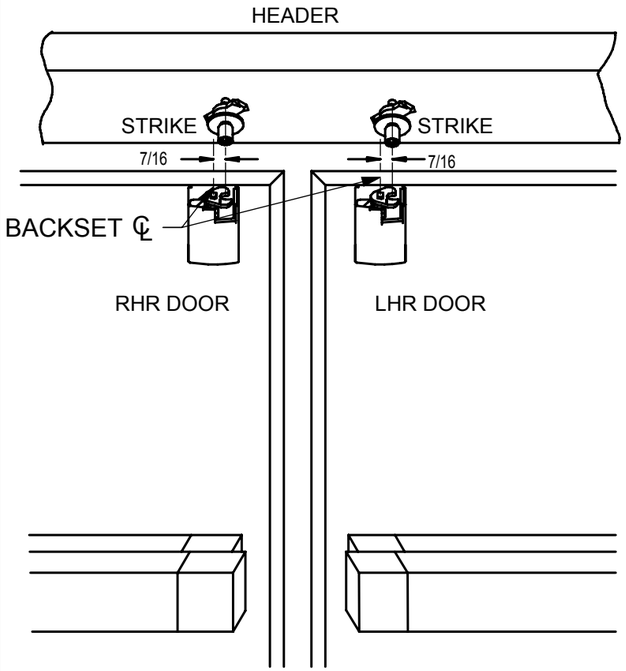
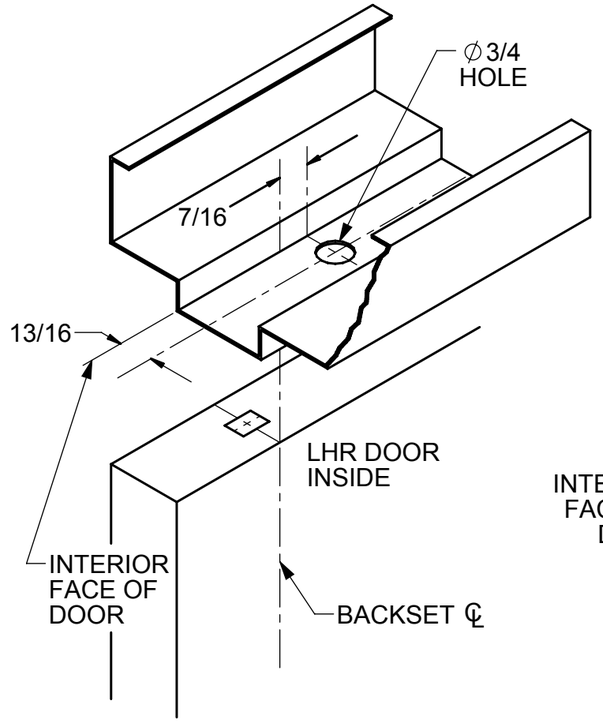
FRAME PREPARATION

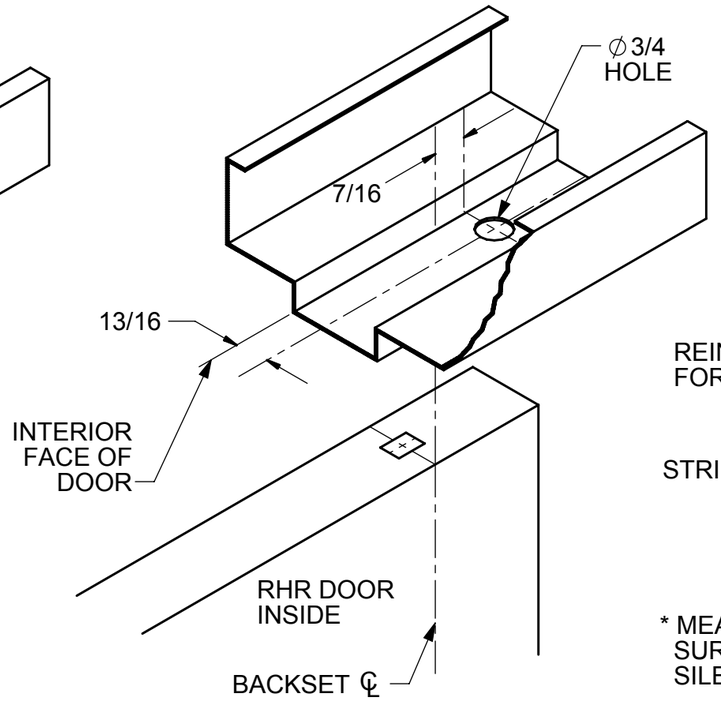


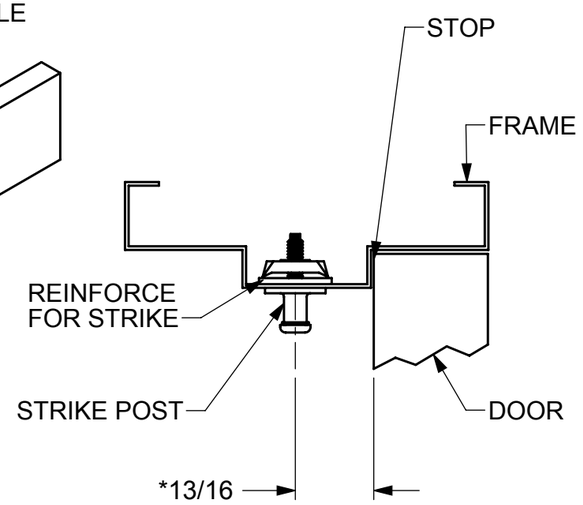
NOTICE

THIS DEVICE IS UNHANDED. IT CAN BE INSTALLED IN EITHER LEFT HAND REVERSE OR RIGHT HAND REVERSE DOORS WITHOUT ALTERATION. THE DOORS' LEAD STILE AND HEADER PREPARATION ARE IDENTICAL ***NOT*** MIRROR IMAGE. NOTE IN THE IMAGE ABOVE THAT THE YOKE TYPE BOLT ***ALWAYS*** FACES RIGHT (AS VIEWED FROM INSIDE) AND THE STRIKE POST IS ALWAYS TO THE RIGHT OF THE BACKSET CENTERLINE.

PRODUCT MUST BE INSTALLED ACCORDING TO ALL APPLICABLE BUILDING AND LIFE SAFETY CODES

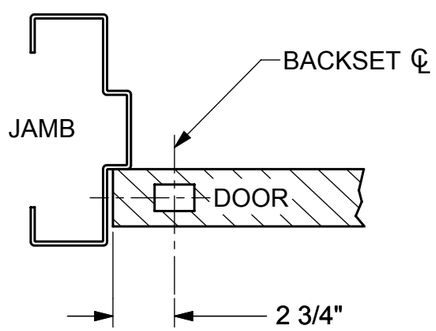




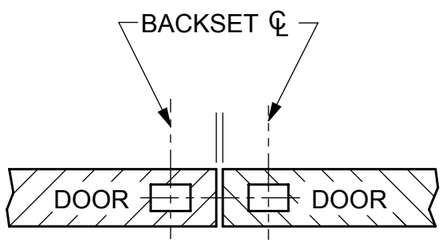


* MEASURED FROM THE INTERIOR DOOR SURFACE. BE SURE TO ADJUST FOR SILENCERS IF USED.

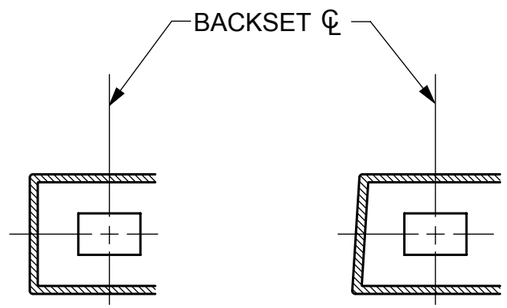
HOW TO FIND BACKSET



SINGLE DOOR

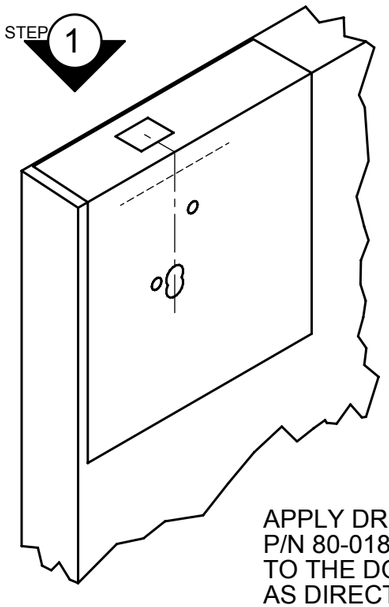


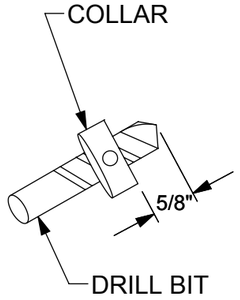
PAIR DOOR



BACKSET CENTERLINE IS TAKEN FROM THE CENTERLINE OF THE SQUARE HOLE ON TOP OF THE DOOR

STEP 1

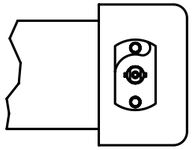




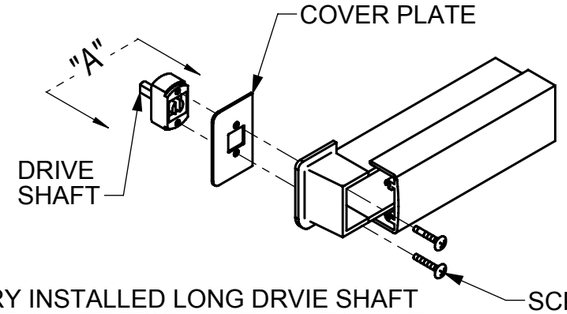
APPLY DRILLING TEMPLATE P/N 80-0180-392 FOR 3900/8900 TO THE DOOR. DRILL HOLES AS DIRECTED. DRILL BIT WITH COLLAR SHOWN FOR REF.

STEP 3a

WITH ENTRY TRIM



VIEW "A"



REPLACE FACTORY INSTALLED LONG DRVIE SHAFT WITH SHORT DRIVE SHAFT FROM INSTALLATION KIT. ATTACH THE COVER PLATE AND THE CENTER BLOCK TO THE EXIT DEVICE USING (2) #10-32 X 1/2 PAN HEAD SCREWS, ITEM #6, PUSH DOWN SCISSOR DEVICE FOR SCREW ACCESS.

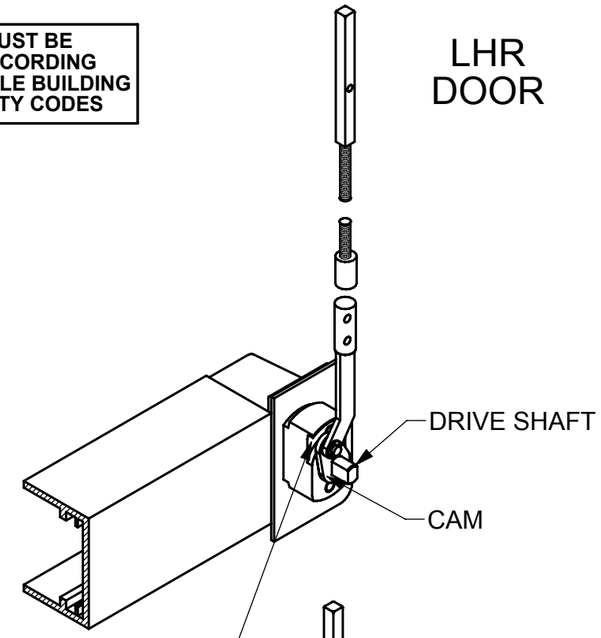
PRODUCT MUST BE INSTALLED ACCORDING TO ALL APPLICABLE BUILDING AND LIFE SAFETY CODES

STEP 3b

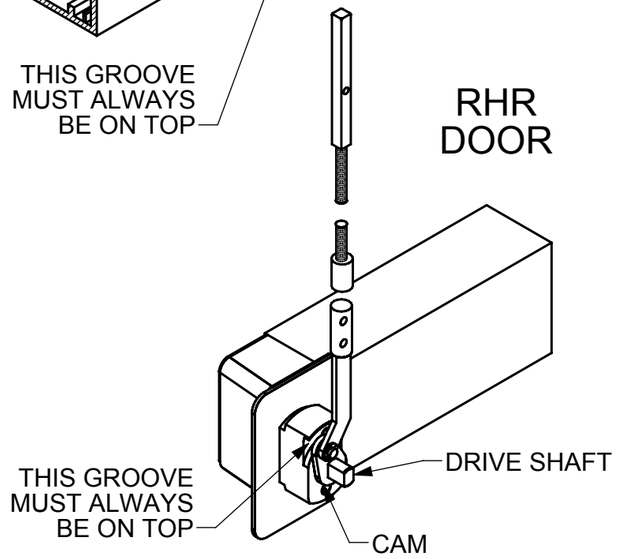
NO ENTRY TRIM

PICTORIAL INSTALLATION GUIDE OF CAM OVER SHAFT FOR LHR AND RHR DOORS.

LHR DOOR



RHR DOOR

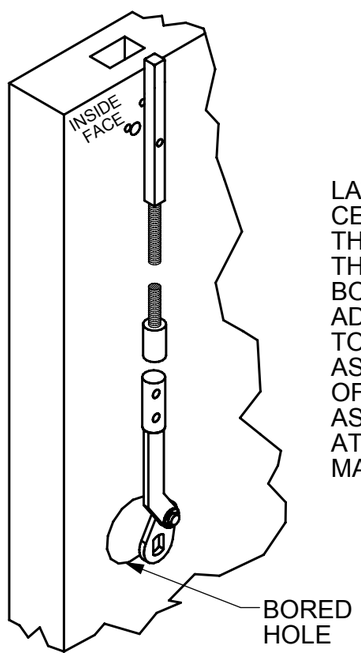


DOOR PREPARATION

THIS PRODUCT IS MADE FOR 1 3/4" DOOR WIDTH. FOR ANY OTHER DOOR THICKNESS, YOU MUST CONSULT FACTORY

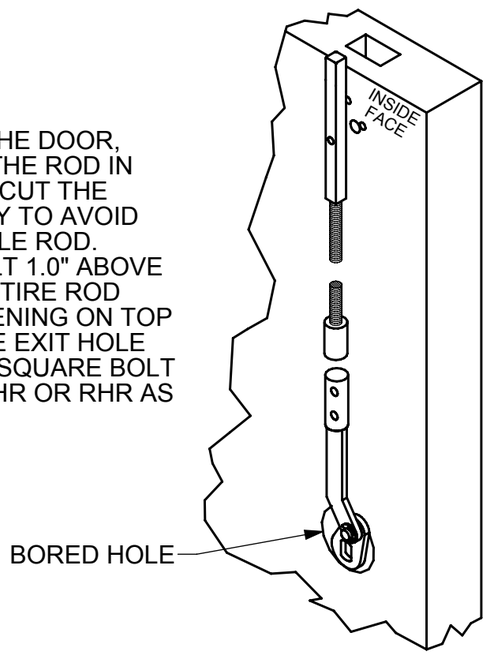
STEP 2

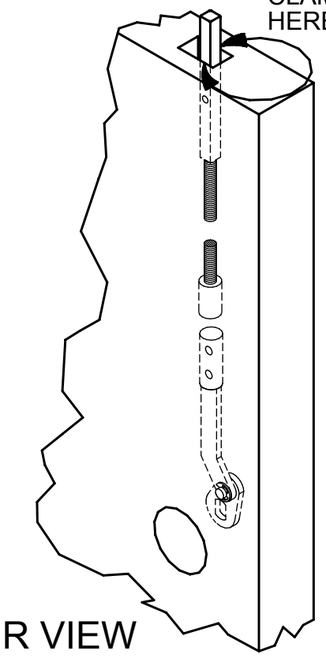
LAY THE ROD ASSEMBLY ON THE DOOR, CENTERING THE BOTTOM OF THE ROD IN THE BORED HOLE AS SHOWN. CUT THE THREADED ROD IF NECESSARY TO AVOID BOTTOMING OUT IN THE FEMALE ROD. ADJUST THE TOP SQUARE BOLT 1.0" ABOVE TOP OF DOOR. INSERT THE ENTIRE ROD ASSEMBLY THROUGH THE OPENING ON TOP OF DOOR. CENTER CAM INSIDE EXIT HOLE AS PER DIAGRAM AND CLAMP SQUARE BOLT AT TOP OF DOOR. OBSERVE LHR OR RHR AS MAY BE THE CASE.



LHR VIEW

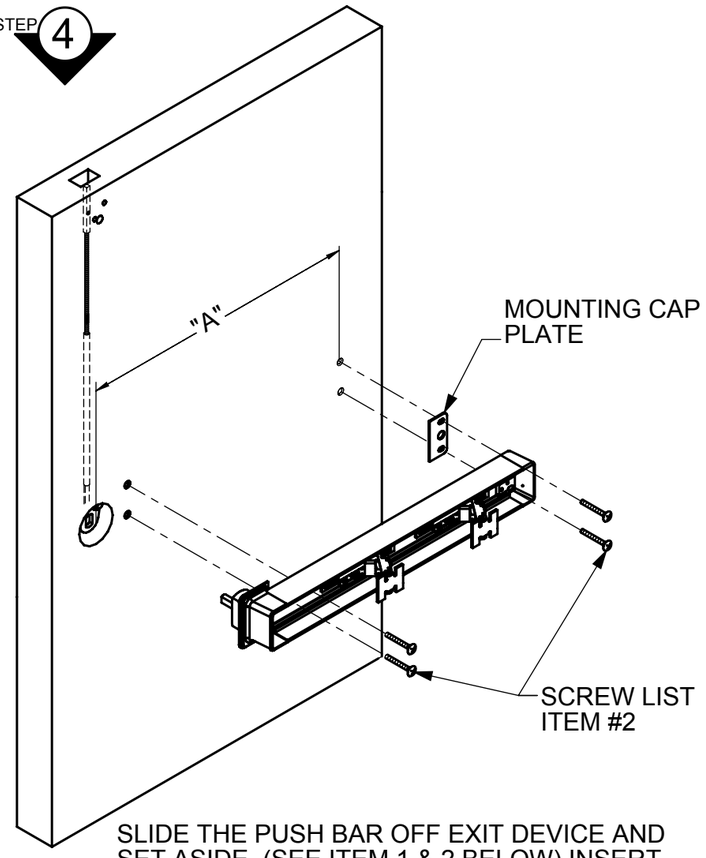
FOR 6' 8" DOORS REMOVE THREADED ROD AND CUT 4"





RHR VIEW

STEP 4



SLIDE THE PUSH BAR OFF EXIT DEVICE AND SET ASIDE. (SEE ITEM 1 & 2 BELOW) INSERT DRIVE SHAFT INTO THE CAM HOLE OF ROD ASSEMBLY AND PUSH THE EXIT BAR AGAINST THE DOOR, KEEPING IT LEVEL. MARK AND DRILL PILOT HOLES. PLACE MOUNTING CAP PLATE UNDER THE DEVICE AND MOUNT THE EXIT DEVICE USING (4) PAN HEAD SHEET METAL SCREWS (ITEM #2)

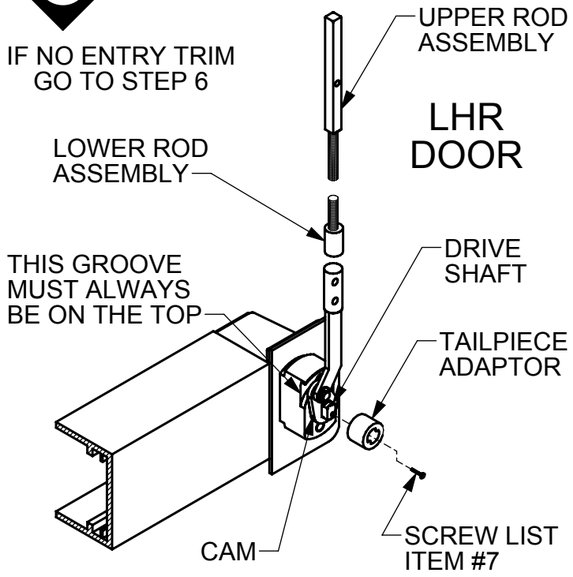
NOTE: IF DOOR IS NOT BLOCK PREPARED FOR THE PANIC DEVICE USE BINDER POST.

SEPARATING PUSH BAR AND MOUNTING BAR PROCEDURE

1. SLIDE PUSH BAR TOWARD HINGE SIDE OF DOOR UNTIL THE PUSH BAR CLEARS THE PIVOT PLATE.
2. SLIDE PUSH BAR IN OPPOSITE DIRECTION KEEPING PIVOT PLATE OUT OF TRACK UNTIL PUSH BAR IS FREE OF MOUNTING BAR.

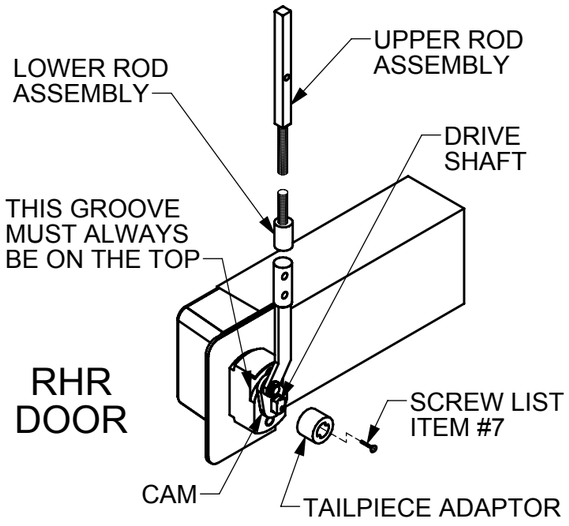
STEP 5 WITH ENTRY TRIM

IF NO ENTRY TRIM GO TO STEP 6



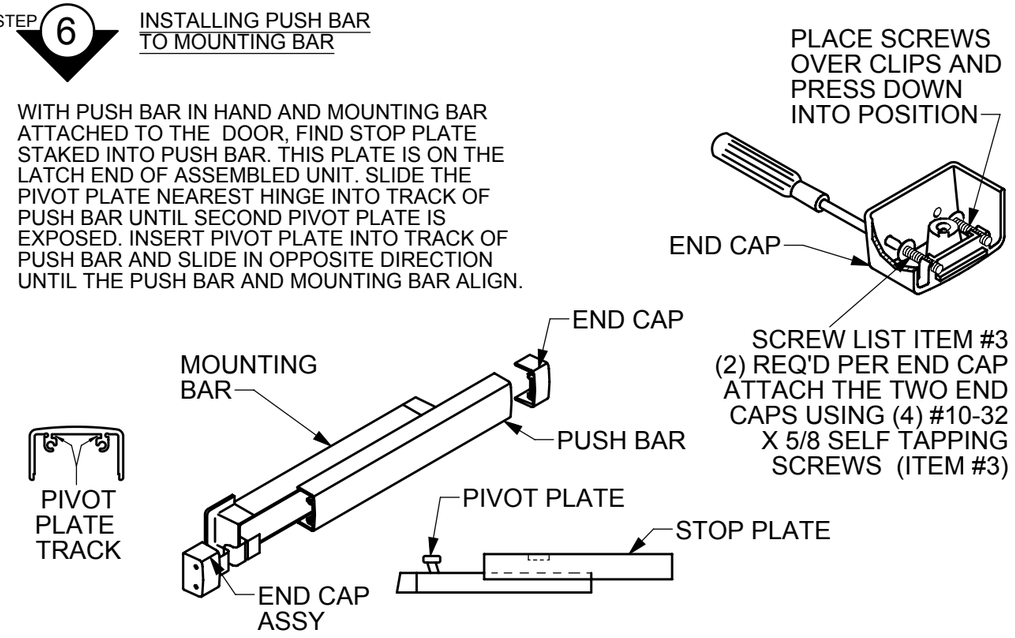
INSTALL TAILPIECE ADAPTOR SUCH THAT DOUBLE "D" IS NESTED ON DRIVE SHAFT. HOLD IN PLACE AND ATTACH WITH SCREW (ITEM #7).

REMOVE CLAMP FROM TOP OF ROD, OPERATE PUSH BAR SCISSORS AND CHECK FOR ROTATION AND INTERFERNCE.



STEP 6 INSTALLING PUSH BAR TO MOUNTING BAR

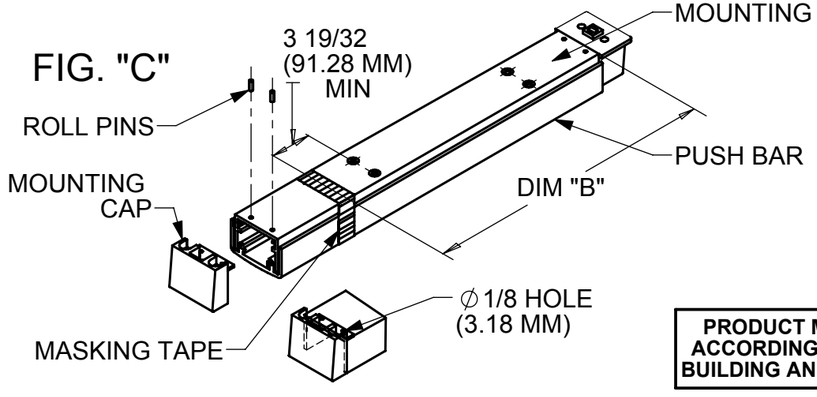
WITH PUSH BAR IN HAND AND MOUNTING BAR ATTACHED TO THE DOOR, FIND STOP PLATE STAKED INTO PUSH BAR. THIS PLATE IS ON THE LATCH END OF ASSEMBLED UNIT. SLIDE THE PIVOT PLATE NEAREST HINGE INTO TRACK OF PUSH BAR UNTIL SECOND PIVOT PLATE IS EXPOSED. INSERT PIVOT PLATE INTO TRACK OF PUSH BAR AND SLIDE IN OPPOSITE DIRECTION UNTIL THE PUSH BAR AND MOUNTING BAR ALIGN.



	DOOR OPENING WIDTH INCH (MM)			
	30" (768)	36" (914.4)	42" (1066.8)	48" (1219 .2)
DIM "A"	24 1/4 (615.95)	30 1/4 (768.35)	36 1/4 (920.75)	42 1/4 (1073.15)

1. DRIVE OUT TWO ROLL PINS.
2. REMOVE MOUNTING CAP.
3. COLLAPSE BAR AND TAPE DOWN IN AREA OF CUT-OFF.
4. DETERMINE EXTRUSION LENGTH ("B" DIM). (NOTE3 19/32 (91.28 MM) MIN DIMENSION FROM RIVET CENTERLINE TO NEW CUT-OFF LENGTH AS SHOWN)
5. MEASURE MOUNTING BAR, NOT PUSH BAR, AND MARK EXTRUSION LENGTH ON TAPE.
6. SAW OFF EXCESS LENGTH, REMOVE TAPE AND DEBURR.
7. LAY MOUNTIING CAP OVER BAR (SEE FIG. C) AND USE A GUIDE TO DRILL TWO Ø1/8 (3.18 MM) HOLES.
8. RE-INSTALL MOUNTING CAP INTO BAR AND DRIVE TWO ROLL PINS INTO HOLES.

FIG. "C"



PRODUCT MUST BE INSTALLED ACCORDING TO ALL APPLICABLE BUILDING AND LIFE SAFETY CODES

STEP 7

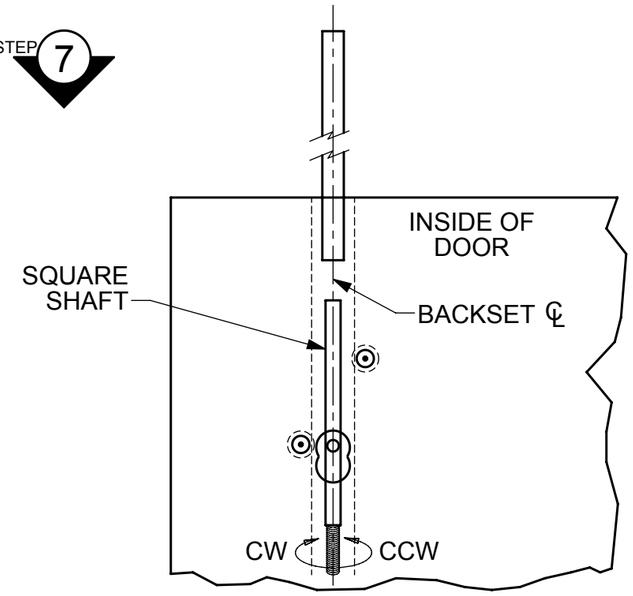
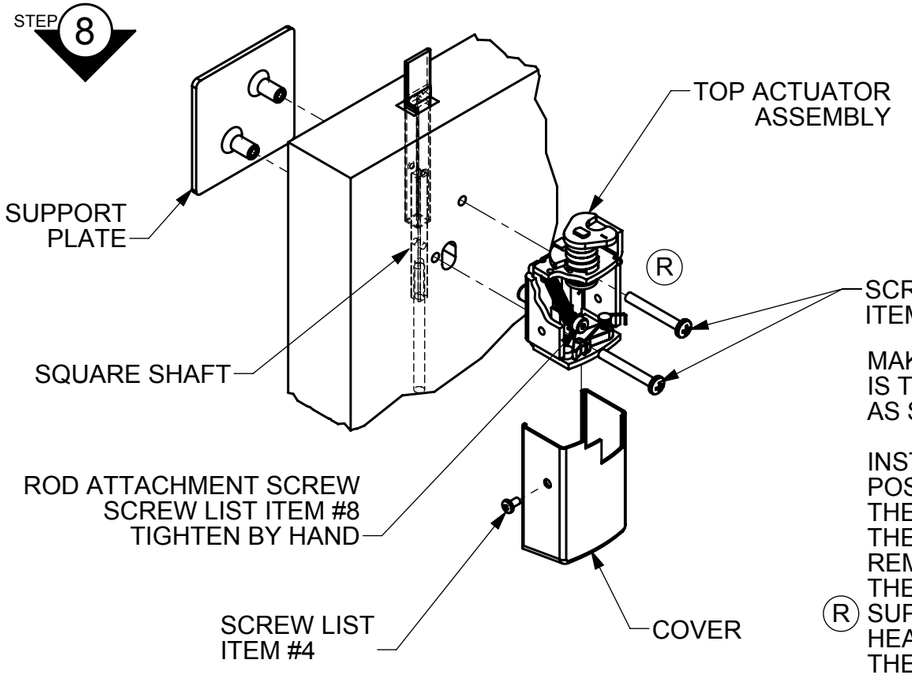


FIG. B

USING SUPPLIED TOOL, ADJUST THE UPPER ROD ASSEMBLY BY TURNING THE SQUARE SHAFT, CLOCKWISE TO LOWER OR COUNTER CLOCKWISE TO RAISE, SO THAT THE HOLE ON THE SQUARE SHAFT ALIGNS WITH THE CENTER OF THE 3/8" HOLE. AS SHOWN FIG. B.

LEAVE ADJUSTMENT TOOL IN PLACE.

STEP 8

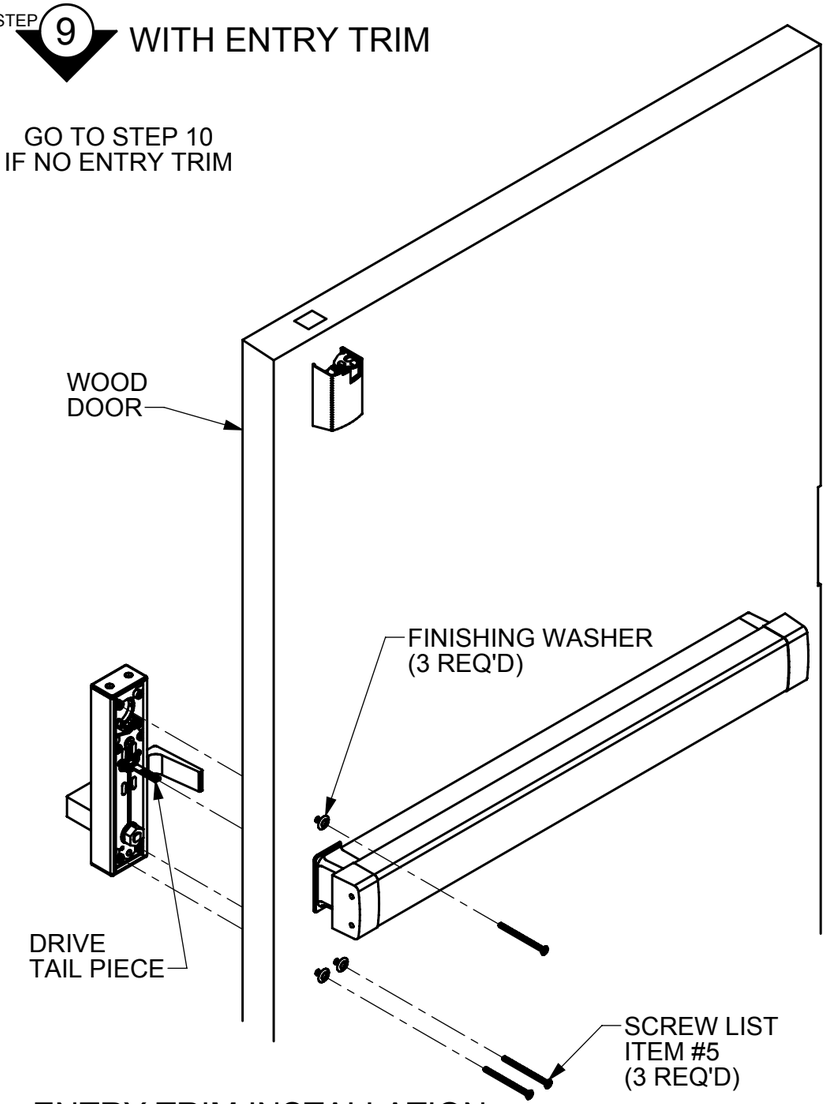


MAKE SURE THAT THE TOP ACTUATOR IS TURNED TO THE LOCKED POSITION AS SHOWN.

Ⓡ INSTALL THE TOP ACTUATOR (AT LOCKED POSITION) TO THE DOOR BY FIRST FASTENING THE ROD ATTACHMENT SCREW (ITEM #8) TO THE SQUARE SHAFT OF THE VERTICAL ROD. REMOVE THE ADJUSTMENT TOOL AND MOUNT THE ACTUATOR TO THE DOOR WITH THE SUPPORT PLATE AND (2) #10-24 X 1 1/2 PAN HEAD SCREWS (ITEM #1). SLIDE COVER ONTO THE TOP ACTUATOR AND SECURE WITH A #6-32 X 1/4 PAN HEAD SCREW (ITEM #4).

STEP 9 WITH ENTRY TRIM

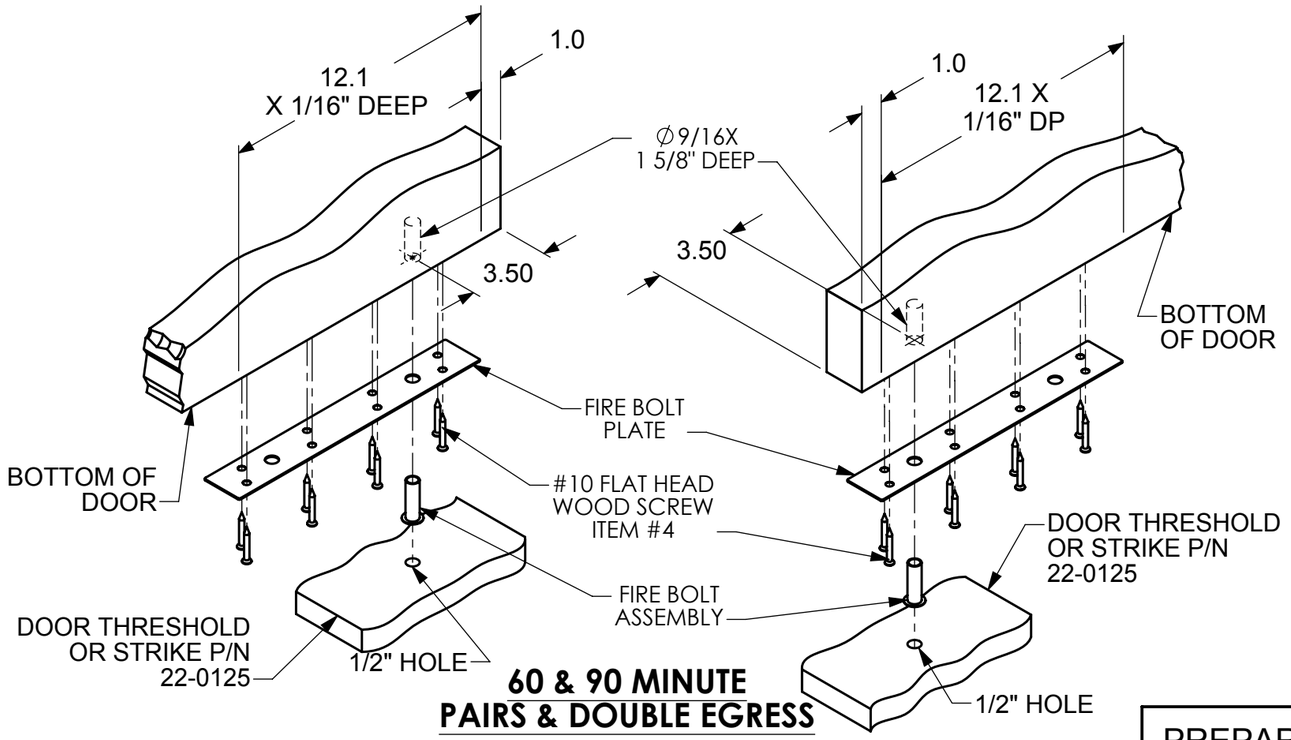
GO TO STEP 10
IF NO ENTRY TRIM



ENTRY TRIM INSTALLATION

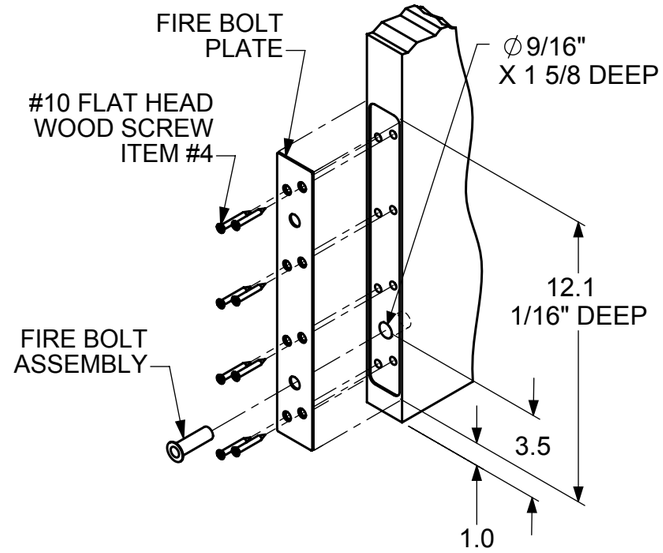
ATTACH THE TRIM TO THE DOOR MAKING SURE THAT THE DRIVE TAILPIECE ENGAGES THE TAILPIECE ADPAPTER. (SEE TRIM INSTALLATION INSTRUCTIONS)

PRODUCT MUST BE INSTALLED ACCORDING TO ALL APPLICABLE BUILDING AND LIFE SAFETY CODES



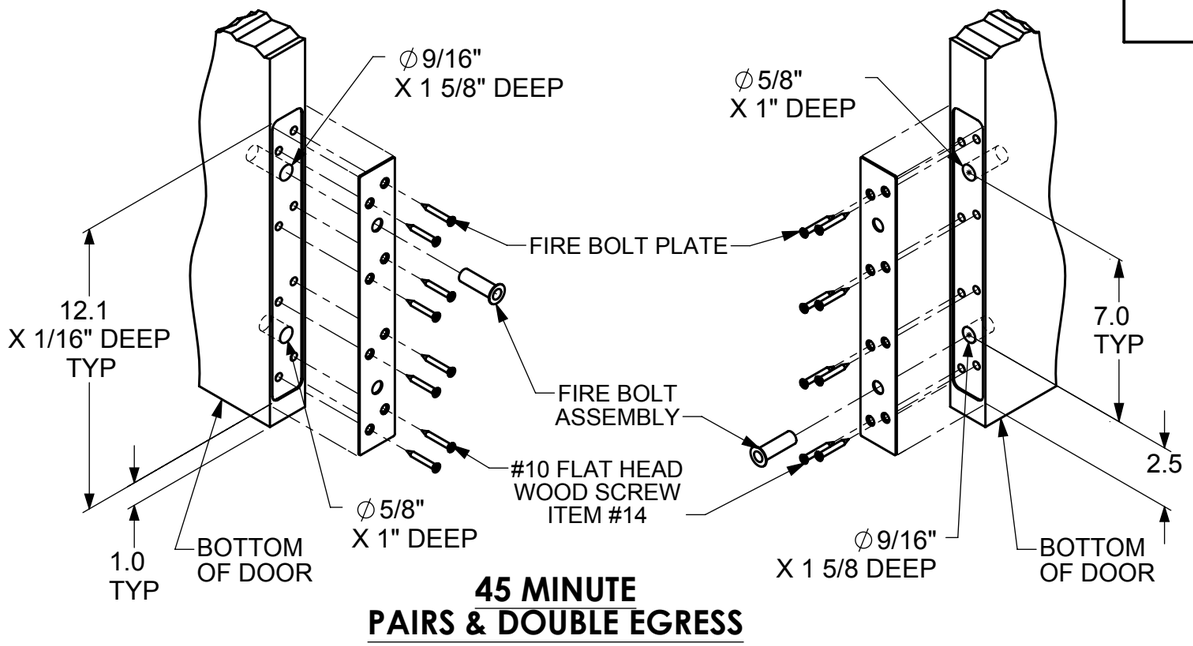
60 & 90 MINUTE
PAIRS & DOUBLE EGRESS

20-MIN DOORS
NO FIRE BOLT REQUIRED



45, 60, & 90 MINUTES
SINGLE DOOR

PREPARATION FOR
FIRE BOLT

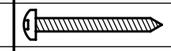
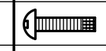


45 MINUTE
PAIRS & DOUBLE EGRESS

PRODUCT MUST BE INSTALLED ACCORDING TO ALL APPLICABLE BUILDING AND LIFE SAFETY CODES

FIRE BOLT INSTALLATION INSTRUCTIONS

1. DRILL 9/16” AND 5/8" DIAMETER HOLES.
2. INSERT GROMMET CLIP INTO 9/16” DIAMETER HOLE AND SIT FLUSH.
3. MOUNT FIRE BOLT PLATE USING (8) #10 FLAT HEAD WOOD SCREWS.
4. INSERT SPRING BOLT ASSEMBLY.

ITEM	SCREW LIST	
1		#10-24 X 1 1/2 PAN HEAD MACHIINE SCREW (2 REQ'D)
2		#10-24 X 1 1/4 PAN HEAD SHEET METAL SCREW (4 REQ'D)
3		#10-32 X 5/8 ROUND HEAD SELF TAP MACHINE SCREW (4 REQ'D)
4		#6-32 X 1/4 PAN HEAD MACHINE SCREW (1 REQ'D)
5		#10-24 X 2 1/2 FLAT HEAD MACHINE SCREW (3 REQ'D)
6		#10-32 X 1/2 PAN HEAD MACHINE SCREW (2 REQ'D)
7		#3-48 X 1/4 FLAT HEAD MACHINE SCREW W/NYLON INS. (1 REQ'D)
8		#10-32 X 1 1/4 X 3/16 Ø SOCKET HD HEX SHOULDER SCREW
9		#10-32 X 1 1/2 FLAT HEAD WOOD SCREW (8 REQ'D)

* SUPPLIED WITH TRIM