDTH OF LOCK STILE



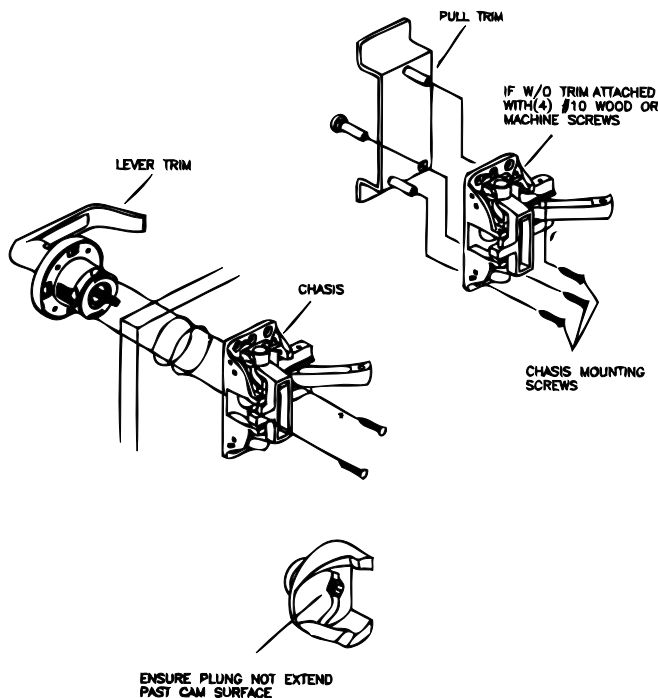
2. PREPARE DOOR

TAPE TEMPLATE ON INSIDE OF DOOR ALONG REFERENCE LINE
SPOT AND DRILL HOLE

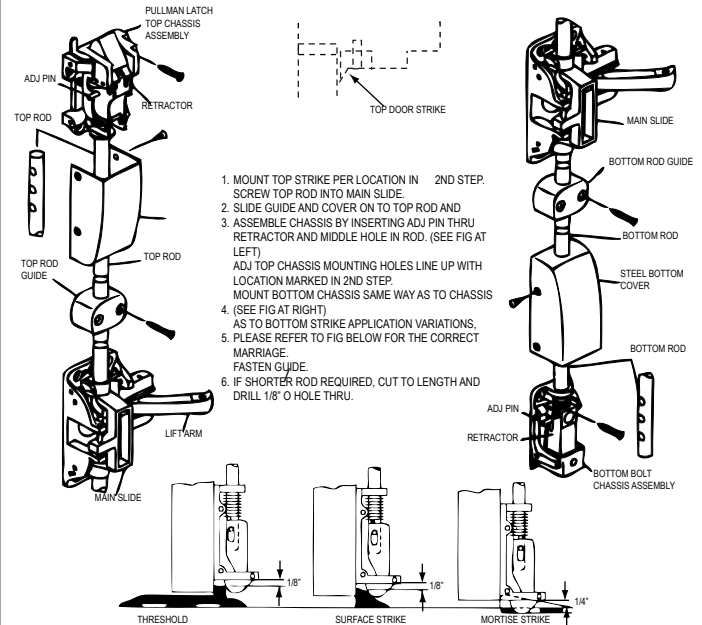


2 1/8" Ø BORE WHEN KNOB AND LEVER TRIM IS USED

3. APPLY TRIM+CHASSIS

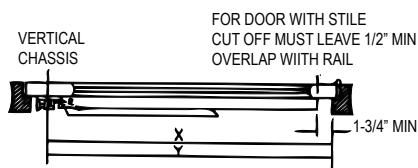


ATTACH TOP AND BOTTOM CHASSIS

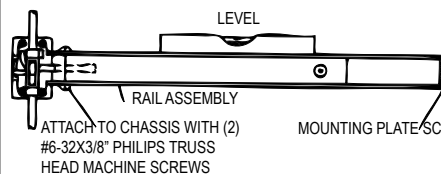


5. APPLY RAIL ASSEMBLY

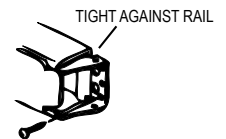
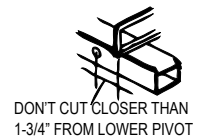
- 1 CHECK THE SIZE OF DEVICE, IF CUTTING TO LENGTH IS REQUIRED
- 2 DETERMINE CUT OFF LENGTH "X" BY SUBTRACTING 1 3/4" FROM "Y" MARK CUT OFF POINT ON MOUNTING RAIL



- 3 DREPRESS ARM INTO RAIL OPENING AND SLIDE RAIL ONTO CHASSIS LEVEL RAIL AND FASSTEN CHASSIS AND MOUNTING PLATE



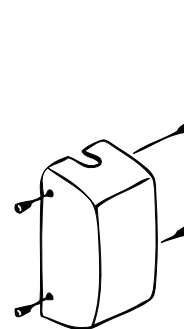
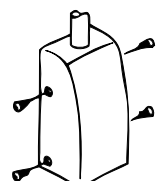
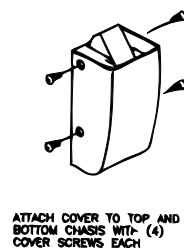
CUT OFF AND DEBURR



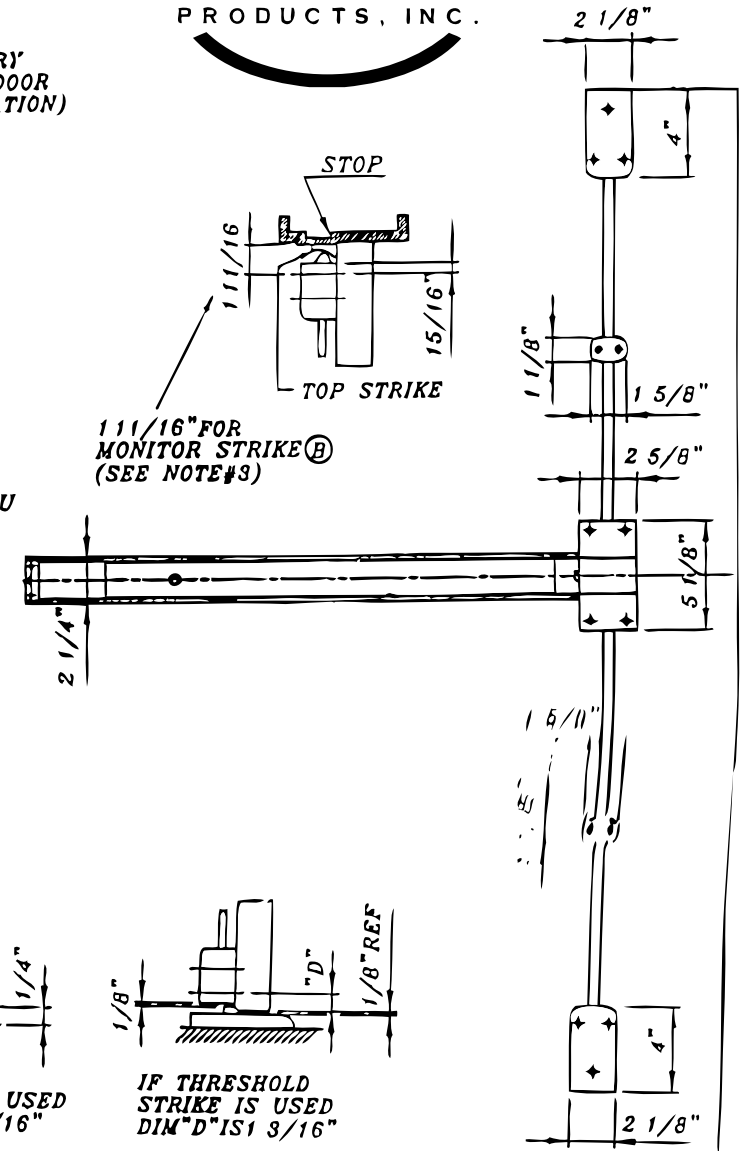
ATTACH MOUNTING PLATE TO DOOR WITH (3) ROUND HEAD SCREWS

6. APPLY COVER

CHECK FINAL OPERATION OF DEVICE
AND ADJUST THEN FASTEN COVERS



ATTACH COVER TO CHASSIS WITH (4) #8 TRUSS HEAD MACHINE SCREWS



2260V/2290V/2280V

INSTALLATION INSTRUCTION FOR #2200EO SERIES PANIC RIM EXIT DEVICE

BEFORE INSTALLING DEVICE, PLEASE CHECK :

IF DOOR FITTED AND HUNG.

SIZE OF EXIT DEVICE, FUNCTION AND DESIGN...

2.1. 36" DOORS, CAN BE CUT TO FIT DOORS DOWN TO 30" WIDE.

2.2. 48" DOORS, CAN BE CUT TO FIT DOORS DOWN TO 36" WIDE.

2.3. HAND OF DEVICE AGAINST APPLICATION.

RIGHT HAND
REVERSE BEVEL

LEFT HAND
REVERSE BEVEL

MOUNTING
RAIL

SURFACE OF DOOR FOR
EXIT DEVICE APPLIED MUST
BE FLUSHED.

END CAP

RAIL MOUNTING
BRACKET

SLIDING
SHIM

DOGGING
HEX KEY

CAL ROYAL
PRODUCTS, INC.

CHASSIS
ASSEMBLY

STRIKE

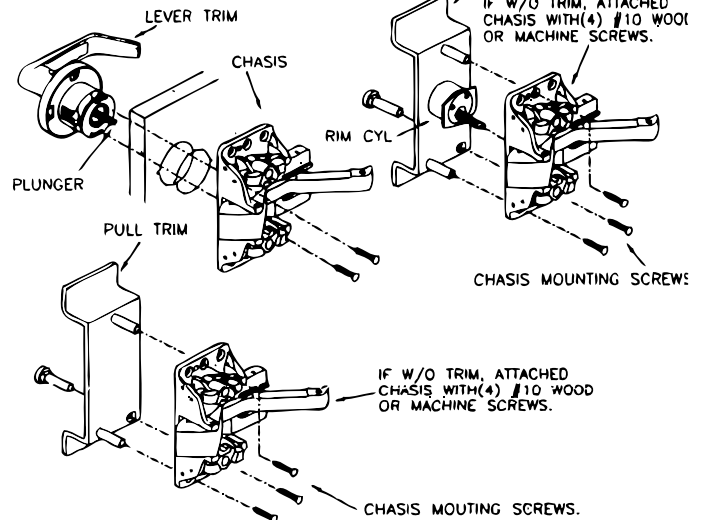
HORIZONTAL
CHASSIS

VERTICAL
CHASSIS

(LHRB)

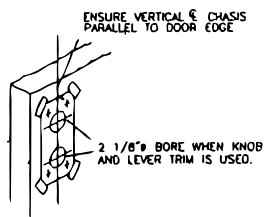
HEAD COVER

2. APPLY TRIM + CHASSIS

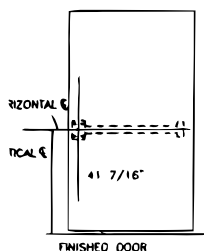


1. PREPARE DOOR

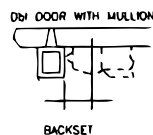
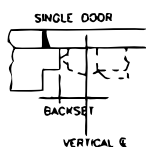
- FOR 2 1/8" Ø BORE PREP POSITION TEMPLATE OVER EXITING HOLE AND MARK FOR TWO CHASSIS MOUNTING SCREW HOLES.



- FOR DOOR W/O BORE PREP, MARK VERTICAL CHASSIS AND HORIZONTAL CHASSIS USING DIMENSIONS BELOW.



IDENTIFY TYPE OF INSTALLATION
TO DETERMINE LOCATION OF
VERTICAL CHASSIS

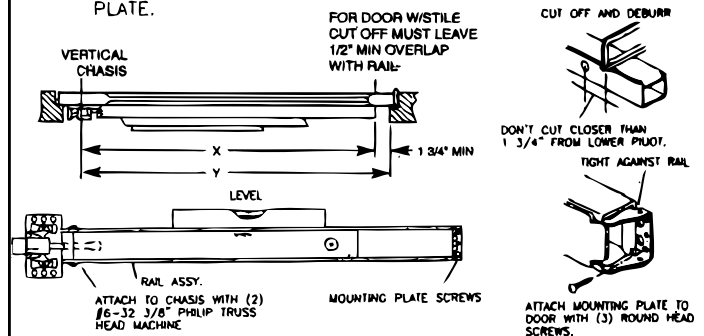


- STRIKE FOR BACKSET 2 1/4"
- STRIKE FOR BACKSET 1 3/4"
- STRIKE FOR BACKSET 2 1/4"

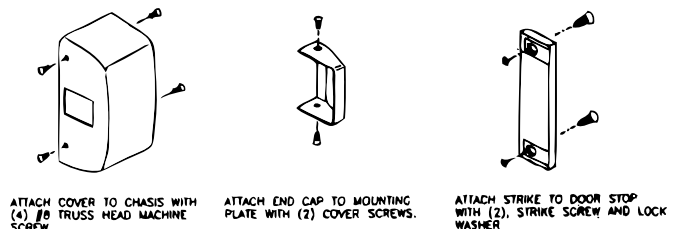
STRIKE FOR BACKSET 1 1/2"

3. APPLY RAIL ASSEMBLY

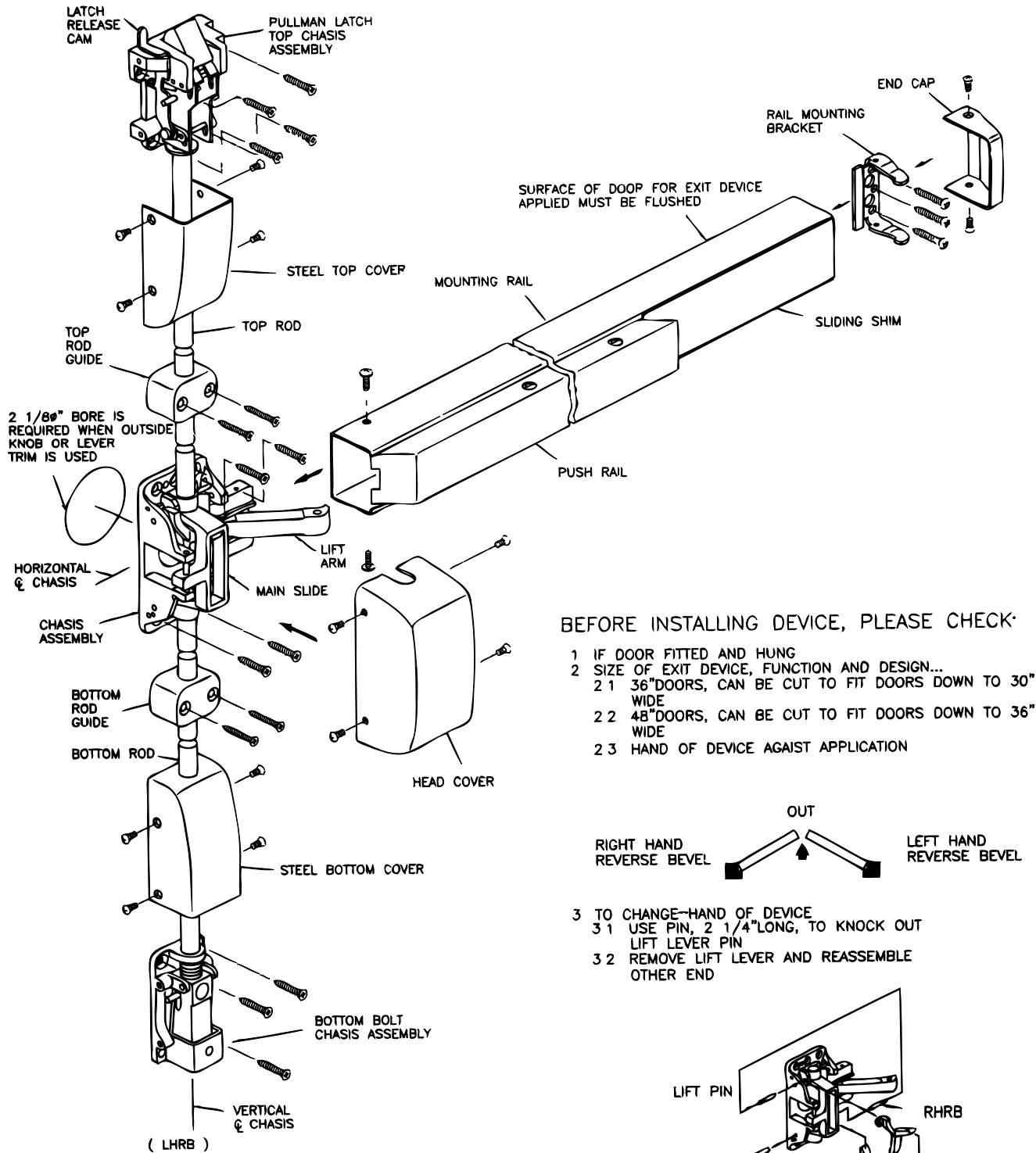
- CHECK THE SIZE OF DEVICE, IF CUTTING TO LENGTH IS REQUIRED.
- DETERMINE CUT OFF LENGTH "X" BY SUBTRACTING 1 3/4" FROM "Y". MARK CUT OFF POINT ON MOUNTING RAIL.
- DEPRESS ARM INTO RAIL OPENING, AND SLIDE RAIL ONTO CHASSIS. LEVEL RAIL AND FASTEN CHASSIS AND MOUNTING PLATE.



4. APPLY COVER AND STRIKES

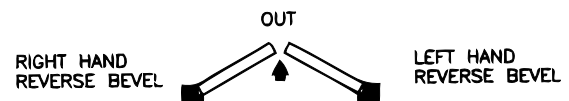


INSTALLATION INSTRUCTION FOR #F2260V SERIES FIRE VERTICAL ROD EXIT DEVICE

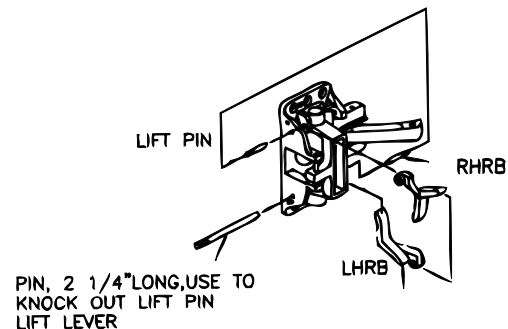


BEFORE INSTALLING DEVICE, PLEASE CHECK:

- 1 IF DOOR FITTED AND HUNG
- 2 SIZE OF EXIT DEVICE, FUNCTION AND DESIGN...
 - 2 1 36" DOORS, CAN BE CUT TO FIT DOORS DOWN TO 30" WIDE
 - 2 2 48" DOORS, CAN BE CUT TO FIT DOORS DOWN TO 36" WIDE
 - 2 3 HAND OF DEVICE AGAINST APPLICATION



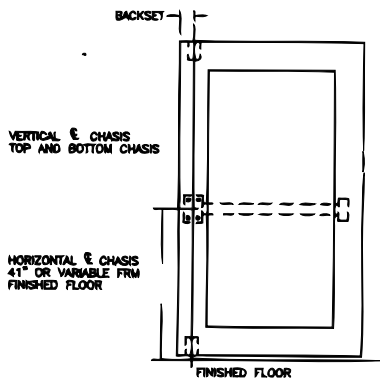
- 3 TO CHANGE-HAND OF DEVICE
 - 3 1 USE PIN, 2 1/4" LONG, TO KNOCK OUT LIFT LEVER PIN
 - 3 2 REMOVE LIFT LEVER AND REASSEMBLE OTHER END



1. MARK VERTICAL AND HORIZONTAL REFERENCE LINE ON DOOR

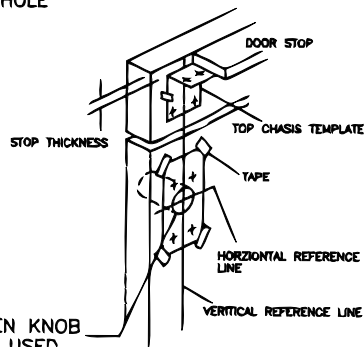
DETERMINE BACKSET TO LOCATE VERTICAL REFERENCE LINE

1. IF LOCK STILE IS 4-1/2" WIDE OR WIDER, BACKSET IS 2-3/4"
2. IF LOCK STILE IS LESS THAN 4-1/2" WIDE, BACKSET IS HALF OF THE EXPOSED WIDTH OF LOCK STILE.



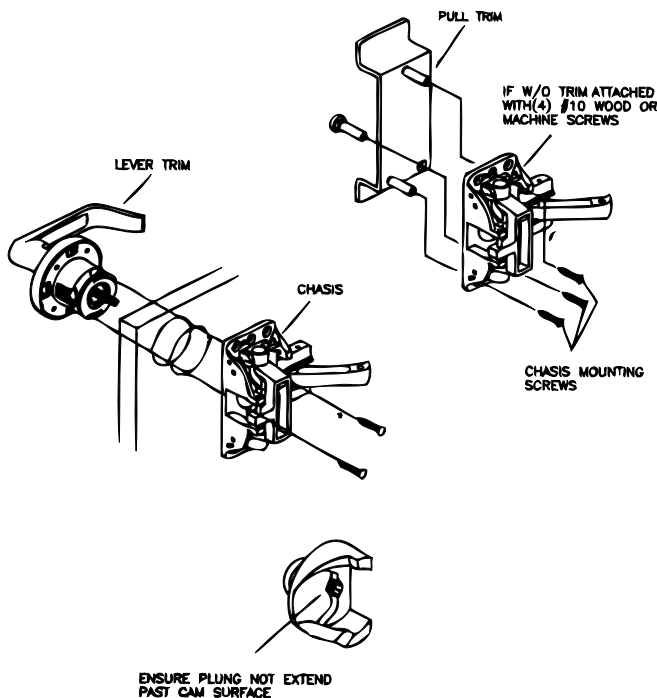
2. PREPARE DOOR

TAPE TEMPLATE ON INSIDE OF DOOR ALONG REFERENCE LINE
SPOT AND DRILL HOLE

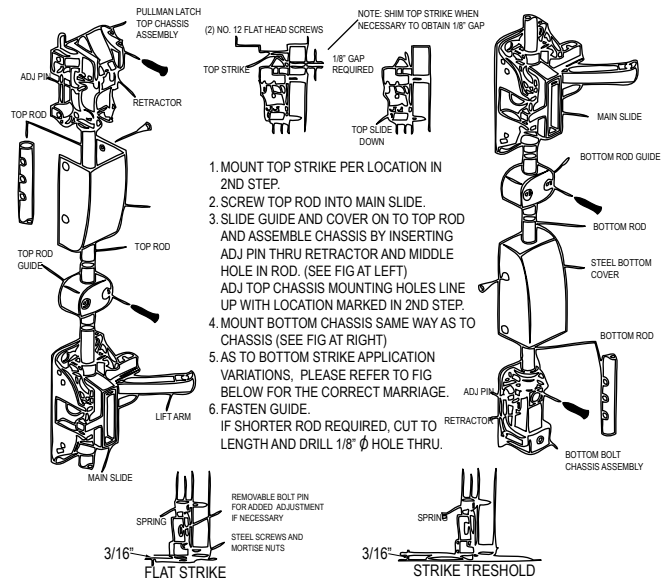


2 1/8" Ø BORE WHEN KNOB AND LEVER TRIM IS USED

3. APPLY TRIM+CHASSIS

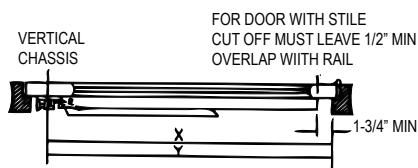


4. ATTACH TOP AND BOTTOM CHASSIS

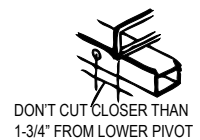


5. APPLY RAIL ASSEMBLY

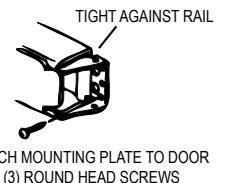
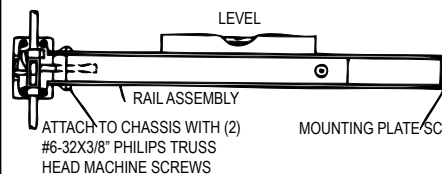
- 1 CHECK THE SIZE OF DEVICE, IF CUTTING TO LENGTH IS REQUIRED
- 2 DETERMINE CUT OFF LENGTH "X" BY SUBTRACTING 1 3/4" FROM "Y" MARK CUT OFF POINT ON MOUNTING RAIL



CUT OFF AND DEBURR

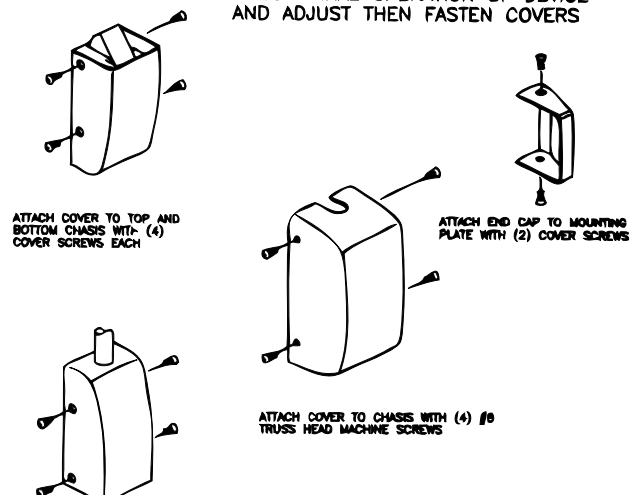


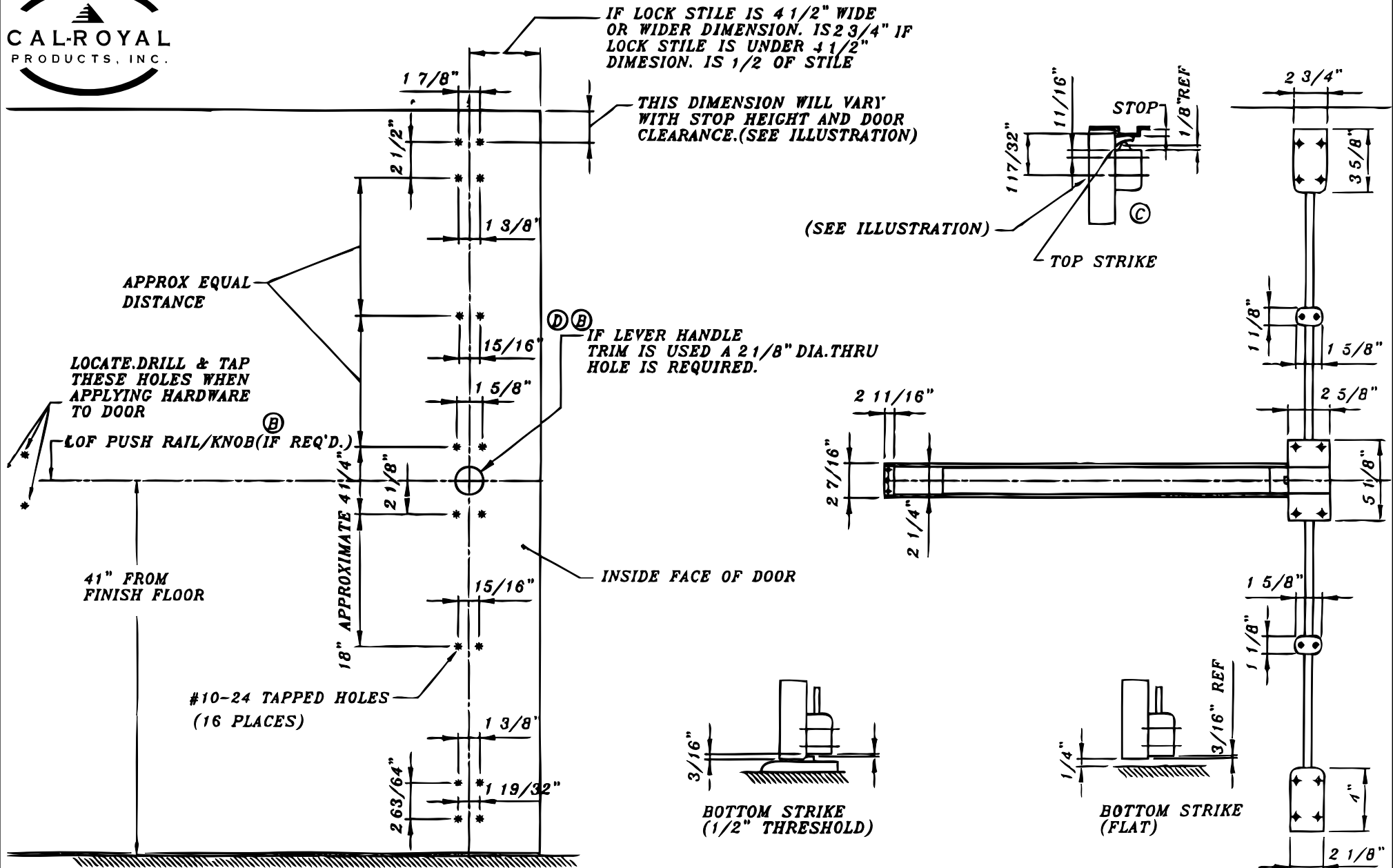
- 3 DREPRESS ARM INTO RAIL OPENING AND SLIDE RAIL ONTO CHASSIS LEVEL RAIL AND FASSTEN CHASSIS AND MOUNTING PLATE



6. APPLY COVER

CHECK FINAL OPERATION OF DEVICE
AND ADJUST THEN FASTEN COVERS





**SURFACE OF DOOR WHERE EXIT DEVICE IS TO BE APPLIED MUST BE FLUSH
SEE MASTER SHEET FOR AREAS REQUIRING REINFORCEMENTS
SEE STRIKE TEMPLATE FOR TOP AND BOTTOM STRIKES.
WE RECOMMEND THAT ALL TAPPED HOLES BE DRILLED & TAPPED IN FIELD
TOLERANCE ON ALL DIMENSIONS $\pm 1/64"$**

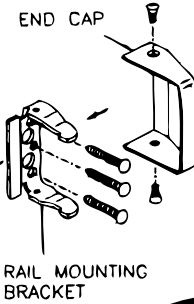
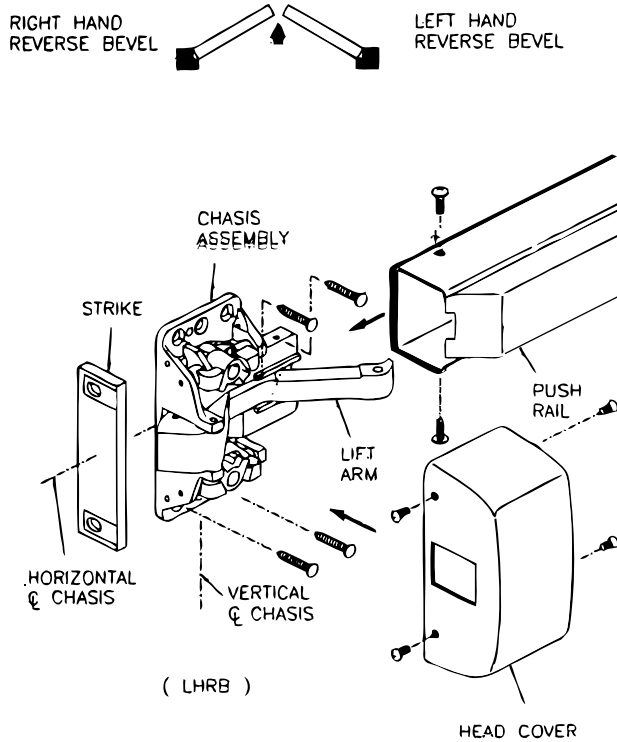
F2260

INSTALLATION INSTRUCTION FOR #F22EO SERIES FIRE RIM EXIT DEVICE

BEFORE INSTALLING DEVICE, PLEASE CHECK:

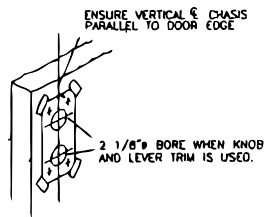
- IF DOOR FITTED AND HUNG.
SIZE OF EXIT DEVICE, FUNCTION AND DESIGN...
2.1. 36" DOORS, CAN BE CUT TO FIT DOORS DOWN TO 30" WIDE.
2.2. 48" DOORS, CAN BE CUT TO FIT DOORS DOWN TO 36" WIDE.
2.3. HAND OF DEVICE AGAINST APPLICATION.

RIGHT HAND REVERSE BEVEL
LEFT HAND REVERSE BEVEL

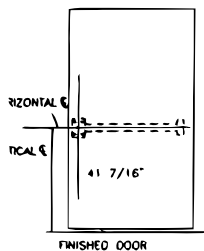


1. PREPARE DOOR

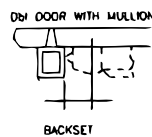
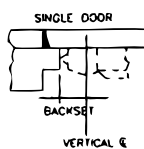
1. FOR 2 1/8" Ø BORE PREP POSITION TEMPLATE OVER EXITING HOLE AND MARK FOR TWO CHASSIS MOUNTING SCREW HOLES.



2. FOR DOOR W/O BORE PREP, MARK VERTICAL & CHASSIS AND HORIZONTAL & CHASSIS USING DIMENSIONS BELOW.



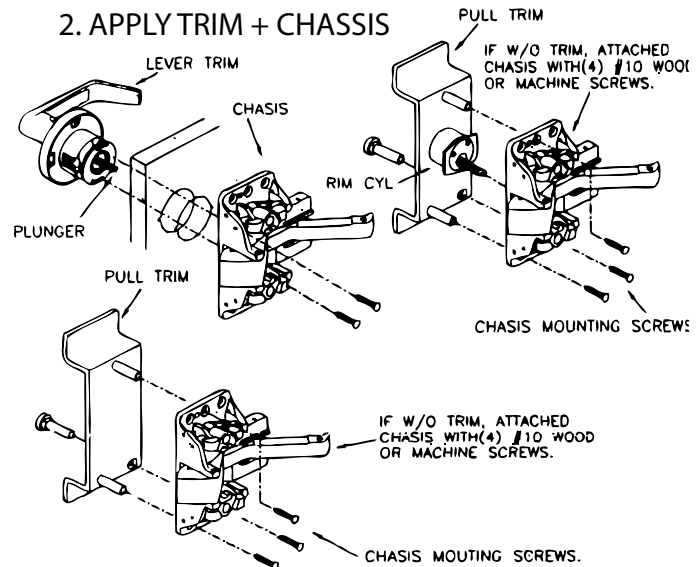
IDENTIFY TYPE OF INSTALLATION TO DETERMINE LOCATION OF VERTICAL &



- STRIKE FOR BACKSET 2 1/4"
STRIKE FOR BACKSET 1 3/4"
STRIKE FOR BACKSET 2 1/4"

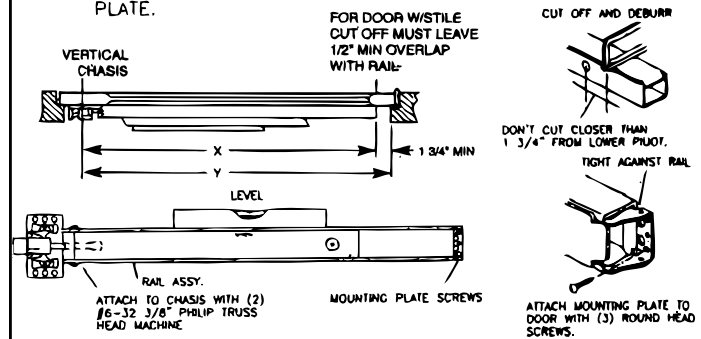


2. APPLY TRIM + CHASSIS

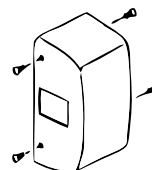


3. APPLY RAIL ASSEMBLY

1. CHECK THE SIZE OF DEVICE, IF CUTTING TO LENGTH IS REQUIRED.
2. DETERMINE CUT OFF LENGTH "X" BY SUBTRACTING 1 3/4" FROM "Y". MARK CUT OFF POINT ON MOUNTING RAIL.
3. DREPRESS ARM INTO RAIL OPENING, AND SLIDE RAIL ONTO CHASSIS. LEVEL RAIL AND FASTEN CHASSIS AND MOUNTING PLATE.



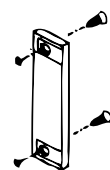
4. APPLY COVER AND STRIKES



ATTACH COVER TO CHASSIS WITH (4) #8 TRUSS HEAD MACHINE SCREW.

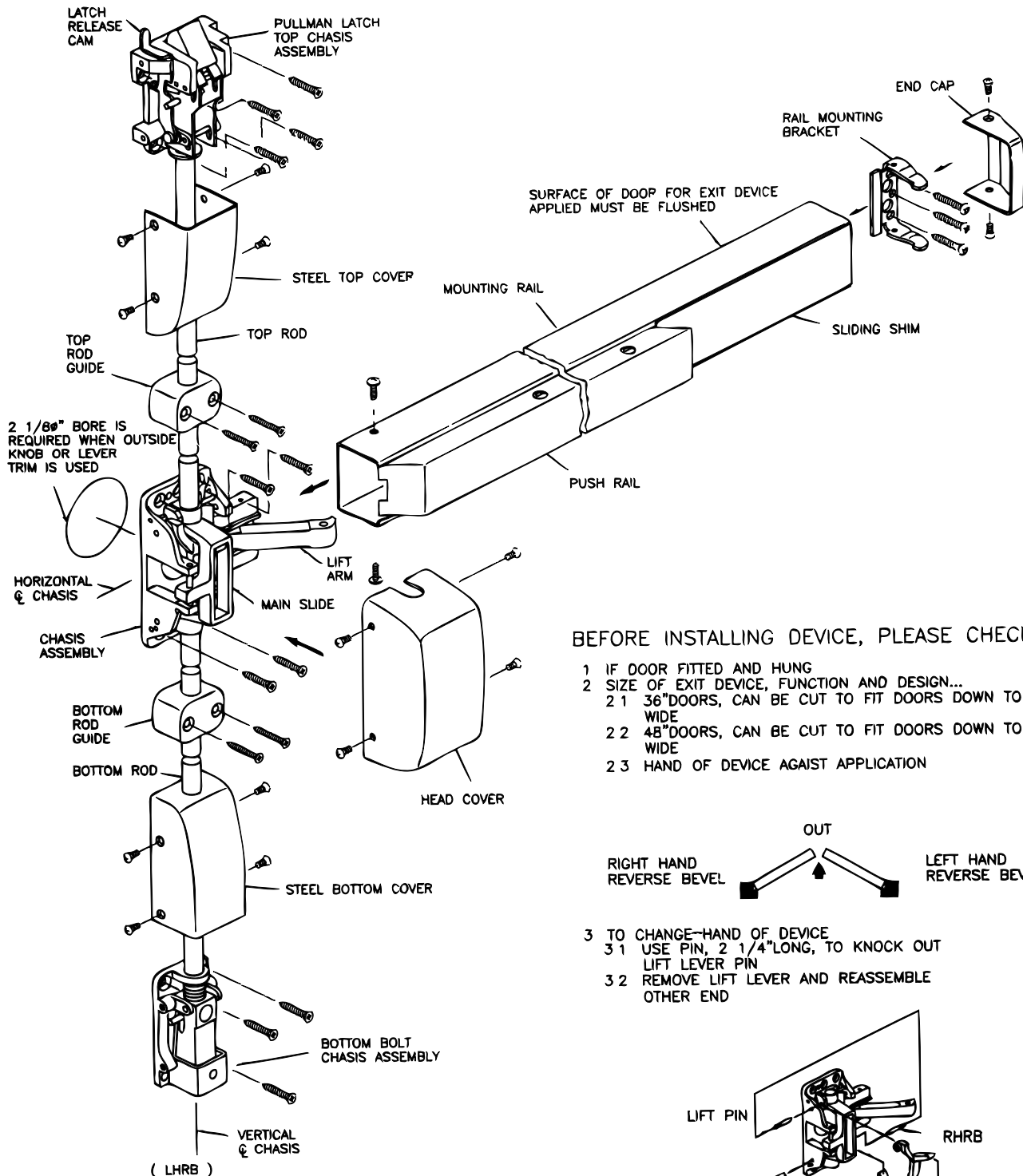


ATTACH END CAP TO MOUNTING PLATE WITH (2) COVER SCREWS.



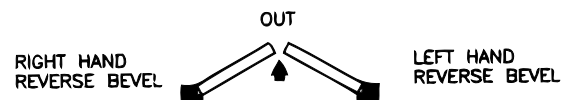
ATTACH STRIKE TO DOOR STOP WITH (2) STRIKE SCREW AND LOCK WASHER.

INSTALLATION INSTRUCTION FOR LBRF2260V & LBRF2280V SERIES FIRE VERTICAL ROD EXIT DEVICE, Less Bottom Rod with Auxillary Fire Latch Assembly

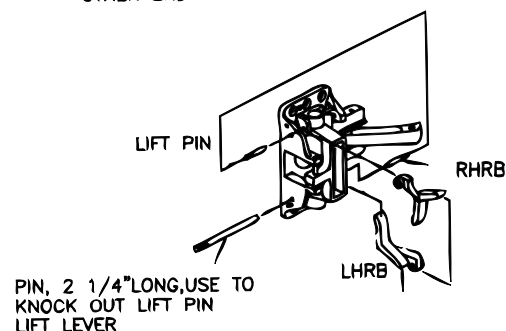


BEFORE INSTALLING DEVICE, PLEASE CHECK:

- 1 IF DOOR FITTED AND HUNG
- 2 SIZE OF EXIT DEVICE, FUNCTION AND DESIGN...
 - 2.1 36" DOORS, CAN BE CUT TO FIT DOORS DOWN TO 30" WIDE
 - 2.2 48" DOORS, CAN BE CUT TO FIT DOORS DOWN TO 36" WIDE
- 2.3 HAND OF DEVICE AGAINST APPLICATION



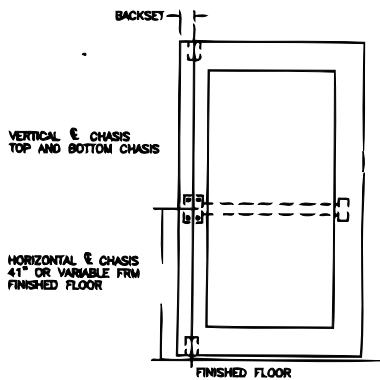
- 3 TO CHANGE-HAND OF DEVICE
 - 3.1 USE PIN, 2 1/4" LONG, TO KNOCK OUT LIFT LEVER PIN
 - 3.2 REMOVE LIFT LEVER AND REASSEMBLE OTHER END



1. MARK VERTICAL AND HORIZONTAL REFERENCE LINE ON DOOR

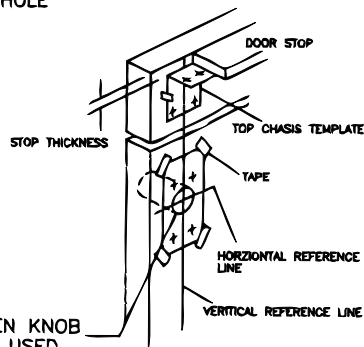
DETERMINE BACKSET TO LOCATE VERTICAL REFERENCE LINE

1. IF LOCK STILE IS 4-1/2" WIDE OR WIDER, BACKSET IS 2-3/4"
2. IF LOCK STILE IS LESS THAN 4-1/2" WIDE, BACKSET IS HALF OF THE EXPOSED WIDTH OF LOCK STILE.



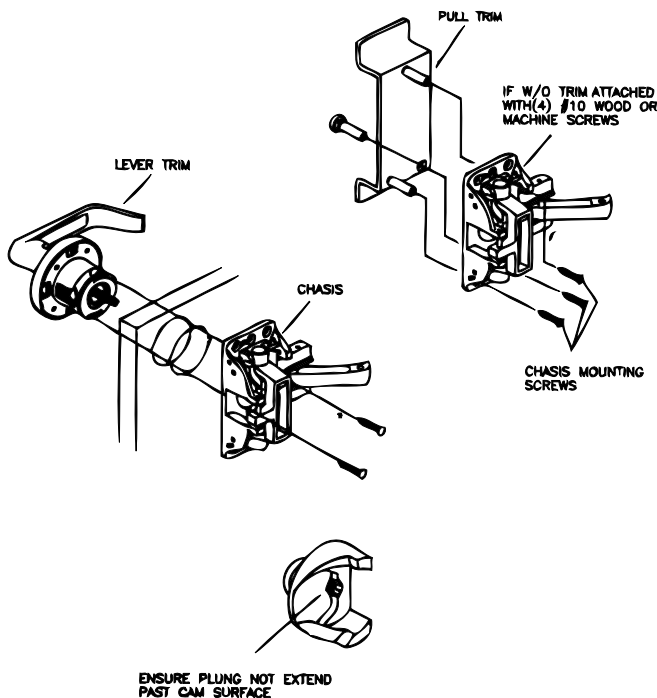
2. PREPARE DOOR

TAPE TEMPLATE ON INSIDE OF DOOR ALONG REFERENCE LINE
SPOT AND DRILL HOLE

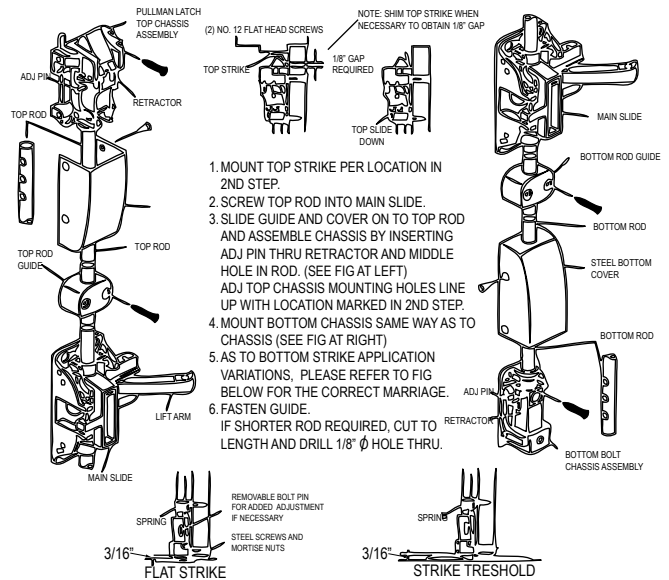


2 1/8" Ø BORE WHEN KNOB AND LEVER TRIM IS USED

3. APPLY TRIM+CHASSIS

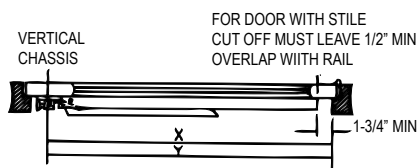


4. ATTACH TOP AND BOTTOM CHASSIS

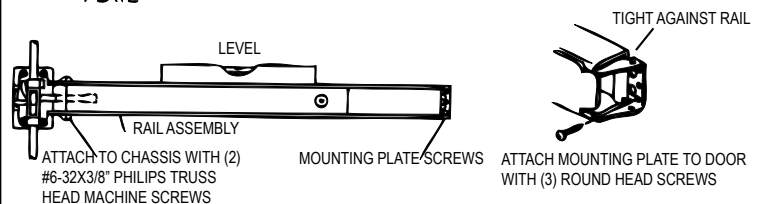


5. APPLY RAIL ASSEMBLY

- 1 CHECK THE SIZE OF DEVICE, IF CUTTING TO LENGTH IS REQUIRED
- 2 DETERMINE CUT OFF LENGTH "X" BY SUBTRACTING 1 3/4" FROM "Y" MARK CUT OFF POINT ON MOUNTING RAIL



- 3 DREPRESS ARM INTO RAIL OPENING AND SLIDE RAIL ONTO CHASSIS LEVEL RAIL AND FASTEN CHASSIS AND MOUNTING PLATE



6. APPLY COVER

CHECK FINAL OPERATION OF DEVICE
AND ADJUST THEN FASTEN COVERS

