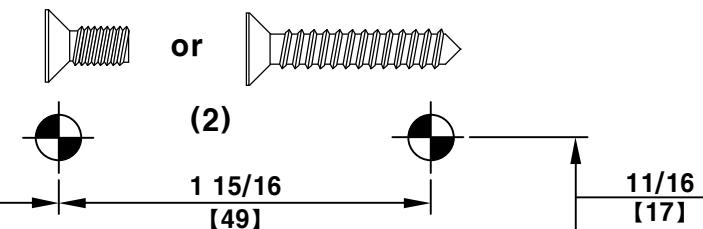


RIGHT HAND
MANO DERECHA
MAIN DROITE

FULL SIZE TEMPLATES

120° TEMPLATE

(NHO)
REGULAR,
RÉGULIER

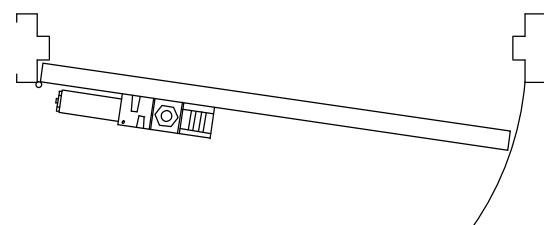


10 13/16
[275]

1 15/16
[49]

11/16
[17]

ALIGN LINE WITH BOTTOM OF FRAME FACE.
ALINEE CON LA PARTE BAJA DE LA CARA DEL MARCO.
ALIGNER CETTE LIGNE SUR LE BAS DE LA FACE DU CADRE.



ALIGN WITH CENTER LINE OF HINGE.
ALINEE CON EL EJE DE LA BISAGRA.
ALIGNER SUR LE CENTRE DU PIVOT DE LA CHARNIÈRE.

TOP EDGE OF DOOR

11/16
[17]

1 1/4
[57]

or

(4)

6 1/4
[159]

1
[25]

3
[76]

1
[25]

METAL $\frac{7}{32}$ " & 1/4-20 TAP, FOR WOOD $\frac{5}{32}$ ". (FOR SEX NUTS USE $\frac{3}{8}$ ")
CANILLA DE METAL $\frac{7}{32}$ " & 1/4-20, PARA MADERA $\frac{5}{32}$ ". (PARA USO DE TUERCAS DE $\frac{3}{8}$ ")
MÉTAL $\frac{7}{32}$ " & 1/4-20, bois $\frac{5}{32}$ ". (ÉCROUS M-F, PERCER $\frac{3}{8}$ ")

TEAR ALONG DOTTED LINE

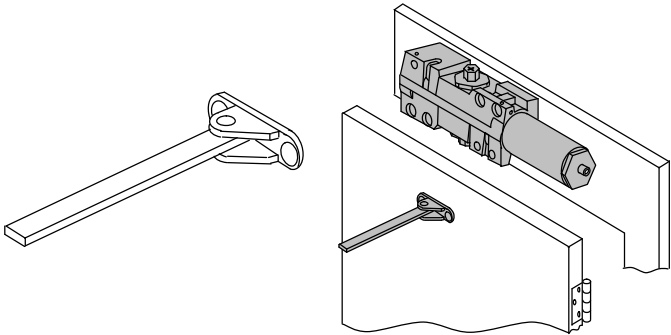
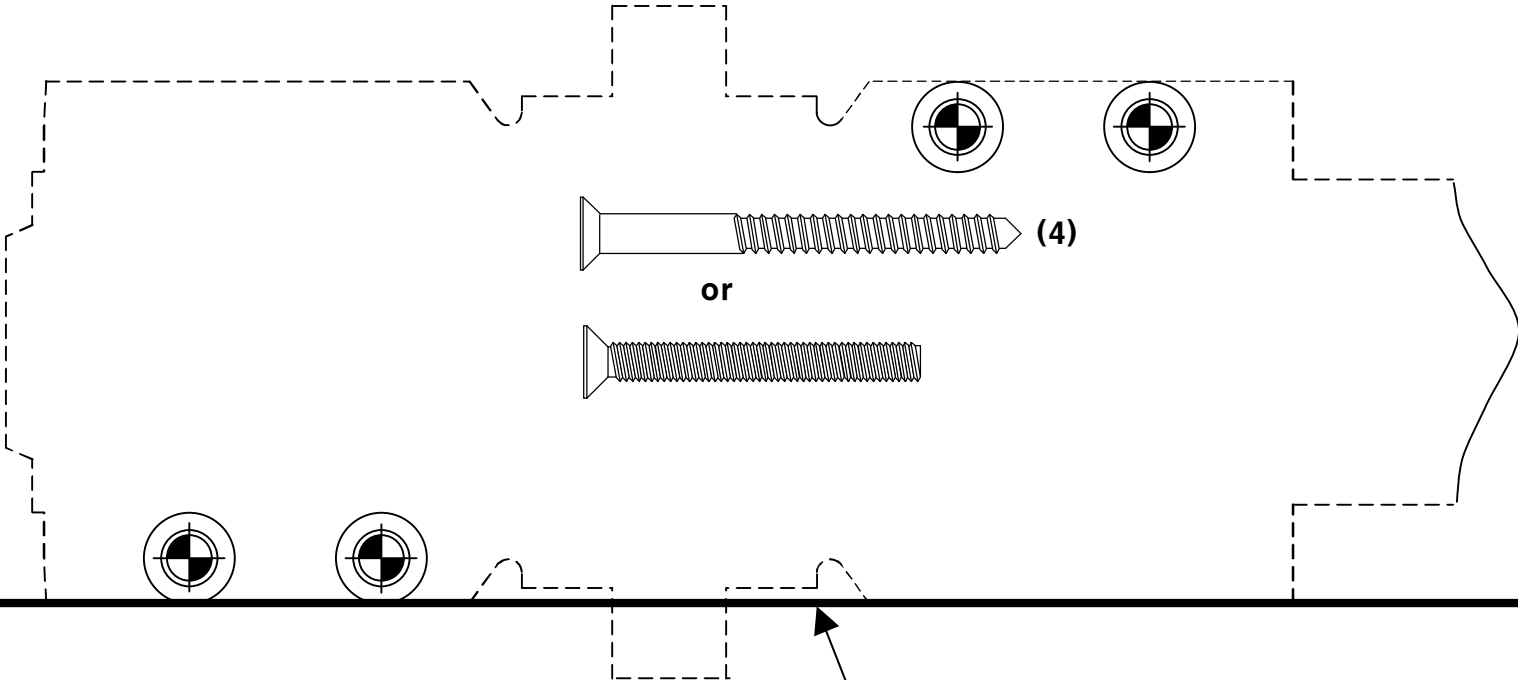
TIRE DE LA LINEA PUNTEADA

DÉTACHER SUR LA LIGNE POINTILLÉE

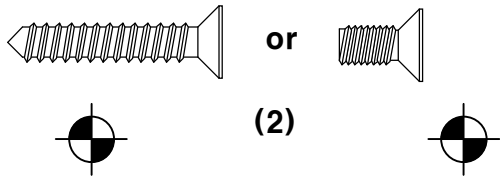
RIGHT HAND
MANO DERECHA
MAIN DROITE
120° TEMPLATE

METAL 7/32" & 1/4-20 TAP, FOR WOOD 5/32". (FOR SEX NUTS USE 3/8")
CANILLA DE METAL 7/32" & 1/4-20, PARA MADERA 5/32". (PARA USO DE TUERCAS DE 3/8")
MÉTAL 7/32" & 1/4-20, bois 5/32". (ÉCROUS M-F, PERCER 3/8")

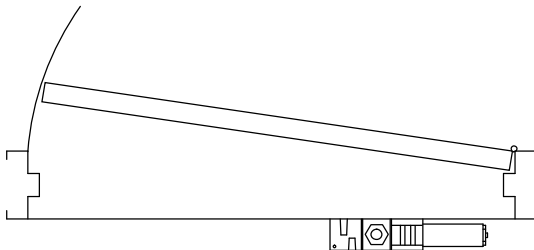
(NHO)
TOP JAMB
MARCO SUPERIOR,
LINTEAU SUPÉRIEUR



ALIGN WITH CENTER LINE OF HINGE.
ALINEE CON EL EJE DE LA BISAGRA.
ALIGNER SUR LE CENTRE DU PIVOT DE LA CHARNIÈRE.



ALIGN LINE WITH BOTTOM OF FRAME FACE.
ALINEE CON LA PARTE BAJA DE LA CARA DEL MARCO.
ALIGNER CETTE LIGNE SUR LE BAS DE LA FACE DU CADRE.



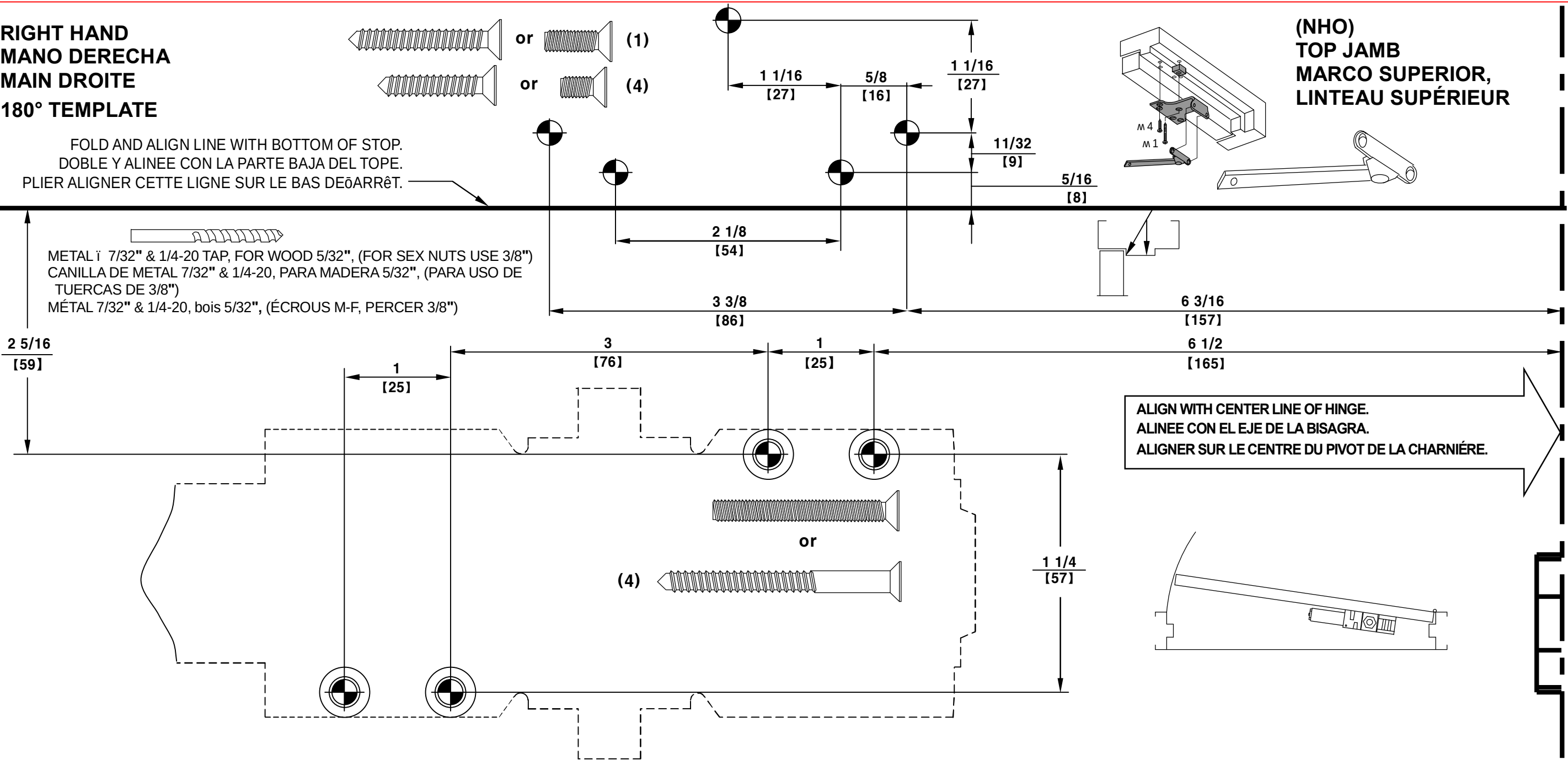
TEAR ALONG DOTTED LINE

TIRE DE LA LINEA PUNTEADA

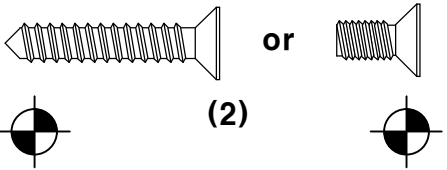
DÉTACHER SUR LA LIGNE POINTILLÉE

**RIGHT HAND
MANO DERECHA
MAIN DROITE
180° TEMPLATE**

FOLD AND ALIGN LINE WITH BOTTOM OF STOP.
DOBLE Y ALINEE CON LA PARTE BAJA DEL TOPE.
PLIER ALIGNER CETTE LIGNE SUR LE BAS DE ARRÊT.



LEFT HAND
MANO IZQUIERDA
MAIN GAUCHE

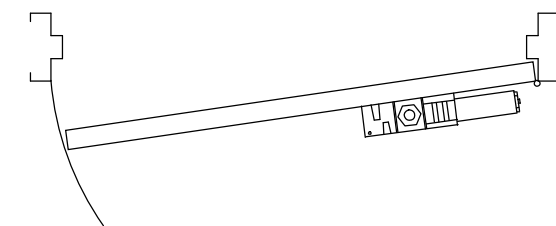


FULL SIZE TEMPLATES
120° TEMPLATE

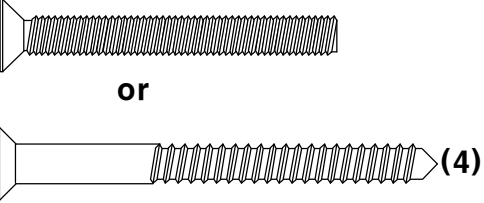
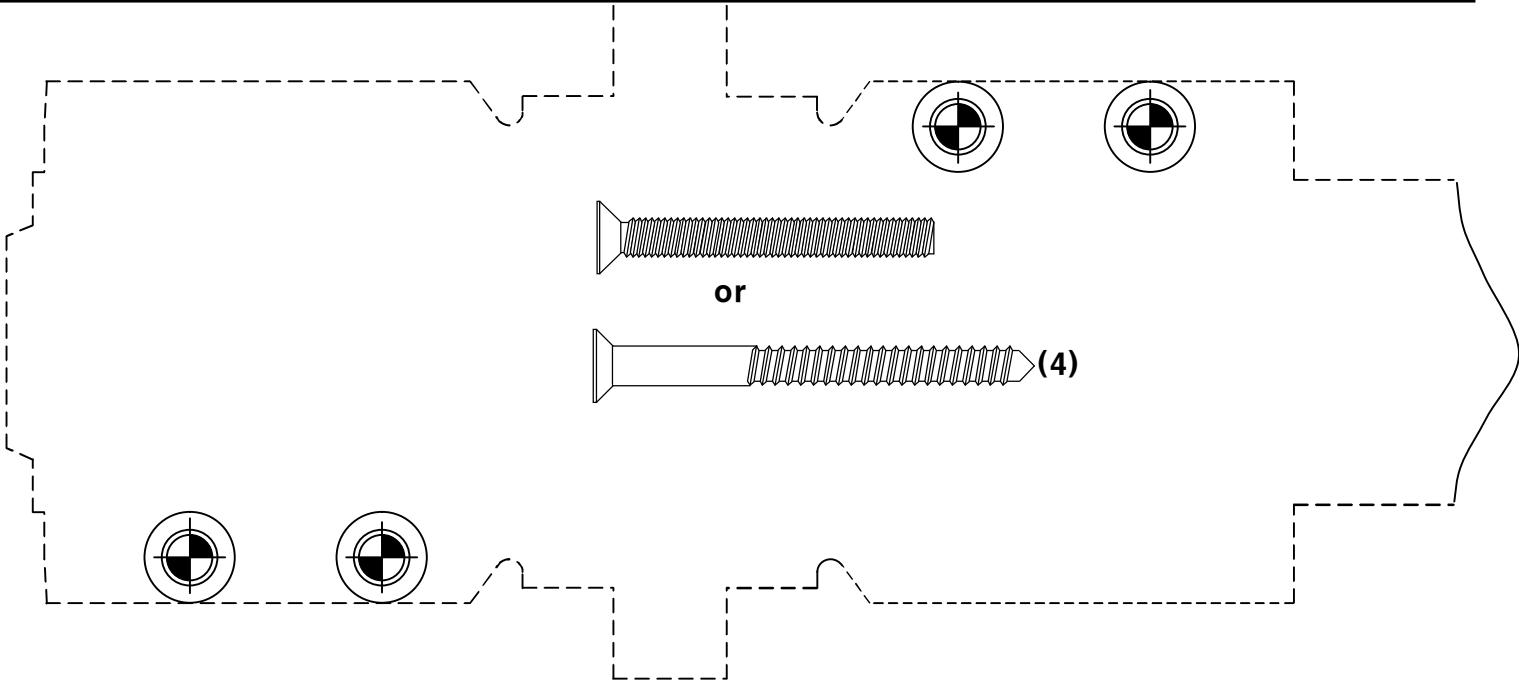
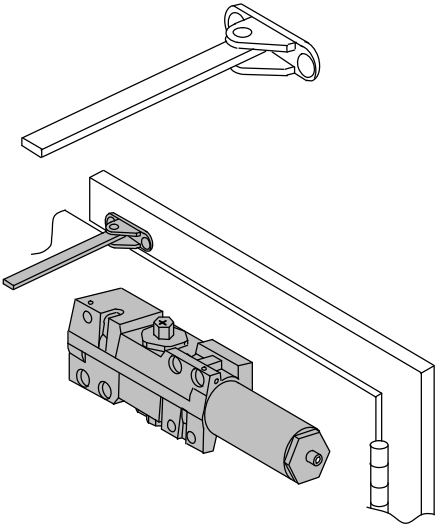
(NHO)
REGULAR,
RÉGULIER

TOP EDGE OF DOOR

ALIGN LINE WITH BOTTOM OF FRAME FACE.
ALINEE CON LA PARTE BAJA DE LA CARA DEL MARCO.
ALIGNER CETTE LIGNE SUR LE BAS DE LA FACE DU CADRE.



ALIGN WITH CENTER LINE OF HINGE.
ALINEE CON EL EJE DE LA BISAGRA.
ALIGNER SUR LE CENTRE DU PIVOT DE LA CHARNIÈRE.



METAL 7/32" & 1/4-20 TAP, FOR WOOD 5/32". (FOR SEX NUTS USE 3/8")
CANILLA DE METAL 7/32" & 1/4-20, PARA MADERA 5/32". (PARA USO DE TUERCAS DE 3/8")
MÉTAL 7/32" & 1/4-20, bois 5/32". (ÉCROUS M-F, PERCER 3/8")

TEAR ALONG DOTTED LINE

TIRE DE LA LINEA PUNTEADA

DÉTACHER SUR LA LIGNE POINTILLÉE

**LEFT HAND
MANO IZQUIERDA
MAIN GAUCHE**

120° TEMPLATE

METAL $\frac{7}{32}$ " & $\frac{1}{4}$ -20 TAP, FOR WOOD $\frac{5}{32}$ ". (FOR SEX NUTS USE $\frac{3}{8}$ ")
CANILLA DE METAL $\frac{7}{32}$ " & $\frac{1}{4}$ -20, PARA MADERA $\frac{5}{32}$ ". (PARA USO DE TUERCAS DE $\frac{3}{8}$ ")
MÉTAL $\frac{7}{32}$ " & $\frac{1}{4}$ -20, bois $\frac{5}{32}$ ". (ÉCROUS M-F, PERCER $\frac{3}{8}$ ")

**(NHO)
TOP JAMB
MARCO SUPERIOR,
LINTEAU SUPÉRIEUR**

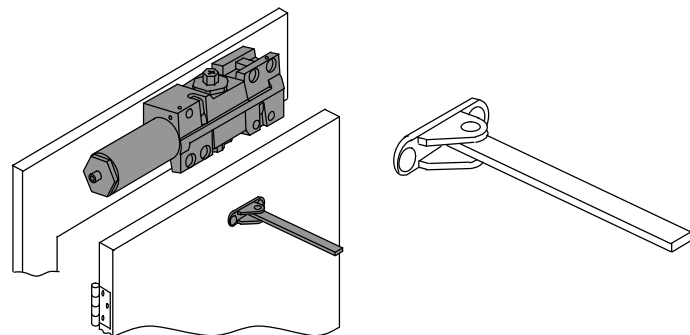
$6 \frac{5}{16}$
[160]

1
[25]

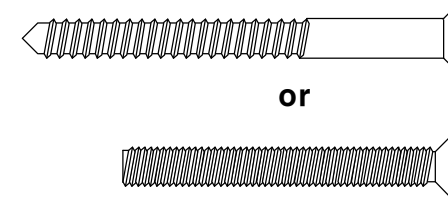
3
[76]

1
[25]

ALIGN WITH CENTER LINE OF HINGE.
ALINEE CON EL EJE DE LA BISAGRA.
ALIGNER SUR LE CENTRE DU PIVOT DE LA CHARNIÈRE.



(4)



or

$1 \frac{1}{4}$
[57]

$\frac{1}{4}$

ALIGN LINE WITH BOTTOM OF FRAME FACE.
ALINEE CON LA PARTE BAJA DE LA CARA DEL MARCO.
ALIGNER CETTE LIGNE SUR LE BAS DE LA FACE DU CADRE.

$10 \frac{7}{8}$
[276]

$1 \frac{1}{4}$
[32]

(2)

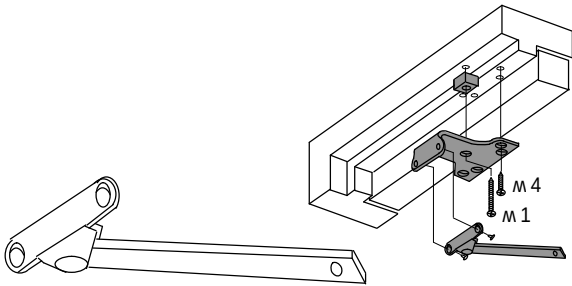
$1 \frac{15}{16}$
[49]

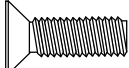
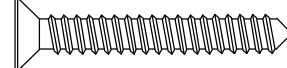
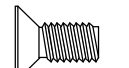
TEAR ALONG DOTTED LINE

TIRE DE LA LINEA PUNTEADA

DÉTACHER SUR LA LIGNE POINTILLÉE

LEFT HAND
MANO IZQUIERDA
MAIN GAUCHE
180° TEMPLATE



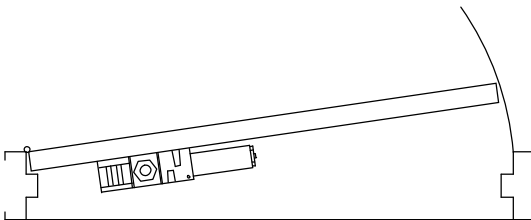
- (1)  or 
(4)  or 

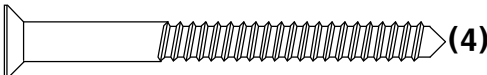
(NHO)
TOP JAMB
MARCO SUPERIOR,
LINTEAU SUPÉRIEUR

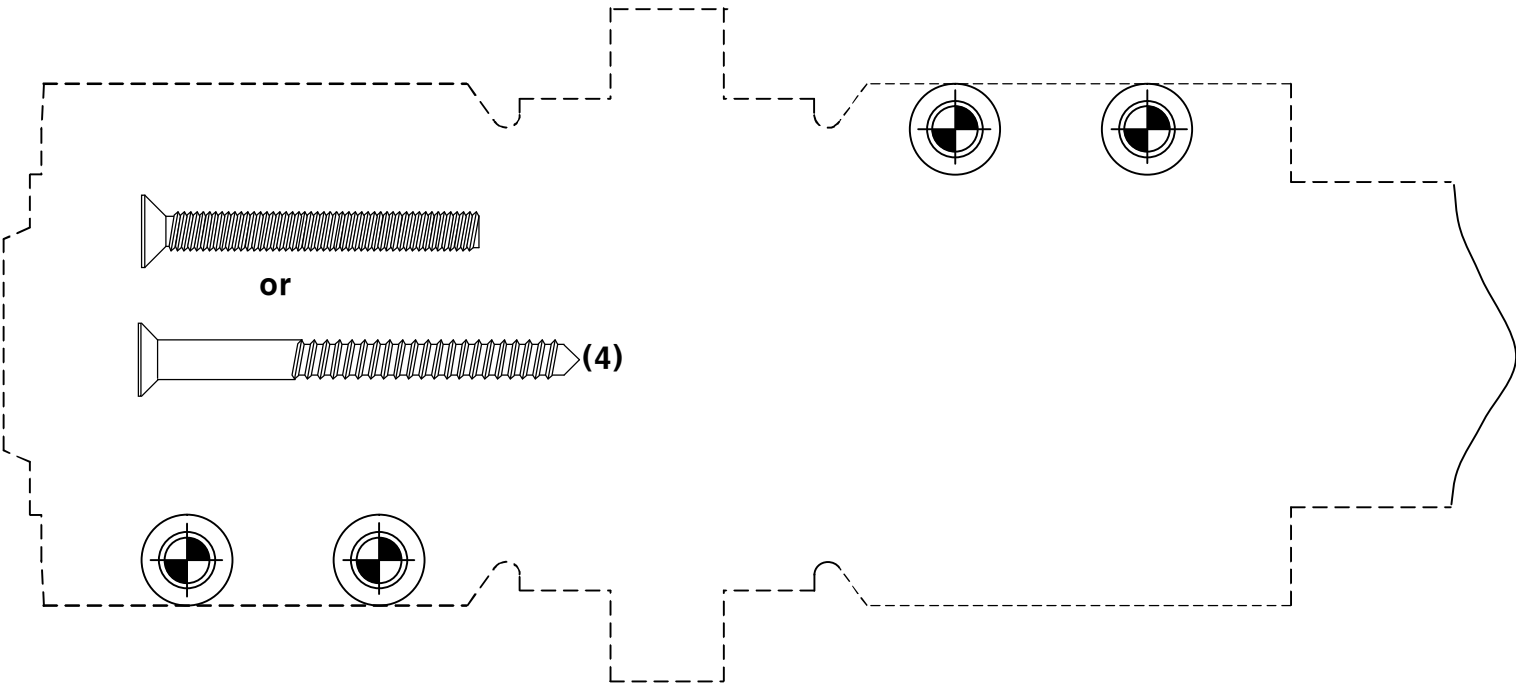
FOLD AND ALIGN LINE WITH BOTTOM OF STOP.
DOBLE Y ALINEE CON LA PARTE BAJA DEL TOPE.
PLIER ALIGNER CETTE LIGNE SUR LE BAS DE L'ARRÊT.

METAL 7/32" & 1/4-20 TAP, FOR WOOD 5/32", (FOR SEX NUTS USE 3/8")
CANILLA DE METAL 7/32" & 1/4-20, PARA MADERA 5/32", (PARA USO DE TUERCAS DE 3/8")
MÉTAL 7/32" & 1/4-20, bois 5/32", (ÉCROUS M-F, PERCER 3/8")

ALIGN WITH CENTER LINE OF HINGE.
ALINEE CON EL EJE DE LA BISAGRA.
ALIGNER SUR LE CENTRE DU PIVOT DE LA CHARNIÈRE.



- 
or
 (4)

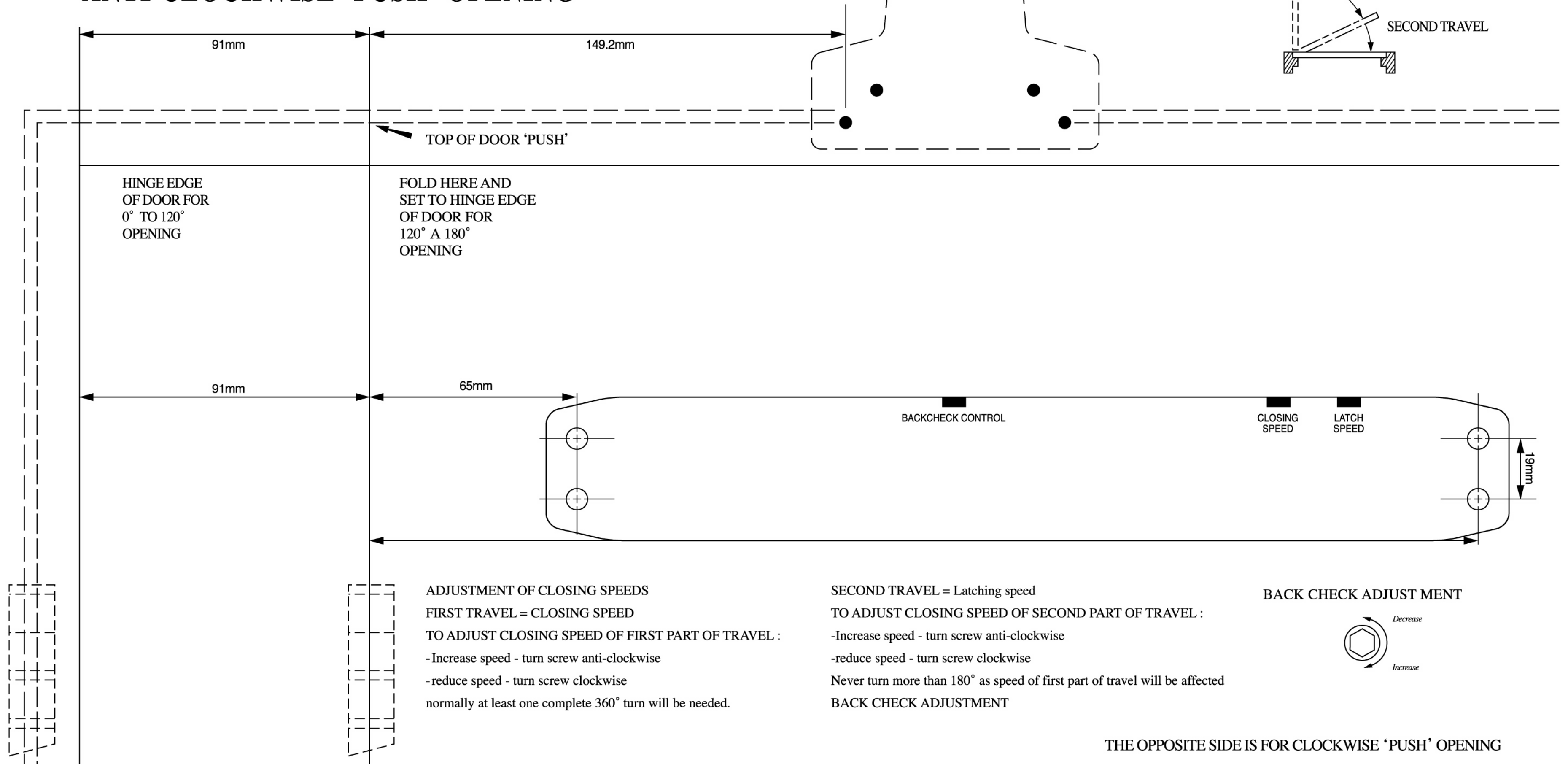


**MODEL No : 900BC
BF900
CB900**

DOOR CLOSER

Template for

ANTI-CLOCKWISE 'PUSH' OPENING

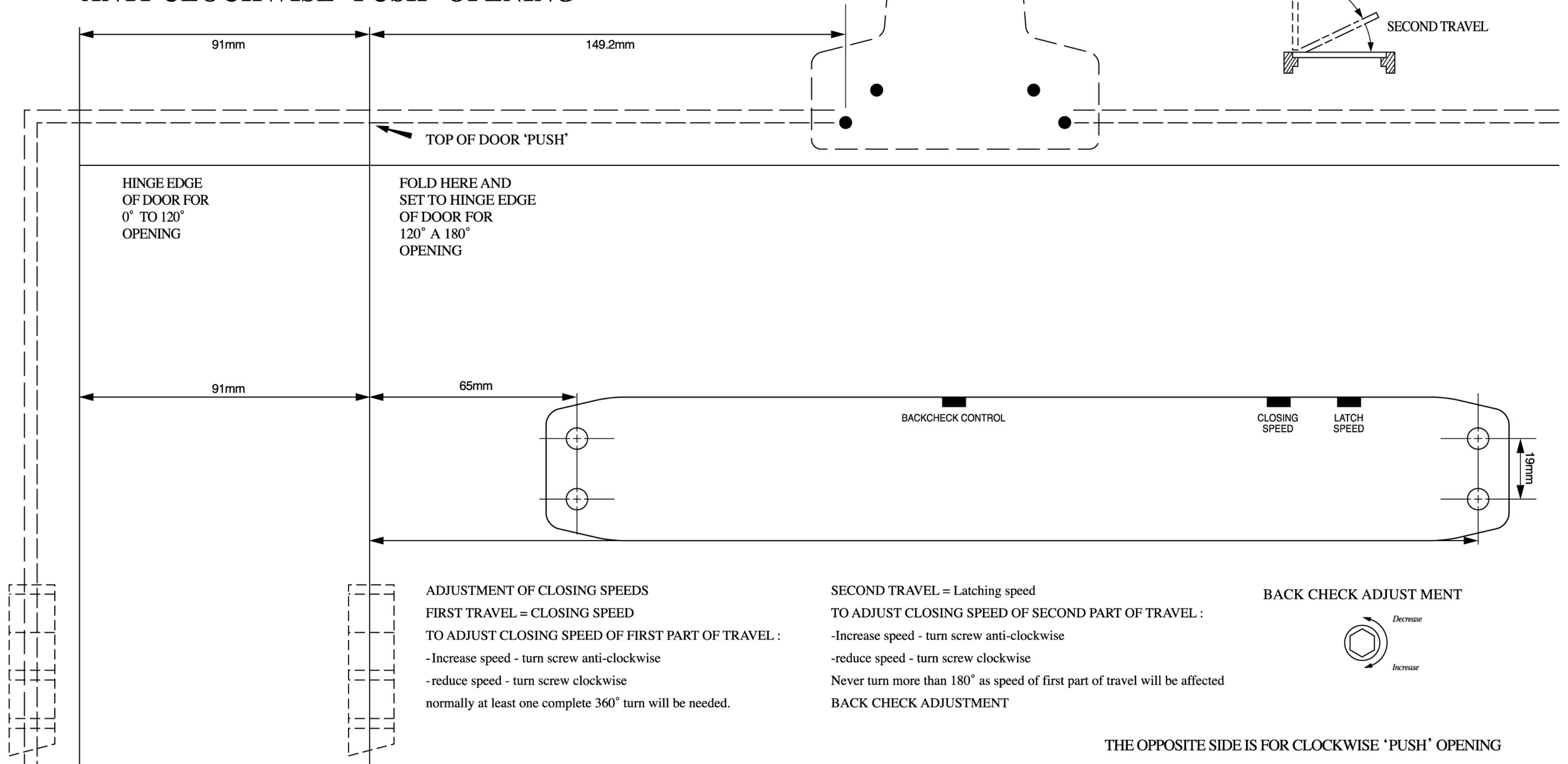


**MODEL No : 900BC
BF900
CB900**

DOOR CLOSER

Template for

ANTI-CLOCKWISE 'PUSH' OPENING



THE OPPOSITE SIDE IS FOR CLOCKWISE 'PUSH' OPENING

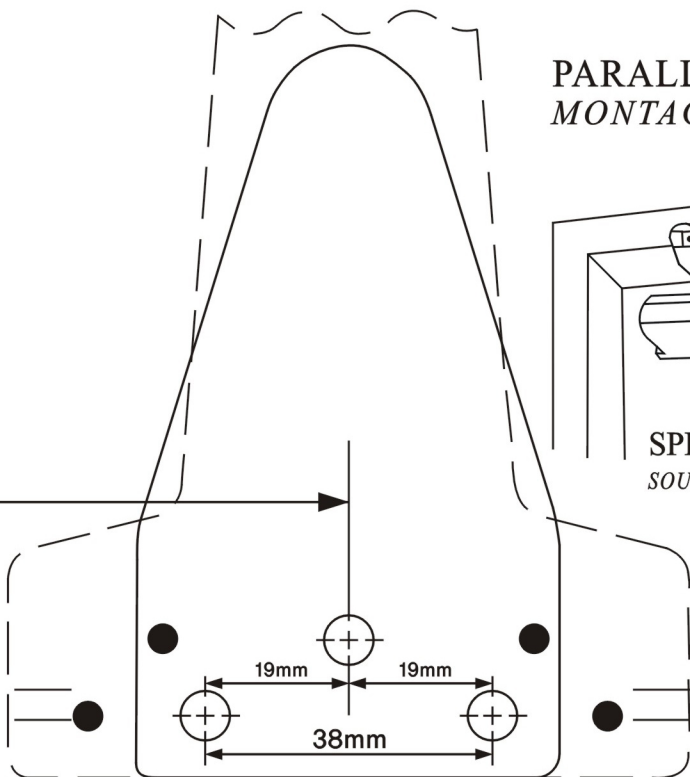
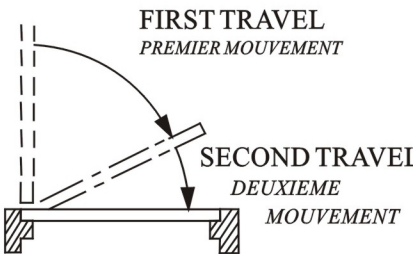
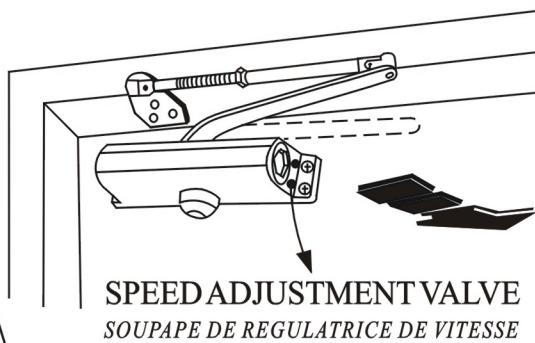
DOOR CLOSER • FERME-PORTE

Template for • Gabarit pour

ANTI-CLOCKWISE 'PUSH' OPENING

'PUSH' OUVERTURE DANS LE SENS DES AIGUILLES D'UNE MONTRE

PARALLEL ARM INSTALLATION MONTAGE AVEC BRAS PARALLELE



HINGE EDGE
OF DOOR FOR
0° TO 120°
OPENING

CHARNIERE DE
LA PORTE POUR
OUVERTURE DE
0° TO 120°

FOLD HERE AND
SET TO HINGE EDGE
OF DOOR FOR
120° A 180°
OPENING

PLIEZ ICI ET
PLACEZ CONTRE
LE BORD DE LA
CHARNIERE DE
LA PORTE POUR
OUVERTURE DE
120° A 180°

SIZE 2,3

142.9mm

208mm

FIXING HOLES(screws supplied)
TROUS DE MONTAGE(VIS INCLUES)

SIZE 4,5

120.7mm

22.2mm

230.2mm

Back Check Adjusting Valve
SOUPAPE DE FREINAGE

LATCHING SPEED ADJUSTING VALVE
SOUPAPE DE RÉGLAGE DE LA VITESSE DE LA VERROUILLAGE

CLOSING SPEED ADJUSTING VALVE
SOUPAPE DE RÉGLAGE DE LA VITESSE DE LA FE

ADJUSTMENT OF CLOSING SPEEDS
AJUSTEMENT DES VITESSES DE FERMETURE

FIRST TRAVEL = CLOSING SPEED
PREMIER MOUVEMENT = VITESSE DE LA FERMATURE

TO ADJUST CLOSING SPEED OF FIRST PART OF TRAVEL:
POUR AJUSTER LA VITESSE DE LA FERMETURE DE LA PREMIERE
PARTIE DU MOUVEMENT

-Increase speed - turn screw anti-clockwise
AUGMENTER de vitesse-tournez la vis contre le sens des aiguilles d'une montre
-reduce speed - turn screw clockwise
DIMINUER de vitesse - tournez la vis dans le sens des aiguilles d'une montre
normally at least one complete 360° turn will be needed.
normalement au moins une revolution complète de 360° sera nécessaire

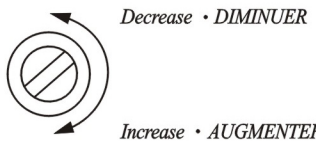
SECOND TRAVEL = Latching speed
DEUXIEME MOUVEMENT = Action de verrouillage

TO ADJUST CLOSING SPEED OF SECOND PART OF TRAVEL:
POUR AJUSTER LA VITESSE DE LA FERMETURE DE LA DEUXIEME
PARTIE DU MOUVEMENT

-Increase speed - turn screw anti-clockwise
AUGMENTER de vitesse - tournez la vis contre le sens des aiguilles d'une montre
-reduce speed - turn screw clockwise
DIMINUER de vitesse - tournez la vis dans le sens des aiguilles d'une montre
Never turn more than 180° as speed of first part of travel will be affected
Ne tournez pas plus de 180° sinon vitesse de la premiere partie du mouvement sera abimée

BACK CHECK ADJUSTMENT • AJUSTEMENT DE FREINAGE

BACK CHECK ADJUST MENT
REGULATRICE DE FREINAGE



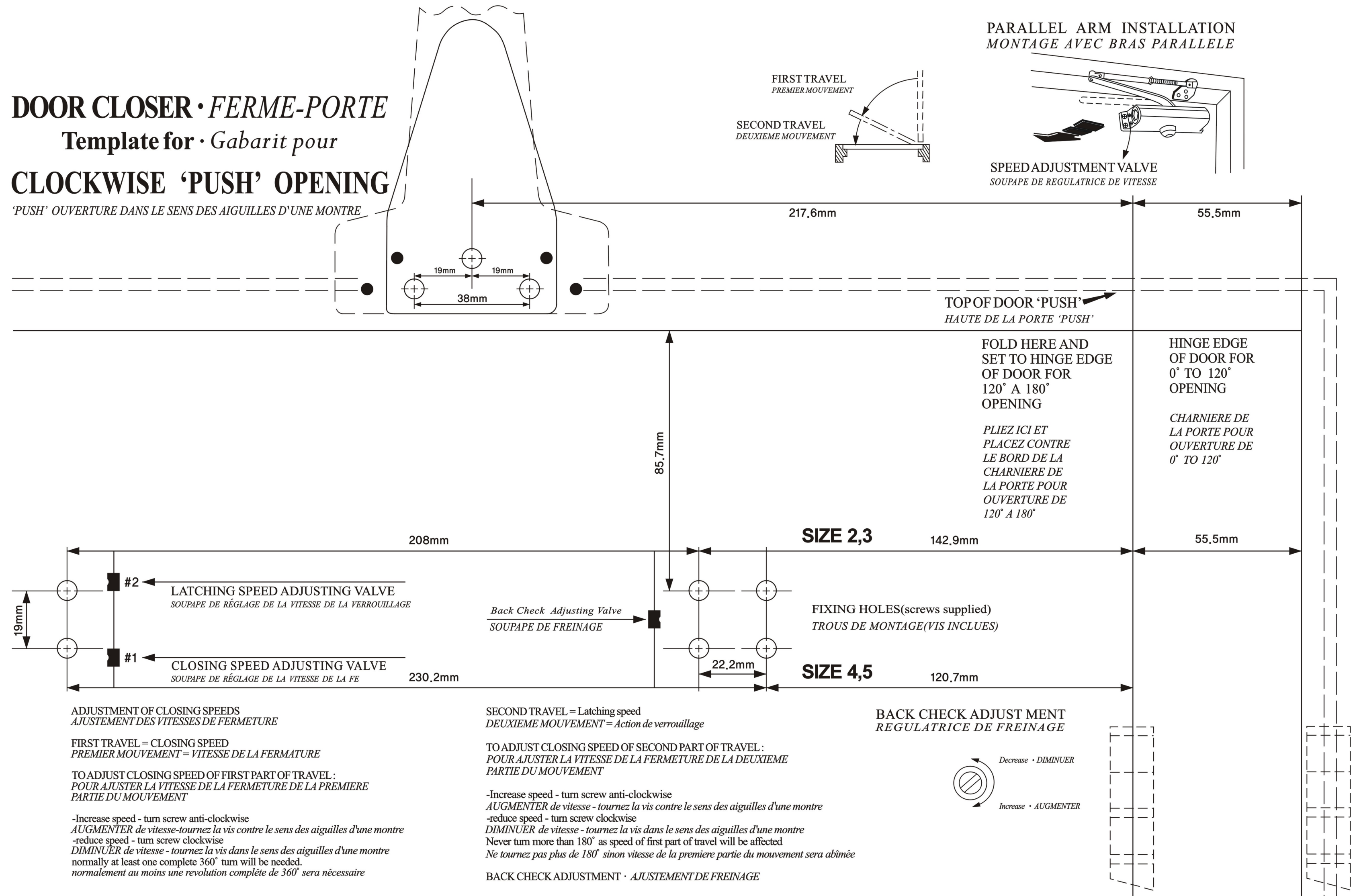
THE OPPOSITE SIDE IS FOR CLOCKWISE 'PUSH' OPENING
POOR 'PUSH' OUVERTURE EN SENS D'AIGUILLES D'UNE MONTRE VOIR

DOOR CLOSER • *FERME-PORTE*

Template for • *Gabarit pour*

CLOCKWISE 'PUSH' OPENING

'PUSH' OUVERTURE DANS LE SENS DES AIGUILLES D'UNE MONTRE



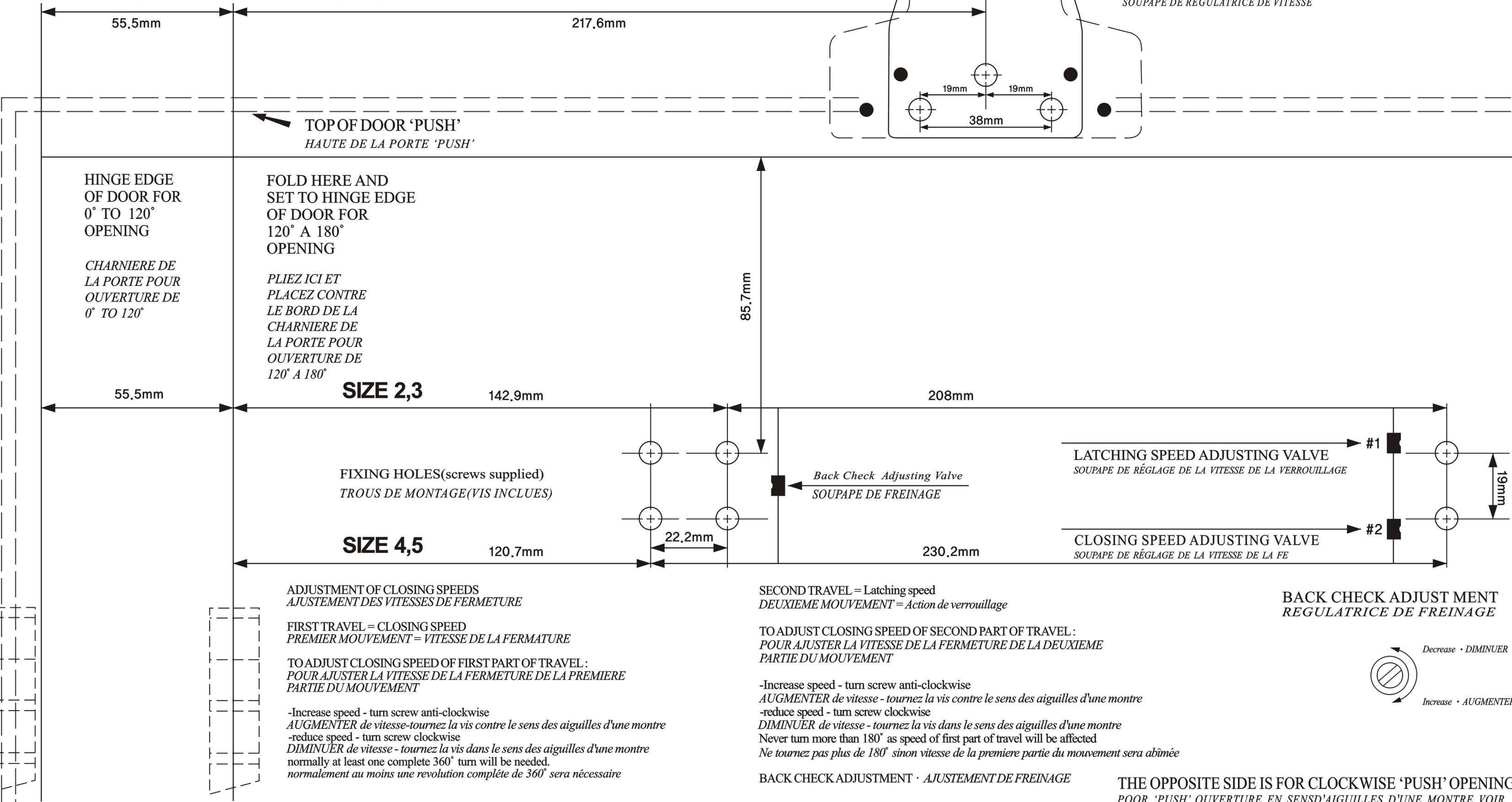
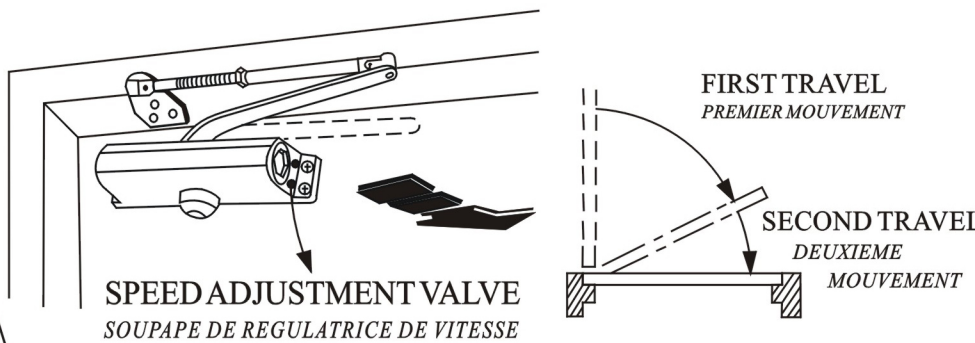
DOOR CLOSER • *FERME-PORTE*

Template for • *Gabarit pour*

ANTI-CLOCKWISE 'PUSH' OPENING

'PUSH' OUVERTURE DANS LE SENS DES AIGUILLES D'UNE MONTRE

PARALLEL ARM INSTALLATION
MONTAGE AVEC BRAS PARALLELE



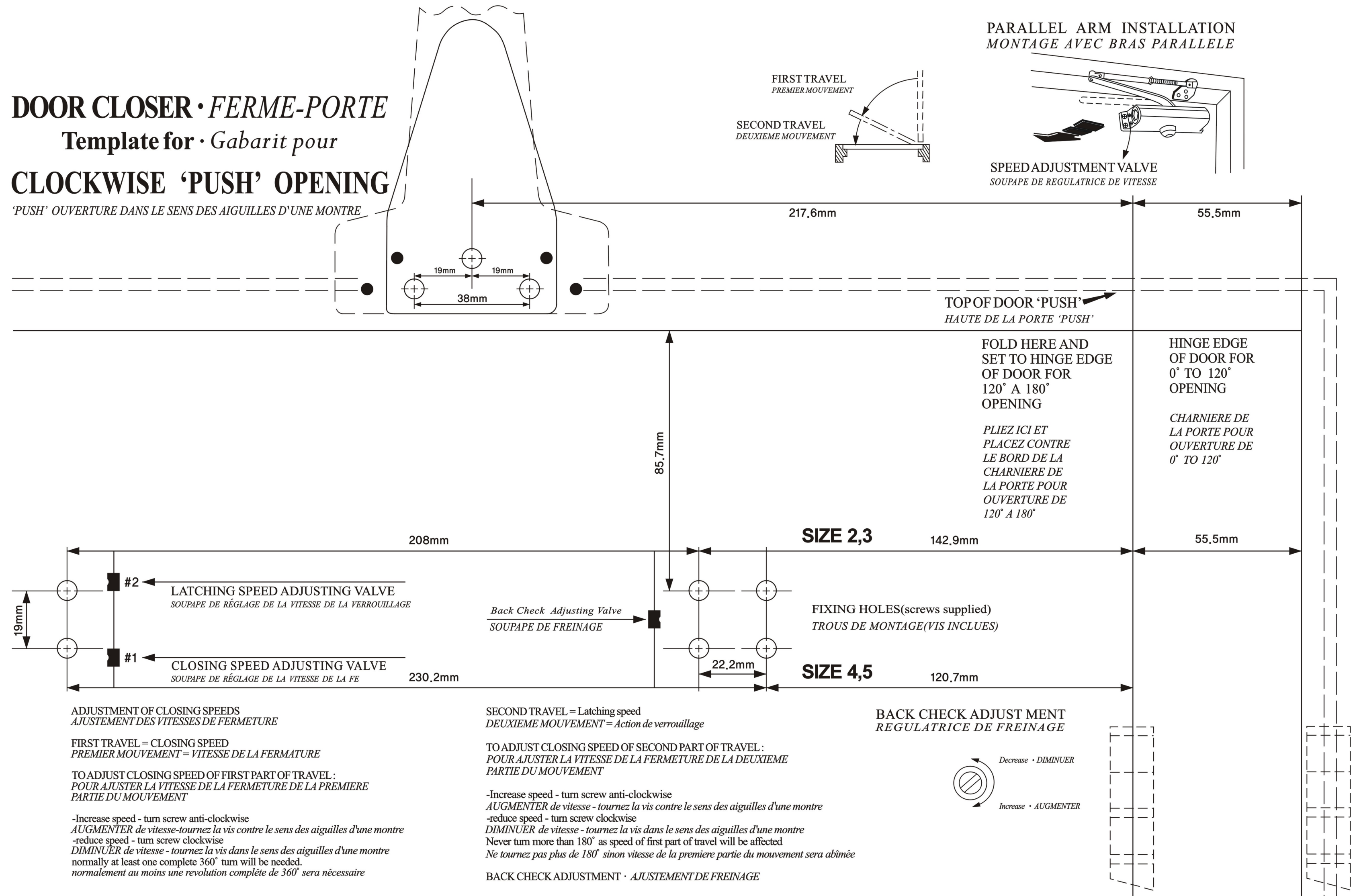
THE OPPOSITE SIDE IS FOR CLOCKWISE 'PUSH' OPENING
POOR 'PUSH' OUVERTURE EN SENS D'AIGUILLES D'UNE MONTRE VOIR

DOOR CLOSER • *FERME-PORTE*

Template for • *Gabarit pour*

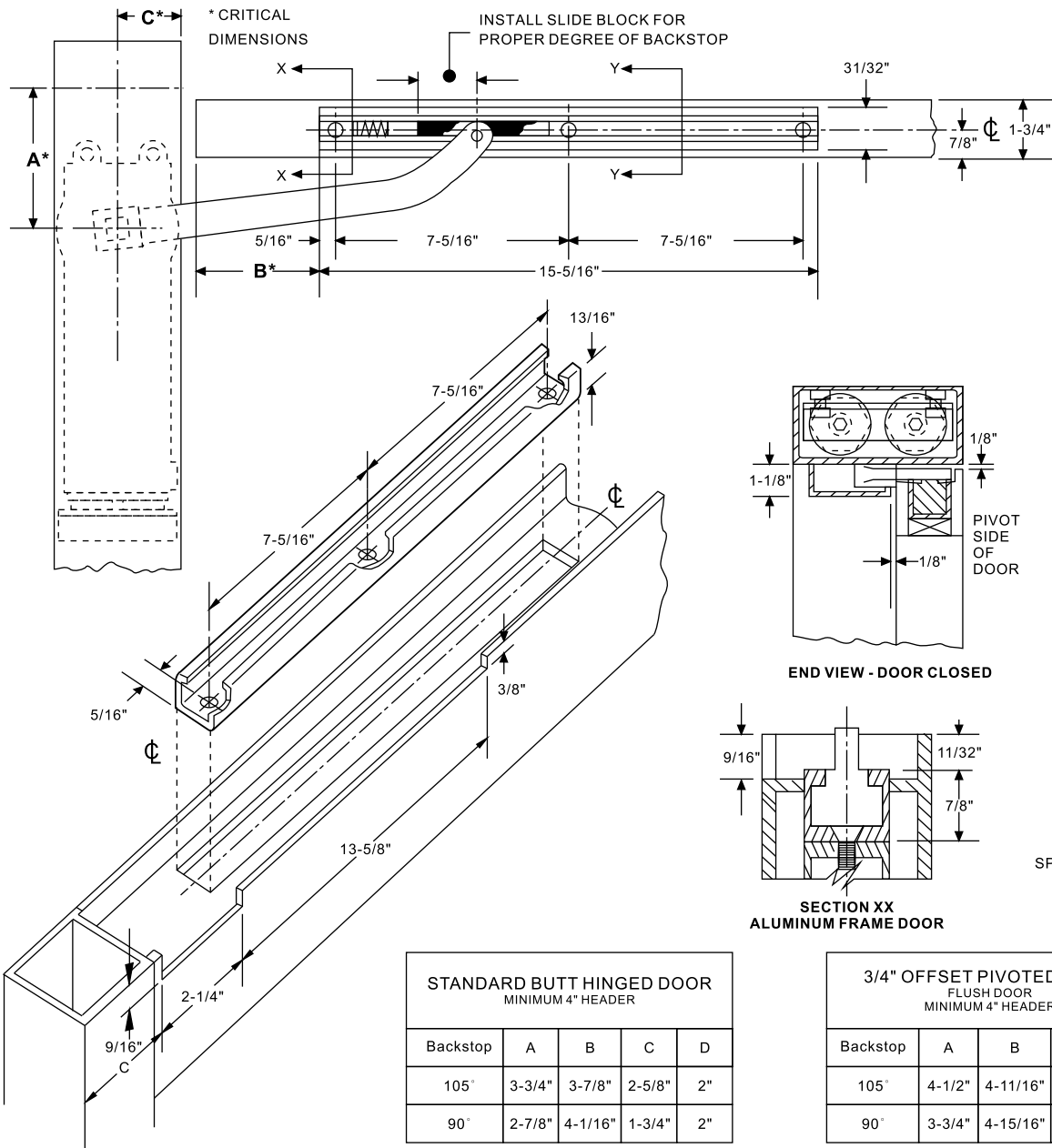
CLOCKWISE 'PUSH' OPENING

'PUSH' OUVERTURE DANS LE SENS DES AIGUILLES D'UNE MONTRE



Offset Arm for OHC Aluminum Door & Frame

Installation Instructions



DETERMINE HOW DOOR IS HUNG AND DEGREE OF CLOSER BACKSTOP AND USE APPLICABLE CHART

HEADER PREPARATION:

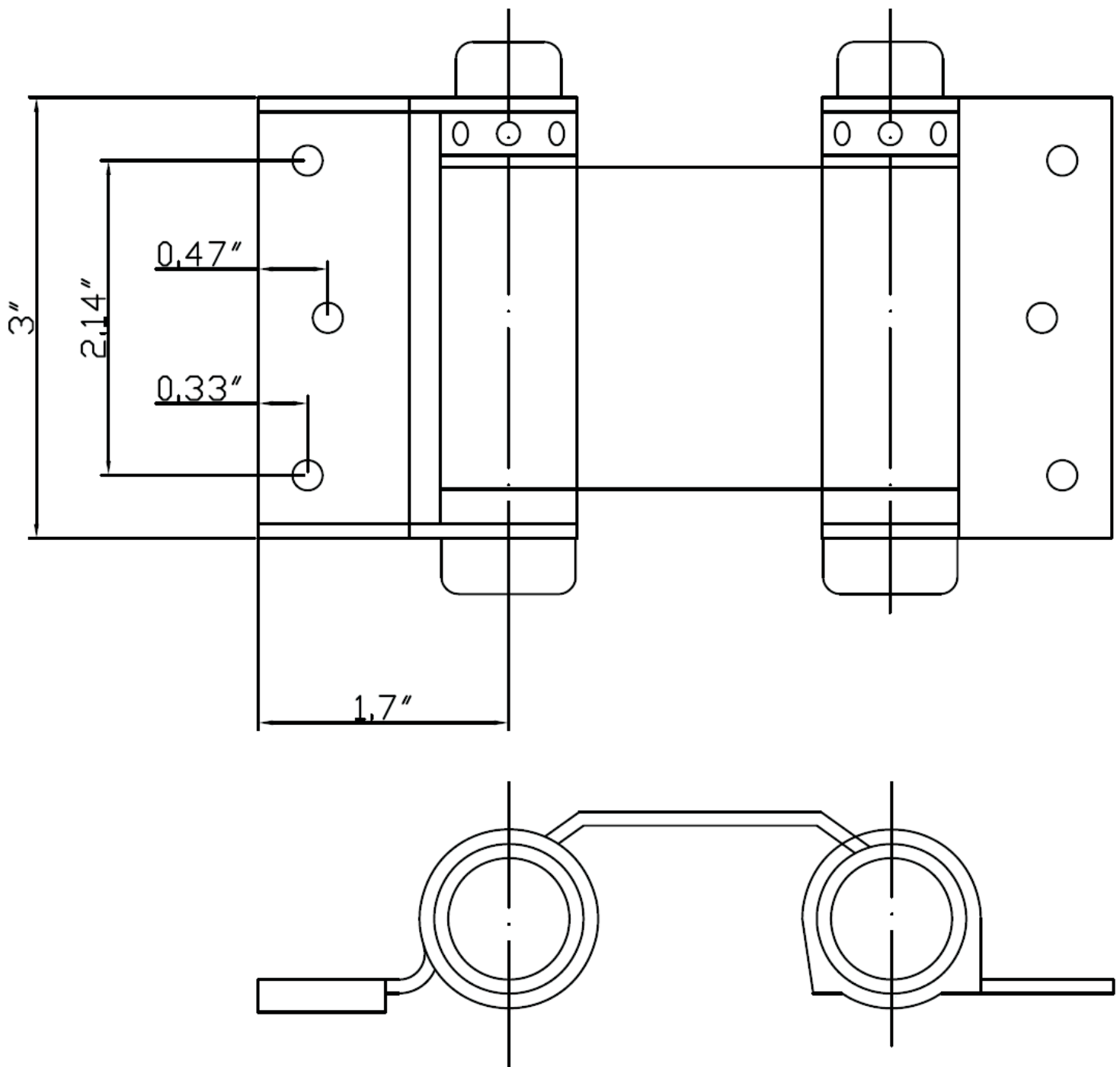
1. DIMENSION 'A', face of jamb to center line of spindle must be maintained.
2. DIMENSION 'D', pivot of hinge side of header to center line of spindle must be maintained regardless of header width.
3. All spacers and/or anchors other than standard 'F' clip package by others.

DOOR PREPARATION:

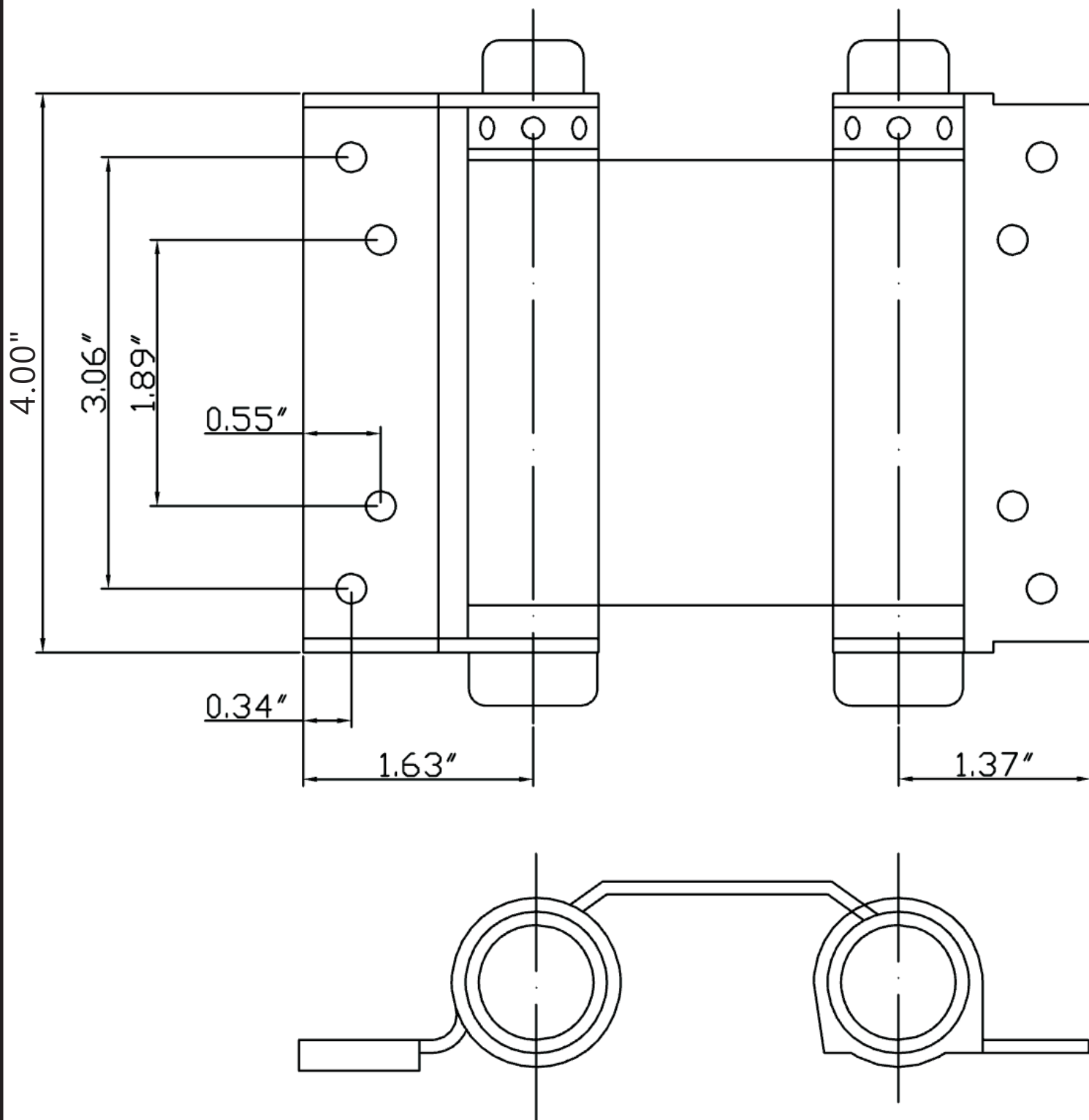
1. Rout out web of top rail as shown for side channel spacers as required to be furnished by door manufacturer.
2. Rout inside face of top rail as shown for arm.
3. Offset pivots or butts by others.

INSTALLATION:

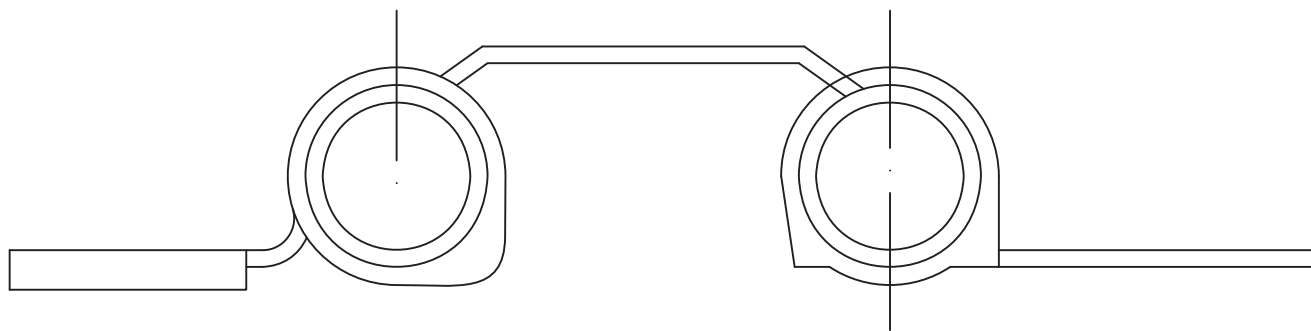
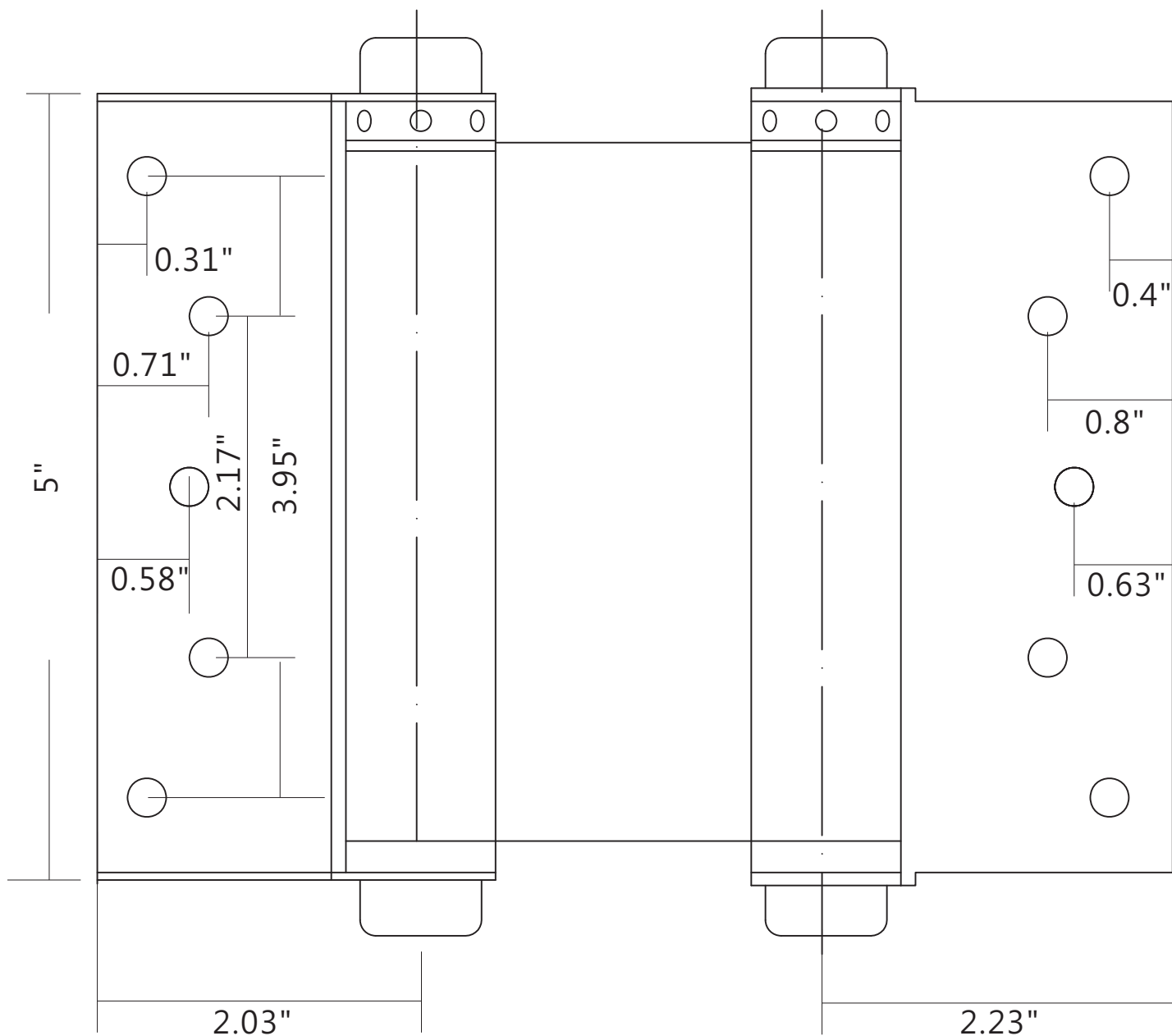
1. Install closer in prepared header.
2. Install slide channel in top rail.
3. Insert slide in slide channel with end marked 90° toward hinge edge of door if 90° backstop closer is used or with end marked 105° toward hinge edge of door if 105° backstop closer is used.
4. Place arm on spindle and tighten 1/4-20 socket head screw securely. Rotate arm from center as if door were open. Place hole in arm over pin in the slide and secure with the 'C' clip.



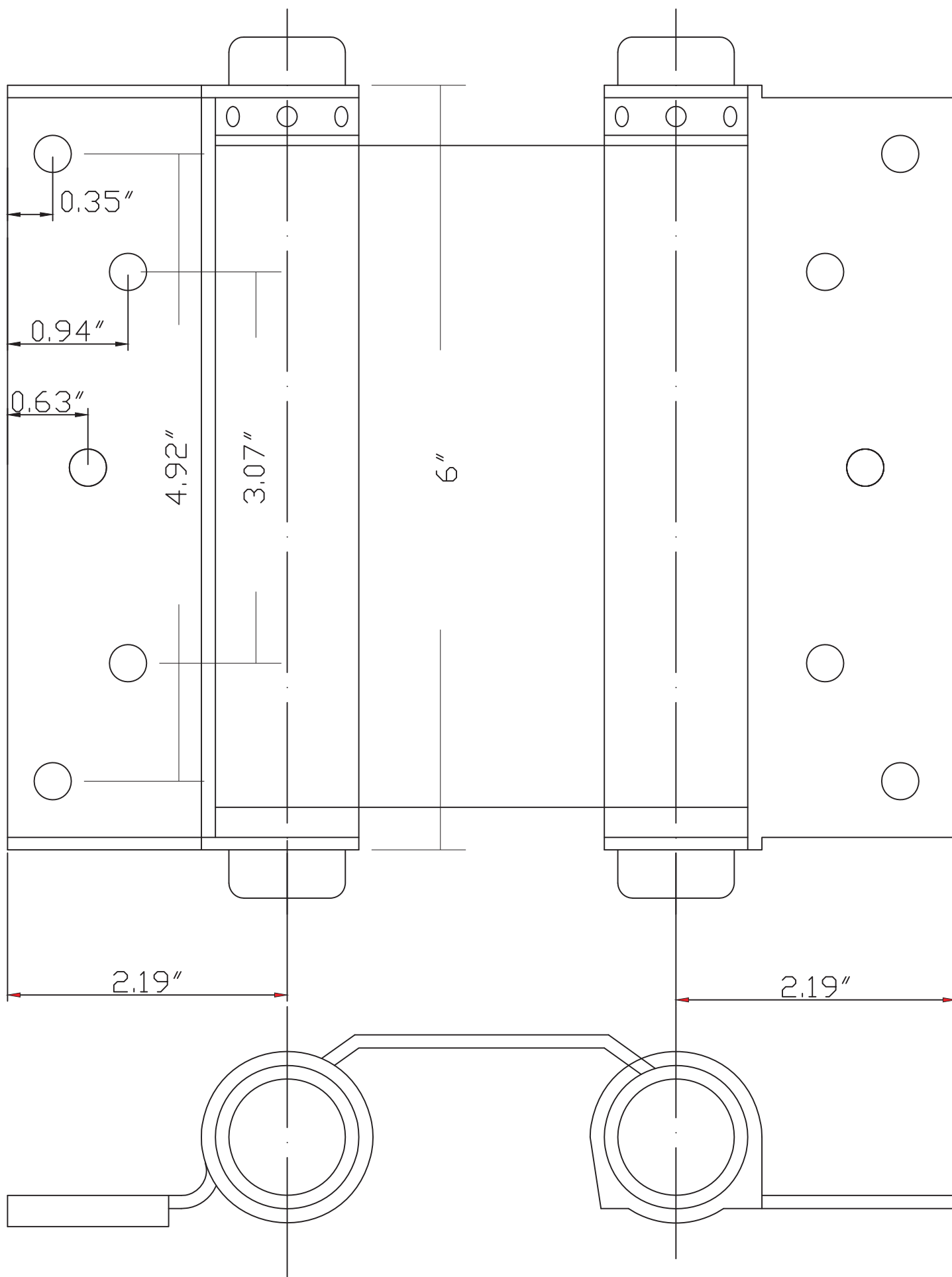
ITEM NO:	DESCRIPTION:		SCALE:
070 SERIES	Double Action Spring Hinge 3"		1:1
ANSI:	UNIT:	VERSION:	BY:
A156.1	inches	ver 1.0	C.C Chen



ITEM NO:	DESCRIPTION:		SCALE:
070 SERIES	Double Action Spring Hinge 4"		1:1
ANSI:	UNIT:	VERSION:	BY:
A156.1	inches	ver 1.0	C.C Chen



ITEM NO:	DESCRIPTION:		SCALE:
070 SERIES	Double Action Spring Hinge 5"		1:1
ANSI:	UNIT:	VERSION:	BY:
A156.1	inches	ver 1.0	C.C Chen

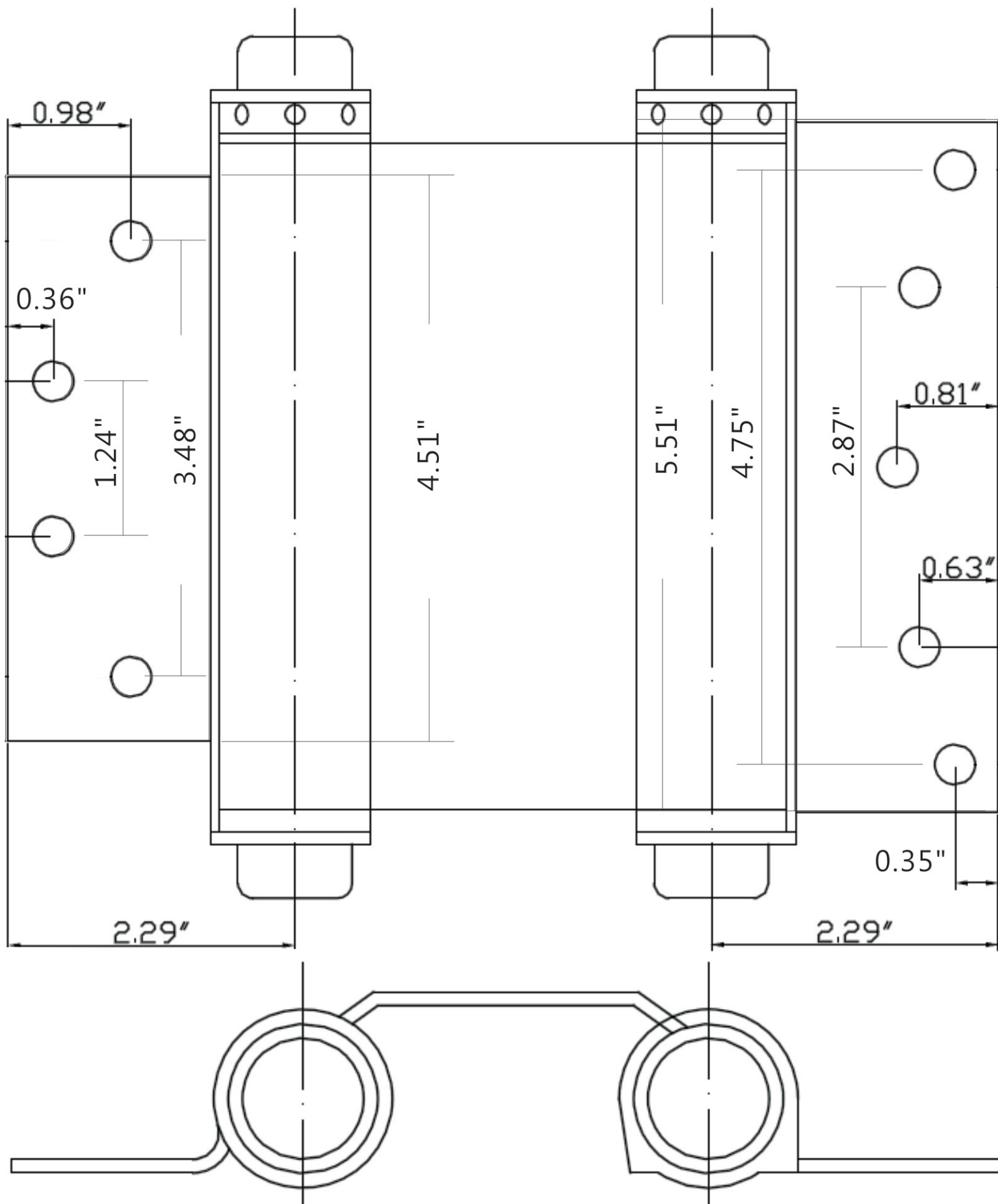


Since 1899 Great Value in Quality Hardware

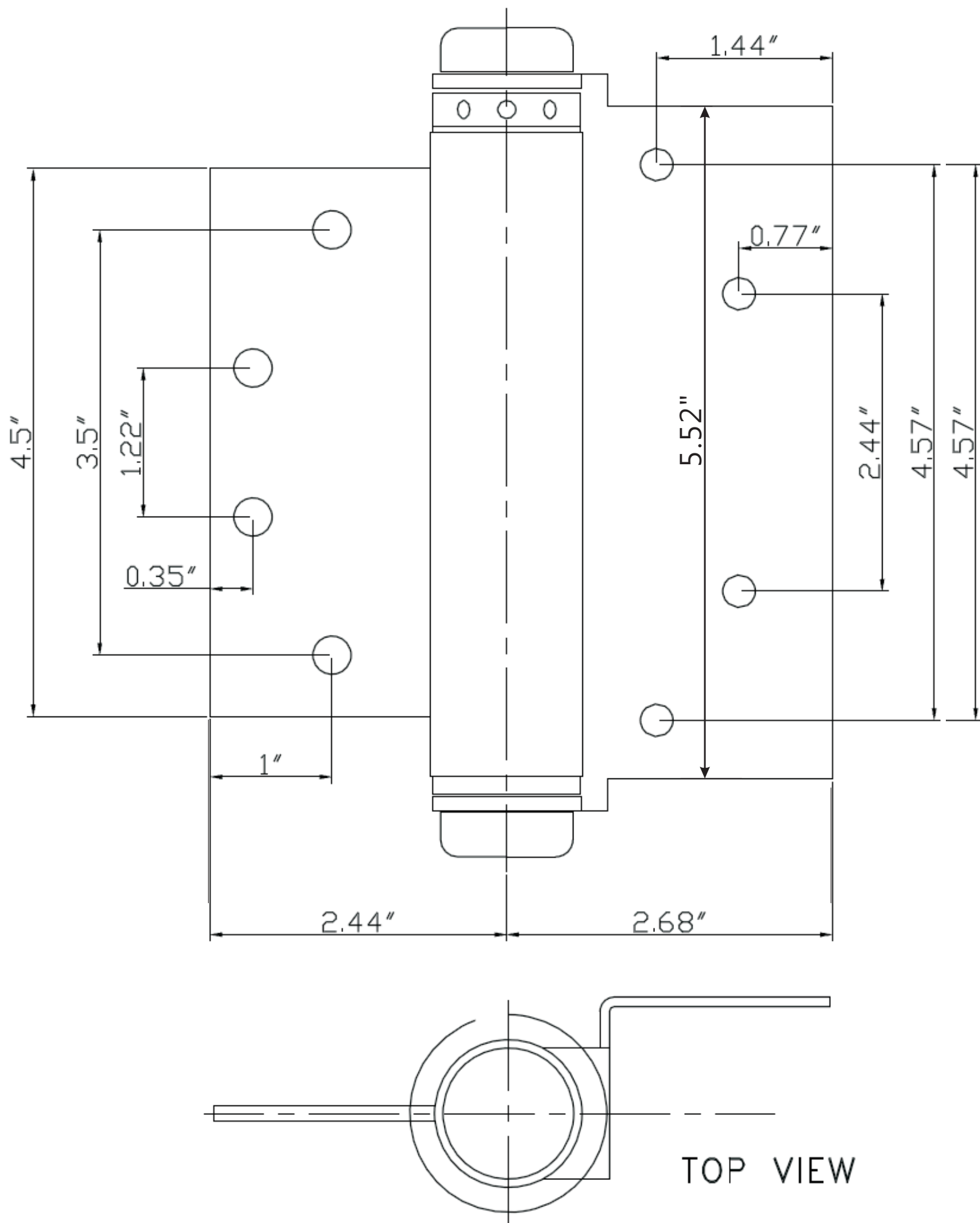
Parker Hardware mfg corp

PARKER DRIVE PO Box 9882, Englewood NJ 07631-1127 • NU (201) 569 1600
In NYC (212) 925-6300 • FAX (201) 569 1082 •
Website: www.sparker.com
Email: hardware@sparker.com

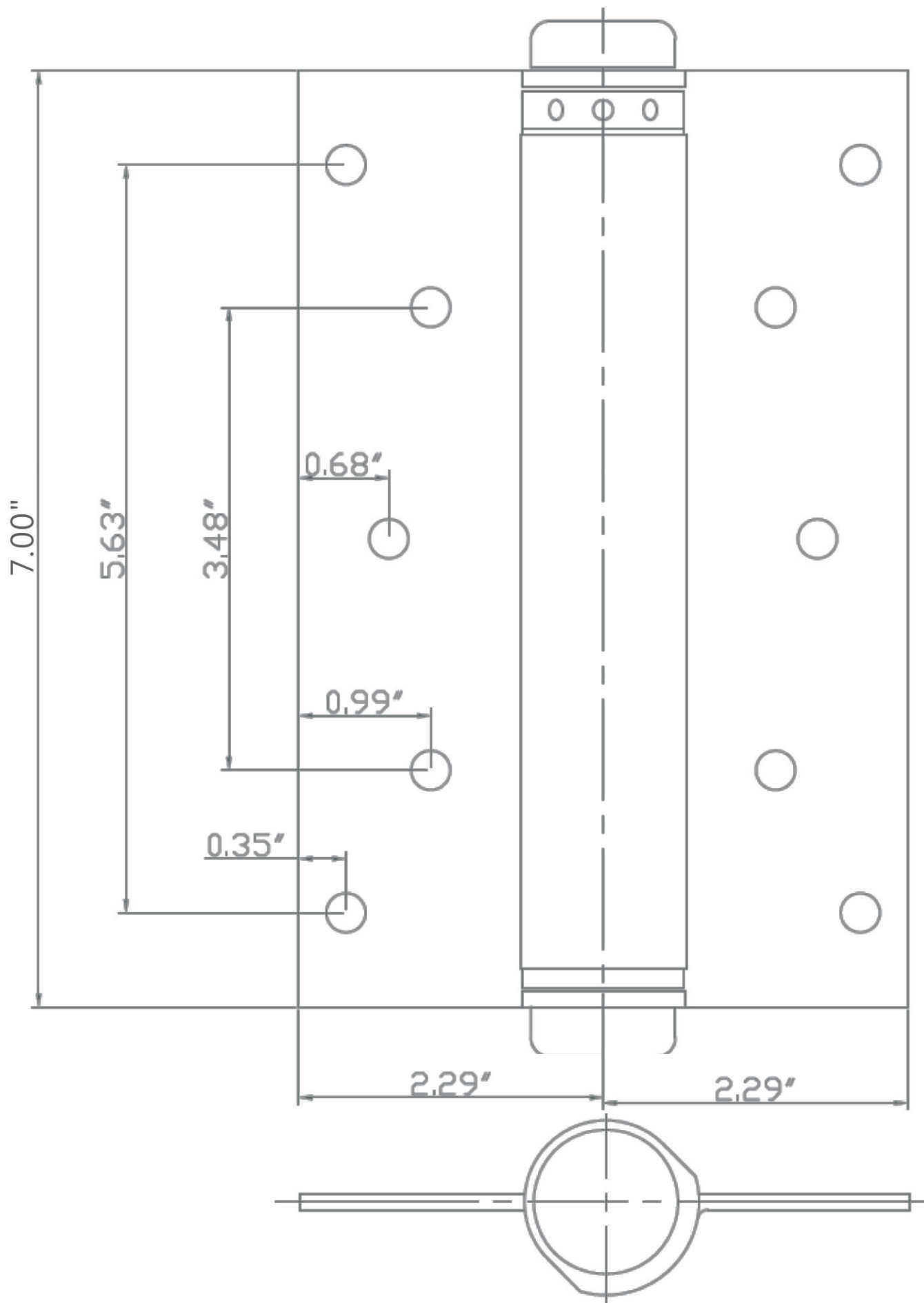
ITEM NO:		DESCRIPTION:		SCALE:
070 SERIES		Double Action Spring Hinge 6"		1:1
ANSI:	UNIT:	VERSION:		BY:
A156.1	inches	ver 1.0		C.C Chen



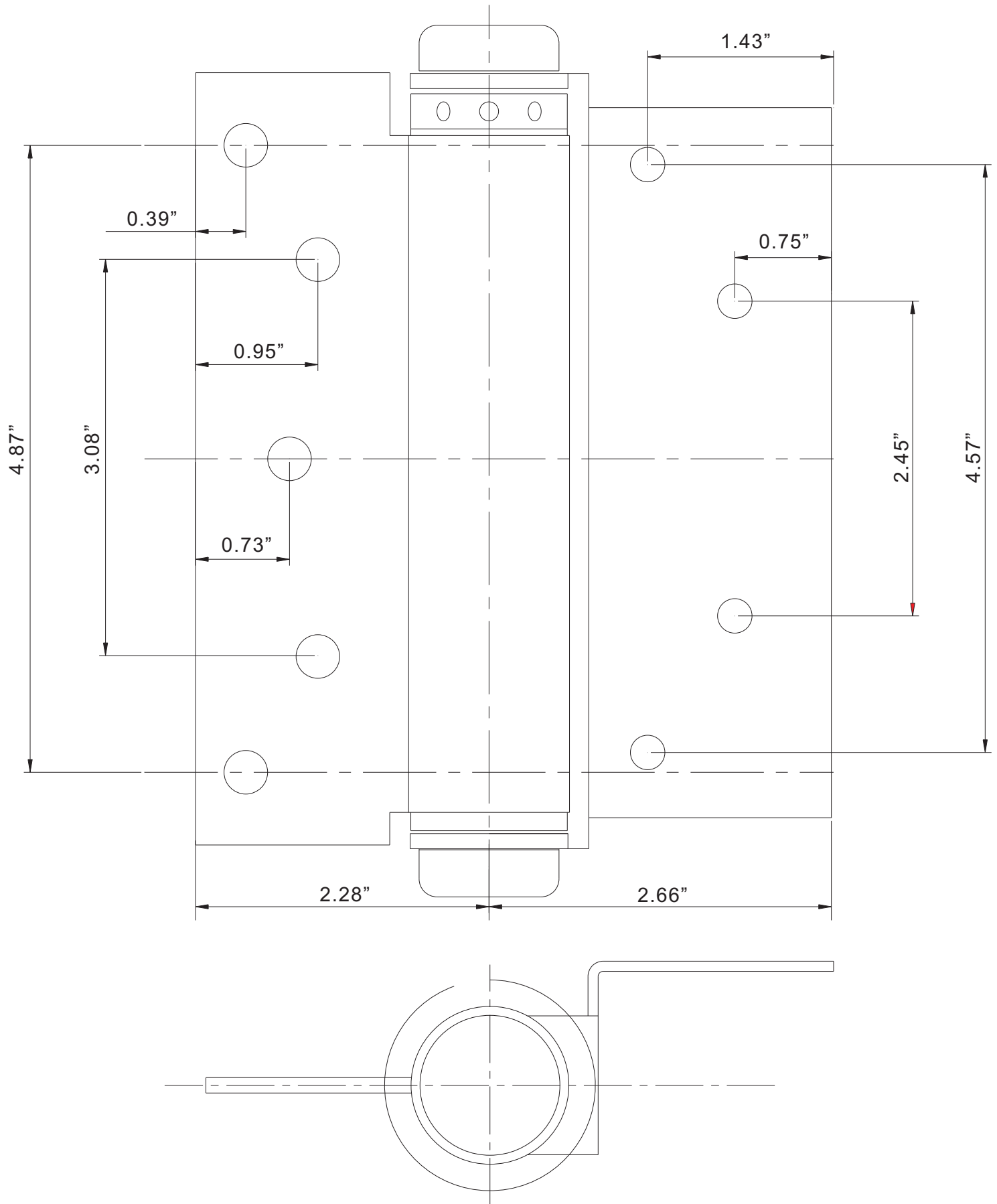
ITEM NO:	DESCRIPTION:		SCALE:
070 PC645	Double Action Spring Hinge 6" x 4-1/2"		1:1
ANSI:	UNIT:	VERSION:	BY:
A156.1	inches	ver 1.0	C.C Chen



ITEM NO:	DESCRIPTION:		SCALE:
2019	Half Surface Template 4-1/2"		1:1
ANSI:	UNIT:	VERSION:	BY:
A156.1	inches	ver 1.0	C.C Chen



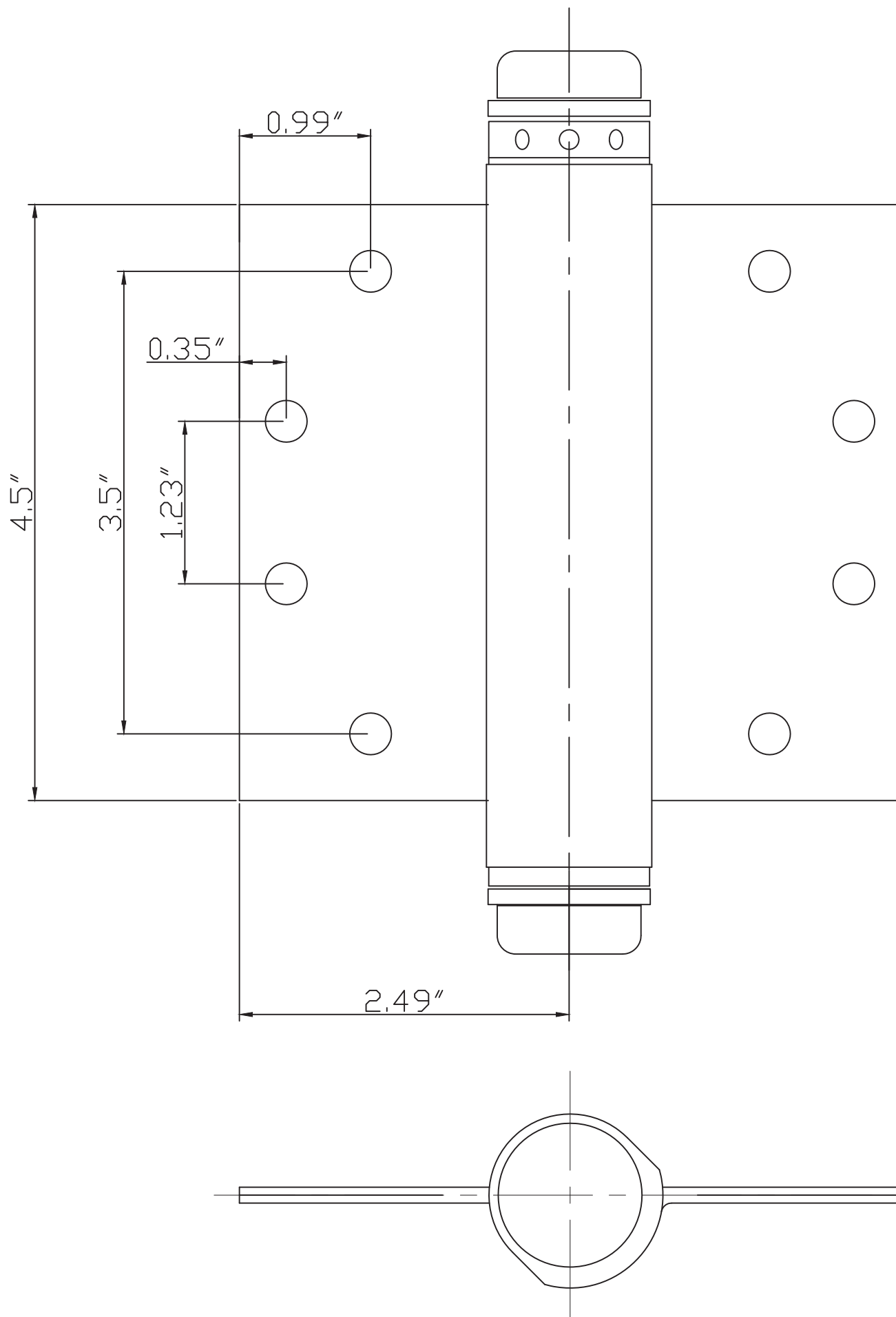
ITEM NO:	DESCRIPTION:		SCALE:
2029TH7	Single Action Spring Non-template Hinge 7"		1:1
ANSI:	UNIT:	VERSION:	BY:
A156.1	inches	ver 1.0	C.C Chen



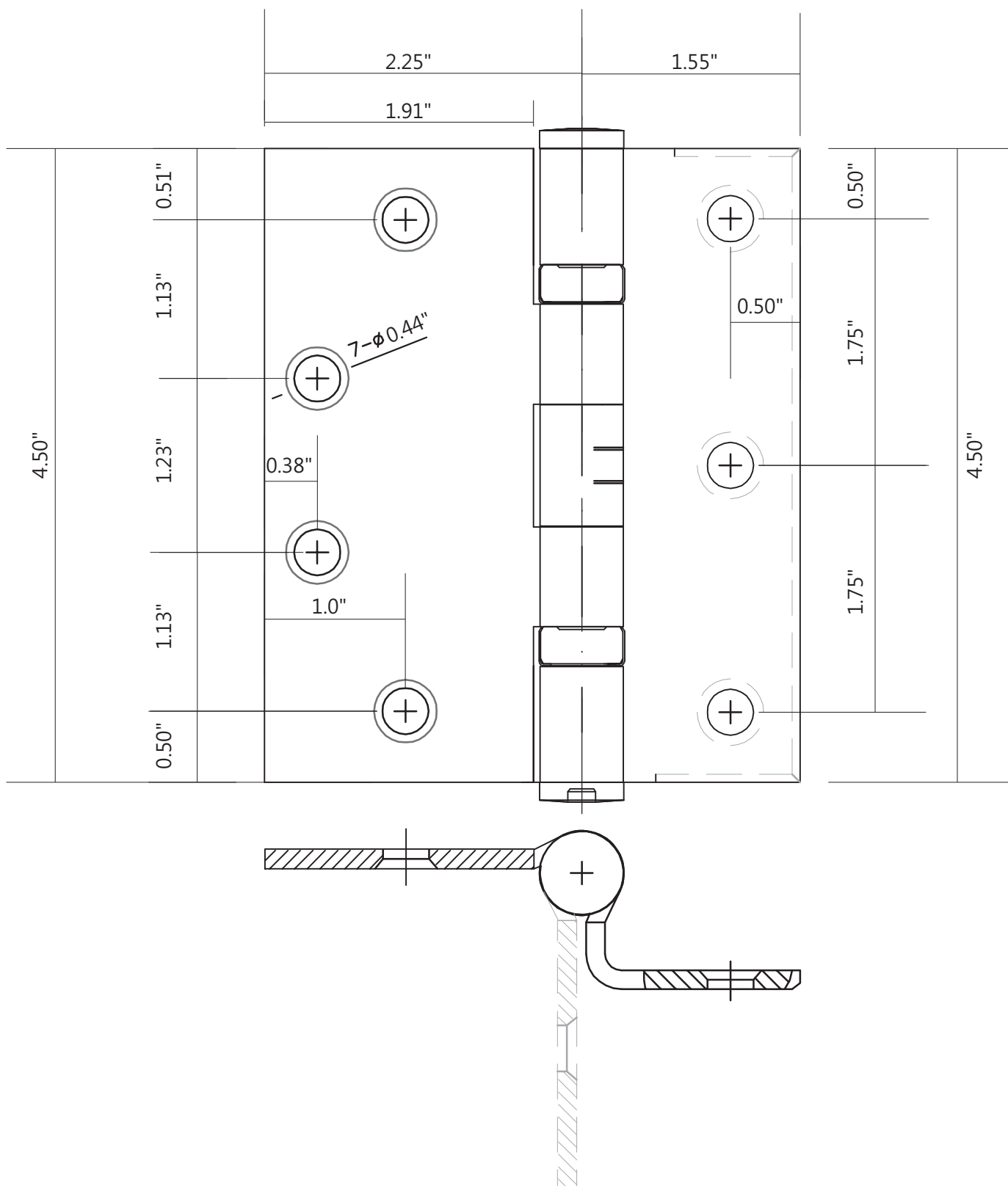
ITEM NO:	DESCRIPTION:		SCALE:
20206	Half Surface Template 6"		1:1
ANSI:	UNIT:	VERSION:	BY:
A156.1	inches	ver 1.1	C.C Chen



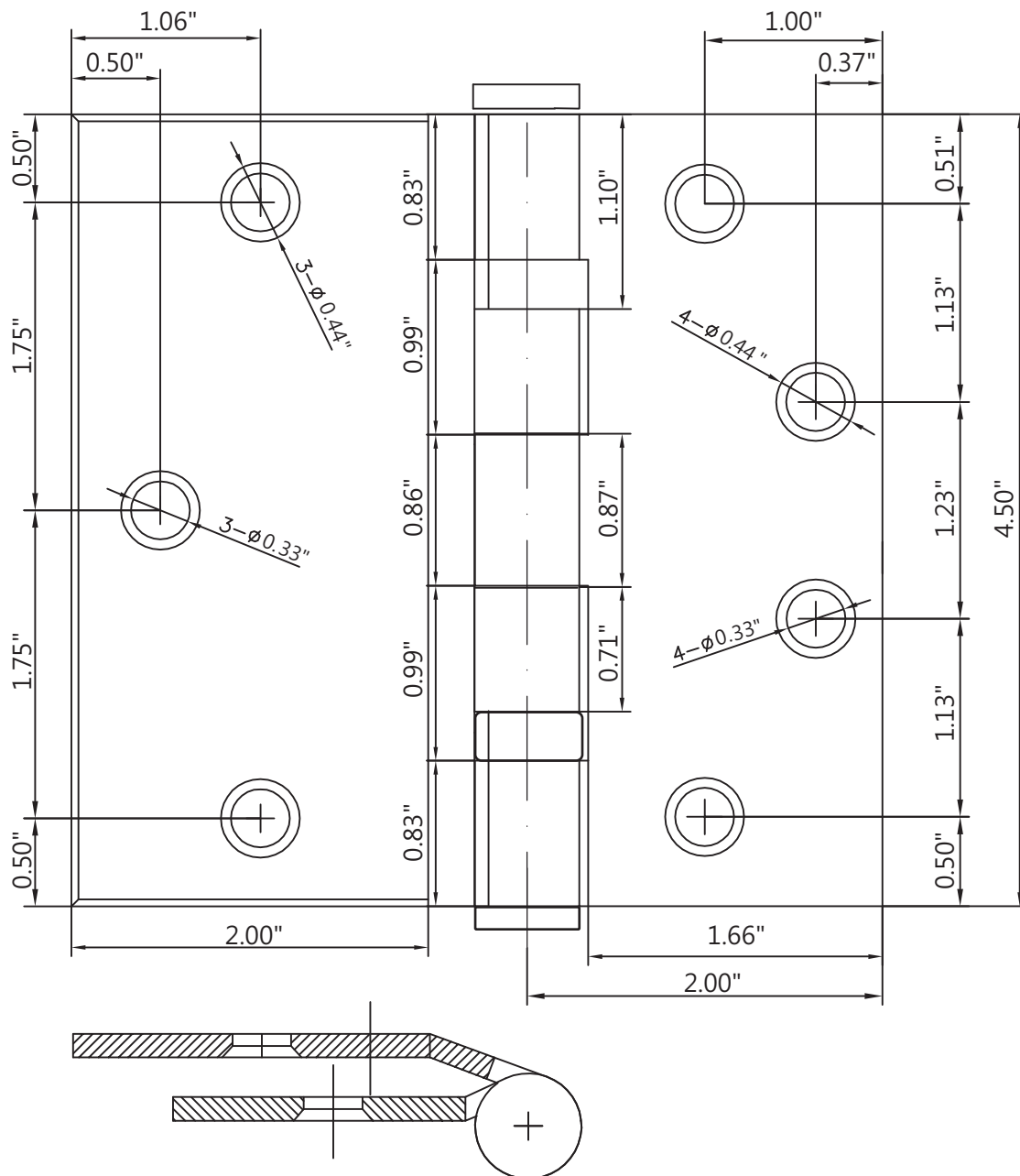
ITEM NO:	DESCRIPTION:		SCALE:
20207	Half Surface Template 7"		1:1
ANSI:	UNIT:	VERSION:	BY:
A156.1	inches	ver 1.0	C.C Chen



ITEM NO:	DESCRIPTION:		SCALE:
20284H	Single Action Spring Template Hinge 4-1/2"		1:1
ANSI:	UNIT:	VERSION:	BY:
A156.1	inches	ver 1.0	C.C Chen

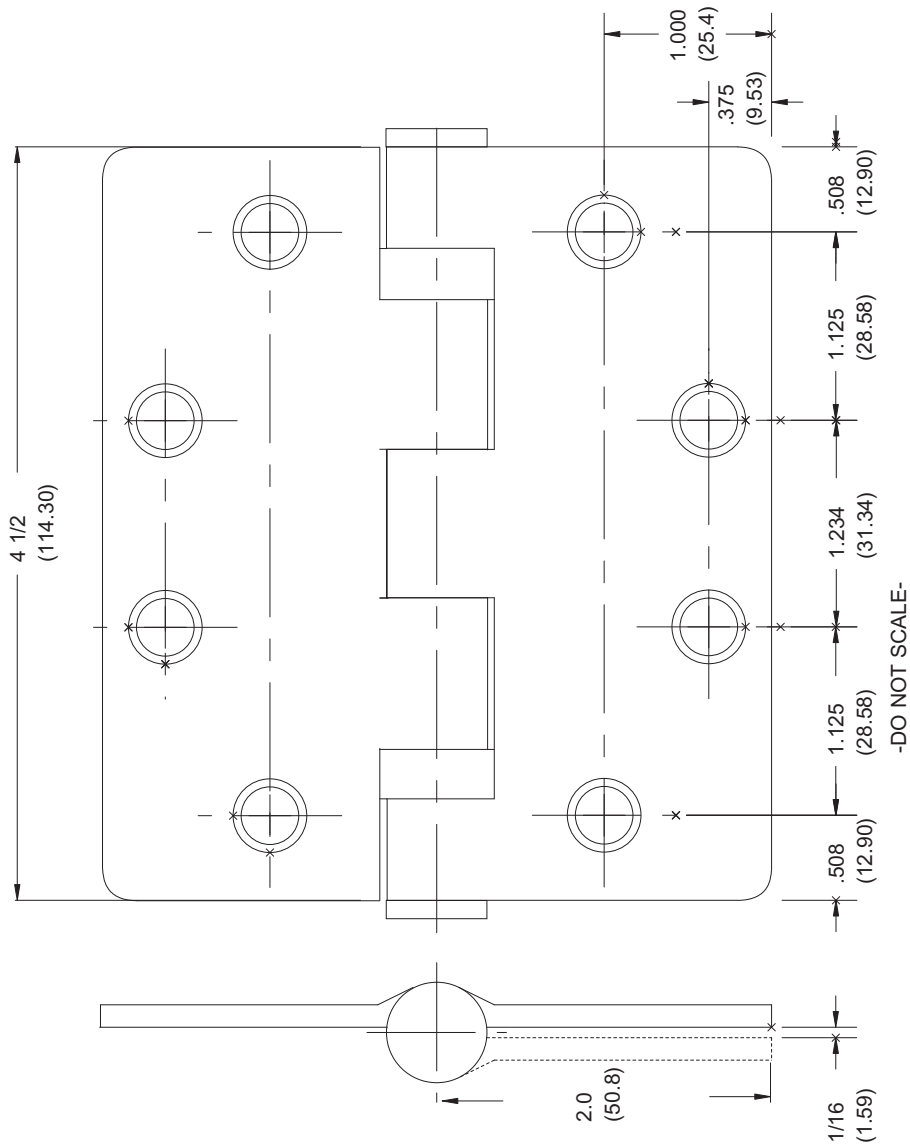


ITEM NO:	DESCRIPTION:		SCALE:
B1130	Ball Bearing Half Mortise Hinge 4-1/2"		1:1
ANSI:	UNIT:	VERSION:	BY:
A156.1	inches	ver 1.0	C.C Chen



ITEM NO:	DESCRIPTION:		SCALE:
B1138	Ball Bearing Half Surface Hinge 4-1/2"		1:1
ANSI:	UNIT:	VERSION:	BY:
A156.1	inches	ver 1.0	C.C Chen

SIZES: 4 1/2 x 4
(114.30x101.60)

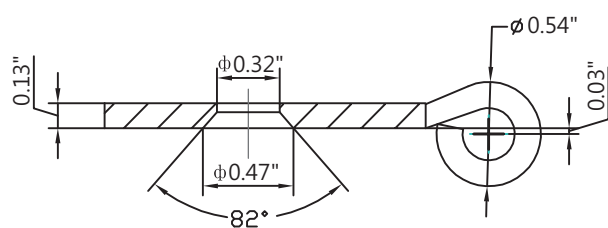


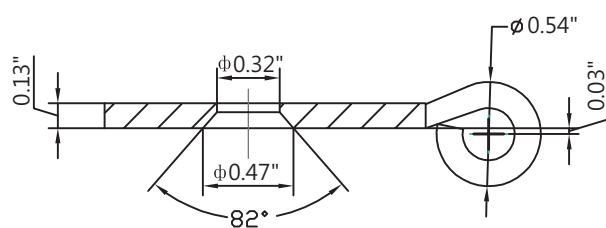
DISTANCE FROM EDGE OF LEAF TO SWAGE LINE
4 1/2 x 4 (114.30x101.60)
1 5/8 (41.28)

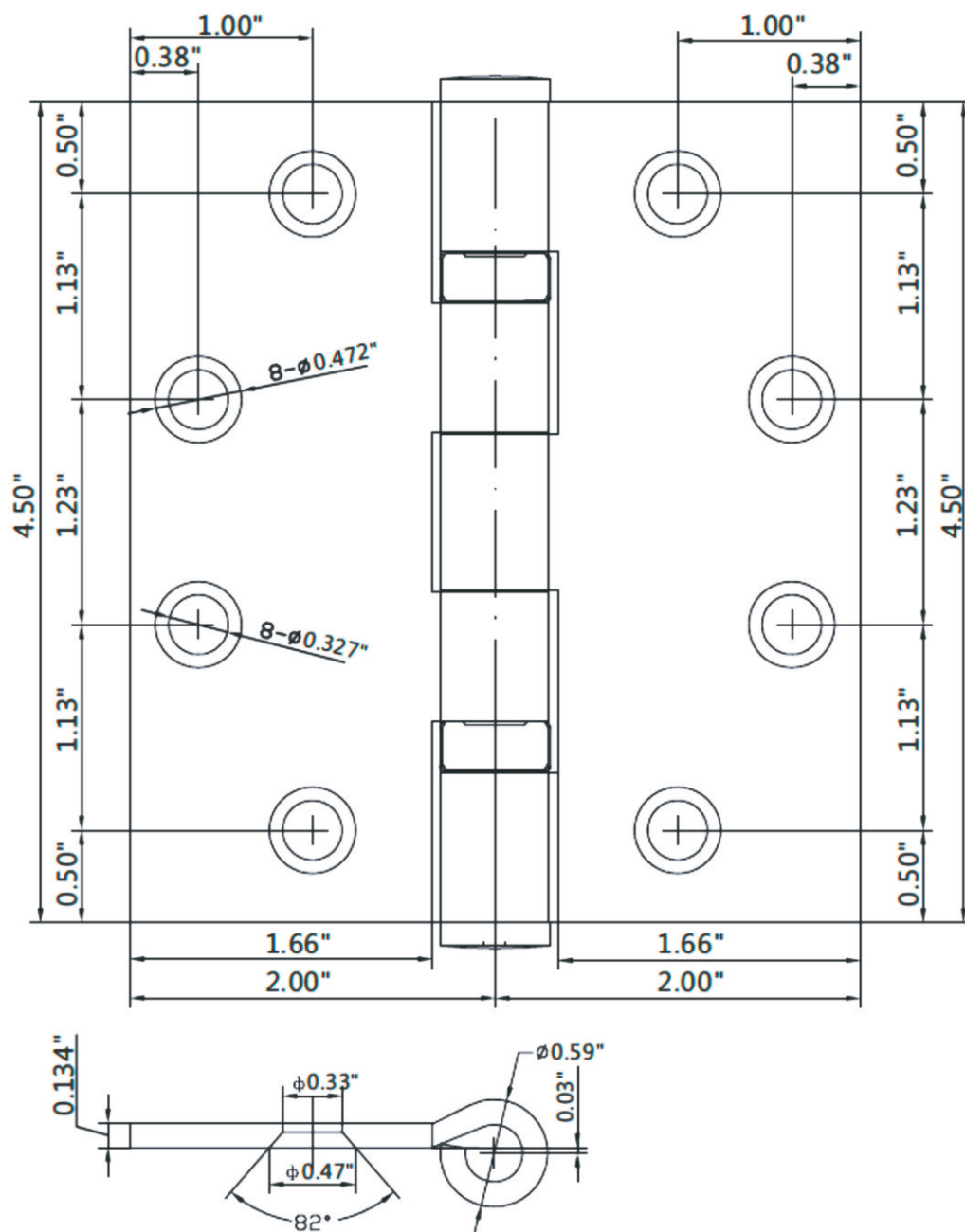
ALL NON-BRACKETED DIMENSIONS ARE IN INCHES, ALL BRACKETED DIMENSIONS ARE IN MILLIMETERS.

Machine Screw Size- 12-24 x 1/2" F.H.

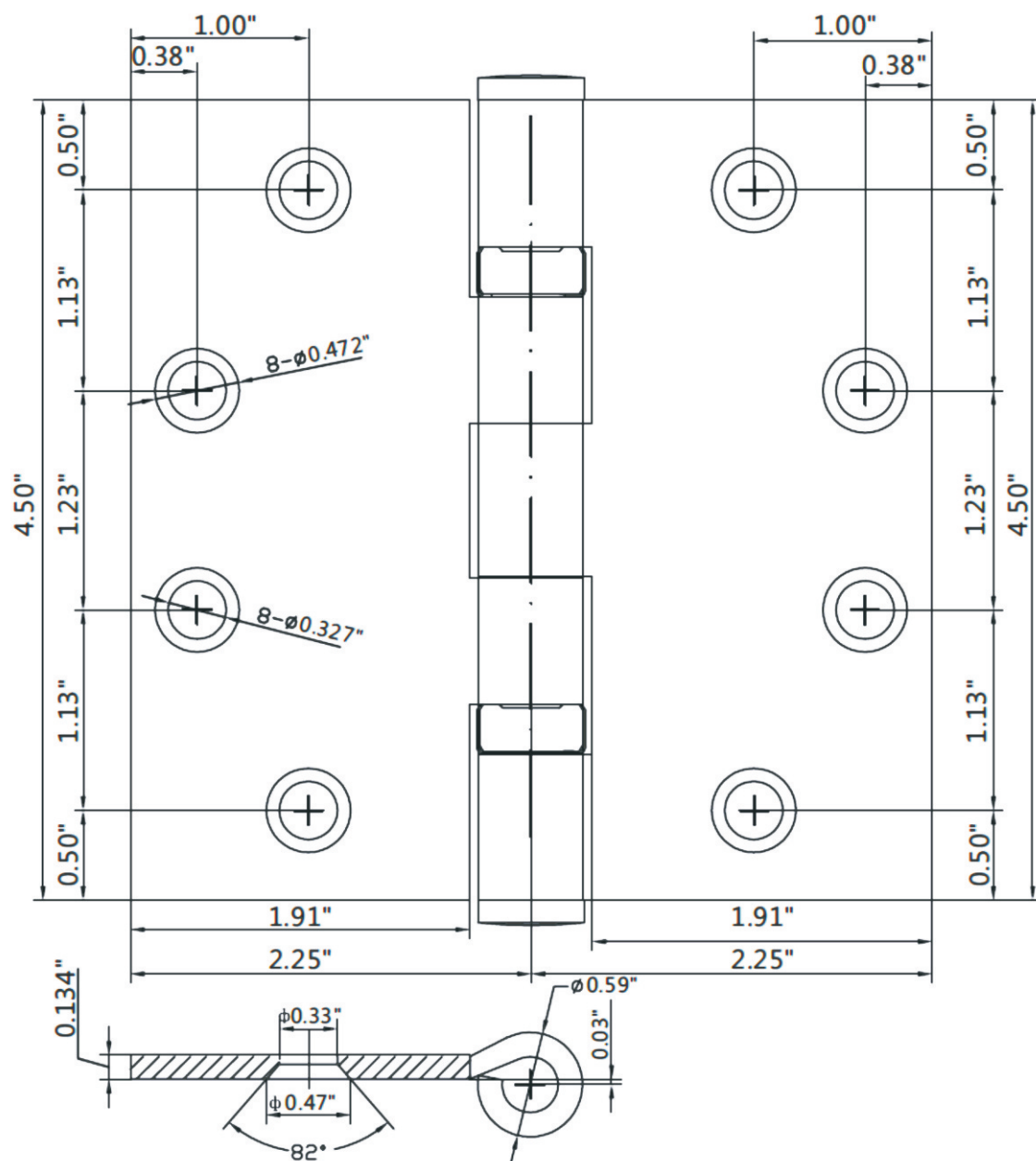
Wood Screw Size- No. 12 x 1 1/4" F.H.



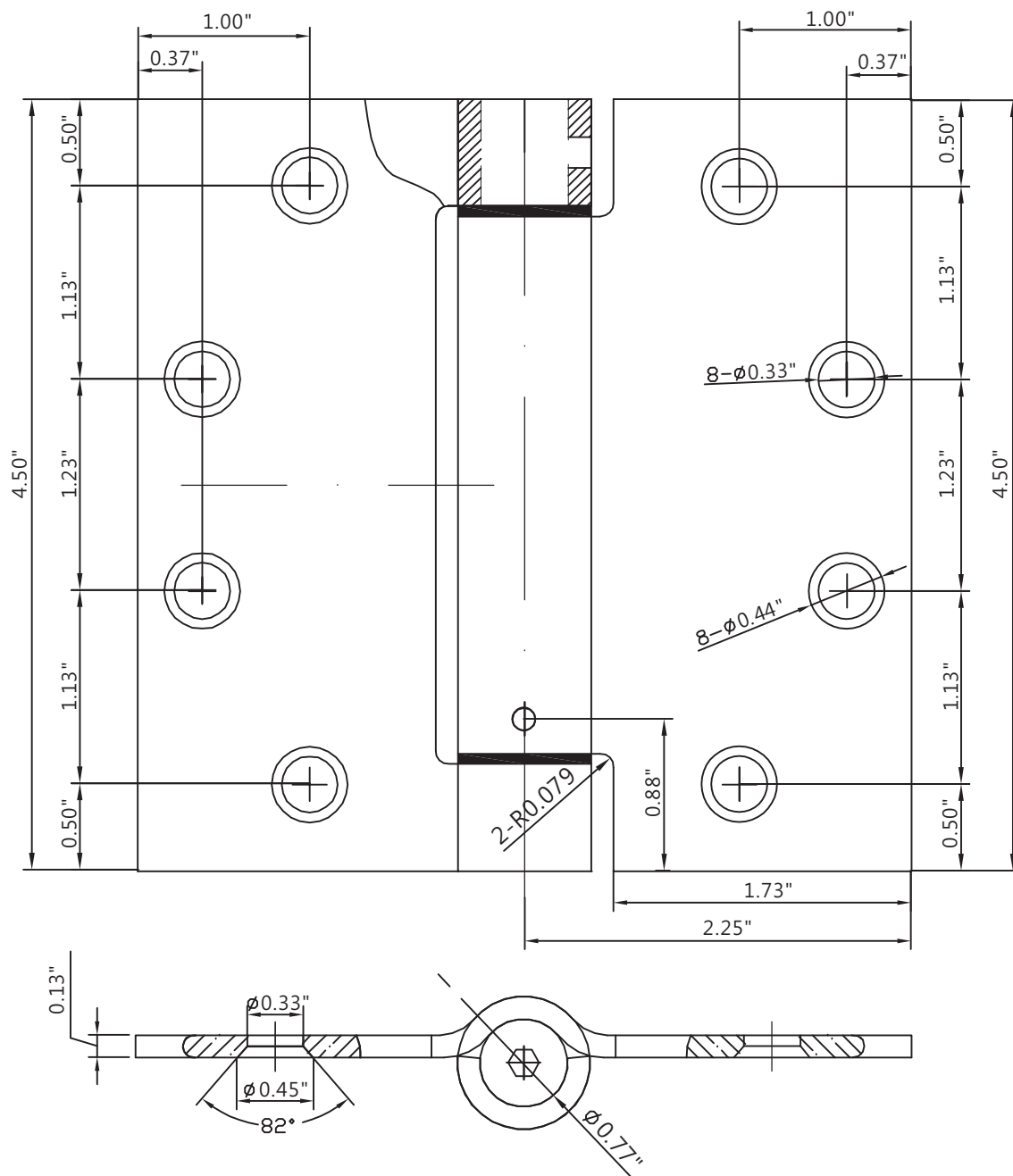




ITEM NO:	DESCRIPTION:		SCALE:
B1279	Ball Bearing Template Hinge 4-1/2" x 4"		1:1
ANSI:	UNIT:	VERSION:	BY:
A156.1	inches	ver 1.0	C.C Chen



ITEM NO:	DESCRIPTION:		SCALE:
B1279	Ball Bearing Template Hinge 4-1/2" x 4-1/2"		1:1
ANSI:	UNIT:	VERSION:	BY:
A156.1	inches	ver 1.0	C.C Chen

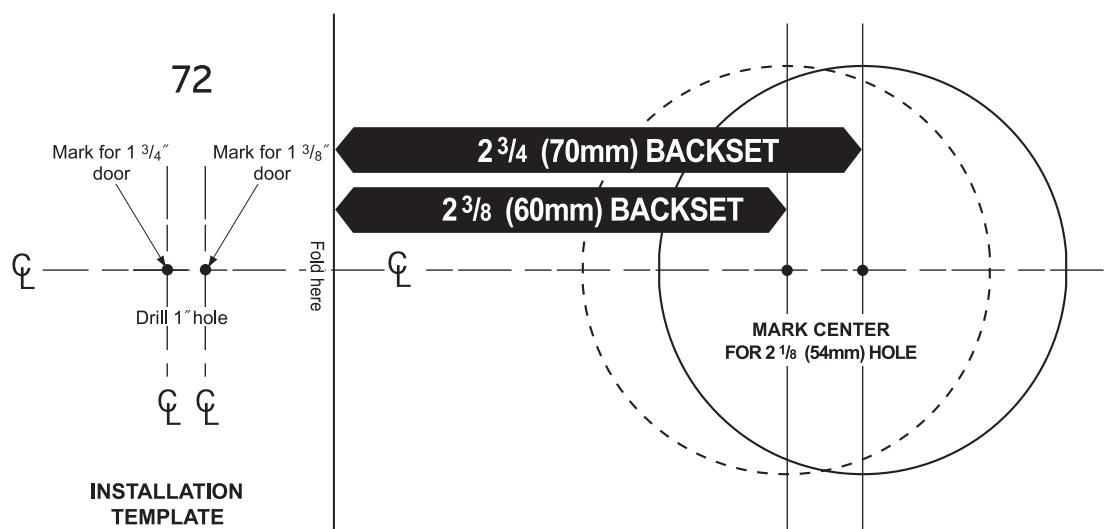


Since 1899 Great Value in Quality Hardware

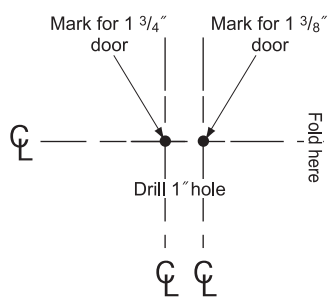
Parker Hardware mfg corp

PARKER DRIVE PO Box 9882, Englewood NJ 07631-1127 • NU (201) 569 1600
In NYC: (212) 925-6300 • FAX (201) 569 1082 •
Website: www.sparker.com
Email: hardware@sparker.com

ITEM NO:	DESCRIPTION:		SCALE:
UL1278	UL1278 Spring Hinges 4-1/2" x 4-1/2"		1:1
ANSI:	UNIT:	VERSION:	BY:
A156.1	inches	ver 1.0	C.C Chen



82 / 92

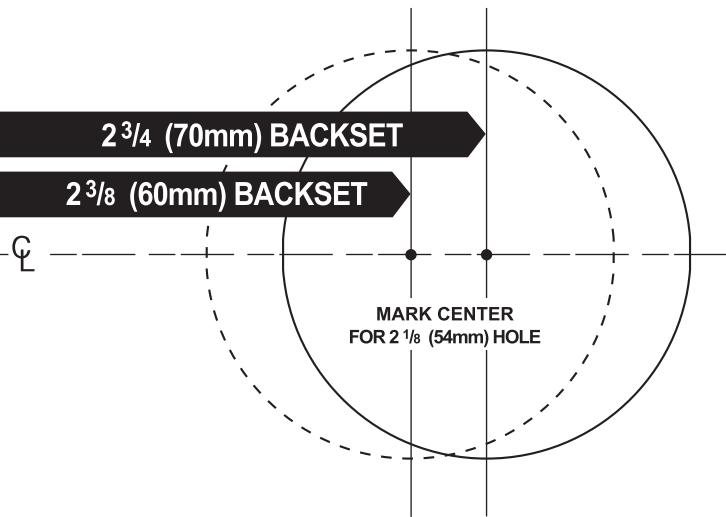


INSTALLATION
TEMPLATE

Fold here

2 3/4 (70mm) BACKSET

2 3/8 (60mm) BACKSET



Mark center of door
thickness for 1" (25mm) hole

8161

℄

℄

INSTALLATION
TEMPLATE

Detach here

High
Bevel

Low
Bevel

Flat on Bevel

℄

NOTE

Do not make the holes
for locks without outside
through-bolt type

2 3/4" (70mm) BACKSET

2 3/8" (60mm) BACKSET

Mark center for
5/16" (8mm) hole

Notch for
metal door only

MARK CENTER
FOR 2 1/8" (54mm) HOLE

IMPORTANT
For high bevel, place
outside line at edge of door.
For flat doors, place center
line at edge of door.
For low bevel, place inside
line at edge of door.

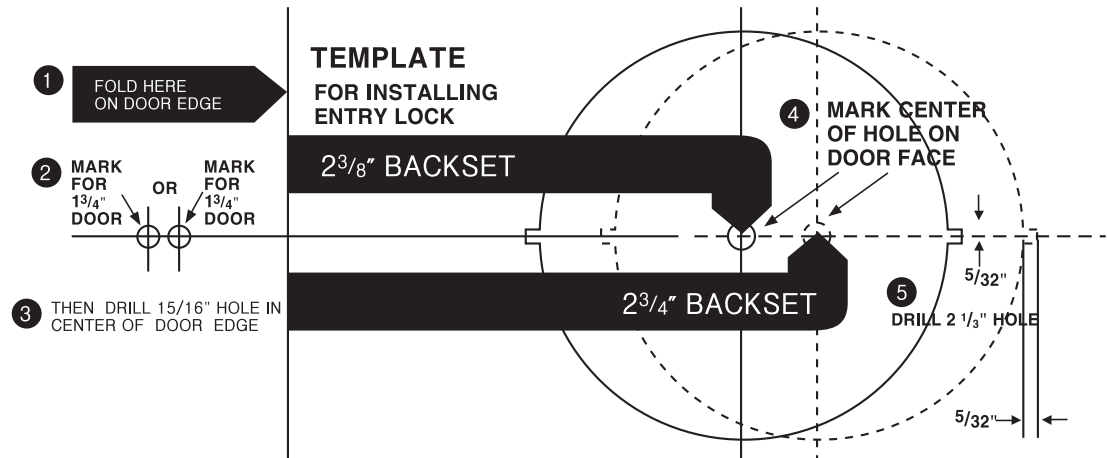
Mark center for
5/16" (8mm) hole

5/32"

2 3/4"

5/32"

B26



HEAVY DUTY BORED LOCKSET

IMPORTANT
FOLD HERE ON
HIGH EDGE OF
BEVELED DOOR

BORE $2\frac{1}{8}$ "
HOLE THRU
DOOR
FIRST

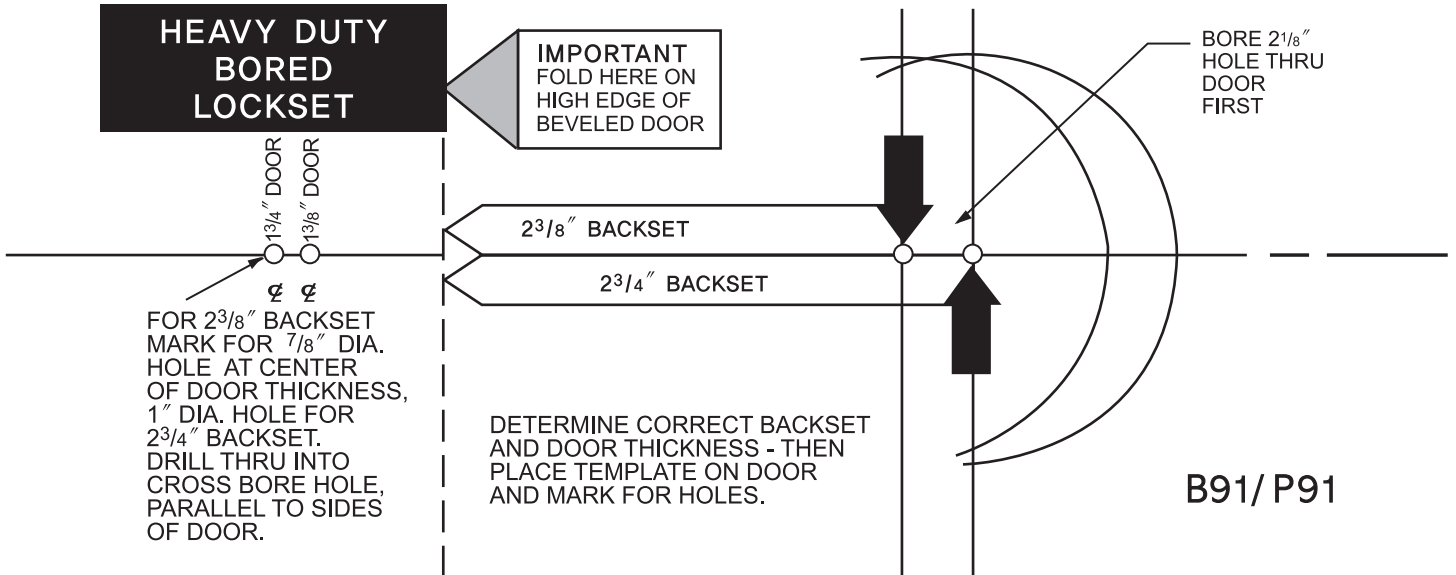
$2\frac{3}{8}$ " BACKSET

$2\frac{3}{4}$ " BACKSET

FOR $2\frac{3}{8}$ " BACKSET
MARK FOR $\frac{7}{8}$ " DIA.
HOLE AT CENTER
OF DOOR THICKNESS,
1" DIA. HOLE FOR
 $2\frac{3}{4}$ " BACKSET.
DRILL THRU INTO
CROSS BORE HOLE,
PARALLEL TO SIDES
OF DOOR.

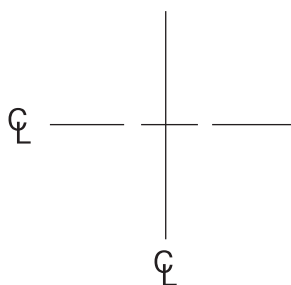
DETERMINE CORRECT BACKSET
AND DOOR THICKNESS - THEN
PLACE TEMPLATE ON DOOR
AND MARK FOR HOLES.

B91/ P91

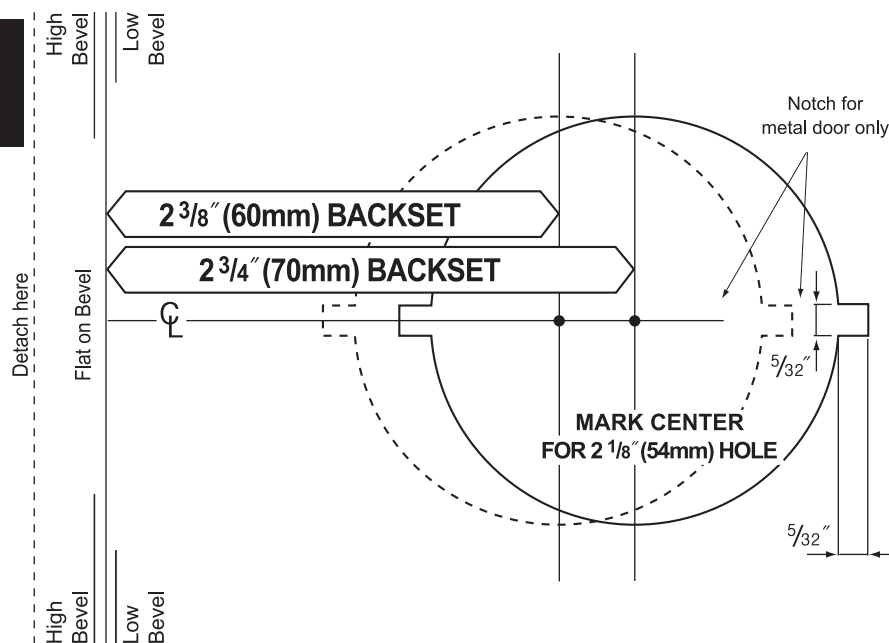


HEAVY DUTY BORED LOCKSET

B8161



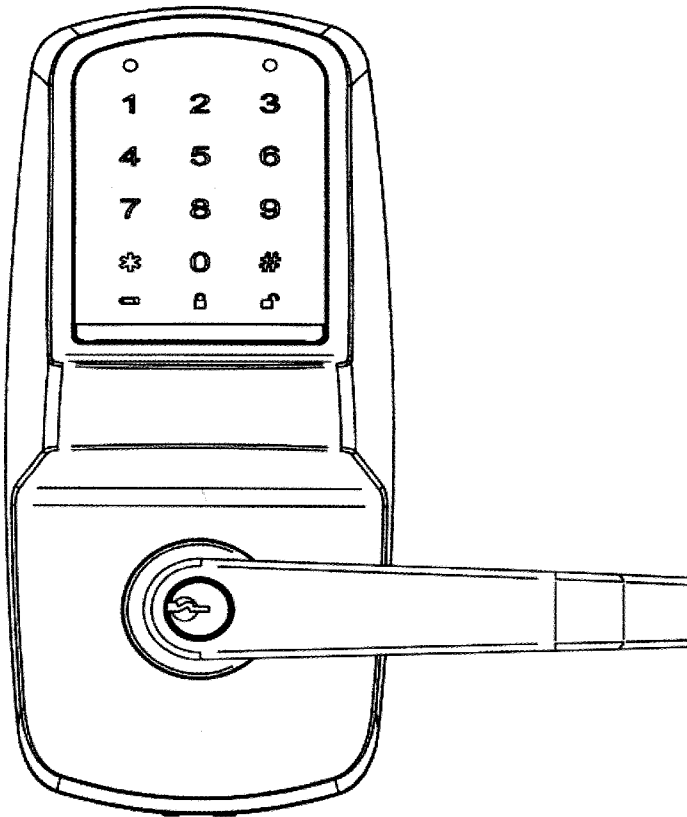
Mark center of
door thickness
for 1" dia hole



SMART PLUS

Touchpad Access Cylindrical Lock

Installation and Programming Instructions



Please read these instructions carefully to prevent missing important Steps.

Please Note: Improper installations may result in damage to the lock and void the factory warranty.

INSTALLATION GUIDE

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Warnings	2
Introduction	2
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Parts Breakdown	3~4
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Installation Instructions	
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Prepare Lock for Installation	7~8
Lock Installation	9~10
Test Lock Operation	11
Hardware Troubleshooting	11

WARNINGS

Warning: *Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.*

- Change your PIN code regularly to ensure the security of your PIN code.
- Keep lock away from wet environments, including wet hands and direct contact with liquids.
- Do not exert excessive force or use sharp instruments to press the buttons on the lock.
- Ensure that the door is properly locked when going outside.
- Ensure the batteries have been installed according to the correct polarity.
- When the battery life expiration warning sounds, replace all batteries with new batteries within one week.
- Do not mix old batteries with new batteries.
- Do not hang on the lock or pull on it with excessive force.
- Use a soft, dry cloth to clean the lock and avoid cleaning with water, benzene or alcohol, etc.

INTRODUCTION

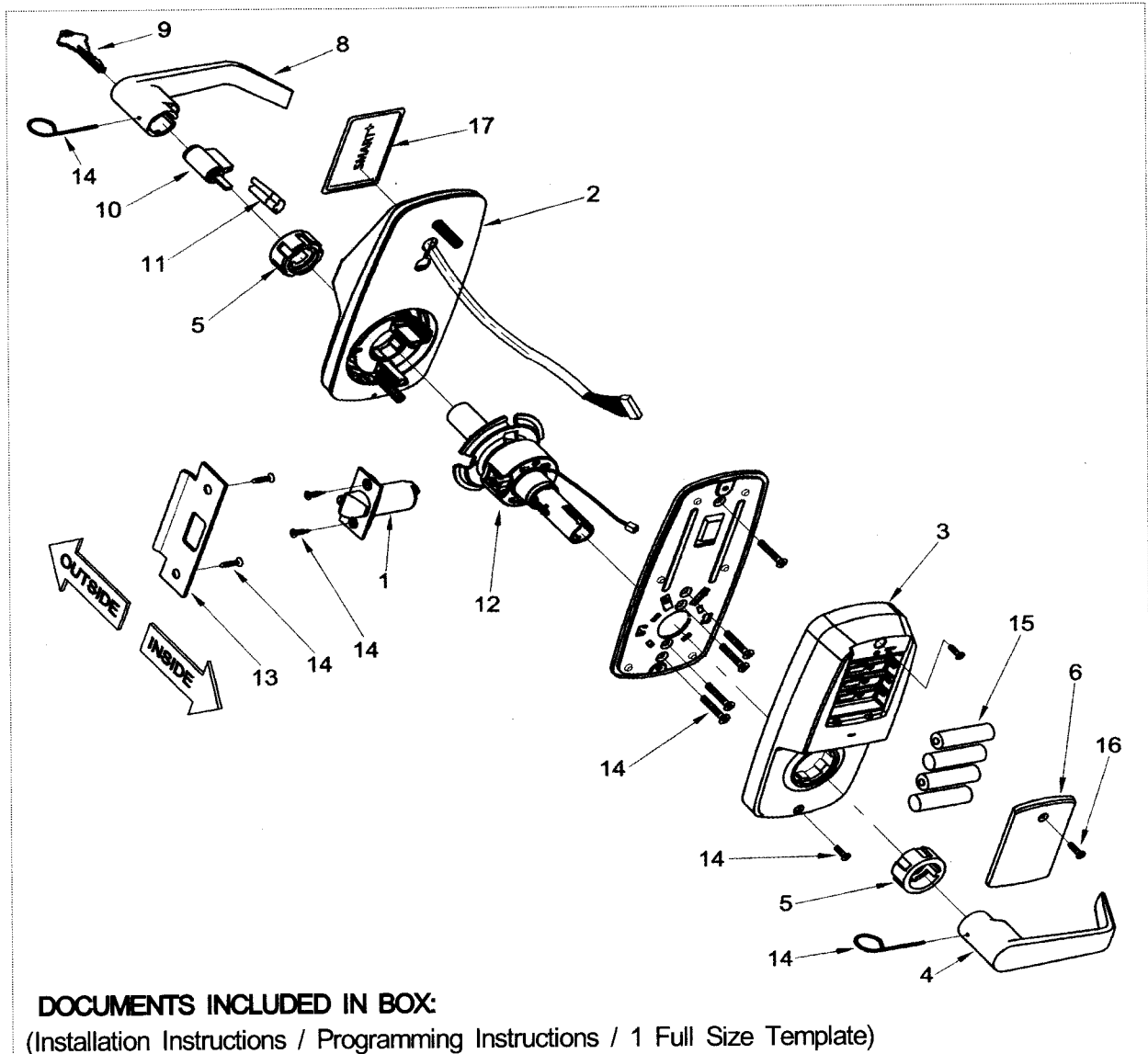
Congratulations on the purchase of your Touchpad Access Cylindrical Lock! Your lock combines a touch-sensitive number display pad and a robust cylindrical lock. You can program up to 1,000 users to open the lock with unique PIN codes and registered RF card. This product is engineered for quick & easy installation and fits into the standard ANSI/BHMA A156.115 cylindrical locks with lever door prep with additional two (1" and 3/8") hole and 11 screws including latchbolt and strike. This product is operated by four (4) "AA" alkaline batteries.

SPECIFICATIONS

- Latch brass - 1/2"(13mm) throw standard
- Deadlocking latch
- Outside lever controlled by touchpad, or key retracts latch
- Inside lever retracts latch
- Locks furnished for 1-3/8"(35mm) to 2"(51mm) doors.
- U.L. Listed

PARTS BREAKDOWN

Confirming the Box Contents The following items should be included in the box:



DOCUMENTS INCLUDED IN BOX:

(Installation Instructions / Programming Instructions / 1 Full Size Template)

PARTS BREAKDOWN (Continued)

ITEM NO.	DESCRIPTION	QTY.
1	Latch (2-3/4"(70mm) Backset (Standard))	1
2	Outside Assembly	1
3	Inside Escutcheon	1
4	Inside Lever	1
5	Spacer Bushing	2
6	Battery Cover	1
7	Mounting Plate Assembly	1
8	Outside Lever	1
9	Key (Provided with Cylinder)	2
10	Cylinder	1
11	Cylinder Retainer	2
12	Lock Body	1
13	Strike	1
14	Screw Pack ▪ (2) 12-24x3/4"(19mm) FL HD Combination Screws for Strike ▪ (2) 8-32x3/4"(19mm) FL HD Combination Screws for Latch ▪ (5) 10-32x1-1/5"(30mm) FL HD Machine Screws for Mounting Plate ▪ (2) M5.0xP0.8-3/4"(19mm) FL HD Machine Screws for Inside Escutcheon ▪ (1) Lever removal tool	1
15	AA Alkaline Batteries	4
16	Battery Cover Screw	1
17	RF Card	2

TOOLS FOR INSTALLATION

Door Prep

- Pencil
- Center punch
- Hammer
- Wood chisel
- Drill with 3/8" or 1/2" chuck
- 2-1/8"(54mm) hole saw
- 1"(25mm) boring bit
- 3/8"(9.5mm) & 7/64"(2.5mm) drill bit

Lock Installation

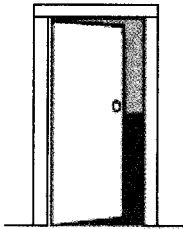
- #2 phillips screw driver
- Lever removal tool (supplied)

INSTALLATION INSTRUCTIONS

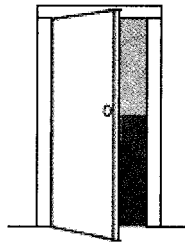
Step #1 Verify Hand and Bevel of Door

Stand on outside/locked side of the door when determining the door hand.

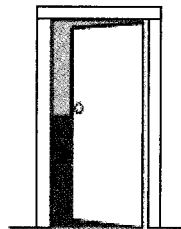
Note: *This lock is non-handed and the lever can be flipped around to the desirable hand.*



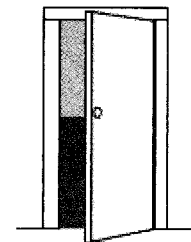
Left Hand
Hinges Left
Open Inward
"LH"



Left Hand
Reverse Bevel
Hinges Left
Open Outward
"LHRB"



Right Hand
Hinges Right
Open Inward
"RH"



Right Hand
Reverse Bevel
Hinges Right
Open Outward
"RHRB"

Step #2 Door & Frame Preparation

IMPORTANT: *The accuracy of the door preparation is critical for the proper functioning and security of this lever handle lock. Misalignment can cause premature wear and tear and a lessening of security.*

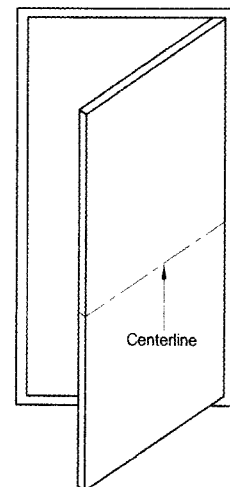
For uncut Doors and Frames

A. Mark Centerline

Draw a horizontal centerline for the lever (the centerline for the lock body hole) on the edge and on both sides of the door at the desired height above the finished floor.

Note 1: *The recommended height from the floor to the lock is 38"(97cm).*

Note 2: *If strike mortice already exist in frame, locate the horizontal centerline of the lock using strike mortice as reference.*

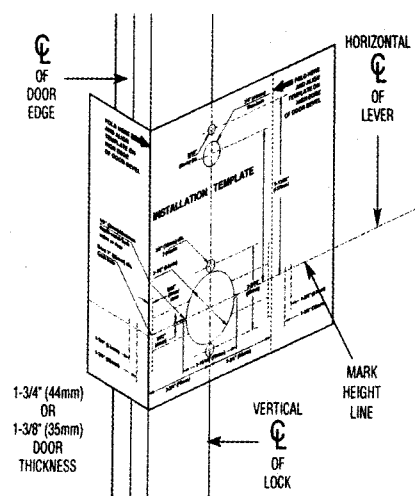


B. Position Template and Mark Drill Points

Be

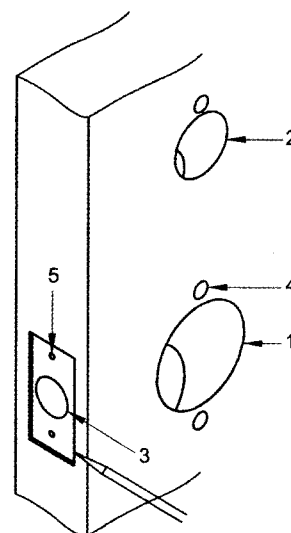
sure to verify backset before marking and drilling door.

1. Fold and Place template on high edge of door at the horizontal centerline.
2. Mark centers of holes at proper backset. For beveled and square edge doors, mark both sides of the door.



C. Drill Holes and Mortise for Latch face

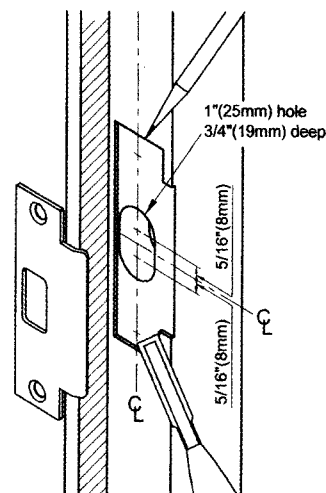
1. Drill 2-1/8"(54mm) diameter hole through the door. Cut notches as shown on template.
2. Drill 1"(25mm) diameter hole through the door according to template.
3. Drill 1"(25mm) diameter hole in edge of door. Mortise for latch front 5/32"(4mm) deep 1-1/8" (29mm) wide × 2-1/4"(57mm) high.
4. Drill three (3) 3/8"(9.5mm) diameter holes through door.
5. Drill the holes for the screws used to install the latch. 7/64"(2.5mm)



Note: To avoid splintering wood doors, drill holes from both sides of the door.

D. Prepare and Install Strike (Wood Frames Only)

1. Mark vertical line and centerline on frame exactly opposite center of latch hole.
2. Drill two (2) 1"(25mm) holes 5/16"(8mm) above and below centerline.
3. Mortise a cutout for strike. Use strike as a pattern for mortise. (Strike should fit flush with frame.)
4. Drill the holes for the screws used to install the strike. 7/64"(2.5mm)



Step #3 Prepare Lock for Installation

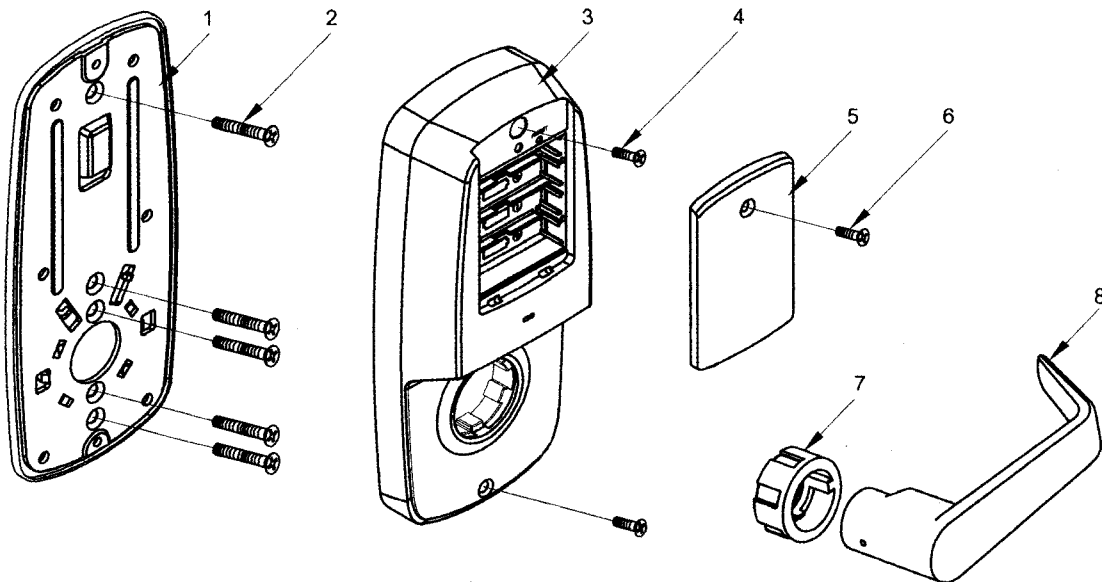
A. Unpack the Lock

The lock is packed in such a way to represent how it will install on the door.

Before installation:

1. Disassemble the inside escutcheon.
 - 1) Remove the inside lever and spacer bushing with the lever removal tool provided.
 - 2) Separate the mounting plate assembly from the inside escutcheon.
2. Remove the battery cover
 - 1) Unscrew the battery cover screw using the #2 phillips screw driver.
 - 2) Take the battery cover off.

The outside assembly stays assembled.



1. Mounting Plate Assembly
2. Mounting Plate Screws

3. Inside Escutcheon
4. Inside Escutcheon Screw

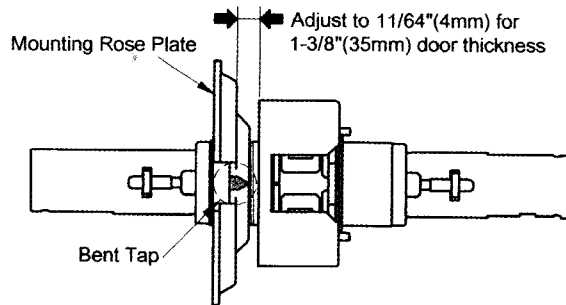
5. Battery Cover
6. Battery Cover Screw
7. Spacer Bushing
8. Inside Lever

B. Adjust for Door Thickness (If Necessary)

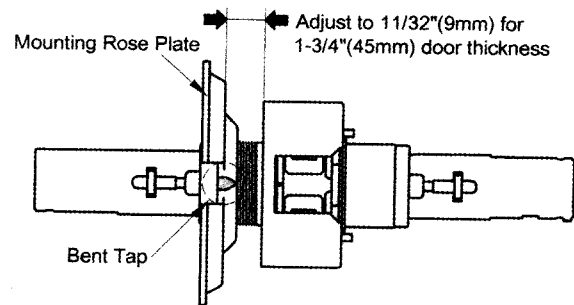
- ☞ Lock is factory-assembled for 1-3/4"(45mm) thick doors.
- ☞ It can be adjusted for door thickness range from 1-3/8"(35mm) to 2"(51mm).

Adjustment for different door thickness:

1. Remove outside lever, spacer bushing and outside assembly (See C below).
2. Rotate outside mounting rose plate for proper door thickness as shown below.
3. Position of bent taps as shown below must match (ensure the bent taps are horizontally crossed).
4. Reassemble outside assembly, spacer bushing and outside lever by reversing procedures.



In case of 1-3/8" (35mm) thick door



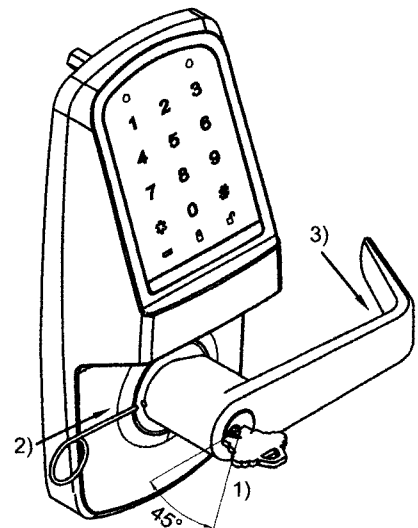
In case of 1-3/4" (45mm) thick door

C. How to Replace, Re-Key or Install Cylinder (If Required)

1. Remove outside lever
 - 1) Insert key, rotate 45° clockwise and hold.
 - 2) Depress lever retainer with lever removal tool (provided).
 - 3) Slide lever off lock.
2. With outside lever in hand, use standard pliers to pull out cylinder retainer.
3. Remove key and cylinder from outside lever.
4. Insert new cylinder.
5. Secure by pressing cylinder retainer flush with the lever.
6. Insert key into cylinder.

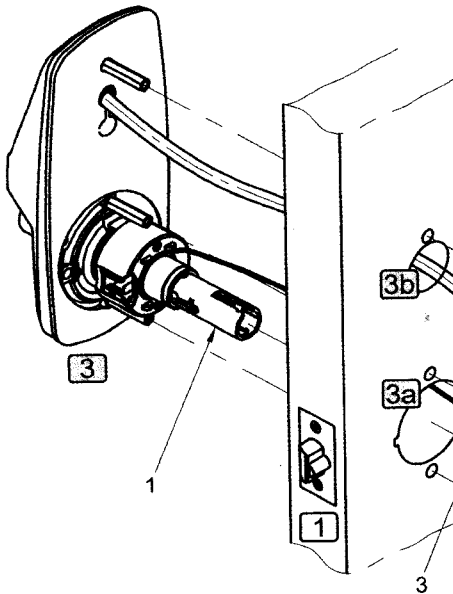
Important: Make sure the key-cut side of key lines up facing towards the end of the lever. If the key is inserted incorrectly, the lock will reassemble and might appear to properly work; however, when the key is removed, the latchbolt will remain retracted.

7. Rotate key 45° counterclockwise.
Push the lever onto the spindle until fully seated.
Pull on lever to insure properly seated.



Step #4 Lock Installation

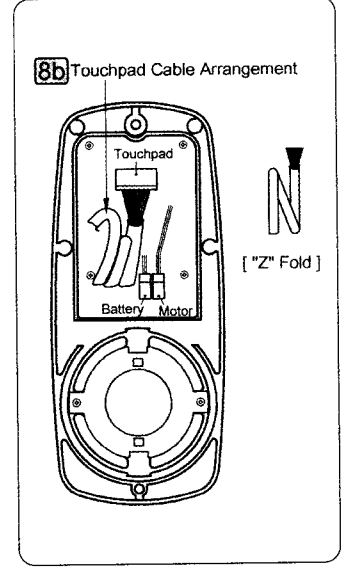
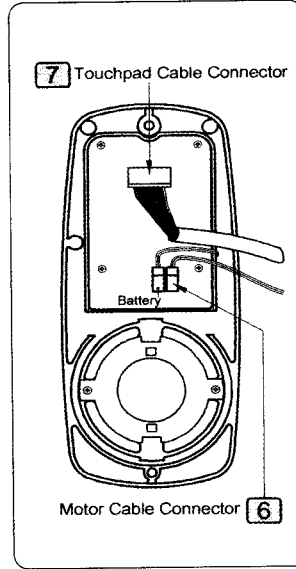
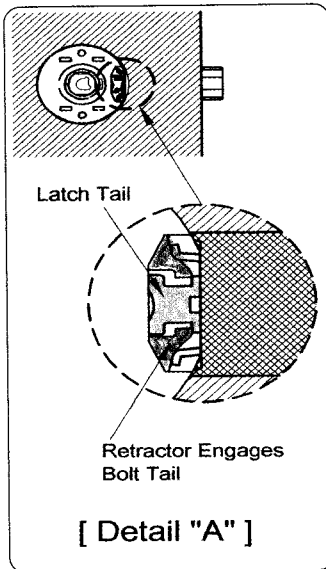
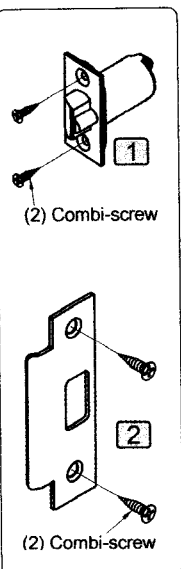
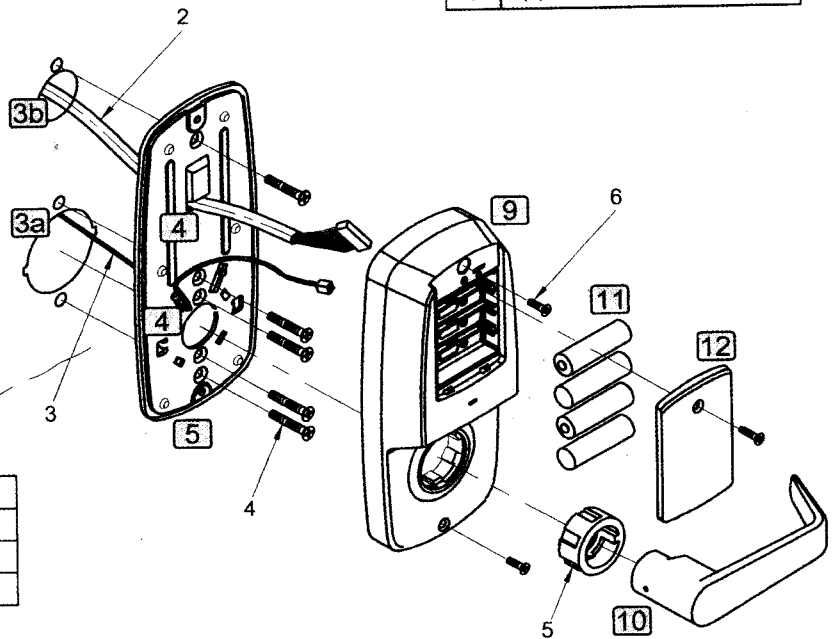
Outside Assembly



No	Designation
1	Spindle
2	Touchpad Cable
3	Motor Cable

Inside Assembly

No	Designation
4	(5) 10-32 x 1-1/5"(30.5mm)
5	Spacer Bushing
6	(2) M5 x P0.8 , 3/4"(19mm)



PROCEDURES

1. Install latch in door. Be sure that bevel edge of bolt faces strike. Attach with two screws supplied.
2. Install strike on the door frame.
3. Insert outside assembly through door, making sure that the lock body frame hooks latch case and retractor engages bolt tail(s). DO NOT FORCE (See Detail A above). If lock body does not engage latch easily, check door preparation for errors.
 - 3a. Guide motor cable (red and black wires) through 2-1/8"(54mm) diameter hole.
 - 3b. Guide touchpad cable through 1"(25mm) diameter upper hole.
4. Guide motor cable and touchpad cable through rectangular holes on mounting plate assembly (motor cable - below rectangular hole / touchpad cable - above rectangular hole).
5. Slide mounting plate assembly over outside assembly, lining up top and bottom screw guides with holes in door. Secure both assemblies with (5) 10-32x2-9/16" (35mm) mounting plate assembly screws. Do not over-tighten.
6. Attach motor cable connector to the inside escutcheon PC board lower header.
7. Attach the touchpad cable connector to the inside escutcheon PC board header as illustrated.
8. Slide inside escutcheon over mounting plate assembly.

CAUTION :

 - 8a. Position motor cable against mounting plate assembly. Avoid pinching wires against spindle and any sharp metal part of the assembly.
 - 8b. "Z" fold touchpad wire cable and lay against the back recessed area of the inside escutcheon. Position and bend wires to prevent binding when installing the inside escutcheon over the mounting plate assembly.
9. Install and secure inside escutcheon with the (2) M5xP0.8-3/4"(19mm) screws through inside escutcheon and into the mounting plate assembly.
10. Slide inside lever onto spindle and push in to attach.
11. Install (4) AA alkaline batteries into controller compartment being careful to align +/- polarity properly.
12. Install battery cover and tighten screw.

Step #5 Test Lock Operation

If you encounter problems while performing any of the following tests, review the installation instructions and this guide and correct any problems.

CAUTION : DOOR MUST REMAIN OPEN DURING INSTALLATION. USE DOOR STOP.

Mechanical Test

- A. Rotate the inside lever. Operation should be smooth, and the latch should retract.
- B. Insert the key into keyway and rotate the key to open the door. Operation should be smooth, and the latch should retract.

Electronic Test

- A. To unlock outside lever.
 1. Press the [Wake Up] button to illuminate the number pad with beep.
 2. Enter factory defaults Master Code [123456] and press the [*] button.
 3. Outside lever will retract the latch
- B. In case of use with RF Card - refer to Programming Guide.

HARDWARE TROUBLESHOOTING

Test the Operation of the Mechanical Lockset

Cycle the lock in both the locked and the unlocked positions. If problems are found:

Symptom	Suggested Action
Door is binding	• Check that door and frame are properly aligned and door is free swinging. • Check hinges: They should not be loose or have excessive wear on knuckles.
Latchbolt will not deadlock	• Either strike is out of alignment or the gap between the door and frame is too great. • Realign strike or shim strike out towards flat area of latchbolt.
Latchbolt does not retract or extend properly	• Latchbolt tail and retractor are not properly positioned: ☞ Remove lockset. Look through 2-1/8" hole and verify latchbolt tail is centered between top and bottom of hole. ☞ Remove latchbolt and insert lockset. Look through latchbolt hole and verify retractor mouth centered in hole. If not, adjust outside mounting rose plate. ☞ If necessary, rebore holes to line up retractor and tail.

PROGRAMMING GUIDE

Take the time to read through this guide to familiarize yourself with the features and operation of the lock, and its quick and easy programming procedures.

TABLE OF CONTENTS

Overview	12
Operation of Lock	13~14
Programming Features	15~17
Programming	18~22
Miscellaneous Information	23
Glossary	24
Troubleshooting	25
User PIN Code Record Sheet	26

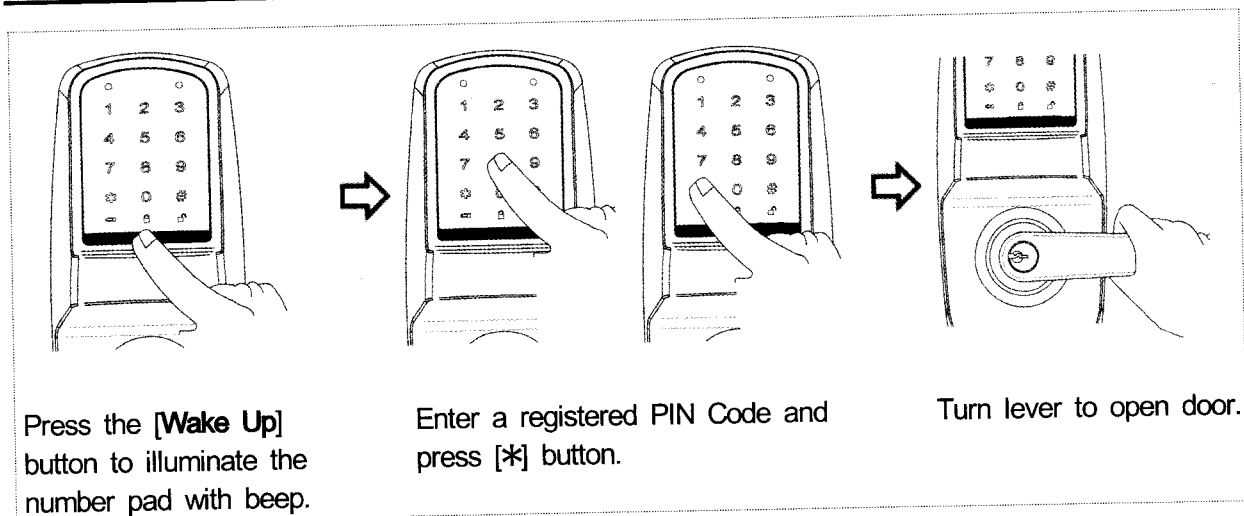
OVERVIEW

The SMART PLUS® Series Stand-Alone Access Control System is a series of State-of-the-Art Microprocessor-Based programmable Touchpad-Entry and Proximity Security Locks.

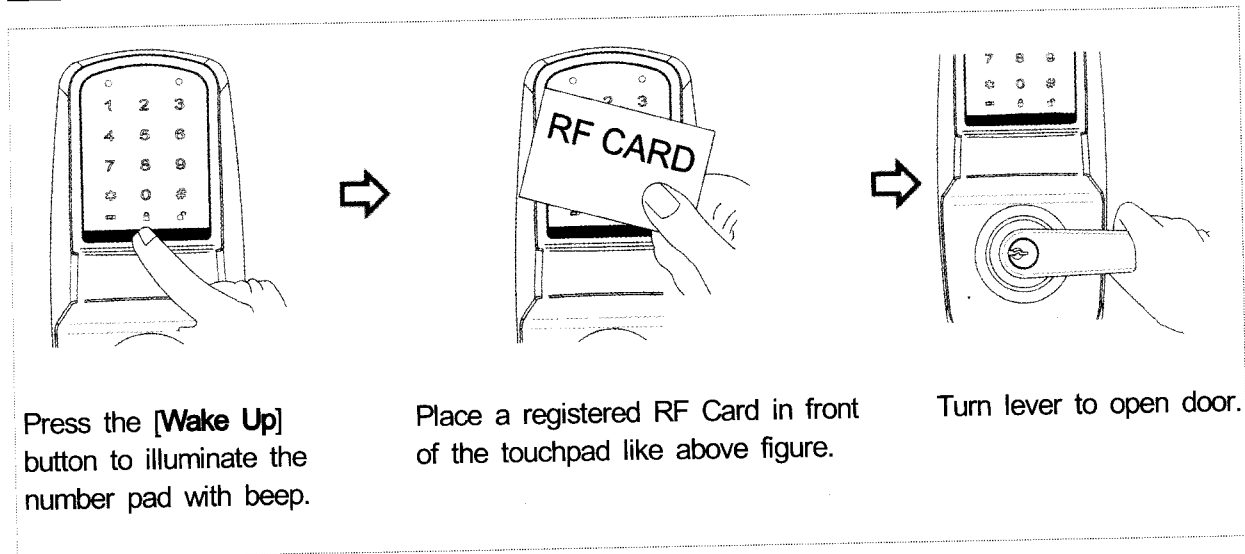
- User Access Methods
 - ☞ Touchpad Entered User PIN Codes.
 - ☞ RF Card.
 - ☞ Metal Key cylinder.
- User Features
 - ☞ 1000 users.
 - ☞ User code length from 3-6 digits.
- Preparing to Program your Lock
 - ☞ At first glance, your new lock may look complicated, but it is in fact designed in a very straightforward way. The keypad contains 12 buttons: numbers 1 through 9 plus zero, a star button [*] and a pound button [#].
 - ☞ These 12 buttons are all you need to program your lock.
 - ☞ All features can be programmed manually through the touchpad.
 - ☞ This guide will show you how to program your lock manually.
- The lock can be programmed for Passage mode, Lockout mode settings. Auto re-lock time and Beep volume are adjustable and can be changed from factory default.

OPERATION OF LOCK

Opening the door with a PIN Code



Opening the door with a RF Card



Opening the door with a Metal Key

- A. Insert the key into keyway.
- B. Rotate the key to open the door.

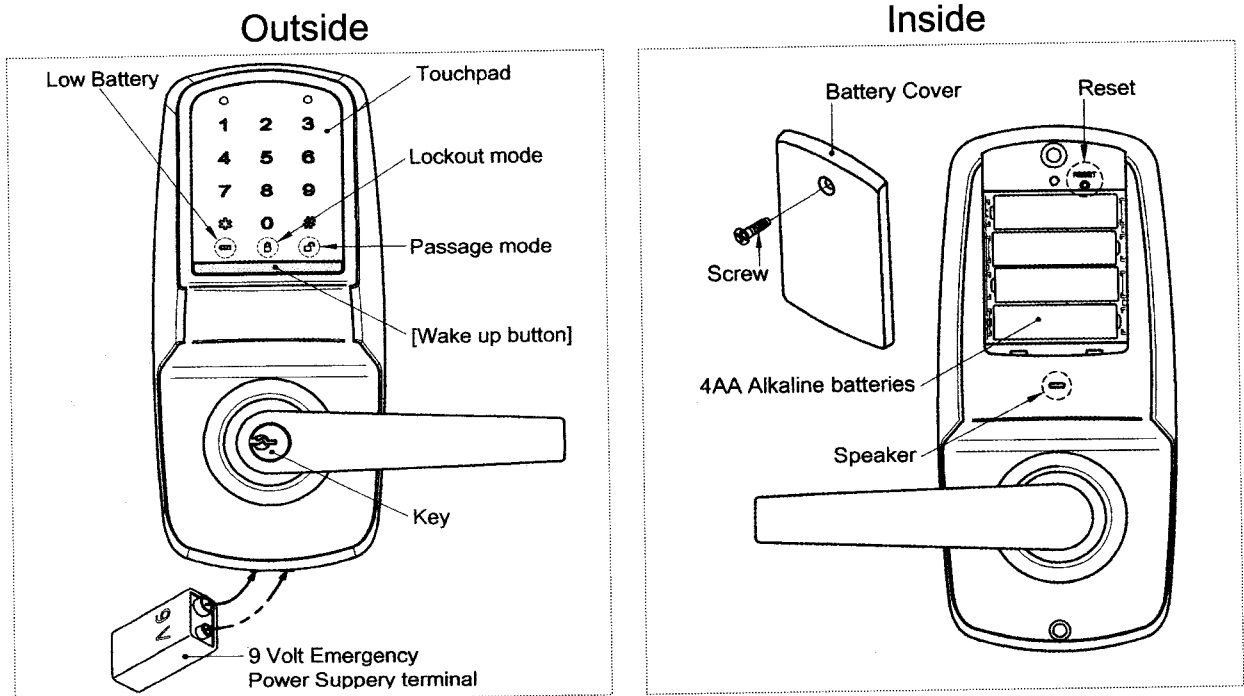
Factory Defaults

Settings	Factory Defaults
Master PIN Code	123456
Lockout Mode	Unprogrammed
Passage Mode	Unprogrammed
Re-lock Time	5 seconds
Wrong Code Entry Limit	5 times
Shut Down Time	60 seconds
Beep Volume	2 levels

Scope of Master, Manager, User Settings

Settings	Master	Manager	User
Entrance Authorization	√	√	√
Register/Change Master PIN Code	√		
Register/Delete Manager PIN Code	√		
Register/Delete User PIN Code	√		
Register/Delete RF Card	√		
Registering One-time User PIN Code	√		
Setting Up/Releasing User Lockout Mode	√	√	
Entrance Authorization at Lockout Mode	√	√	
Setting Up/Releasing Passage Mode	√	√	
Setting Up the Sound Volume	√	√	
Setting Up the Re-lock Time	√	√	

PROGRAMMING FEATURES



Menu and Icons

Symbols	Description
W	Press the [Wake Up] button on the outside assembly. It is used to start inputting or to exit the Program mode.
0 ~ 9	Press the indicated number buttons.
*	Press the [*] button. It is used to complete an input process.
#	Press the the [#] button. It is used to enter Programming mode.
Mstr PIN	Enter the Master PIN Code (3~6 digits in length). [Factory Default: 123456]
Mgr PIN	Enter the Master PIN Code (3~6 digits in length).
U PIN	Enter the User PIN Code (3~6 digits in length).
	Low Battery Icon. When battery power is low, the low battery icon will begin blinking.
	Passage Mode Icon.
	Lockout Mode Icon

To Begin Programming:

The Lock is preset at the factory with Master PIN Code [123456].

- A. Press the **W** button to illuminate the number pad with beep.
- B. Entering **123456*** will unlock the lock allowing the outside lever to retract the latchbolt.

Note: The Master Code must be changed (i.e., "Forced Change") from the factory default prior to adding users.

Feature Programming Through Master Code

Procedure Description

Press the Wake Up **W** button to activate.

Step 1. Enter the Master PIN Code and press the **#** button.

Step 2. Enter Program Code and press the **#** button.

Step 3. Enter digit corresponding to the function to be performed and press the **#** button.

Step 4. Press the **#** button to confirm.

Step 5. Press the ***** button to complete the process and conclude the Programming session.

Change Default Master Code Before Programming

① ② ③ ④ ⑤

W → Default **Mstr** PIN **#** → **1** **#** → Enter New **Mstr** PIN **#** → Enter New **Mstr** PIN **#** → *****

Register User PIN Code

W → **Mstr** PIN **#** → **2** **#** → Enter **U** PIN **#** → **#** → *****

Delete registered PIN Code except Master PIN Code

W → **Mstr** PIN **#** → **3** **#** → Registered **U** PIN **#** → **#** → *****
 Registered **Mstr** PIN **#** → **#** → *****

Register One-Time User PIN Code

W → **Mstr**PIN # → **4** # → One-Time **U** PIN # → # → *

Register Manager PIN Code

W → **Mstr**PIN # → **6** # → Enter **Mgr**PIN # → # → *

Register RF Card

W → **Mstr**PIN # → **8** # → Enter the Card Register No. (1~999) # → Place the RF Card on Touchpad # → *

Delete RF Card

W → **Mstr**PIN # → **9** # → Enter the Card Registered No. # → # → *

Setting Up/Releasing Passage Mode

W → **Mstr**PIN or **Mgr**PIN # → **5** # → **1** Enable *

→ **3** Disable *

☞ Another method to disable Passage Mode: Press the **W** button for 3seconds, will disable Passage Mode.

Setting Up/Releasing Lockout Mode

W → **Mstr**PIN or **Mgr**PIN # → **7** # → **1** Enable *

→ **3** Disable *

Setting Up the Sound Volume or Re-lock Time

W → **Mstr**PIN or **Mgr**PIN # → **0** # → **1** Volume # → **1~4** *

→ **2** Re-lock Time # → **1~9** *

☞ Sound Volume: **1** minimum volume ~ **3** maximum volume, **4** mute.

☞ Re-lock Time: **1** to **9** seconds through feature settings. (factory default **5** five seconds)

PROGRAMMING

Change Default Master Code Before Programming

Note: The factory default Master Code must be changed prior to adding users.

W → Default **Mstr** PIN **#** → **1** **#** → Enter New **Mstr** PIN **#** → Enter New **Mstr** PIN **#** → *

Press the **W** button to activate.

1. Enter the default Master PIN Code **123456** and press the **#** button.
Green and Red LED blinks.
2. Enter the Program Code **1** and press the **#** button.
Green and Red LED blinks.
3. Enter the new Master PIN Code and press the **#** button.
Beep melody with Green LED blinks.
4. Enter the new Master PIN Code again and press the **#** button.
Beep melody and Number pad blink one time.
5. Press the ***** button.
Completes with beep sound.

[For example, if you want your new Master PIN Code to be "2580".

Press: **W** → **123456** **#** → **1** **#** → **2580** **#** → **2580** **#** → *

Now that the Master Code has been changed, there is no need to change it again (unless you want to).

Register User PIN Code

W → **Mstr** PIN **#** → **2** **#** → Enter **U** PIN **#** → **#** → *

Press the **W** button to activate.

1. Enter the Master PIN Code and press the **#** button.
Green and Red LED blinks.
2. Enter the Program Code **2** and press the **#** button.
Green and Red LED blinks.
3. Enter the new User PIN Code and press the **#** button.
Beep melody with Green LED blinks.

4. Press the **#** button.
Beep melody and Number pad blink one time.
☞ [Repeat steps 3 and 4 for each new user (if necessary).]
5. Press the ***** button.
Completes with beep sound.

[For example, John Smith and Jessica are users. You want to register their User PIN Codes "111222" and "223344".

Program the lock by pressing: **W**→**Mstr**PIN **#**→**2** **#**→**111222** **#**→**#**
→**223344** **#**→**#**→*****]

Delete registered PIN Code except Master PIN Code

W→ **Mstr**PIN **#**→**3** **#**→ Registered **U**PIN **#**→ **#** → *****

Press the **W** button to activate.

1. Enter the Master PIN Code and press the **#** button.
Green and Red LED blinks.
2. Enter the Program Code **3** and press the **#** button.
Green and Red LED blinks.
3. Enter the registered PIN Code and press the **#** button.
Beep melody with Green LED blinks.
4. Press the **#** button.
Beep melody and Number pad blink one time.
☞ [Repeat step 3 and 4 for delete of another registered PIN Code (if necessary).]
5. Press the ***** button again.
Completes with beep sound.

[For example, You want to delete registered PIN Codes "111222" and "223344".

Program the lock by pressing: **W**→**Mstr**PIN **#**→**3** **#**→**111222** **#**→**#**
→**223344** **#**→**#**→*****]

Register One-Time User PIN Code

W→ **Mstr**PIN **#**→**4** **#**→ One-Time **U**PIN **#**→ **#** → *****

Press the **W** button to activate.

1. Enter the Master PIN Code and press the **#** button.
Green and Red LED blinks.
2. Enter the Program Code **4** and press the **#** button.
Green and Red LED blinks.
3. Enter the One-Time User PIN Code and press the **#** button.
Beep melody with Green LED blinks.
4. Press the **#** button.
Beep melody and Number pad blink one time.
☞ [Repeat steps 3 and 4 for each new one-time user (if necessary).]
☞ You may register up to 3 One-Time User PIN Codes.
5. Press the ***** button.
Completes with beep sound.

Register RF Card

W → **Mstr**PIN **#** → **8** **#** → Enter the Card Register No. (1~999) **#** → Place the Card in front of the Touchpad **#** → *****

Press the **W** button to activate.

1. Enter the Master PIN Code and press the **#** button.
Green and Red LED blinks.
2. Enter the Program Code **8** and press the **#** button.
Green and Red LED blinks.
3. Enter the new RF Card Register Number(1~999) and press the **#** button.
Green and Red LED blinks.
4. Place a RF Card about 2 seconds in front of the touchpad (hear beep melody and Green LED blinks.) and press the **#** button.
Beep melody and Number pad blink one time.
☞ [Repeat step 3 and 4 for each new RF Card Register (if necessary)].
5. Press the ***** button.
Completes with beep sound.

[For example, you wish to register two RF Cards for User 11 and User 12 respectively.

Press: **W** → **Mstr**PIN **#** → **8** **#** → **11** **#** → place the first card in front of the touchpad (hear beep melody and Number pad blink one time) **#** and then within 20 seconds, **12** **#** → place the second card in front of the touchpad (hear beep melody and Number pad blink one time) **#** → *****]

Delete RF Card

W → **Mstr**PIN **#** → **9** **#** → Enter the Card Registered No. **#** → **#** → *****

Press the **W** button to activate.

1. Enter the Master PIN Code and press the **#** button.
Green and Red LED blinks.
2. Enter the Program Code **9** and press the **#** button.
Green and Red LED blinks.
3. Enter the delete card number (registered number) and press the **#** button.
Beep melody and Green LED blinks.
4. Press the **#** button.
Beep melody and Number pad blink one time.
☞ [Repeat steps 3 and 4 for delete of another card number(if necessary)].
5. Press the ***** button.
Completes with beep sound.

[For example, you wish to delete two RF Cards for User 11 and User 12 respectively.

Press: **W** → **Mstr**PIN **#** → **9** **#** → **11** **#** → **#** → **12** **#** → **#** → *****]

Setting Up/Releasing Passage Mode

W → **Mstr**PIN or **Mgr**PIN **#** → **5** **#** → **1** Enable *****
→ **3** Disable *****

Press the **W** button to activate.

1. Enter the Master PIN Code or Manager PIN Code and press the **#** button.
Green and Red LED blinks.
2. Enter the Program Code **5** and press the **#** button.
Green and Red LED blinks.
3. Enter the Enable Code **1** or Disable Code **3** and press the ***** button.
Completes with beep sound.

Another method to disable Passage Mode: Press the **W** button for 3seconds, will disable Passage Mode.

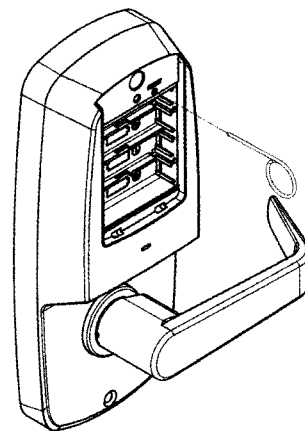
MISCELLANEOUS INFORMATION

Returning the Lock to Factory Defaults

1. Remove battery cover using #2 phillips screw driver.
2. Push and hold the Reset Button with the lever removal tool provided for 10 seconds.
3. After beep, all numbers of touchpad will blink about 20 seconds. Please wait until the blinks stop.

Note:

All registered Master, Manager and User PIN Code data, etc., will be deleted, and the lock will reset to the factory default.



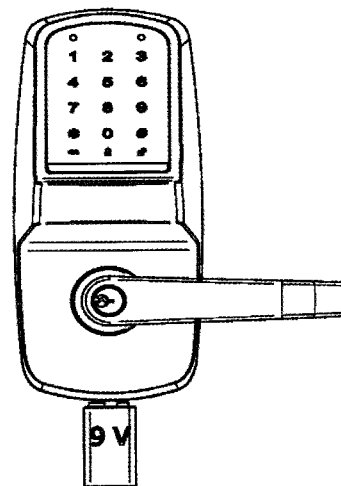
9V Battery Emergency Power

9V battery connections are located under the front of the outside assembly.

In the case that the 4 AA alkaline batteries are completely discharged, a 9V battery can be used to supply power to the lock.

While connecting the 9V battery, the lock can be operated as normal, thus granting access so the 4 AA alkaline batteries can be replaced.

Discharged batteries should be replaced right away.



Battery Replacement

When battery power is low, the low battery icon will begin blinking with beep sound. Always replace weak batteries as soon as possible. The locks use four (4) AA-size 1.5 volt alkaline batteries.

GLOSSARY

Wake Up Button: Pressing this button activates the number pad. Enter the PIN Code while the number pad is illuminated, and when not illuminated press the [Wake Up] button to illuminate the pad, It is also used to quit the Program mode.

Master PIN Code: The Master PIN Code is used for programming User codes and feature settings. The Master PIN Code will operate the lock. The Master PIN Code is a factory default setting.

Manager PIN Code: The Manager PIN Code is used for programming Passage Mode, Lockout Mode and Sound Volume and Auto re-lock time settings. The Manager PIN Code will operate the lock. User can program in up to 3 different Manager PIN Codes.

User PIN Code: The User PIN code is used for operating the lock.

One-Time User PIN Code: This PIN Code can only be used once and the PIN information is deleted automatically after use. User can program in up to 3 different One-Time User PIN Codes.

Passage Mode: Enabling Passage Mode allows continuous entry for non-restricted traffic. Passage Mode is enabled or disabled through feature programming by either the Master or Manager PIN Code. When the unit is in Passage Mode, the unlocked padlock icon will appear on the screen.

Lockout Mode: This feature is enabled by either the Master or Manager PIN Codes. When enabled, it restricts all User PIN Code access except Master and Manager PIN Codes. When the unit is in Lockout, the padlock icon will appear on the screen.

Low Battery: When battery power is low, the low battery icon will begin blinking. If battery power is completely lost, the key and cylinder can be used.

Re-lock Time: After successful code entry and the unit unlocks, it will automatically re-lock after a default of five (5) seconds. Re-lock time is adjustable from one (1) to ten (10) seconds through feature settings.

Beep Volume: It sets the volume of sound emitted during the inputting of numbers and opening or locking the door. (Level 1 ~ Level 4) The sound is muted at Level 4, and is at the maximum volume at Level 3. The factory default is Level 2.

Shut Down Time: The unit will shut down for a default of sixty (60) seconds and not allow operation after the wrong code entry limit has been met. Shut down time is factory default settings. When the unit is in Shut Down, the padlock icon will be flashing.

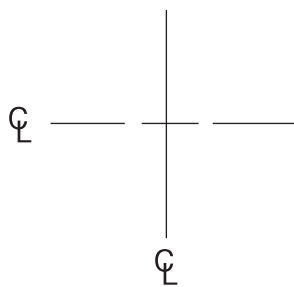
Wrong Code Entry Limit: After a default of five (5) unsuccessful attempts at entering a valid PIN Code the unit will shut down and not allow operation. Wrong code entry limit is a factory default setting.

TROUBLESHOOTING

Symptom	Suggested Action
There is no power.	• Check if the batteries are faulty or in the correct polarity. • Check if the batteries are inserted properly or completely discharged.
I can't change the Master PIN Code.	• There was a delay while entering the new Master PIN Code. The number pad must be illuminated while the new Master PIN Code is being entered. Also, after entering the first digit the next digit must be entered within 10 seconds. • If batteries are discharged, try again after replacing the batteries. • Refer to the changing the Master PIN Code section in the programming instructions and try changing again.
I can't change the User PIN Code.	• Another PIN Code is already registered. • If the PIN Code is less than 3 digits or over 6 digits in length, change it to be within 3-6 digits and register again.
I entered registered PIN Code and pressed the [*] button, but the door won't open.	• Check that the registered PIN Code was entered correctly. • If the number pad illumination is turned off while entering the PIN Code, the button input is not registered. Press the [Wake Up] button to illuminate the number pad and enter PIN Code again. (The number pad illumination is turned off automatically if there is no input within 10 seconds.)
The door won't lock automatically when I close it.	• Check if Passage mode is set. If the door opens just by turning the handle on the inside assembly down without any input on the lock, it means the Passage mode is enabled. • If the door doesn't lock automatically when Passage mode is disabled, then the lock has been installed incorrectly. Contact a digital lock outlet and have the lock reinstalled.
The lock issues the low voltage warning sound when I activate the lock.	• The sound indicates that it is time to replace the batteries. Replace with new batteries within a week.
Lock does not respond – door is locked and inaccessible.	• Batteries may be completely discharged. • Use mechanical key to gain entry and replace batteries. • Connect a 9-volt battery to the emergency power supply terminal which is located on the outside escutcheon, under the lever. With the 9-volt battery connected, press the wake up button and enter PIN code. Replace batteries.
The unit is on for a while, and then shows no reaction. Lights dim.	• The batteries do not have enough power. Replace the batteries.

Mark center of door thickness for 1" (25mm) or 7/8" (22mm) hole, depending on latch housing diameter

SL/ASL



INSTALLATION
TEMPLATE

Detach here

High Bevel

Low Bevel

Flat on Bevel

High Bevel

Low Bevel

2 3/4 (70mm) BACKSET

2 3/8 (60mm) BACKSET

IMPORTANT
For high bevel, place outside line at edge of door.
For flat doors, place center line at edge of door.
For low bevel, place inside line at edge of door.

MARK CENTER FOR 2 1/8 (54mm) HOLE

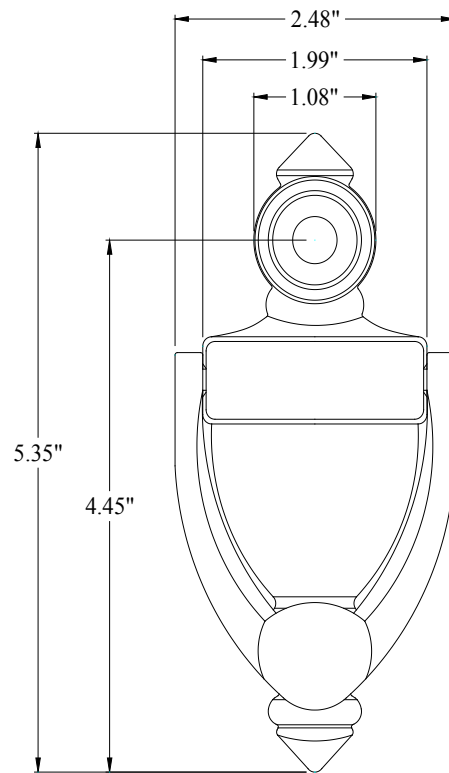
Mark center for 5/16" (8mm) hole

2 3/4"

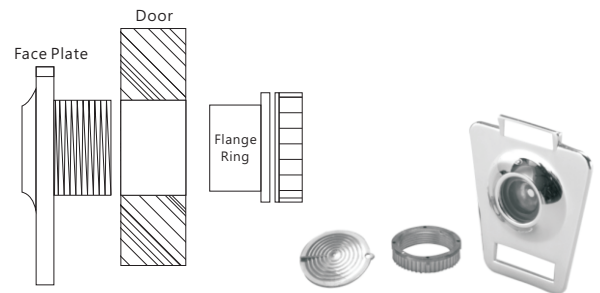
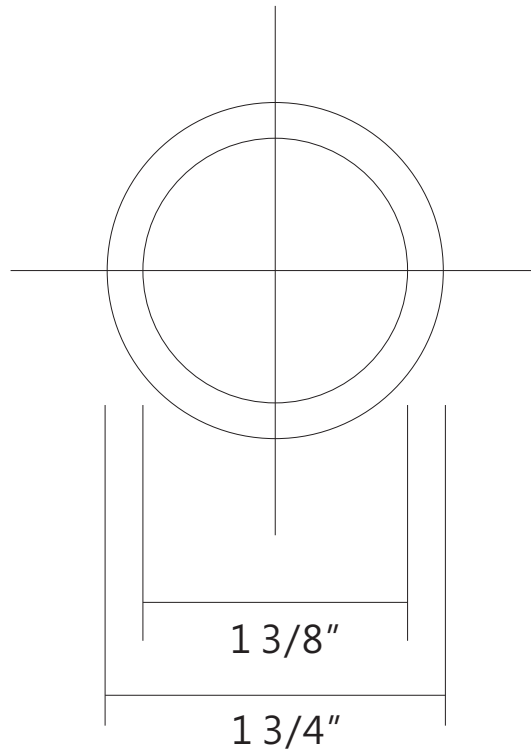
5/32"

Mark center for 5/16" (8mm) hole

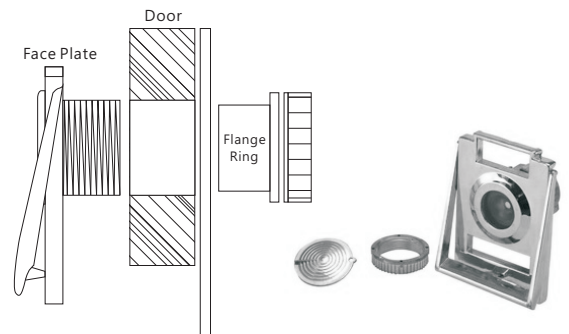
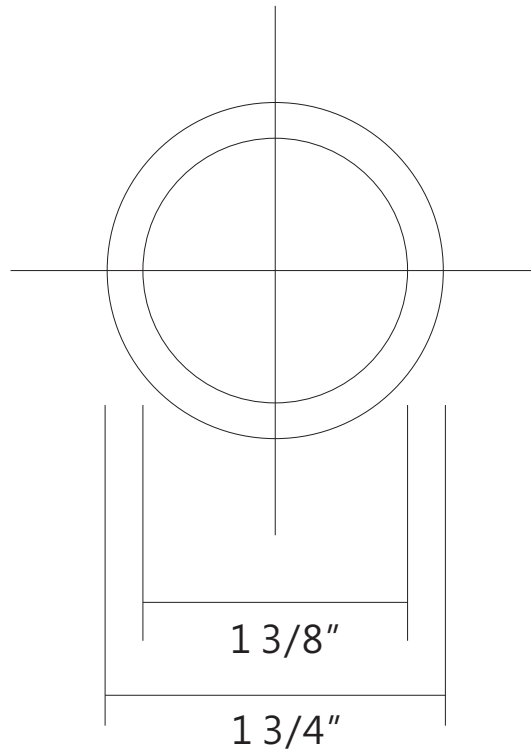
NOTE : Do not make the holes for locks without outside through-bolt type



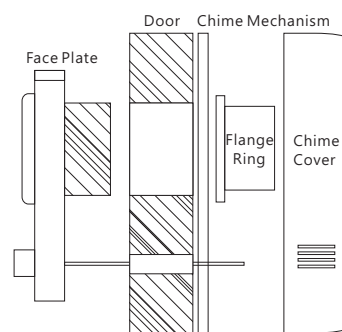
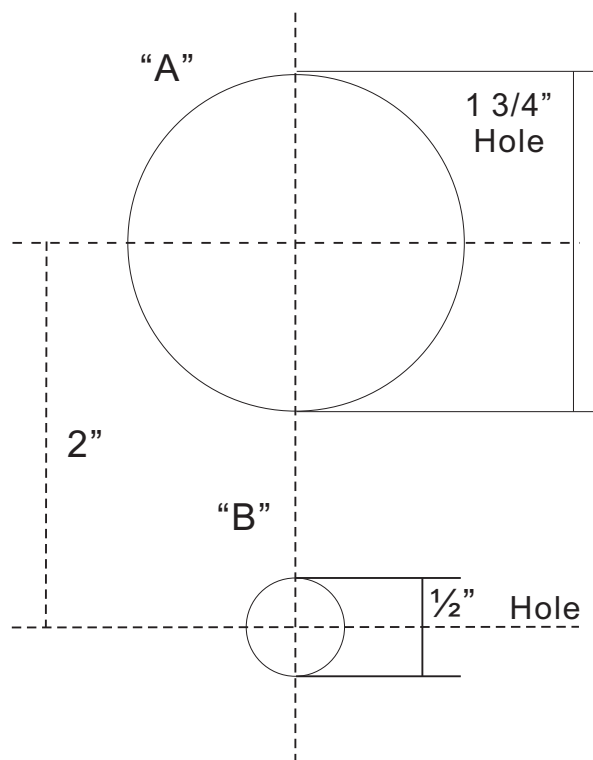
BIN81810



ITEM NO:	DESCRIPTION:		SCALE:
1601	Door Knockers and Viewers without Klocker		1:1
ANSI:	UNIT:	VERSION:	BY:
	inches	ver 1.0	C.C Chen



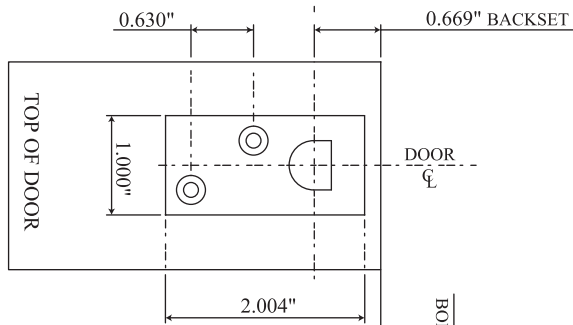
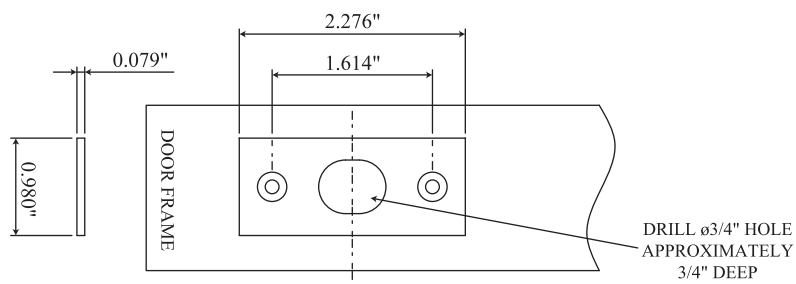
ITEM NO:	DESCRIPTION:		SCALE:
1601VK	Door Viewer W/ Knocker		1:1
ANSI:	UNIT:	VERSION:	BY:
	inches	ver 1.0	C.C Chen



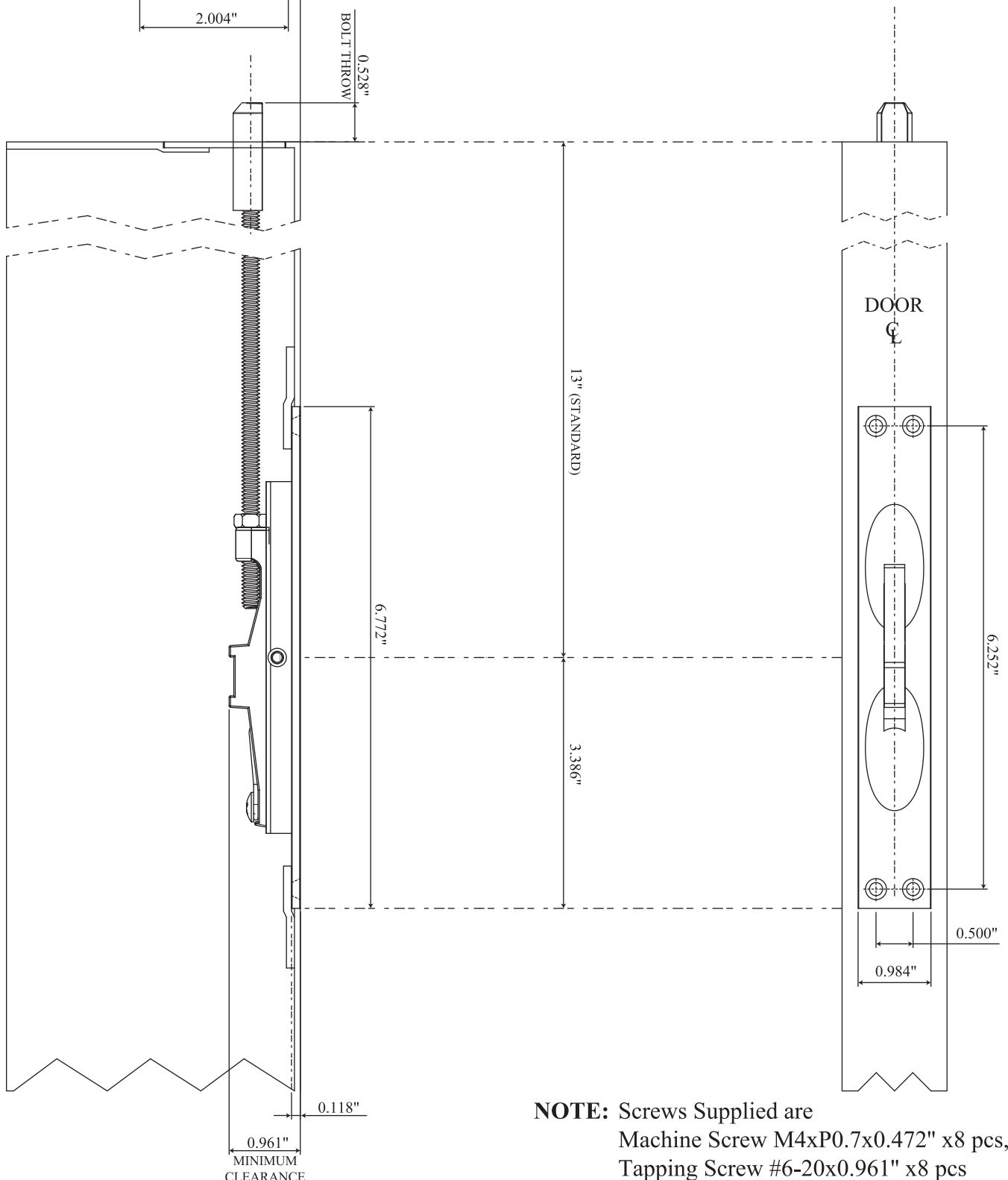
ITEM NO:	DESCRIPTION:		SCALE:
1602	Combination Door Chime&Viewer Non-Electric Chime		1:1
ANSI:	UNIT:	VERSION:	BY:
	inches	ver 1.0	C.C Chen

197 AL Flushbolt

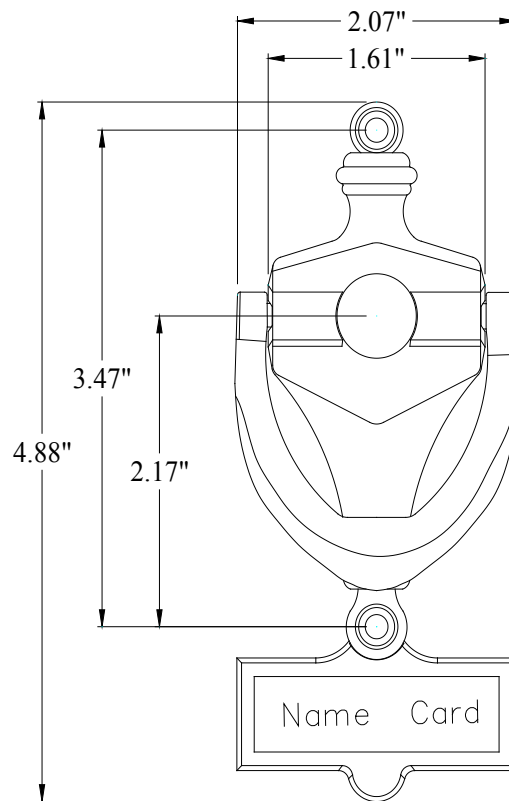
HOLLOW METAL DOOR & FRAME TEMPLATE



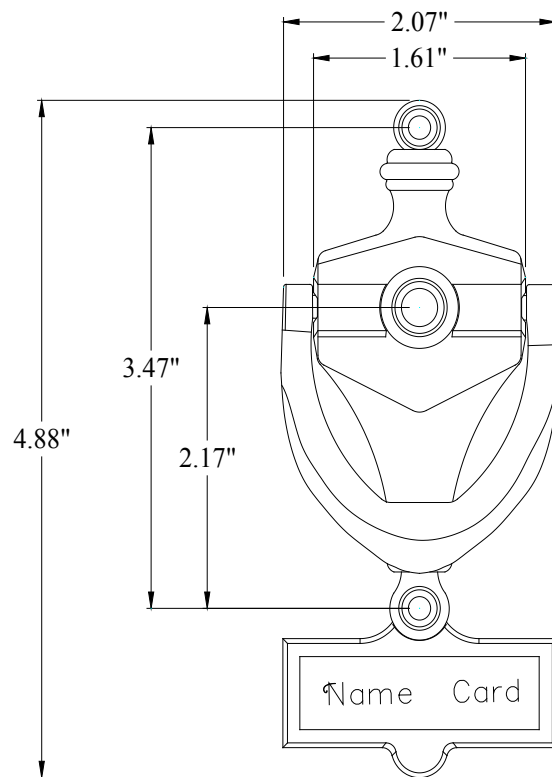
**DRAWING IS
NOT TO SCALE**



NOTE: Screws Supplied are
Machine Screw M4xP0.7x0.472" x8 pcs,
Tapping Screw #6-20x0.961" x8 pcs



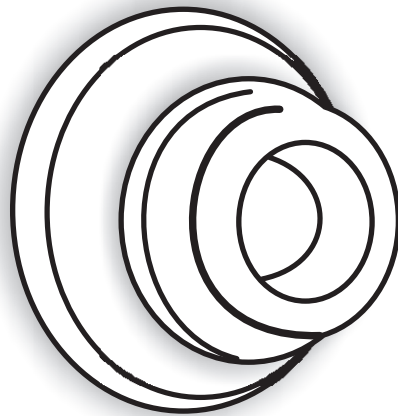
B05330



B05331

INSTALLATION INSTRUCTIONS

- 1.Remove backplate from door stop.
- 2.Place in desired location and mark.
- 3.Drill 1/8" pilot hole and insert anchor into hole.
- 4.Fasten backplate with screw.
- 5.Put door stop over backplate and turn to lock into place.
- 6.Clean with mild soap, water, and a soft cloth.



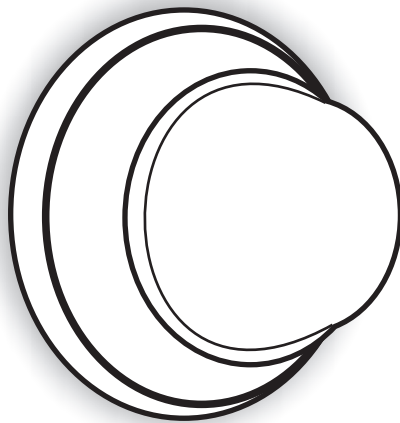
Tools Needed:

- A. Drill
- B. 1/8" Drill bit
- C. Phillips screwdriver
- D. Pencil
- E. Safety goggles

ITEM NO:	DESCRIPTION:	SCALE:
636UAL	DOOR STOP - CONCAVE	N/A
	UNIT:	VERSION:
	BY:	
	inches	ver 1.0
		C.C Chen

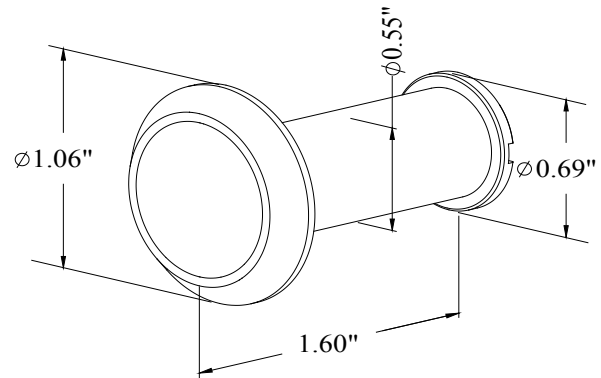
INSTALLATION INSTRUCTIONS

- 1.Remove backplate from door stop.
- 2.Place in desired location and mark.
- 3.Drill 1/8" pilot hole and insert anchor into hole.
- 4.Fasten backplate with screw.
- 5.Put door stop over backplate and turn to lock into place.
- 6.Clean with mild soap, water, and a soft cloth.



Tools Needed:
A. Drill
B. 1/8" Drill bit
C. Phillips screwdriver
D. Pencil
E. Safety goggles

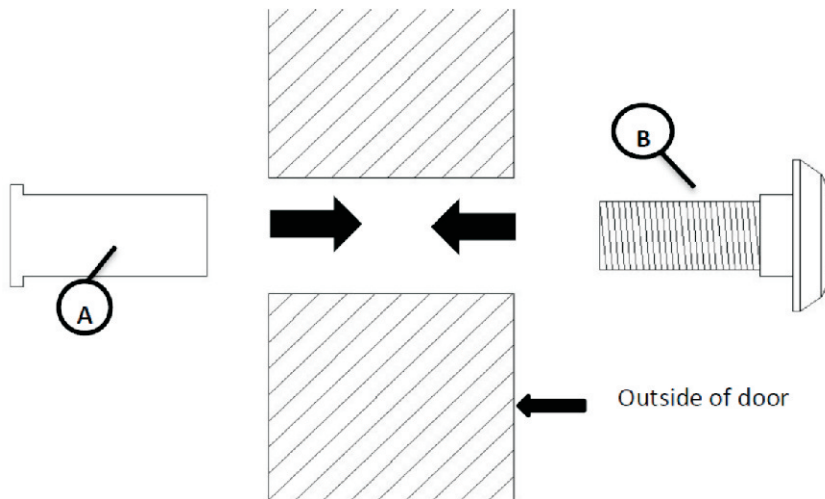
ITEM NO:	DESCRIPTION:		SCALE:
636AL	DOOR STOP - CONVEX		N/A
	UNIT:	VERSION:	BY:
	inches	ver 1.0	C.C Chen



B05334

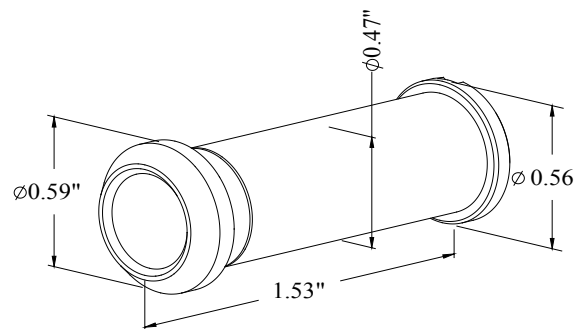
INSTALLATION INSTRUCTIONS

Hole Dia.	Door Thickness	Lens Angle
13mm (1/2")	33mm - 50mm (1-3/8"~2")	160°



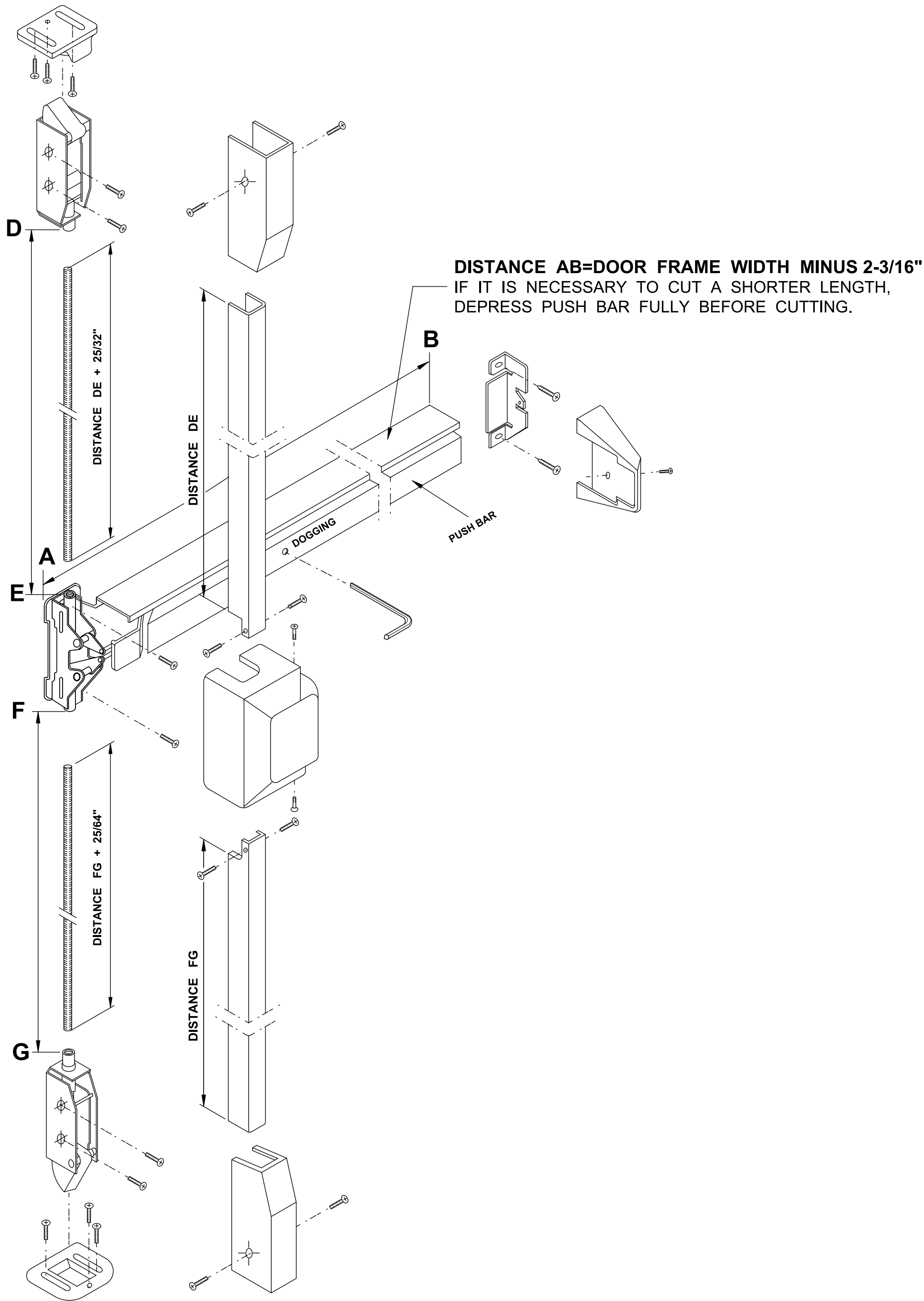
Door :1-3/8"~2"

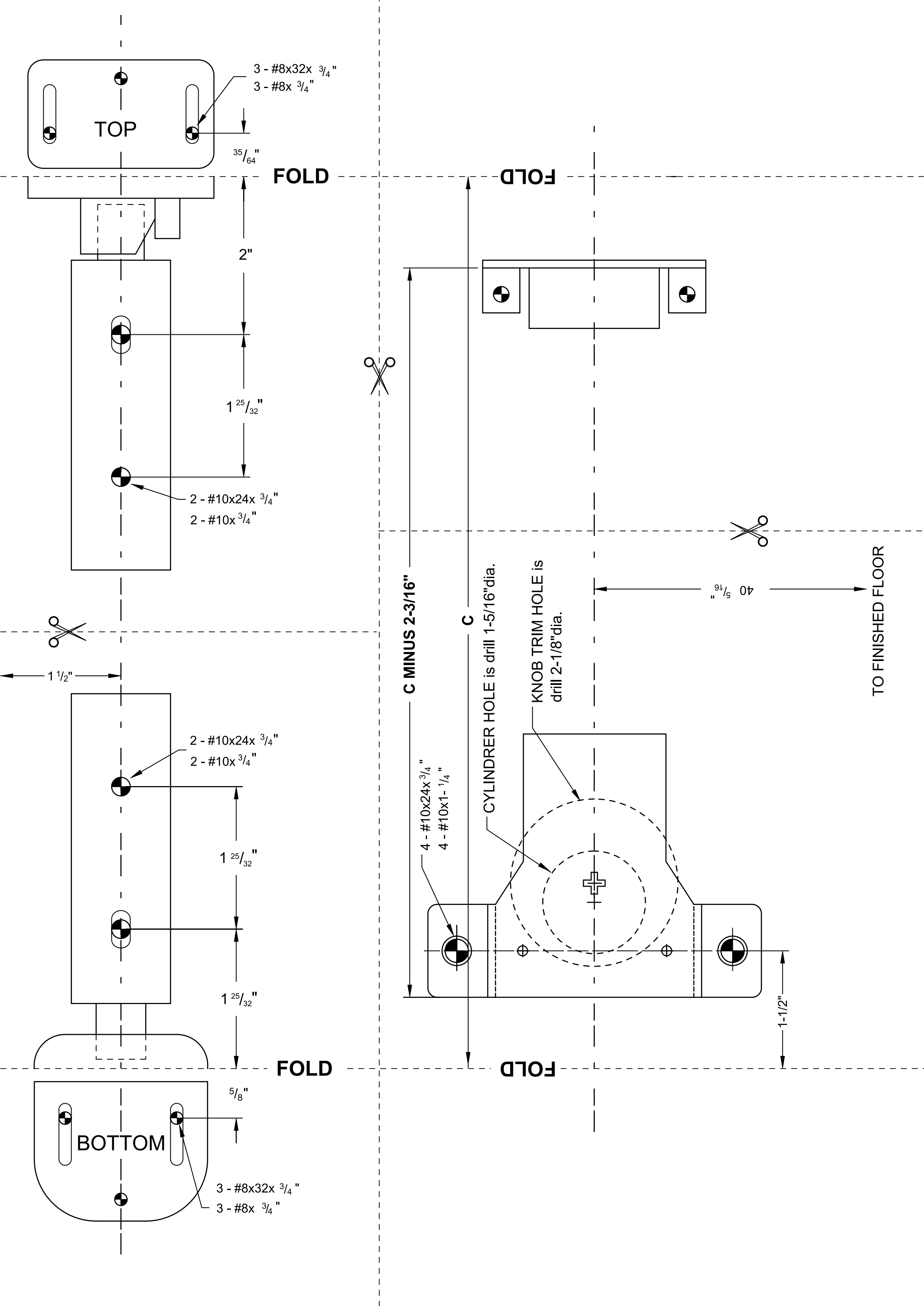
1. Position at eye level center of door. Mark and drill 1/2" (13mm) diameter hole completely through door.
2. Place receiver tube section (A) insert through the hole from inside of door.
3. Insert section (B) from outside of door and secure into section (A)



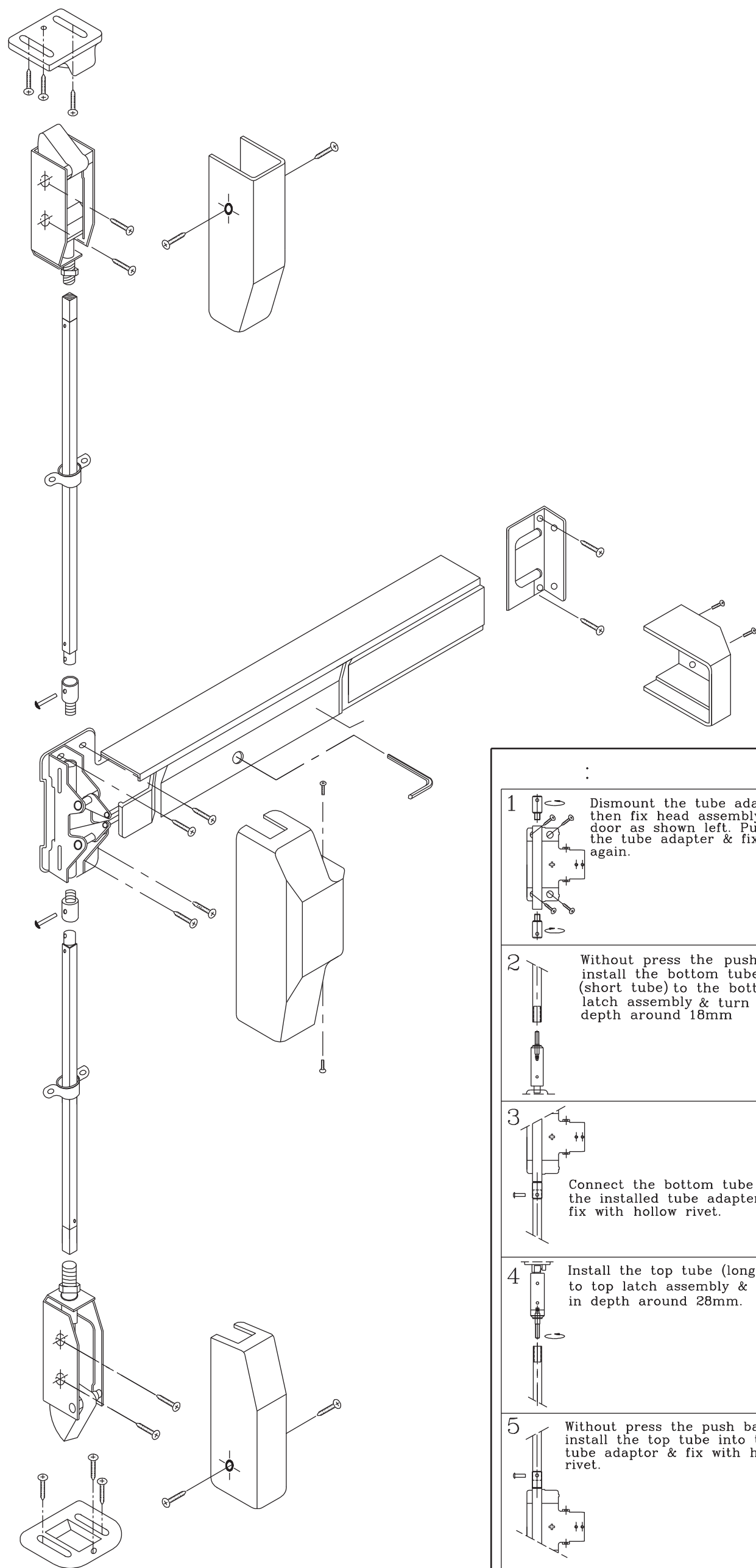
R1606

UL520V SERIES
SURFACE VERTICAL ROD EXIT DEVICE-REVERSIBLE
INSTALLATION INSTRUCTION
(TEMPLATE ON BACK PAGE)

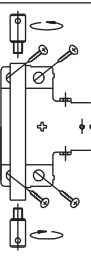




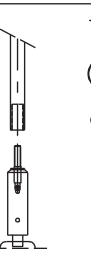
5000V VERTICAL EXIT DEVICE-REVERSIBLE INSTALLTION INSTRUCTION
LHR door shown, RHR door opposite



- 1



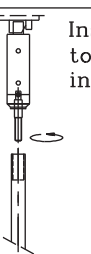
Dismount the tube adapter then fix head assembly on door as shown left. Put in the tube adapter & fix it again.
- 2



Without press the push bar, install the bottom tube (short tube) to the bottom latch assembly & turn in depth around 18mm
- 3



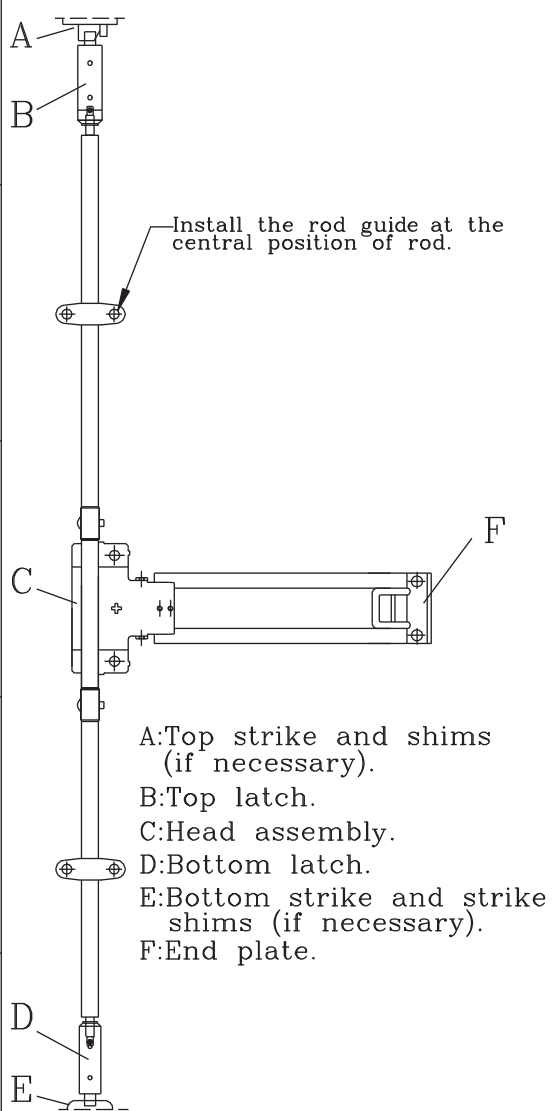
Connect the bottom tube to the installed tube adapter & fix with hollow rivet.
- 4



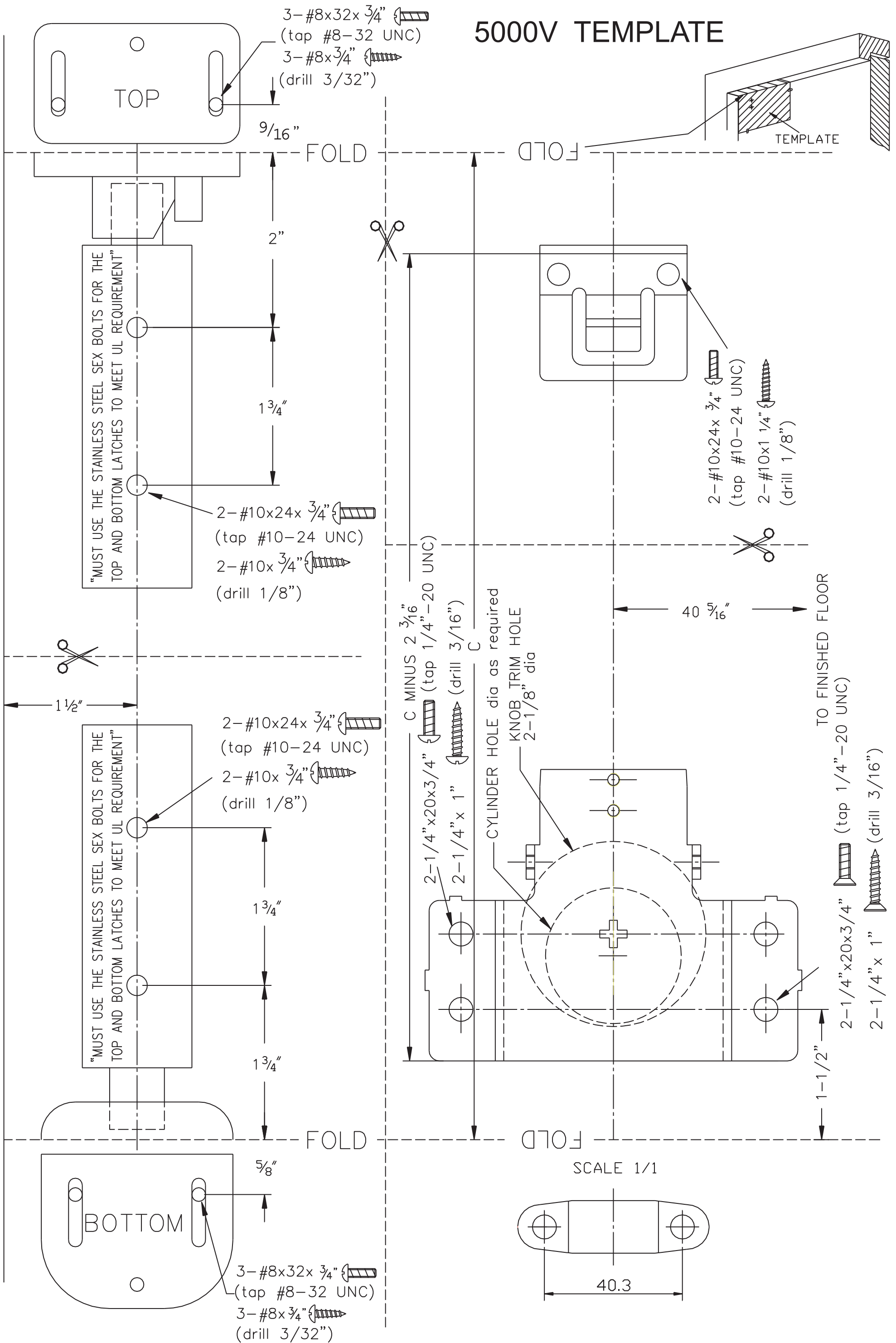
Install the top tube (long tube) to top latch assembly & turn in depth around 28mm.
- 5



Without press the push bar, install the top tube into the tube adaptor & fix with hollow rivet.

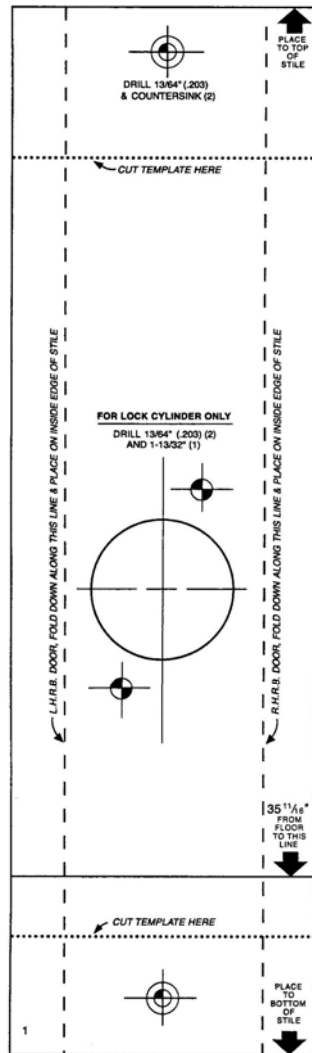


5000V TEMPLATE



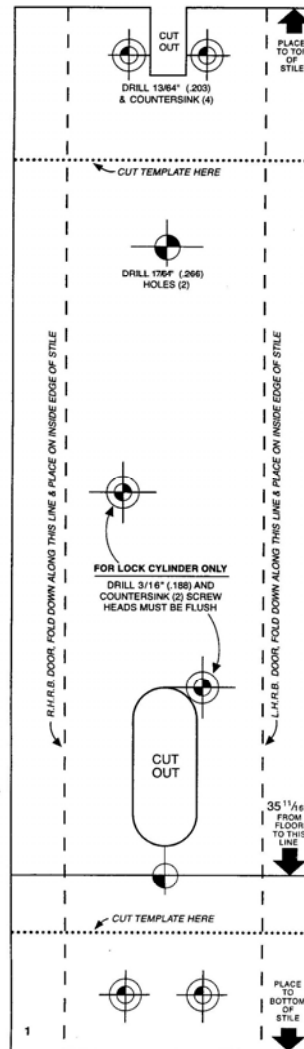
CYLINDER MOUNTING PAD

LOCK STILE OUTSIDE FACE



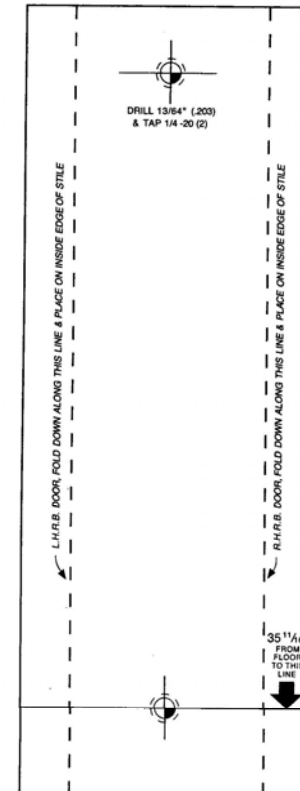
EXIT DEVICES

LOCK STILE INSIDE FACE



EXIT DEVICES

HINGE STILE INSIDE FACE



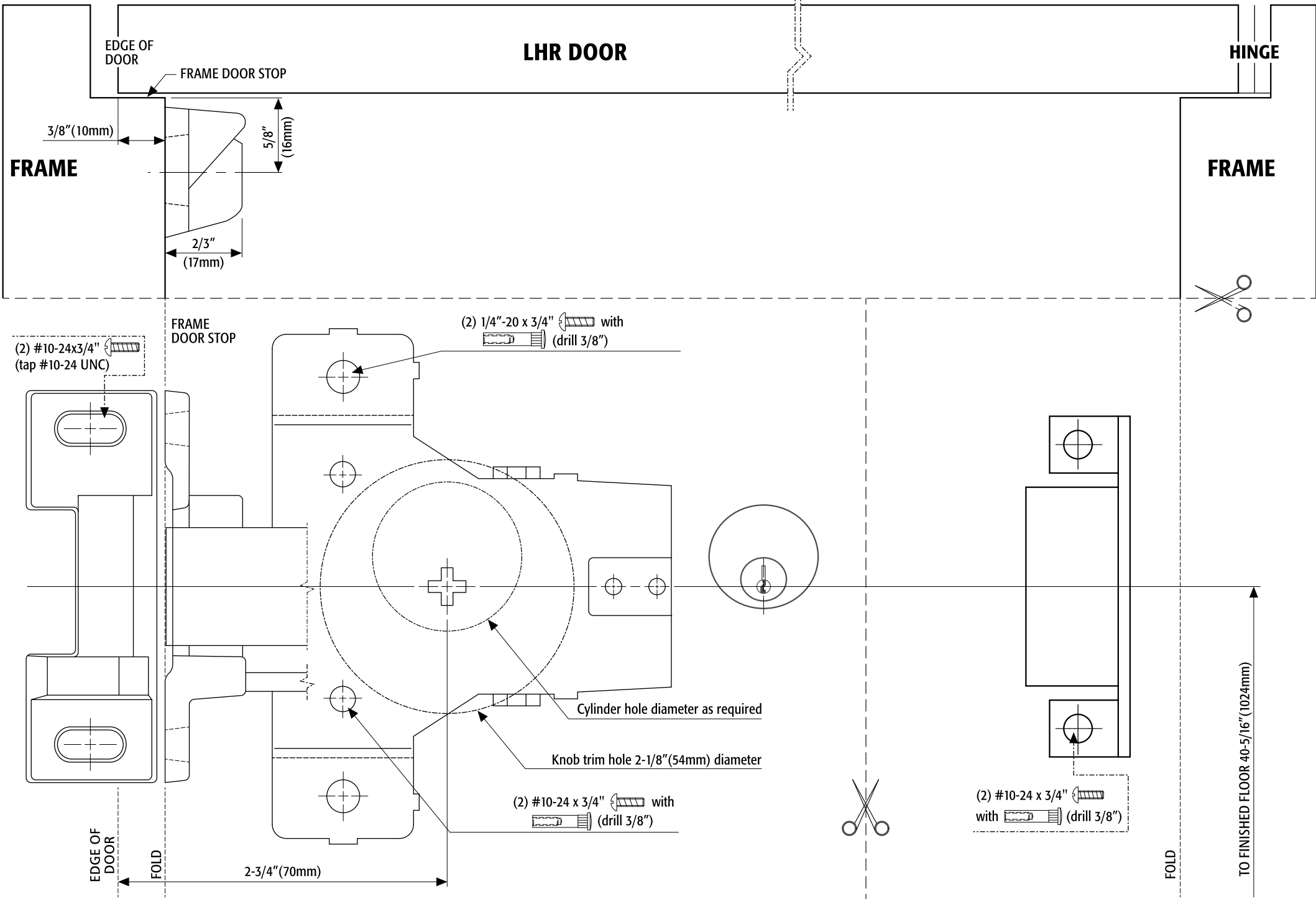
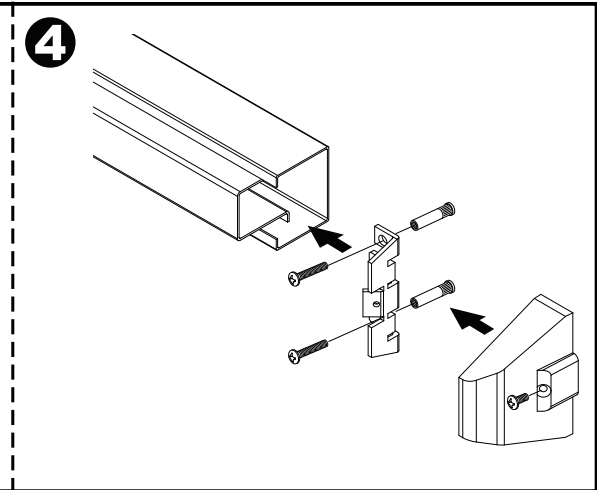
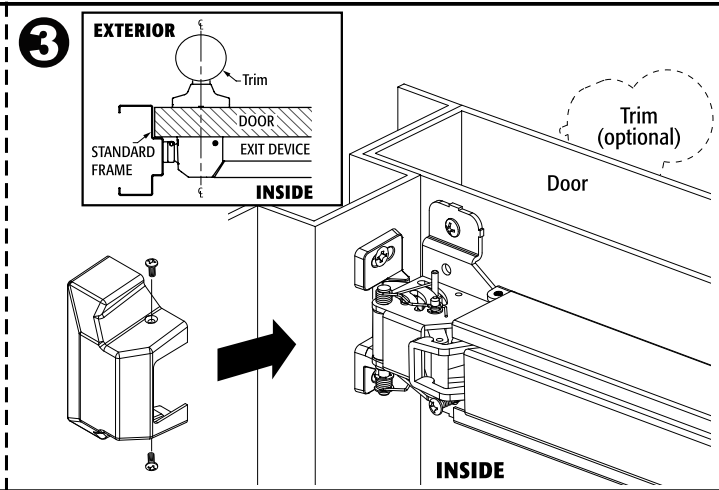
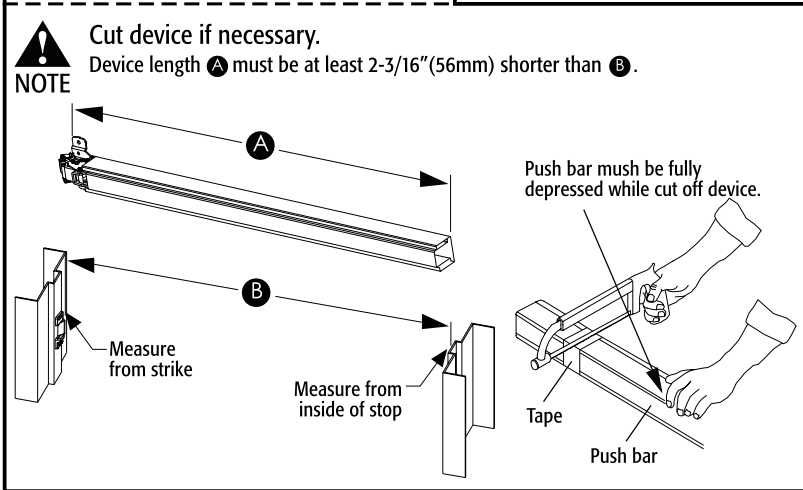
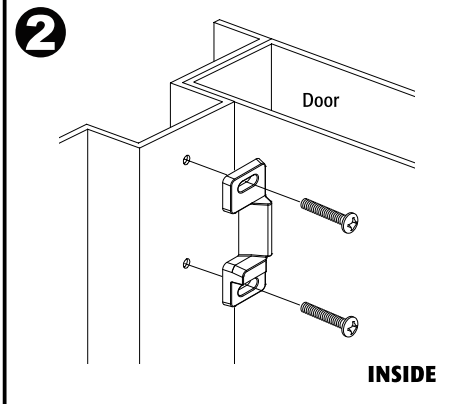
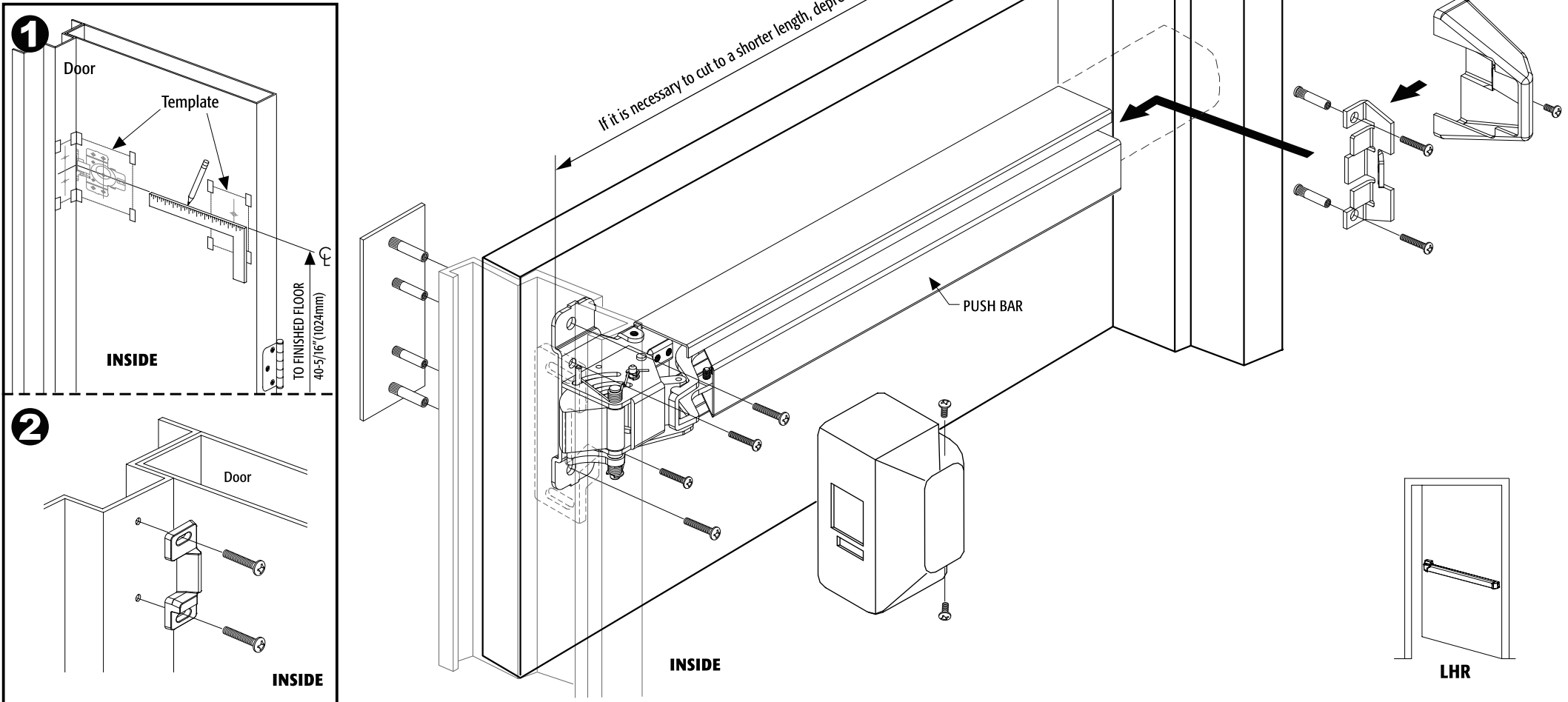
Parker Hardware mfg. corp.
INSTALLATION INSTRUCTIONS
(TEMPLATE)

540V

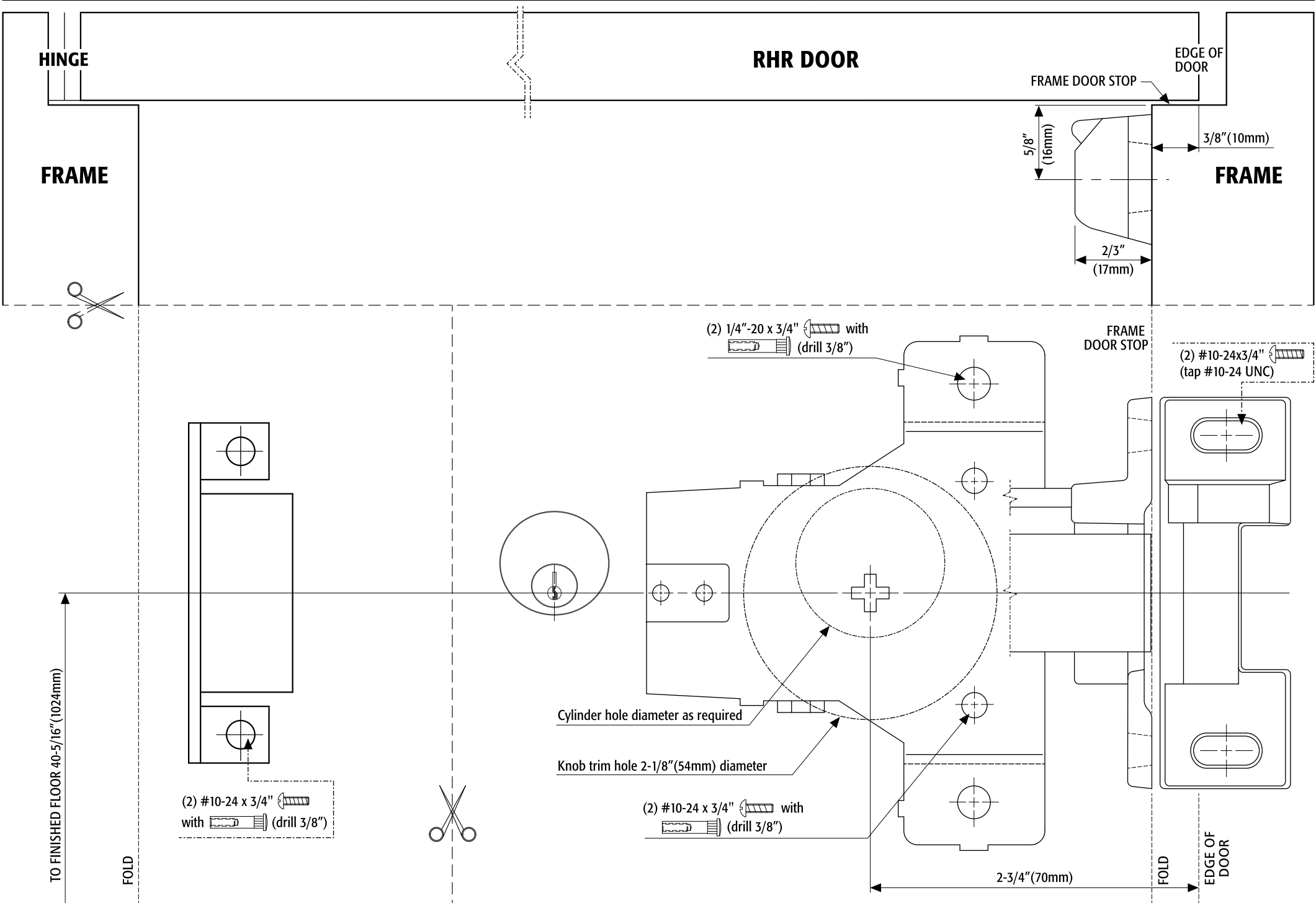
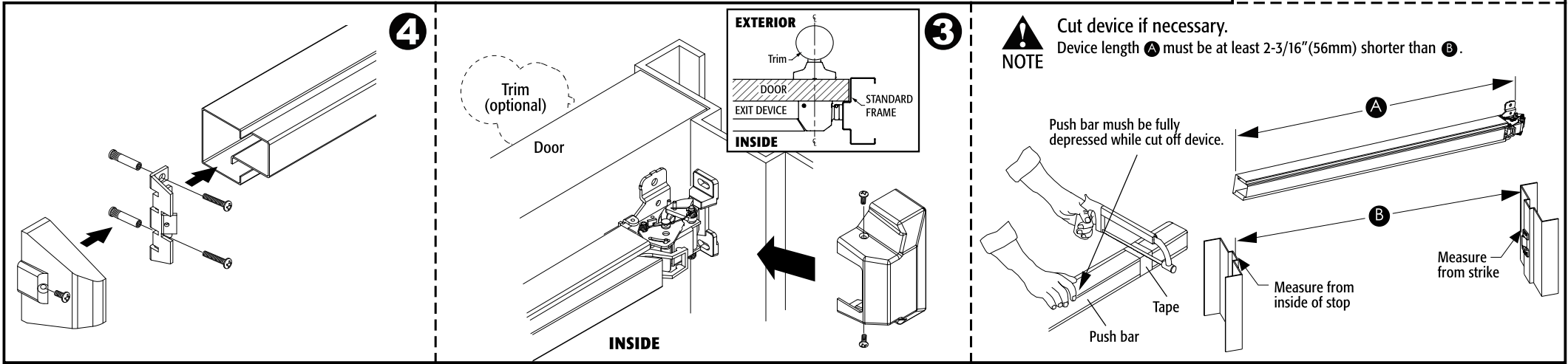
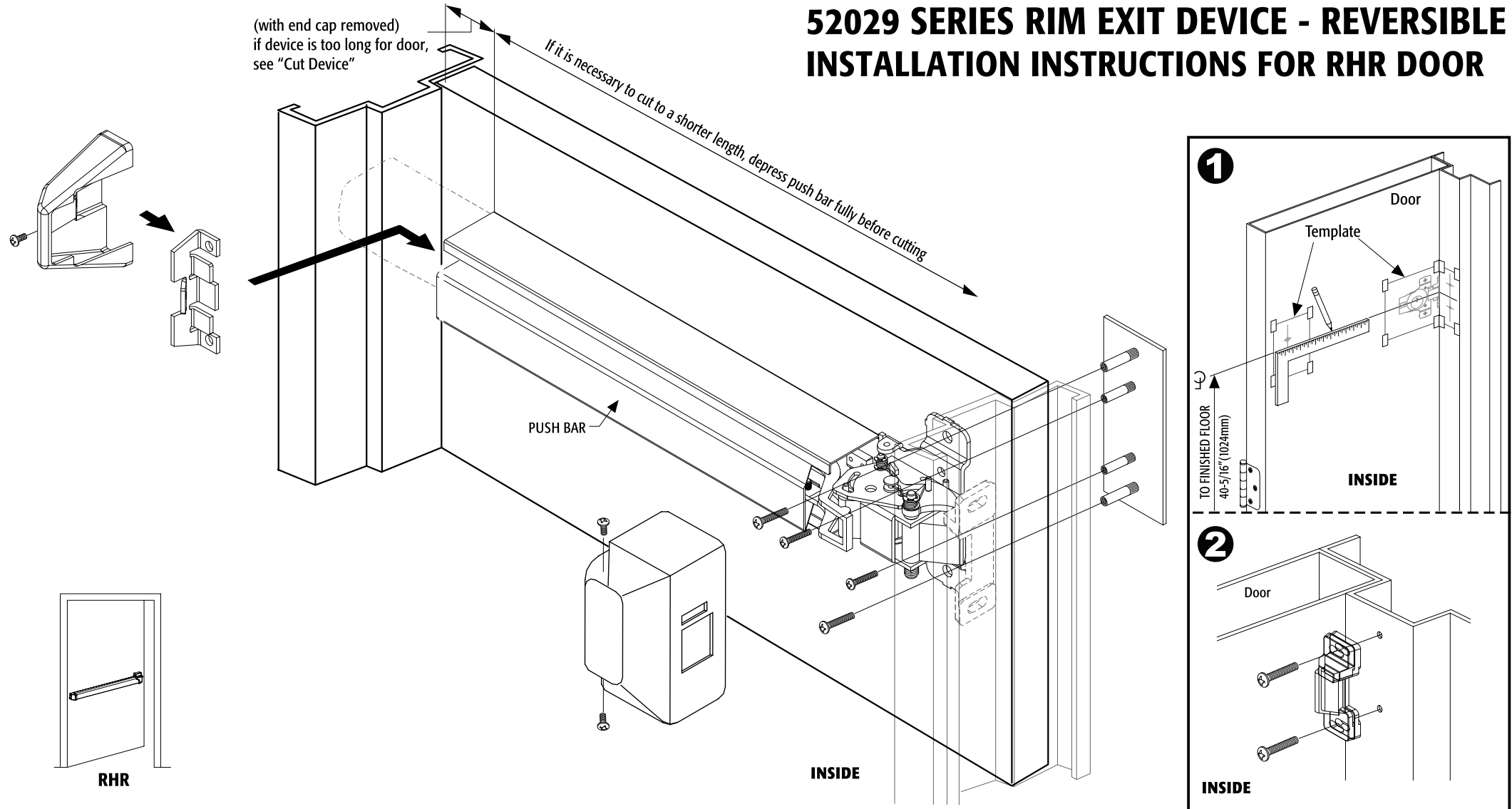
Cross Bar Panic Devices
Concealed Vertical Rod ; Non-handed (201408-W)

52029 SERIES RIM EXIT DEVICE - REVERSIBLE
INSTALLATION INSTRUCTIONS FOR LHR DOOR

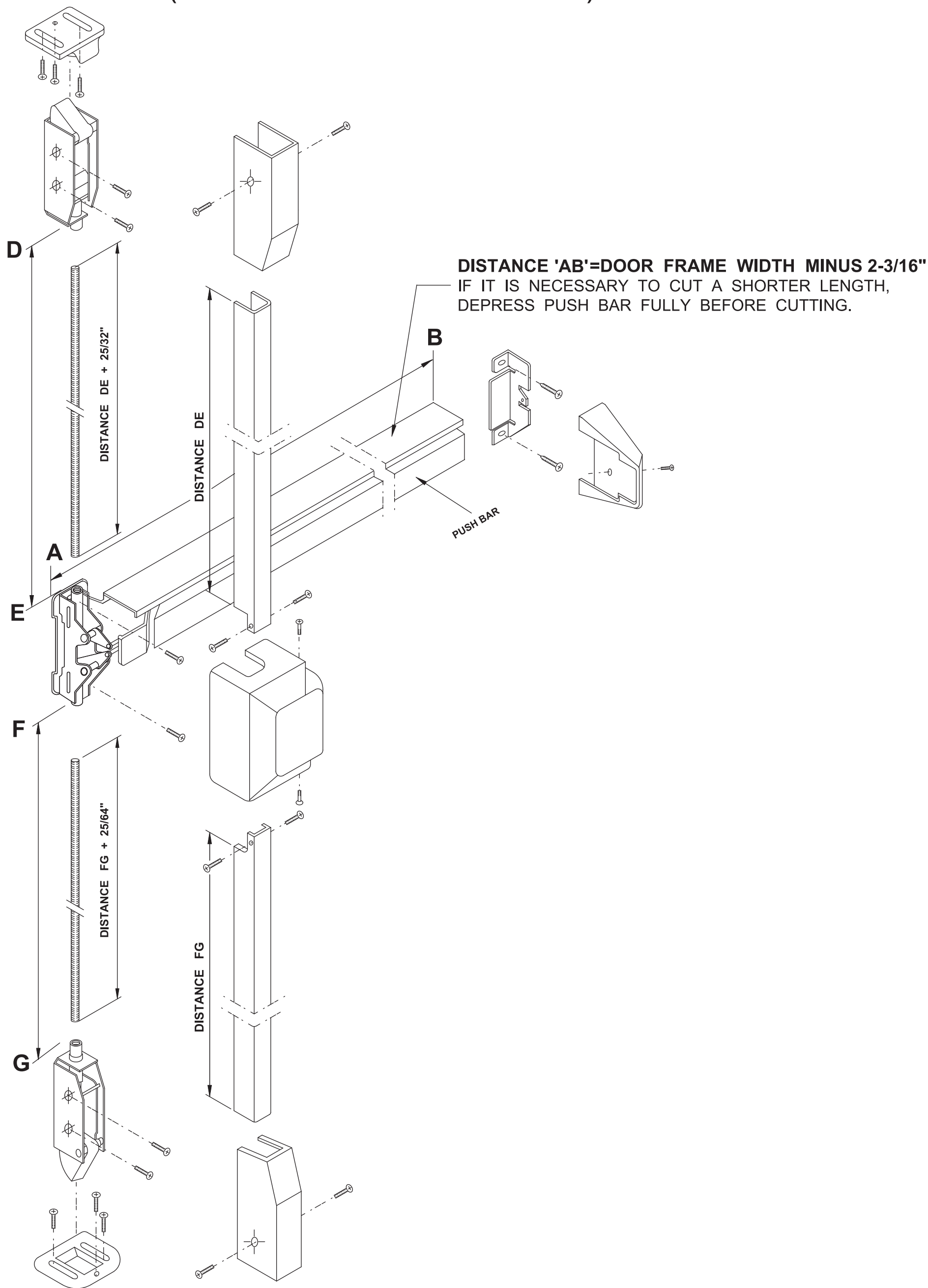
10107 ZINS-R8042-45

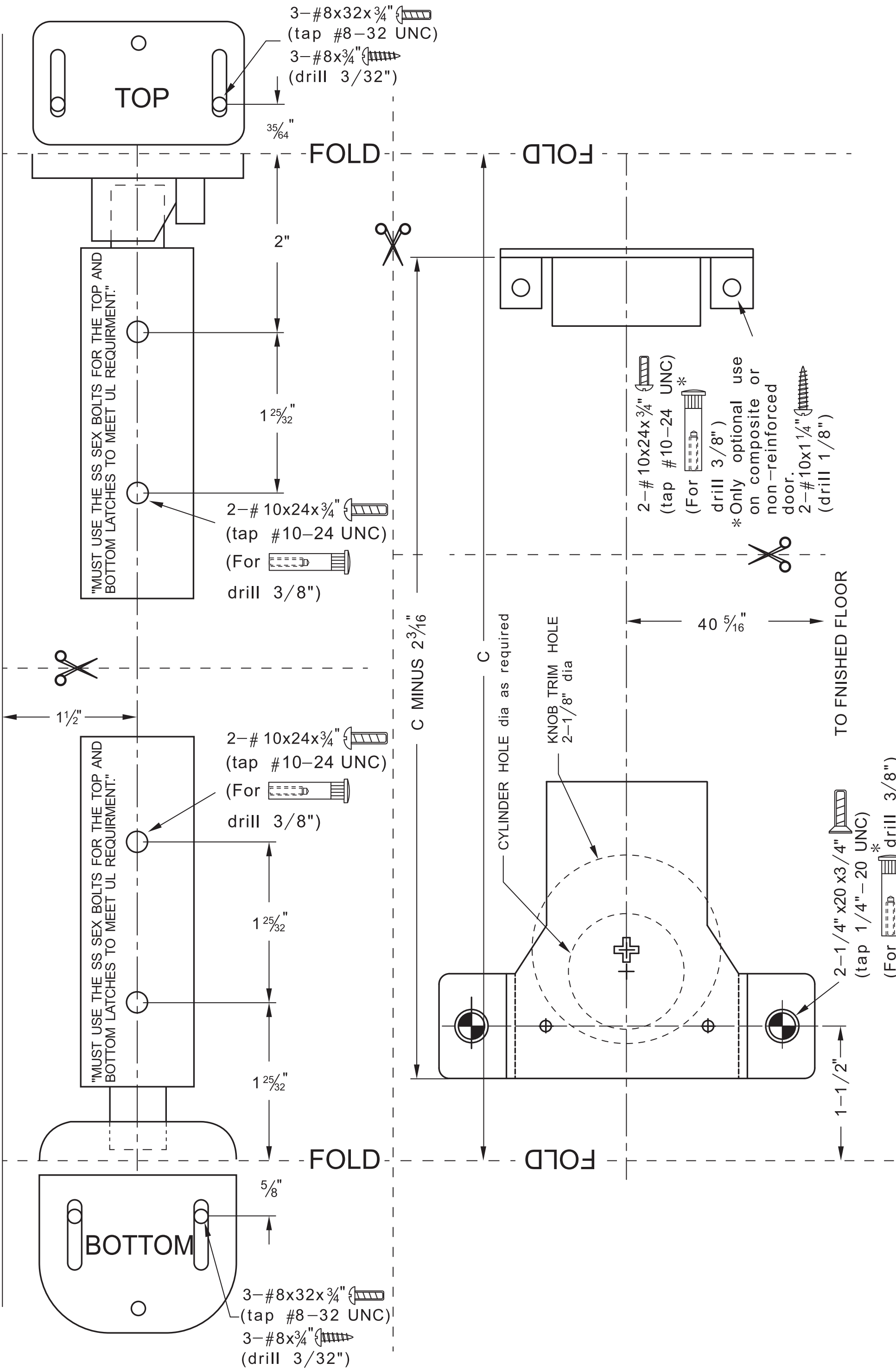


52029 SERIES RIM EXIT DEVICE - REVERSIBLE
INSTALLATION INSTRUCTIONS FOR RHR DOOR

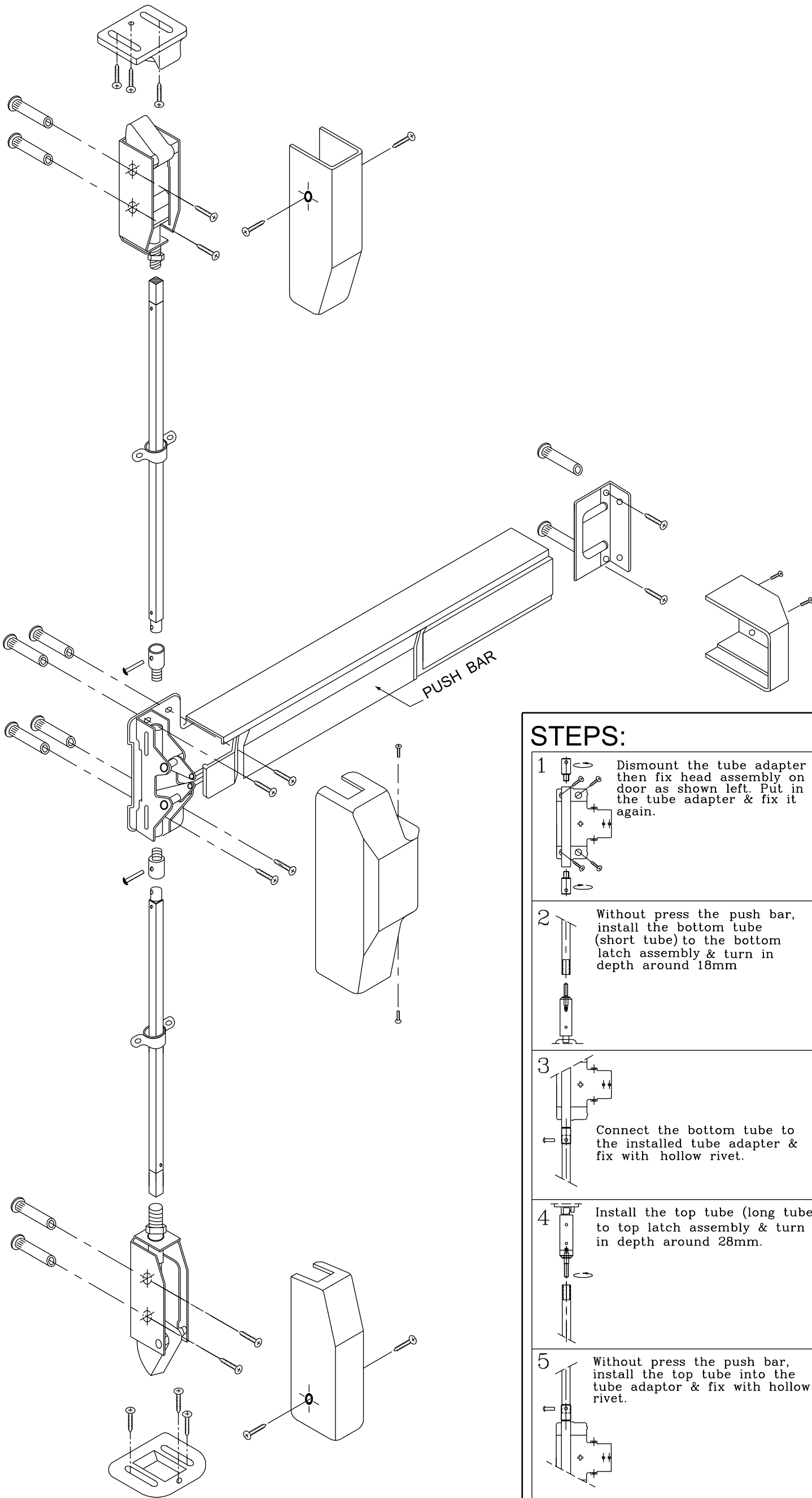


SERIES
SURFACE VERTICAL ROD EXIT DEVICE
INSTALLATION INSTRUCTION
REVERSIBLE
(TEMPLATE ON BACK PAGE)





F5000V VERTICAL EXIT DEVICE-REVERSIBLE INSTALLTION INSTRUCTION
LHR door shown, RHR door opposite



STEPS:

1

Dismount the tube adapter then fix head assembly on door as shown left. Put in the tube adapter & fix it again.

2

Without press the push bar, install the bottom tube (short tube) to the bottom latch assembly & turn in depth around 18mm

3

Connect the bottom tube to the installed tube adapter & fix with hollow rivet.

4

Install the top tube (long tube) to top latch assembly & turn in depth around 28mm.

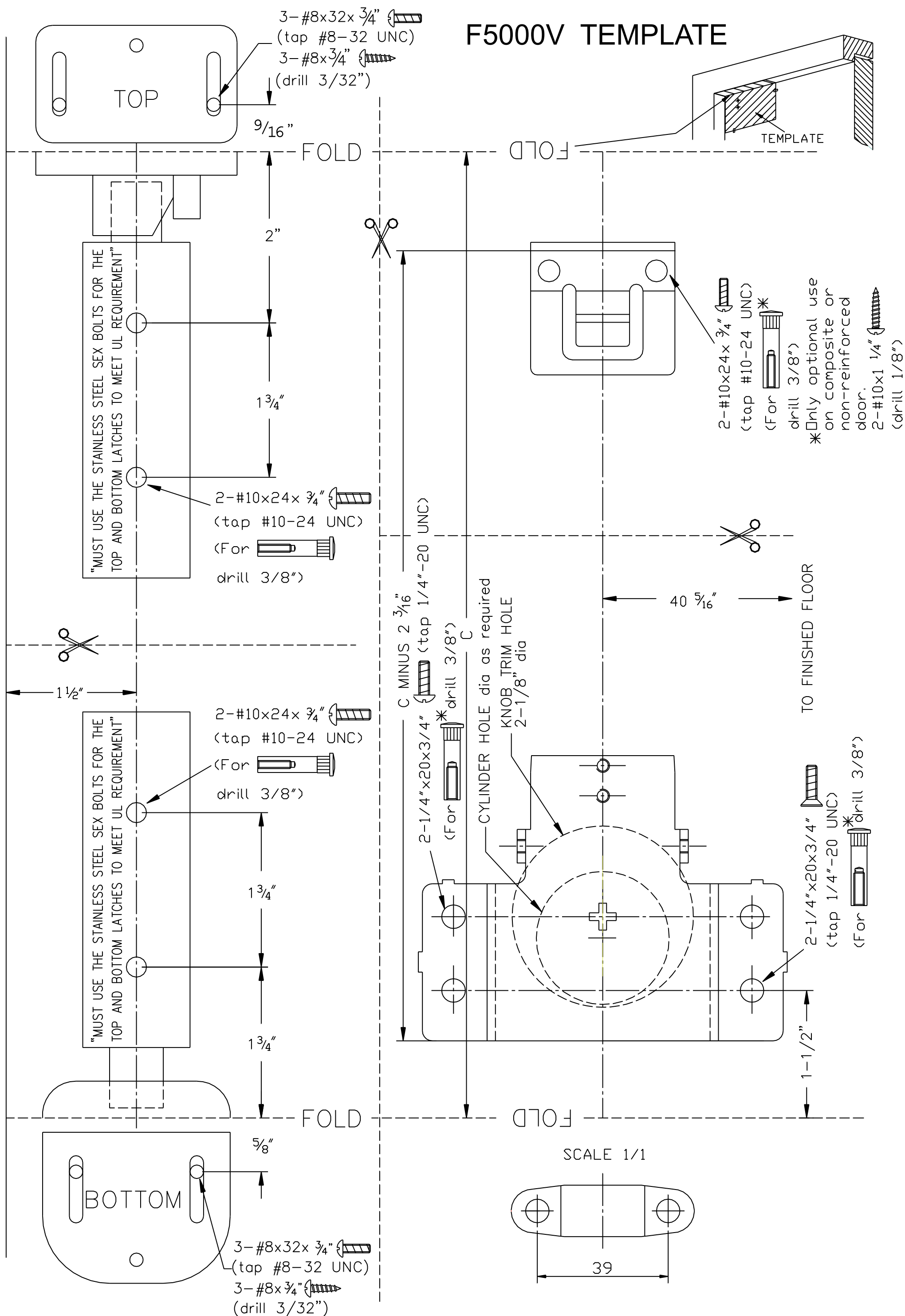
5

Without press the push bar, install the top tube into the tube adaptor & fix with hollow rivet.

Install the rod guide at the central position of rod.

A:Top strike and shims (if necessary).
B:Top latch.
C:Head assembly.
D:Bottom latch.
E:Bottom strike and strike shims (if necessary).
F:End plate.

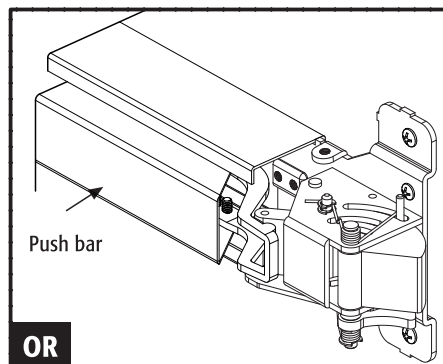
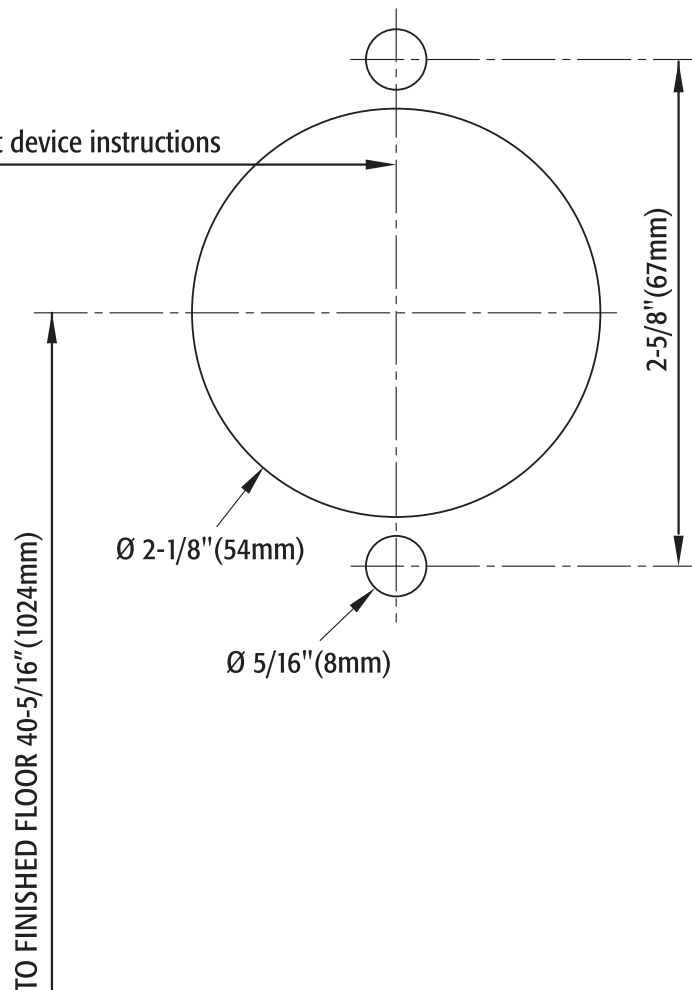
F5000V TEMPLATE



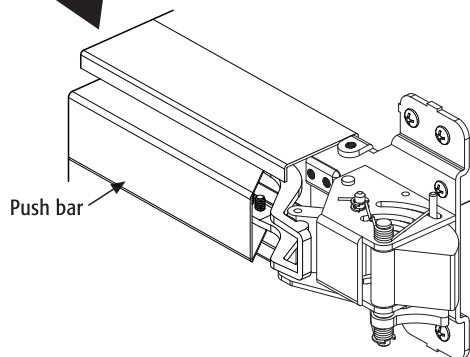
OUTSIDE KNOB(LEVER) INSTALLATION INSTRUCTIONS

1. Follow the drilling instructions on template. Drill 2-1/8"(54mm) holes on inside and outside door faces.
2. Follow the drilling instructions on template. Drill (2) 5/16"(8mm) holes on outside door face for lever only.
3. Insert knob (or lever) tail piece through 2-1/8"(54mm) hole on outside door face.
4. Cut off tail piece,if necessary, to have 3/16"(4.5mm) projection beyond inside door face.
5. Place inside mounting plate on inside door face and tighten 2 installation screws securely.
6. Install push bar.

Notice: Do not remove the stud of the lever when connected with Exit Panic Device.



OR

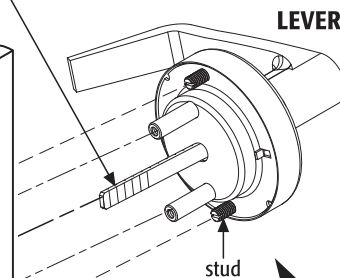


Must be vertical

INSIDE

$\varnothing 5/16"$ (8mm) holes for studs on outside door face for lever only

Cut off tail piece, if necessary, to have 3/16"(4.5mm) projection beyond inside door face.

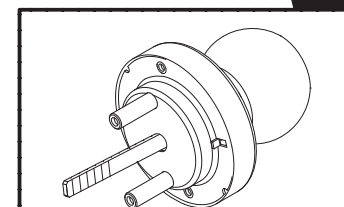


LEVER

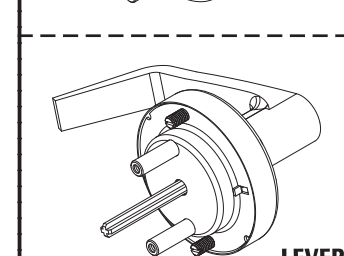
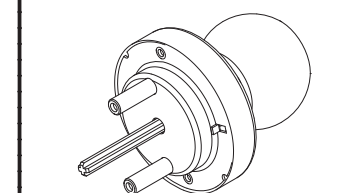
stud

OUTSIDE

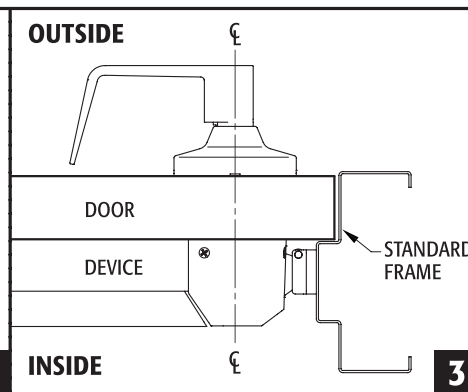
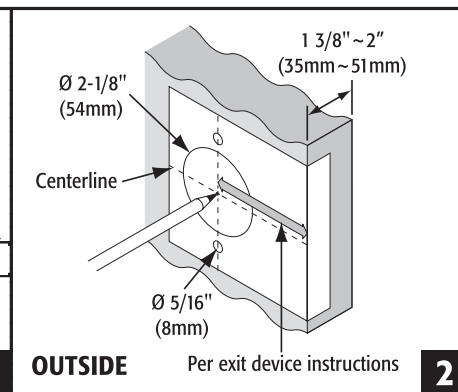
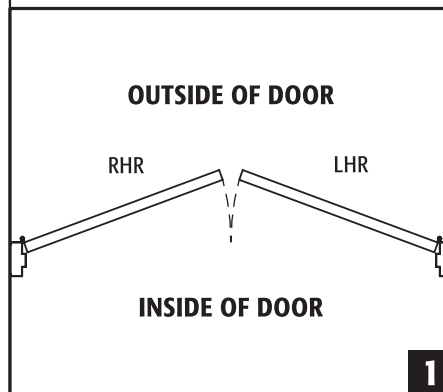
OR



KNOB



LEVER



OUTSIDE OF DOOR

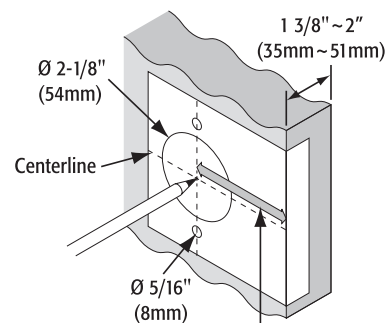
RHR

LHR

INSIDE OF DOOR

1

OUTSIDE



OUTSIDE

Per exit device instructions

2

INSIDE

OUTSIDE

DOOR

DOOR

DEVICE

STANDARD FRAME

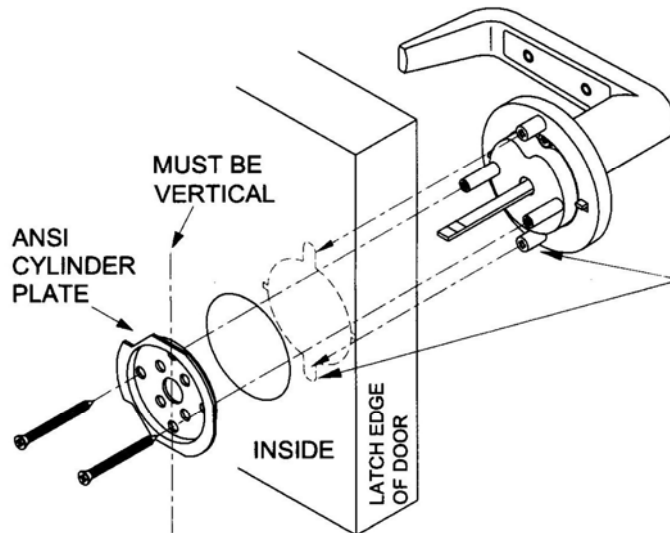
3

J. Parker Hardware mfg. corp.

INSTALLATION INSTRUCTIONS

WHEN YOUR DOOR HAS CYLINDRICAL LOCK CUT-OUT

CUT OFF LENGTH OF CYL. CONNECTING BAR SO THAT 3/16" PROJECTS BEYOND INSIDE FACE OF DOOR.



IMPORTANT!

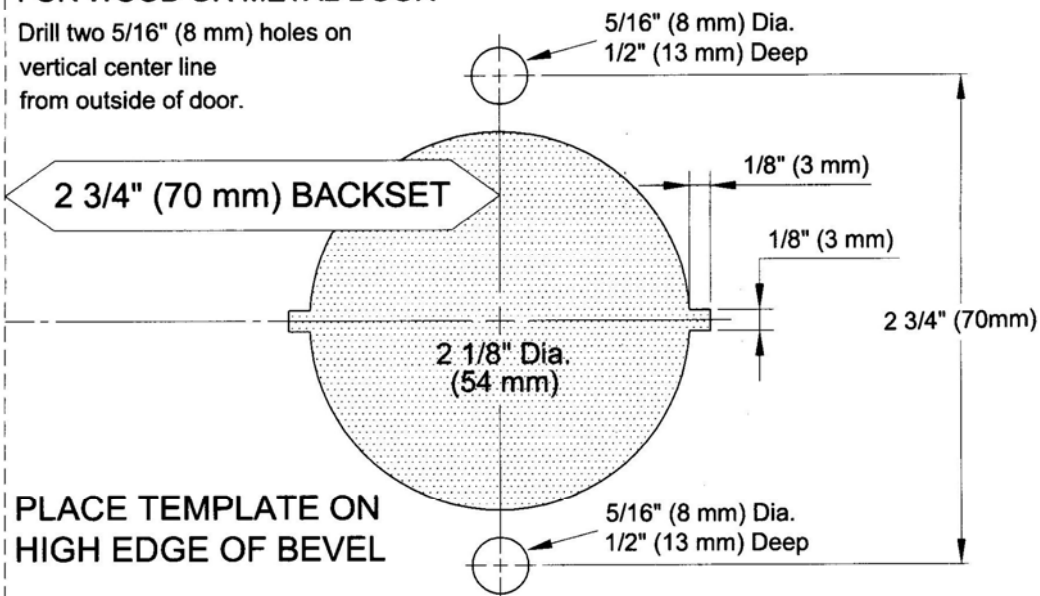
NOTE: ALIGNMENT STUDS **MUST** ENTER INTO (2) 5/16" FIELD DRILLED HOLES ON OUTSIDE OF DOOR (EXISTING SLOTS CAN BE ELONGATED WITH A FILE).

FOLD AND ALIGN TEMPLATE ON EDGE OF DOOR

TEMPLATE

FOR WOOD OR METAL DOOR

Drill two 5/16" (8 mm) holes on vertical center line from outside of door.



PLACE TEMPLATE ON HIGH EDGE OF BEVEL

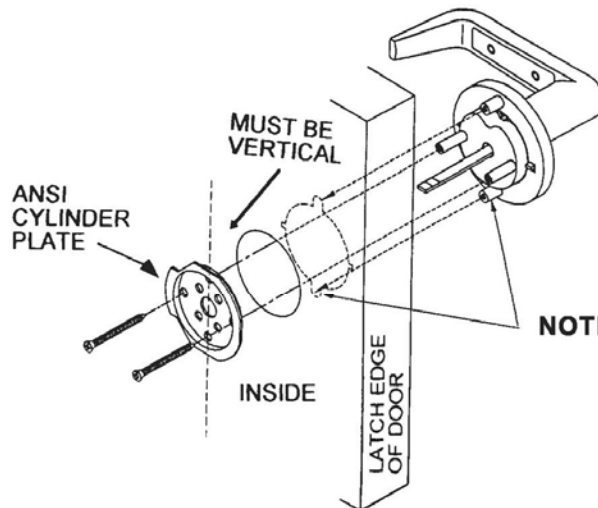
WD-OD002(185)

Parker Hardware mfg. corp.

INSTALLATION INSTRUCTIONS

WHEN YOUR DOOR HAS CYLINDRICAL LOCK CUT-OUT

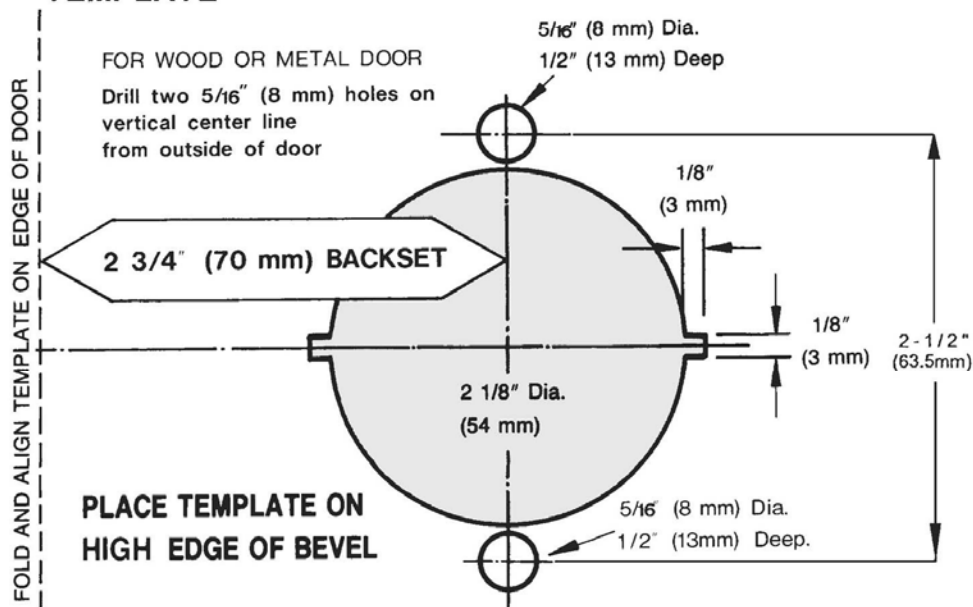
CUT OFF LENGTH OF CYL. CONNECTING BAR SO THAT 3/16" PROJECTS BEYOND INSIDE FACE OF DOOR.

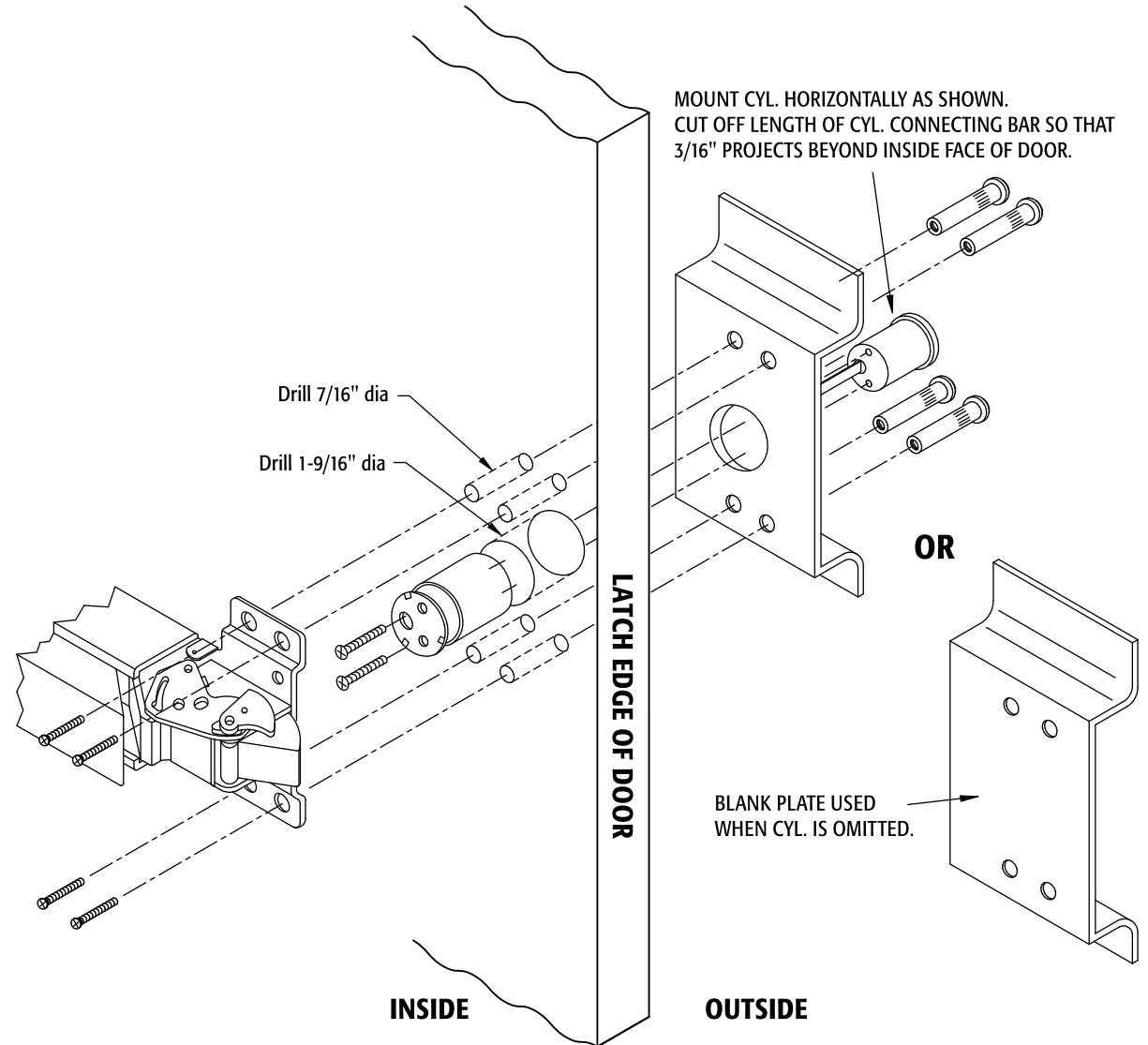
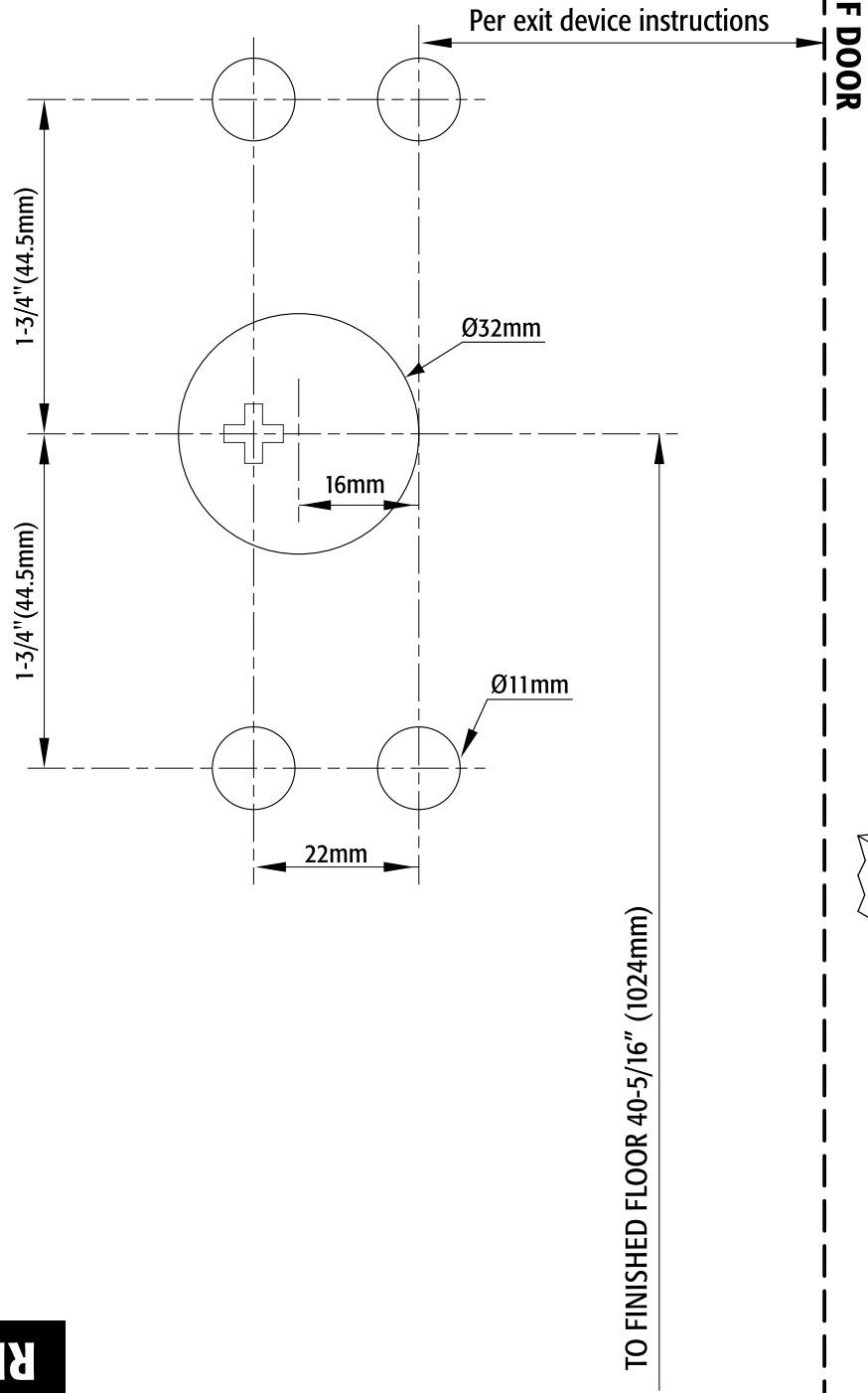


IMPORTANT!

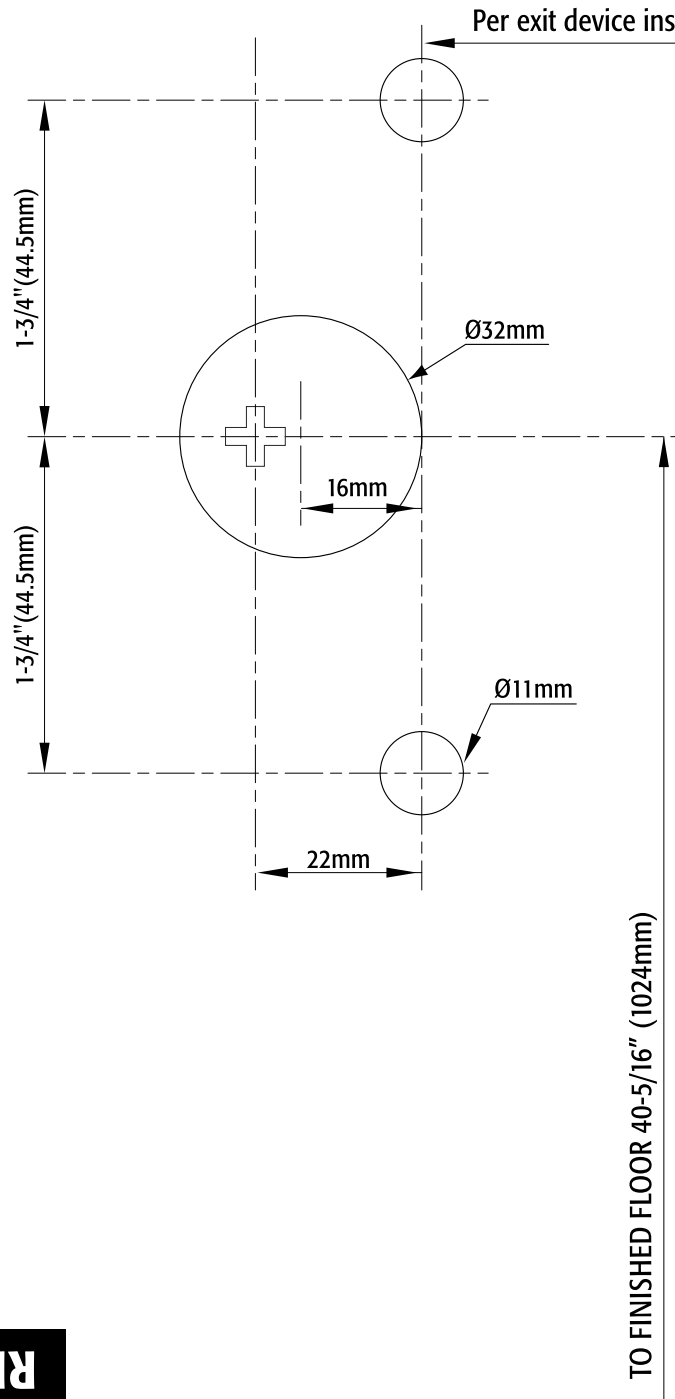
NOTE: ALIGNMENT STUDS MUST ENTER INTO (2) 5/16" FIELD DRILLED HOLES ON OUTSIDE OF DOOR (EXISTING SLOTS CAN BE ELONGATED WITH A FILE).

TEMPLATE

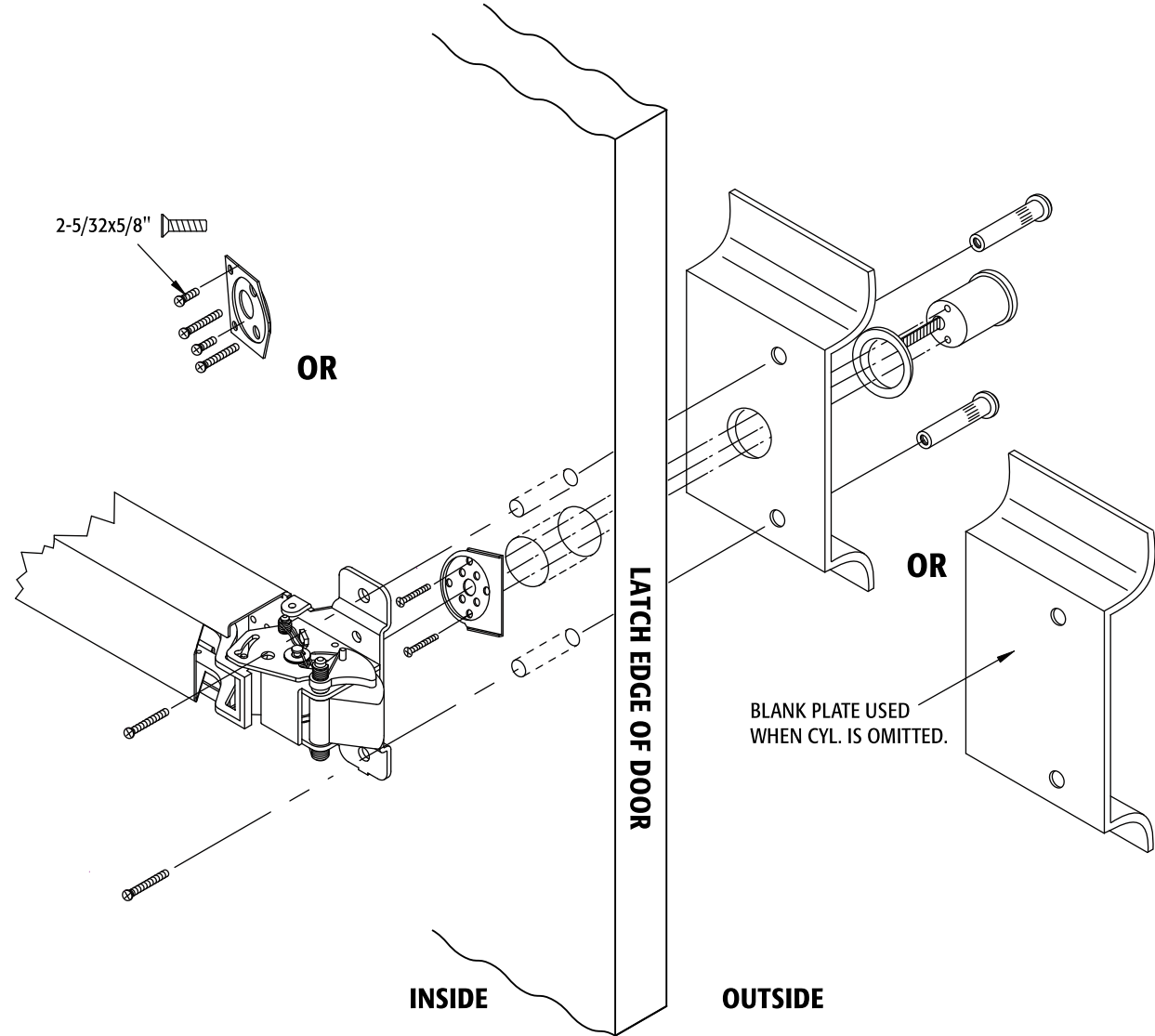




LHR



EDGE OF DOOR



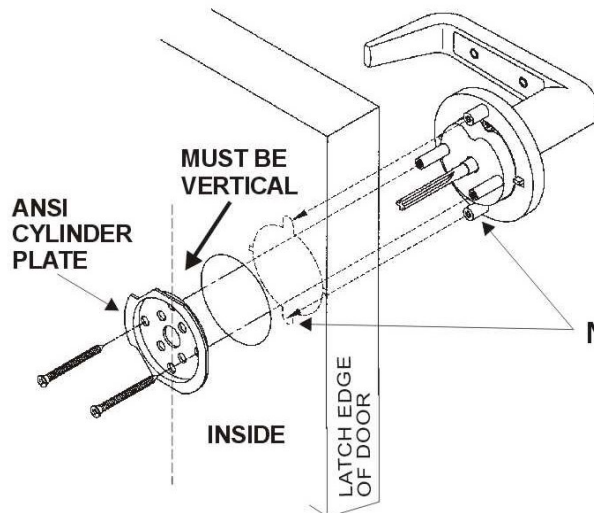
RHR

Parker Hardware mfg. corp.

INSTALLATION INSTRUCTIONS

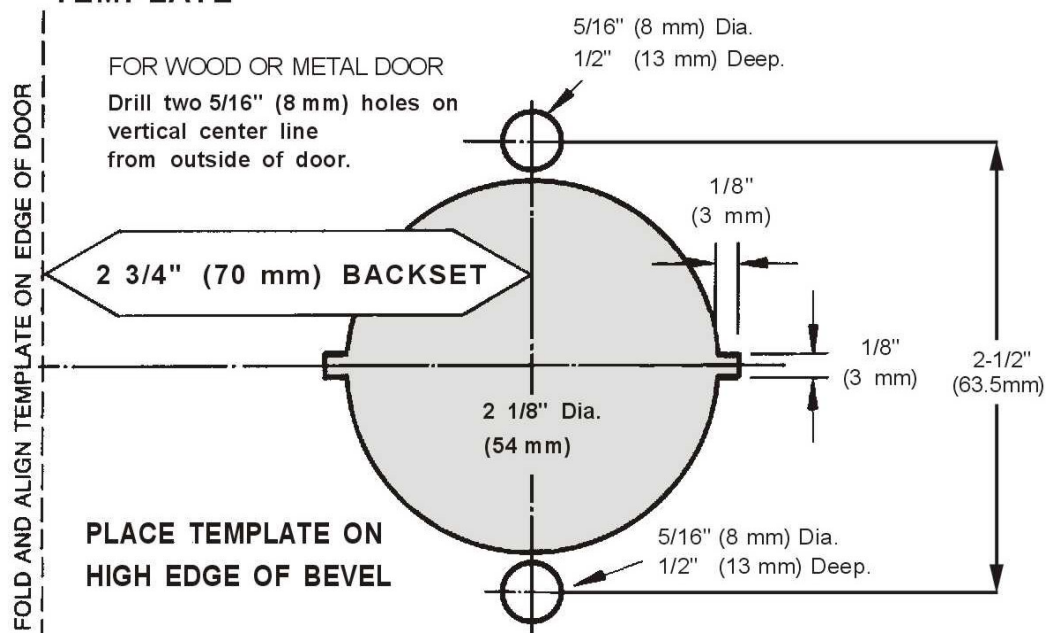
WHEN YOUR DOOR HAS CYLINDRICAL LOCK CUT-OUT

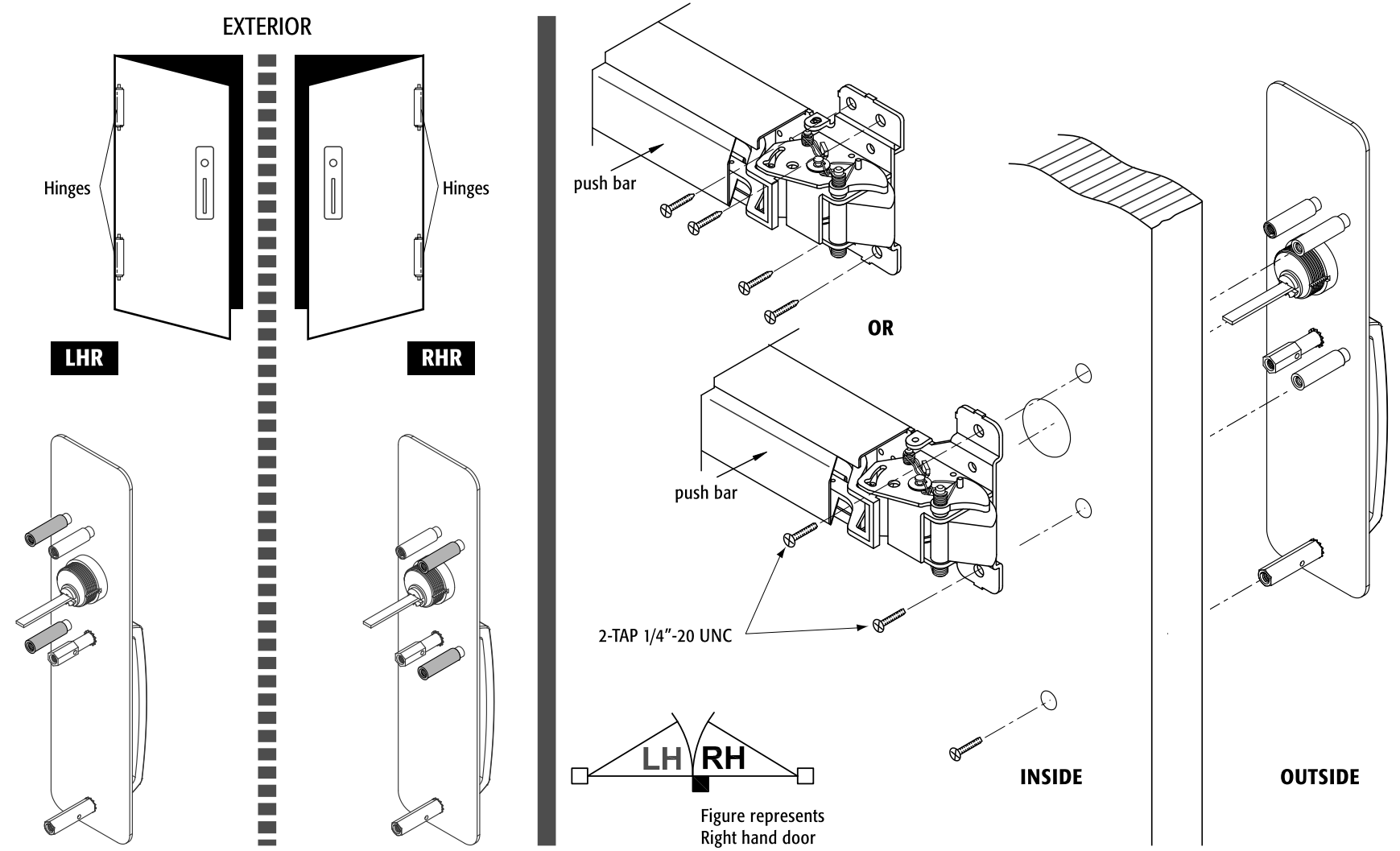
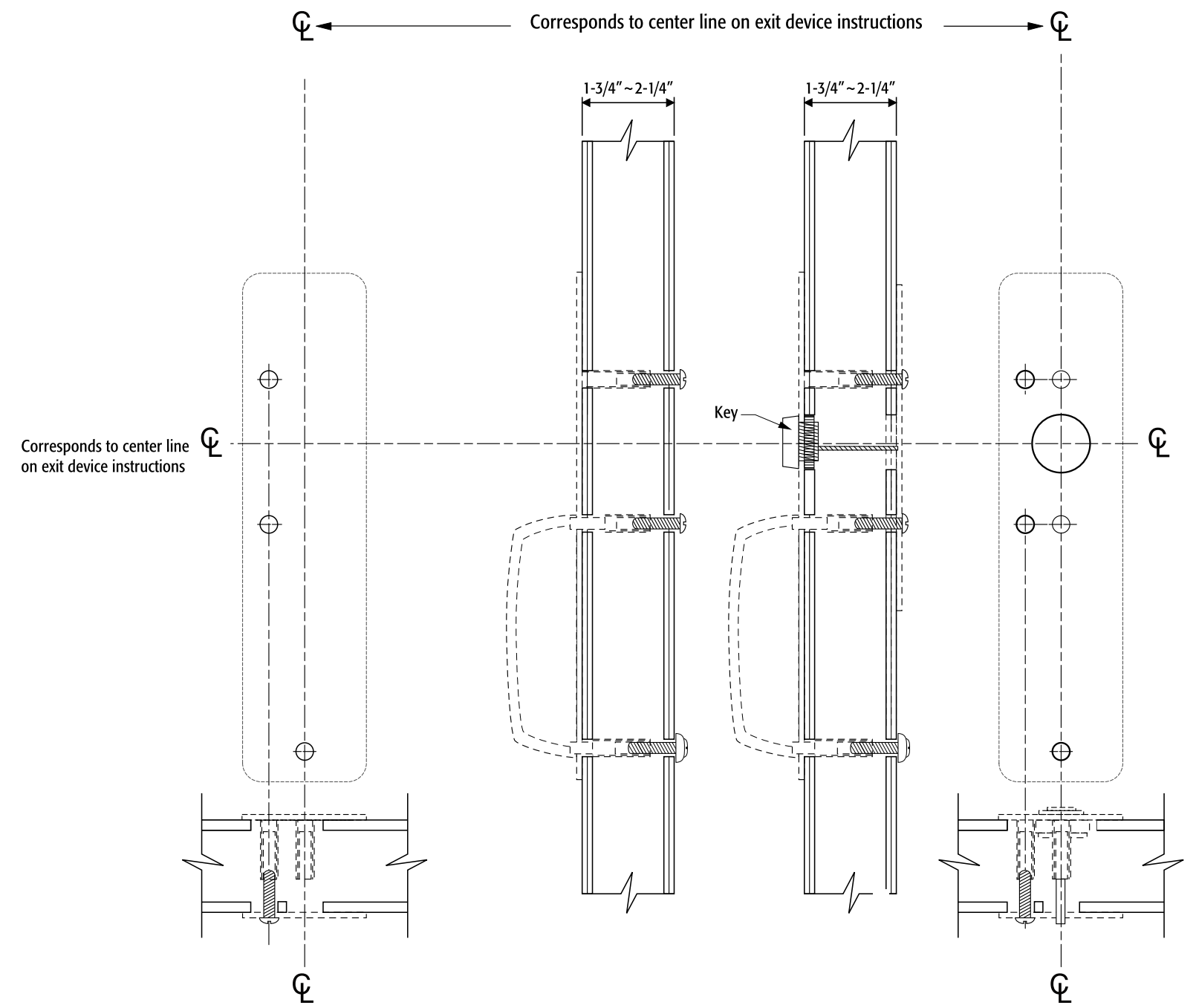
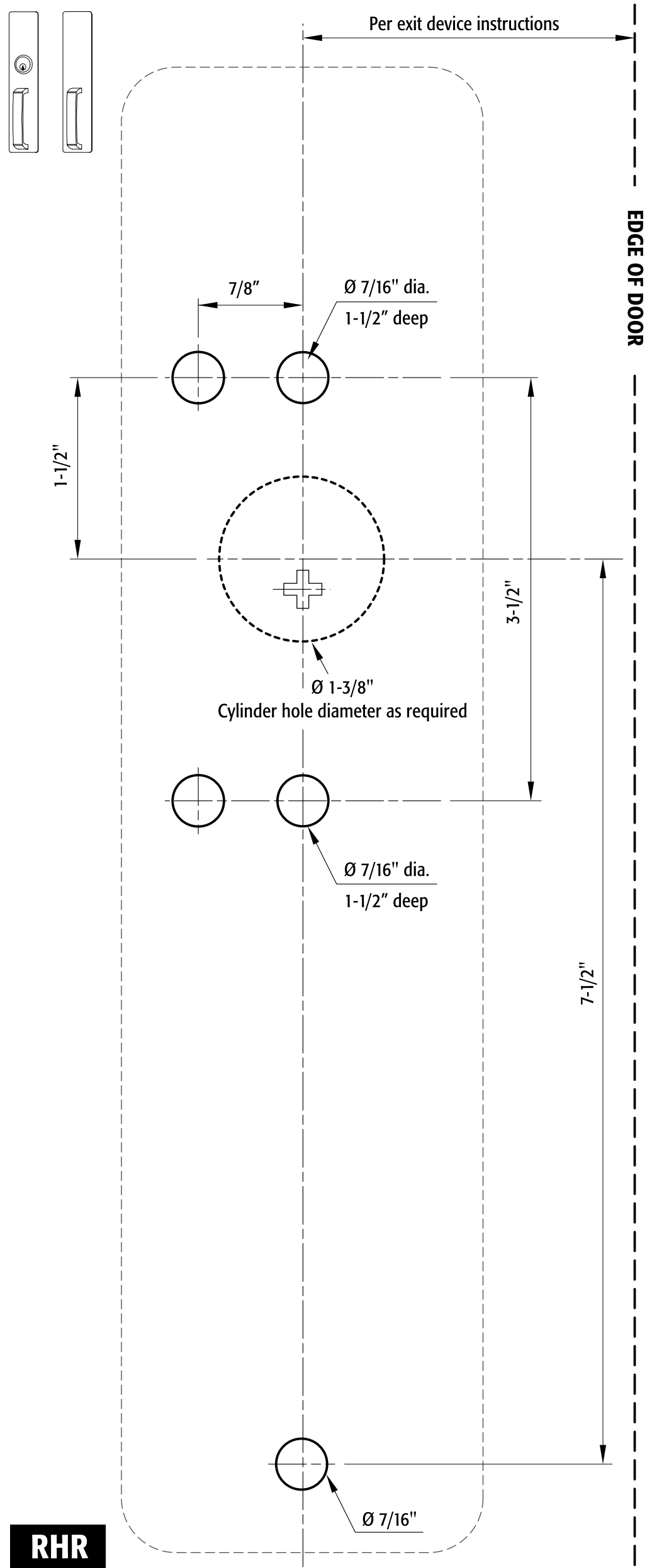
CUT OFF LENGTH OF CYL. CONNECTING BAR SO THAT 3/16" PROJECTS BEYOND INSIDE FACE OF DOOR.

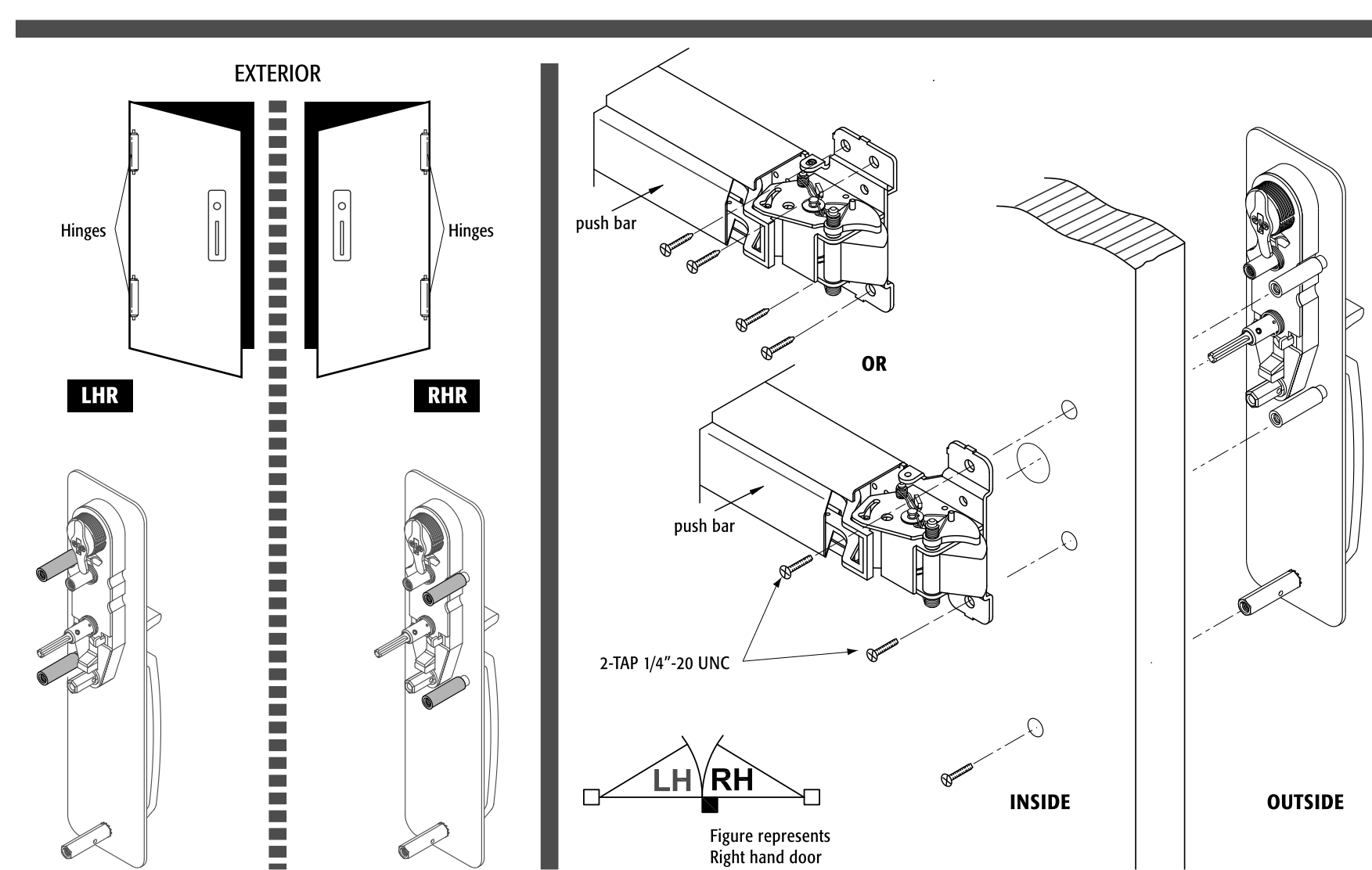
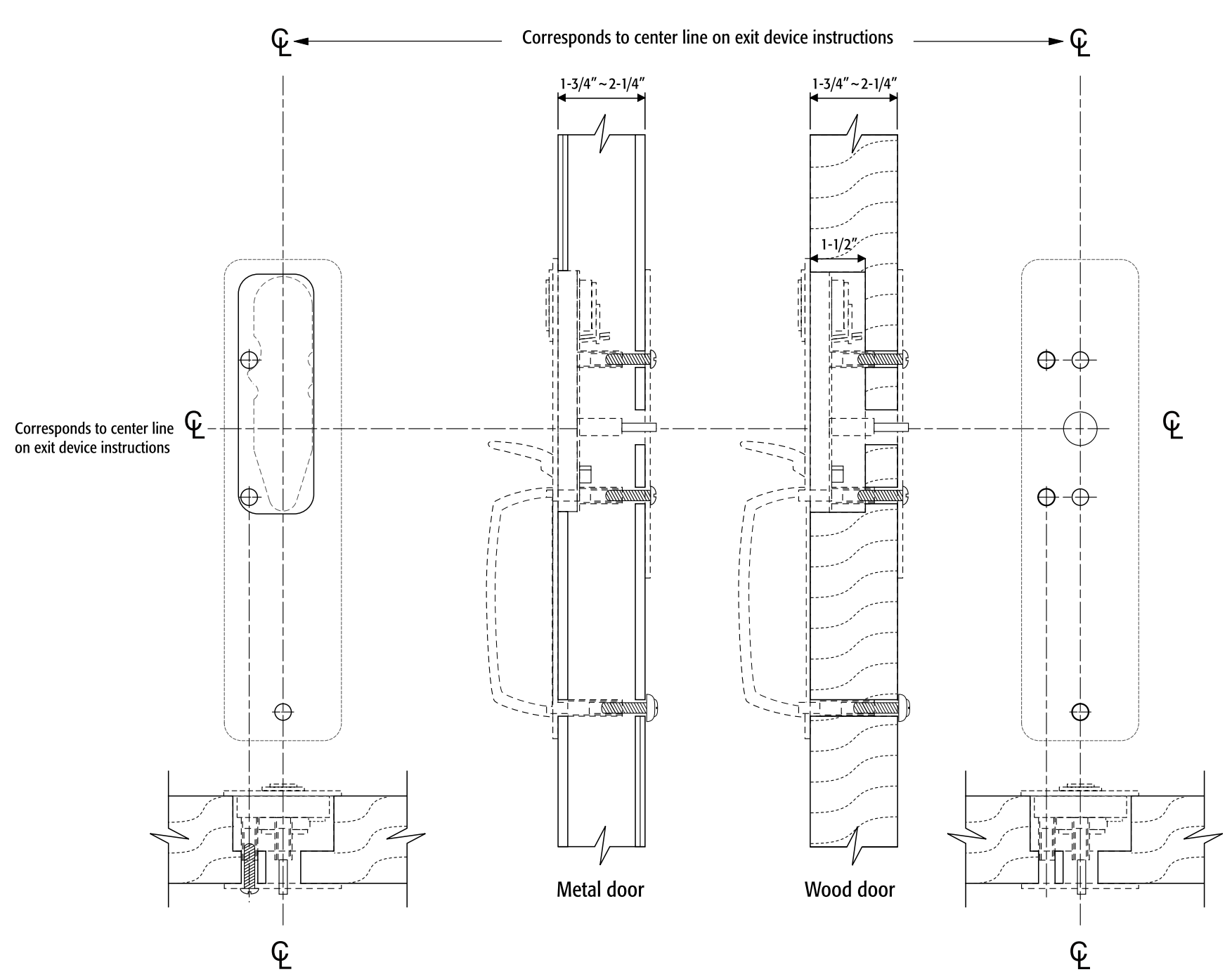
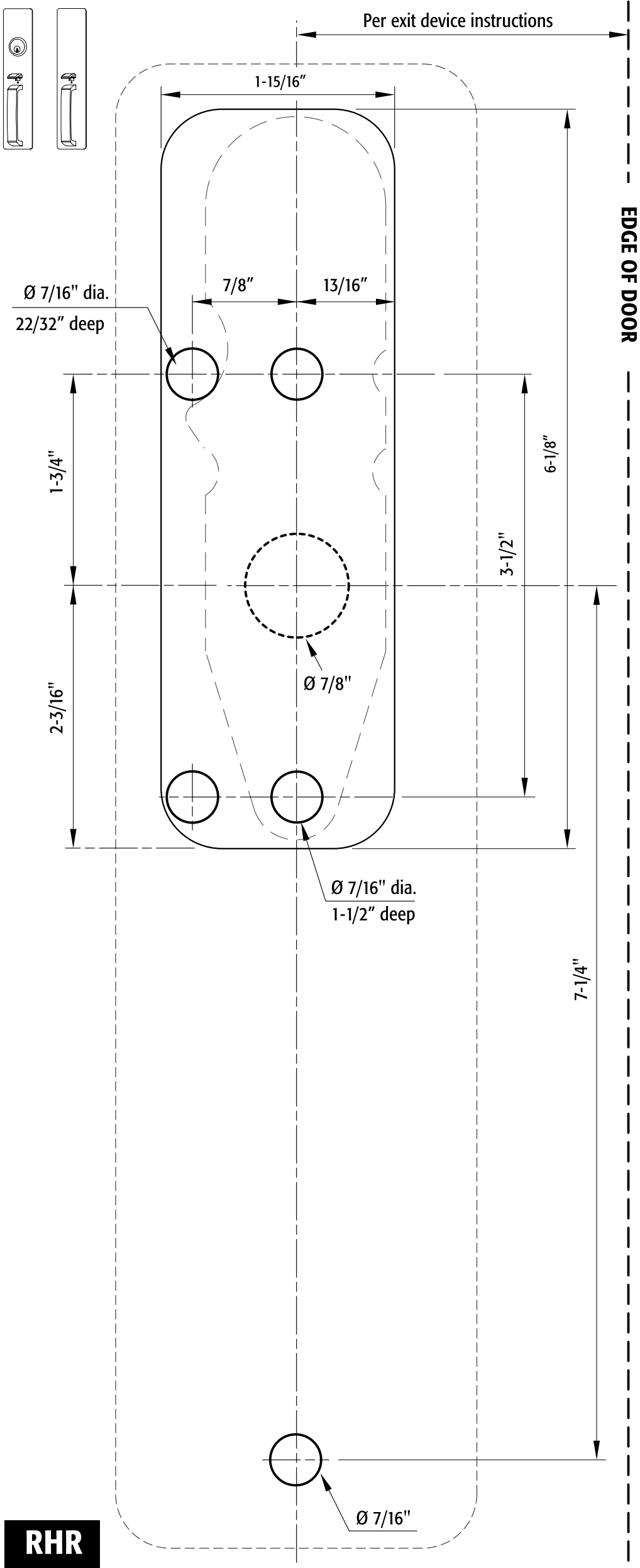


IMPORTANT!
NOTE: ALIGNMENT STUDS MUST ENTER INTO (2) 5/16" FIELD DRILLED HOLES ON OUTSIDE OF DOOR (EXISTING SLOTS CAN BE ELONGATED WITH A FILE).

TEMPLATE

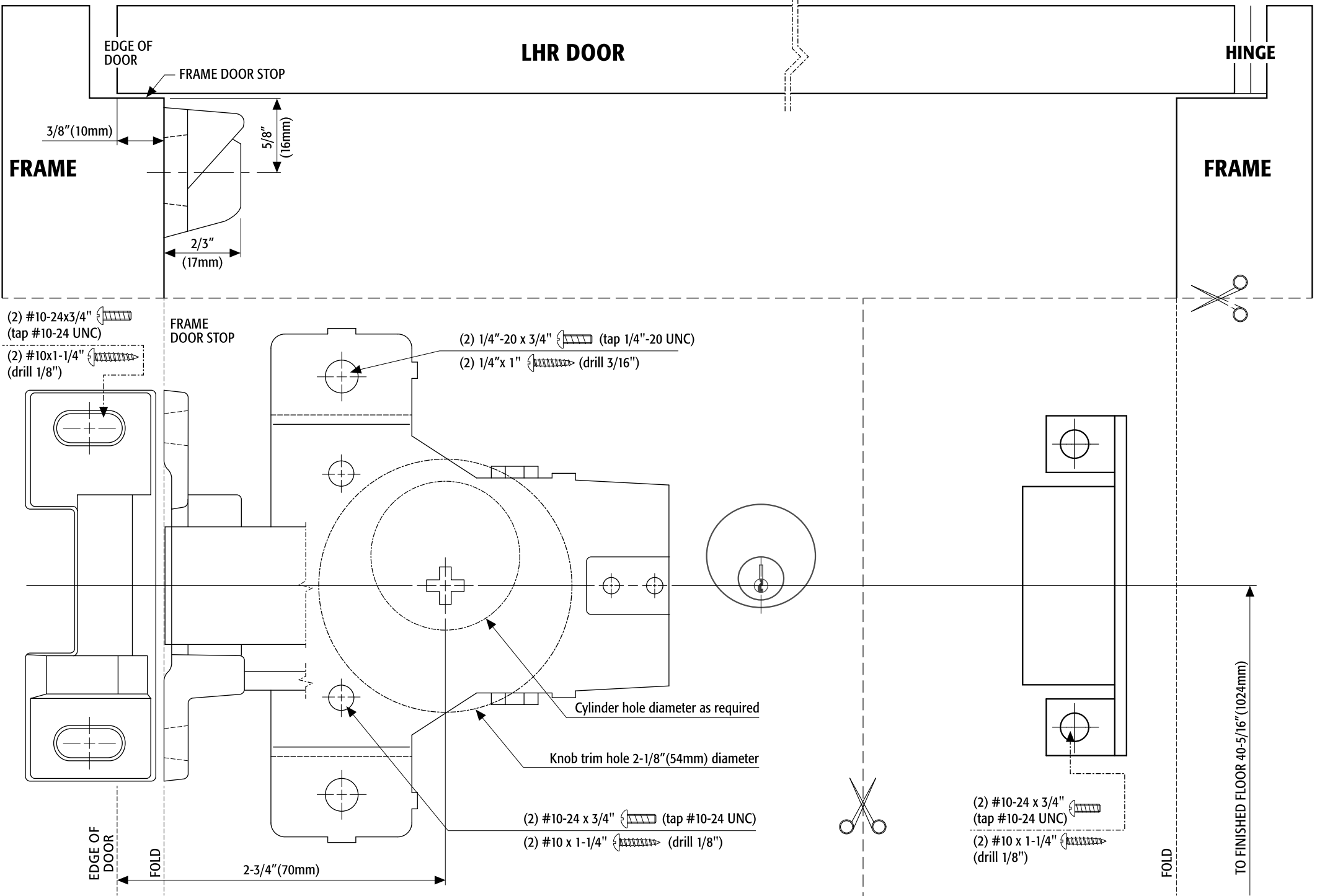
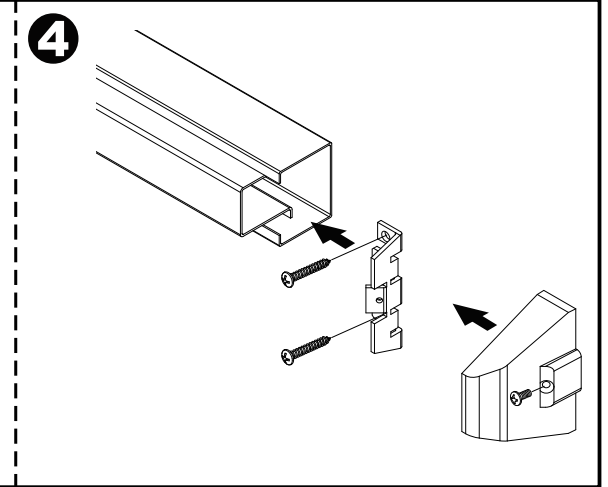
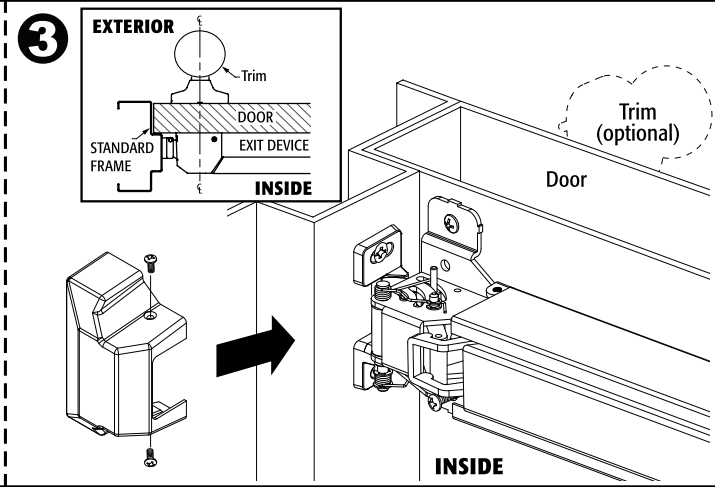
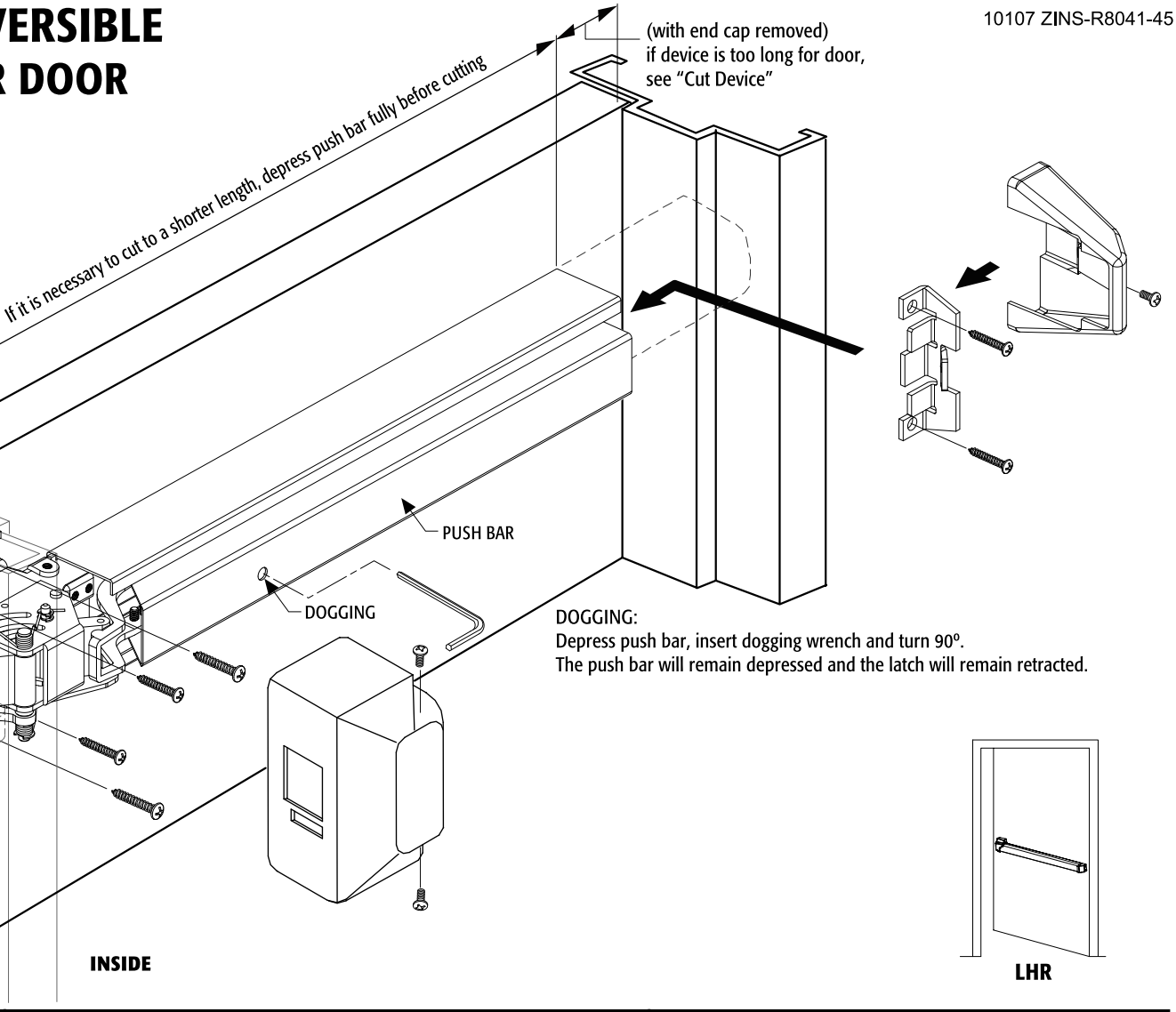
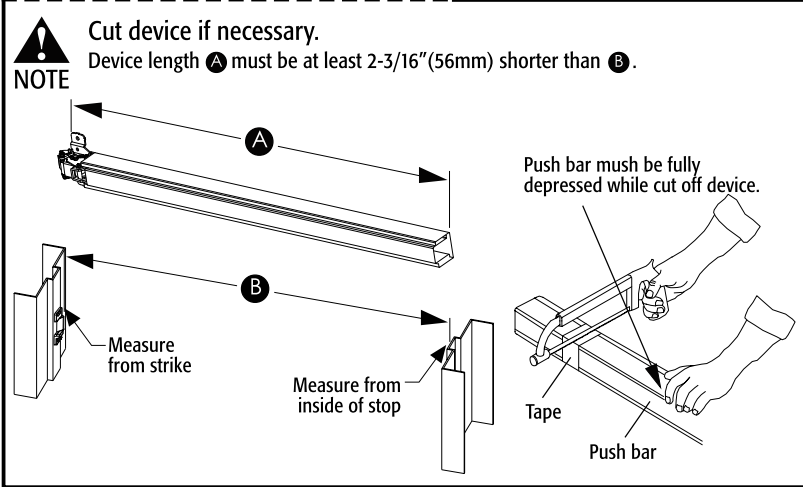
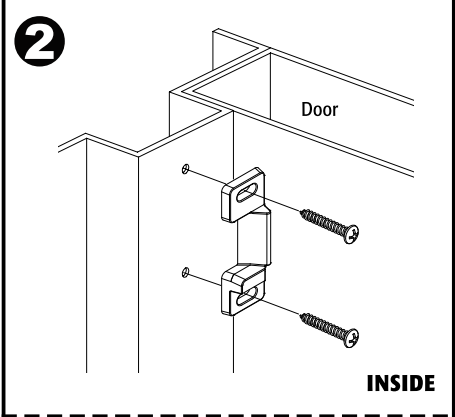
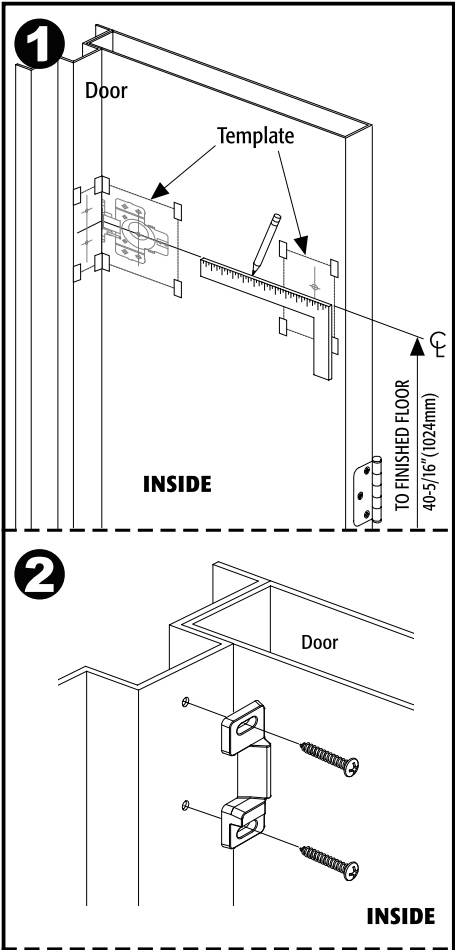




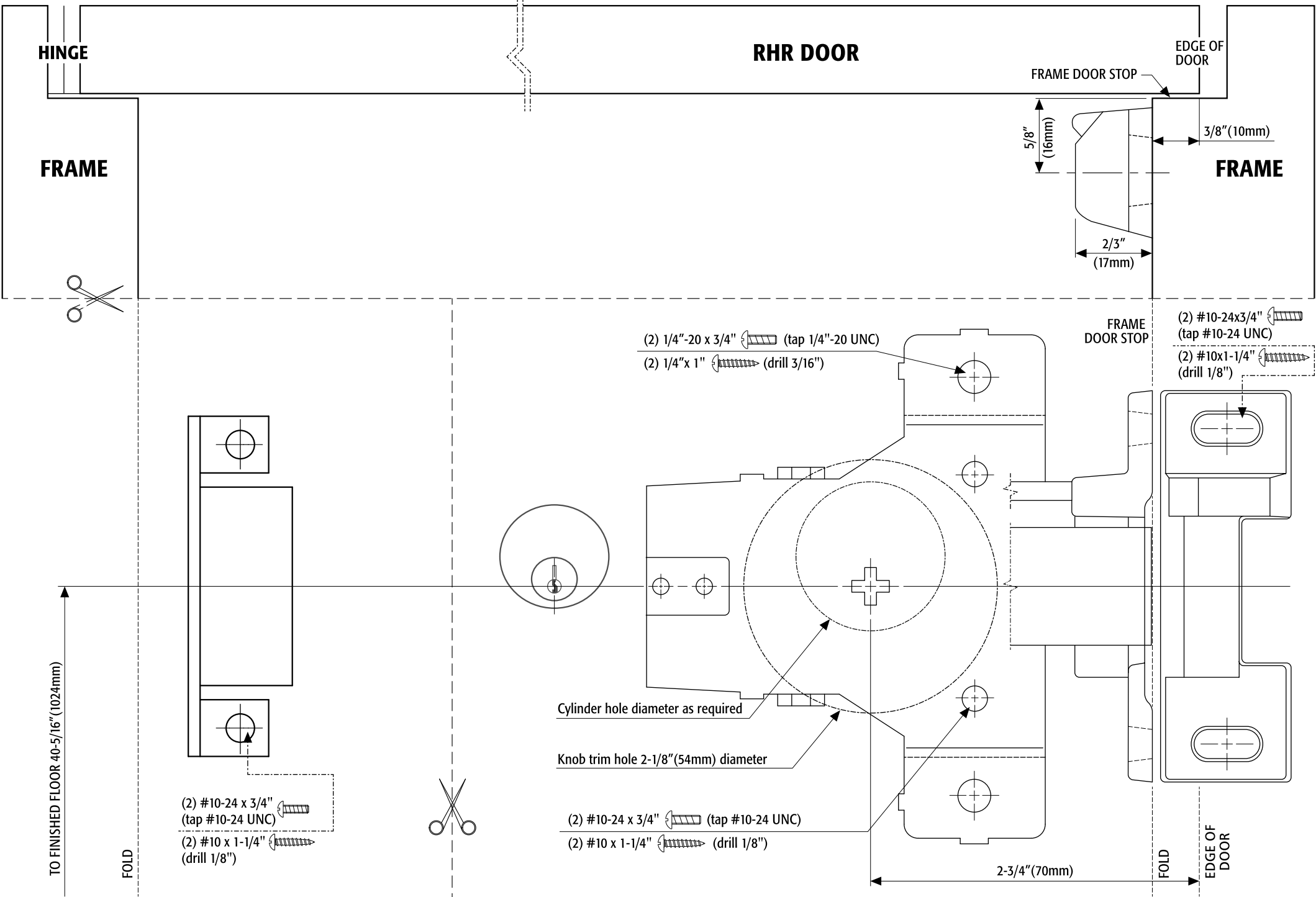
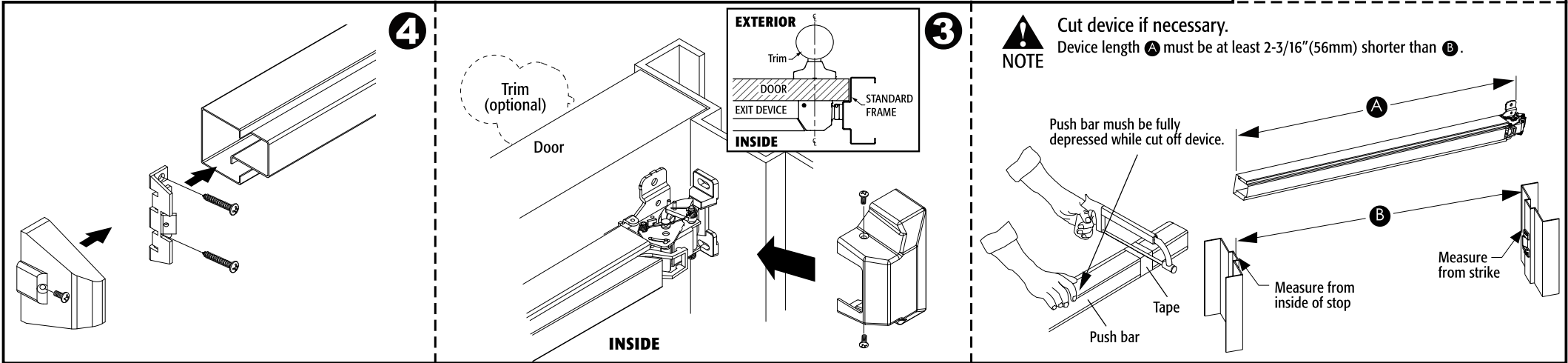
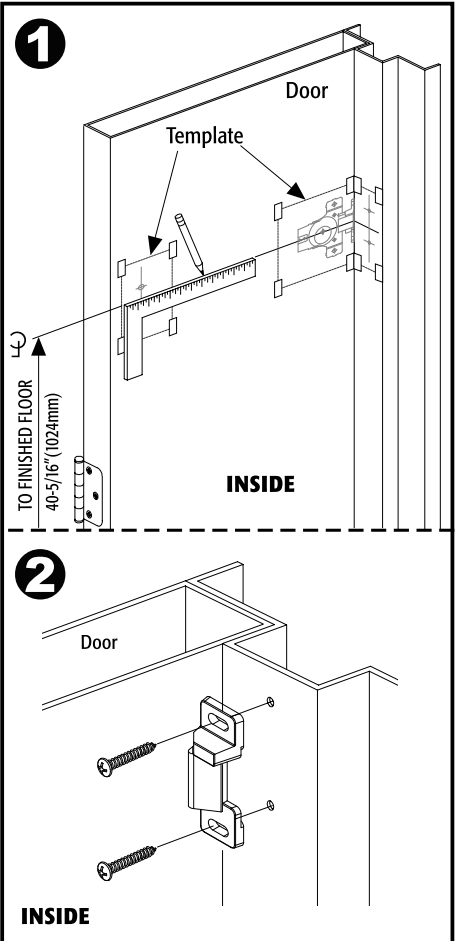
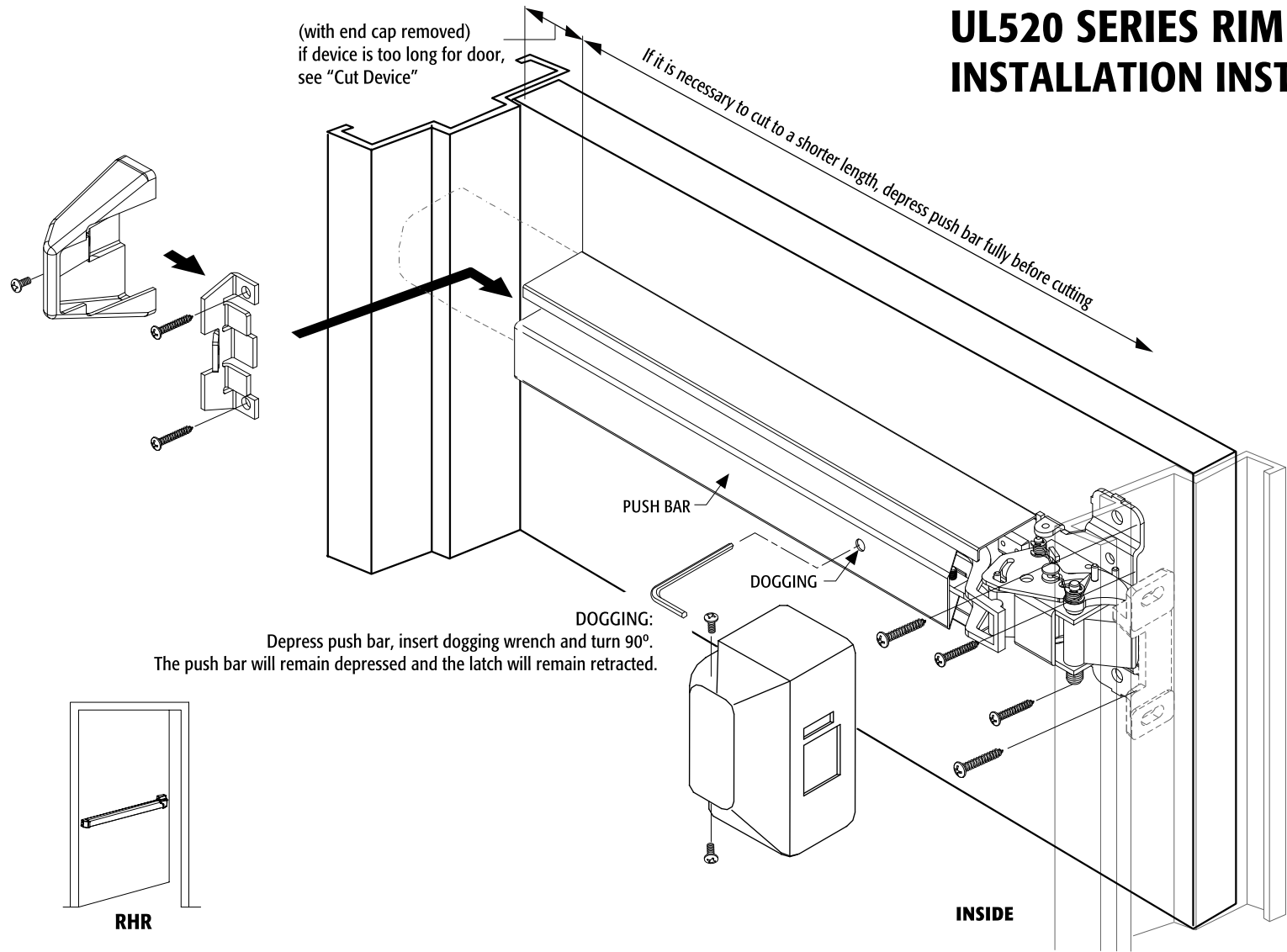


UL520 SERIES RIM EXIT DEVICE - REVERSIBLE
INSTALLATION INSTRUCTIONS FOR LHR DOOR

10107 ZINS-R8041-45



UL520 SERIES RIM EXIT DEVICE - REVERSIBLE INSTALLATION INSTRUCTIONS FOR RHR DOOR



FOR LHR DOOR

FOLD TOWARD YOU ON
THIS LINE AND PLACE
THIS EDGE AGAINST
FACE OF STOP

a, a' or b, b' :
Two holes for cylinder
mounting screws use.

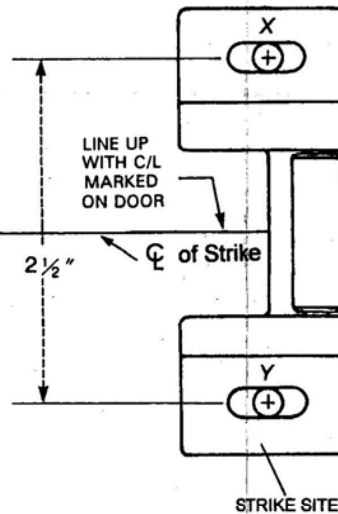


Figure 1 is a plan view of the mounting plate. It shows a rectangular plate with various dimensions and features. Key dimensions include: "To face of stop" at 2 1/4 inches; a central hole with diameter 1 9/16 inches; four mounting holes with diameter 5/16 inches; a distance of 1/4 inch from the center of the device to the center of the top-left mounting hole; a distance of 5/16 inch between the centers of the top two mounting holes; a distance of 2 7/8 inches from the center of the device to the center of the top-right mounting hole; a distance of 3 9/16 inches from the center of the device to the center of the bottom-right mounting hole; a distance of 25/32 inches between the centers of the bottom two mounting holes; and a total height of 40 inches. A note indicates "Drill a cam hole" near the bottom-right mounting hole. A warning box states "Watch for special mounting height requirements." The bottom edge is labeled "Finished floor".

11/32" Drill Inside 13/32" Drill Outside

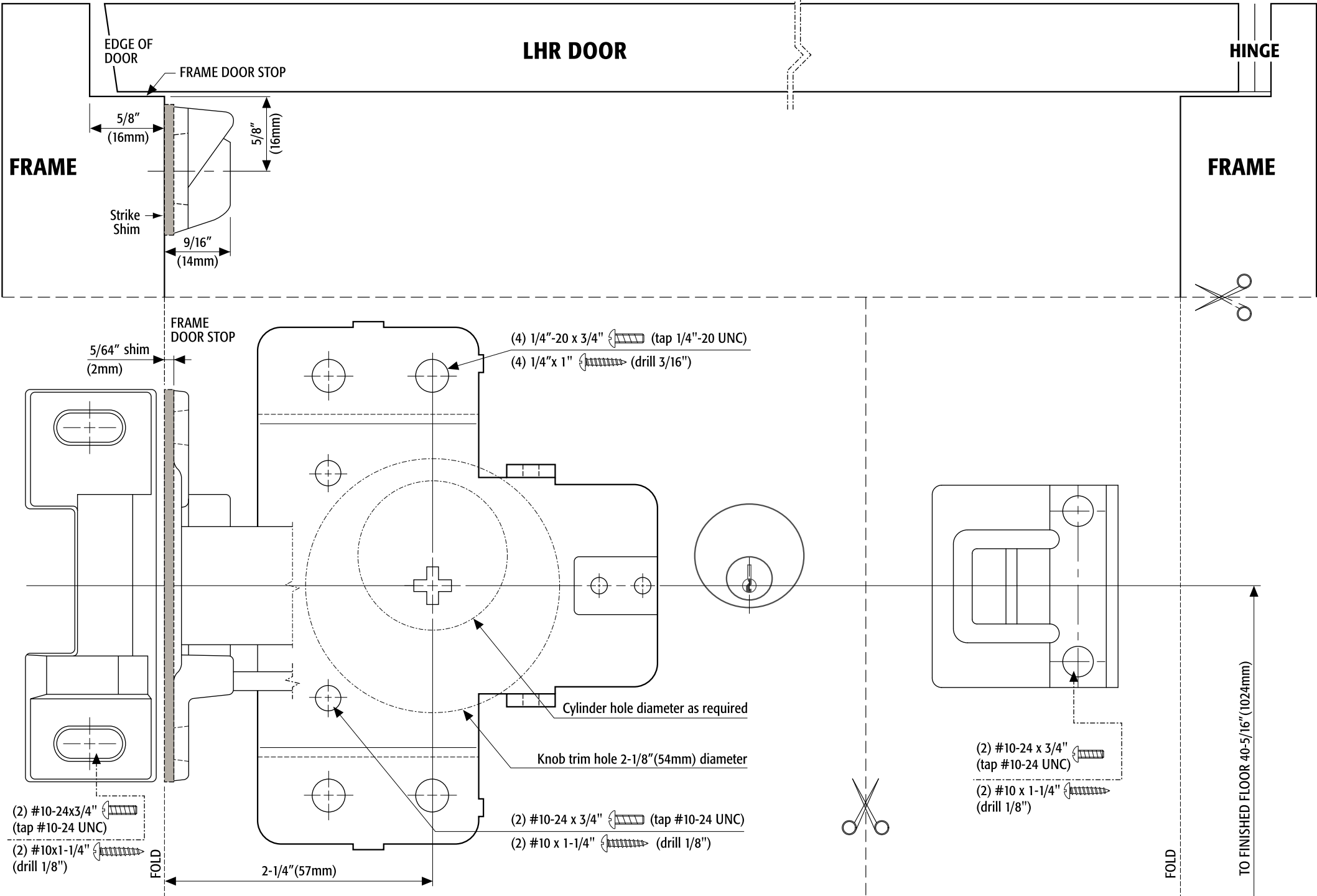
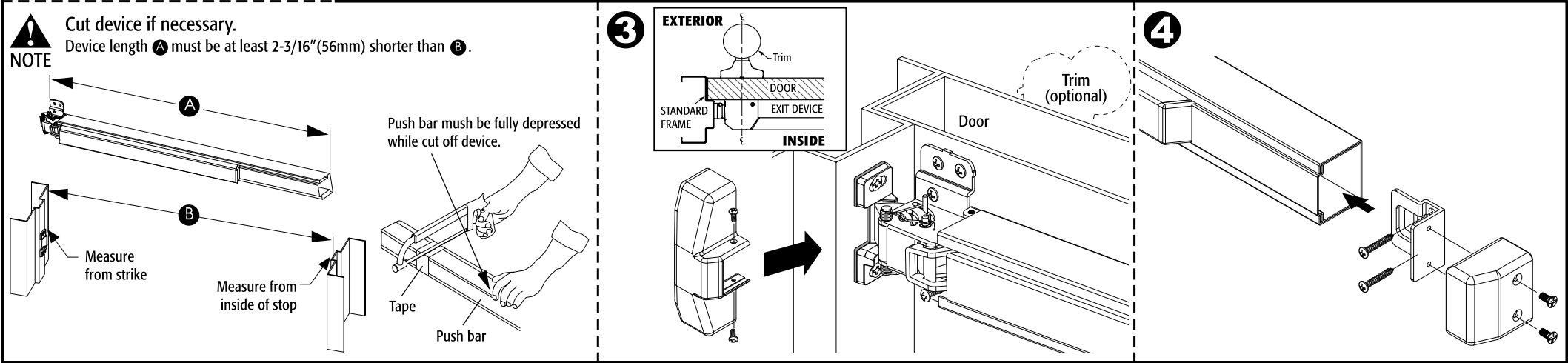
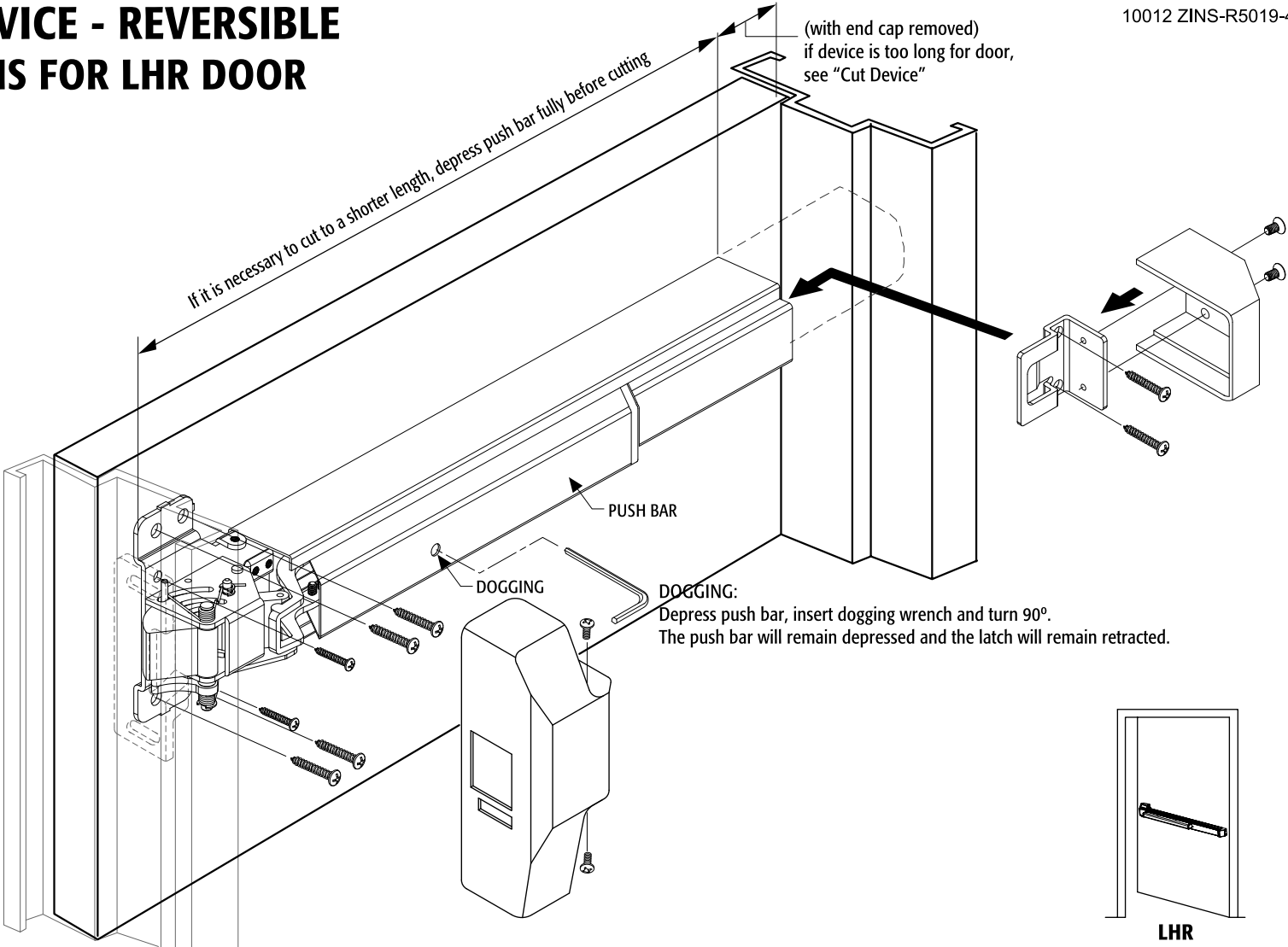
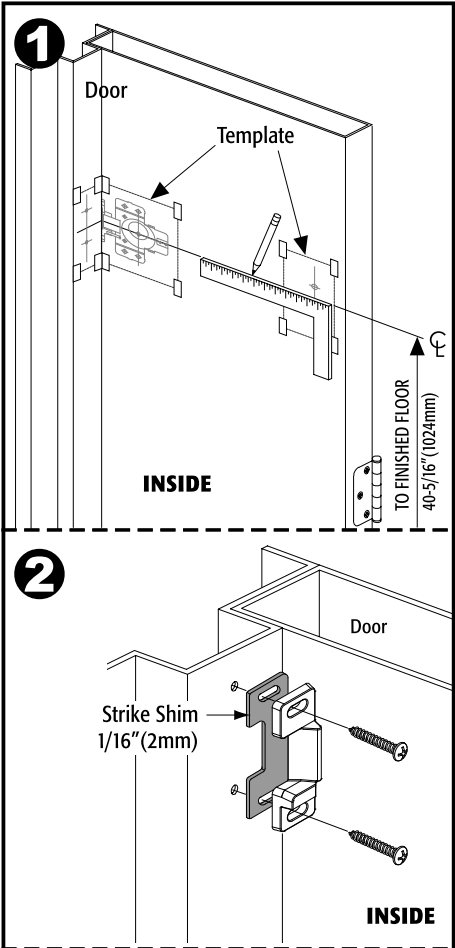
INSIDE FACE OF DOOR

FOR RHR DOOR

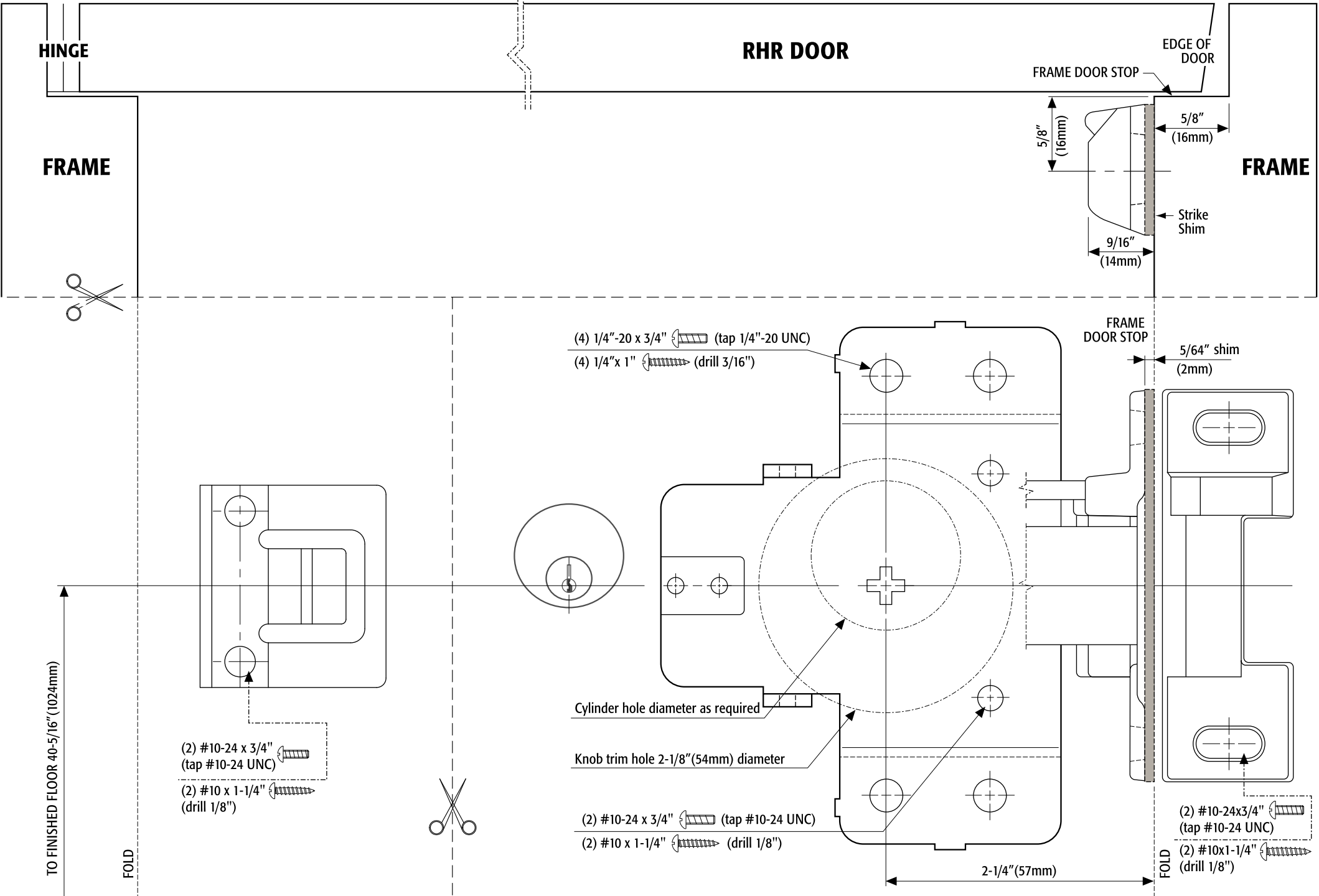
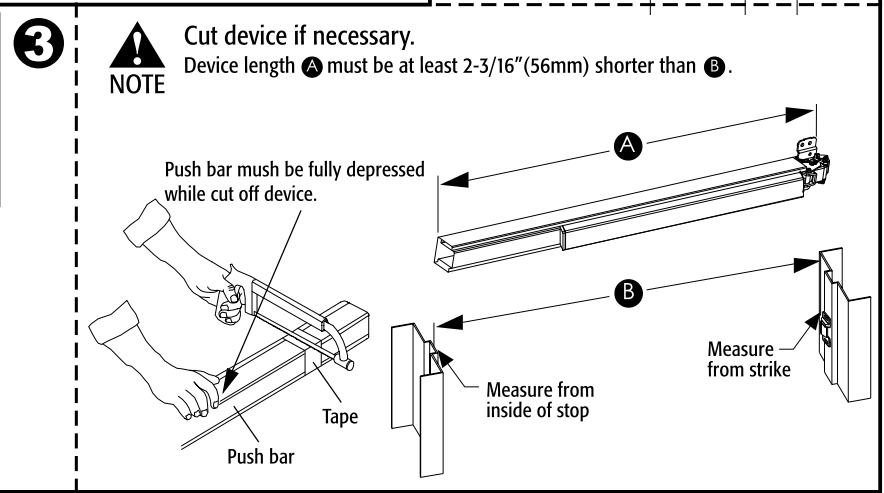
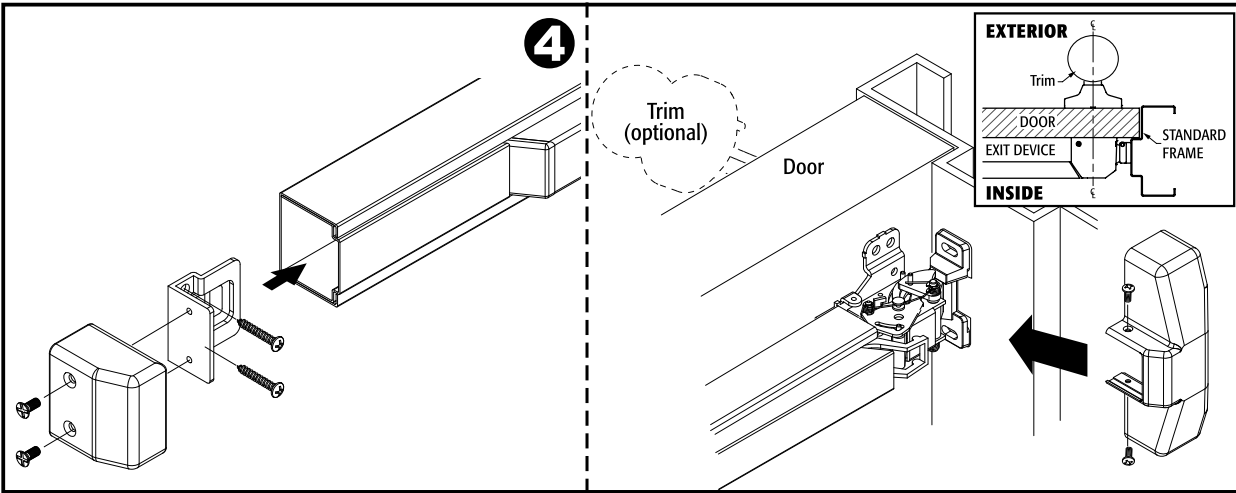
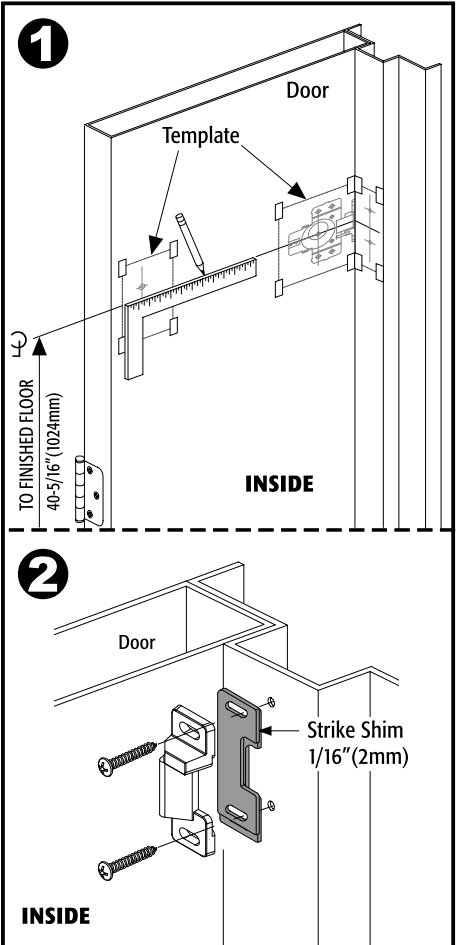
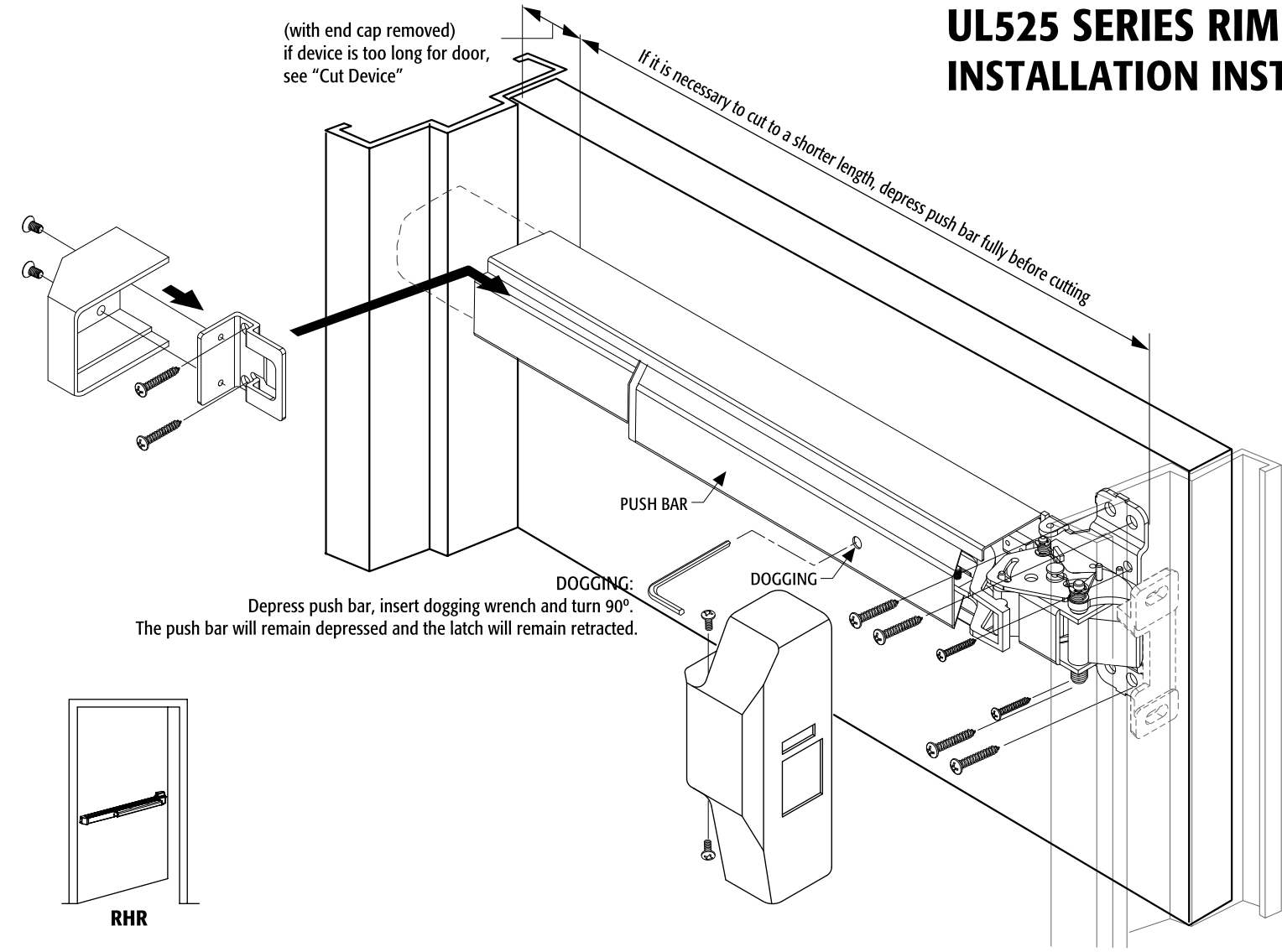
(201408-W)

UL525 SERIES RIM EXIT DEVICE - REVERSIBLE
INSTALLATION INSTRUCTIONS FOR LHR DOOR

10012 ZINS-R5019-45

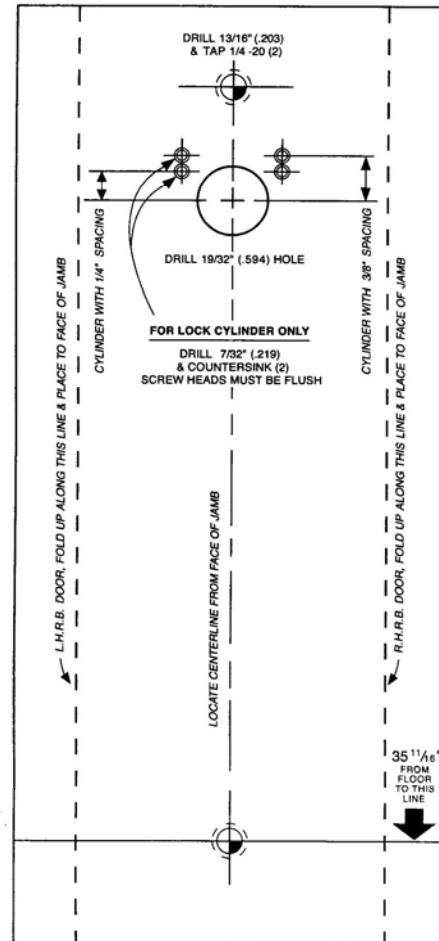


UL525 SERIES RIM EXIT DEVICE - REVERSIBLE
INSTALLATION INSTRUCTIONS FOR RHR DOOR



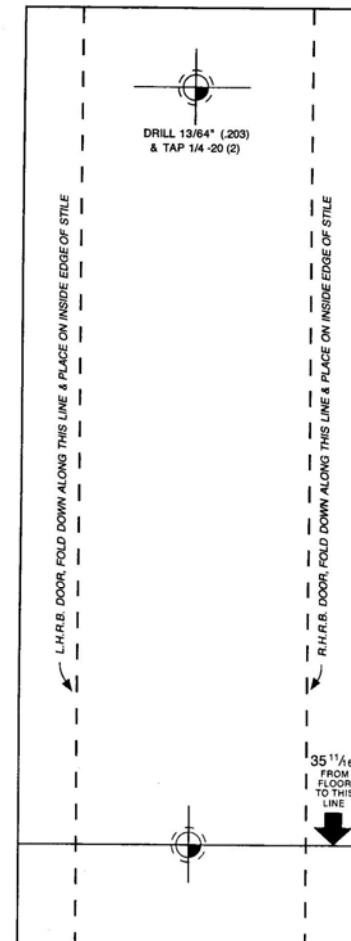
EXIT DEVICES

LOCK STILE INSIDE FACE



EXIT DEVICES

HINGE STILE INSIDE FACE



Parker Hardware mfg. corp.
INSTALLATION INSTRUCTIONS
(TEMPLATE)

UL540

Cross Bar Panic Devices
Rim ; Handed

(201408-W)