Q2000 SERIES
SERVICE MANUAL

ANSI GRADE 1 NARROW HEAD EXIT DEVICES

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Q2000 Series Service Manual

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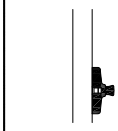
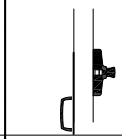
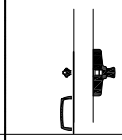
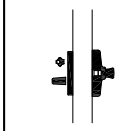
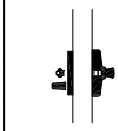
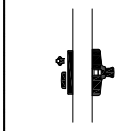
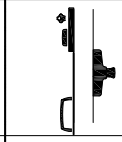
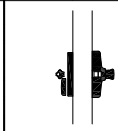
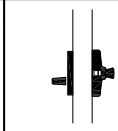
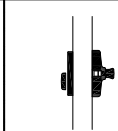
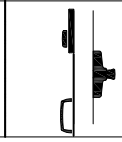
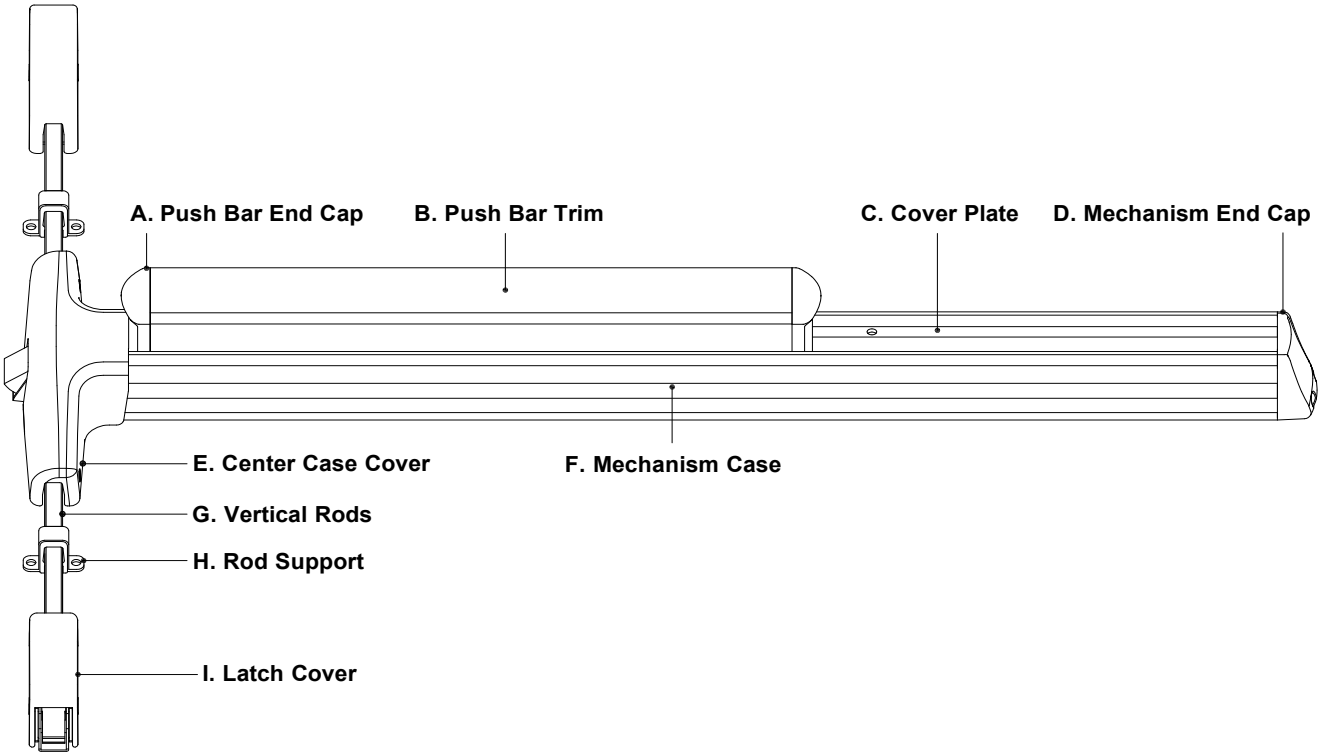
Device Drawing Index

Funtions ANSI A156.3 Grade 1		Description	Trim Options		
No.	Illustration		Q400 Series Pull Trim	Q500 Series Escutcheon	Page No.
01		**Exit only** Exit only, no trim or blank escutheon.	Q401	N/A	24
02		**Dummy Pull Only** Entrance by trim when actuating bar is locked down.	Q402	Q502	24 27
03		**Night Latch Key Retracts Latch Bolt** Entrance by trim when latch is released by key. Key removable only when locked.	Q403R	Q503R	25 27
08		**Key Locks or Unlocks Latch Bolt** Entrance by knob or lever. Key locks or unlocks knob or lever.	N/A	Q508M	28
09		**Night Latch Key Retracts Latch Bolt** Entrance by knob or lever only when released by key. Key removable only when locked.	N/A	Q509R	28
11		**Key Locks or Unlocks Latch Bolt** Entrance by control thumbturn. Key locks or unlocks control.	N/A	Q511M	29
11		**Key Locks or Unlocks Latch Bolt** Entrance by control thumbturn. Key locks or unlocks control.	Q402	Q511P	34
12		**Night Latch Key Retracts Latch Bolt** Entrance by control thumbturn only when released by turning key. Key removable only when locked.	N/A	Q512R	31
14		**Lever/Knob Always Operable** Entrance by trim when latch is released by knob or lever. Always active, no cylinder.	N/A	Q514	31
16		**Thumbturn Always Active** Entrance by trim when latch is released by control thumbturn. Thumbturn always active, no cylinder.	N/A	Q516	32
16		**Thumbturn Always Active** Entrance by trim when latch is released by control thumbturn. Thumbturn always active, no cylinder.	Q402	Q516P	35

Device Finishes



Finishes

Color	ANSI/BHMA	US	B. E. H. I.	A. D.	C. F. G.
Polished Brass	605	3	Brass, Polished	Plated	Buffed Anodized
Satin Brass	606	4	Brass, Satin	Plated	Anodized
Polished Bronze	611	9	Bronze, Polished	Plated	Buffed Anodized
Satin Bronze	612	10	Bronze, Satin	Plated	Anodized
Dark Oxidized Satin Bronze	613	10B	Bronze, Satin ; Dark Oxidized	Plated	Anodized
Polished Chrome	625	26	Brass, Polished Plated	Plated	Buffed Anodized
Satin Chrome	626	26D	Brass, Satin & Plated	Plated	Anodized
Satin Stainless Steel	630	32D	St. Steel, Satin	Plated	Anodized

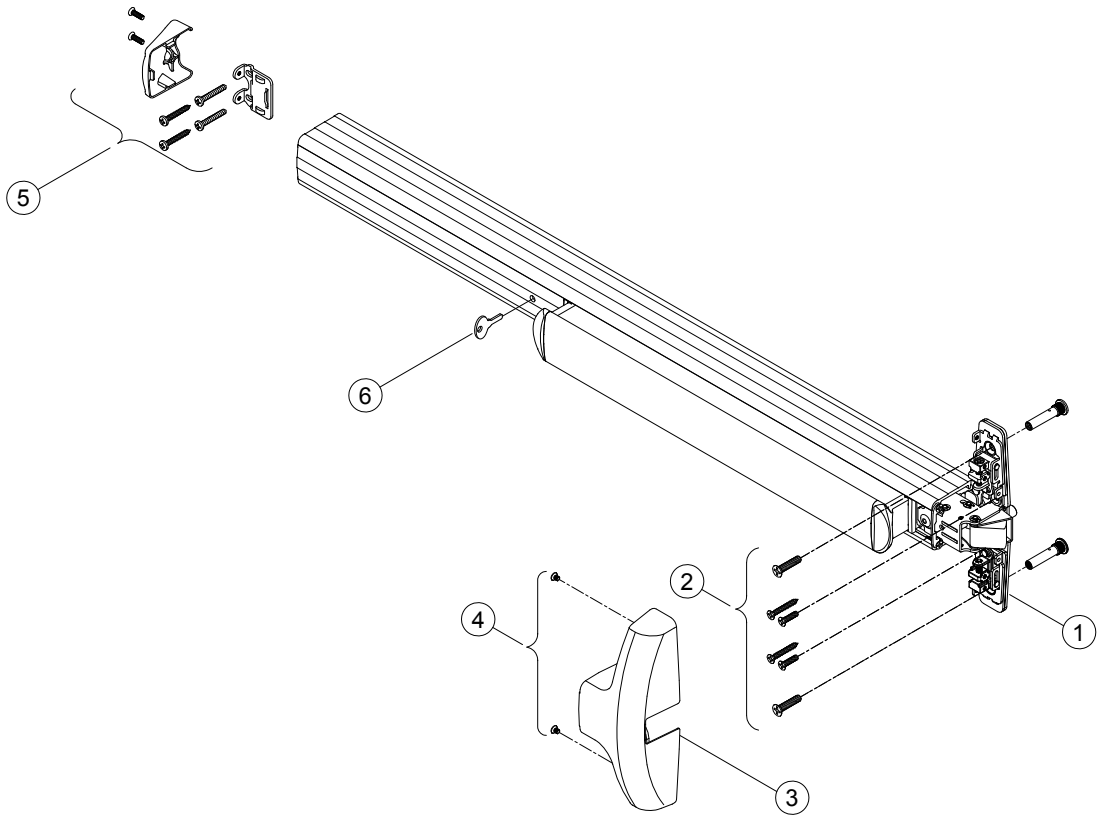
Variations

Grade	No.	Description		Grooved	Smooth
P, Fire	B.	Push Bar Trim		3'	
				4'	
	F.	Mechanism Case		3'	
				4'	
Fire	C.	Cover Plate (Dogging Options See Page 22)	LD	3'	
				4'	
P			HKD	3'	
				4'	
			CD	3'	
				4'	

Fire Exit Hardware P Panic Exit Device

Q2100

Narrow Head Rim Exit Device - RIM

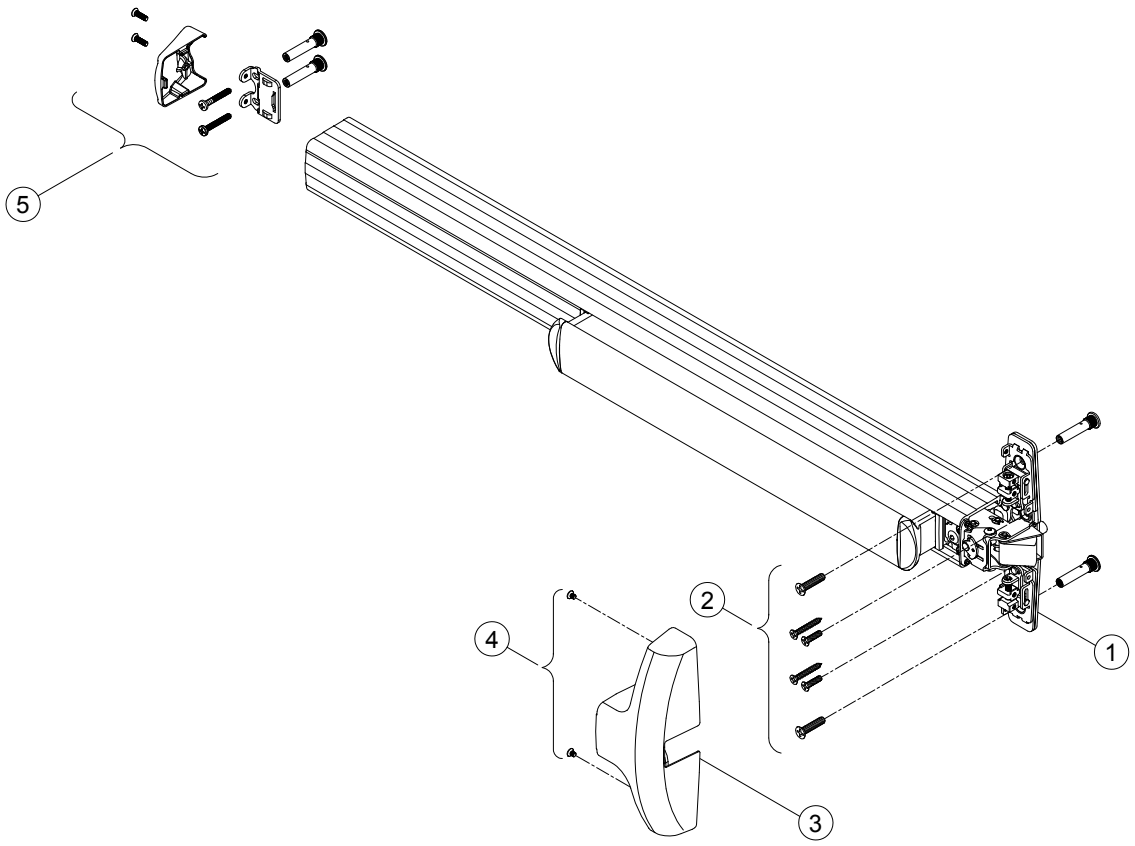


Item No.	Q'ty	Description
1	1	Q2100 Rim Device for (3′ or 4′)
2	1	Mounting Screw - Center Case (86-5302)
3	1	Center Case Cover

Item No.	Q'ty	Description
4	1	Mounting Screw - Cover (553-M9010)
5	1	End Cap Kit (68-5913)
6	1	Dogging Key

QF2100

Narrow Head Rim Fire Exit Device - RIM

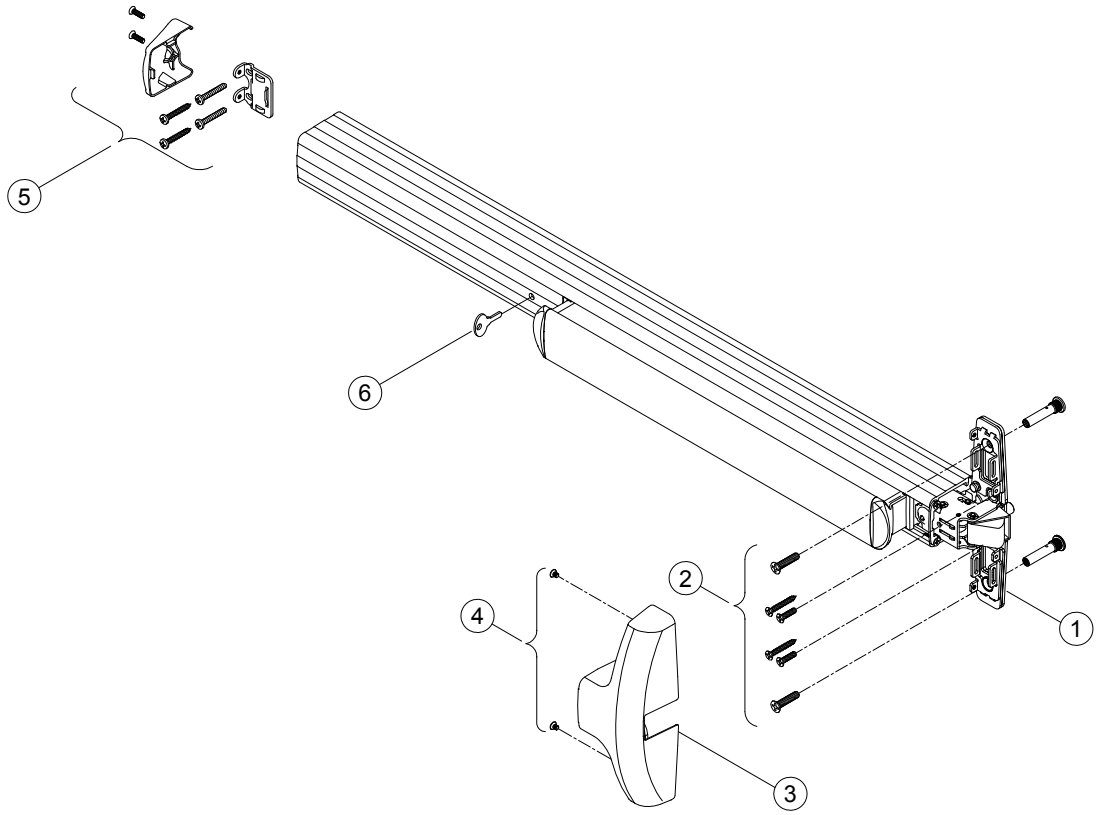


Item No.	Q'ty	Description
1	1	QF2100 Rim Device for (3′ or 4′)
2	1	Mounting Screw - Center Case (86-5302)
3	1	Center Case Cover

Item No.	Q'ty	Description
4	1	Mounting Screw - Cover (553-M9010)
5	1	End Cap Kit (68-5914)

Q2105

Narrow Head Accessible Rim Exit Device - RIM

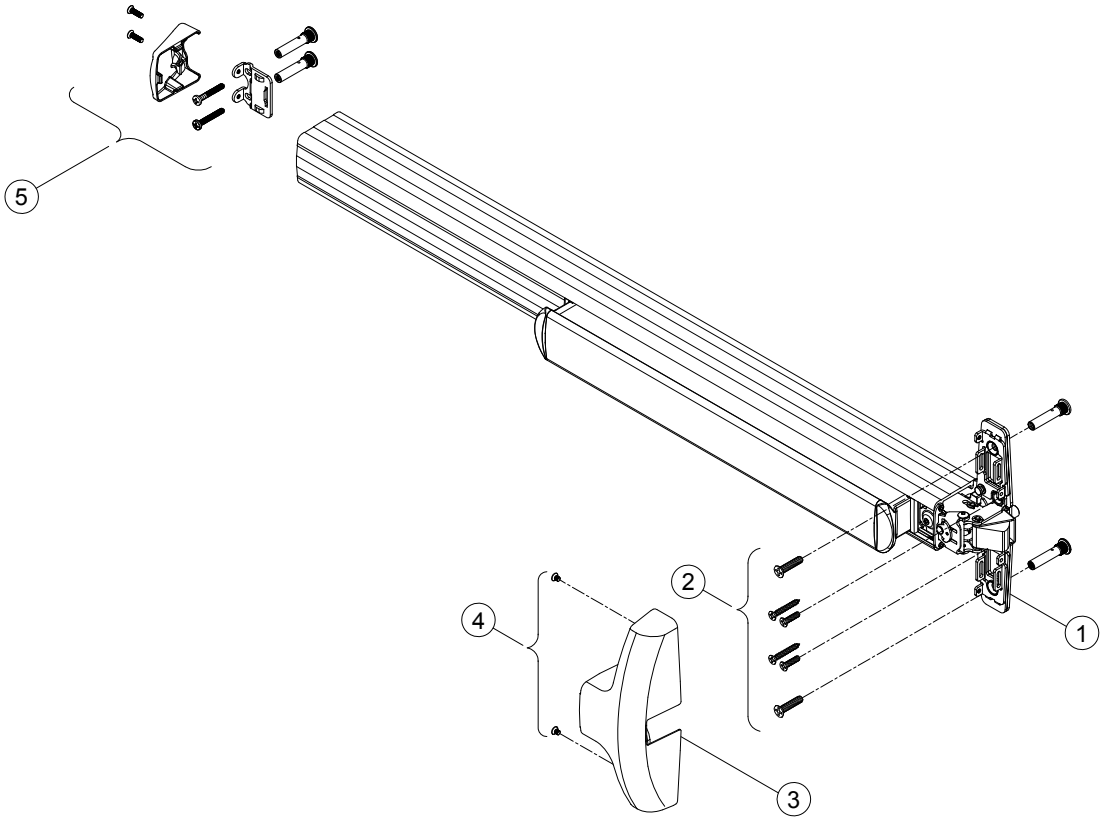


Item No.	Q'ty	Description
1	1	Q2105 Rim Device for (3' or 4')
2	1	Mounting Screw - Center Case (86-5302)
3	1	Center Case Cover

Item No.	Q'ty	Description
4	1	Mounting Screw - Cover (553-M9010)
5	1	End Cap Kit (68-5913)
6	1	Dogging Key

QF2105

Narrow Head Accessible Rim Fire Exit Device - RIM

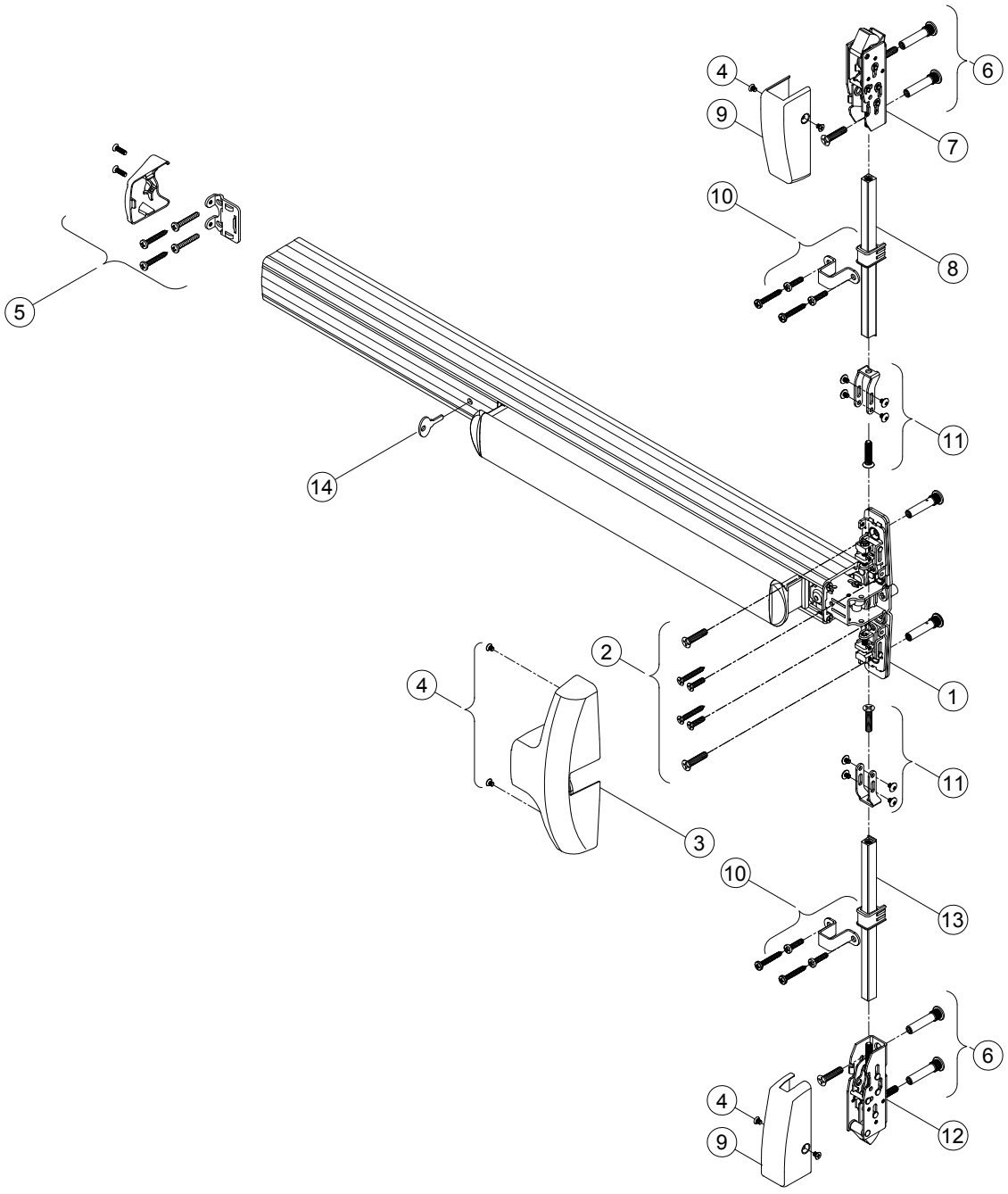


Item No.	Q'ty	Description
1	1	QF2105 Rim Device for (3′ or 4′)
2	1	Mounting Screw - Center Case (86-5302)
3	1	Center Case Cover

Item No.	Q'ty	Description
4	1	Mounting Screw - Cover (553-M9010)
5	1	End Cap Kit (68-5914)
6	1	Dogging Key

Q2200

Narrow Head Surface Vertical Rod Device - SVR



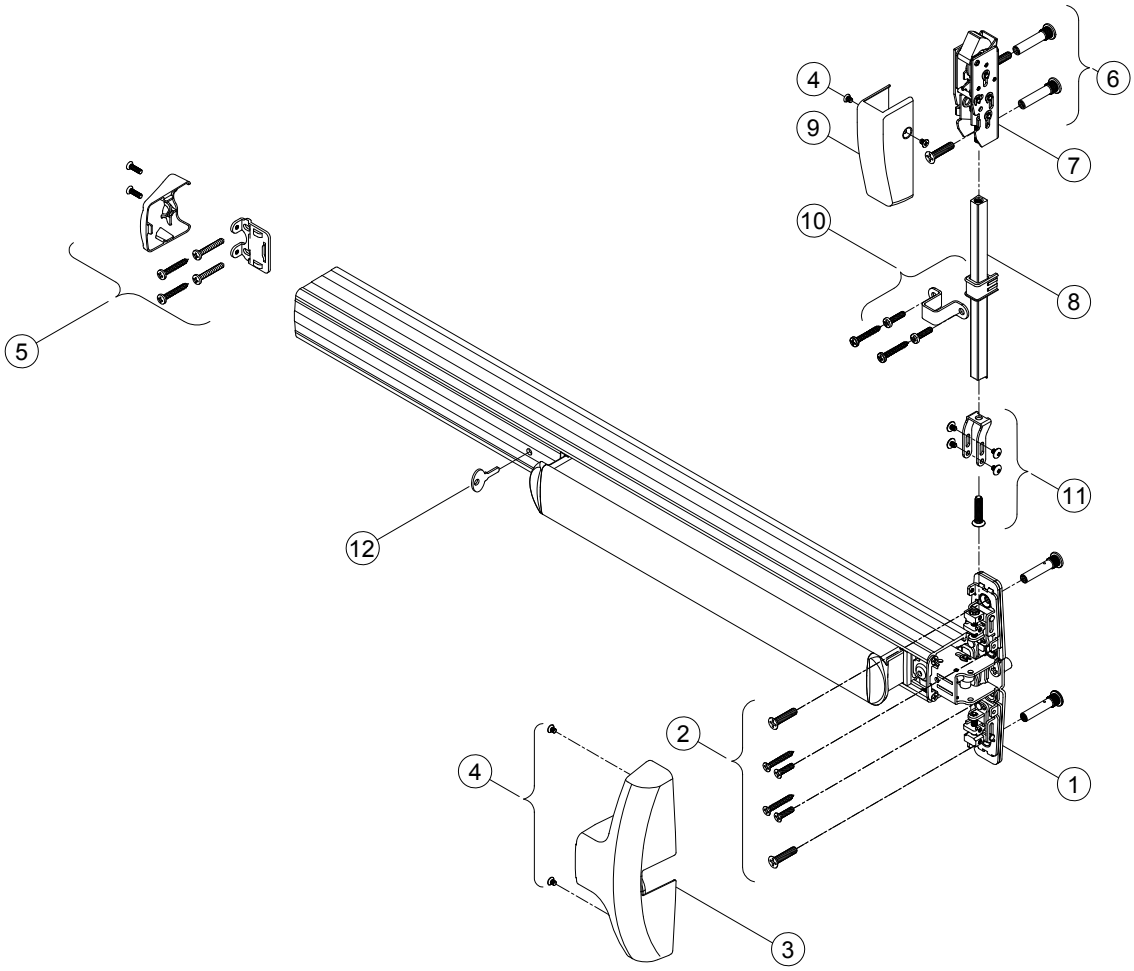
Q1200 SVR Device for (3′ or 4′)

Item No.	Q'ty	Description
1	1	Q2200 SVR Device for (3′ or 4′)
2	1	Mounting Screw - Center Case (86-5302)
3	1	Center Case Cover
4	3	Mounting Screws - Cover (553-M9010)
5	1	End Cap Kit (68-5913)
6	2	Mounting Kits - Latch (68-0402)
7	1	Top Latch Assembly

Item No.	Q'ty	Description
8	1	Top Rod (See Page 23)
9	2	Latch Covers
10	2	Mounting Kits - Rod Support (86-2501)
11	2	Mounting Kits - Rod Connector (86-0901)
12	1	Bottom Latch Assembly
13	1	Bottom Rod (See Page 23)
14	1	Dogging Key

Q2200

Narrow Head Surface Vertical Rod Device - SVR (LBR)



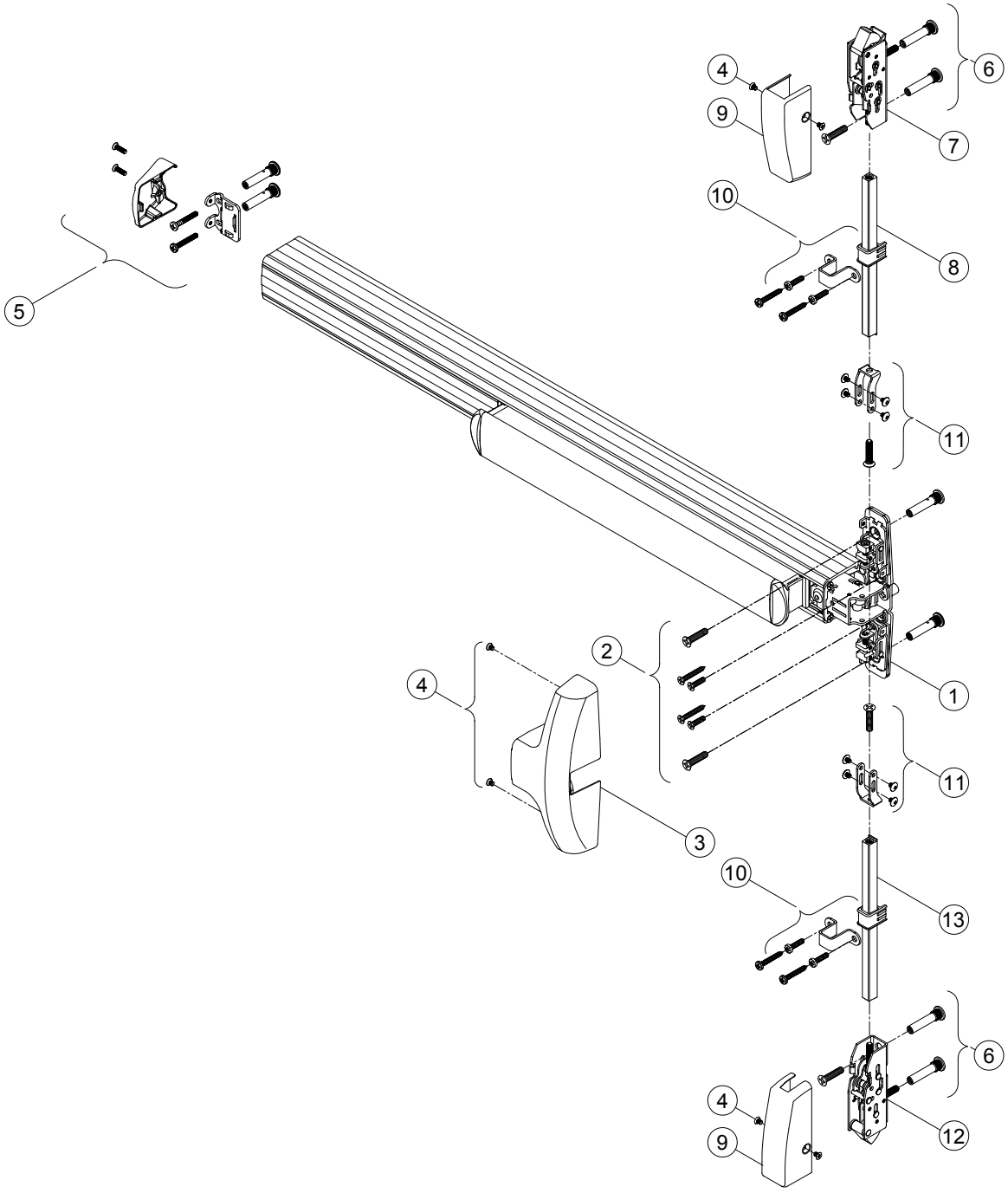
QF1200 SVR (LBR) Device for (3′ or 4′)

Item No.	Q'ty	Description
1	1	Q2200 SVR-LBR Device for (3′ or 4′)
2	1	Mounting Screw - Center Case (86-5302)
3	1	Center Case Cover
4	2	Mounting Screws - Cover (553-M9010)
5	1	End Cap Kit (68-5913)
6	1	Mounting Screw (68-0402)

Item No.	Q'ty	Description
7	1	Top Latch Assembly
8	1	Top Rod (See Page 23)
9	1	Latch Cover
10	1	Mounting Kit - Rod Support (86-2501)
11	1	Mounting Kit - Rod Connector (86-0901)
12	1	Dogging Key

QF2200

Narrow Head Surface Vertical Rod Fire Device - SVR

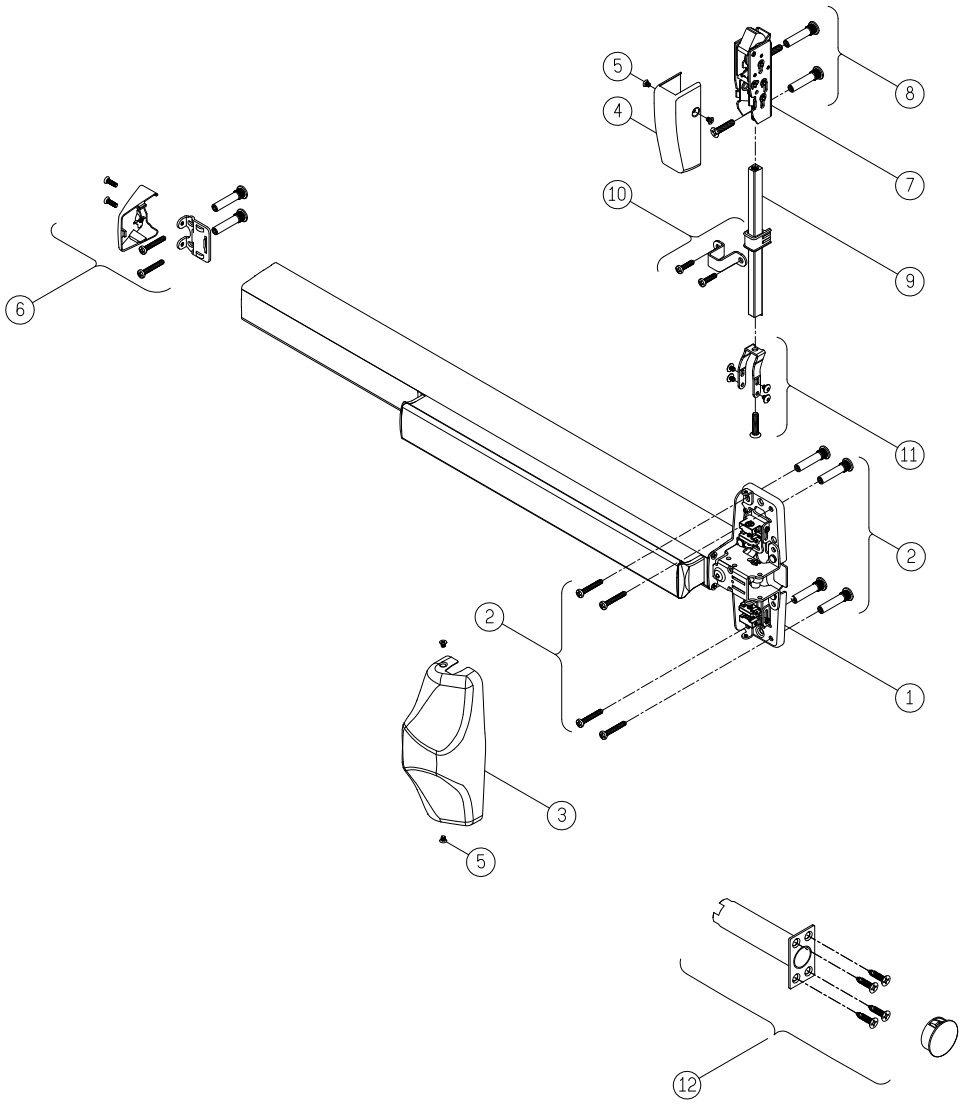


Item No.	Q'ty	Description
1	1	QF2200 SVR Device for (3′ or 4′)
2	1	Mounting Screw - Center Case (86-5302)
3	1	Center Case Cover
4	3	Mounting Screws - Cover (553-M9010)
5	1	End Cap Kit (68-5914)

Item No.	Q'ty	Description
8	1	Top Rod (See Page 23)
9	2	Latch Covers
10	2	Mounting Kits - Rod Support (86-2501)
11	2	Mounting Kits - Rod Connector (86-0901)
12	1	Bottom Latch Assembly

QF2200

Surface Vertical Rod Fire Device - SVR (LBR)

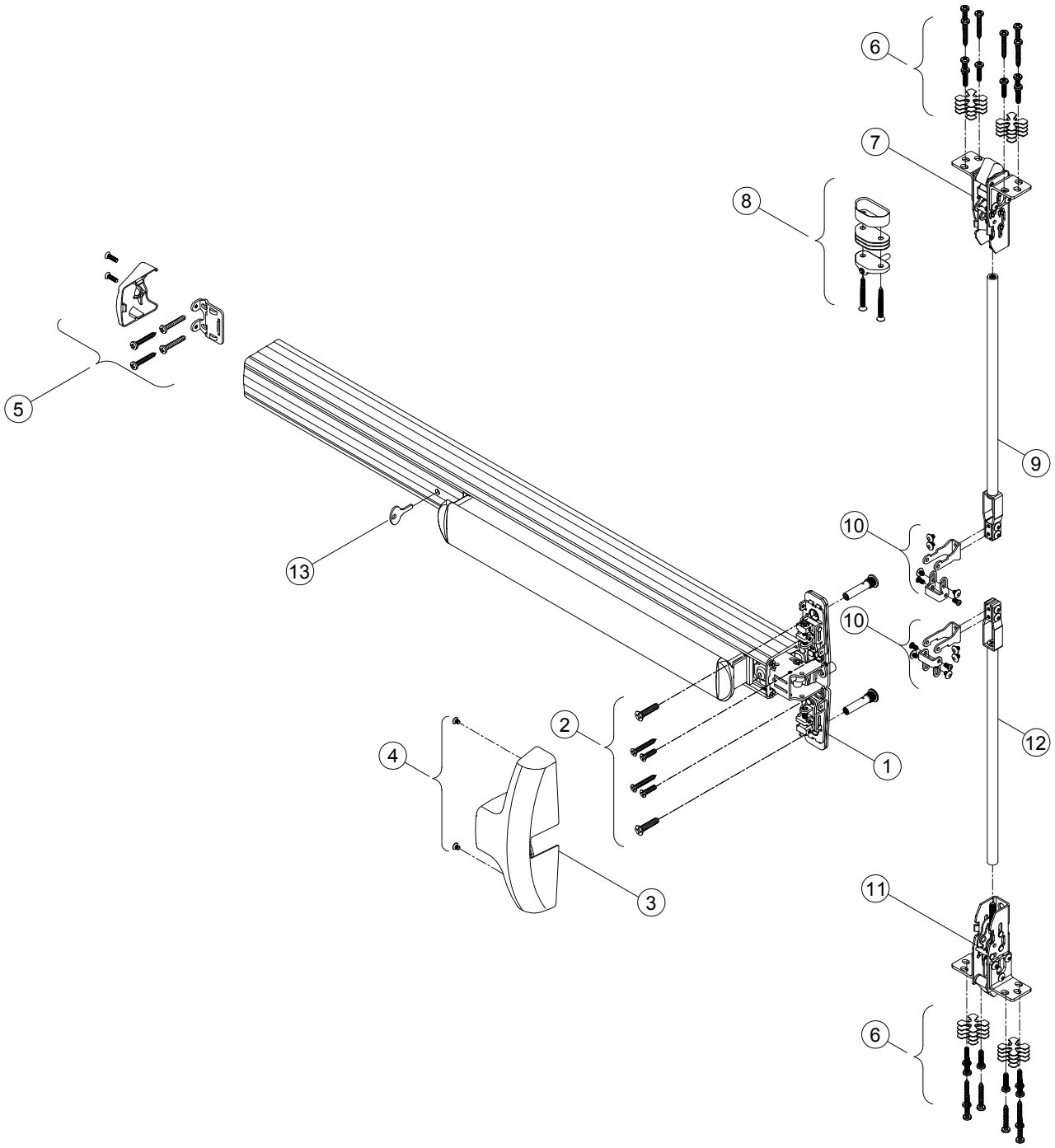


Item No.	Q'ty	Description
1	1	QF2200 SVR-LBR Device for (3' or 4')
2	1	Mounting Screw - Center Case (68-0403)
3	1	Center Case Cover
4	1	Latch Cover
5	2	Mounting Screws - Cover (553-M9010)
6	1	End Cap Kit (68-59**)

Item No.	Q'ty	Description
7	1	Top Latch Assembly
8	1	Mounting Kit - Latch (68-0402)
9	1	Top Rod (See Page 29)
10	1	Mounting Kit - Rod Support (68-2501)
11	1	Mounting Kit - Rod Connector (68-0901)
12	1	Fire Bolt (68-4502)

Q2300

Narrow Head Concealed Vertical Rod Device - CVR

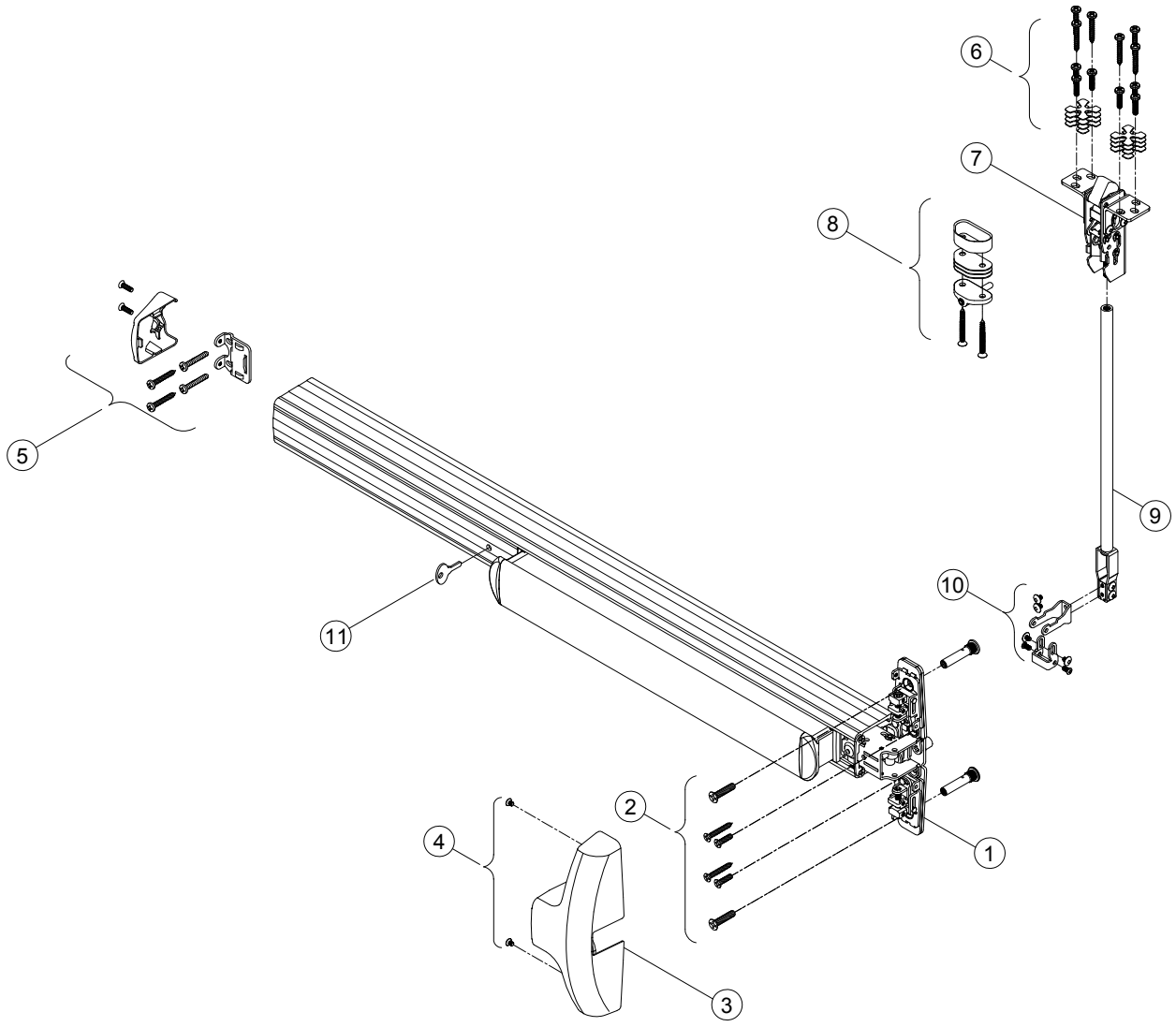


Item No.	Q'ty	Description
1	1	Q2300 CVR Device for (3′ or 4″)
2	1	Mounting Screw - Center Case (86-5302)
3	1	Center Case Cover
4	1	Mounting Screw - Cover (553-M9010)
5	1	End Cap Kit (68-5913)
6	2	Mounting Kits - Latch (68-5305)
7	1	Top Latch Assembly

Item No.	Q'ty	Description
8	1	Mounting Kit - Ratchet Release (68-0801)
9	1	Top Rod Assembly (See Page 23)
10	2	Mounting Kits - Rod Connector (86-0902)
11	1	Bottom Latch Assembly
12	1	Bottom Rod Assembly (See Page 23)
13	1	Dogging Key

Q2300

Narrow Head Concealed Vertical Rod Device - CVR (LBR)



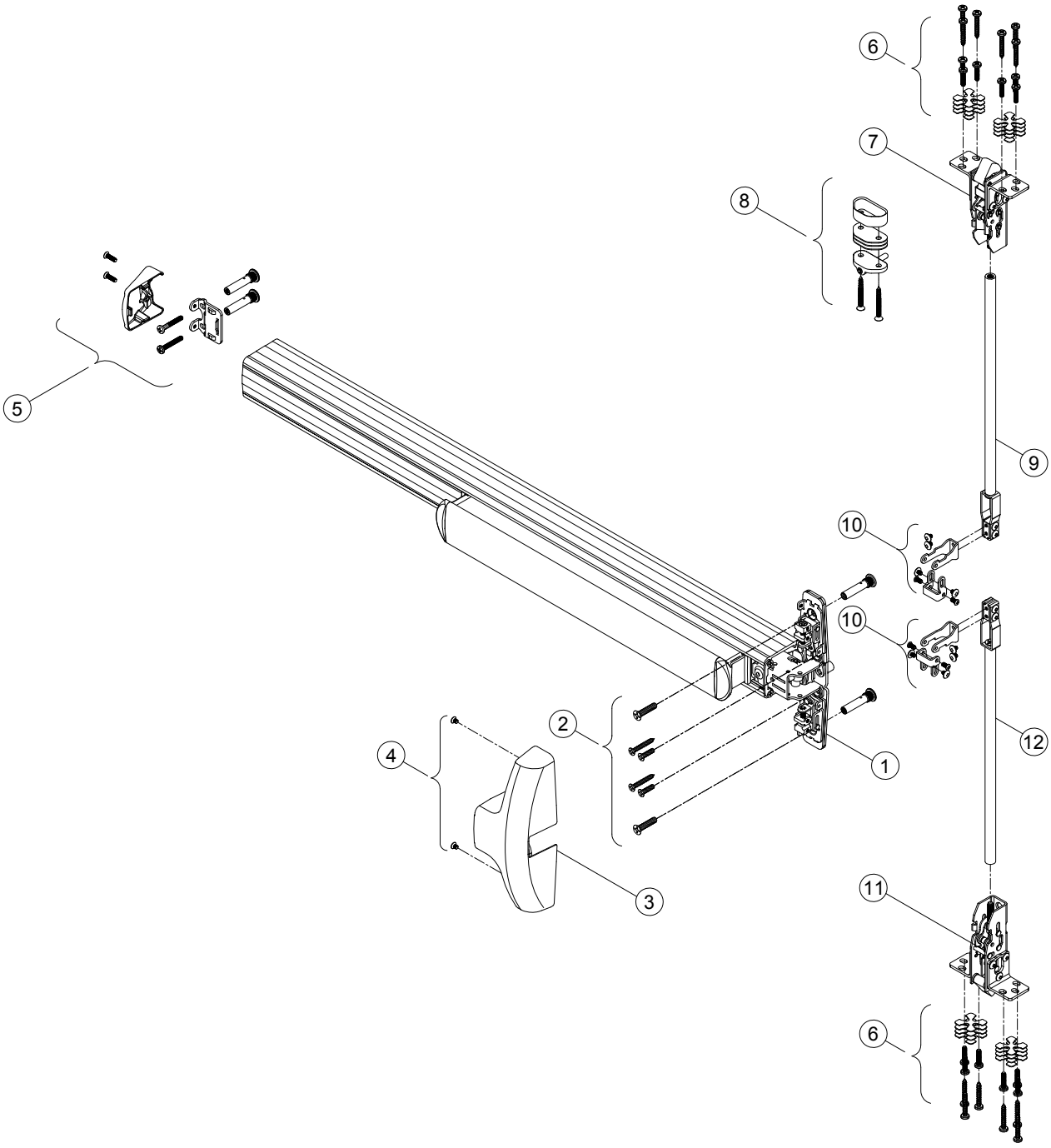
Q2300 CVR-LBR Device for (3′ or 4′)

Item No.	Q'ty	Description
1	1	Q2300 CVR-LBR Device for (3′ or4″)
2	1	Mounting Screw - Center Case (86-5302)
3	1	Center Case Cover
4	1	Mounting Screw - Cover (553-M9010)
5	1	End Cap Kit (68-5913)
6	1	Mounting Kit - Latch (68-5305)

Item No.	Q'ty	Description
7	1	Top Latch Assembly
8	1	Mounting Kit - Ratchet Release (68-0801)
9	1	Top Rod Assembly (See Page 23)
10	1	Mounting Kit - Rod Connector (86-0902)
11	1	Dogging Key

QF2300

Narrow Head Concealed Vertical Rod Fire Device - CVR

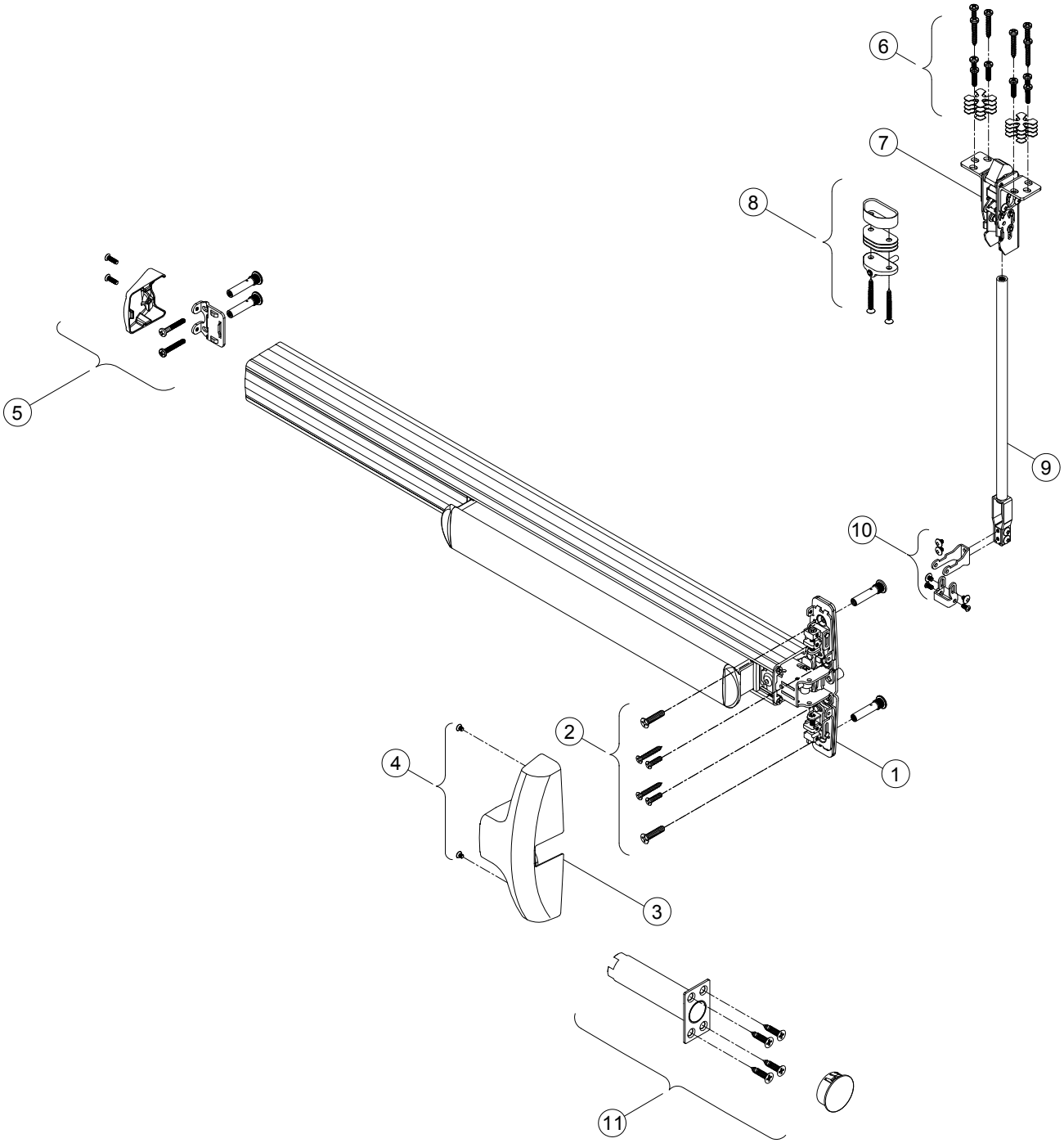


Item No.	Q'ty	Description
1	1	QF2300 CVR Device for (3′ or 4′)
2	1	Mounting Screw - Center Case (86-5302)
3	1	Center Case Cover
4	1	Mounting Screw - Cover (553-M9010)
5	1	End Cap Kit (68-5914)
6	2	Mounting Kits - Latch (68-5305)

Item No.	Q'ty	Description
7	1	Top Latch Assembly
8	1	Mounting Kit - Ratchet Release (68-0801)
9	1	Top Rod Assembly (See Page 23)
10	2	Mounting Kits - Rod Connector (86-0902)
11	1	Bottom Latch Assembly
12	1	Bottom Rod Assembly (See Page 23)

QF2300

Narrow Head Concealed Vertical Rod Fire Device - CVR (LBR)

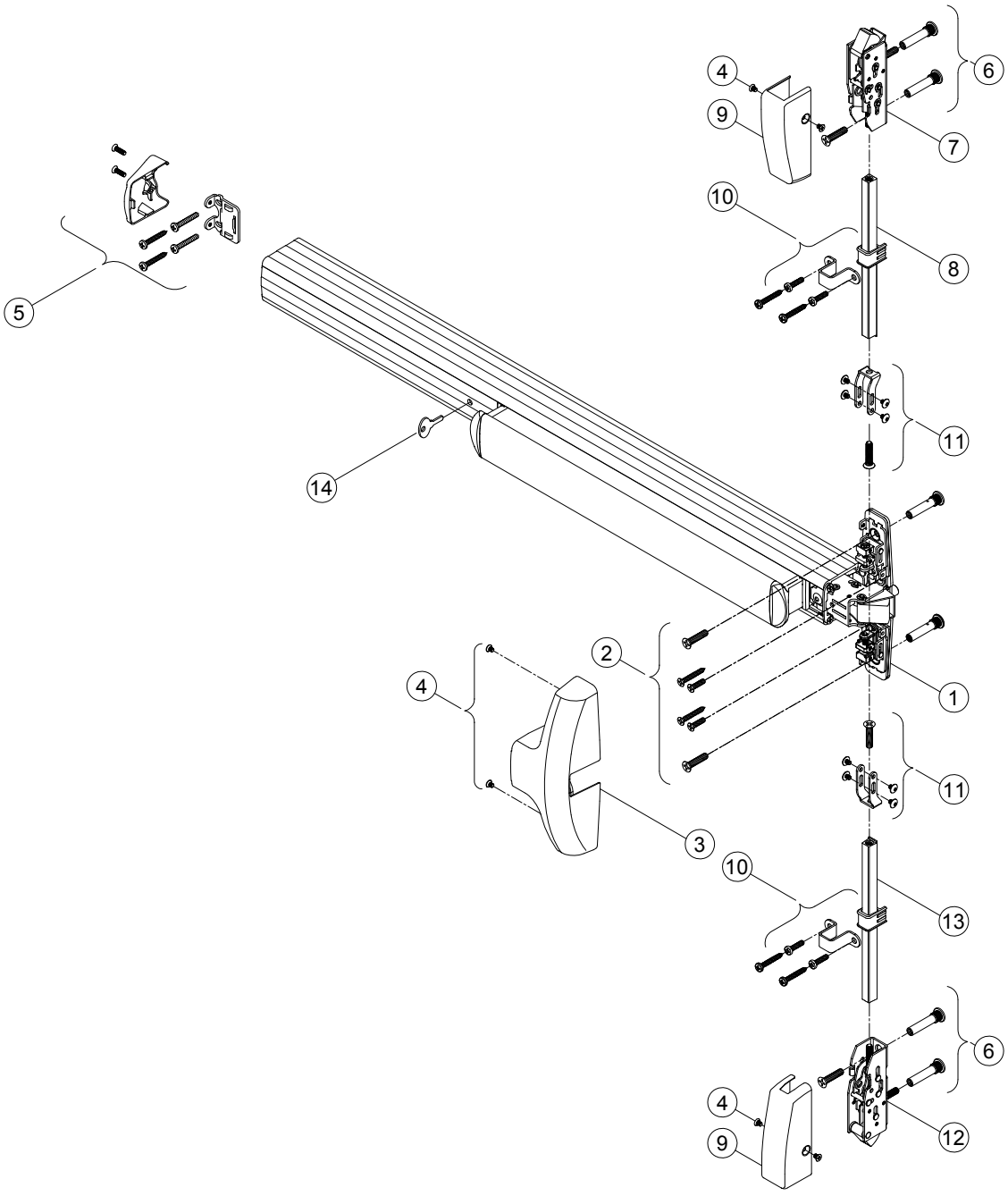


Item No.	Q'ty	Description
1	1	QF2300 CVR-LBR Device for (3′ or 4′)
2	1	Mounting Screw - Center Case (86-5302)
3	1	Center Case Cover
4	1	Mounting Screw - Cover (553-M9010)
5	1	End Cap Kit (68-5913)
6	1	Mounting Kit - Latch (68-5305)

Item No.	Q'ty	Description
7	1	Top Latch Assembly
8	1	Mounting Kit - Ratchet Release (68-0801)
9	1	Top Rod Assembly (See Page 23)
10	1	Mounting Kit - Rod Connector (86-0902)
11	1	Fire Bolt (68-4502)

Q2500

Narrow Head Three-Point Latching Device - 3PT

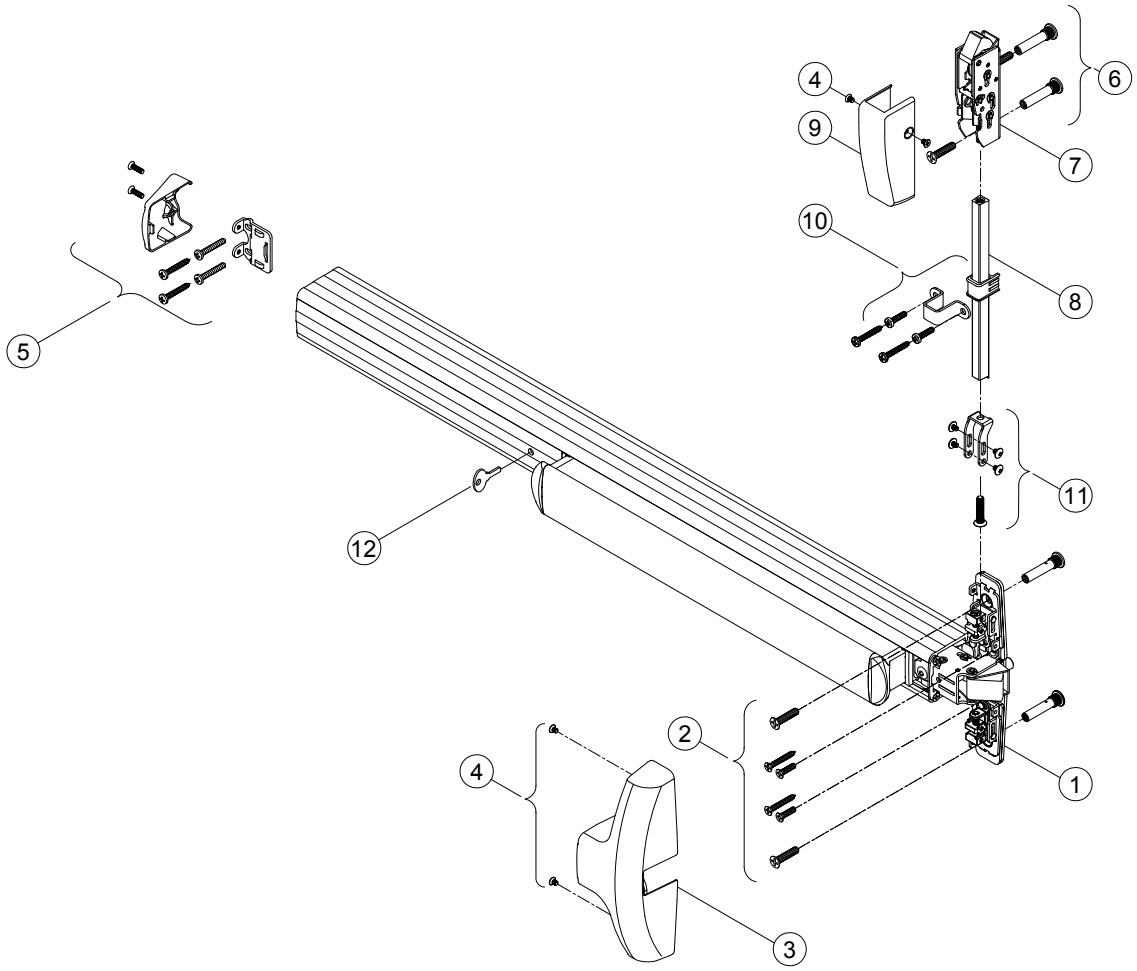


Item No.	Q'ty	Description
1	1	Q2500 3TP Device for (3′ or 4′)
2	1	Mounting Screw - Center Case (86-5302)
3	1	Center Case Cover
4	3	Mounting Screws - Cover (553-M9010)
5	1	End Cap Kit (68-5913)
6	2	Mounting Kits - Latch (68-0402)
7	1	Top Latch Assembly

Item No.	Q'ty	Description
8	1	Top Rod (See Page 23)
9	2	Latch Covers
10	2	Mounting Kits - Rod Support (86-2501)
11	2	Mounting Kits - Rod Connector (86-0901)
12	1	Bottom Latch Assembly
13	1	Bottom Rod (See Page 23)
14	1	Dogging Key

Q2500

Narrow Head Three-Point Latching Device - 3PT (LBR)

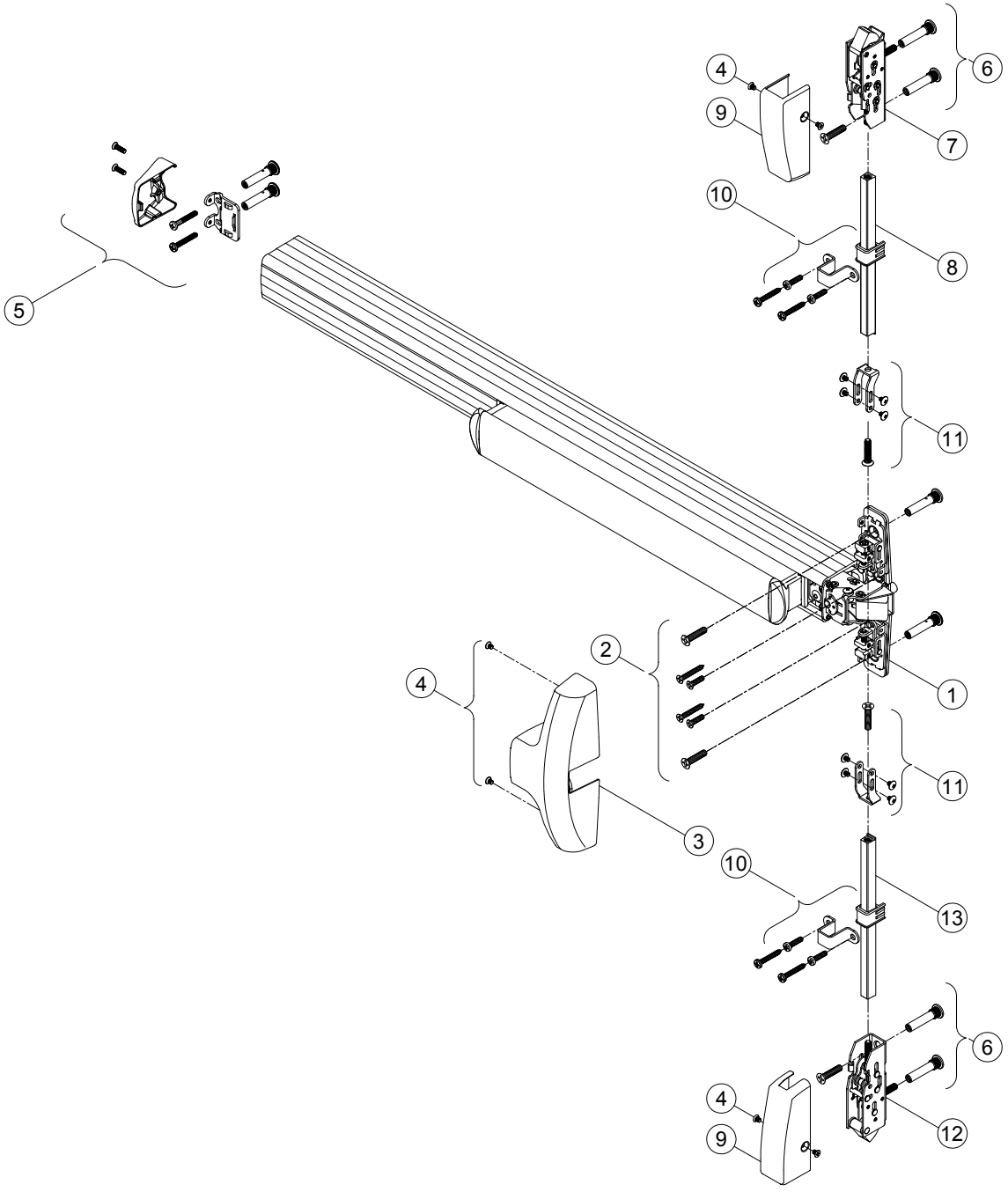


Item No.	Q'ty	Description
1	1	Q2500 3TP-LBR Device for (3′ or 4′)
2	1	Mounting Screw - Center Case (86-5302)
3	1	Center Case Cover
4	2	Mounting Screws - Cover (553-M9010)
5	1	End Cap Kit (68-5913)
6	1	Mounting Kit - Latch (68-0402)

Item No.	Q'ty	Description
7	1	Top Latch Assembly
8	1	Top Rod (See Page 23)
9	1	Latch Cover
10	1	Mounting Kit - Rod Support (86-2501)
11	1	Mounting Kit - Rod Connector (86-0901)
12	1	Dogging Key

QF2500

Narrow Head Three-Point Latching Fire Device - 3PT

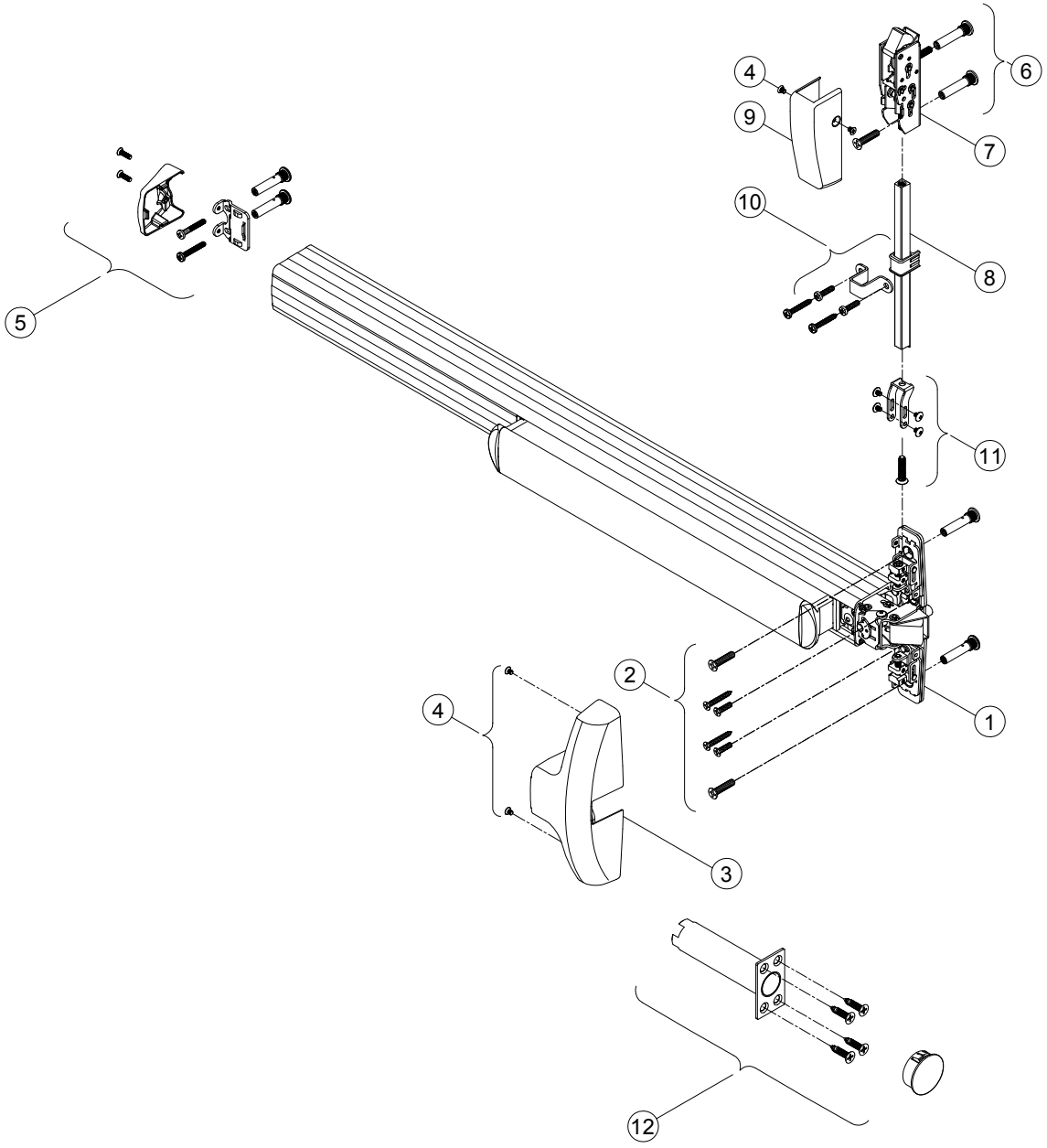


Item No.	Q'ty	Description
1	1	QF2500 3TP Device for (3′ or 4′)
2	1	Mounting Screw - Center Case (86-5302)
3	1	Center Case Cover
4	3	Mounting Screws - Cover (553-M9010)
5	1	End Cap Kit (68-5914)
6	2	Mounting Kits - Latch (68-0402)
7	1	Top Latch Assembly

Item No.	Q'ty	Description
8	1	Top Rod (See Page 23)
9	2	Latch Covers
10	2	Mounting Kits - Rod Support (86-2501)
11	2	Mounting Kits - Rod Connector (86-0901)
12	1	Bottom Latch Assembly
13	1	Bottom Rod (See Page 23)

QF2500

Narrow Head Three-Point Latching Fire Device - 3PT (LBR)

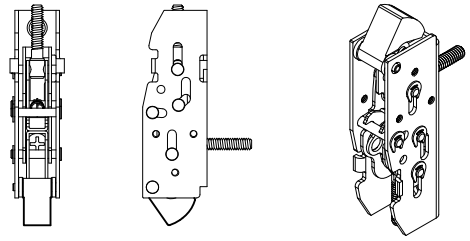
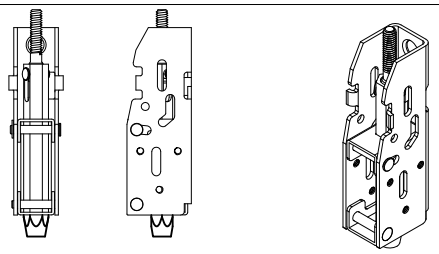


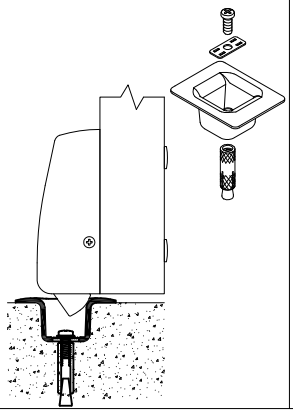
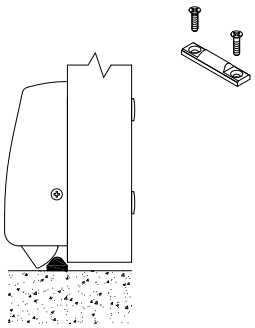
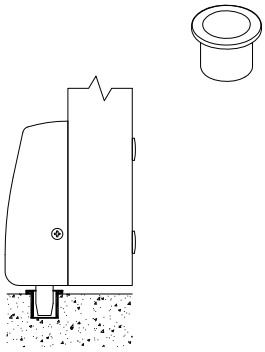
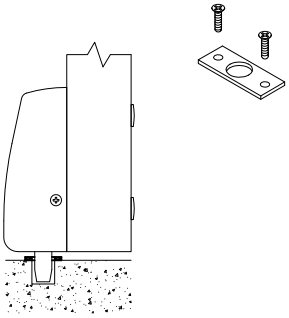
Item No.	Q'ty	Description
1	1	QF2500 3TP (LBR) Device for (3′ or 4′)
2	1	Mounting Screw - Center Case (86-5302)
3	1	Center Case Cover
4	2	Mounting Screws - Cover (553-M9010)
5	1	End Cap Kit (68-5914)
6	1	Mounting Kit - Latch (68-0402)

Item No.	Q'ty	Description
7	1	Top Latch Assembly
8	1	Top Rod (See Page 23)
9	1	Latch Cover
10	1	Mounting Kit - Rod Support (86-2501)
11	1	Mounting Kit - Rod Connector (86-0901)
12	1	Fire Bolt (68-4502)

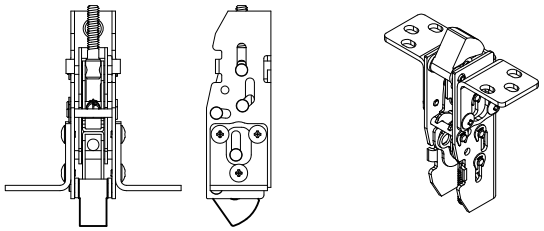
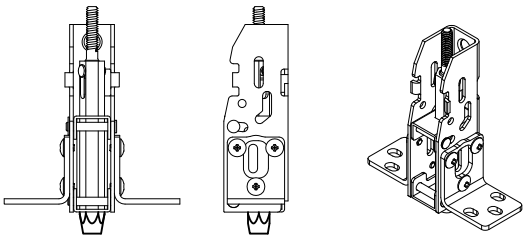
Bottom Latches

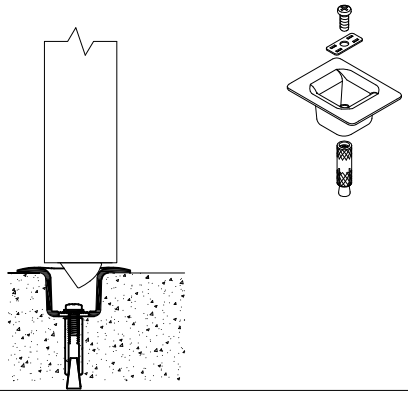
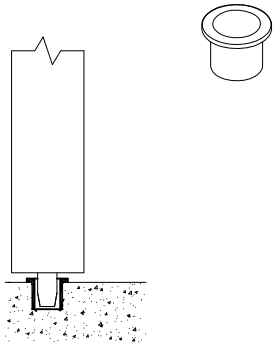
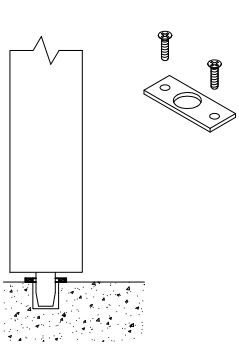
For SVR/3PT

Latch Type	Pullman Latch (P)	Round Slide Bolt Latch (P)
		

Strikes Applications	Q227/227F	Q224F	Q226F	Q225F
				

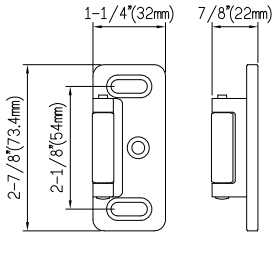
For CVR

Latch Type	Pullman Latch (P)	Round Slide Bolt Latch (P)
		

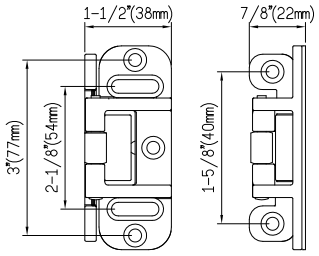
Strikes Applications	Q227F	Q226F	Q225F
			

Strikes

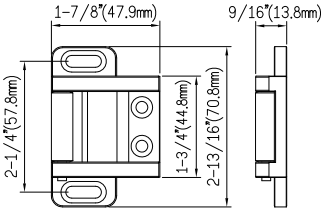
Rim Exit Device



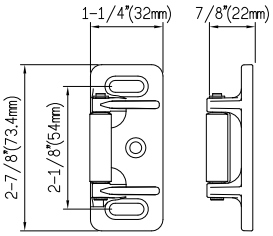
Q106 Rim Strike
For Rim/SVR/3PT



Q108 Rim Strike
For double door Rim/3PT
use with QF170/QF270 Mullion



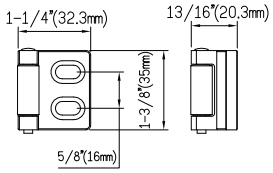
Q103 Rim Strike
For Rim/3PT



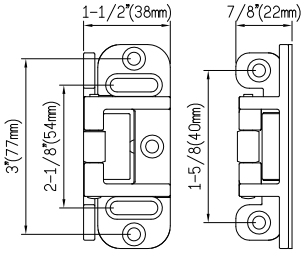
106Z Rim Strike
For Q2105 Rim

Vertical Rod Device

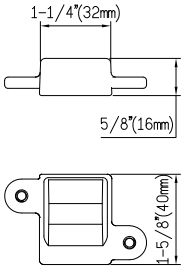
Top Strike



Q203 Top Strike
For SVR/3PT

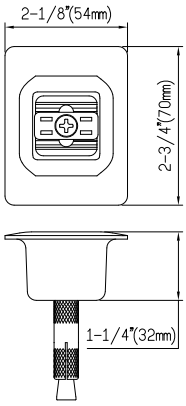


Q108 Rim Strike
For double door SVR/3PT
use with Mullion

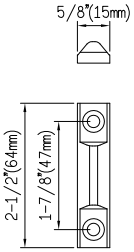


Q216 Top Strike
For CVR

Bottom Strike

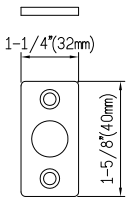


Q227F Bottom Strike
Standard furnished
for SVR/CVR/3PT

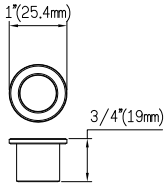


Q224 Bottom Strike
Optional for SVR/3PT

Flat Bottom Strike



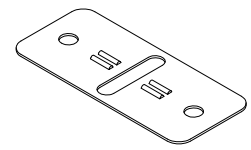
Q225 Bottom Strike
Optional for SVR/CVR/3PT
Round Slide Bolt



Q226 Bottom Strike
Optional for SVR/CVR/3PT
Round Slide Bolt

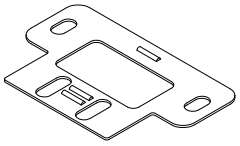
Shims

Shims

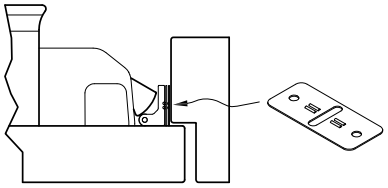


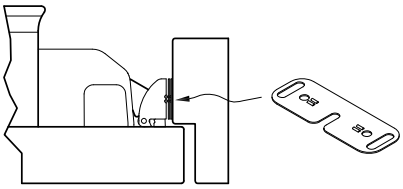
For Q106 / Q106Z Rim Strike

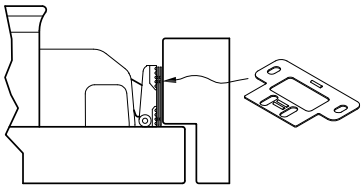
For Q108 Rim Strike

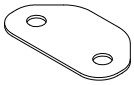


For Q103 Rim Strike



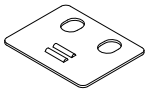




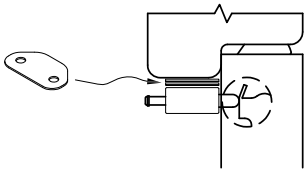


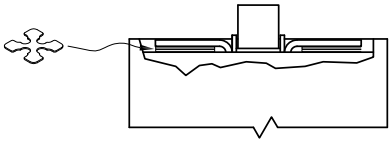
For CVR Ratchet Release

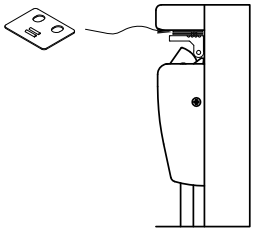
For CVR Top & Bottom Latches



For Q203 Top Strike



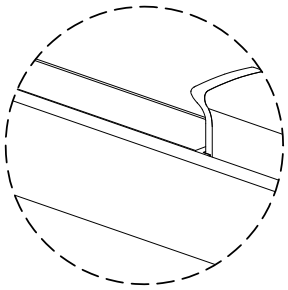




Dogging

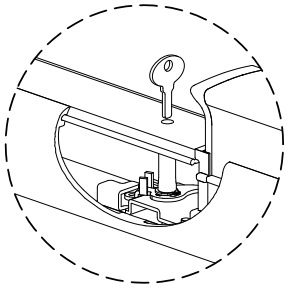
LD - Less Dogging

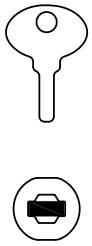
Less Dogging is available in all
Q2000 Series Panic Exit Devices.



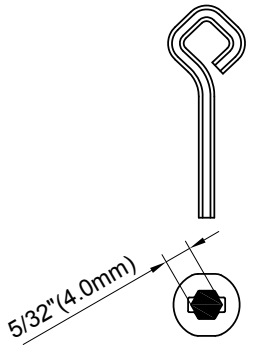
HKD - Flat / Hex Key Dogging

Basic Standard / Compatible with 5/32"(4.0mm) Hex Key





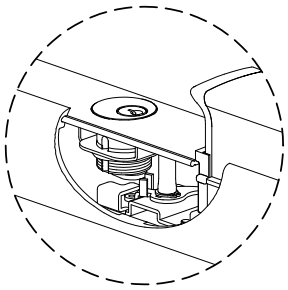
Flat Key
(Supplied)

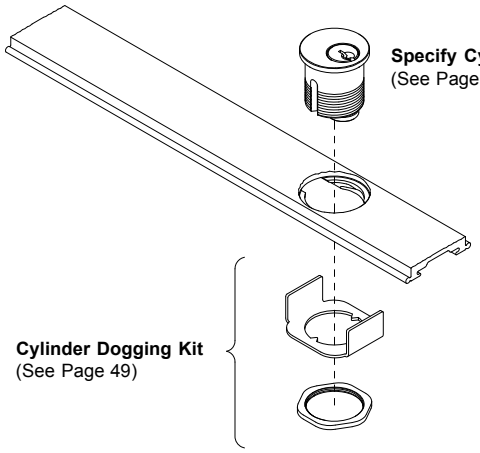


Hex Key
(Not Supplied)

CD - Cylinder Dogging

Available for all models except for Fire Exit Hardware. Cylinder Dogging provides the ability to lock down the Push Bar with a Key Cylinder, so that the door can be used in the push/pull mode. To order, specify "CD". It requires the use of a 1-1/4" Mortise Cylinder. Not Standard Furnished; specify when required.



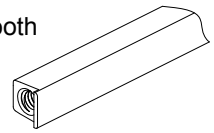
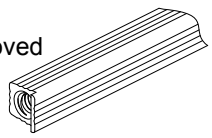


Specify Cylinder
(See Page 44)

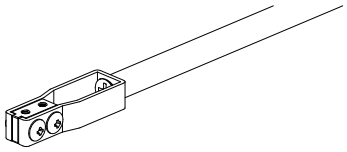
Cylinder Dogging Kit
(See Page 49)

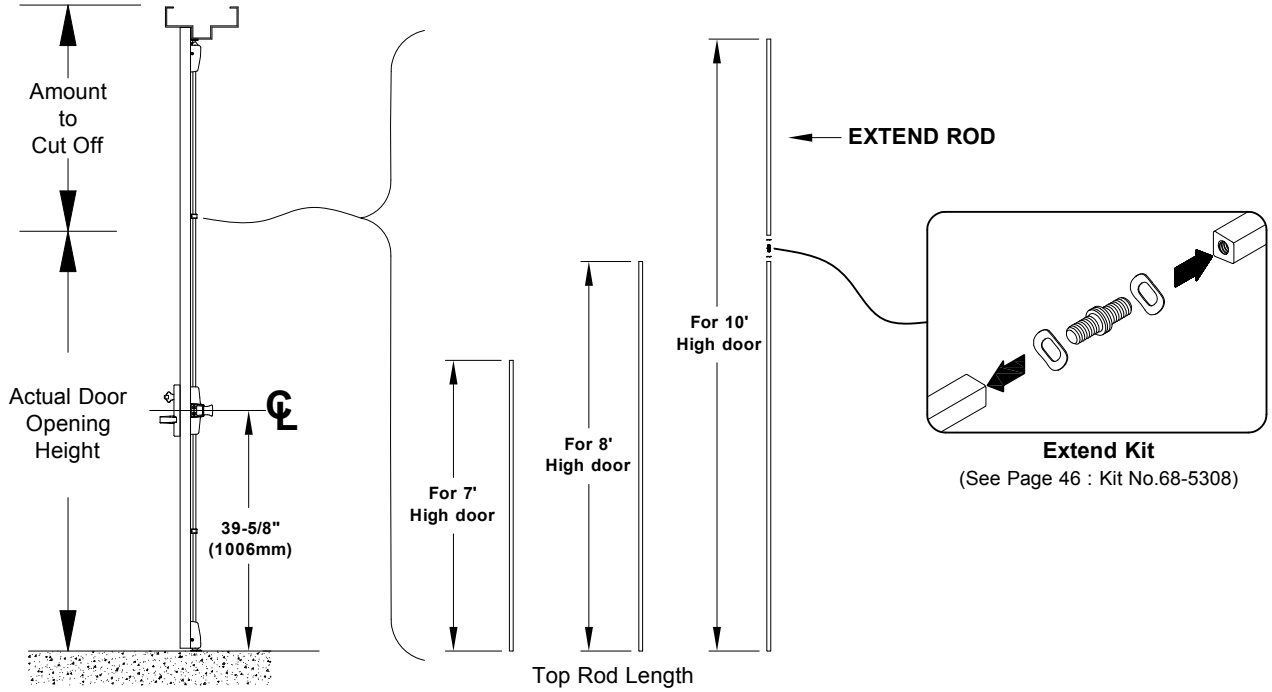
Rods

For SVR & 3PT

Illustration	Rod Type	Rod Length	Door Height
Smooth  Grooved 	Top Rod	36-1/8" (916mm)	7'
		48-1/8" (1221mm)	8'
		48-1/8" (1221mm) Add 24" (609mm)	10'
	Bottom Rod	31-7/8" (807mm)	Device Center to Finished Floor 39-5/8" (1006mm)

For CVR

Illustration	Rod Type	Rod Length	Door Height
	Top Rod	36" (940mm)	7'
		49" (1245mm)	8'
		49" (1245mm) Add 23-7/8" (605mm)	10'
	Bottom Rod	31-3/4" (805mm)	Device Center to Finished Floor 39-5/8" (1006mm)



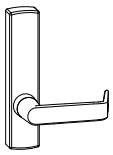
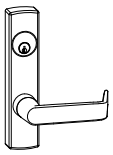
Extend Kit
(See Page 46 : Kit No.68-5308)

Trim Options

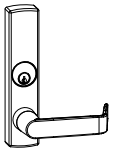
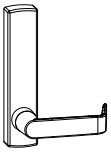
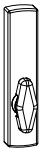
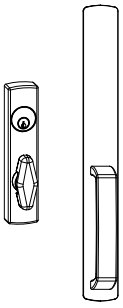
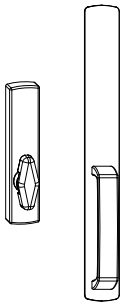
Q400 Series Pull Trim

ANSI No.	01	02	03
Operation	Exit Only	Dummy Pull Only	Night Latch Key Retracts Latch Bolt
Illustration			
Trim No.	**Q401**	**Q402**	**Q403R**
Device No.	**Q**2100 **Q**2200 **Q**2300 **Q**2500	**Q**2100 **Q**2200 **Q**2300 **Q**2500	**Q**2100 **Q**2200 **Q**2300 **Q**2500
Cylinder Type			Rim

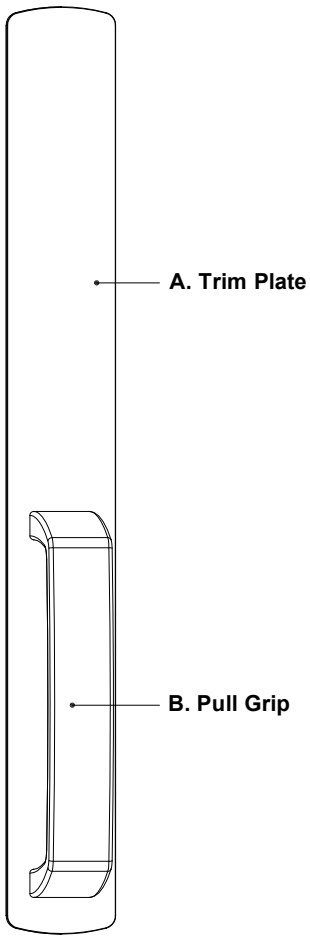
Q500 Series Escutcheon

ANSI No.	01	02	03	08
Operation	Exit Only	Dummy Pull Only	Night Latch Key Retracts Latch Bolt	Key Locks or Unlocks Latch Bolt
Illustration				
Trim No.		**Q502**	**Q503R**	**Q508M**
Device No.	**Q**2100 **Q**2200 **Q**2300 **Q**2500	**Q**2100 **Q**2200 **Q**2300 **Q**2500	**Q**2100 **Q**2200 **Q**2300 **Q**2500	**Q**2100 **Q**2200 **Q**2300 **Q**2500
Cylinder Type			Rim	Mortise

Q500 Series Escutcheon

ANSI No.	09	14	11	12	16	11	16
Operation	Night Latch Key Retracts Latch Bolt	Lever Always Active ,No Cylinder	Key Locks or Unlocks Latch Bolt	Night Latch Key Retracts Latch Bolt	Turn Always Active, No Cylinder	Key Locks or Unlocks Latch Bolt	Turn Always Active, No Cylinder
Illustration							
Trim No.	**Q509R**	**Q514**	**Q511M**	**Q512R**	**Q516**	**Q511P+Q402**	**Q516P+Q402**
Device No.	**Q**2100 **Q**2200 **Q**2300 **Q**2500	**Q**2100 **Q**2200 **Q**2300 **Q**2500	**Q**2100 **Q**2200 **Q**2300 **Q**2500	**Q**2100 **Q**2200 **Q**2300 **Q**2500	**Q**2100 **Q**2200 **Q**2300 **Q**2500	**Q**2200 **Q**2300	**Q**2200 **Q**2300
Cylinder Type	Rim		Mortise	Rim		Mortise	

Q400 Series Pull Trim Finishes



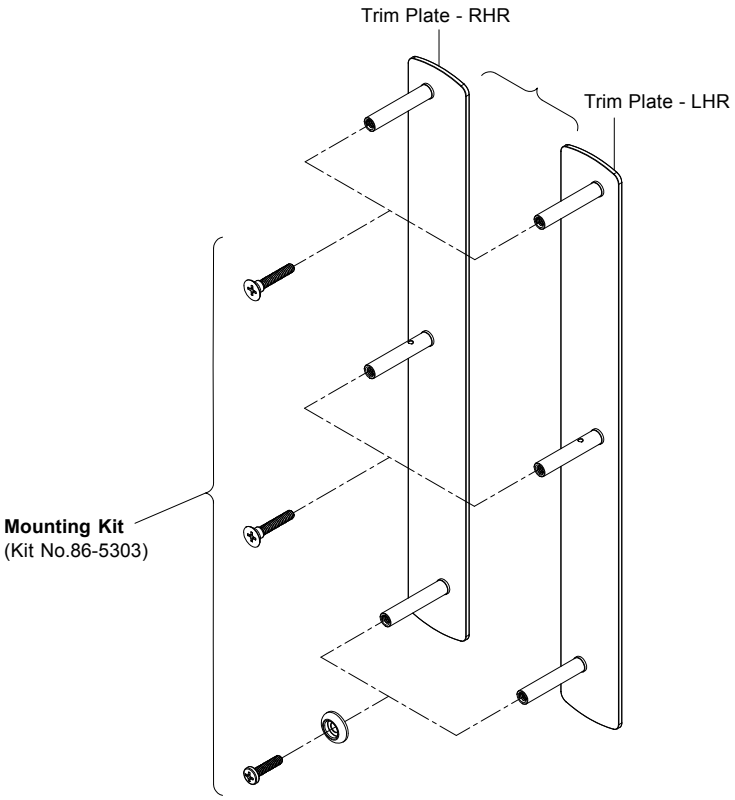
Finishes

Color	ANSI / BHMA	US	A.	B.	
Polished Brass	605	3	Brass, Polished	Brass, Polished	Zinc, Polished & Plated
Satin Brass	606	4	Brass, Satin	Brass, Satin	Zinc, Satin & Plated
Polished Bronze	611	9	Brass, Polished & Plated	Brass, Polished & Plated	Zinc, Polished & Plated
Satin Bronze	612	10	Brass, Satin & Plated	Brass, Satin & Plated	Zinc, Satin & Plated
Dark Oxidized Satin Bronze	613	10B	Brass, Satin; Dark Oxidized	Brass, Satin; Dark Oxidized	Zinc, Satin & Plated
Polished Chrome	625	26	Brass, Polished & Plated	Brass, Polished & Plated	Zinc, Polished & Plated
Satin Chrome	626	26D	Brass, Satin & Plated	Brass, Satin & Plated	Zinc, Satin & Plated
Satin Stainless Steel	630	32D	St. Steel, Satin	Brass, Satin & Plated	Zinc, Satin & Plated

Q401/Q402

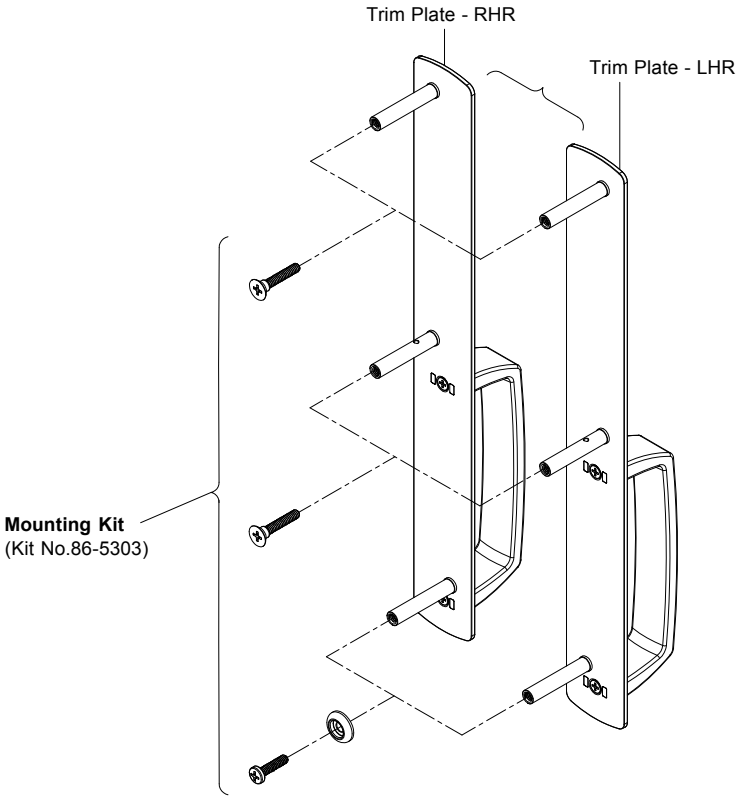
Q401

Exit Only



Q402

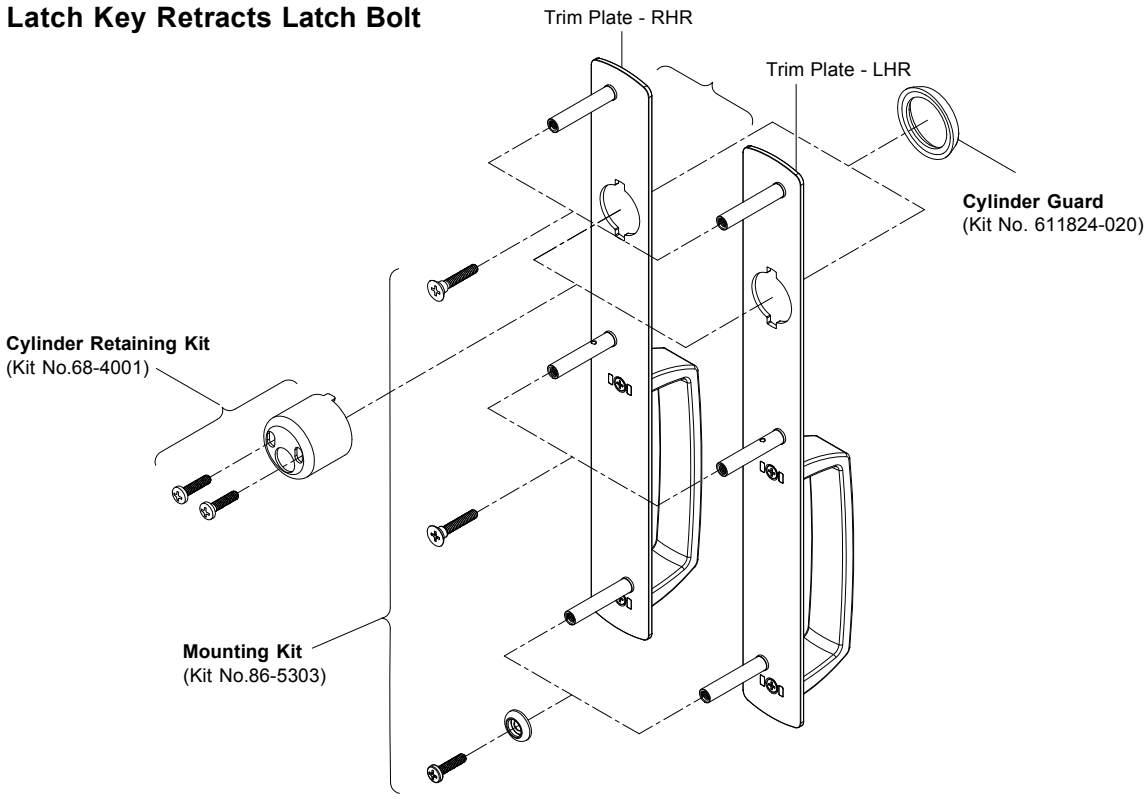
Dummy Pull Only



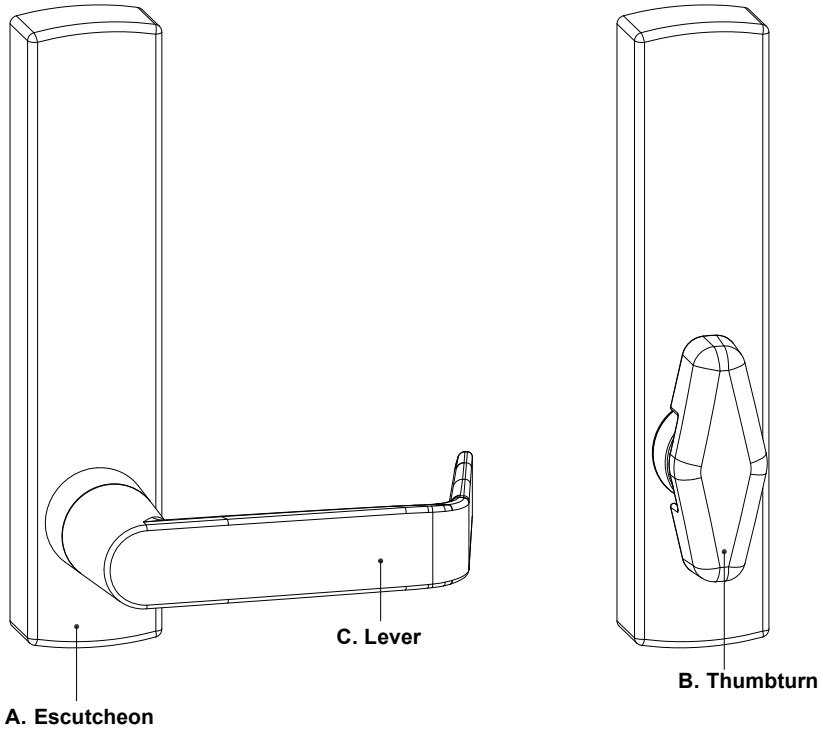
Q403

Q403

Night Latch Key Retracts Latch Bolt



Q500 Series Excutcheon Finishes



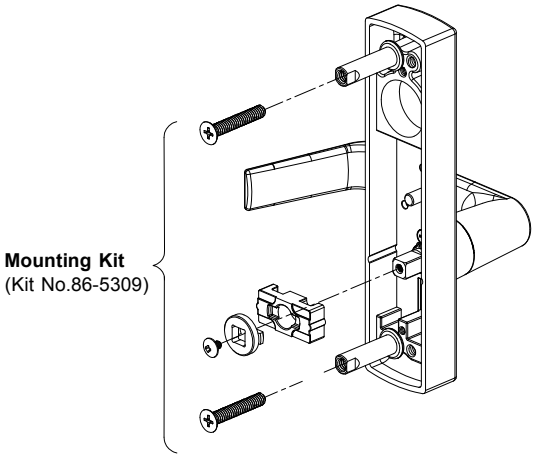
Finishes

Color	ANSI / BHMA	US	A. B.	C.	
Polished Brass	605	3	Zinc, Polished & Plated	Brass, Polished	Zinc, Polished & Plated
Satin Brass	606	4	Zinc, Satin & Plated	Brass, Satin	Zinc, Satin & Plated
Polished Bronze	611	9	Zinc, Polished & Plated	Brass, Polished & Plated	Zinc, Polished & Plated
Satin Bronze	612	10	Zinc, Satin & Plated	Brass, Satin & Plated	Zinc, Satin & Plated
Dark Oxidized Satin Bronze	613	10B	Zinc, Satin & Plated	Brass, Satin; Dark Oxidized	Zinc, Satin & Plated
Polished Chrome	625	26	Zinc, Polished & Plated	Brass, Polished & Plated	Zinc, Polished & Plated
Satin Chrome	626	26D	Zinc, Satin & Plated	Brass, Satin & Plated	Zinc, Satin & Plated
Satin Stainless Steel	630	32D	Zinc, Satin & Plated	Brass, Satin & Plated	Zinc, Satin & Plated

Q502/Q503R

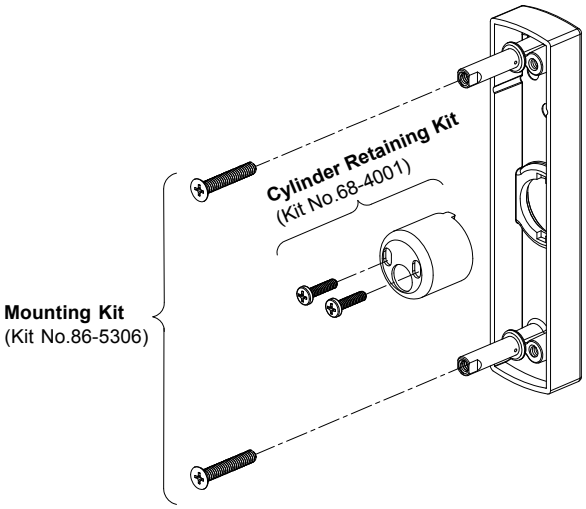
Q502

Dummy Pull Only



Q503R

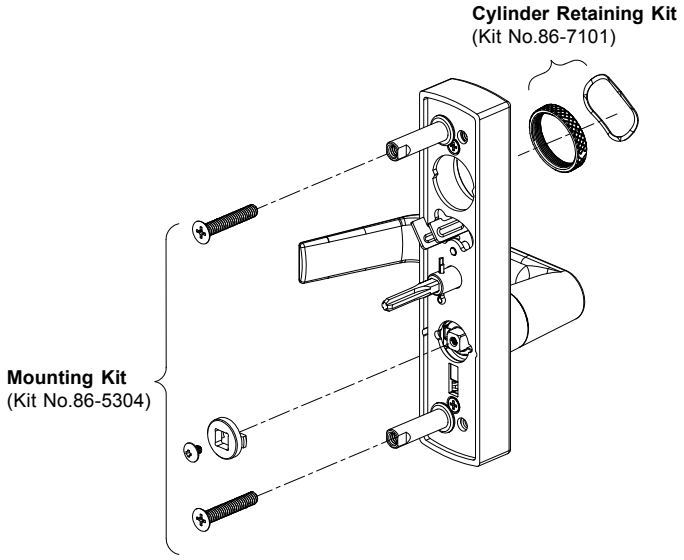
Night Latch Key Retracts Latch Bolt



Q508M/Q509R

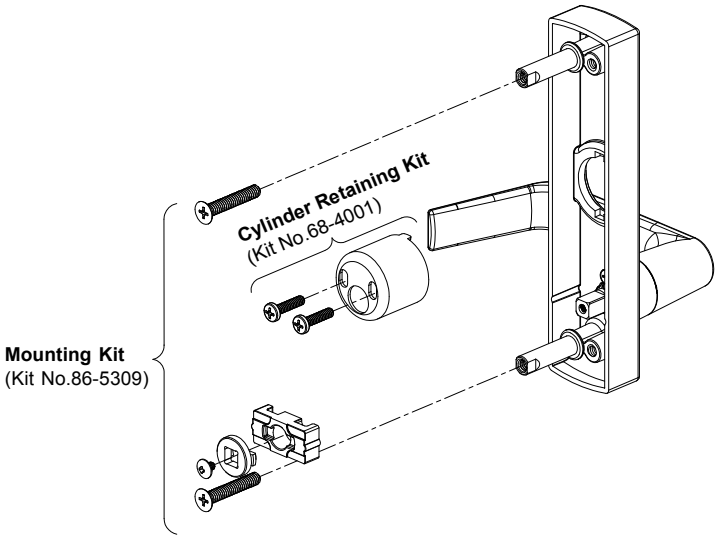
Q508M

Key Locks or Unlocks Latch Bolt



Q509R

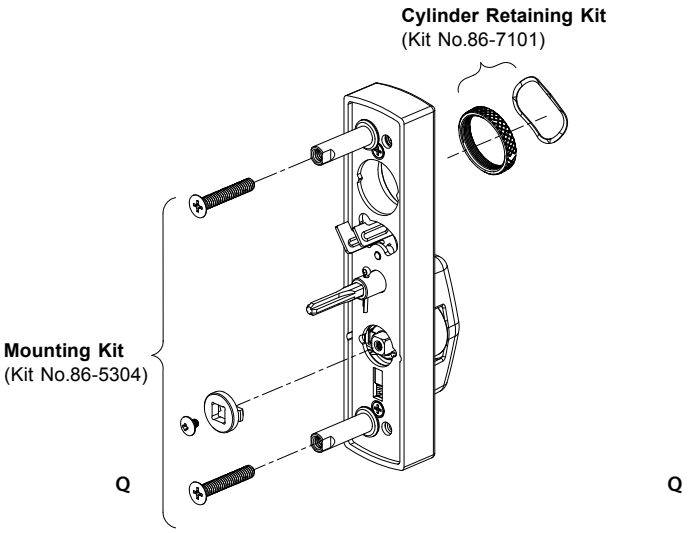
Night Latch Key Retracts Latch Bolt



Q511M/Q511P

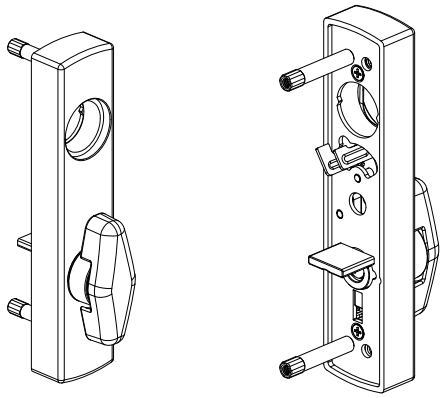
Q511M

Key Locks or Unlocks Latch Bolt



Q511P

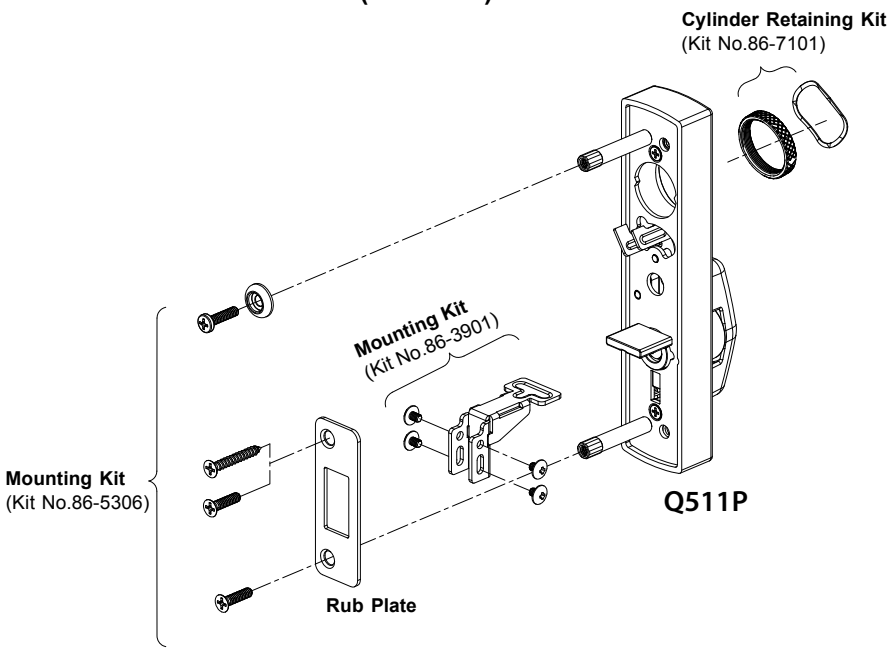
Key Locks or Unlocks Latch Bolt (For SVR/CVR)



Q511SP/Q511CP

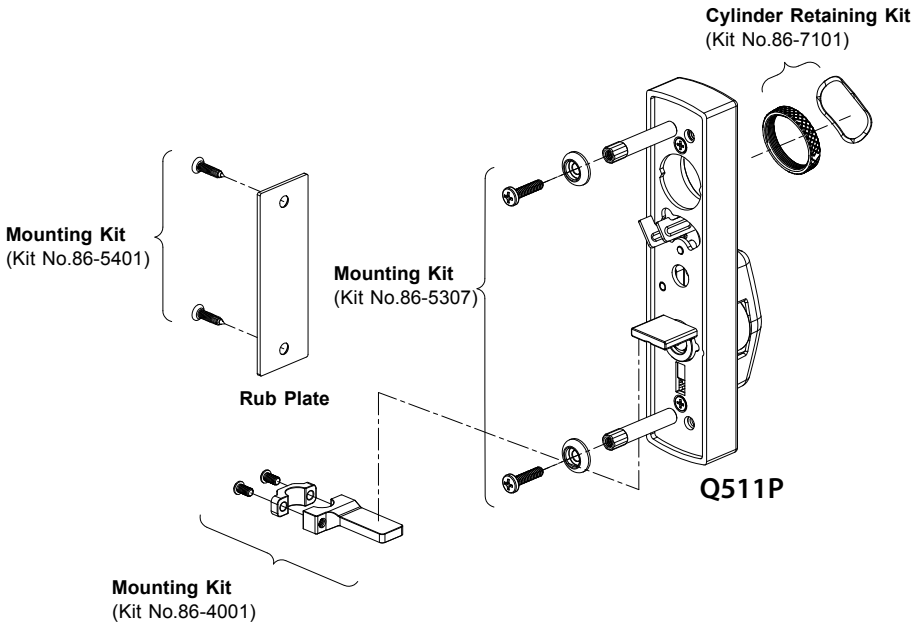
Q511SP

Key Locks or Unlocks Latch Bolt (For SVR)



Q511SP

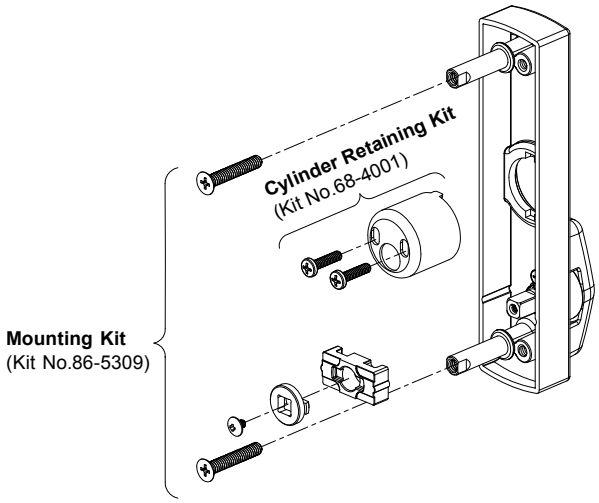
Key Locks or Unlocks Latch Bolt (For CVR)



Q512R/Q514

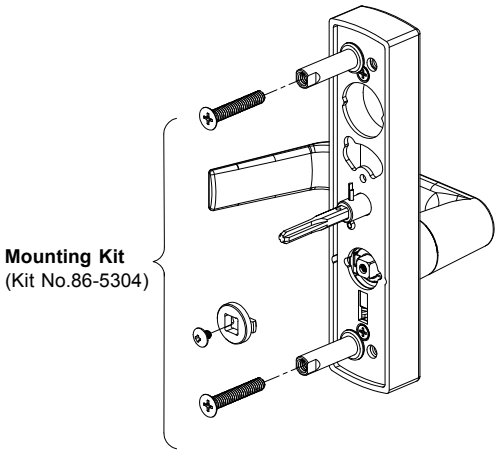
Q512R

Night Latch Key Retracts Latch Bolt



Q514

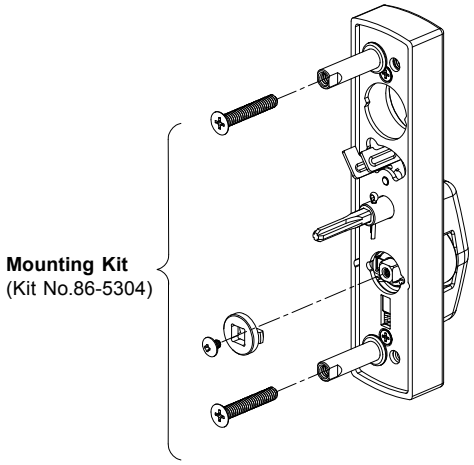
Lever Always Active



Q516/Q516P

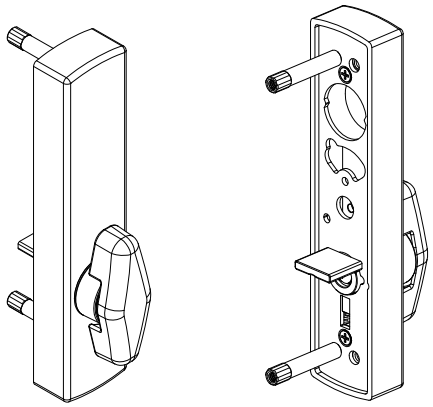
Q516

Turn Always Active



Q516P

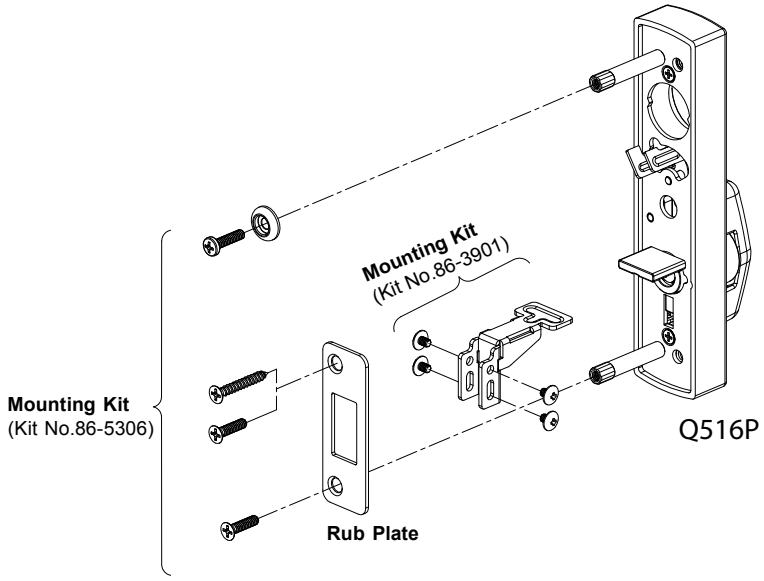
Turn Always Active (For SVR/CVR)



Q516SP/Q516CP

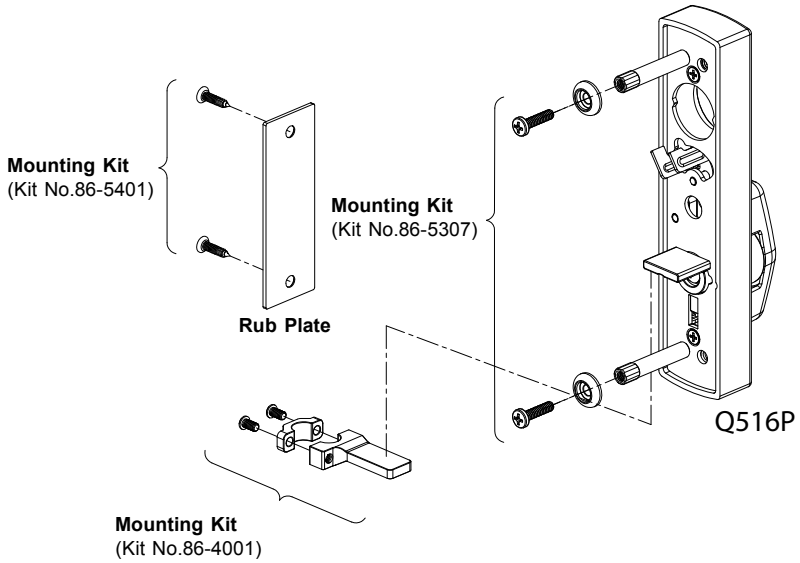
Q512R

Turn Always Active (For SVR)



Q514

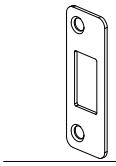
Turn Always Active (For CVR)



Q511P+Q402

Q511P+Q402

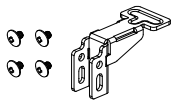
Key Locks or Unlocks Latch Bolt (For SVR)



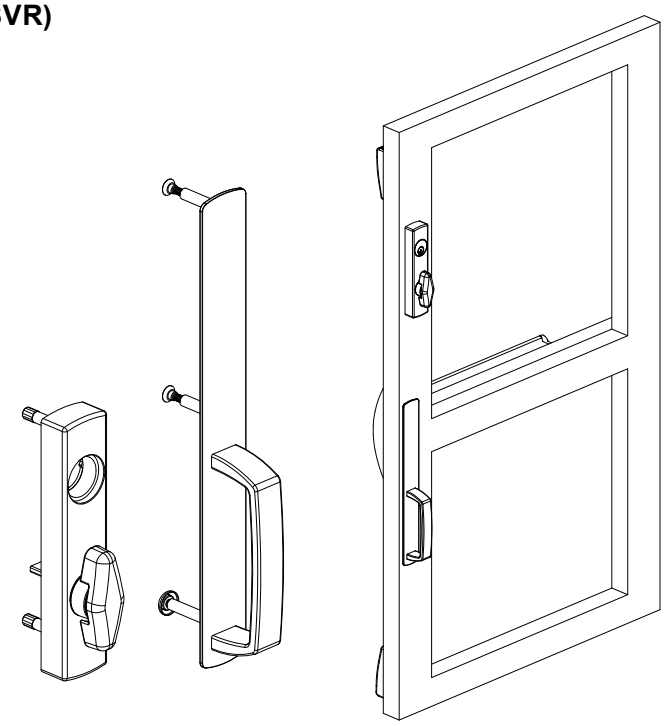
Rub Plate

Cylinder Retaining Kit
(Kit No.86-7101)

Mounting Kit
(Kit No.86-5306)



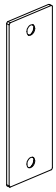
Mounting Kit
(Kit No.86-3901)



Q511P **Q402 RHR (or Q402 LHR)**

Q511P+Q402

Key Locks or Unlocks Latch Bolt (For CVR)

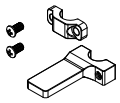


Rub Plate

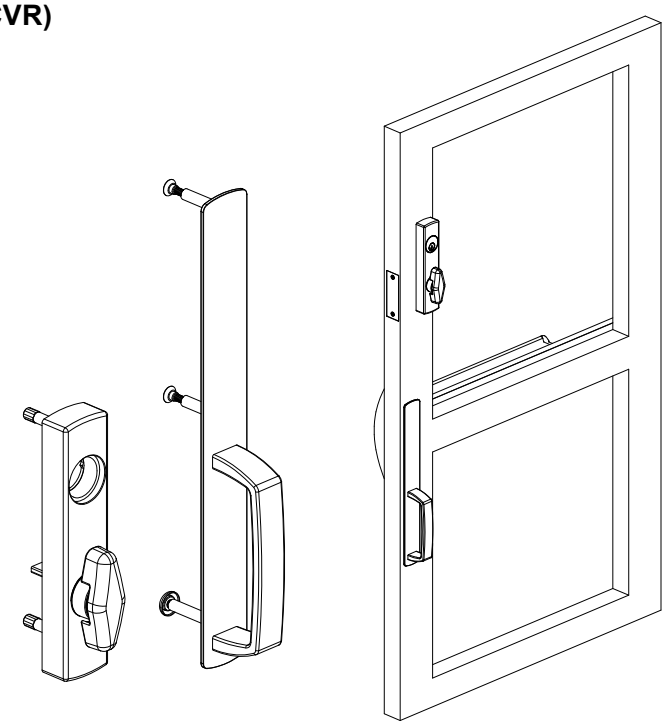
Cylinder Retaining Kit
(No.86-7101)

Mounting Kit
(Kit No.86-5401)

Mounting Kit
(Kit No.86-5307)



Mounting Kit
(Kit No.86-4001)

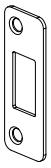


Q511P **Q402 RHR (or Q402 LHR)**

Q516P+Q402

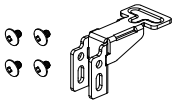
Q516P+Q402

Turn Always Active (For SVR)

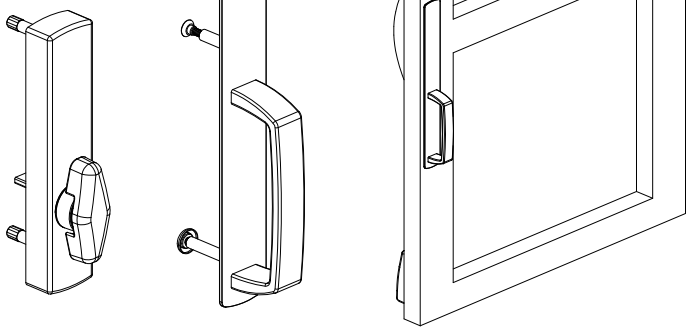


Rub Plate

Mounting Kit
(Kit No.86-5306)



Mounting Kit
(Kit No.86-3901)



Q516P **Q402 RHR (or Q402 LHR)**

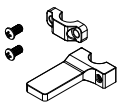
Q516P+Q402

Turn Always Active (For CVR)

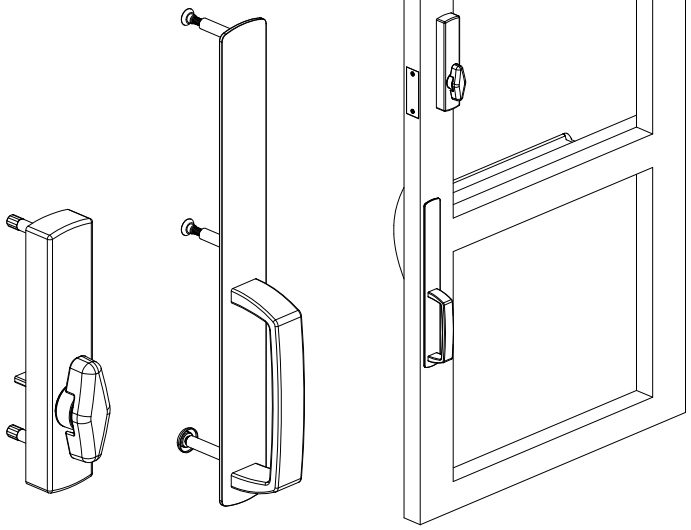
Rub Plate

Mounting Kit
(Kit No.86-5401)

Mounting Kit
(Kit No.86-5307)



Mounting Kit
(Kit No.86-4001)

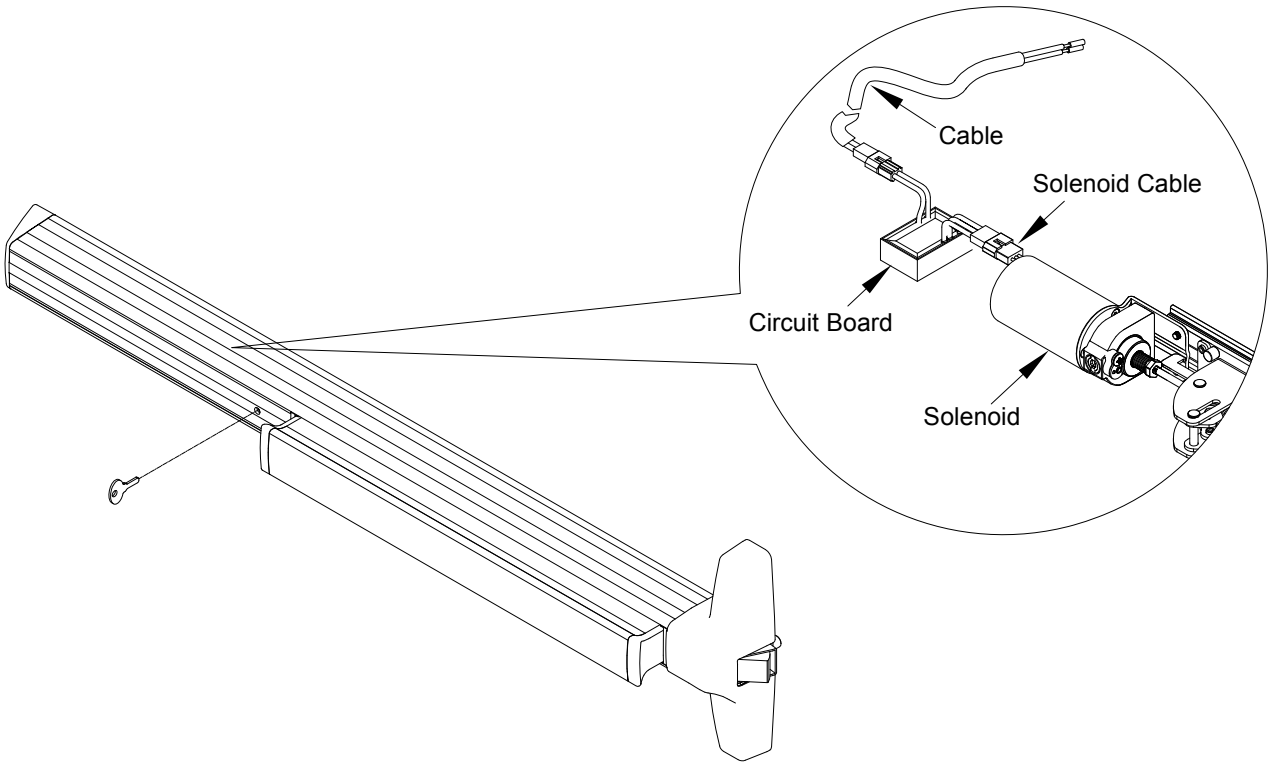


Q516P **Q402 RHR (or Q402 LHR)**

Electric Exit Device (ELR/SS)

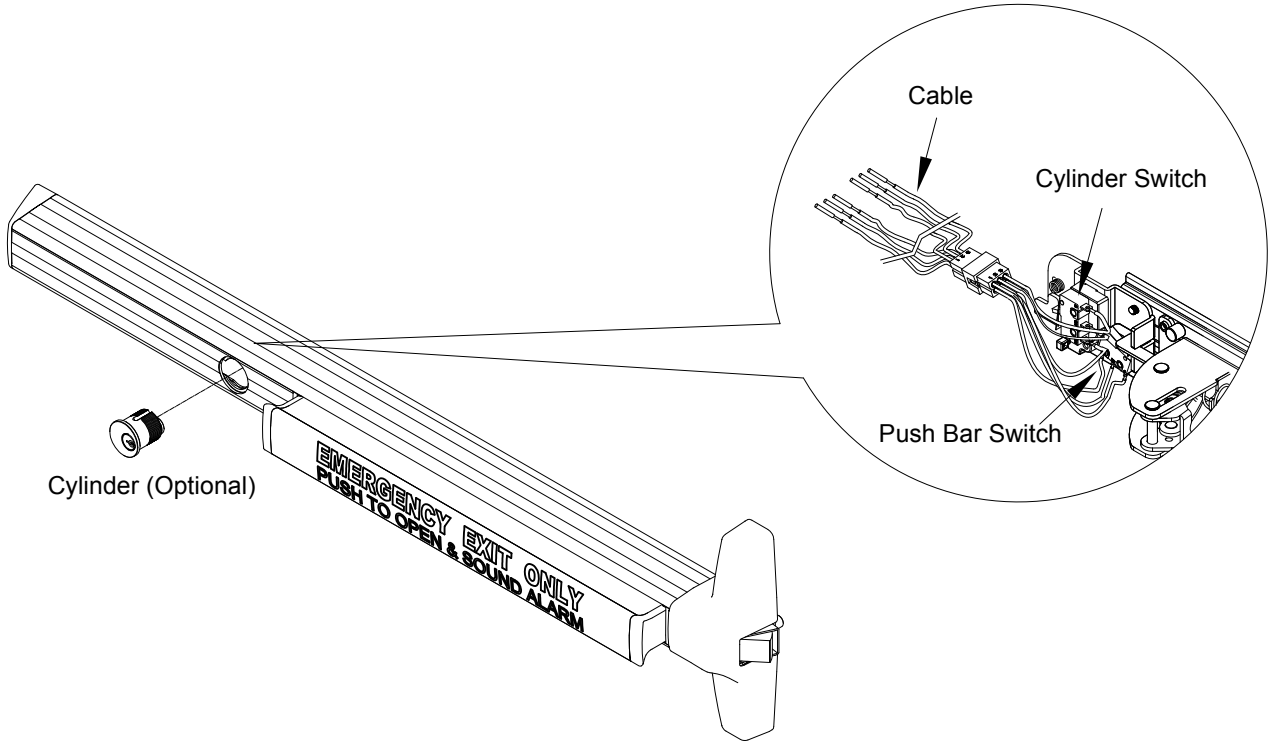
ELR - Electric Latch Retraction

Function Available - All Devices



SS - Signal Switch

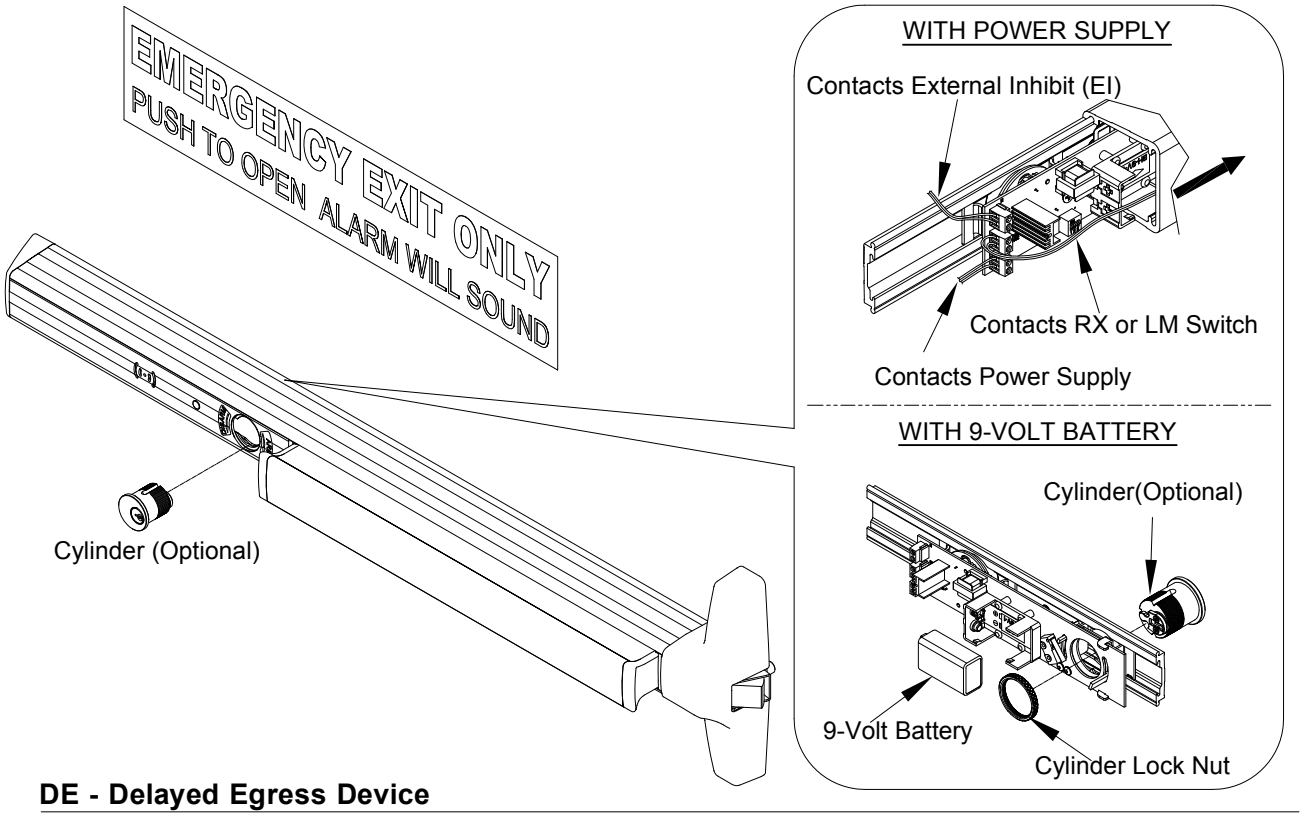
Function Available - All Devices



Electric Exit Device (AL/DE)

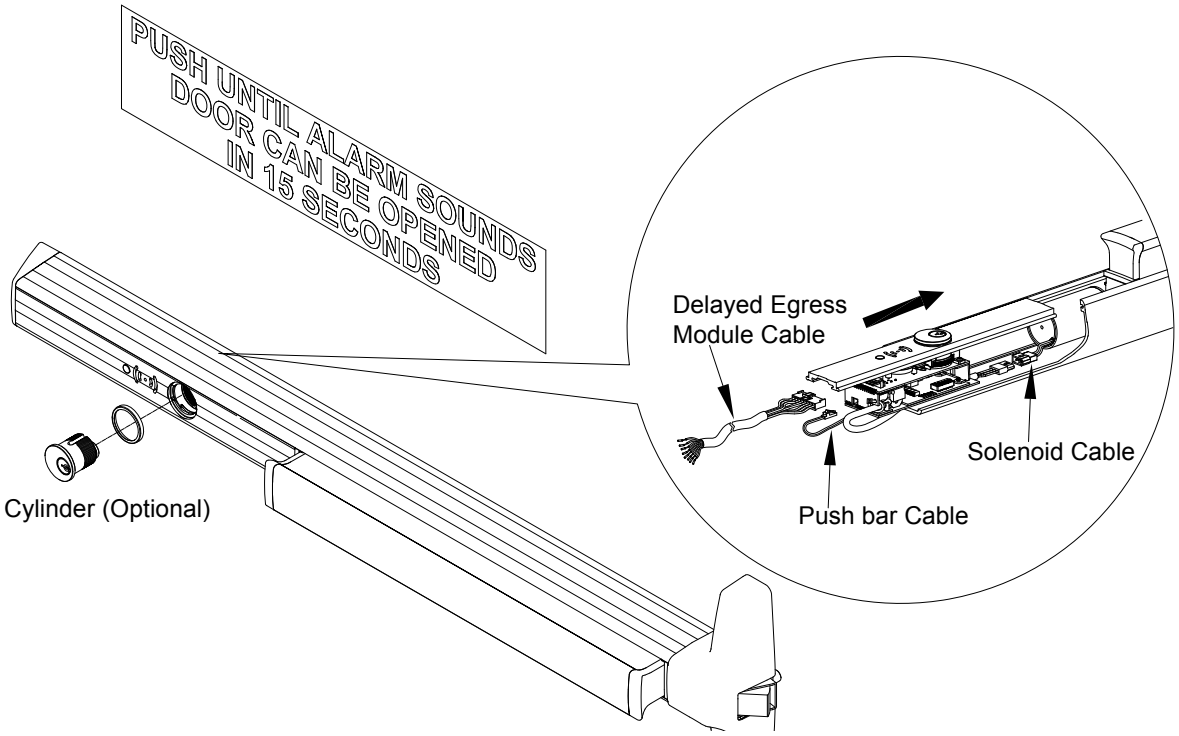
AL - Alarm Exit

Function Available - All Devices



DE - Delayed Egress Device

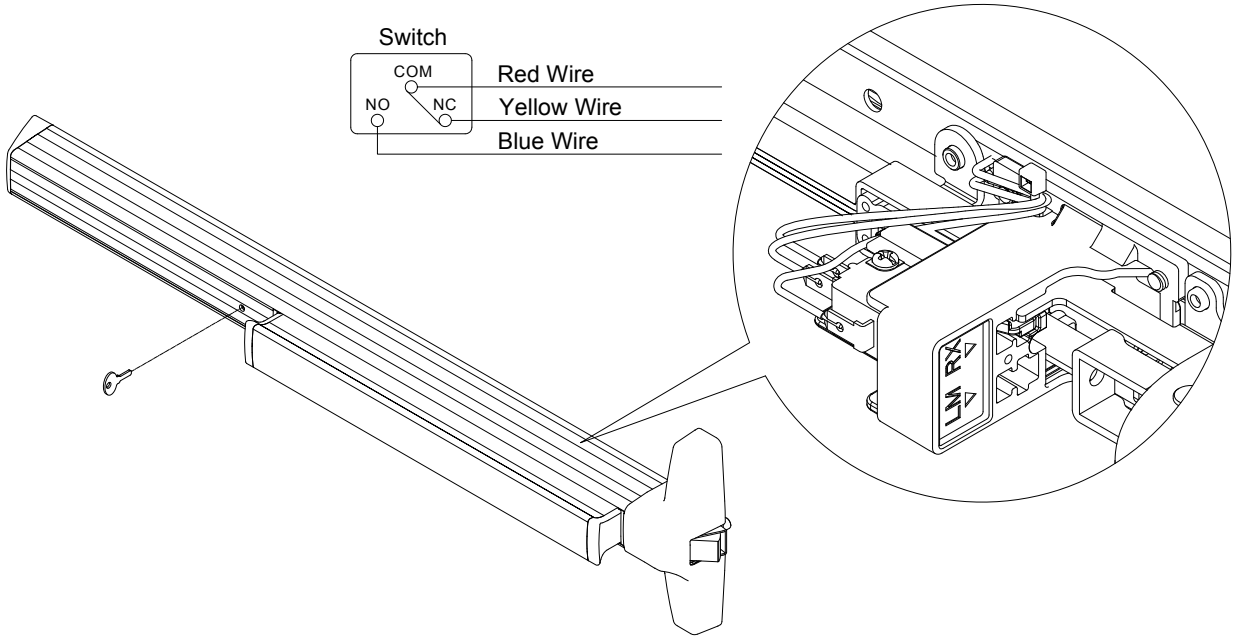
Function Available - All Devices



Electric Exit Device (RX/LM)

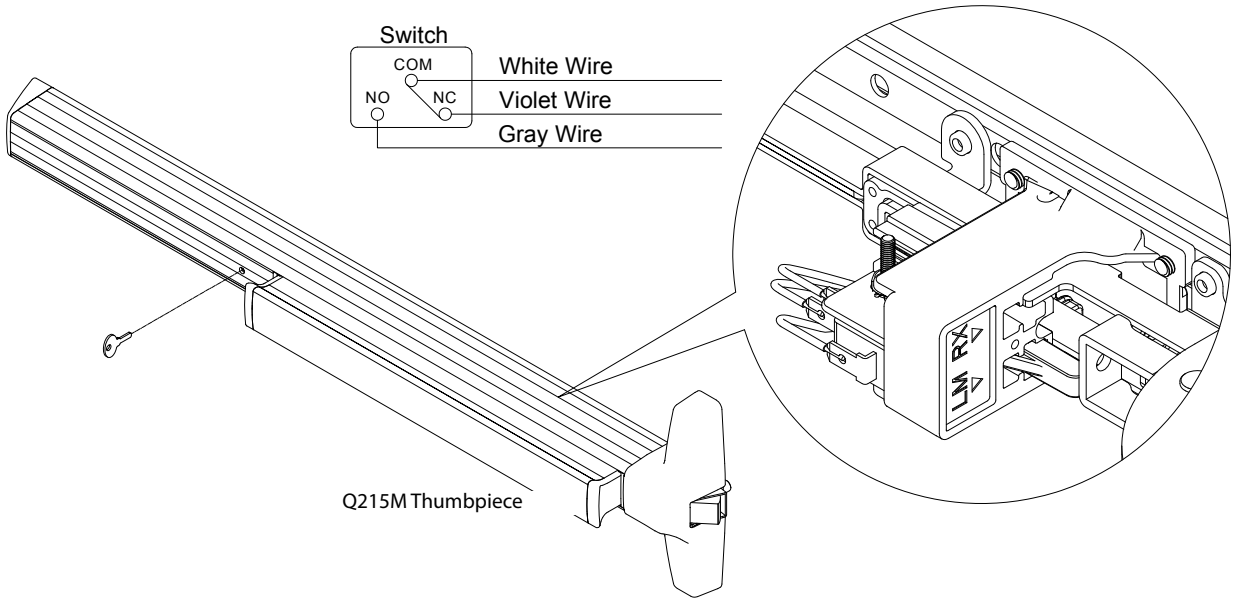
RX - Request To Exit

Function Available - All Devices



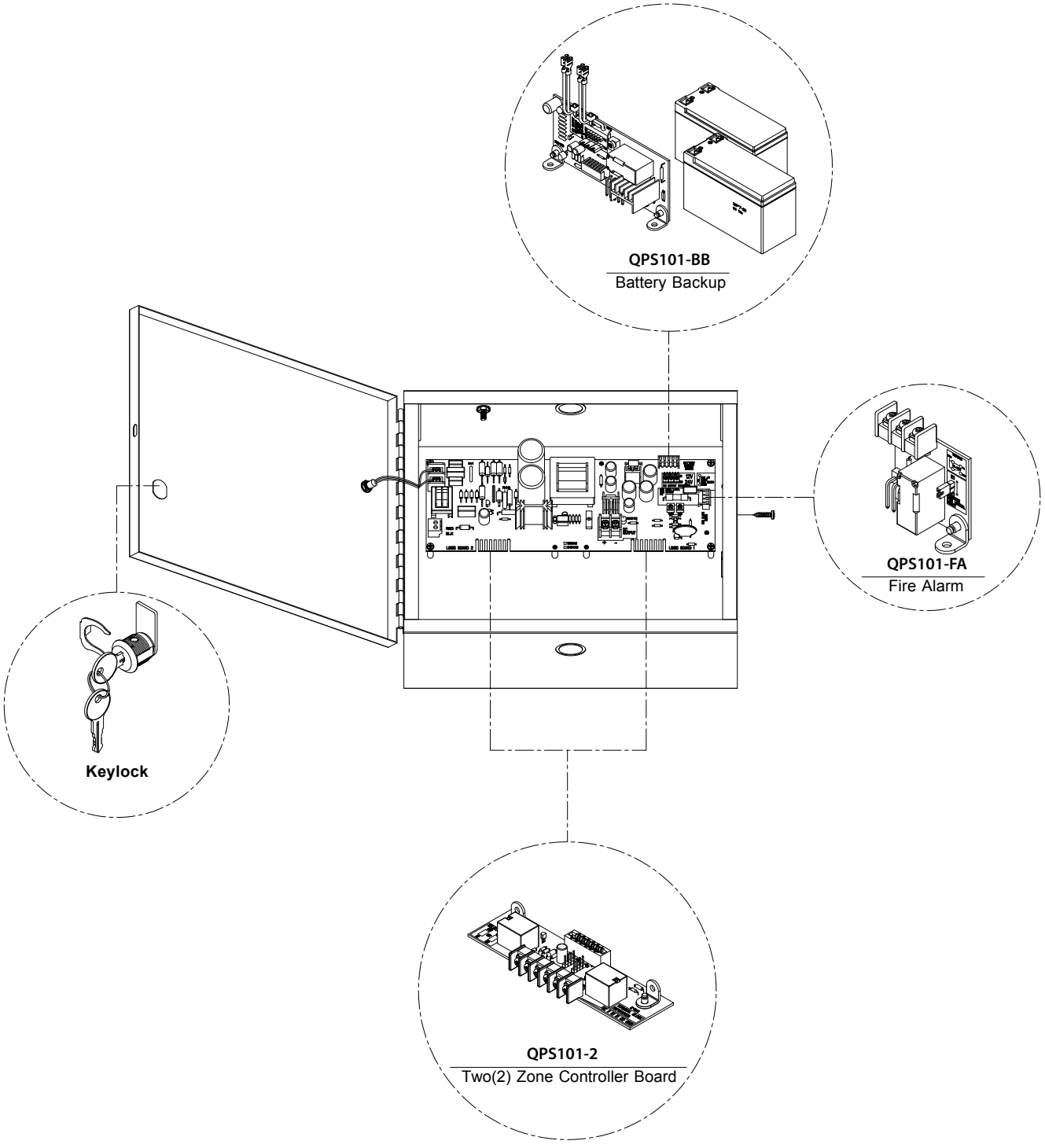
LM - Latch Bolt Monitoring

Function Available - All Devices



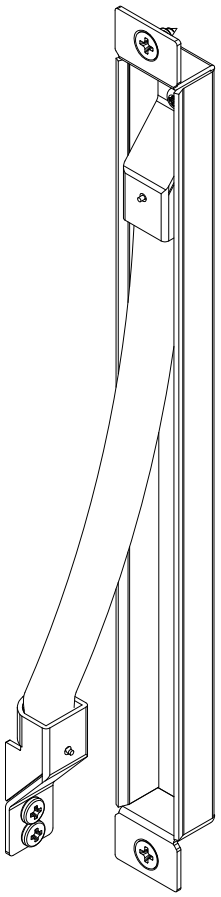
QPS100

Power Supply

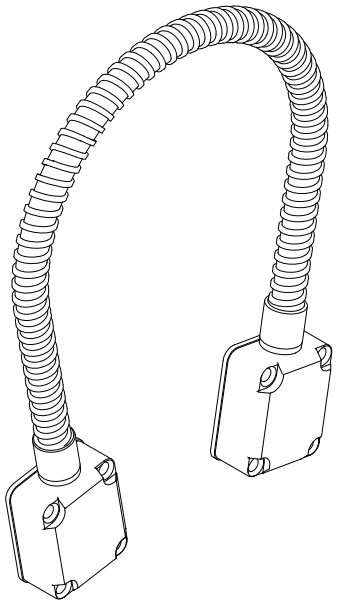


EPT

Power Transfer



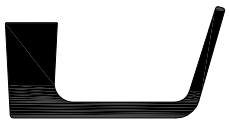
EPT-1



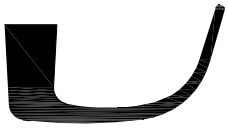
EPT-2

Lever/Grip Designs

Lever Options

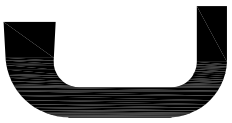


D type (Standard)



Q type

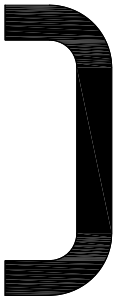
A type



K type

Grip Options

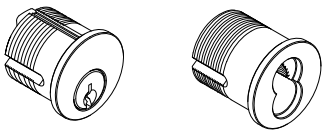
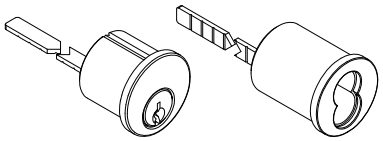
GD type (Standard)



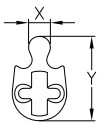
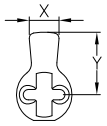
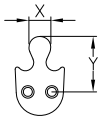
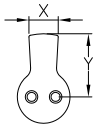
GK type

Cylinders

Cylinder

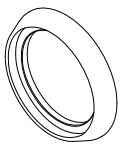
Cylinder Type	Application	Trim	Cylinder	Cyl. Length (Part No.)	Cylinder Cam
Mortise Cylinder  Standard I/C	08 / 11 for RIM / SVR / CVR* / 3PT	Q500	Standard	1-1/8"(441-102)	440-0704
			I/C	1-1/4"(442-601)	440-0708
	Cylinder Dogging	All Devices	Standard	1-1/4"(441-103)	440-0702
			I/C	1-3/8"(442-701)	440-0706
RIM Cylinder  Standard I/C	03 for RIM / SVR / CVR / 3PT (Must use with Cylinder Guard Part/No.611824-020)	Q400	Standard I/C	Tailpiece Length 3-1/8"(79.6mm)	
	03 / 09 / 12 for RIM / SVR / CVR / 3PT	Q500			

Cylinder Cam

Illustration				
Dimension	X=1/4"(6mm) Y=5/8"(15mm)	X=3/8"(9.5mm) Y=3/4"(19mm)	X=1/4"(6mm) Y=5/8"(15mm)	X=3/8"(9.5mm) Y=3/4"(19mm)
Cam No.	440-0702	440-0704	440-0706	440-0708

Cylinder Guard

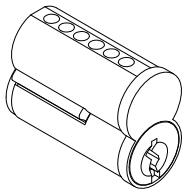
For use on Q403R



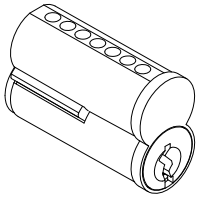
Part/No.611824-020

I/C Core

"A" keyway standard supplied. Specify 6 or 7 pin, combinated or uncombinated and finish 606 or 626 when ordering. Consult factory for other keyways.



I/C Core - 6 Pin



I/C Core - 7 Pin

Mounting Screws

Center Case

Kit No.	Illustration	Application				Description		Q'ty
		RIM	SVR	CVR	3PT			
86-5302		P	P	P	P	①	Center Case Screws (Metal)	2
						②	Center Case Screws (Metal)	2
						③	Center Case Screws(Wood)	2
						④	Sex Bolts	2

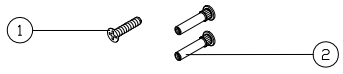
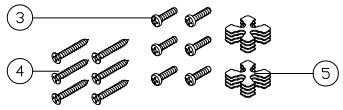
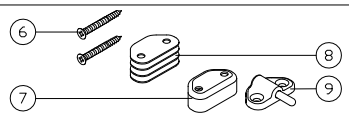
Center Case Cover/Latch Cover

Kit No.	Illustration	Application	Description	Q'ty
553-M9010		1. All Devices' Center Case Cover 2. Top & Bottom Latch Cover	Cover Screws	2
68-5401			Cover Screws (Torx)	2

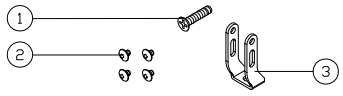
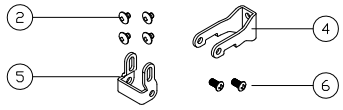
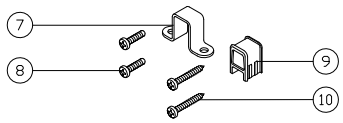
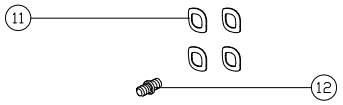
Fire Exit Hardware P Panic Exit Device

Mounting Kits

Top/Bottom Latch

Kit No.	Illustration	Application			Description		Q'ty
		SVR	CVR	3PT			
68-0402		P		P	①	Latch Screws	1
					②	Sex Bolts	2
					③	Latch Screws (Metal)	6
68-5305			P		④	Latch Screws (Wood)	6
					⑤	Shims	8
					⑥	Ratchet Release Screws	2
68-0801			P		⑦	Ratchet Release Spacer	1
					⑧	Shims	4
					⑨	Ratchet Release	1

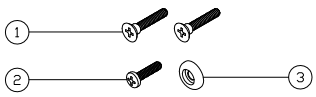
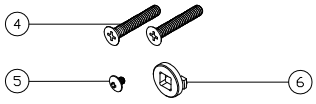
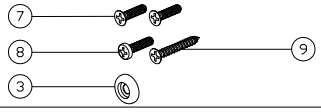
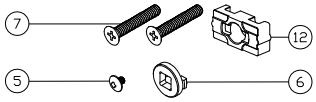
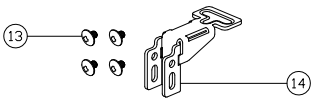
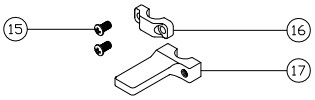
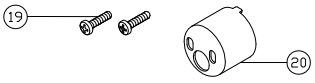
Top/Bottom Rod

Kit No.	Illustration	Application			Description		Q'ty
		SVR	CVR	3PT			
86-0901		P		P	①	Connector Screws	1
					②	Side Screws	4
					③	Rod Connector	1
86-0902			P		④	Rod Connector	1
					⑤	Support Bracket	1
					⑥	Side Screws	2
86-2501		P		P	⑦	Rod Support	1
					⑧	Mounting Screws(Metal)	2
					⑨	Rod Guide	1
68-5308		P	P	P	⑩	Mounting Screws(Wood)	2
					⑪	Spring Washers	4
					⑫	Connector Screws	1

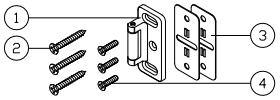
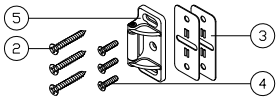
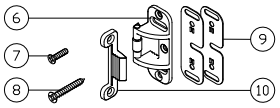
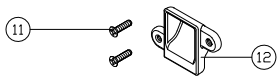
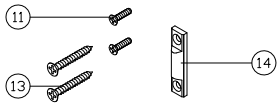
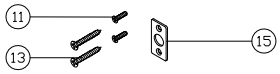
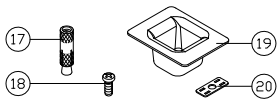
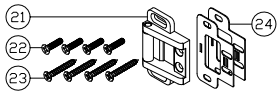
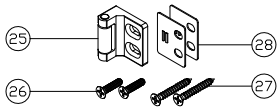
Fire Exit Hardware P Panic Exit Device

Mounting Kits

Q400 Series Pull Trim / Q500 Series Escutcheon

Kit No.	Illustration	Applications			Description		Q'ty
		Trim NO.	Q400 Series	Q500 Series			
86-5303		Q401 Q402 Q403	●		①	Trim Screws	2
					②	Trim Screw	1
86-5304		Q508M Q514 Q511M Q516		●	③	Screw Washer	1
					④	Trim Screws	2
86-5306		Q511SP Q516SP		●	⑤	Side Screws	1
					⑥	Breakable Cam	1
86-5307		Q511CP Q516CP		●	⑦	Trim Screws(Metal)	2
					⑧	Trim Screws	1
86-5308		Q503R		●	⑨	Trim Screws(Wood)	1
					⑩	Trim Screws	2
86-5309		Q502 Q509R Q512R		●	⑪	Screw Washer	2
					⑫	Spindle Seat	1
86-3901		Q511SP Q516SP		●	⑬	Side Screws	4
					⑭	Rod member	1
86-4001		Q511CP Q516CP		●	⑮	Screws	2
					⑯	Screw Seat	1
86-5401		Q511CP Q516CP		●	⑰	Rob member	1
					⑱	Screw	2
68-4001		Q403R Q503R Q509R Q512R	●	●	⑲	Trim Screws	2
					⑳	Cylinder Spacer	1
86-7101		Q508M Q511M Q511CP Q511SP		●	㉑	Cylinder Locking Nut	1
					㉒	Wave Washer	1

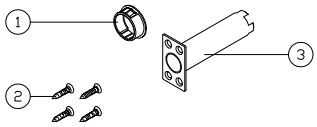
Strike Kits

Kit No.	Illustration	Application				Description		Q'ty
		RIM	SVR	CVR	3PT			
Q106		P			P	①	Q106 Strike	1
						②	Strike Screws (Wood)	3
						③	Q106 Strike Shims	2
Q106Z		P				④	Strike Screws (Metal)	3
						⑤	Q106Z Strike	1
Q108F						⑥	Q108F Strike	1
						⑦	Strike Screws (Metal)	7
						⑧	Strike Screws (Wood)	7
						⑨	Q108F Strike Shims	2
Q216F				P		⑩	Strike Hook	1
						⑪	Strike Screws (Metal)	2
Q224F			P		P	⑫	Q216F Strike	1
						⑬	Strike Screws (Wood)	2
						⑭	Q224F Strike	1
Q225F			P	P	P	⑮	Q225F Strike	1
						⑯	Q226F Strike	1
						⑰	Steel Anchor	1
Q226F			P	P	P	⑱	Strike Screws	1
						⑲	Q227F Strike	1
						⑳	Q227F Strike Shims	1
Q227F			P	P	P	㉑	Q103 Strike	1
						㉒	Strike Screws (Metal)	4
						㉓	Strike Screws (Wood)	4
Q103		P			P	㉔	Q103 Strike Shims	2
						㉕	Q203 Strike	1
Q203			P		P	㉖	Strike Screws (Metal)	2
						㉗	Strike Screws (Wood)	2
						㉘	Q203 Strike Shims	2

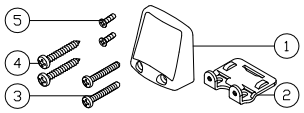
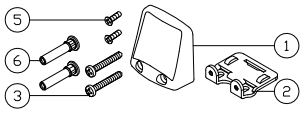
Fire Exit Hardware P Panic Exit Device

Fire Bolt/End Cap Kits/Cylinder Retaining Kits

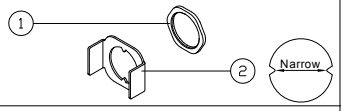
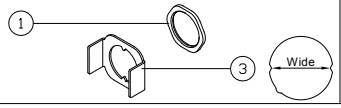
Fire Bolt

Kit No.	Illustration	Application			Description		Q'ty
		SVR	CVR	3PT			
68-4502		🔥	🔥	🔥	①	Cover	1
					②	Mounting Screws	4
					③	Fire Bolt	1

End Cap Kits

Kit No.	Illustration	Application	Description		Q'ty
68-5913		Ⓟ	①	End Cap	1
			②	End Cap Bracket	1
			③	Bracket Screws (Metal)	2
68-5914		🔥	④	Bracket Screws (Wood)	2
			⑤	End Cap Screws	2
			⑥	Sex Bolts	2

Cylinder Retaining Kits

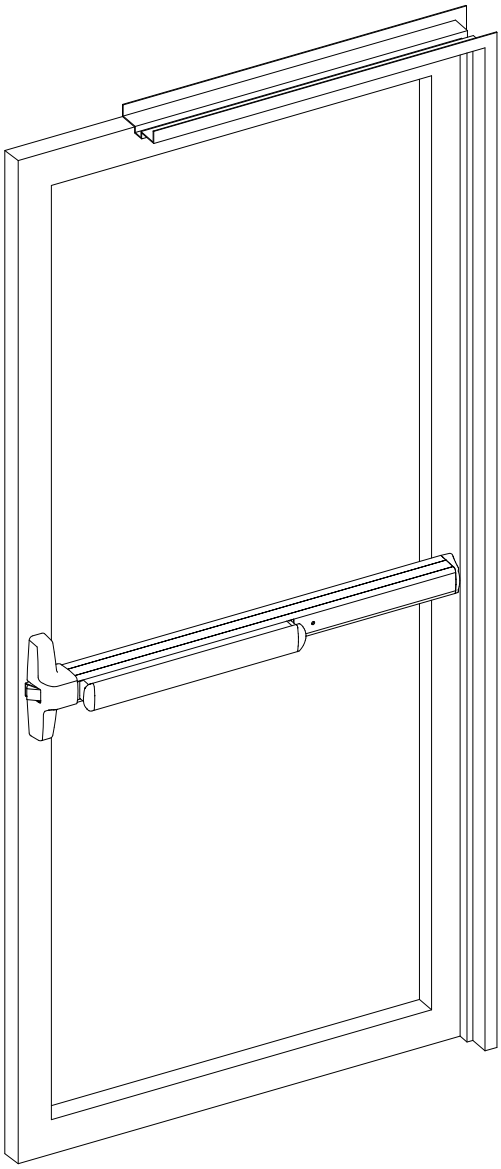
Kit No.	Illustration	Application	Description		Q'ty
68-7001		Standard Mortise Cylinder (For Dogging)	①	Cylinder Nut	1
			②	Cylinder Bracket	1
68-7002		Non-Standard Mortise Cylinder (For Dogging)	③	Cylinder Bracket	1

🔥 Fire Exit Hardware Ⓟ Panic Exit Device

Q2100/QF2100 Installation Instructions (Page 1)

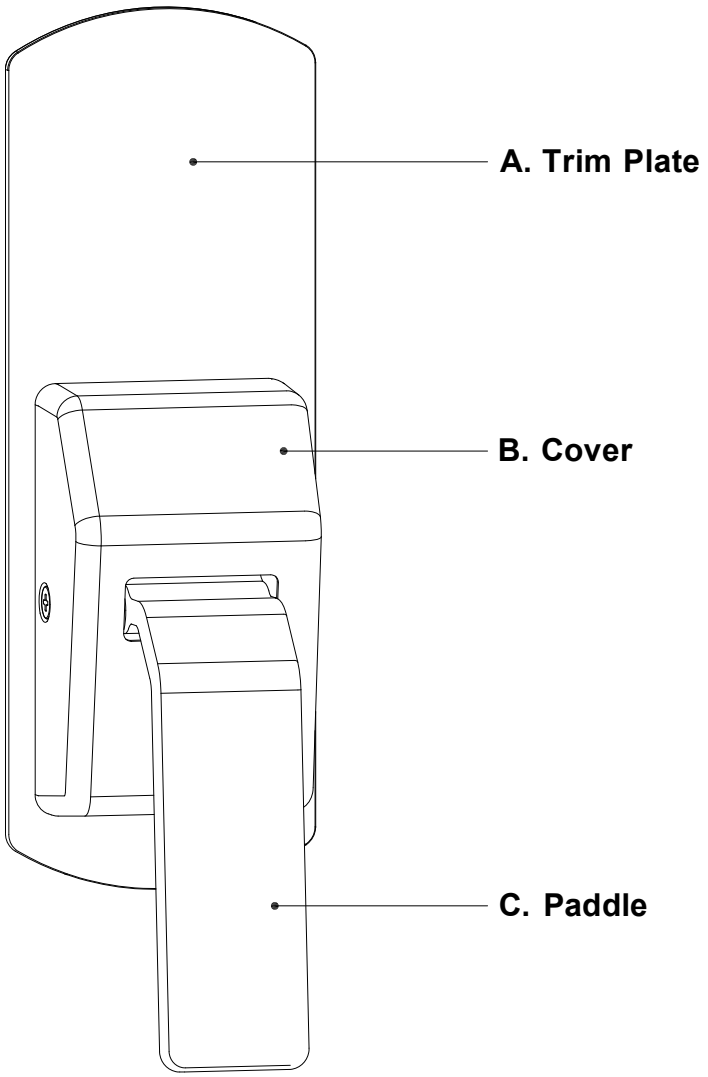
Q2100/QF2100 SERIES
RIM EXIT DEVICE

INSTALLATION INSTRUCTIONS



WD-OD002(409)

Q2100/QF2100 Installation Instructions (Page 2)

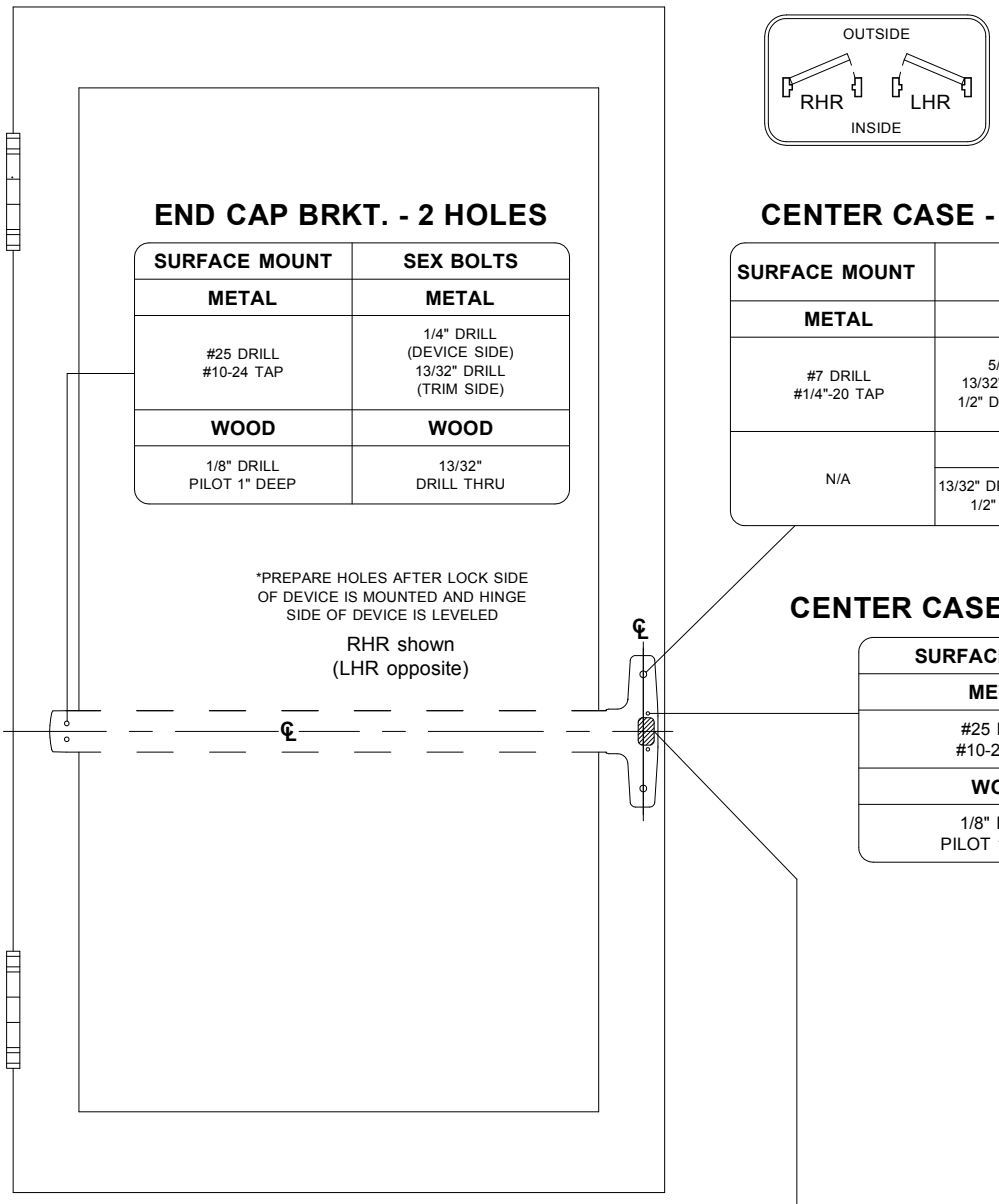


Finishes

Color	ANSI/BHMA	US	A.B	C.
Polished Brass	605	3	Brass, Polished	Zinc, Polished & Plated
Satin Brass	606	4	Brass, Satin	Zinc, Satin & Plated
Polished Bronze	611	9	Brass, Polished & Plated	Zinc, Polished & Plated
Satin Bronze	612	10	Brass, Satin & Plated	Zinc, Satin & Plated
Dark Oxidized Satin Bronze	613	10B	Brass, Satin; Dark Oxidized	Zinc, Satin & Plated
Polished Chrome	625	26	Brass, Polished & Plated	Zinc, Polished & Plated
Satin Chrome	626	26D	Brass, Satin & Plated	Zinc, Satin & Plated
Satin Stainless Steel	630	32D	St. Steel, Satin	Zinc, Satin & Plated

Q2100/QF2100 Installation Instructions (Page 3)

DOOR PREPARATION CHART



END CAP BRKT. - 2 HOLES

SURFACE MOUNT	SEX BOLTS
METAL	**METAL**
#25 DRILL #10-24 TAP	1/4" DRILL (DEVICE SIDE) 13/32" DRILL (TRIM SIDE)
WOOD	**WOOD**
1/8" DRILL PILOT 1" DEEP	13/32" DRILL THRU

CENTER CASE - 2 HOLES

SURFACE MOUNT	SEX BOLTS OR TRIM
METAL	**METAL**
#7 DRILL #1/4"-20 TAP	5/16" DRILL INSIDE 13/32" DRILL (SEX BOLTS) 1/2" DRILL OUTSIDE (TRIM)
N/A	**WOOD**
	13/32" DRILL THRU (SEX BOLTS) 1/2" DRILL THRU (TRIM)

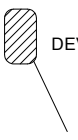
*PREPARE HOLES AFTER LOCK SIDE OF DEVICE IS MOUNTED AND HINGE SIDE OF DEVICE IS LEVELED

RHR shown
(LHR opposite)

CENTER CASE - 2 HOLES

SURFACE MOUNT
METAL
#25 DRILL #10-24 TAP
WOOD
1/8" DRILL PILOT 1" DEEP

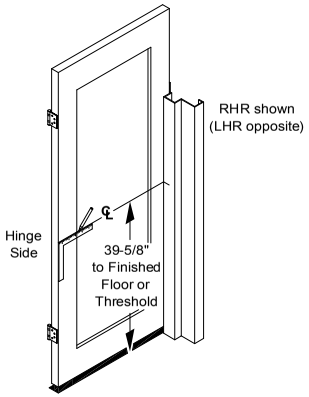
DOOR CUT-OUTS



CUT-OUT
DEVICE SIDE ONLY 5/8" DEEP FOR WOOD DOOR

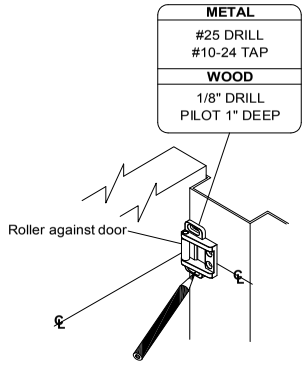
1/4" Radius

1 DRAW HORIZONTAL DEVICE AND STRIKE CENTERLINE.



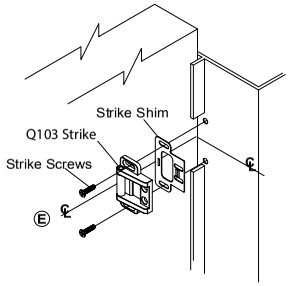
Close door, mark horizontal centerline on inner side of door and on door stop. The distance of centerline measured from finished floor should be of 39-5/8". If trim is used, horizontal centerline should be measured on outer side of door as well.

2 ALIGN STRIKE ON HORIZONTAL CENTERLINE (℄) AND MARK TWO(2) SLOTTED HOLES.



Use strike as template and place it against inner side of door and door stop such that strike is aligned both with centerlines on door and on stop. Mark centers and drill / tap holes as required.

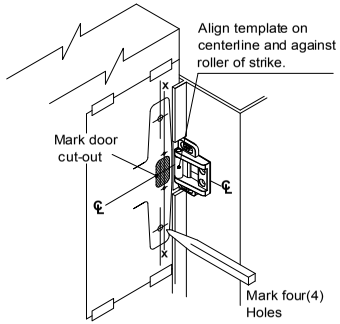
3 INSTALL STRIKE AND SHIM.



Prepare two(2) holes and install a screw through each slot.

For Q106 and Q108 strikes, refer to page 7 and page 8 of this instruction manual.

4 POSITION TEMPLATE AGAINST STRIKE AND ON ℄ AND MARK DOOR.

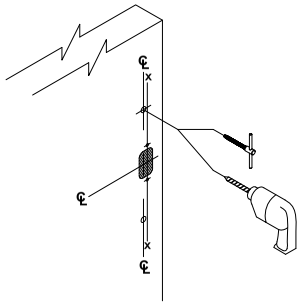


Paper Template (Page 9 and 10)

Position and tape template (and trim template if trim is used), making sure the centerlines of the template and door are aligned, as show in above figure. Mark centers and drill / tap the required holes as indicated on the template.

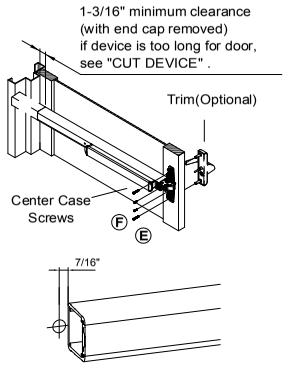
5 PREPARE DOOR FOR DEVICE AND TRIM.

See trim instructions for outside door preparation.
Locate same vertical centerline for both sides.
Be extra careful if edge of door is beveled.
Be sure X-X vertical centerline is parallel to edge of door.



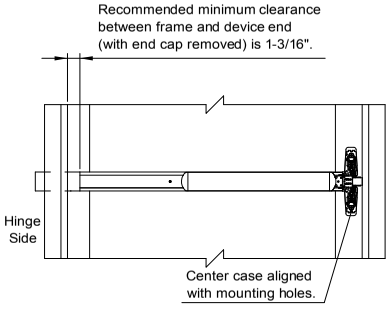
See "DOOR PREPARATION CHART" on page 3 for drill, tap and cut-out information.

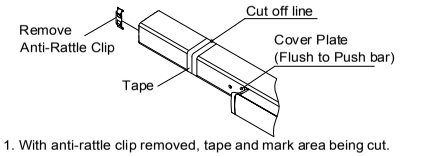
6 MEASURE TO DETERMINE LENGTH TO CUT DEVICE



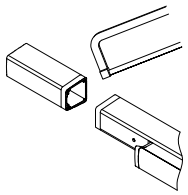
If 5/8" diameter wire access hole has been predrilled in door , cut device 7/16" measured from center of hole.

7 CUT DEVICE (IF REQUIRED)





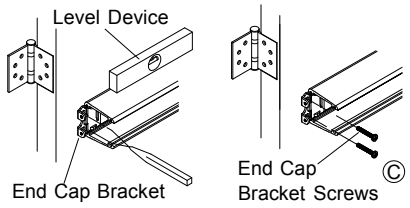
1. With anti-rattle clip removed, tape and mark area being cut.



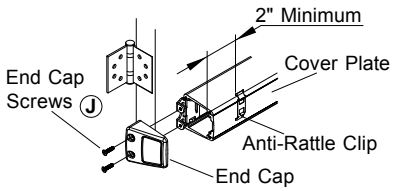
2. Cut off device and deburr.
NOTE: Device must be cut square for proper end cap fit.

Q2100/QF2100 Installation Instructions (Page 5)

8 INSTALL MOUNTING BRACKET AND END CAP.

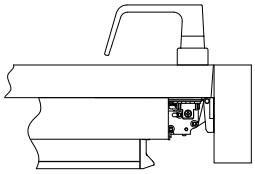


1. Remove cover plate, insert end cap bracket into push bar assembly against mechanism case. Level device, mark and drill two(2) holes for Bracket Screws. Fasten end cap bracket screws to door.

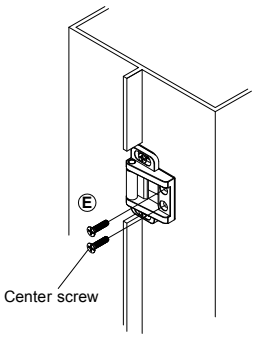


2. Insert cover plate, slide anti-rattle clip in position (2" minimum from end), and attach end cap with two(2) end cap screws.

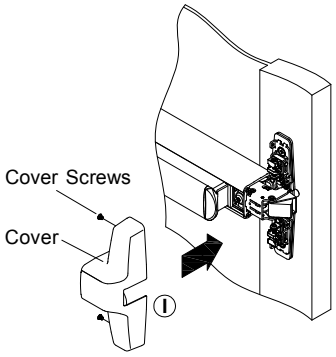
9 ADJUST AND SECURE STRIKE.



Fasten strike to frame and adjust strike so that the device latches tightly without binding, apply center screw once adjustment is complete.



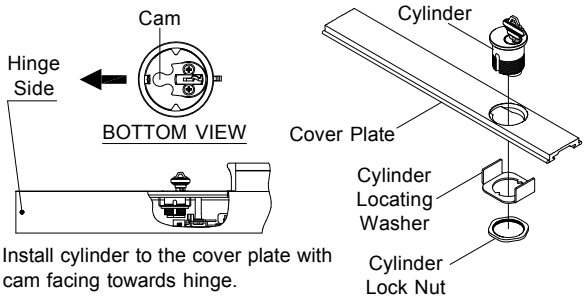
10 INSTALL COVER.



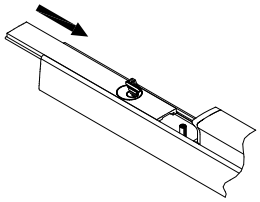
Attach cover to center case with two(2) center case screws.

OPTIONAL DOGGING

CYLINDER DOGGING

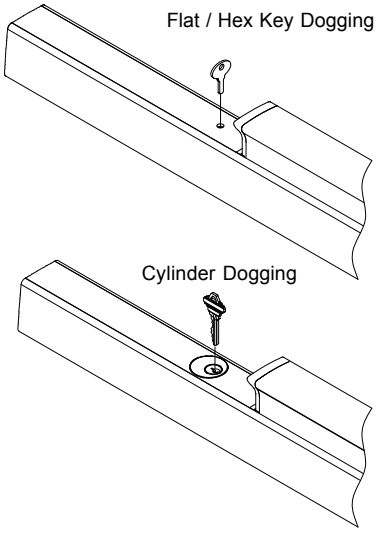


Install cylinder to the cover plate with cam facing towards hinge.



Slide cover plate in position in the mechanism case.

DOGGING CHECK

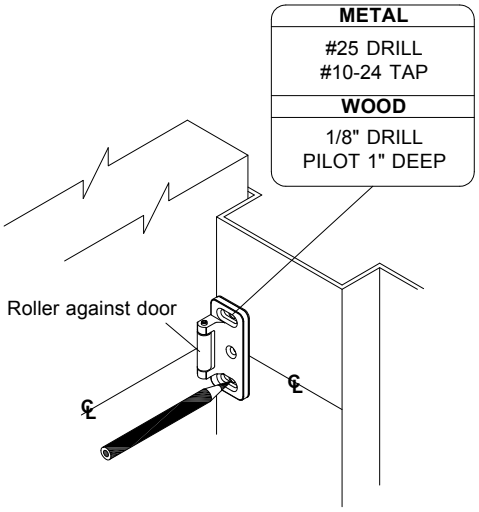


Depress push bar and turn flat / hex wrench or key one full turn for dogging check.

Q2100/QF2100 Installation Instructions (Page 6)

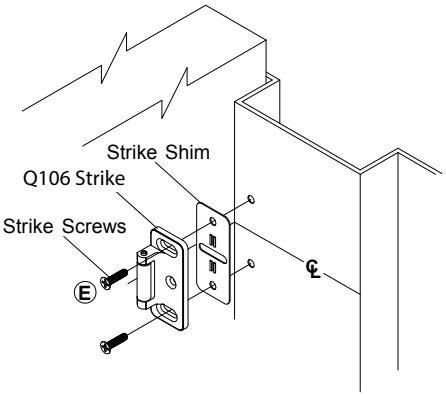
Q106 STRIKE INSTALLATION

1 ALIGN STRIKE ON HORIZONTAL CENTERLINE (℄) AND MARK TWO(2) SLOTTED HOLES.



Use strike as template and place on door stop and against inside face of door, so the horizontal centerline on strike lines up with the horizontal centerline on door stop and door. Mark centers and drill / tap holes as required.

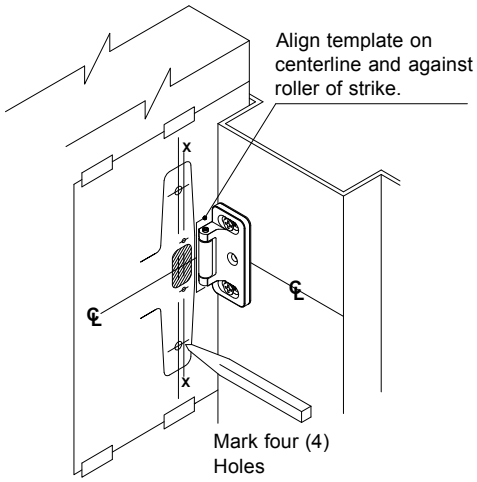
2 INSTALL STRIKE AND SHIM.



Prepare two(2) holes and install a screw through each slot.

For Q108 strike see back cover of this page.

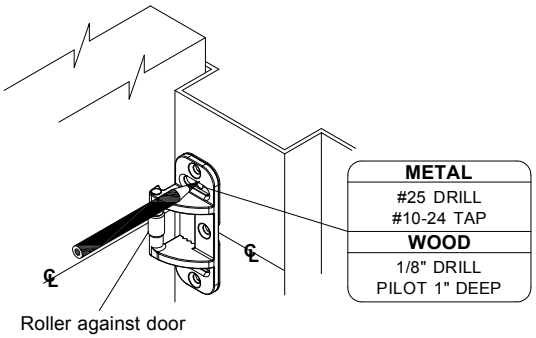
3 TEMPLATE ALIGNS AS SHOW

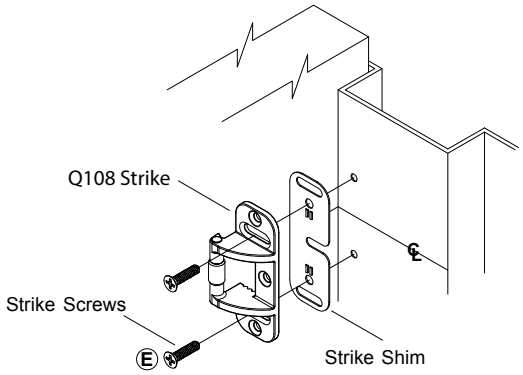


Q2100/QF2100 Installation Instructions (Page 7)

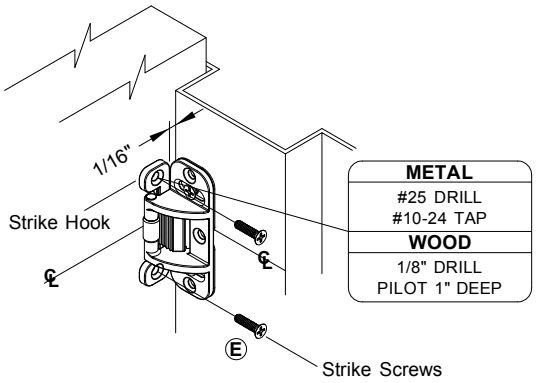
Q108 STRIKE INSTALLATION

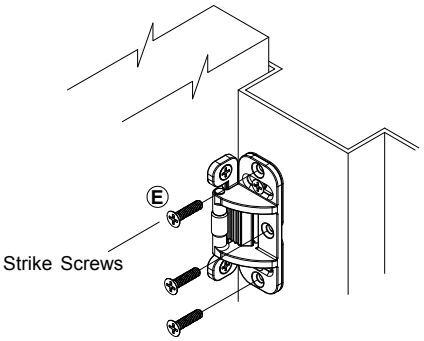
1 PREPARE AND INSTALL SCREWS THROUGH 2 STRIKE SLOTS.



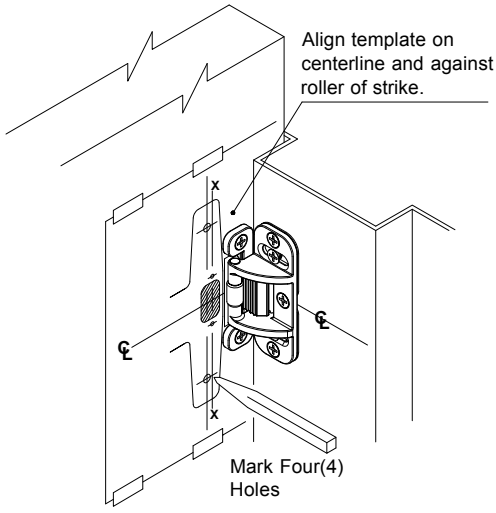


2 INSTALL STRIKE HOOK AND ADDITIONAL STRIKE SCREWS.





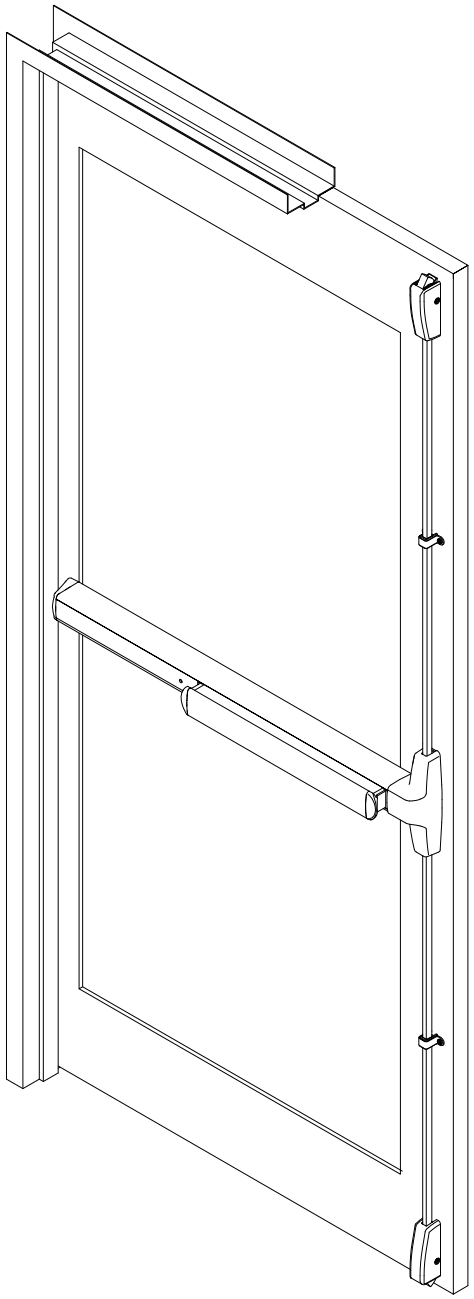
3 TEMPLATE ALIGNS AS SHOWN.



Q2200/QF2200 Installation Instructions (Page 1)

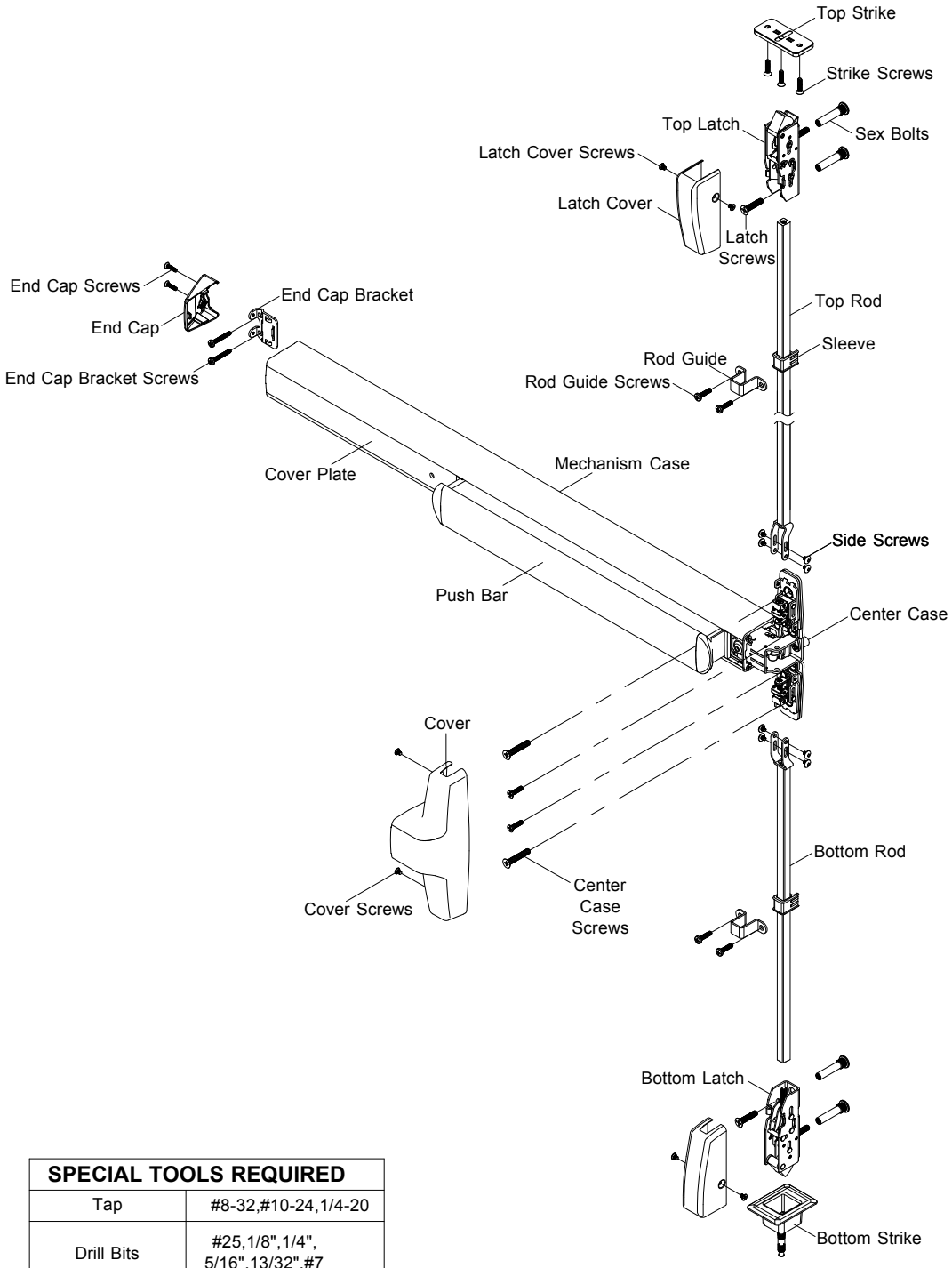
Q2200/QF2200 SERIES
SURFACE VERTICAL ROD DEVICE

INSTALLATION INSTRUCTIONS



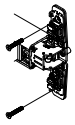
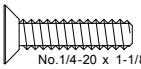
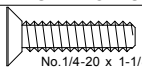
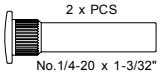
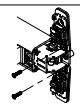
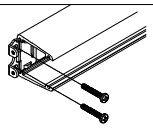
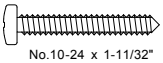
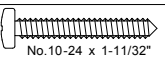
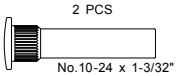
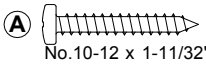
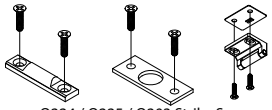
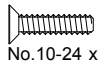
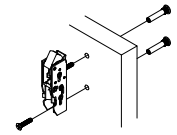
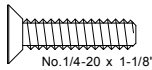
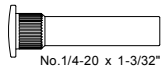
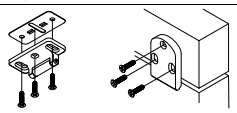
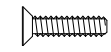
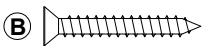
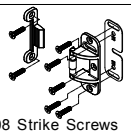
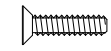
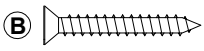
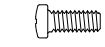
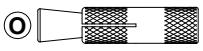
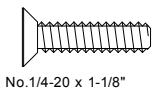
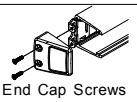
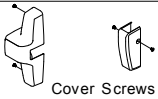
WD-OD002(410)

Q2200/QF2200 Installation Instructions (Page 2)

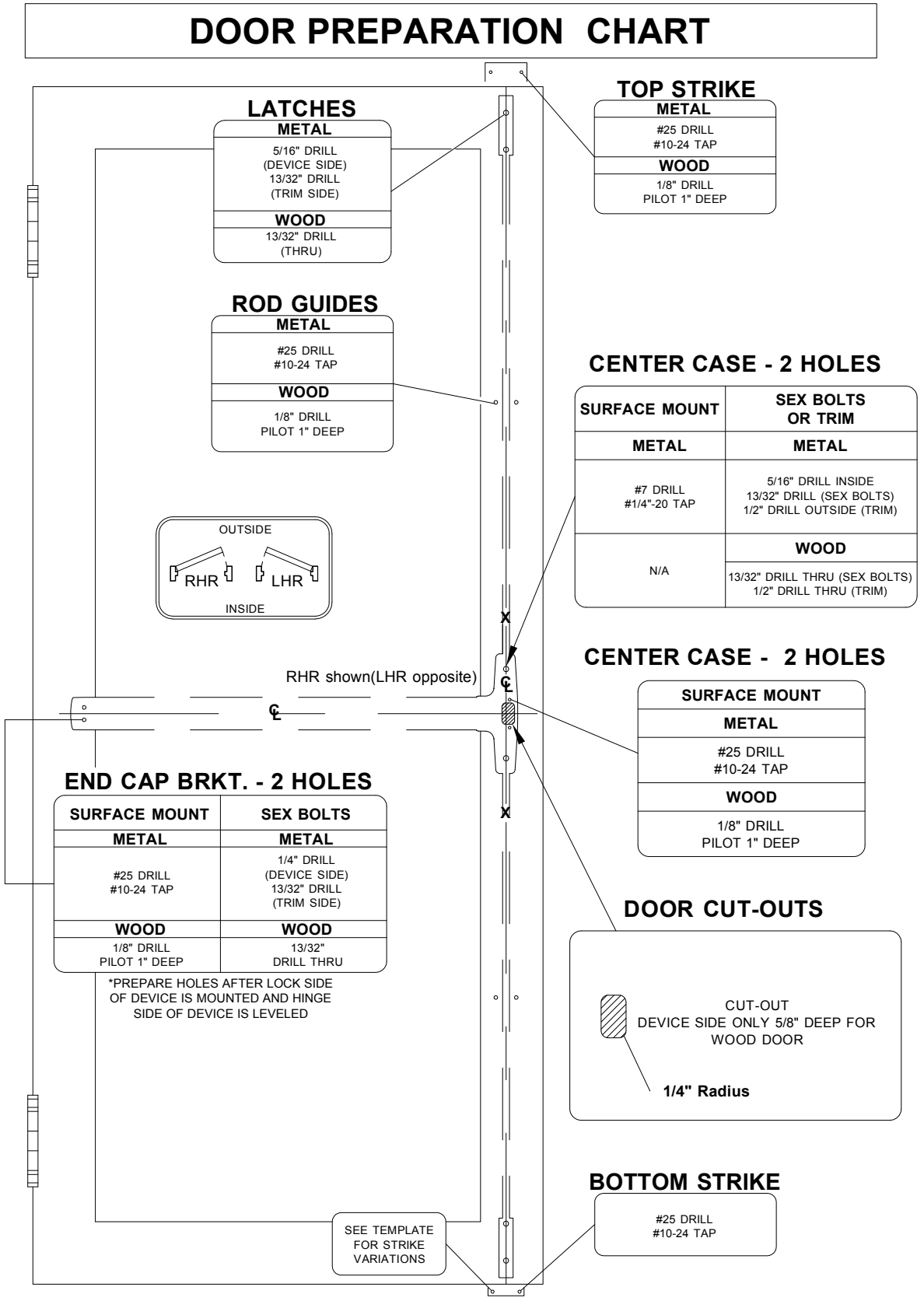


SPECIAL TOOLS REQUIRED	
Tap	#8-32,#10-24,1/4-20
Drill Bits	#25,1/8",1/4", 5/16",13/32",#7
Spade Drill	5/8" (For Wood Door)

Q2200/QF2200 Installation Instructions (Page 3)

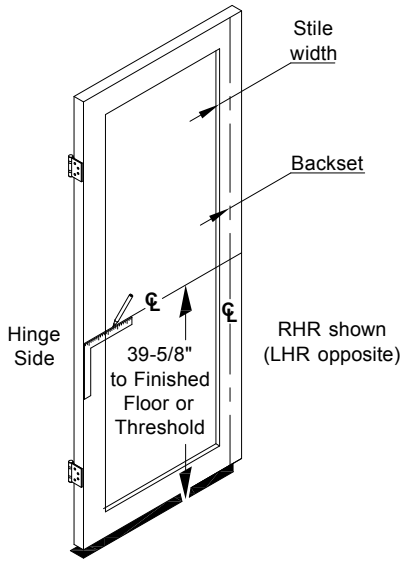
SCREW CHART			
APPLICATION	**METAL**	**SEX BOLTS**	**WOOD**
 Center Case Screws	 Ⓕ No.1/4-20 x 1-1/8" 2 x PCS	 Ⓕ No.1/4-20 x 1-1/8" 2 x PCS  Ⓗ No.1/4-20 x 1-3/32" 2 x PCS	Trim mount or sex bolts
 Center Case Screws	 Ⓔ No.10-24 x 11/16" 2 PCS		 Ⓐ No.10-12 x 1-11/32" 2 PCS
 End Cap Bracket Screws	 Ⓒ No.10-24 x 1-11/32" 2 PCS	 Ⓒ No.10-24 x 1-11/32" 2 PCS  Ⓖ No.10-24 x 1-3/32" 2 PCS	 Ⓐ No.10-12 x 1-11/32" 2 PCS
 Rod Guide Screws	 Ⓓ No.10-24 x 25/32" 2 x PCS		 Ⓐ No.10-12 x 1-11/32" 2 x PCS
 Q224 / Q225 / Q203 Strike Screws	 Ⓔ No.10-24 x 11/16" 2 x PCS		
 Top / Bottom Latch Screws		 Ⓕ No.1/4-20 x 1-1/8" 1 x PCS  Ⓗ No.1/4-20 x 1-3/32" 2 x PCS	
 Q106 / Q215 Strike Screws	 Ⓔ No.10-24 x 11/16" 3 x PCS		 Ⓑ No.10-12 x 1-11/32" 3 x PCS
 Q108 Strike Screws	 Ⓔ No.10-24 x 11/16" 7 PCS		 Ⓑ No.10-12 x 1-11/32" 7 PCS
 Q227 Strike Screws	 Ⓝ No.1/4-20 x 5/8" 1 PCS	 Ⓞ No.1/4-20 x 5/8" 1 PCS	
 Side Screws & Connecting Screws	 Ⓕ No.1/4-20 x 1-1/8" 1 PCS	 Ⓛ No.8-32 x 7/32" 4 PCS	
 End Cap Screws	 Ⓙ No.8-32 x 5/8" 2 PCS		
 Cover Screws	 Ⓘ No.8-32 x 5/32" 2 PCS		

Q2200/QF2200 Installation Instructions (Page 4)



Q2200/QF2200 Installation Instructions (Page 5)

1 DRAW HORIZONTAL CENTERLINE (℄).



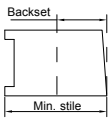
Mark horizontal centerline on inside face of door 39-5/8" from finished floor as shown. (Continue horizontal center line to outside face of door if trim is used)

Backset	Min. stile	Application
1-3/16"	2" - 2-3/4"	Two vertical rod devices
1-1/2"	2-3/4" - 3-3/4"	
1-7/8"	3-3/4" - 5"	
2-1/2"	5" to flush	
1-11/32"	2-1/8" - 2-3/4"	Single door
1-1/2"	2-3/4" - 3-3/4"	
1-7/8"	3-3/4" - 5"	
2-1/2"	5" to flush	
2-7/32"	3" min	Vertical rod and rim devices

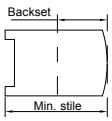
Note: For Q106/Q108F top strike use minumum backsets shown below.

Double door : 1-3/4" min. backset
2-11/16" min. stile
Single door : 1-7/8" min. backset
2-7/8" min. stile

Beveled edge door

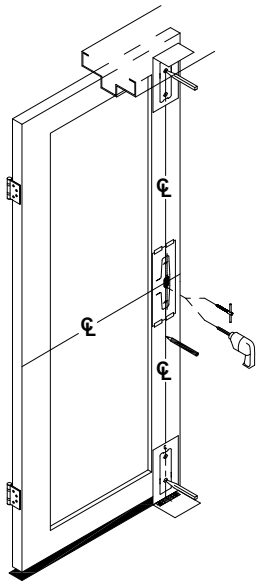


Rounded edge door



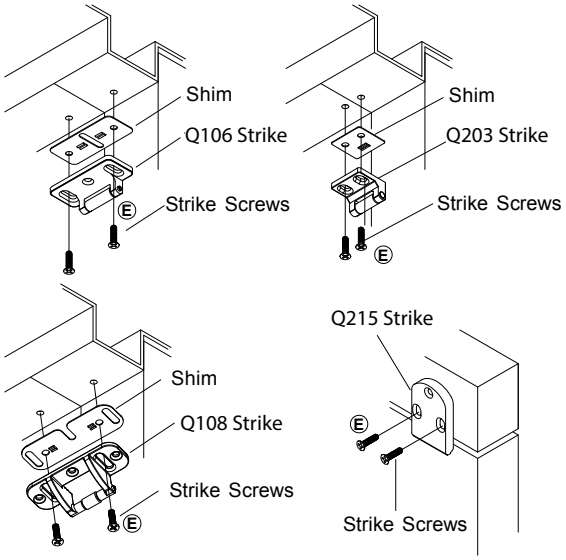
Backset measured from outer edge of door as show. Minimum stile is less glass stop (rectangular glass stop is recommended for stiles less then 2-1/8")

2 ALIGN TOP & BOTTOM TEMPLATES ALONG CENTERLINE, THEN MARK AND PREPARE DOOR.



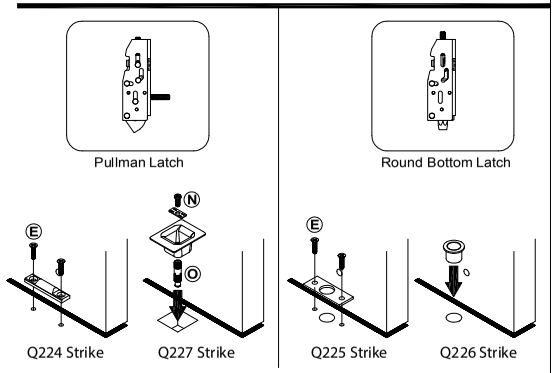
1. Fold strike template and place on door stop and inside face of door, so the vertical centerline on template lines up with the vertical centerline on door stop and door.
2. Tape template on door stop and the door face.
3. Mark centers and drill/tap holes as indicated on the template. See "DOOR PREPARATION CHART" on page 4 for drill/tap, and cut-out information.
4. See trim instructions for pull side door preparation.

3 INSTALL TOP STRIKE AND SHIM.



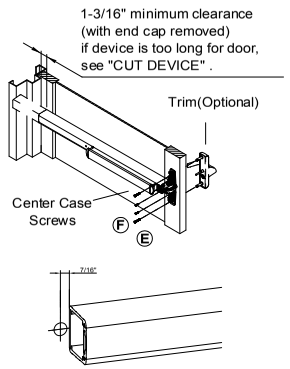
Install a screw through each slot.

4 INSTALL BOTTOM STRIKE.



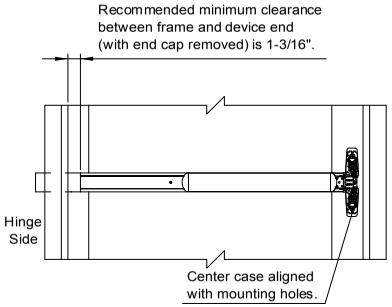
1. Mark floor for fasteners, prepare floor according to the type of strike and fastener furnished. Provide clearance in floor for bolt.
2. For threshold application:
   Provide hole in threshold according to type of strike and fasteners furnished.

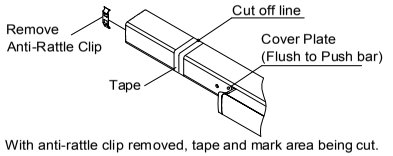
5 MEASURE TO DETERMINE LENGTH TO CUT DEVICE



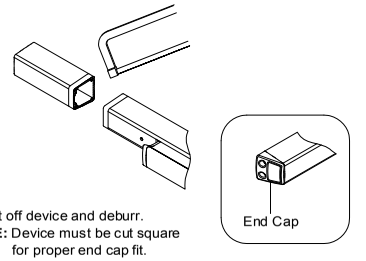
If 5/8" diameter wire access hole has deen predrilled in door , cut device 7/16" from center of hole

6 CUT DEVICE (IF REQUIRED)



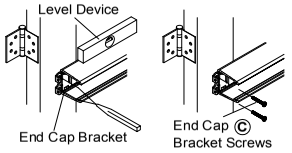


1. With anti-rattle clip removed, tape and mark area being cut.

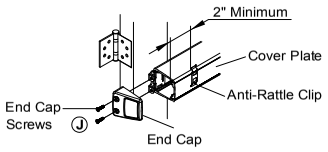


2. Cut off device and deburr.
NOTE: Device must be cut square for proper end cap fit.

7 INSTALL MOUNTING BRACKET AND END CAP.



1. Remove cover plate, insert end cap bracket into push bar assembly against mechanism case. Level device, mark and drill two(2) holes for Bracket Screws. Fasten end cap bracket screws to door.



2. Insert cover plate, slide anti-rattle clip in position (2" minimum from end), and attach end cap with two(2) end cap screws.

8 INSTALL TOP LATCH AND ROD.

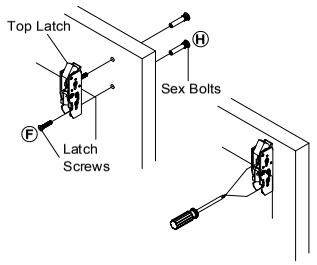


Figure 1

1. Install top latch with two(2) screws (sex bolts). Adjust strike so that device latches without binding. **See Figure 1**
2. Determine rod lengths as shown in **Figure 2**. If necessary; cut end of rod and tap. See "CUT TOP ROD / EXTEND TOP ROD" on page10.

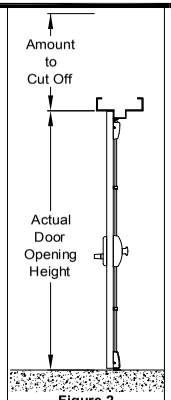


Figure 2

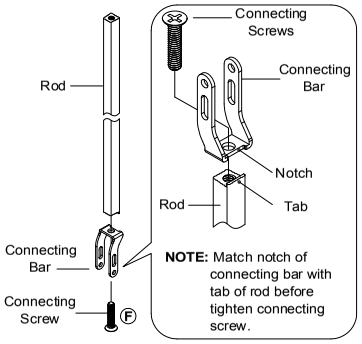
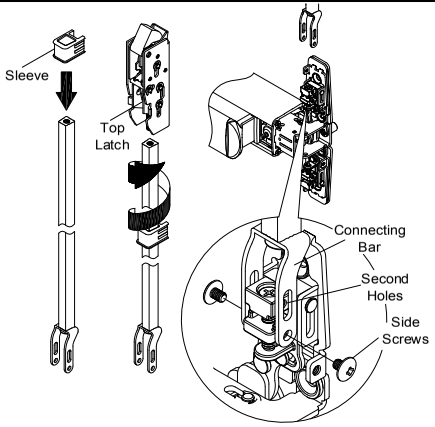


Figure 3

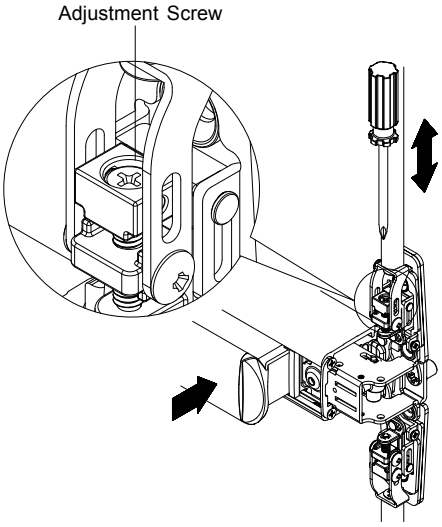
3. Put connecting screw through round hole of connecting bar and thread into top rod and tighten. **See Figure 3**



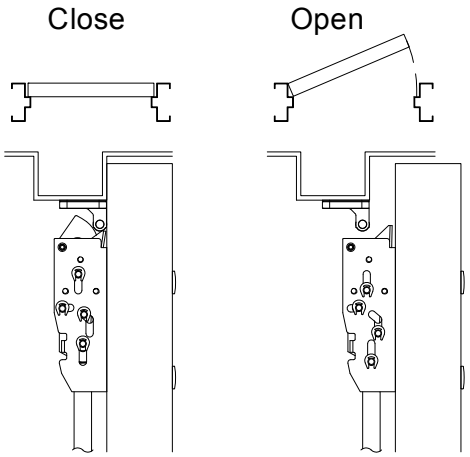
4. Assemble sleeve with rod. Thread top rod onto top latch until first hole in connecting bar align with first hole in retractor and fasten side screws.

Q2200/QF2200 Installation Instructions (Page 7)

9 CHECK TOP LATCH FOR HOLDBACK AND DEADLOCK.

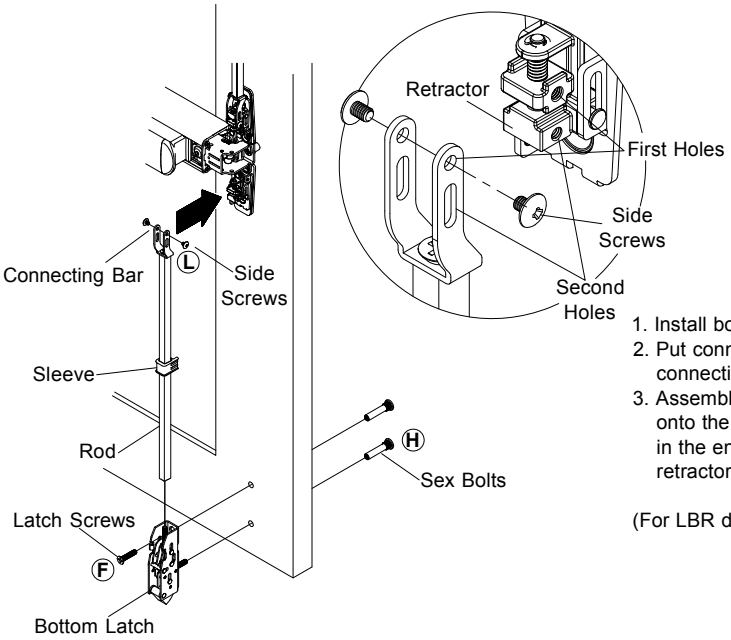


1. Pushing on push bar will retract the latchbolt and open the door. Latchbolt will stay retracted and device is in HOLDBACK. If NO HOLDBACK adjust the screw in top of retractor by screw driver.



2. Fully extended latchbolt should be in deadlock. DEADLOCKED latchbolt cannot be pushed down into the latch housing. If NO DEADLOCK, loose strike screws and adjust strike position.

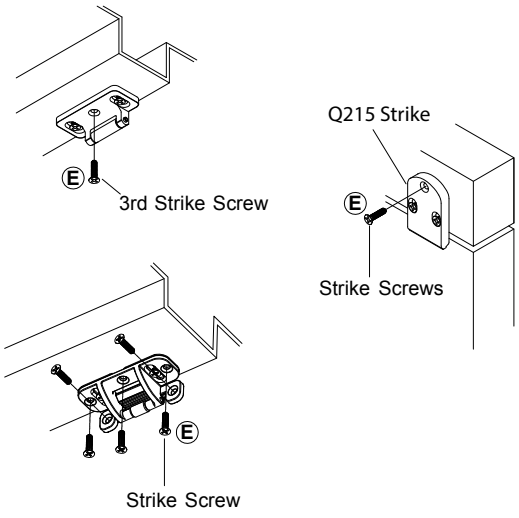
10 INSTALL BOTTOM LATCH AND ROD.



1. Install bottom latch with two(2) screws(Sex bolts).
2. Put connecting screw through round hole of connecting bar and thread into bottom rod and tighten.
3. Assemble sleeve with rod, thread the bottom rod onto the stud in the bottom latch until the first holes in the end of connecting bar align with first holes in retractor and fasten side screws.

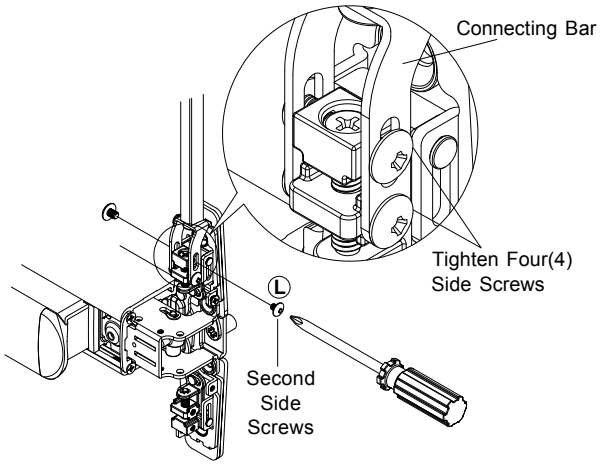
(For LBR devices omit preparation for bottom Latch and rod.)

Q2200/QF2200 Installation Instructions (Page 8)



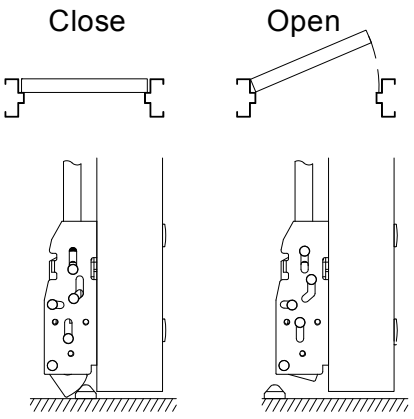
4. Apply third screw in hole of strike once adjustment is complete.

11 SECURE TWO(2) SIDE SCREWS.



Apply second side screws through second holes in connecting bar with second holes in retractor and tighten two side screws.

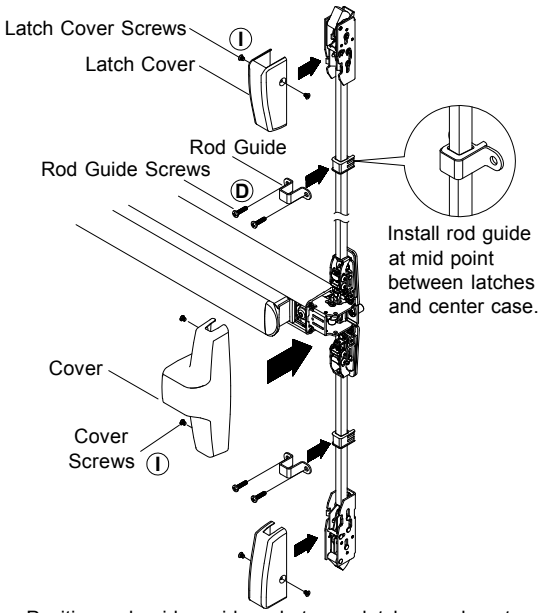
12 ADJUST BOTTOM ROD WITH DOOR OPEN (TOP LATCH RETRACTED).



1. Place device in holdback by pushing on push bar. Bottom latch bolt clears bottom strike, adjust retractor by screw driver or readjust rod if needed.
2. Secure two side screws when adjustment is completed.

Open and close door a few times and check for deadlocking when door is closed.

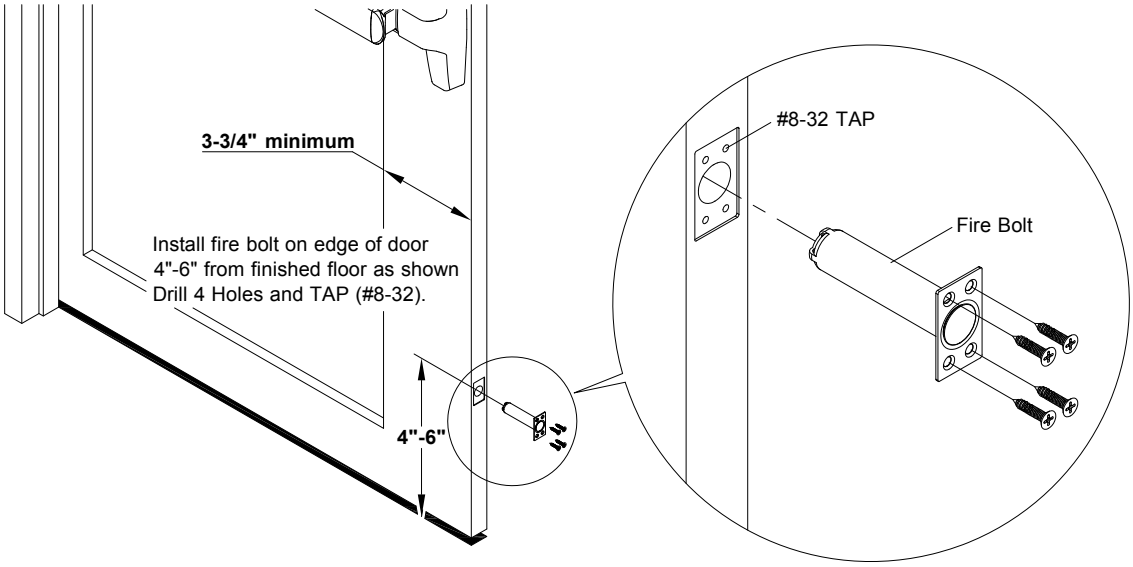
13 INSTALL ROD GUIDES AND COVERS WITH SCREWS.



Position rod guides midway between latches and center case, centered on rods. Mark, drill/tap and fasten rod guides with two(2) screws.

Q2200/QF2200 Installation Instructions (Page 9)

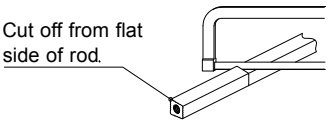
INSTALL FIRE BOLT



NOTE: Fire rated device with less bottom rod (LBR) applications must use FIRE BOLT.

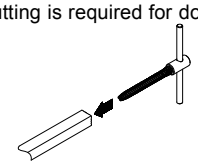
CUT TOP ROD / EXTEND TOP ROD

CUT TOP ROD



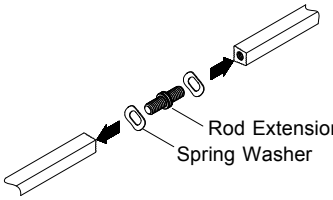
Step 1: Make sure the flat side of rod, and measure amount to cut off rod.

NOTE: Rod cutting is required for doors shorter than 7'.

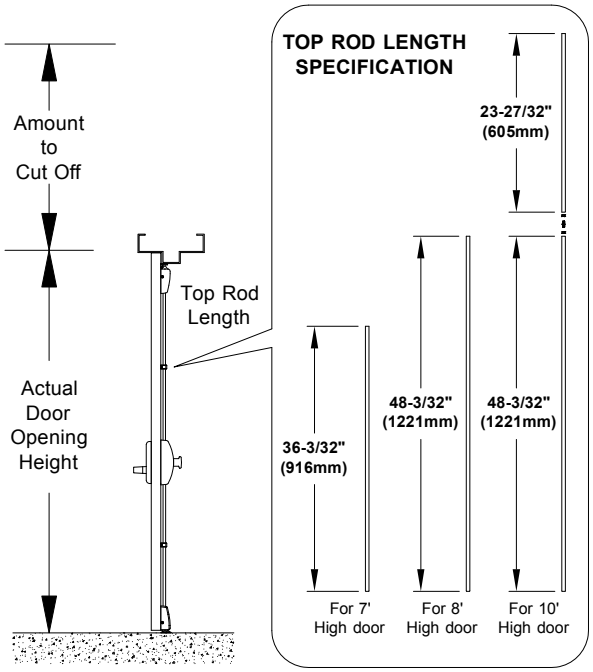


Step 2: Tap #1/4-20 ; 1" deep.

EXTEND TOP ROD



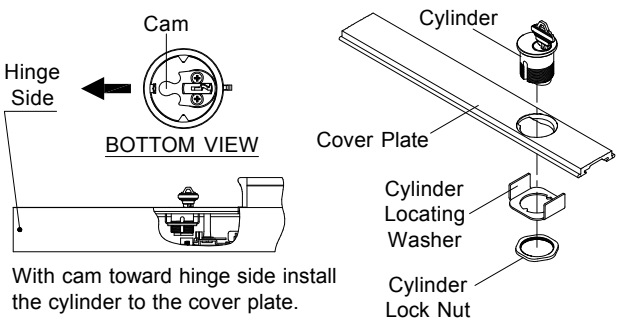
Install rod extension & spring washer to connect two(2) rods tightly.



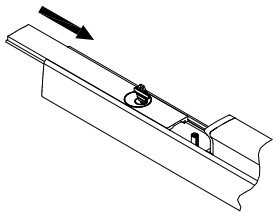
Q2200/QF2200 Installation Instructions (Page 10)

OPTIONAL DOGGING

CYLINDER DOGGING

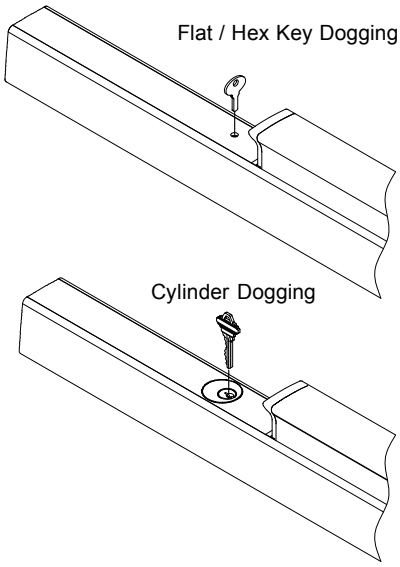


With cam toward hinge side install the cylinder to the cover plate.



Slide cover plate in position in the mechanism case.

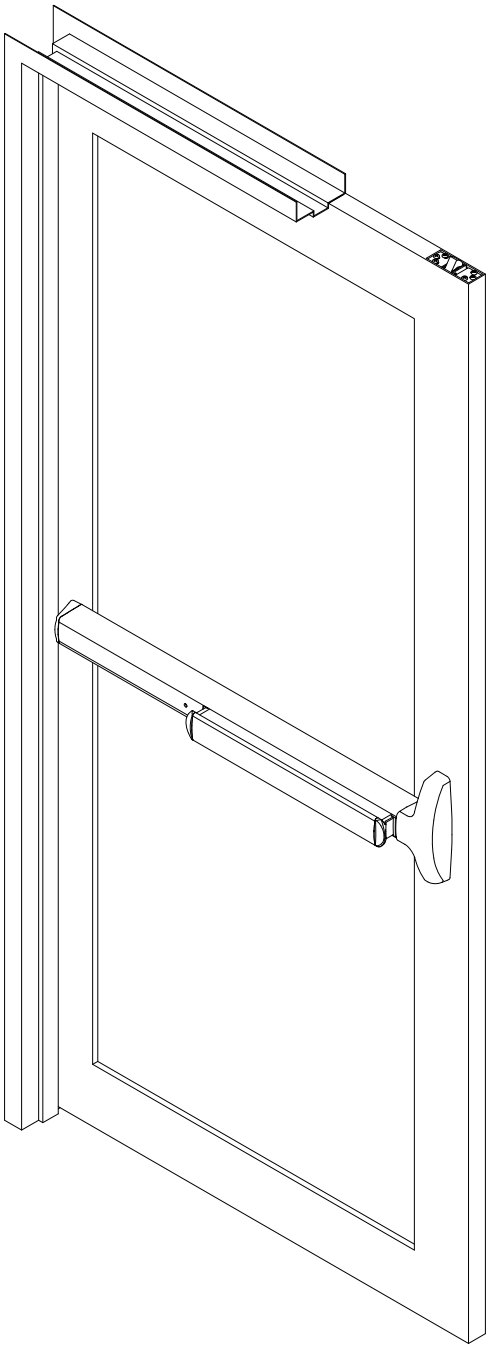
DOGGING CHECK



Depress push bar and turn flat / hex wrench or key one full turn for dogging check.

Q2300/QF2300 SERIES
CONCEALED VERTICAL ROD DEVICE

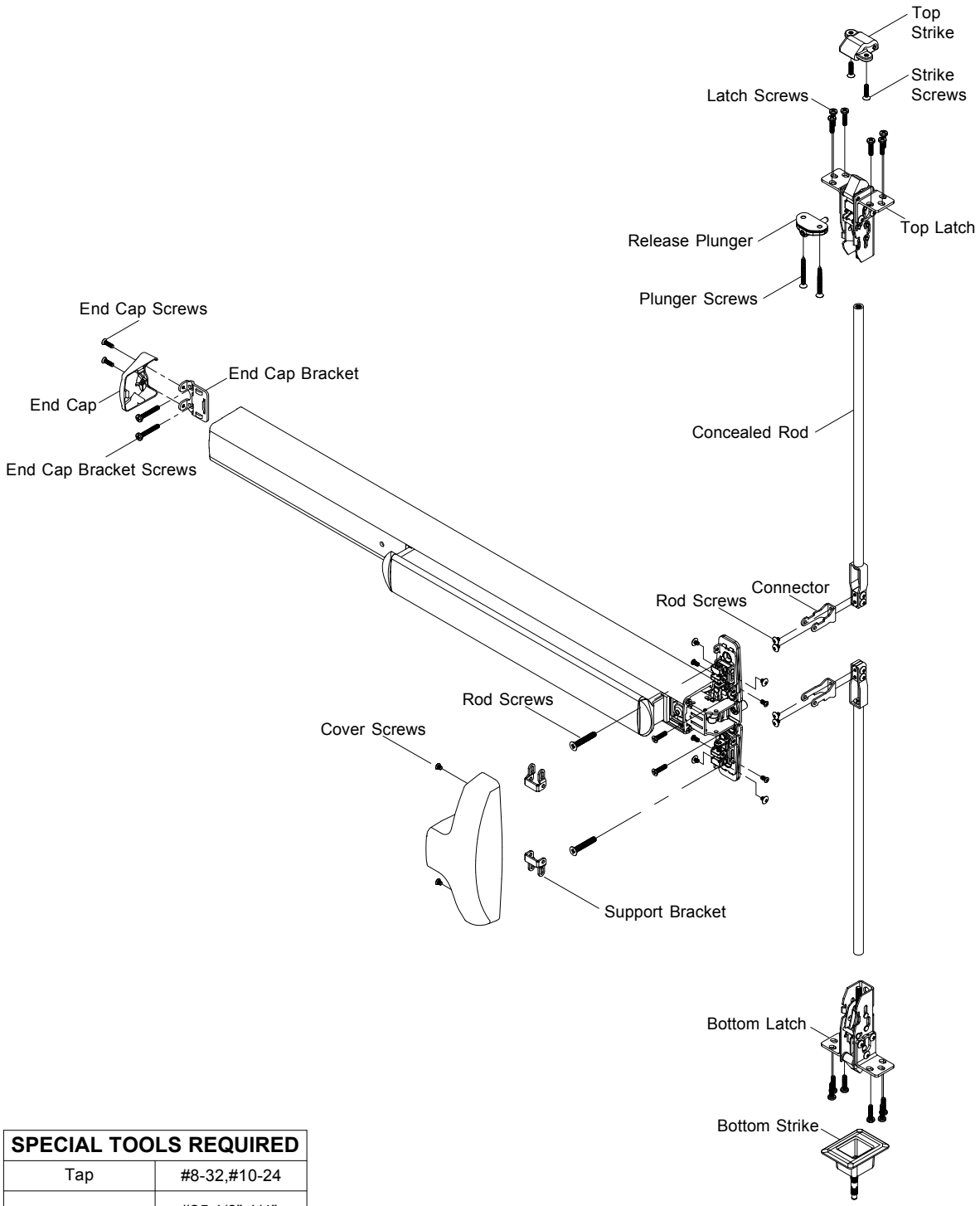
INSTALLATION INSTRUCTIONS



WD-OD002(586)

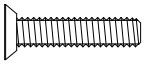
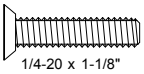
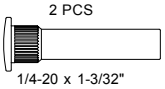
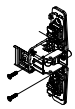
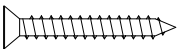
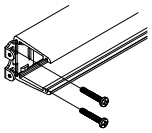
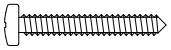
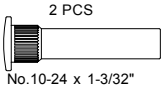
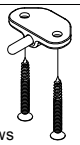
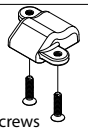
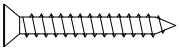
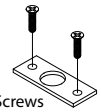
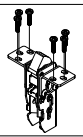
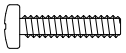
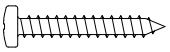
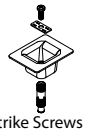
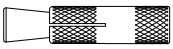
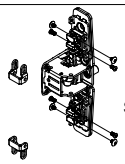
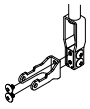
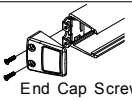
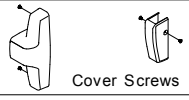
Q2300/QF2300 Installation Instructions (Page 2)

The Function Available - RIM/SVR/CVR/3PT



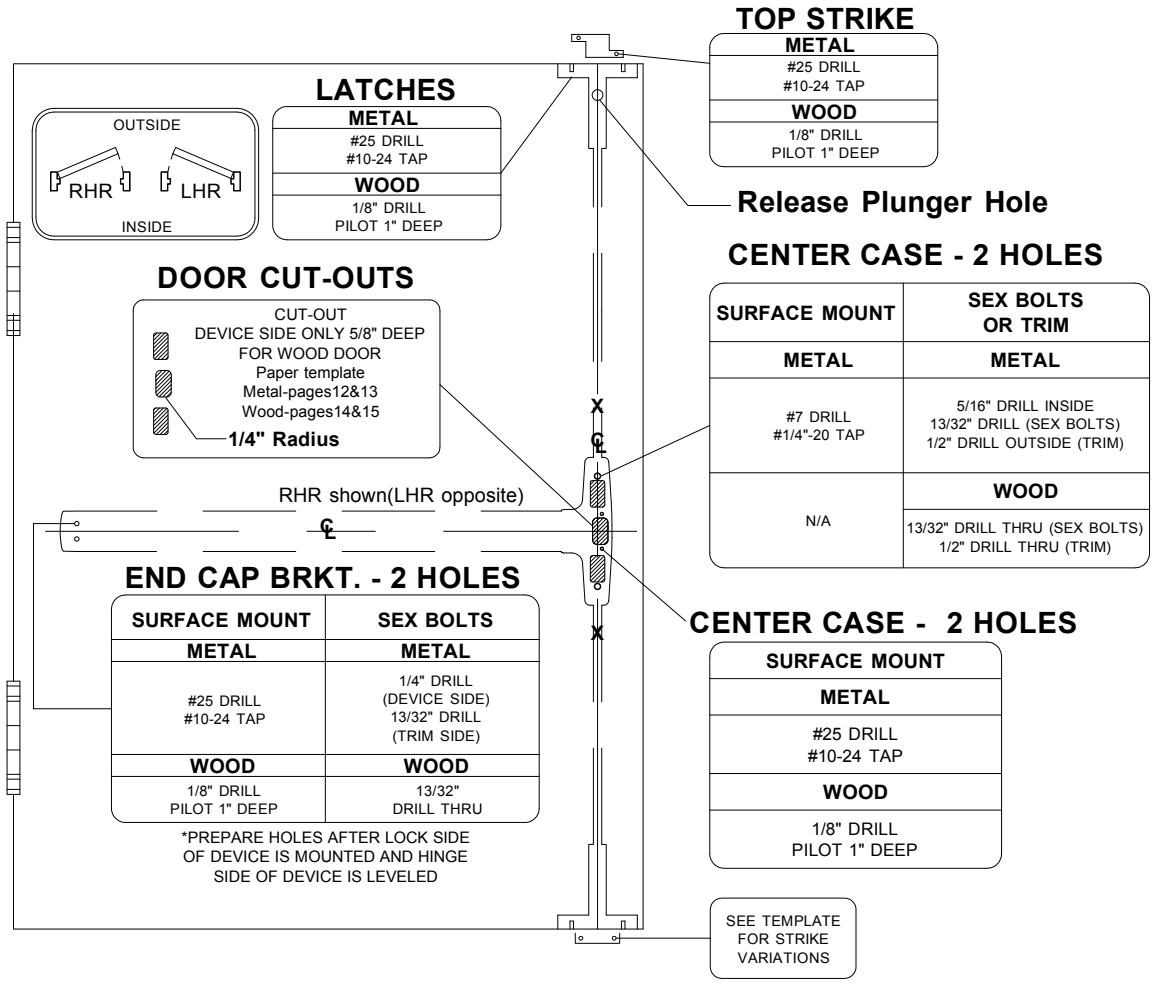
SPECIAL TOOLS REQUIRED	
Tap	#8-32,#10-24
Drill Bits	#25,1/8",1/4", 5/16",13/32",#7
Spade Drill	5/8" (For Wood Door)

Q2300/QF2300 Installation Instructions (Page 3)

SCREW CHART			
APPLICATION	**METAL**	**SEX BOLTS**	**WOOD**
 Center Case Screws	Ⓕ  1/4-20 x 1-1/8" 2 PCS	Ⓕ  1/4-20 x 1-1/8" 2 PCS Ⓗ  1/4-20 x 1-3/32" 2 PCS	Trim mount or sex bolts
 Center Case Screws	Ⓔ  No.10-24 x 11/16" 2 PCS		Ⓑ  No.10-12 x 1-11/32" 2 PCS
 End Cap Bracket Screws	Ⓒ  No.10-24 x 1-11/32" 2 PCS	Ⓒ  No.10-24 x 1-11/32" 2 PCS Ⓖ  No.10-24 x 1-3/32" 2 PCS	Ⓐ  No.10-12 x 1-11/32" 2 PCS
 Plunger Screws		Ⓟ  No.10-24 x 1-5/8" 2 PCS	
 Q216 Strike Screws	Ⓔ  No.10-24 x 11/16" 2 PCS		Ⓑ  No.10-12 x 1-11/32" 2 PCS
 Q225 Strike Screws	Ⓔ  No.10-24 x 11/16" 2 PCS		
Top / Bottom Latch Screws 	Ⓓ  No.10-24 x 25/32" 6 PCS		Ⓐ  No.10-12 x 1-11/32" 6 PCS
 Q227 Strike Screws	Ⓝ  No.1/4-20 x 5/8" 1 PCS	Ⓞ  No.1/4-20 x 5/8" 1 PCS	
 Side Screws Top / Bottom Rod Screws 	Ⓛ  No.8-32 x 7/32" 4 PCS	Ⓜ  No.8-32 x 5/16" 2 PCS	
 End Cap Screws	Ⓙ  No.8-32 x 5/8" 2 PCS		
 Cover Screws	Ⓘ  No.8-32 x 5/32" 2 PCS		

Q2300/QF2300 Installation Instructions (Page 4)

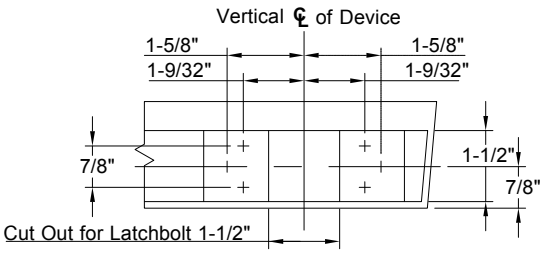
DOOR PREPARATION CHART



LATCH HOLE PREPARATION

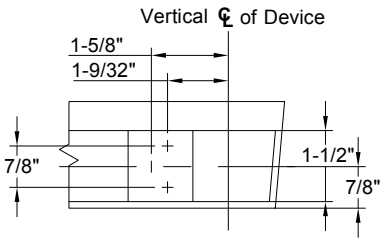
(Drill Top and Bottom of Door)

Fire device



INNER FACE OF DOOR

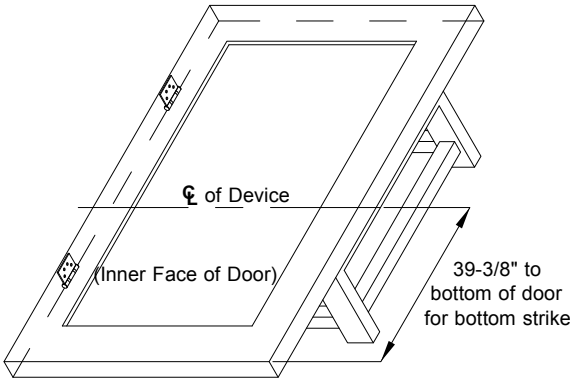
Panic device



INNER FACE OF DOOR

Q2300/QF2300 Installation Instructions (Page 5)

1 DRAW HORIZONTAL DEVICE CENTER LINE(℄).

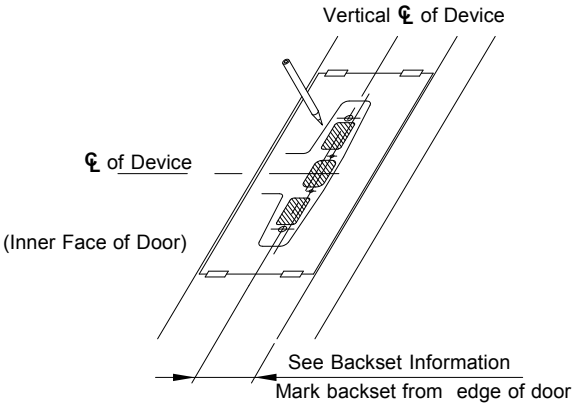


If threshold is present centerline of device must be at a distance of 39-5/8" from finished floor.
(bottom door gap must be 1/4")

RHR shown
(LHR opposite)

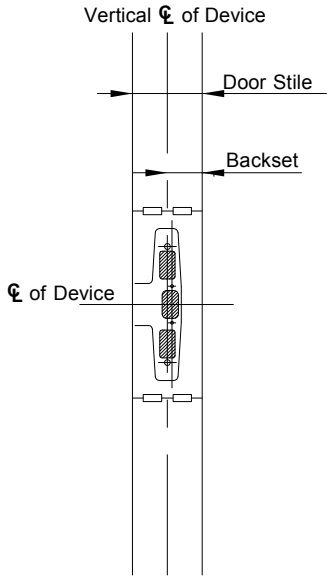
Lay door in place and draw horizontal device center line as shown.

2 DRAW VERTICAL ℄ & MARK BACKSET.



Position template as shown, then mark vertical center line for device center case.

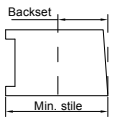
Backset Information



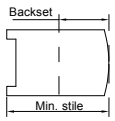
Backset Table

Door Type	Backset	Min. stile	Application
Wood Door	1-5/16"	2-1/8" - 2-3/4"	
Metal	1-1/2"	2-3/4" - 3-3/4"	Two vertical rod devices
	1-7/8"	3-3/4" - 5"	
	2-1/2"	5" to flush	
	1-1/2"	2-1/2" - 3-3/4"	Single door
	1-7/8"	3-3/4" - 5"	
	2-1/2"	5" to flush	
	2-3/4"	3-5/8" to flush	Fire applications

Beveled edge door

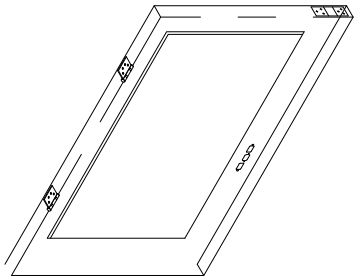


Rounded edge door



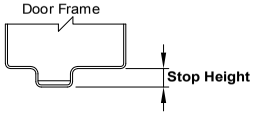
Backset must be measured from outer edge of door as shown. Recommended for rectangular glass stop stiles less than 2-1/8".

3 PREPARE DOOR FOR DEVICE AND TOP & BOTTOM LATCH.



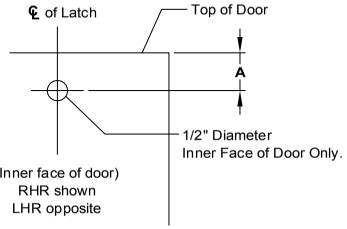
See "DOOR PREPARATION CHART" on page 4 for drill tap, and cut-out information.

4 DRILL TOP OF DOOR FOR RELEASE PLUNGER.

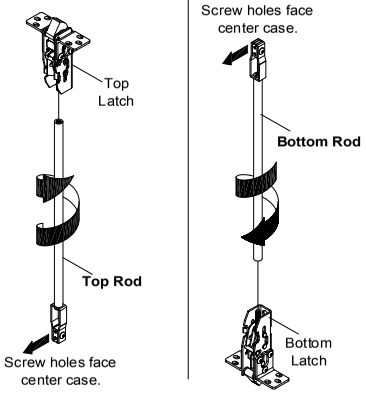


Stop Height	A
1/2"	11/16"
5/8"-Std.	13/16"
3/4"	15/16"

Measure "**Stop Height of Door Frame**" to decide "**Dimension of A**".

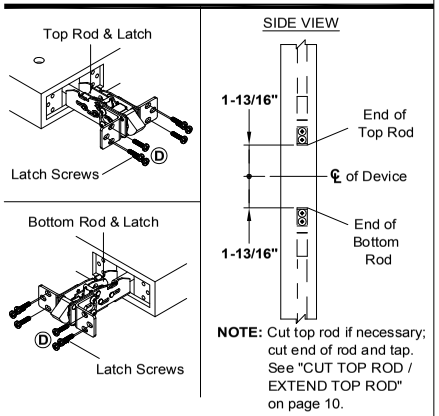


5 ATTACH RODS TO LATCHES.



Thread rod onto latch stud until screw holes in rod bars face center case.

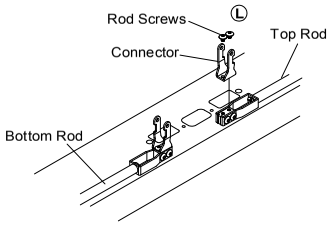
6 INSTALL RODS AND LATCH.



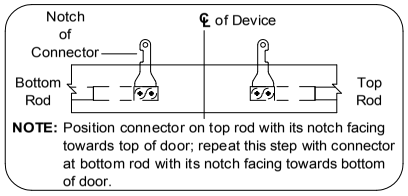
NOTE: Cut top rod if necessary; cut end of rod and tap. See "CUT TOP ROD / EXTEND TOP ROD" on page 10.

1. Install top latch and latch screws at top of door.
2. Install bottom latch and latch screws at bottom of door.
3. Fine tune the overall length by threading latch in or out of rod.

INSTALL CONNECTORS.

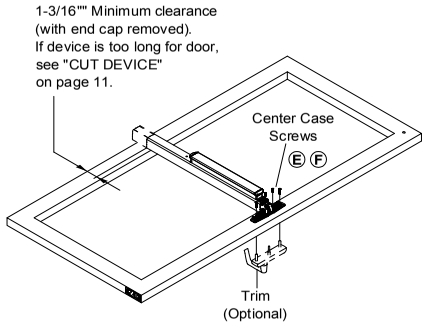


After adjusting the lengths, Install connectors on both concealed rods with rod screws.

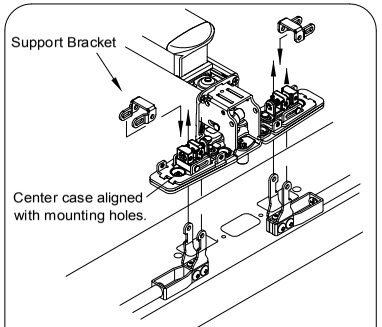


NOTE: Position connector on top rod with its notch facing towards top of door; repeat this step with connector at bottom rod with its notch facing towards bottom of door.

8 INSTALL TRIM (IF USING) AND SECURE DEVICE CENTER CASE TO DOOR.

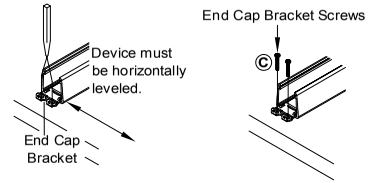


1. DEVICE WITH TRIM - See "Trim Instructions".
2. EXIT ONLY - Mount center case to the door with four(4) center case screws.

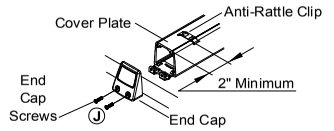


NOTE: 1. Install center case with both connectors go through clearance between retractors and center case.
2. Install support bracket on the top of connector and retractor.

9 INSTALL MOUNTING BRACKET AND END CAP.



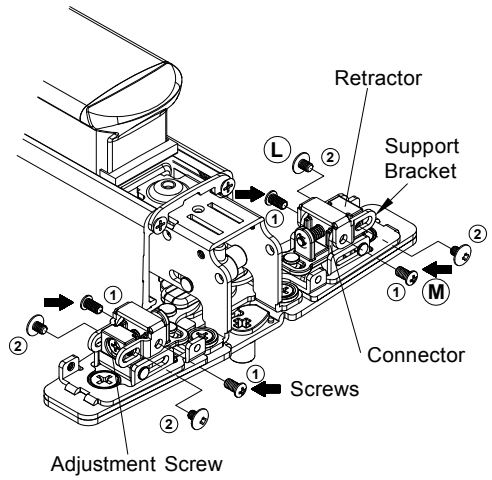
1. Remove cover plate, insert end cap bracket into push bar assembly against mechanism case. Level device, mark and drill two(2) holes for Bracket Screws. Fasten end cap bracket screws to door.



2. Insert cover plate, slide anti-rattle clip in position (2" minimum from end), and attach end cap with two(2) end cap screws.

Q2300/QF2300 Installation Instructions (Page 7)

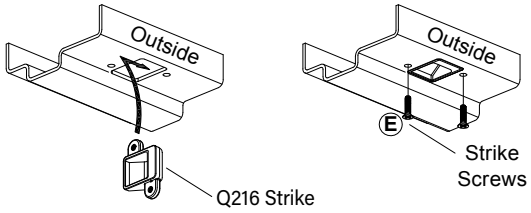
10 INSTALL SIDE SCREWS.



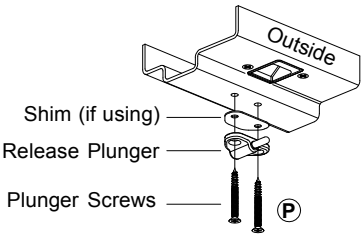
1.Deadbolt should be sticked out.
2.Turning side screws through support bracket, connector and retractor, then tighten the screw.
3.Steady screw 2. through support bracket on retractor.

Note:Steady screw 2., then adjust deadbolt before tighten it.

11 HANG DOOR AND INSTALL TOP STRIKE & RELEASE PLUNGER.

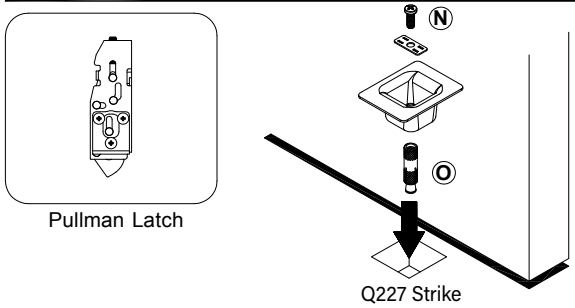


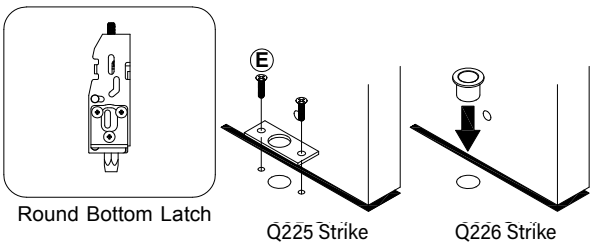
See "FRAME PREPARATION" on page 9 for cut-out and holes. After preparing, install top strike into door frame and mount two(2) strike screws.



See "FRAME PREPARATION" on page 9 for holes. After preparing, install release plunger with two(2) plunger screws.

12 INSTALL BOTTOM STRIKE.

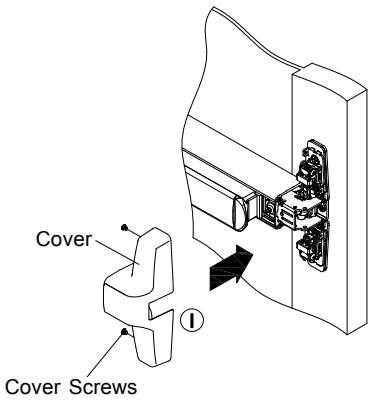




1. Mark floor for fasteners, prepare floor according to the type of strike and fastener furnished. Provide clearance in floor for bolt.
2. For threshold application:
   Provide hole in threshold according to type of strike and fasteners furnished.

13 ADJUST RODS AND INSTALL CASE COVER.

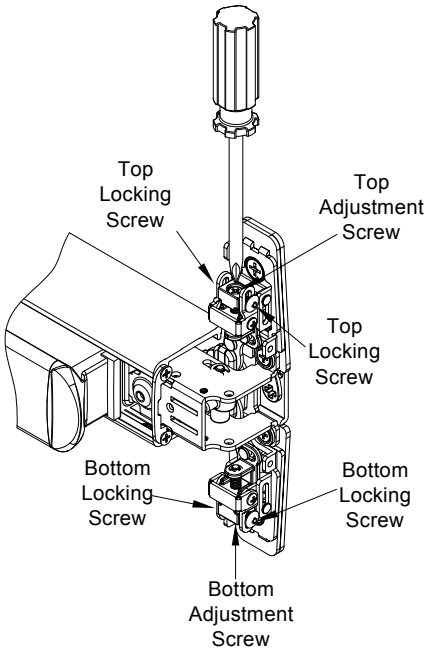
1.For Rod Adjustments SEE PAGE 9



2. Attach cover to center case with two(2) center case screws.

Q2300/QF2300 Installation Instructions (Page 8)

ADJUST LATCHES AND SECURE TOP & BOTTOM LOCKING SCREWS.



1. Depress push bar to retract the latch bolt and open the door.
2. Check top latch for HOLDBACK (Latchbolt stays retracted in latch case). **See Figure 1**
3. Loosen top locking screw.
4. Rotate top adjustment screw until top latchbolt is fully retracted.
5. Release top latchbolt. **See Figure 2**
6. Check top latchbolt for DEADLOCK (Latchbolt should not push in).
7. Rotate top adjustment screw until top latchbolt is in DEADLOCK.
8. Tighten top locking screw.
9. Depress push bar and retract latchbolt.
10. Make sure top latchbolt stays retracted as shown. **See Figure 1**
11. Loosen bottom locking screw.
12. With top latchblot still retracted, adjust bottom rod by rotating bottom adjustment screw, so latchbolt clears floor and bottom strike in HOLDBACK. **See Figure 3**
13. Release top latchbolt. **See Figure 2**
14. Check bottom latchbolt for DEADLOCK.
15. Tighten bottom locking screw.
16. Open and close door several times and check device operation and DEADLOCK & HOLDBACK function.

Figure 1

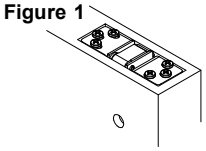


Figure 2

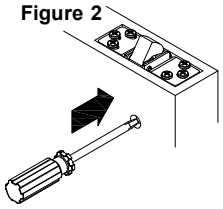
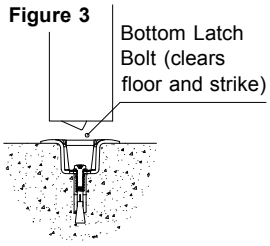
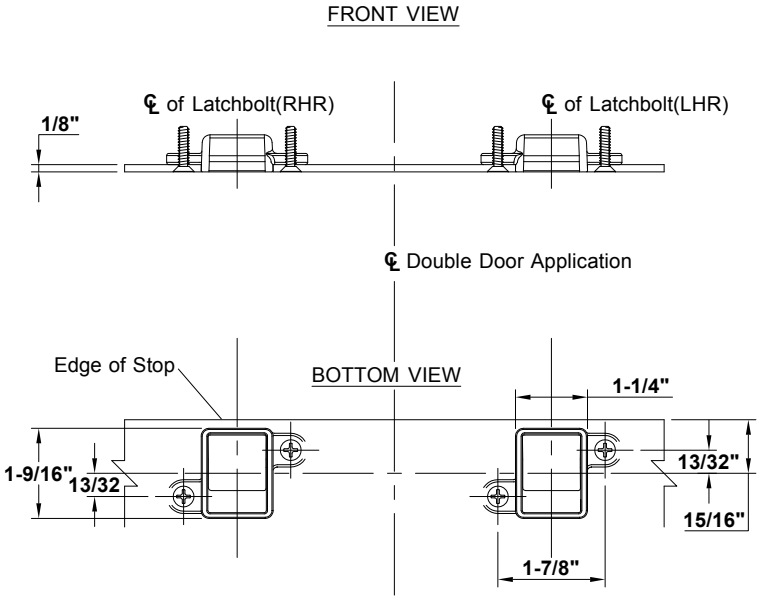


Figure 3

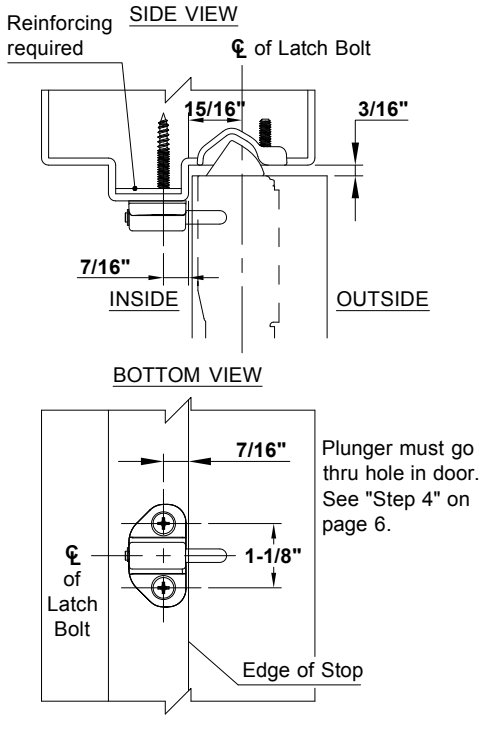


FRAME PREPARATION

Q216 STRIKES

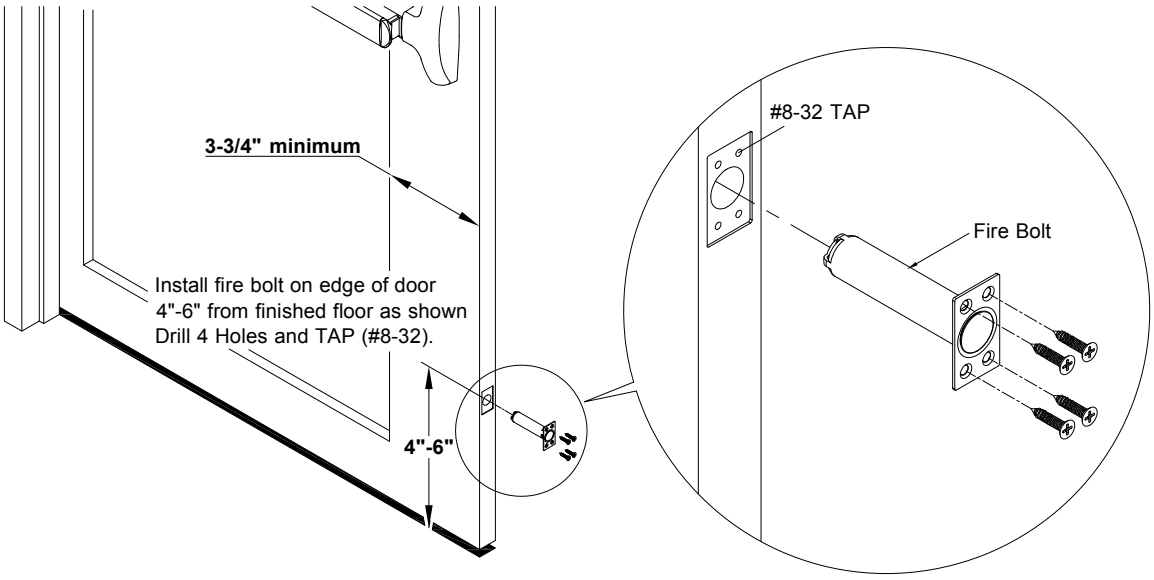


RELEASE PLUNGER



Plunger must go thru hole in door. See "Step 4" on page 6.

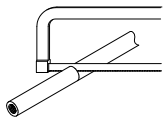
INSTALL FIRE BOLT



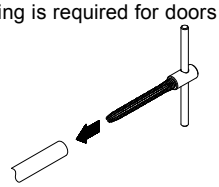
NOTE: Fire rated device with less bottom rod (LBR) applications must use FIRE BOLT.

CUT TOP ROD / EXTEND TOP ROD

CUT TOP ROD

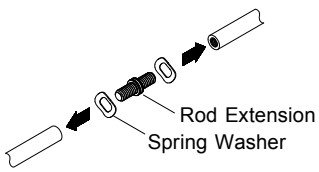


Step 1: Make sure the section cut is perendicular to the rod length, and measure amount to cut off rod.
NOTE: Rod cutting is required for doors shorter than 7'.

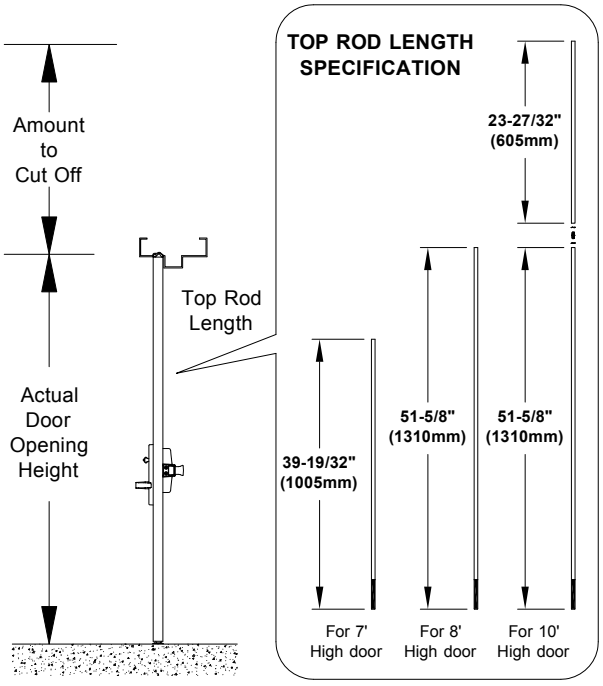


Step 2: Tap #1/4-20 ; 1" deep.

EXTEND TOP ROD



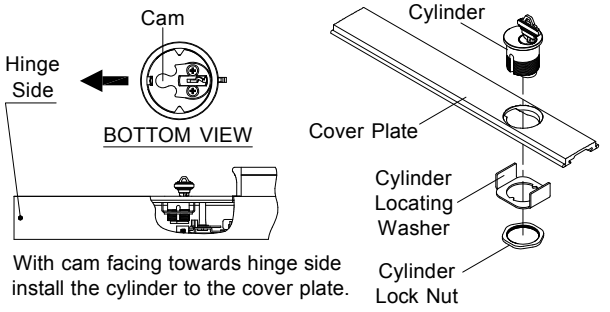
Install rod extension & spring washer to connect two(2) rods tightly.



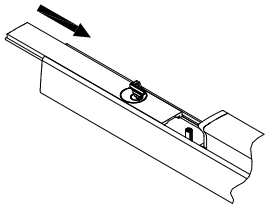
Q2300/QF2300 Installation Instructions (Page 10)

OPTIONAL DOGGING

CYLINDER DOGGING

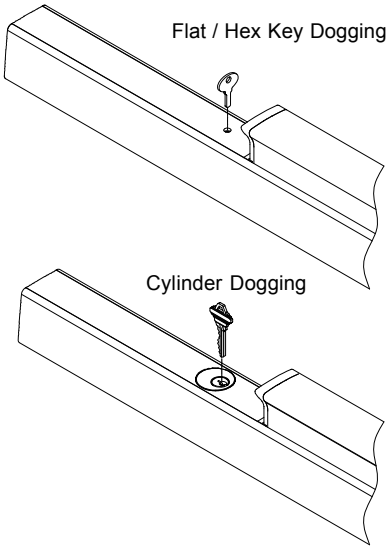


With cam facing towards hinge side install the cylinder to the cover plate.



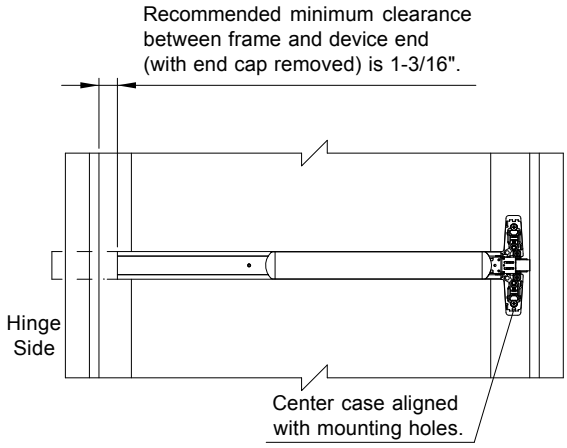
Slide cover plate in position in the mechanism case.

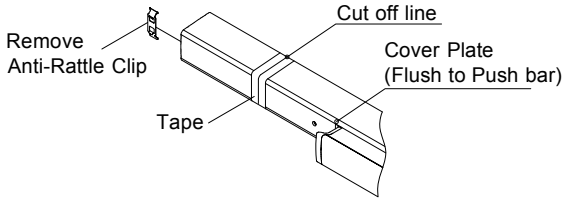
DOGGING CHECK



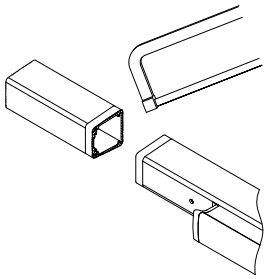
Depress push bar and turn flat / hex wrench or key one full turn for dogging check.

CUT DEVICE (IF REQUIRED)

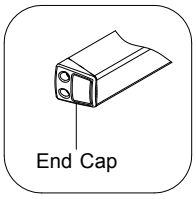




1. With anti-rattle clip removed, tape and mark area being cut.



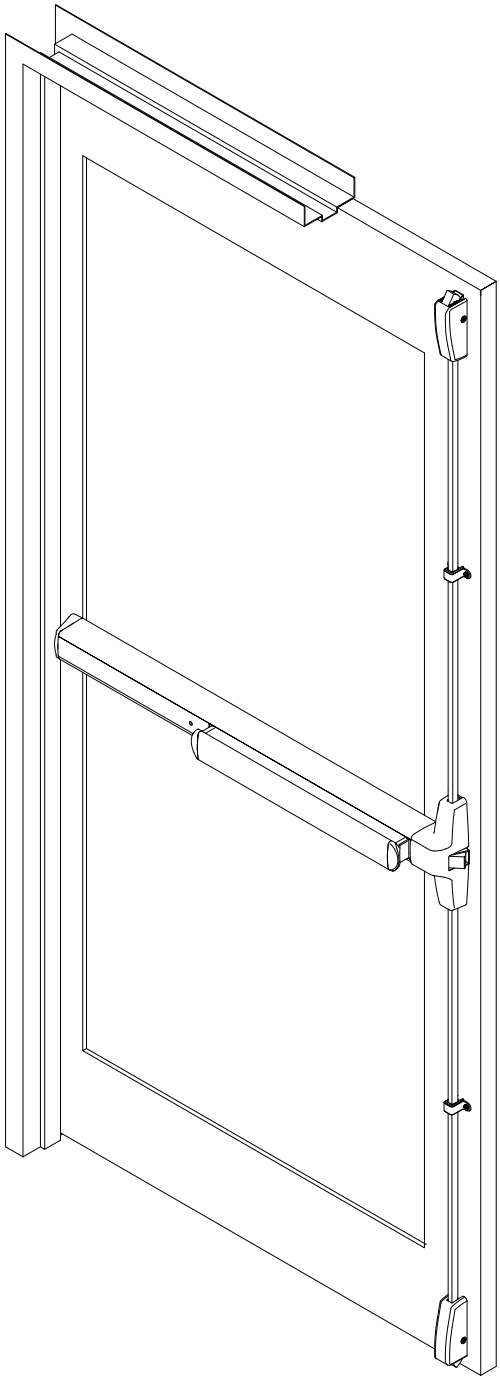
2. Cut off device and deburr.
NOTE: Device must be cut square for proper end cap fit.



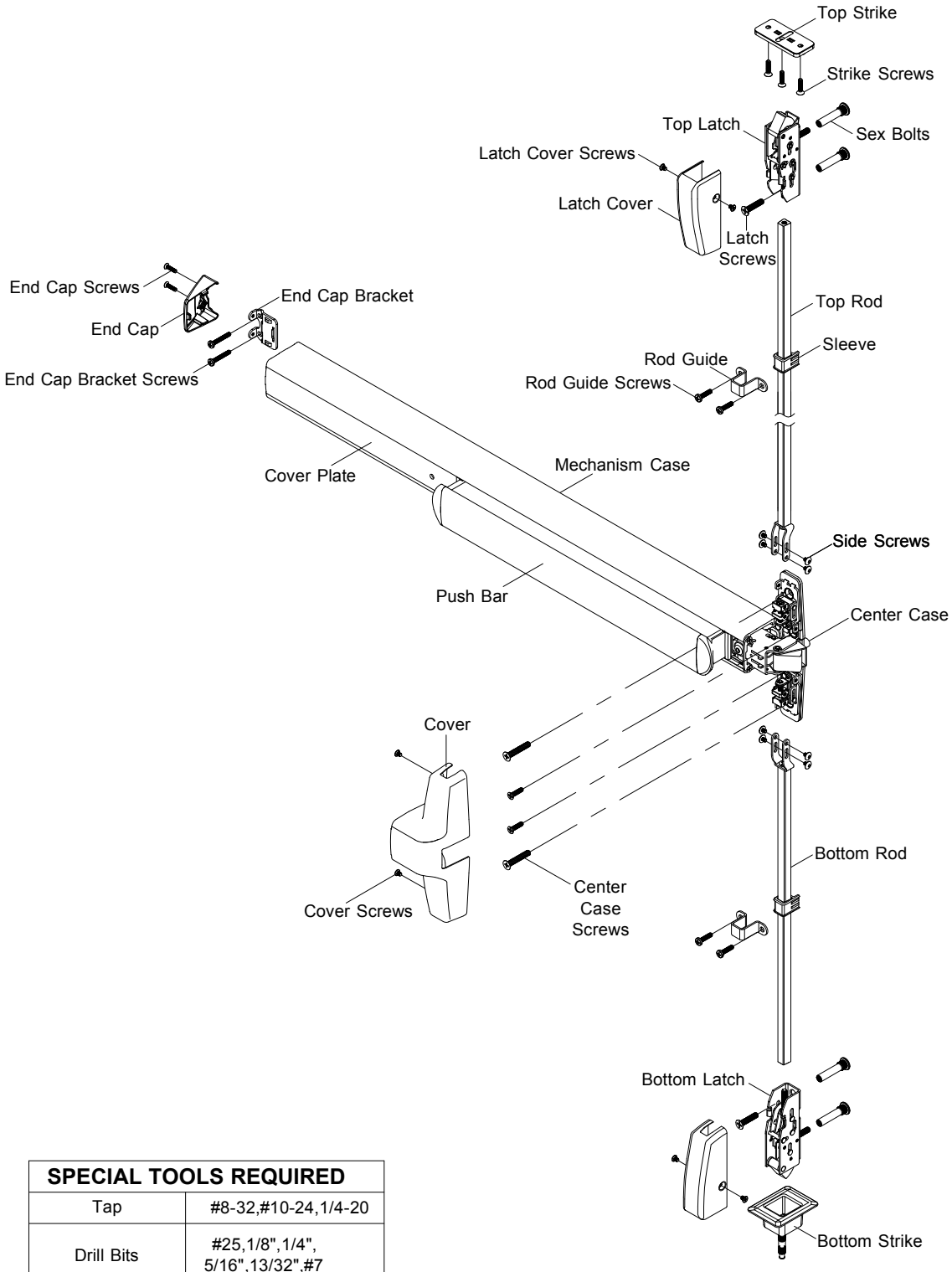
Q2500/QF2500 Installation Instructions (Page 1)

Q2500/QF2300 SERIES
THREE-POINT LATCHING DEVICE

INSTALLATION INSTRUCTIONS

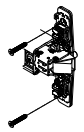
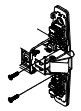
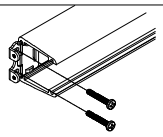
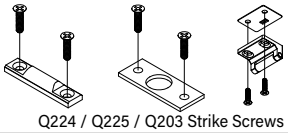
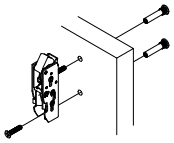
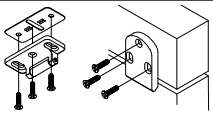
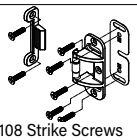
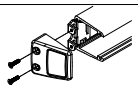
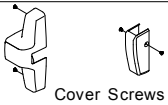


Q2500/QF2500 Installation Instructions (Page 2)

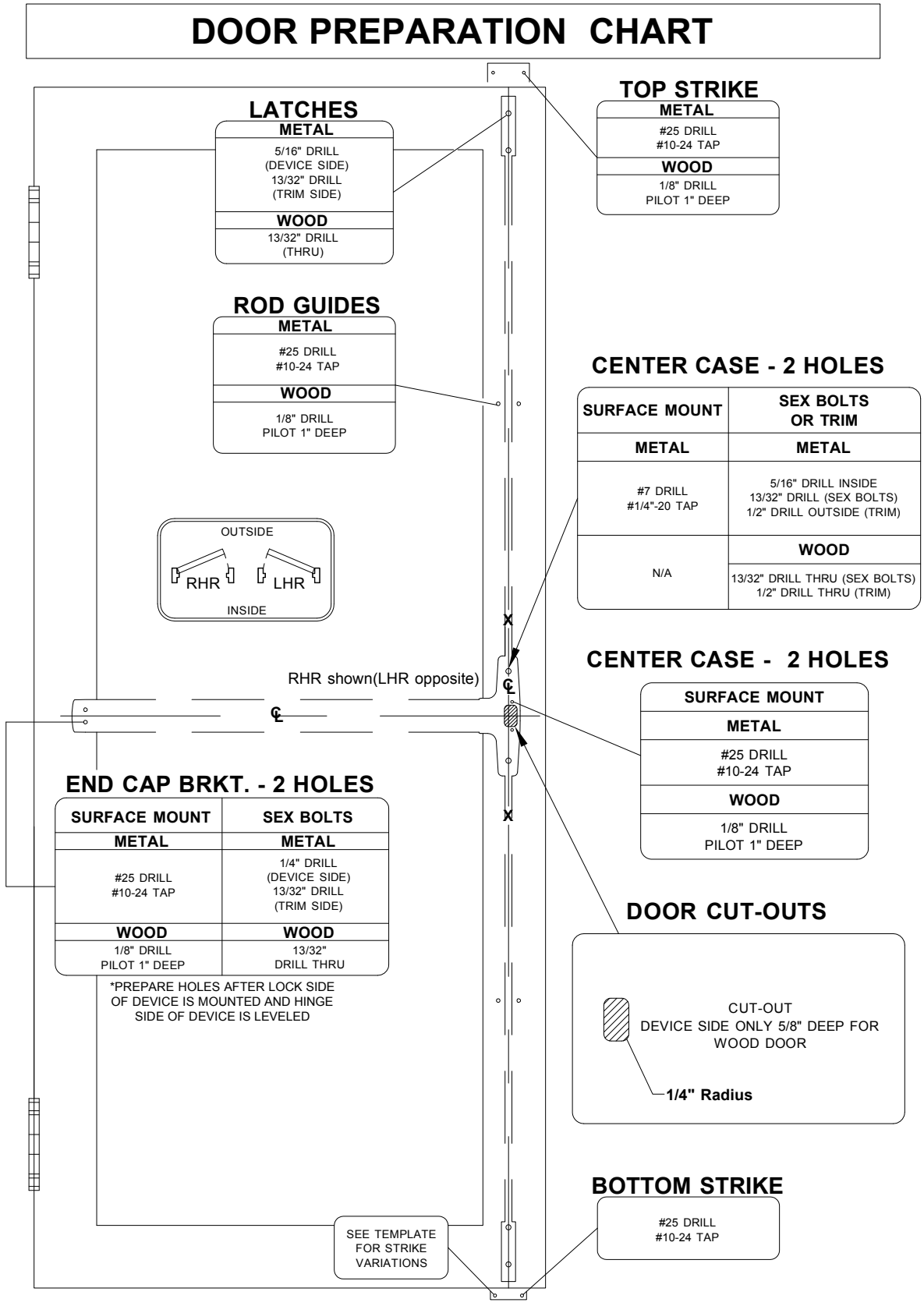


SPECIAL TOOLS REQUIRED	
Tap	#8-32,#10-24,1/4-20
Drill Bits	#25,1/8",1/4", 5/16",13/32",#7
Spade Drill	5/8" (For Wood Door)

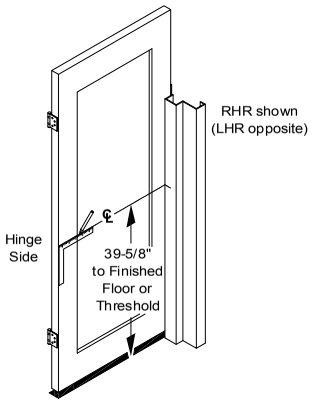
Q2500/QF2500 Installation Instructions (Page 3)

SCREW CHART			
APPLICATION	**METAL**	**SEX BOLTS**	**WOOD**
 Center Case Screws	Ⓕ 1/4-20 x 1-1/8" 2 PCS	Ⓕ 1/4-20 x 1-1/8" 2 PCS Ⓗ 1/4-20 x 1-3/32" 2 PCS	Trim mount or sex bolts
 Center Case Screws	Ⓔ No.10-24 x 11/16" 2 PCS		Ⓐ No.10-12 x 1-11/32" 2 PCS
 End Cap Bracket Screws	Ⓒ No.10-24 x 1-11/32" 2 PCS	Ⓒ No.10-24 x 1-11/32" 2 PCS Ⓖ No.10-24 x 1-3/32" 2 PCS	Ⓐ No.10-12 x 1-11/32" 2 PCS
 Rod Guide Screws	Ⓓ No.10-24 x 25/32" 2 x PCS		Ⓐ No.10-12 x 1-11/32" 2 x PCS
 Q224 / Q225 / Q203 Strike Screws	Ⓔ No.10-24 x 11/16" 2 x PCS		
 Top / Bottom Latch Screws		Ⓕ No.1/4-20 x 1-1/6" 1 x PCS Ⓗ No.1/4-20 x 1-3/32" 2 x PCS	
 Q106 / Q215 Strike Screws	Ⓔ No.10-24 x 11/16" 3 x PCS		Ⓑ No.10-12 x 1-11/32" 3 x PCS
 Q108 Strike Screws	Ⓔ No.10-24 x 11/16" 7 PCS		Ⓑ No.10-12 x 1-11/32" 7 PCS
 Q227 Strike Screws	Ⓝ No.1/4-20 x 5/8" 1 PCS	Ⓞ No.1/4-20 x 5/8" 1 PCS	
 Side Screws & Connecting Screws	Ⓕ No.1/4-20 x 1-1/6" 1 PCS	Ⓛ No.8-32 x 7/32" 4 PCS	
 End Cap Screws	Ⓙ	No.8-32 x 5/8" 2 PCS	
 Cover Screws	Ⓘ	No.8-32 x 5/32" 2 PCS	

Q2500/QF2500 Installation Instructions (Page 4)

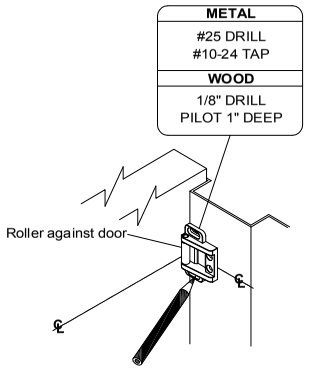


1 DRAW HORIZONTAL DEVICE AND STRIKE CENTERLINE.



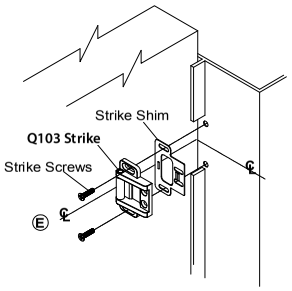
Close door, mark horizontal centerline on inside face of door and on lock side door stop 39-5/8" from finished floor as shown(continue horizontal centerline to outside face of door if trim is used).

2 ALIGN STRIKE WITH HORIZONTAL CENTERLINE (℄) AND MARK TWO(2) SLOTTED HOLES.



Use strike as template and place on door stop and against inside face of door, so the horizontal centerline on strike lines up with the horizontal centerline on door stop and door. Mark centers and drill / tap holes as required.

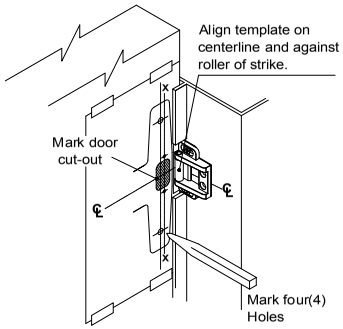
3 INSTALL STRIKE AND SHIM.



Prepare two(2) holes and install a screw through each slot.

For Q106 and Q108 strikes, see page 11 and 12 of this instruction manual.

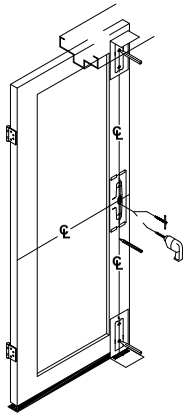
4 POSITION TEMPLATE AGAINST STRIKE AND ON ℄ AND MARK DOOR.



Paper Template (Page 17 and 18)

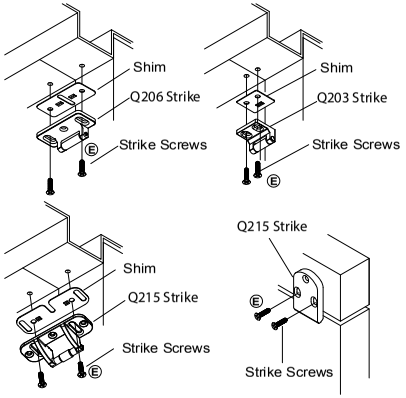
Tape "TEMPLATE "(and trim template if trim is using) to the door so that the centerlines on the template line up with centerlines on the door. Mark centers and drill/tap the required holes as indicated on the template.

5 ALIGN TOP & BOTTOM TEMPLATES ALONG CENTERLINE, THEN MARK AND PREPARE DOOR.



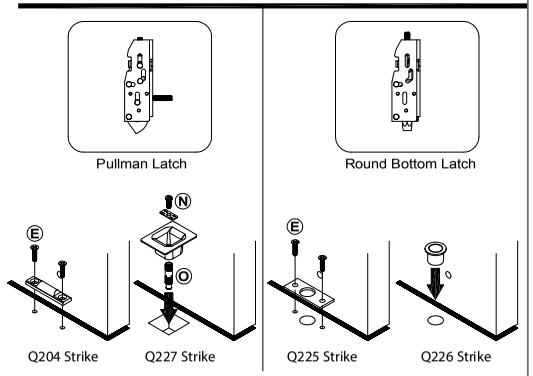
1. Fold strike template and place on door stop and inside face of door, so the vertical centerline on template lines up with the vertical centerline on door stop and door.
2. Tape template on door stop and the door face.
3. Mark centers and drill/tap holes as indicated on the template. See "DOOR PREPARATION CHART" on page 4 for drill/tap, and cut-out information.
4. See trim instructions for pull side door preparation.

6 INSTALL TOP STRIKE AND SHIM.



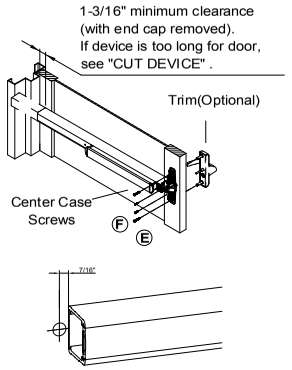
Install a screw through each slot.

7 INSTALL BOTTOM STRIKE.



1. Mark floor for fasteners, prepare floor according to the type of strike and fastener furnished. Provide clearance in floor for bolt.
2. For threshold application:
   Provide hole in threshold according to type of strike and fasteners furnished.

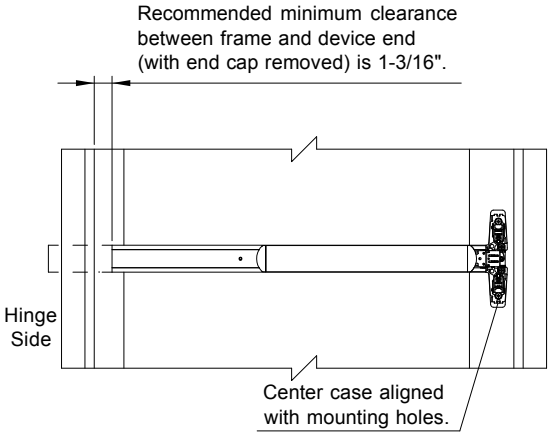
8 MEASURE TO DETERMINE LENGTH TO CUT DEVICE

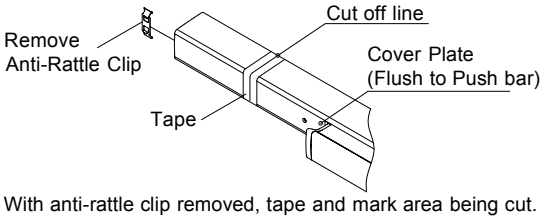


If 5/8" diameter wire access hole has deen predrilled in door , cut device 7/16" measured from center of hole.

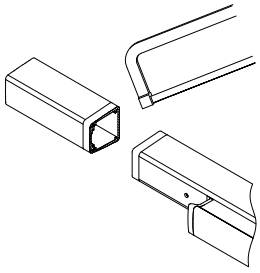
Q2500/QF2500 Installation Instructions (Page 6)

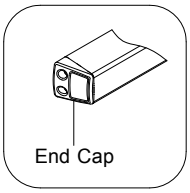
9 CUT DEVICE (IF REQUIRED)





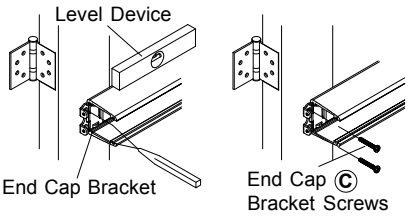
1. With anti-rattle clip removed, tape and mark area being cut.



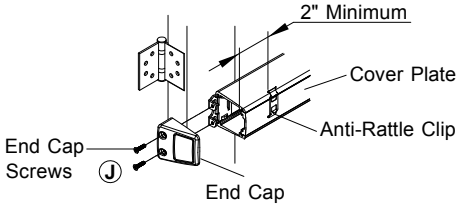


2. Cut off device and deburr.
NOTE: Device must be cut square for proper end cap fit.

10 INSTALL MOUNTING BRACKET AND END CAP.



1. Remove cover plate, insert end cap bracket into push bar assembly against mechanism case.
2. Level device, mark and drill two(2) holes for Bracket Screws.
3. Fasten end cap bracket screws to door.



4. Insert cover plate, slide anti-rattle clip in position (2" minimum from end), and attach end cap with two(2) end cap screws.

11 INSTALL TOP LATCH AND ROD.

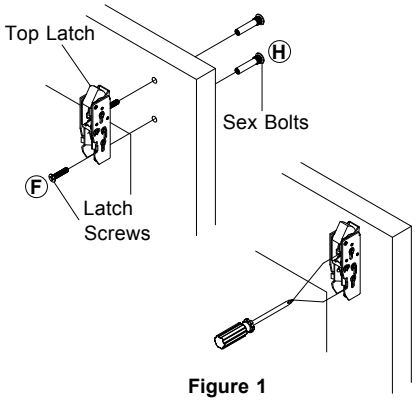


Figure 1

1. Install top latch with two(2) screws (sex bolts). Adjust strike so that device latches without binding. **See Figure 1**
2. Determine rod lengths as shown in **Figure 2**. If necessary, cut end of rod and tap. See "CUT TOP ROD / EXTEND TOP ROD" on page10.

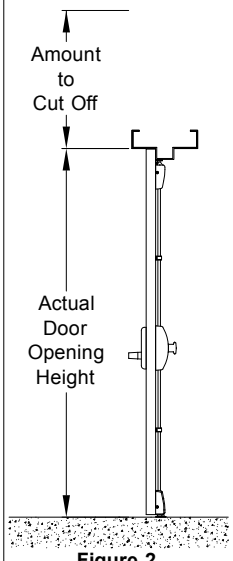


Figure 2

Q2500/QF2500 Installation Instructions (Page 7)

11 INSTALL TOP LATCH AND ROD. (Continued)

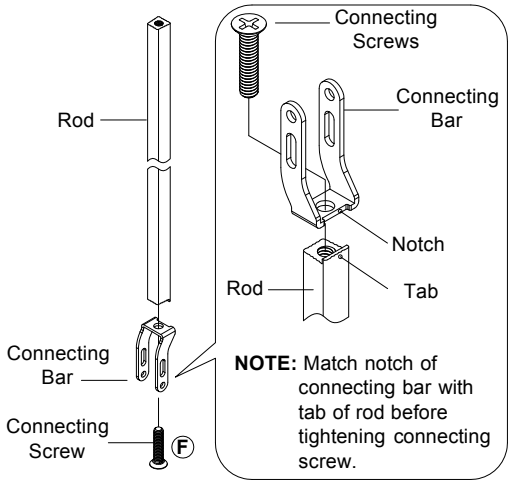
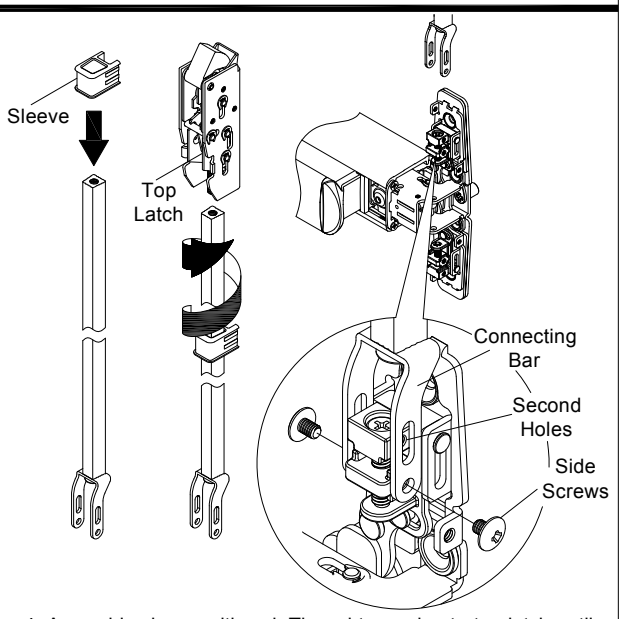


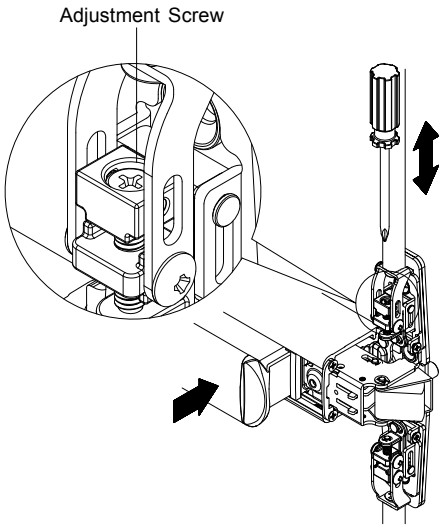
Figure 3

3. Put connecting screw through round hole of connecting bar and thread into top rod and tighten. **See Figure 3**

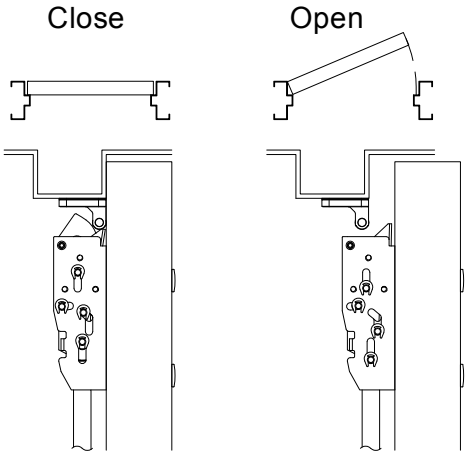


4. Assemble sleeve with rod. Thread top rod onto top latch until first hole in connecting bar aligns with first hole in retractor and fasten side screws.

12 CHECK TOP LATCH FOR HOLDBACK AND DEADLOCK.



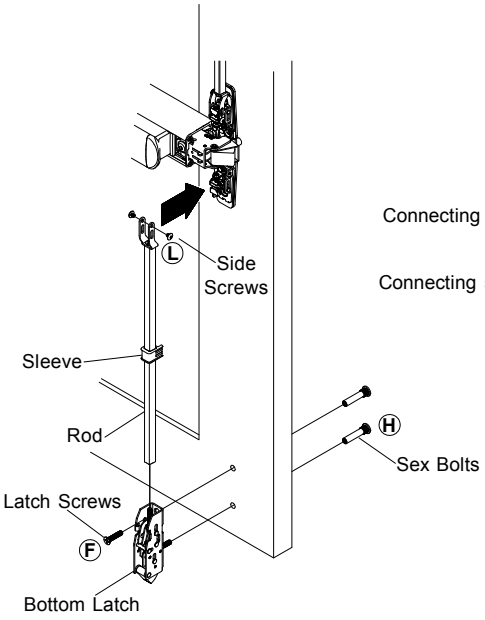
1. Pushing on push bar will retract the latchbolt and open the door. Latchbolt will stay retracted and device is in HOLDBACK position. If not, adjust the screw in top of retractor with screw.

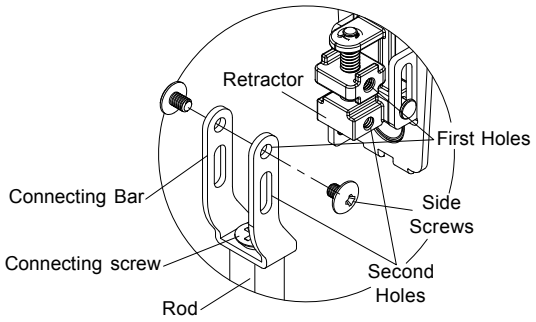


2. Fully extended latchbolt should be in deadlock status. DEADLOCKED latchbolt cannot be pushed down into the latch housing. If not, loosen strike screws and adjust strike position.

Q2500/QF2500 Installation Instructions (Page 8)

13 INSTALL BOTTOM LATCH AND ROD.

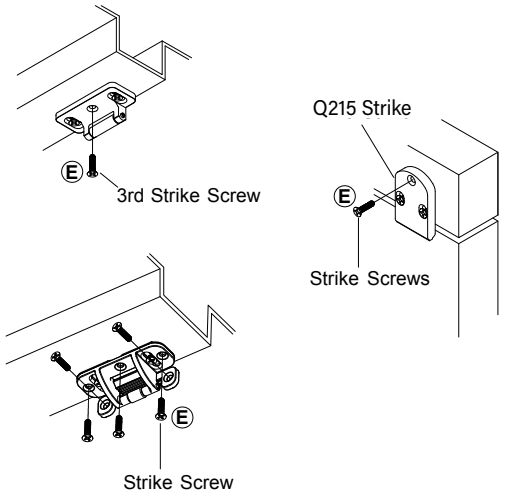




1. Install bottom latch with two(2) screws(Sex bolts).
2. Attach connecting bar to bottom rod and tighten with screws.
3. Assemble sleeve with rod.
4. Thread the bottom rod onto the stud in the bottom latch until the first holes in the end of connecting bar aligns with first holes in retractor.
5. Fasten side screws.

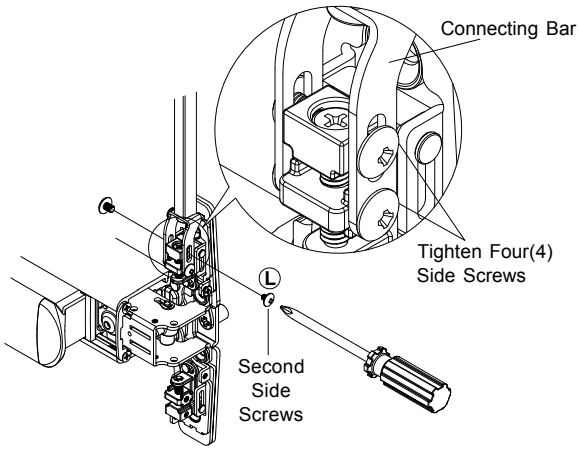
(For LBR devices omit preparation for bottom Latch and rod.)

12 CHECK TOP LATCH FOR HOLDBACK AND DEADLOCK. (Continued)



4. Apply third screw in hole of strike once adjustment is complete.

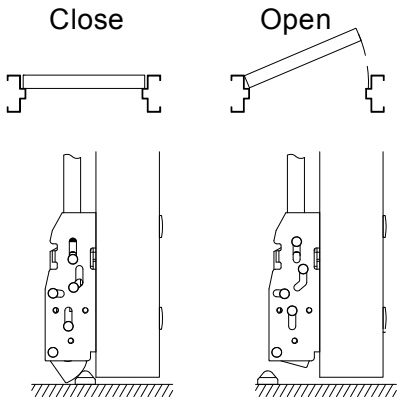
14 SECURE TWO(2) SIDE SCREWS.



Join connecting bar with retractor and secure with two side screws.

Q2500/QF2500 Installation Instructions (Page 9)

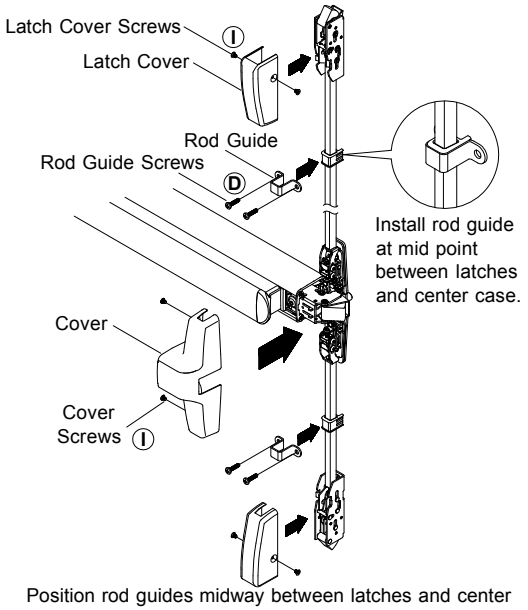
15 ADJUST BOTTOM ROD WITH DOOR OPEN (TOP LATCH RETRACTED).



1. Place device in holdback by pushing on push bar. Bottom latch bolt clears bottom strike, adjust retractor by screw driver or readjust rod if needed.
2. Secure with two side screws when adjustment is completed.

Open and close door a few times and check for deadlocking when door is closed.

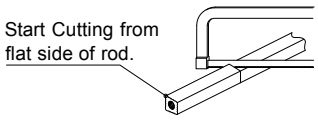
16 INSTALL ROD GUIDES AND COVERS WITH SCREWS.



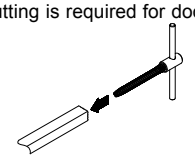
Position rod guides midway between latches and center case, centered on rods. Mark, drill/tap and fasten rod guides with two(2) screws.

CUT TOP ROD / EXTEND TOP ROD

CUT TOP ROD

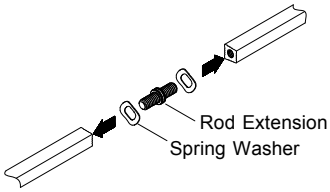


Step 1: Make sure the section cut is prependicular to the rod length, and measure amount to cut off rod.
NOTE: Rod cutting is required for doors shorter than 7'.

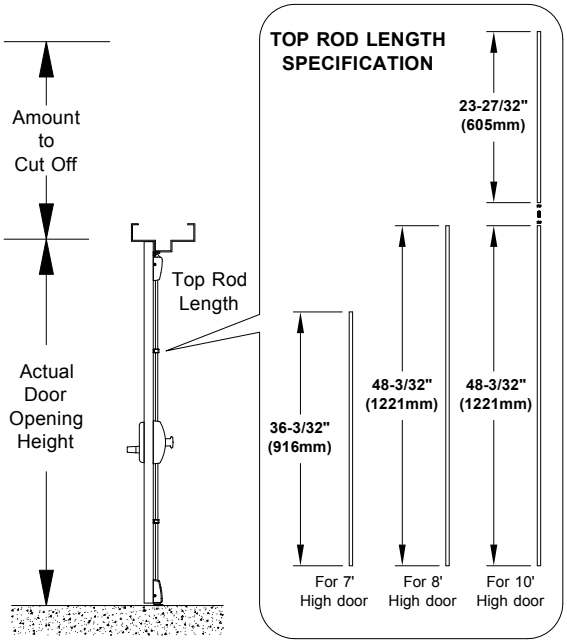


Step 2: Tap #1/4-20 ; 1" deep.

EXTEND TOP ROD



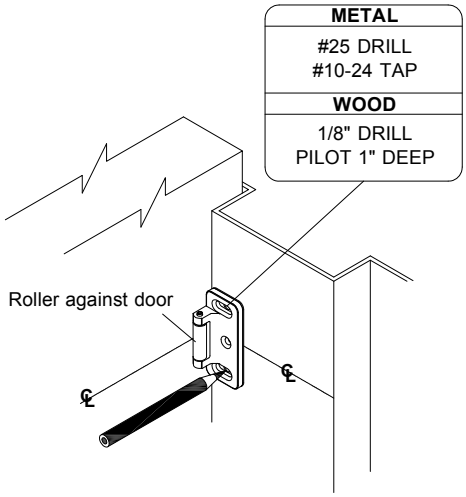
Install rod extension & spring washer to connect two(2) rods tightly.



Q2500/QF2500 Installation Instructions (Page 10)

Q106 STRIKE INSTALLATION

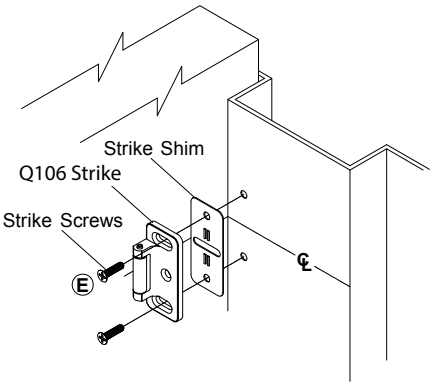
1 ALIGN STRIKE WITH HORIZONTAL CENTERLINE (℄) AND MARK TWO(2) SLOTTED HOLES.



Q108

Use strike as template and place on door stop and against inside face of door, so the horizontal centerline on strike lines up with the horizontal centerline on door stop and door. Mark centers and drill / tap holes as required.

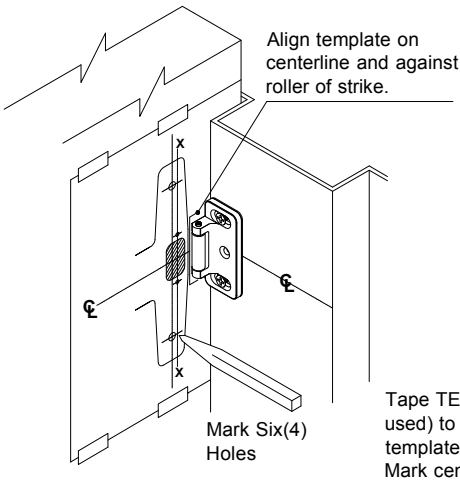
2 INSTALL STRIKE AND SHIM.



Prepare two(2) holes and install a screw through each slot.

For Q108 strike see back cover of this instruction.

3 POSITION TEMPLATE AGAINST STRIKE AND ON AND MARK DOOR.

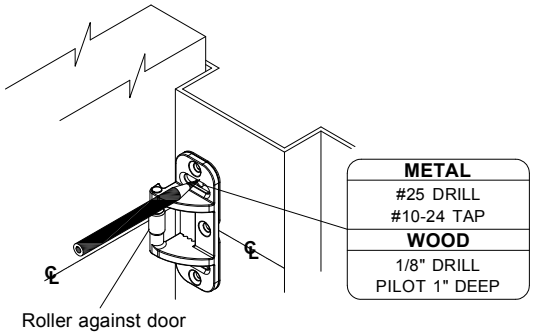


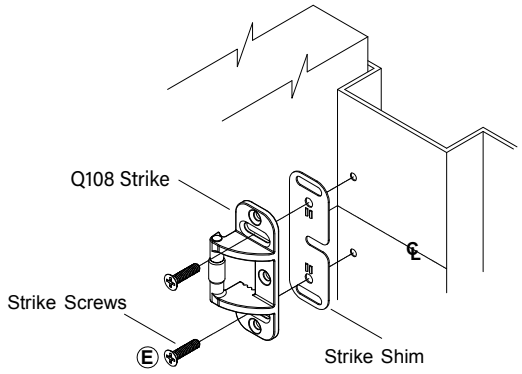
Tape TEMPLATE (and trim template if trim is used) to the door so that the centerlines on the template line up with centerlines on the door. Mark centers and drill/tap the required holes as indicated on the template.

Q2500/QF2500 Installation Instructions (Page 11)

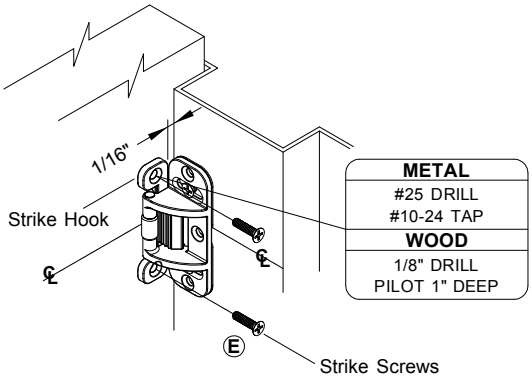
Q108 STRIKE INSTALLATION

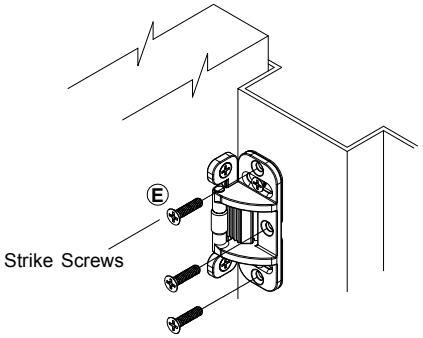
1 **PREPARE AND INSTALL SCREWS THROUGH 2 STRIKE SLOTS.**



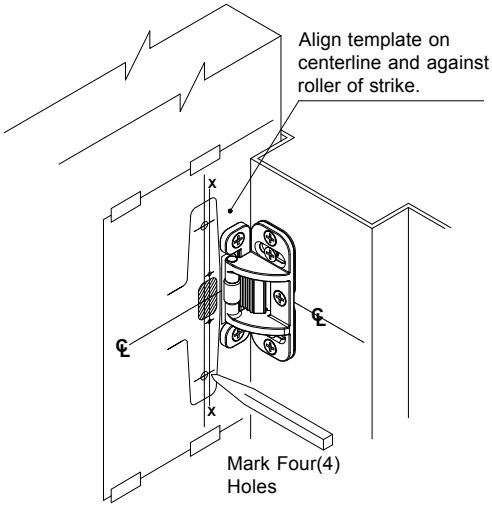


2 **INSTALL STRIKE HOOK AND ADDITIONAL STRIKE SCREWS.**





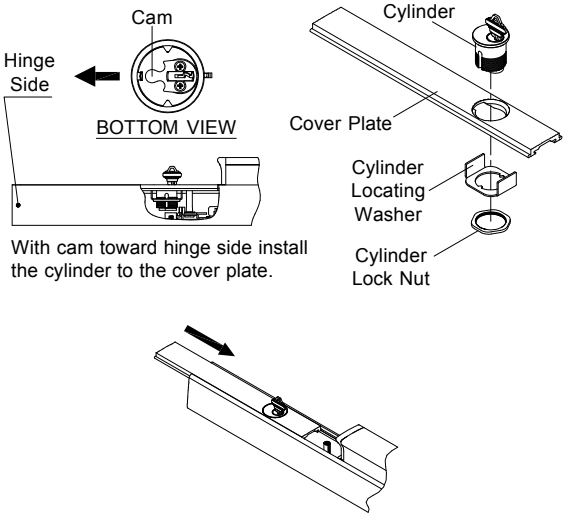
3 **TEMPLATE ALIGNS AS SHOWN.**



Q2500/QF2500 Installation Instructions (Page 12)

OPTIONAL DOGGING

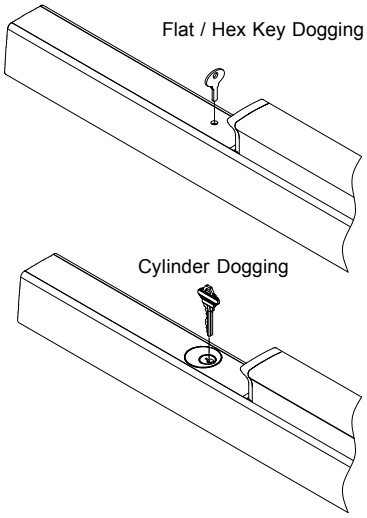
CYLINDER DOGGING



With cam toward hinge side install the cylinder to the cover plate.

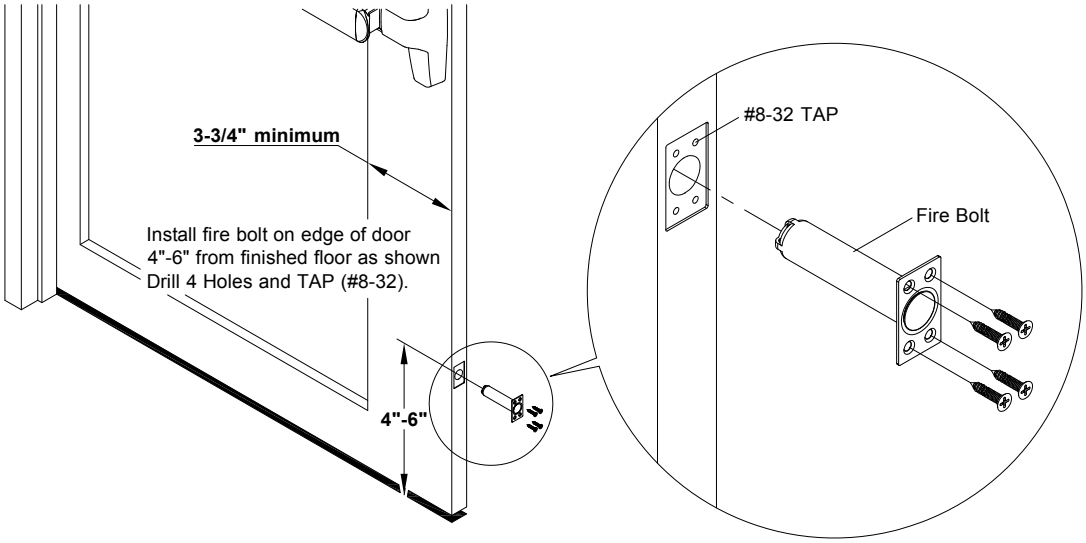
Slide cover plate in position in the mechanism case.

DOGGING CHECK



Depress push bar and turn flat / hex wrench or key one full turn for dogging check.

INSTALL FIRE BOLT

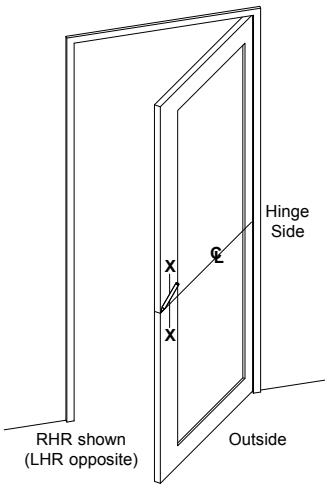


NOTE: Fire rated device with less bottom rod (LBR) applications must use FIRE BOLT.

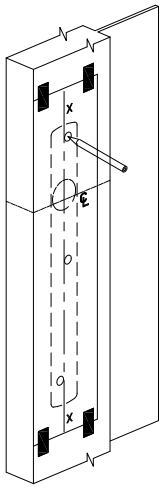
Q400 Series Installation Instructions (Page 1)

Q400 Series
PULL TRIM FOR EXIT DEVICE

INSTALLATION INSTRUCTIONS

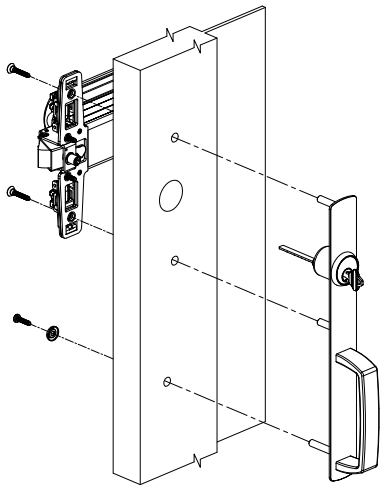


1. Prepare door for exit device. See exit device instructions for holes, backset (line X-X), and center lines.
2. Transfer line X-X from inner (exit device) side of door to outer (trim side) of door. Be extra care if edge of door is beveled. Make sure line X-X is parallel to edge of door.



3. Locate X-X line and prepare required holes with template.

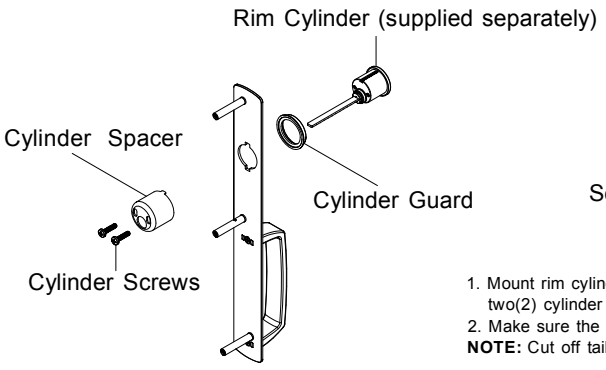
NOTE:
*.See "APPLICATION CHART" on back page for different trim functions.
**.Be aware when applying templates for right-hand side door and left hand-side door

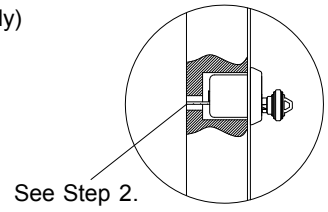


4. Determine trim handing and assemble trim. (see "INSTALL CYLINDER")

INSTALL CYLINDER

RIM CYLINDER FOR
RIM AND VERTICAL ROD DEVICES

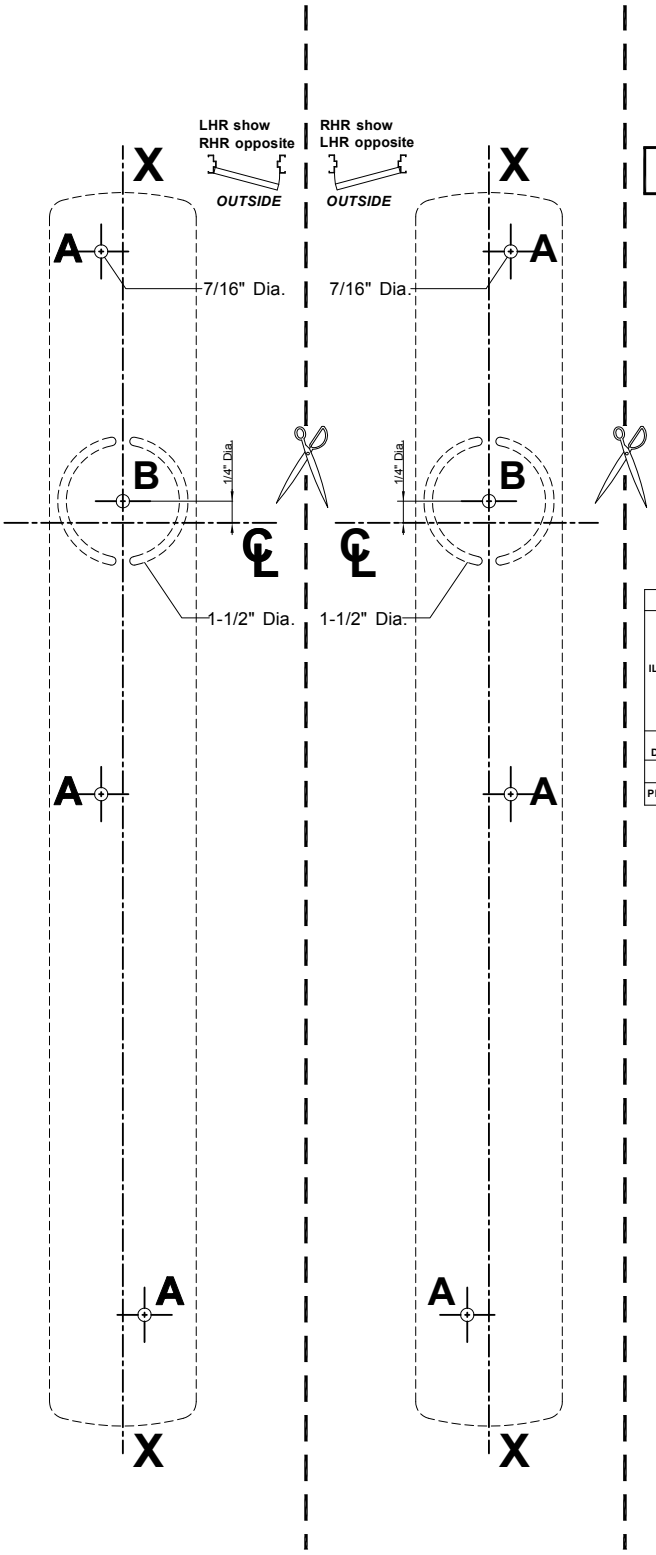




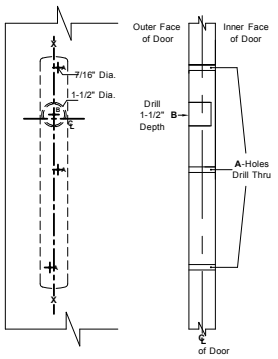
1. Mount rim cylinder to cylinder spacer and attach to outer trim with two(2) cylinder screws.
2. Make sure the tailpiece is aligned with the inner face of door.

NOTE: Cut off tailpiece for different door ranges and cylinder lengths.

Q400 Series Installation Instructions (Page 2)



DOOR PREPARATION

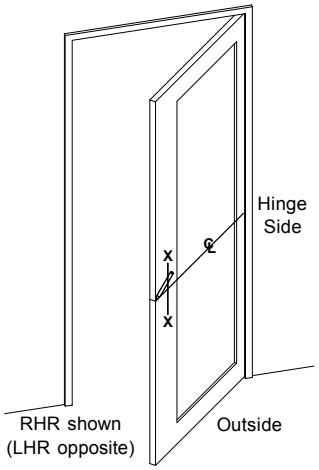


FOR RIM AND VERTICAL ROD APPLICATION			
CUT OUT ILLUSTRATION			
TRIM DESCRIPTION	Q401	Q402	Q403
FUNCTION	01	02	03
PREPARATION	A	A	A+B

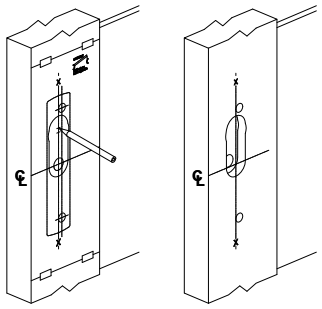
WD-OD002(458)

Q500 Series Installation Instructions

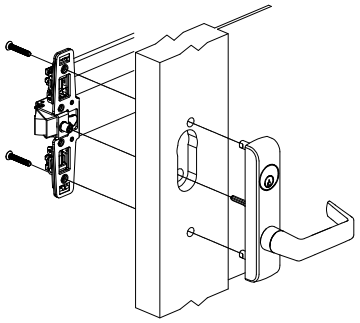
Q500 Series
ESCUTCHEON TRIM FOR 2000 SERIES EXIT DEVICE
INSTALLATION INSTRUCTIONS



1. Prepare door for exit device. See exit device instructions for holes, backset (line X-X), and center lines.
2. Transfer line X-X from inner side (exit device) of door to outer side (trim side) of door. Use extra care if edge of door is beveled. Be sure line X-X is parallel to edge of door.



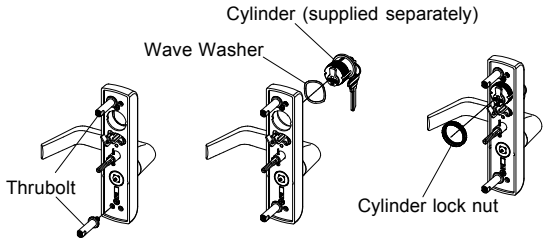
3. Locate X-X line and prepare required holes with Template.



4. Determine trim handing and assemble trim. (see "HOW TO ASSEMBLE TRIM")

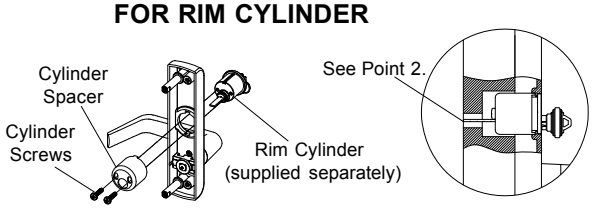
HOW TO ASSEMBLE TRIM

FOR MORTISE CYLINDER



1. Use the wrench provided to fasten the thrubolt.
2. Install cylinder,wave washer into hole in escutcheon.
3. Thread cylinder lock nut onto mortise cylinder. Make sure to fasten down tight.

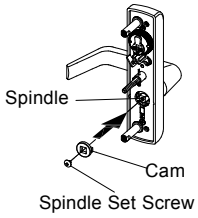
FOR RIM CYLINDER



1. Mount rim cylinder to cylinder spacer and attach to outside trim with two(2) cylinder screws.
2. Make sure the tailpiece is aligned with the inside face of door.

NOTE: Cut off tailpiece for different door ranges and cylinder lengths.

FOR FUNCTIONAL LEVER



1. Determine lever handing. (RHR shown;LHR opposite)
2. Insert cam on spindle.
3. Rotate lever to check function, tighten spindle set screw.

Trim No.	Q502	Q508M	Q509R	Q514	Q503R	Q511M	Q512R	Q516
ANSI No.	02	08	09	14	03	11	12	16
Illustration								
Cylinder Type		Mortise	Rim		Rim	Mortise	Rim	
Application Template	B	A	B	B	B	A	B	B

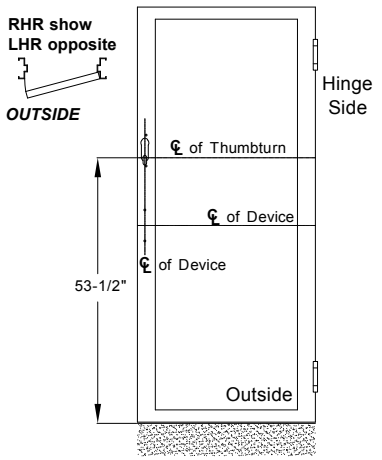
Application Template : "A" for Trim No. Q508M, Q511M
"B" for Trim NO. Q502, Q503R, Q509R, Q512R, Q514 and Q516

WD-OD002(413)

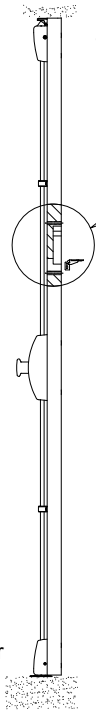
Q500 SP Series Installation Instructions (Page 1)

Q500 SP MODEL
ESCUTCHEON TRIM FOR EXIT DEVICE

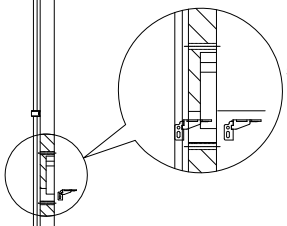
INSTALLATION INSTRUCTIONS



1. Prepare door for Exit Device, for details please refer to WD-OD002(410) user manual.
2. When extending the device centerline from the door's inner side to its outer side,pay attention to the beveled edge of door.
3. Place template at a distance of 53-1/2" from floor so that it aligns both with the thumbturn and the device centerlines and drill screw holes for trim.

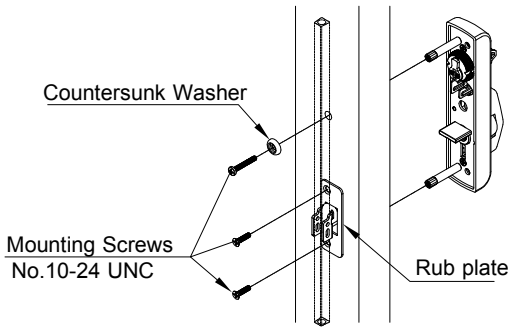


4. Install Exit Device.

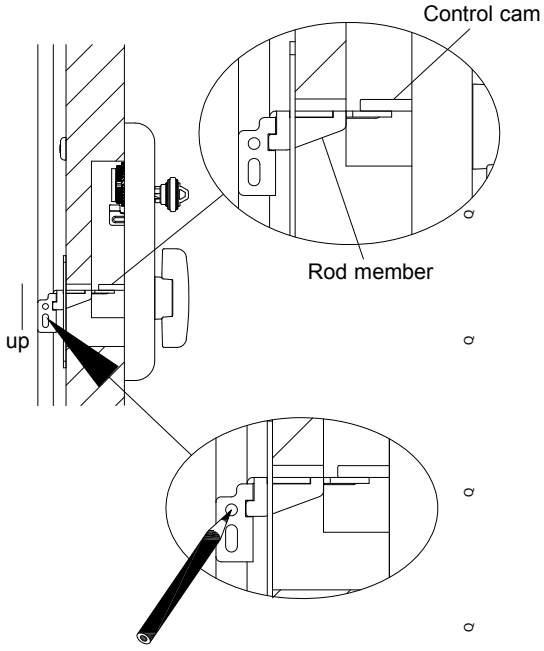


5. Attach rod member to top verical rod.

6. Set trim in place and fix it with screws.

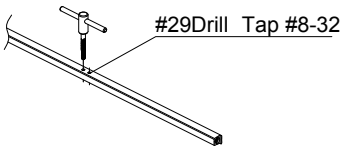


7. Push rod member upwards against the control cam.

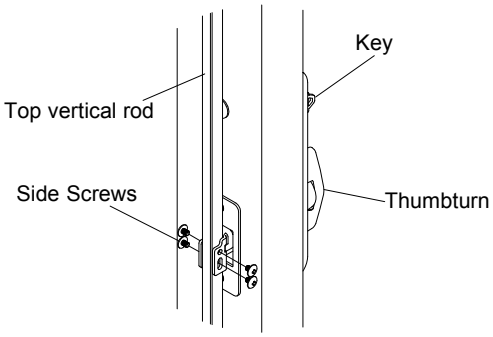


8. Mark rod member's screw hole on top verical rod.

9. Remove top vertical rod and drill holes at marked spot.

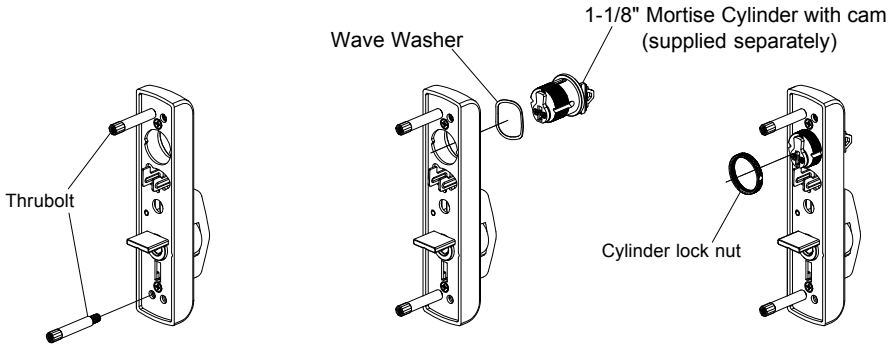


10. Set top vertical rod back in place and adjust as indicated in user manual. Fix rod member with side screws and check for actuation of key, thumbturn and device.



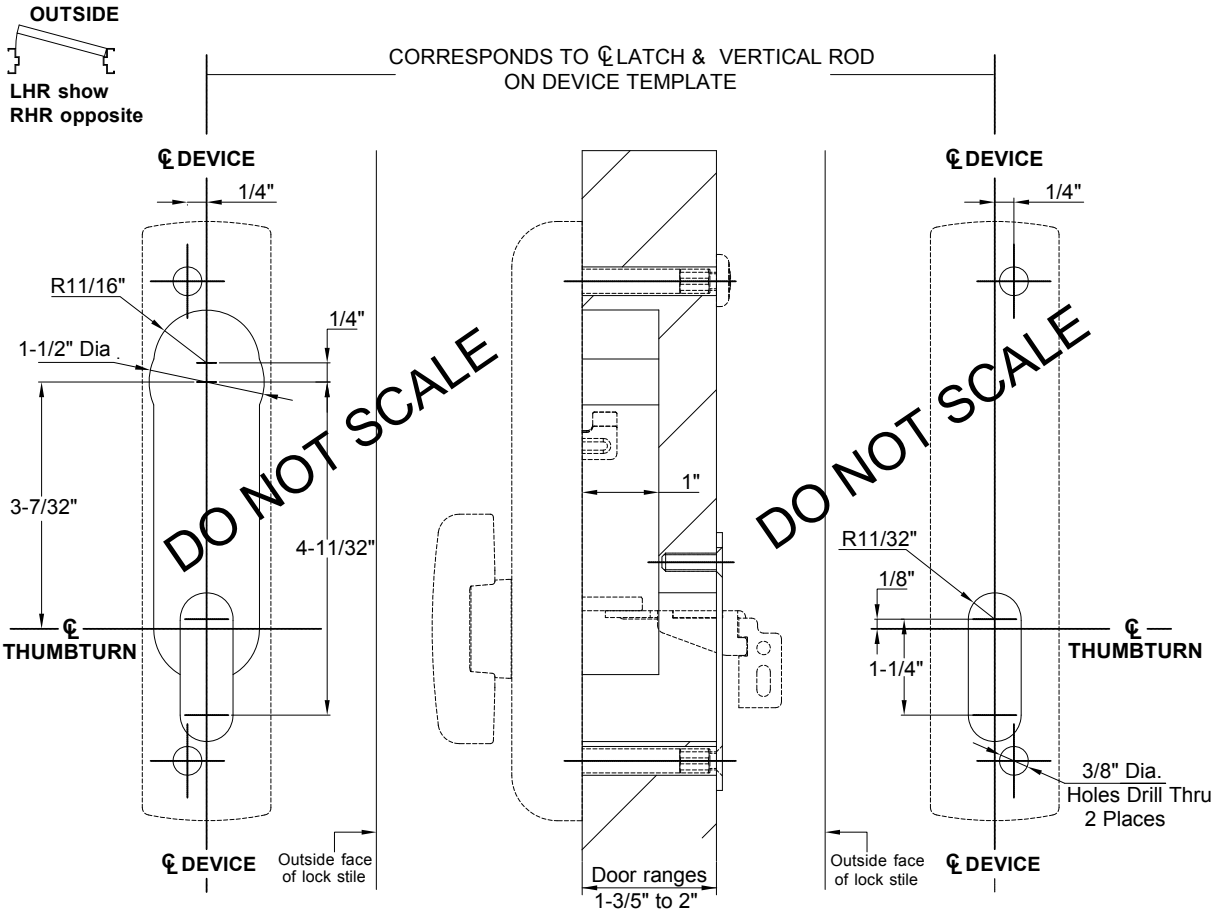
Q500 SP Series Installation Instructions (Page 2)

HOW TO ASSEMBLE TRIM



1. Use the wrench provided to fasten the thrubolt.
2. Install cylinder,Wave Washer into hole in escutcheon.
3. Thread cylinder lock nut onto mortise cylinder.
   Be sure to fasten down tight.

Q500 SP Model Mounting Dimensions

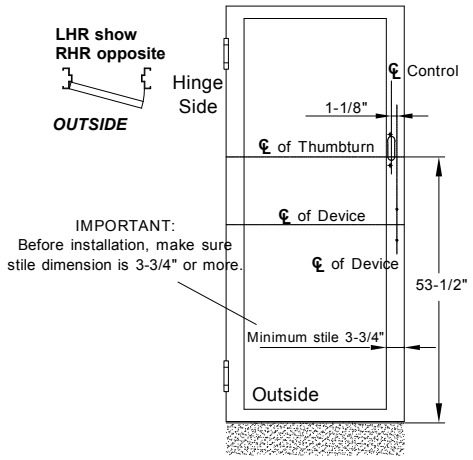


WD-OD002(444)

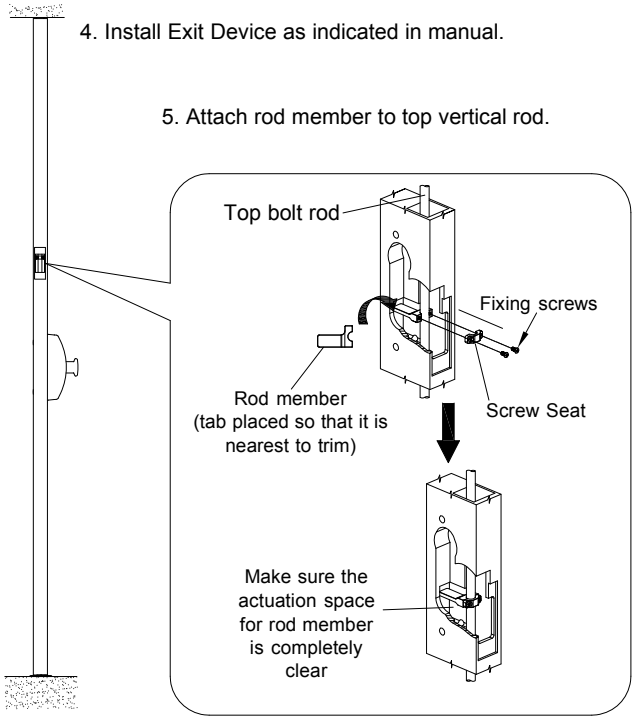
Q500 CP Series Installation Instructions (Page 1)

Q500 CP MODEL
ESCUTCHEON TRIM FOR EXIT DEVICE

INSTALLATION INSTRUCTIONS



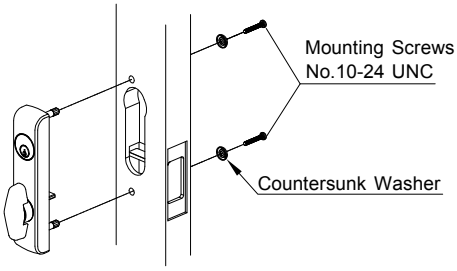
1. Prepare door for Exit Device (for details please refer to WD-OD002(411) user manual).
2. When extending the device centerline from the door's inner side to its outer side, pay attention to the beveled edge of door.
3. Place template at a distance of 53-1/2" from floor so that it aligns both with the thumbturn and the device centerlines and drill screw holes for trim.



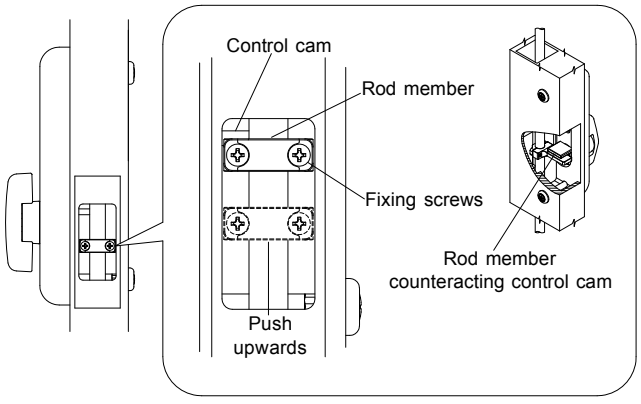
4. Install Exit Device as indicated in manual.

5. Attach rod member to top vertical rod.

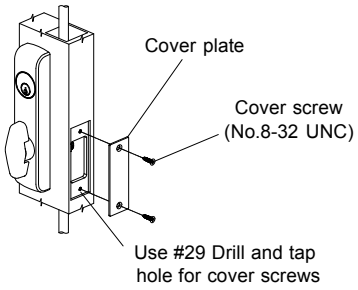
6. Set trim in place and fix it with screws.



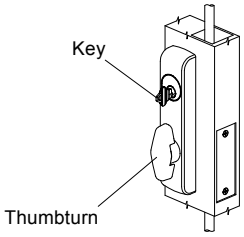
7. Push rod member upwards against the control cam and tighten with fixing screws.



8. Assemble Cover plate and tighten with cover screws.

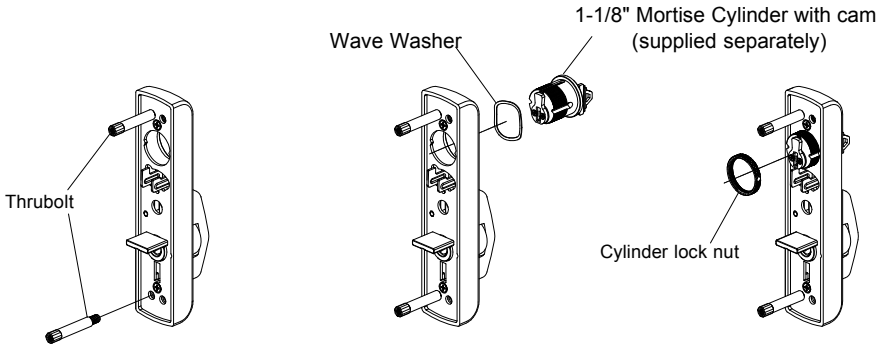


9. Check for actuation of key, thumbturn and device.



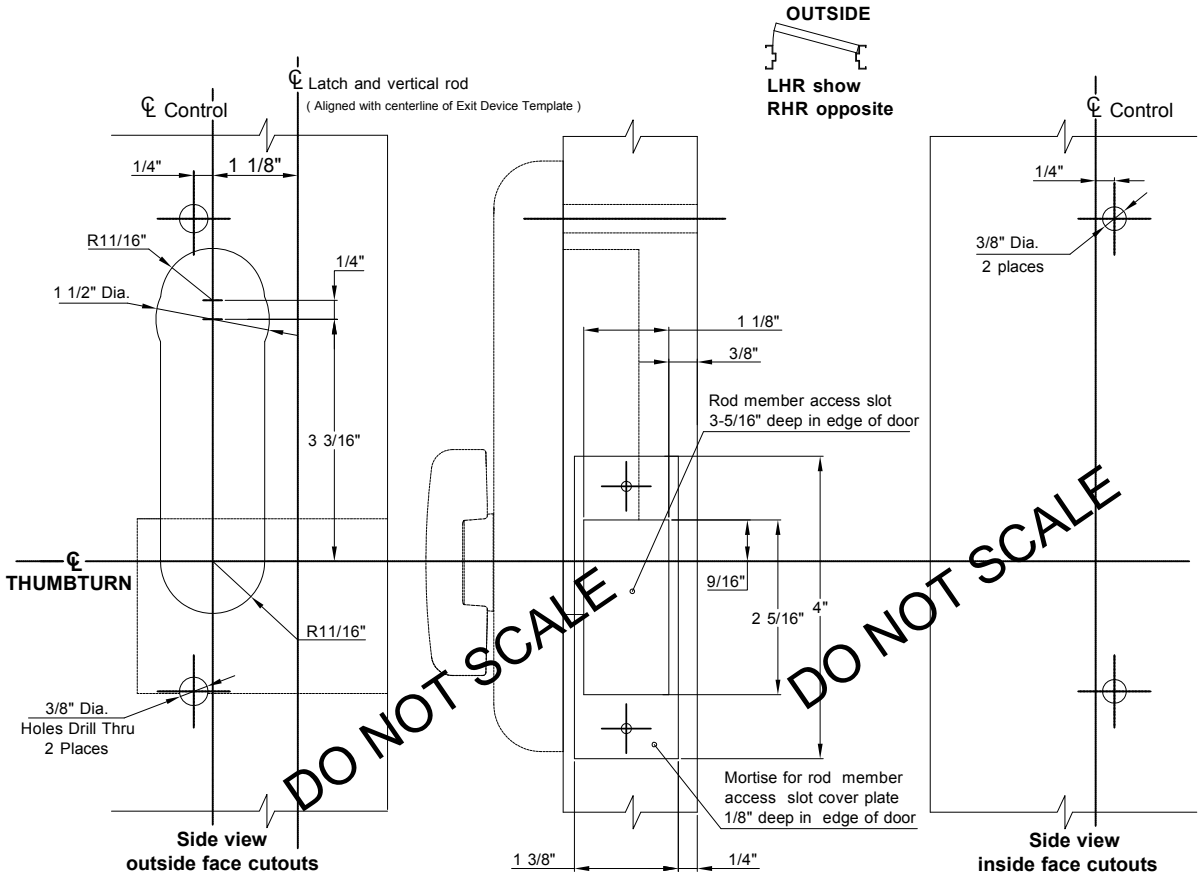
Q500 CP Series Installation Instructions (Page 2)

HOW TO ASSEMBLE TRIM



1. Use the wrench provided to fasten the thrubolt.
2. Install cylinder,Wave Washer into hole in escutcheon.
3. Thread cylinder lock nut onto mortise cylinder.
   Be sure to fasten down tight.

Q500 CP Model Mounting Dimensions



WD-OD002(445)

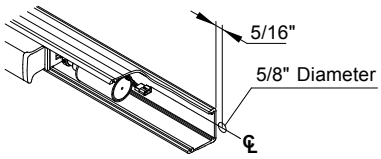
Electric Latch Retraction Exit Device Installation Instructions

ELECTRIC LATCH RETRACTION EXIT DEVICE

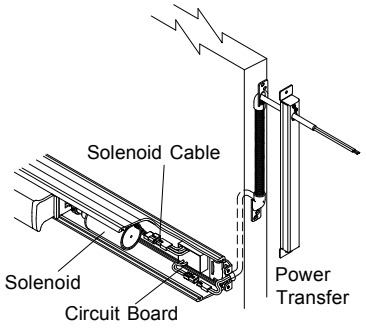
INSTALLATION INSTRUCTIONS

1 WIRING SETUP.

1. Drill 5/8"dia. wire access hole thru device side of door.



2. Route cable through hole and connect wires to power transfer (see "POWER TRANSFER" instructions as needed).



NOTE: Do not cut device with circuit board installed.

2 FUNCTION CHECK.

1. Make sure device is not dogged.
2. Push/release push bar to see whether latch bolt retracts and extends completely.
3. Electrically energize solenoid and hold.
4. Check latch bolt for full retraction.
5. Release solenoid and check latch bolt extension.

3 TROUBLE SHOOTING.

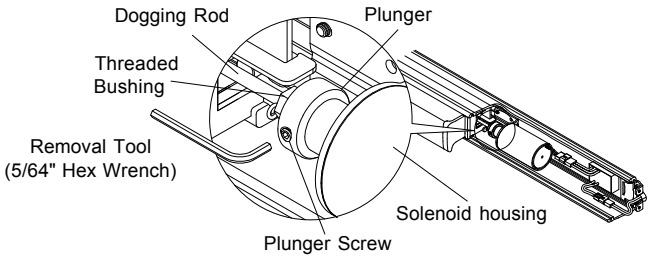
Solenoid must be wired to a QPS100 Series Q100-2 logic board.
Refer to installation instructions for the QPS101 / QPS102
Class 2 power supply.

WARNING: It is not suggested to use boards other than the ones provided along with product. We do not hold responsible for damage caused by misuse of components.

Problem	Solution
Solenoid fails to hold.	1. Check device vertical rod adjustment (if vertical rod device, see exit device installation instructions). 2. Make sure dogging does not interfere withplunger (ELR-ED only). 3. Check dogging rod adjustment (see below for details).
Solenoid pulls but no complete retraction of latch.	
Device works intermittently.	1. Check power supply. It must be QPS100 with Q100-2 option board. 2. Check for correct AWG of field wiring.

NOTE: When power is applied to the circuit board, the solenoid receives a momentary signal to retract and a separate signal to hold as long as power is applied.
When attempting to retract solenoid again, power must be removed from the circuit and reapplied.

4 HOW TO ADJUST DOGGING ROD.



Maximum Wire Run From Power Supply to Device and Back		
Wire	12 AWG	14 AWG
Feet	200	100

Solenoid Specifications:
Current Pulse (0.3 seconds) : 24VDC, 16Amp
Continuous : 24VDC, 0.25Amp

1. Check length of dogging rod:
   Too long if latch bolt does not retract.
   Too short if:
   A. Latch bolt extends partially.
   B. Solenoid cannot hold.
2. Adjust dogging rod.
   A. Loosen plunger screw.
   B. Hold plunger depressed in solenoid housing.
   C. If latch bolt is not retracted, hold plunger fully retracted with thumb and adjust threaded bushing until latch bolt position is correct.
   D. Tighten plunger screw.
   NOTE: Plunger screw must be tightened flat against threaded bushing.
   E. Replace cover plate and end cap.
   F. Return to check for proper function.

WD-OD002(435)

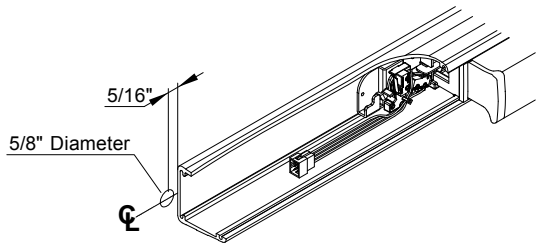
Signal Switch Exit Device Installation Instructions

SIGNAL SWITCH EXIT DEVICE

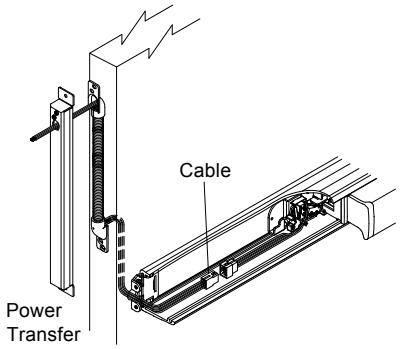
INSTALLATION INSTRUCTIONS

1 WIRING SETUP.

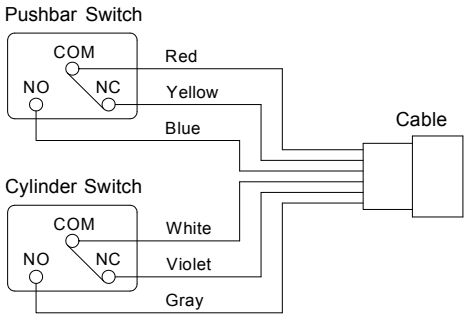
1. Drill 5/8"dia. wire access hole thru device side of door.

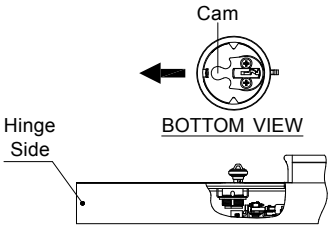


2. Route cable through hole and connect wires to power transfer (see "POWER TRANSFER" instructions as needed).



2 WIRE CONNECTION.

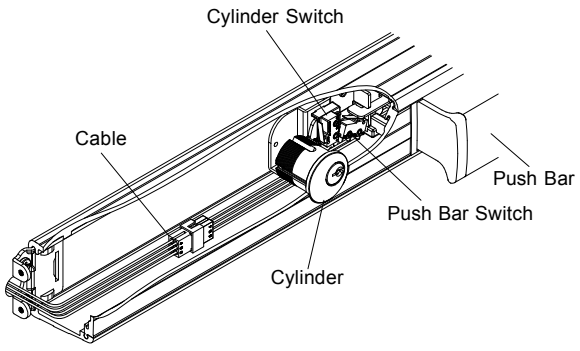




When installing cylinder make sure cam is facing towards hinge.

NOTE: The unit can be attached to a console or may be used as a single door alarm when properly connected to a horn and power supply.

Switch ratings are as follows :
Cylinder switch: 24VDC, 2Amp SPDT
Pashbar switch: 24VDC, 2Amp SPDT



NOTE:
1. Depression of push bar and retraction of latch bolt activates push bar switch for alarm initiation.
2. Insert and turn key into cylinder to activate or reset alarm.
3. Position slide cover plate back to mechanism case before use.
4. Cut device to proper length before connecting cable and switch wires.

WD-OD002(437)

Request To Exit Device Installation Instructions

REQUEST TO EXIT DEVICE

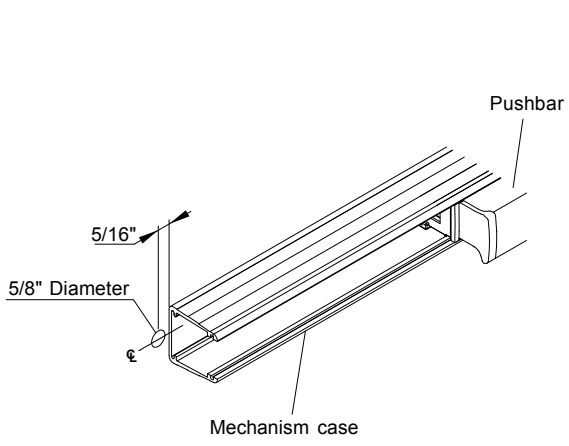
INSTALLATION INSTRUCTIONS

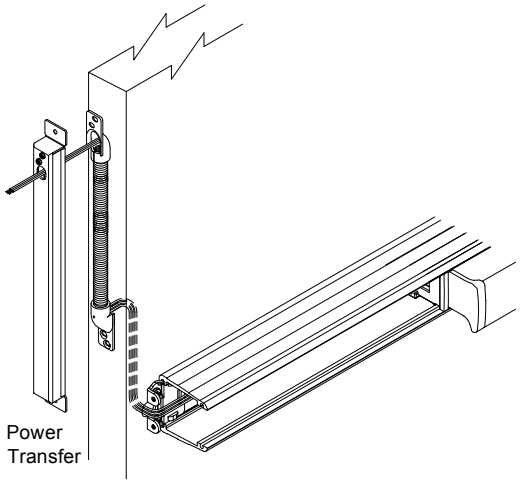
RX - Switch is designated for signaling purposes and designed to resist a maximum load of 3 amperes corresponding to a voltage value of 24V DC/AC. Application with magnetic locks or solenoid devices lowers the switch capacity.

1. The RX monitor activates in coordination with the pressing of push bar.
2. The following configuration represents the situation in which the latch bolt and push bar are in their initial position.

NOTE: Switch ratings are as follows :
Switch: 24VDC, 3Amp SPDT

3. Drill 5/8"dia. wire access hole thru device side of door.
4. Route cable through hole and connect wires to power transfer (See "POWER TRANSFER" instructions as needed).





WD-OD002(438)

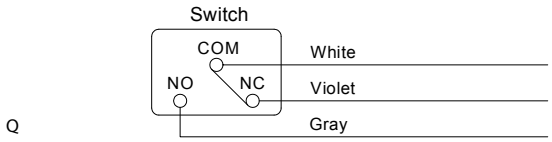
Latch Bolt Monitring Exit Device Installation Instructions

LATCH BOLT MONITRING EXIT DEVICE

INSTALLATION INSTRUCTIONS

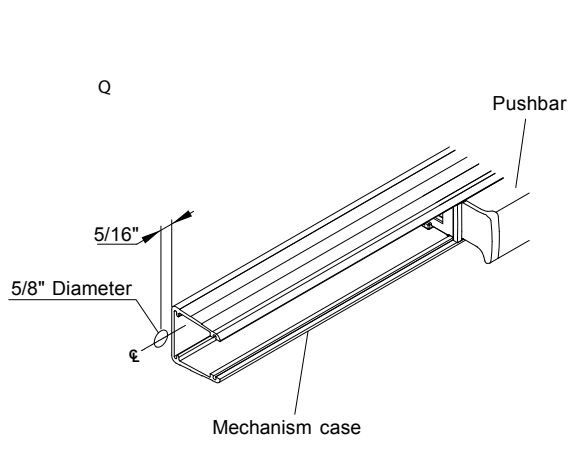
LM - Switch is designated for signaling purposes and designed to resist a maximum load of 3 amperes corresponding to a voltage value of 24V DC/AC. Application with magnetic locks or solenoid devices lowers the switch capacity.

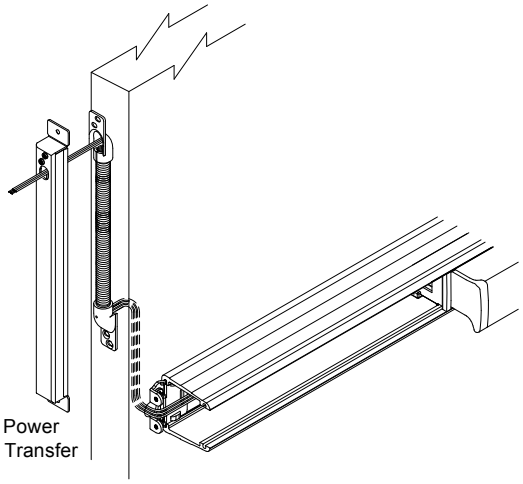
1. The latch bolt monitor activates in coordination with the retraction of latch bolt.
2. The following configuration represents the situation in which the latch bolt and push bar are in their initial position.



NOTE: Switch ratings are as follows :
Switch: 24VDC, 3Amp SPDT

3. Drill 5/8"dia. wire access hole thru device side of door.
4. Route cable through hole and connect wires to power transfer (See "POWER TRANSFER" instructions as needed).





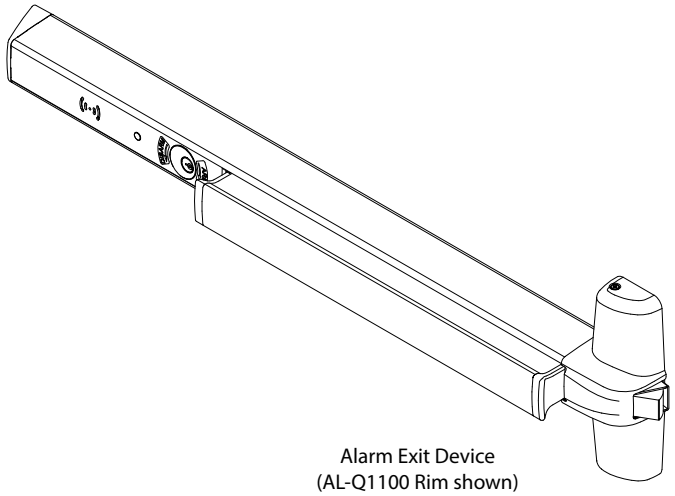
WD-OD002(439)

Alarm Exit Device Installation Instructions (Page 1)

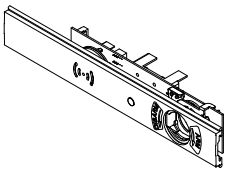
ALARM EXIT DEVICE

INSTALLATION INSTRUCTIONS

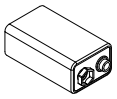
COMPONENTS:



Alarm Exit Device
(AL-Q1100 Rim shown)



Cover Plate
(Include Alarm Exit Module)



9 Volt Battery

Cylinder Lock Nut

EMERGENCY EXIT ONLY
PUSH TO OPEN ALARM WILL SOUND

Emergency Exit Sign
(packed in cardboard tube)

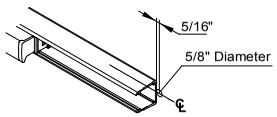
SPECIFICATIONS:

Voltage	12 to 24VDC, 12 to 24VAC
Current	0.2A
Battery	9V
Normally open inputs	External inhibit (EI)

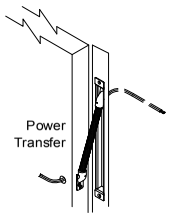
NOTE: 1. The Alarm Exit Module requires an RX or LM switch mounted in the exit device.
2. Choose battery or remote power for usage.
3. Alarm Kit can be used for Q1000 Series QF1100, QF1200, QF1300, QF1400 and QF1500 Model.
Q2000 Series QF2100, QF1200, QF2300 and QF2500 Model.

INSTALLATION PROCEDURE:

1 COMPLETE WIRING (IF REQUIRED).

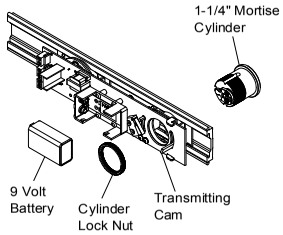


Drill 5/8"dia. wire access hole thru device side of door.

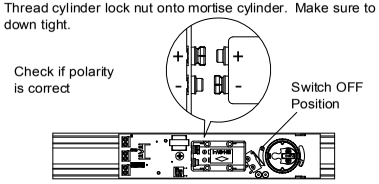


Route cable through hole and connect wires to power transfer (see "POWER TRANSFER" instructions as needed).
NOTE: Alarm Exit Device does not contain dogging option.

2 INSTALL CYLINDER AND BATTERY.

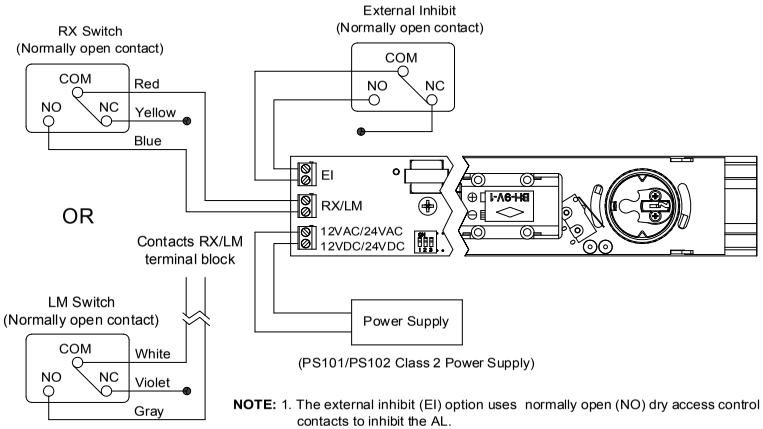


Thread cylinder lock nut onto mortise cylinder. Make sure to fasten down tight.



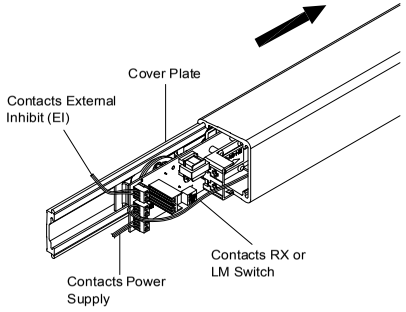
IMPORTANT: Before installing battery, make sure transmitting cam is in OFF position.

3 ATTACH WIRING TO TERMINAL BLOCKS ON ALARM EXIT MODULE.



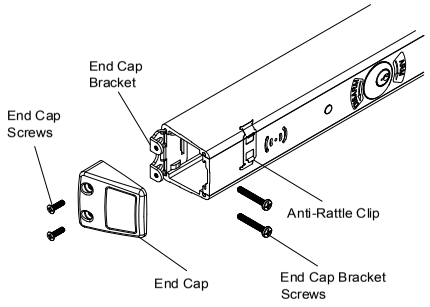
NOTE: 1. The external inhibit (EI) option uses normally open (NO) dry access control contacts to inhibit the AL.
2. Closing the access control contacts inhibits the AL. When the access control contacts are re-opened, the AL re-arms with no delay.
3. All terminal inputs are not polarized.

4 INSTALL COVER PLATE.



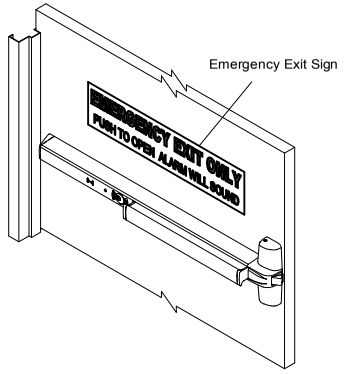
Insert cover plate back into the mechanism case.
NOTE: Be careful not to pinch cable when sliding cover plate.

5 INSTALL MOUNTING BRACKET AND END CAP.



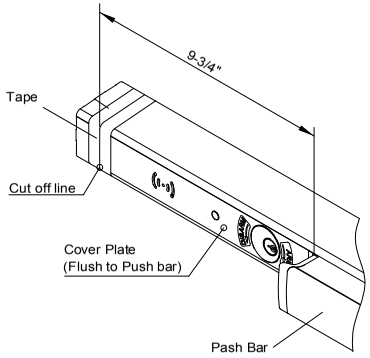
After all wire connections are made and device checked for operation, install the end cap bracket, end cap and label .

6 MOUNT EMERGENCY EXIT SIGN.



Remove protective layer and stick Emergency Exit on door.

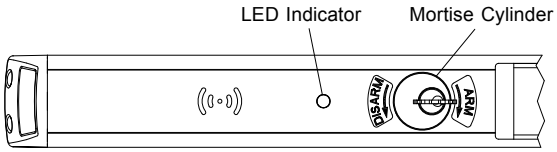
7 CUT DEVICE (IF REQUIRED).



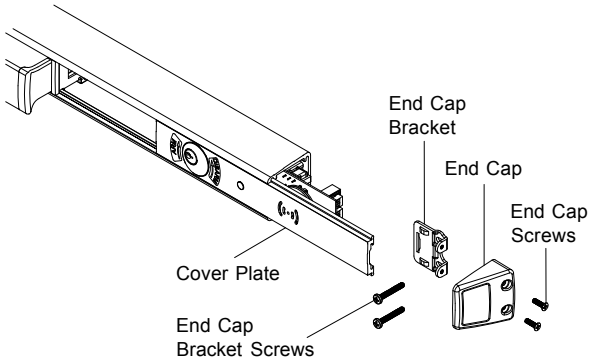
NOTE: Length measured from push bar to cutoff line must not be less than 9-3/4" long.

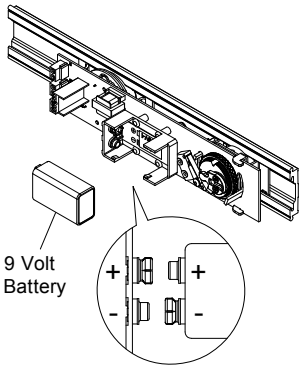
Alarm Exit Device Installation Instructions (Page 3)

OPERATION



1. Insert the key into the cylinder and turn clockwise to arm unit. Rotate to initial position to remove key.
2. Arming time is of 15 seconds, during which the LED flashes green every 1.5 seconds.
3. A brief sound will indicate that the alarming time is complete. When armed the LED will flash red every 15 seconds.
4. Turn the key counterclockwise to disarm.
5. Changing the battery:
   A beep will sound every 15 seconds to indicate that battery is low. This cannot be shut down by disarming the unit and the sound will stop only when battery is changed.

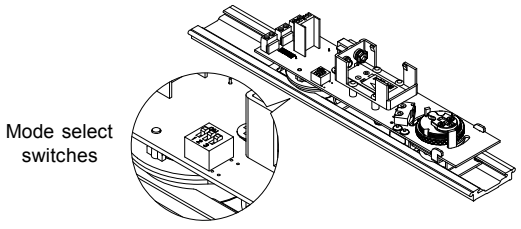


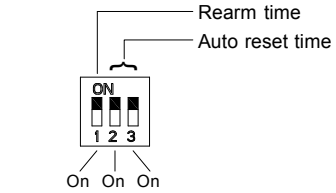


Make sure polarity is correct

7. To change the battery.
   A. Remove end cap and loosen or remove mounting bracket.
   B. Remove cover plate.
   C. Change Battery.
   D. Reassemble.

OPTIONS





Factory settings shown

MODE SELECT SWITCHES	
Option	**Function**
Rearm time	If switch No. 1 is off, AL device re-arms with no delay.
Auto reset time	Set switches No. 2 and 3 for auto reset alarm time. Three setting options: 1.5, 3 or 5 minutes.

NOTE: The default configuration setting for alarm sound is set for 5 minutes before rearming.

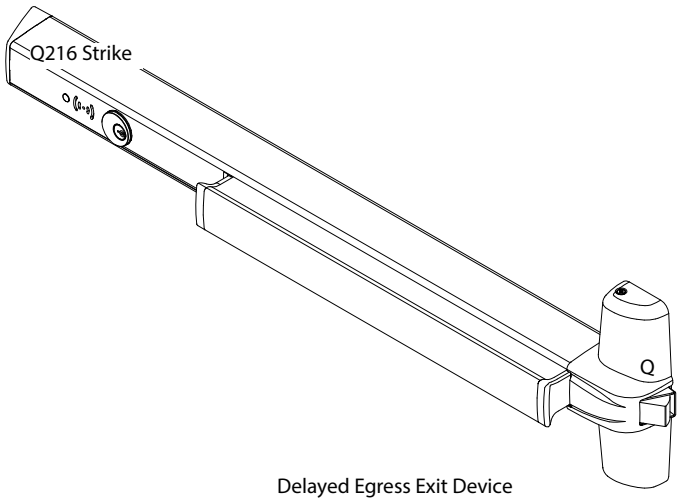
AUTO RESET TIME				
Minutes	1-1/2	3	5	infinite
Switch No. 2	off	on	on	off
Switch No. 3	on	off	on	off

WD-OD002(440)

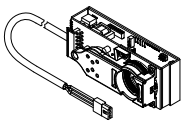
Delayed Egress Exit Device Installation Instructions (Page 1)

DELAYED EGRESS EXIT DEVICE - ELECTRICAL

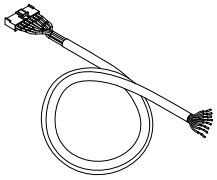
INSTALLATION INSTRUCTIONS



Delayed Egress Exit Device
(DE-Q1100 Rim shown)



Delayed Egress Module



Cable

PUSH UNTIL ALARM SOUNDS DOOR CAN BE OPENED IN 15 SECONDS

Door Sign
(Door sign is in cardboard tube)

The Delayed egress exit device sounds an alarm and keeps an exit door secured for 15 seconds following an attempt to exit. The device releases immediately upon a fire alarm condition.

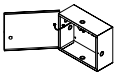
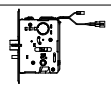
SPECIFICATIONS:

Voltage 24VDC
Current (Delayed Egress Device) 0.37A
Current (Electric Mortise) 0.25A
Current (Electric Trim) 0.25A
Current on arming ..... 300ms 16A in-rush
External alarm dry contacts (NO and C) ..... 23.76~24VDC, 1A
Normally closed inputs ..... Fire alarm (FA; required)
Door position switch (DPS)
Normally closed inputs ..... External inhibit (EI)
Optional (Normally open inputs)

NOTE: 1. Do not exceed rated specifications.
2. The DE device must be installed in accordance with these instructions by a qualified electrician.
3. Wiring must be in accordance with all local codes and regulations.
4. Install within a well-protected premise that is supervised/attended at all times.

Delayed Egress Exit Device Installation Instructions (Page 2)

INSTALLATION COMPONENTS

Illustration	Component	Function	Remark
	24VDC Power supply *	Supplis power to delayed egress exit device	QPS101/QPS102 Class 2 power supply
	Electric mortise lock *	Serves as locking device on electric mortise applications	If used trim (Electric Mortise Lock)
	Electric trim *	Serves as locking device on electric trim applications	If used trim (Electric trim)
	Building fire alarm * (normally closed contacts)	Unlocks DE device in case of fire alarm	
	Power transfer (EPT-1 shown)	Transfers electrical power through frame to door (wires concealed)	Highly recommended or used, the door loop or electric hinge
	External inhibit device (card reader, key switch, etc.) Rim and vertical (normally closed contacts) Electric Mortise & Electric Trim Fail safe (normally closed contacts) Electric Mortise & Electric Trim Fail secure (normally open contacts)	Allows authorized egress or ingress without alarm	Wire multiple external inhibit devices in series See "External inhibit Switch"
	Door position switch (normally closed contacts)	Arms device 2.5 seconds after door closes; sounds alarm if door forced open	If not used, Connect red wire to green wire
	External horn	Provides louder alarm than device internal horn	If not used, Insulate blue and black wires separately

NOTE: 1. Always disconnect power prior to making any connections or service.
2. Components marked with (*) are required for product.

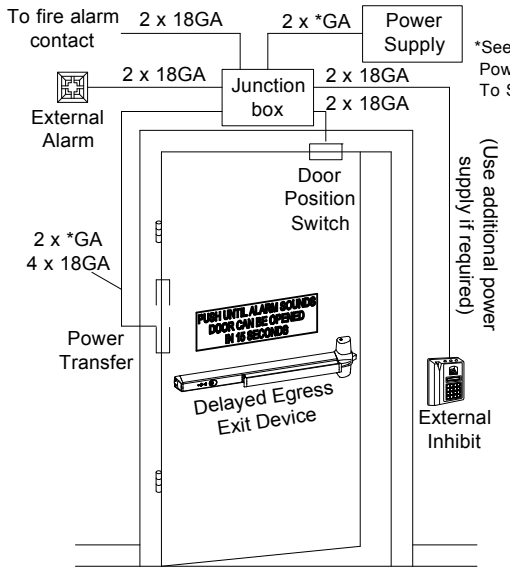
WIRE FUNCTIONS		
Terminal	**Description**	**Function**
Red	+24	Power supply +24VDC
Blue	NO	Common for 24 output; 24VDC, 1A maximum Normally open output; closes during alarm
Gray	CM-	Communication line; connect device
Yellow	CM+	Communication line; connect device
Orange	FA	Fire alarm input; 0 VDC = fire ; 24 VDC = no fire
Green	DPS	Door position switch input; 0 VDC = door open ; 24 VDC = door closed
White	EI	External inhibit off input; 0 VDC = device inhibited ; 24 VDC = device active External inhibit on input; 0 VDC = device active ; 24 VDC = device inhibited
Black	GND	Power supply ground

Maximum Wire Length From Power Supply To Device & Back To Supply In Feet x Wire Gage		
Wire	12 AWG	14 AWG
Feet	200	100

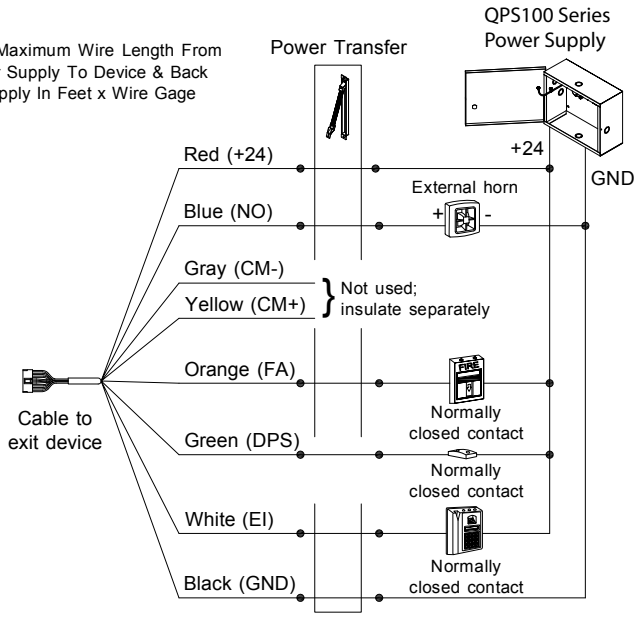
Delayed Egress Exit Device Installation Instructions (Page 3)

TYPICAL WIRING

RIM/VERTICAL - SINGLE DOOR APPLICATION



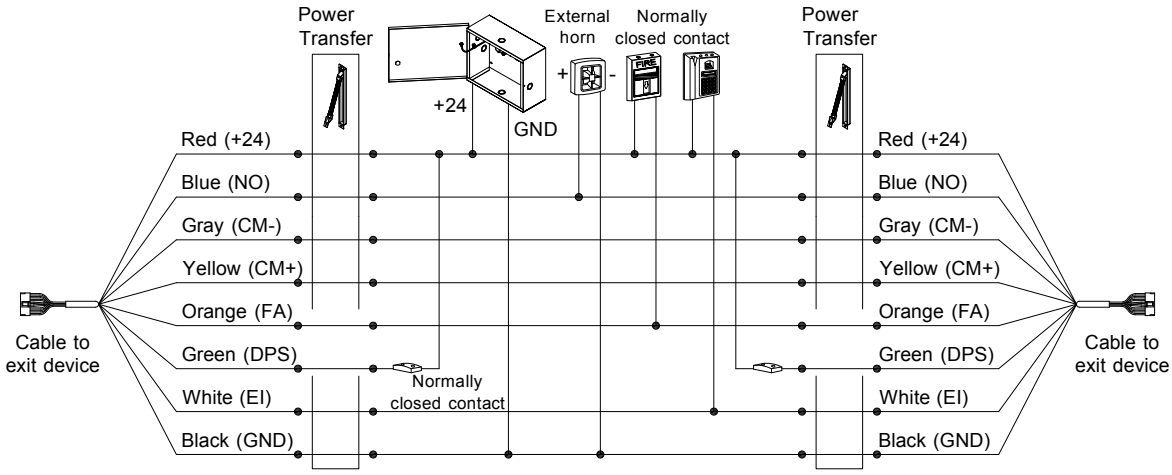
Component Placement and Wiring Requirements, Single Door



Wiring Connections, Single Door

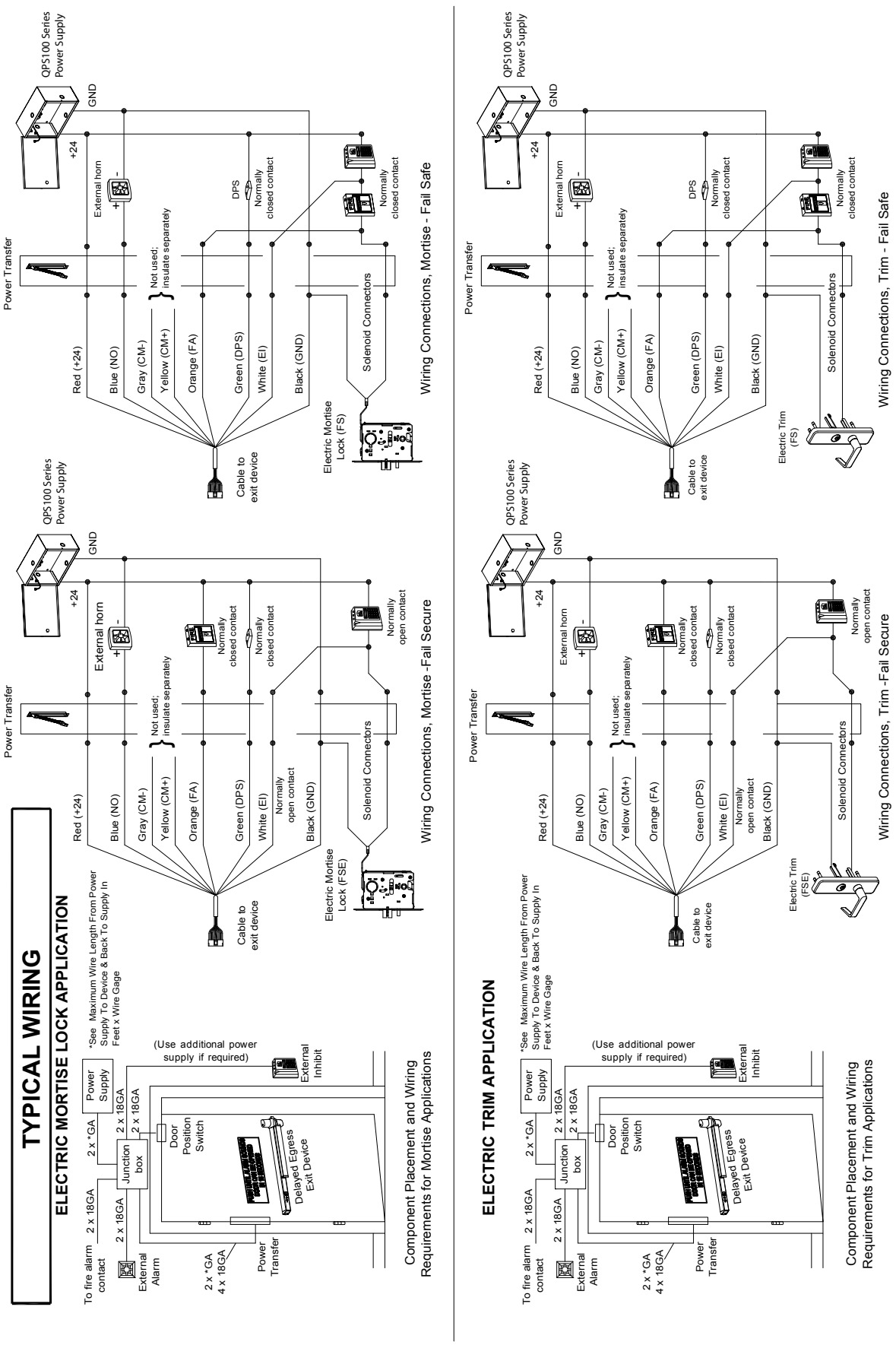
RIM/VERTICAL - DOUBLE DOOR APPLICATION

For double door application, both doors are installed with DE devices which are interconnected by yellow (CM+) and gray (CM-) wires (if not used, insulate wires separately). When one of the DE devices' alarm goes off, the other one does as well, and both devices will unlock after a 15 seconds interval. Both door locks can also be deactivated by a fire alarm or an external inhibit. If door position switch is used, after the external inhibit disarms the alarm of the device, the door opened will rearm 2.5 seconds after it closes, while the unused door will rearm depending on the full rearming time setting. For proper operation, the rearming time between the DE devices must differ by at least 2 seconds.



Wiring Connections, Double Door

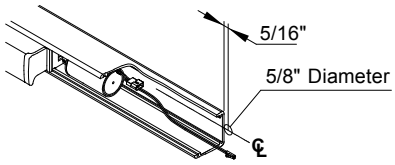
Delated Egress Exit Device Installation Instructions (Page 4)



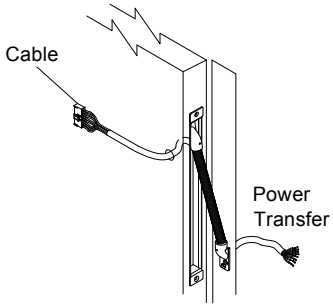
Delayed Egress Exit Device Installation Instructions (Page 5)

INSTALLATION

1 COMPLETE WIRING.

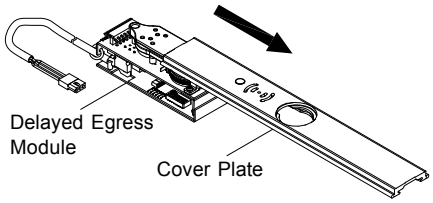


Drill 5/8"dia. wire access hole thru device side of door.

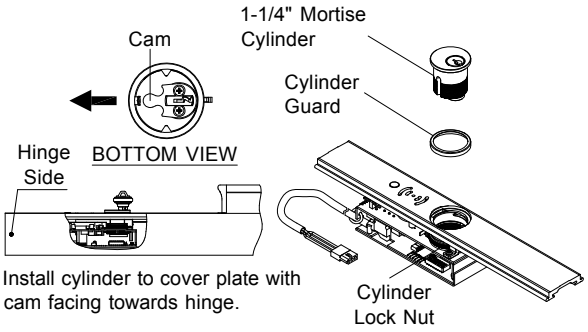


Route cable through hole and connect wires to power transfer (see "POWER TRANSFER" instructions as needed).

2 INSTALLATION DELAYED EGRESS MODULE AND CYLINDER.



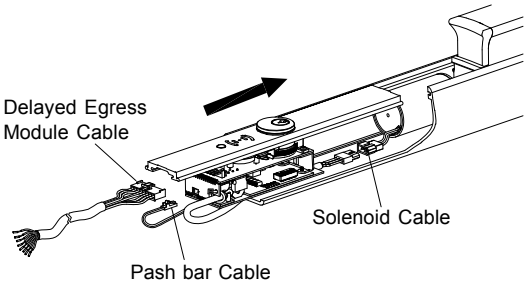
Slide delayed egress module into cover plate.



Install cylinder to cover plate with cam facing towards hinge.

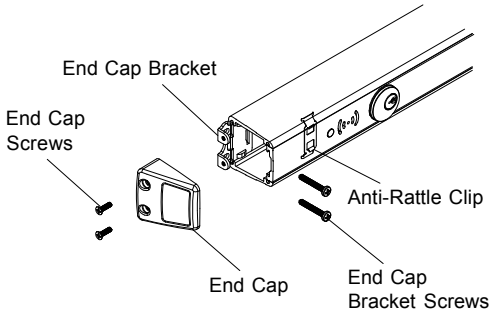
1. Insert 1-1/4" Mortise Cylinder with cylinder guard into the cover plate.
2. Thread cylinder lock nut onto mortise cylinder.
3. Make sure to fasten down tight.

3 WIRE CONNECTION.



Slide cover plate half way into place while routing and connecting three cables.
Route three cables while slowly sliding cover plate into place.

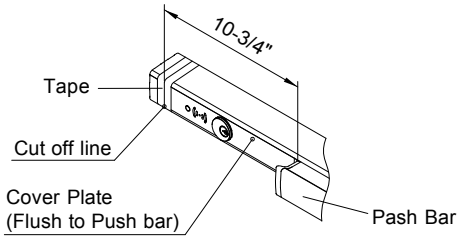
4 INSTALL MOUNTING BRACKET AND END CAP.



After all wire connections are made and device checked for operation, install the end cap bracket, end cap and label .
NOTE: Door sign is in cardboard tube

Go to "Operation" for testing and troubleshooting.

5 CUT DEVICE (IF REQUIRED).

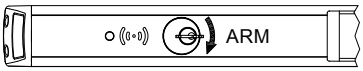


NOTE: Length measured from push bar to cutoff line must not be less than 10-3/4".

Delayed Egress Exit Device Installation Instructions (Page 6)

OPERATION

The DE device is designed to sound an alarm when activated and keep the door locked for 15 seconds before allowing passing. In order to make sure the DE device functions properly, perform actions No.1 through No.7 described in the following table and check if your product functions matches with the descriptions shown. If it does not, see "Troubleshooting".



RHR shown
(LHR opposite)

ARMING THE DE DEVICE:
With power applied, turn the key clockwise. The LED indicator will illuminate for 10 seconds and after it starts flashing quickly, the pushbar will lock. (default operation)

SUMMARY OF DELAYED EGRESS EXIT DEVICE MODES					
Action	**Mode**	**Pushbar**	**Red LED**	**Alarm**	**Duration**
1. Turn on device with key switch (turn key clockwise)	Rearm	Unlocked	On solid	Off	Rearm time (0~28 seconds)
2. Rearm time expires	Armed	Locked	Slow flash	Off	Continuous
3. Press pushpad	Release delay	Locked	Fast flash	On	15 seconds
4. 15 seconds release delay expires	Armed	Unlocked	Fast flash	On	Continuous
5. Turn off key switch or activate EI (external inhibit)	Inhibit	Unlocked	Off	Off	Returns to rearm mode when key switch turned on or EI reset
6. Fire alarm contacts open	Alarm	Unlocked	Fast flash	On (if option switch No. 8 is off)	Continuous (turn off key switch to clear)
7. Door position switch contacts open	Alarm	Unlocked	On solid	On	Continuous (turn off key switch to clear)

NOTE: 1. When door position switch is used, the DE device will arm 2.5 seconds after door closes.
2. The DE device default rearming time is 10 seconds.

TROUBLESHOOTING

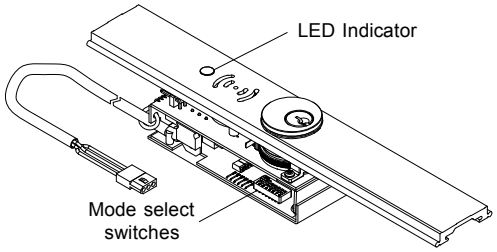
Turn the DE device off and on using key switch. Identify the problem encountered in the following table and apply the corresponding solution. After troubleshooting, check device function as instructed in "Operation" section.

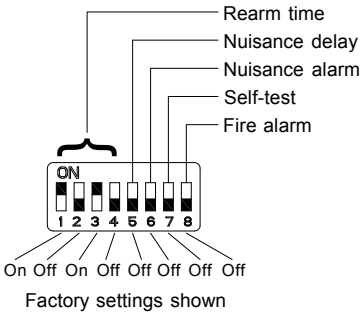
MODE SELECT SWITCHES		
Symptom	**Problem**	**Solution**
Red LED does not light	Power not reaching DE device	Replace/reset AC fuse/circuit breaker; check power supply input/output voltages; check input voltage at DE device cable connector
Red LED flashes fast and horn sounds	Fire alarm contacts open	Connect normally closed fire alarm contacts between red and orange wires
Red LED flashes once	External inhibit switch setting error	Check external inhibit switch and contacts between red and white wires
Red LED on solid then flashes fast and horn sounds	1. Push bar pressed 2. Push bar switch disconnected	1. Release the push bar 2. Connect pushbar switch connectors (see step No. 3 of "Installation")
Red LED on solid, horn sounds, and solenoid pulls in for one second (two sharp sounds)	1. Door open 2. Door position switch contacts open 3. Door position function not used and wires not terminated properly	1. Close door 2. Connect normally closed door position switch contacts between red and green wires 3. If door position switch not used, connect red and white green together

Delayed Egress Exit Device Installation Instructions (Page 7)

OPTIONS

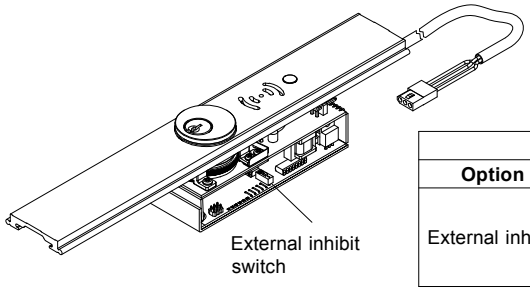
Rearming time settings can be made through switches within the Delayed Egress module. Before setting, turn off the DE device. Changes will take effect once the DE device is turned on.





Factory settings shown

MODE SELECT SWITCHES	
Option	**Function**
Rearm time	Switches No.1 through 4 determine the amount of time able to pass through after using key or external inhibit device (for details see table below)
Nuisance delay	If switch No. 5 is on, it is required to push and hold the pushbar for at least 2 seconds to activate alarm.
Nuisance alarm	If switch No.6 is on, during nuisance delay the pushbar will set off the DE device horn; usage must be in accordance to local code.
Self-test	If switch No.7 is on, a self-test is performed when the device is turned on; for normal operation, set this switch in off position.
Local fire alarm	If switch No. 8 is on, the internal horn will go off during a fire alarm.



Factory settings shown

EXTERNAL INHIBIT SWITCH	
Option	**Function**
External inhibit	If switch is on, the external inhibit must be set with normally open contacts.
	If switch is off, the external inhibit must be set with normally closed contacts.

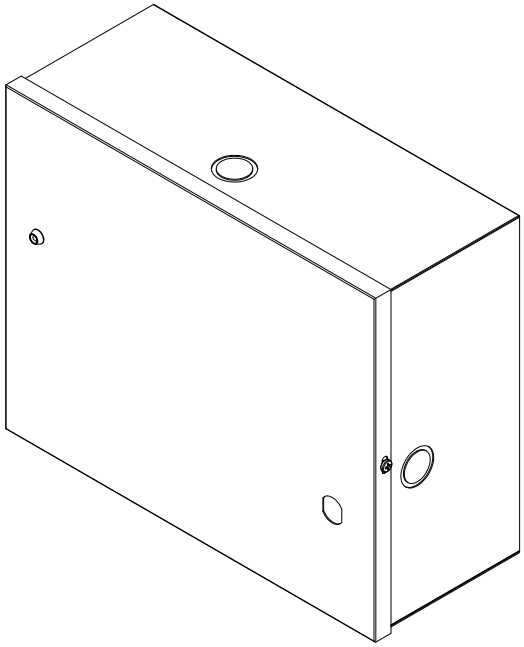
REARM TIME SWITCH SETTINGS																
Seconds	0	2	4	6	8	10	12	14	16	18	20	22	24	26	28	infinite
Switch No. 1	off	on	off	on	off	on	off	on	off	on	off	on	off	on	off	on
Switch No. 2	off	off	on	on	off	off	on	on	off	off	on	on	off	off	on	on
Switch No. 3	off	off	off	off	on	on	on	on	off	off	off	off	on	on	on	on
Switch No. 4	off	off	off	off	off	off	off	off	on	on	on	on	on	on	on	on

NOTE: 1. Set the rearming time a few seconds longer than the time needed to open and close the door to make sure the DE device will always arm after the door closes.
2. When the rearming time is infinite, the device must be applied along with door position switch for rearming to occur.
3.When the rearming time is infinite, the door must be open and closed once after the device is turned on, otherwise it won't activate.
4. If a door position switch is used, the DE device initial rearming time setting will be switched to an 2.5 second interval.
5. For proper operation, the rearming time between the DE devices must differ by at least 2 seconds.

WD-OD003(045) REV. 08/19-A

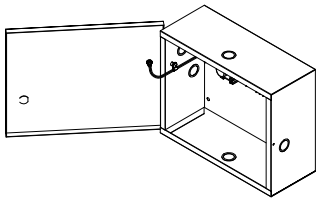
QPS101 / QPS102 CLASS 2 POWER SUPPLY

INSTALLATION INSTRUCTIONS



QPS101/QPS102 Class 2 Power Supply Installation Instructions (Page 2)

QPS101 / QPS102 Class 2 Power Supply



SPECIFICATIONS:

INPUT : QPS101 - 120VAC, 1.0 Amperes 50 / 60 Hz
QPS102 - 240VAC, 0.5 Amperes 50 / 60 Hz

OUTPUT : 24VDC, 2 Amperes
12VDC, 4 Amperes

ELR Compatible - 24VDC, 16 Amp-inrush (0.3 sec.).
When using ELR device: Q100-2 option board required - see page 7-8.
Output protected with 4 A slow blow, 250V, fuse (F2)

⚠ CAUTION!

FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, FOR REPLACEMENT OF FUSE, PLEASE RETURN TO MANUFACTURER / AUTHORIZED DEALERS FOR SERVICING.

NOTE: During battery backup (Q100-BB required),
Output range becomes 10.92-12VDC, 4 A or 22.2-23.9VDC, 2 A.

ENCLOSURE: 10" H x 12.5" W x 5.0" D Hinged cover box
20 GA steel, five(5) 1/2" x 3/4" knockouts total

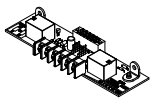
TEMPERATURE: 32-120 degrees F (0-49 degrees C)

RELATIVE HUMIDITY: 93%RH

NOTE:
1. If installing a QPS101 with an ELR device, see Page 7-8 of these instructions and exit device instructions under "optional equipment - ELR".
2. If installing QPS101 with a DE device, see DE instructions.
3. UL Listed (voltage range compatible) devices may be used.
4. For Canadian applications, the device must be installed in accordance with Canadian Electrical Code, Comply with CAN/CSA-C22.2 No. 107.1.
5. Product wiring methods shall be in accordance with NFPA70.
6. For indoor use only.
7. For Attack Class I installation only.

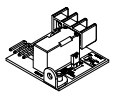
Q100-2, Q100-FA, Q100-BB, Q100-K Options

OPTIONS FUNCTION



No.6-32 x 15/32"
2 PCS

Q100-2 Two (2) Zone
Controller Board (Page 7~8)



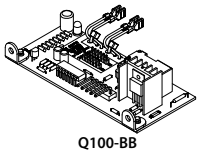
No.6-32 x 15/32"
1 PCS

Q100-FA
Fire Alarm Board (Page 5~6)

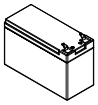
Buckle piece
1 PCS

Q100-K
Key Lock (Page 6)

Keys
1 PCS



Q100-BB
Battery Backup Board (Page 4)



Batteries
2 PCS

No.6-32 x 15/32"
2 PCS

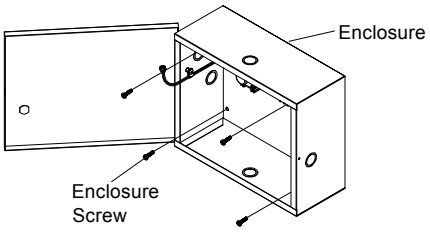
Cable Clamp
1PCS

No.8-32 x 7/32"
1PCS

QPS101/QPS102 Class 2 Power Supply Installation Instructions (Page 3)

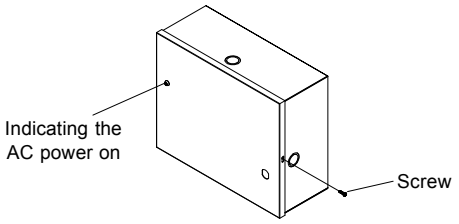
QPS101 / QPS102 Class 2 Power Supply

1 MOUNT POWER SUPPLY.



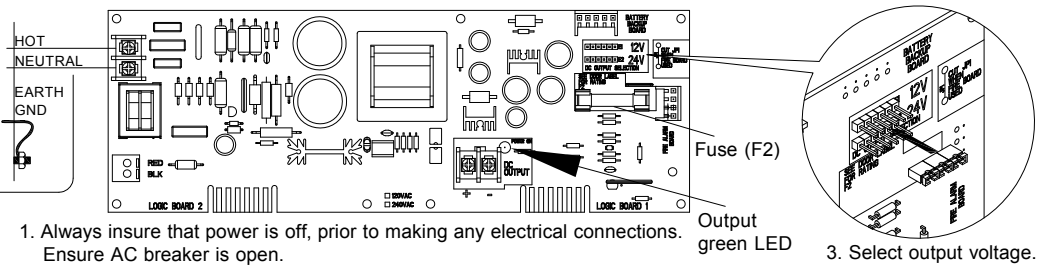
Install power supply with fore(4) screw.

NOTE: 1. For surface mounting only.
2. AC power wire must be installed with conduit.



To secure door closed, install screw as shown.

2 AC POWER CONNECTION.



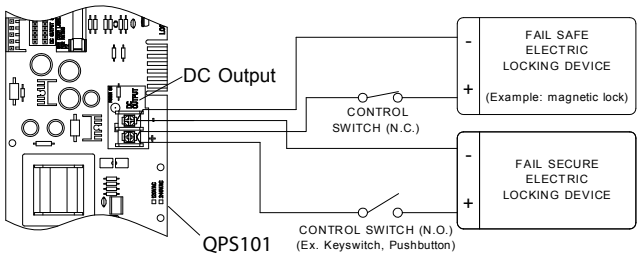
1. Always insure that power is off, prior to making any electrical connections. Ensure AC breaker is open.
2. For supply connections, use wire suitable for at least 90°C temperature.
3. Select output voltage (12 VDC or 24 VDC).
4. Connect AC voltage to two(2) 6" black and white leads (hot and neutral) or remove the 6" leads and apply the AC voltage directly to terminal block.

NOTE: Maintain 1/4" spacing between AC input wiring and any other wiring (such as DC output wiring, switch contact wiring, etc.).

5. Close breaker to turn on power supply,verify green LED on cover is illuminated.
6. Verify green LED is illuminated, indicating output voltage is present.

NOTE: QPS101 supports optional logic cards (such as Q100-2 board) which perform door control and monitoring function.

3 BASIC WIRING INFORMATION.



Fail Safe: Upon ultimate power loss, the locking device will unlock. Use of the QPS101 controlled output is not intended to replace the function of Listed panic hardware for emergency exit.

Fail Secure: Upon ultimate power loss, the locking device will remain locked. Install after consulting with local authority having jurisdiction. Listed panic hardware may be required to allow emergency exit from the secured area. use of the QPS101 controlled output is not intended to replace the function of Listed panic hardware for emergency exit.

1. Temporarily remove AC voltage from QPS101 while connecting loads to output terminal block.
2. Wire Devices.
3. See "TROUBLE SHOOTING" table at end of instructions if devices do not work properly.

QPS101/QPS102 Class 2 Power Supply Installation Instructions (Page 4)

Q100-BB BATTERY BACKUP BOARD

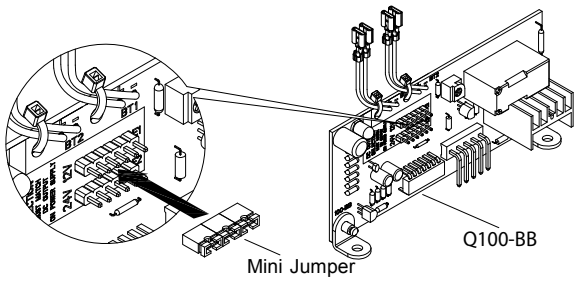
SPECIFICATIONS:

BATTERY BACKUP TIME: 2 hours at 100% load

BATTERIES: Two(2) 12V,7AH Lead Acid

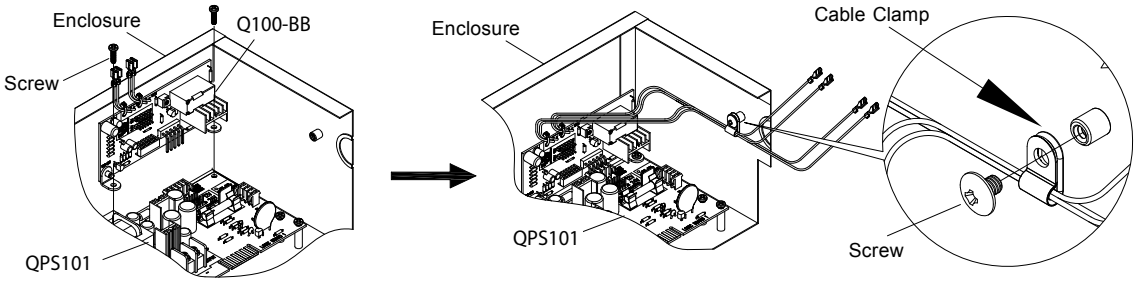
CAUTION: Charge only specifications:12V , 7AH Lead acid batteries. Other types of batteries may burst causing personal injury and damage. Observe the proper polarity when connecting the batteries.

1 ENSURE AC BREAKER IS OPEN. PREPARE BATTERY BACKUP BOARD FOR POWER SUPPLY.



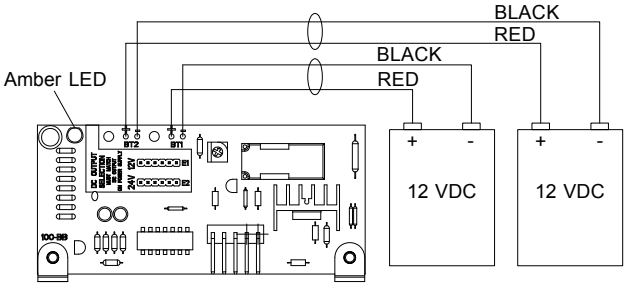
1. Ensure AC breaker is open.
2. Select output voltage. Must match power supply voltage (12 VDC or 24 VDC).

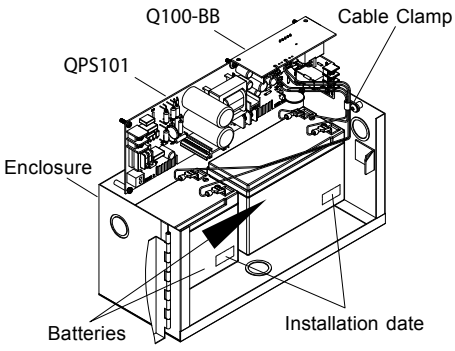
2 INSTALL Q100-BB ONTO QPS101.



1. Install Q100-BB onto QPS101.
2. For Q100-BB wiring, Install Cable Clamp on Enclosure as shown.

3 CONNECT Q100-BB LEADS TO BATTERIES.





1.Being careful to connect RED to"+"and BLACK to"-".
2.Set battery installation date.
3.Place batteries in bottom of enclosure.
4.Close AC breaker. If the batteries is low, the amber LED on.

QPS101/QPS102 Class 2 Power Supply Installation Instructions (Page 5)

Q100-FA FIRE ALARM BOARD

The Q100-FA option consists of one printed circuit board that plugs onto the QPS101 power supply.
In the event a fire alarm is active, this board will remove power from the QPS101 output and any logic board output.
The Fire Alarm board can be configured for Automatic or Manual reset.

NOTE: 1. Listed Panic Hardware shall be used to allow emergency exit from the protected area.
2. Fire Alarm, then all wirings between FACP and Power Supply need to be wired for Fail Safe.
3. Relay rated for resistive load.

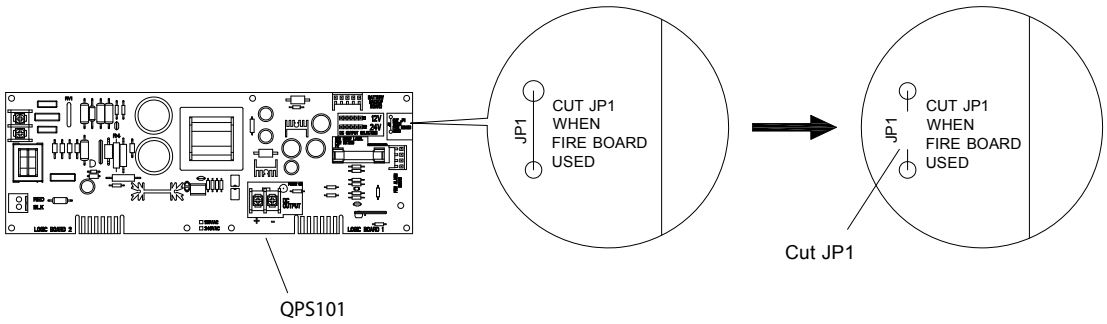
SPECIFICATIONS:

AUTOMATIC RESET: After a fire alarm condition is terminated, the Q100-FA option will immediately restore power to all loads. The Q100-FA is shipped in the Automatic configuration.

MANUAL RESET: After a fire alarm condition is cleared (or following a power outage), the Q100-FA option will not restore power until a reset device has been toggled.

RESET DEVICE CONTACTS: 24 VDC, 0.1 A rating required.

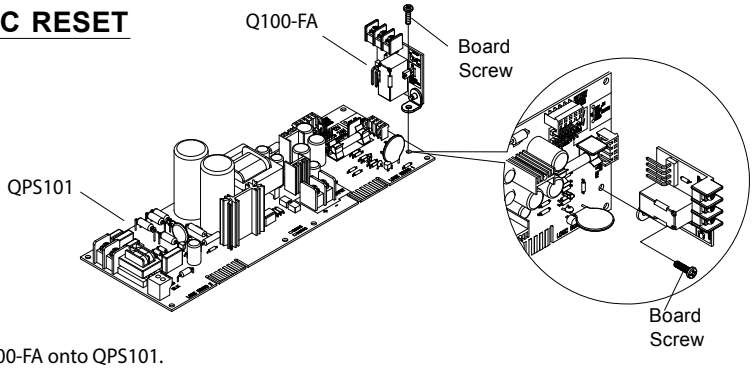
1 ENSURE AC BREAKER IS OPEN, (DISCONNECT BATTERIES IF YOU HAVE THIS OPTION).
CUT JUMPER (JP1) FOR FIRE ALARM BOARD.



Jumper labeled "CUT JP1 WHEN FIRE BOARD USED" on the left side of the JP1 and cut.

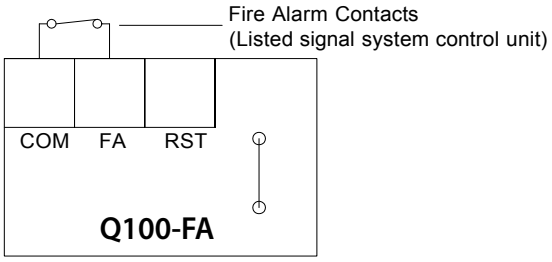
2 PERPARE FIRE ALARM BOARD FOR POWER SUPPLY.
CONFIGURE Q100-FA AS AUTOMATIC OR MANUAL RESET.

AUTOMATIC RESET



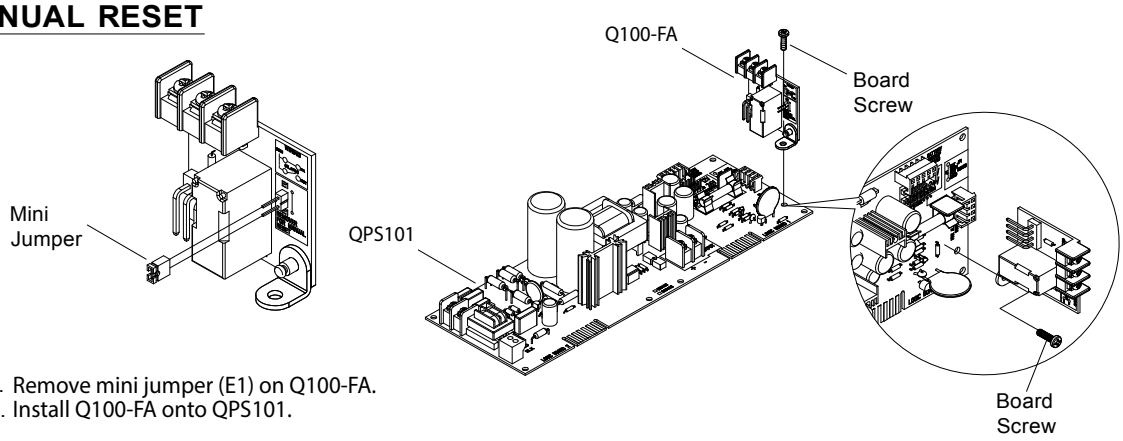
1. Install Q100-FA onto QPS101.

QPS101/QPS102 Class 2 Power Supply Installation Instructions (Page 6)

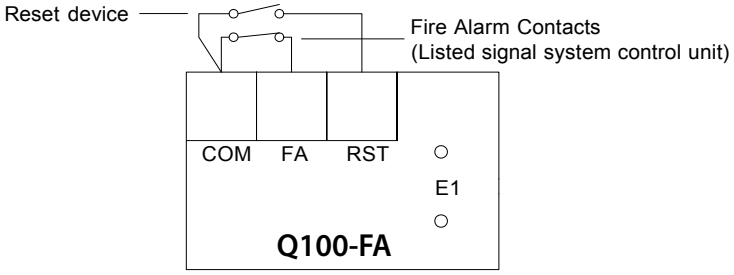


2. Connect normally closed fire alarm contacts.
3. Restore AC input voltage and reconnect batteries (if you have this option). The green LED on the power supply will illuminate.

MANUAL RESET



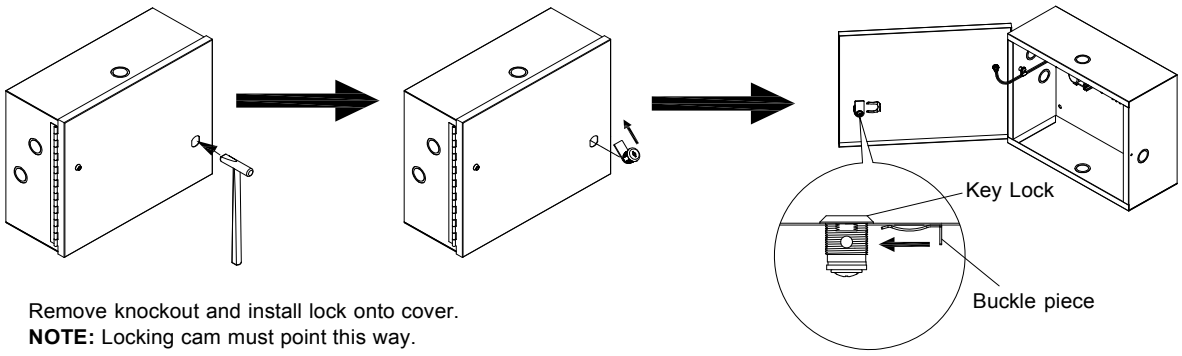
1. Remove mini jumper (E1) on Q100-FA.
2. Install Q100-FA onto QPS101.



3. Restore AC input voltage and reconnect batteries (if you have this option).
4. Momentarily close the reset device contacts. The green LED on the power supply will illuminate.

NOTE: If the reset device contacts are left in the closed position, the Q100-FA will not work properly.

Q100-K KEYLOCK OPTION



Remove knockout and install lock onto cover.
NOTE: Locking cam must point this way.

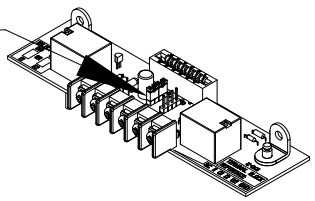
QPS101/QPS102 Class 2 Power Supply Installation Instructions (Page 7)

Q100-2 INSTALLATION

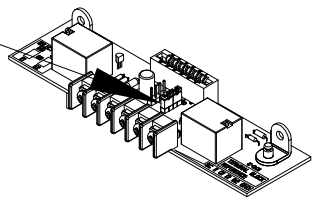
The Q100-2 option provides control over two zones. One or two Q100-2 boards can be installed on each QPS101.
NOTE: 1. Q100-2 board only provides to 24 VDC output.
2. Relay rated for 0.6 PF induction load.

1 ENSURE AC BREAKER IS OPEN, (DISCONNECT BATTERIES IF YOU HAVE THIS OPTION).
SELECT BETWEEN INDIVIDUAL OR SEQUENTIAL OUTPUTS.

For Individual (IND) operation, install jumper on E1 as shown.



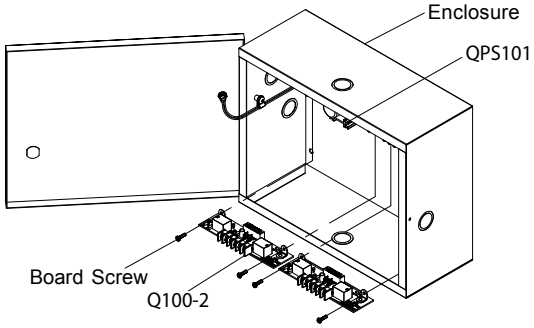
For Sequential (SEQ) operation, install jumper on E2 as shown.



INDIVIDUAL OUTPUTS (must be field programmed):
Input 1 will control output 1.
Input 2 will control output 2.

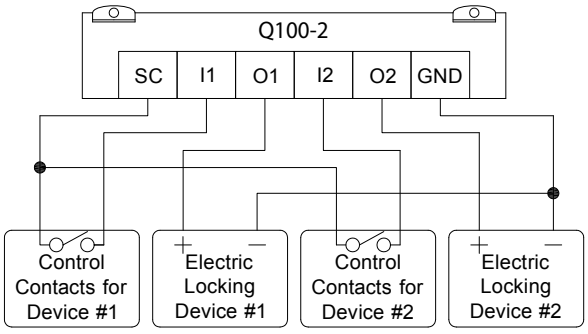
SEQUENTIAL OUTPUTS (factory shipped):
Input 1 will sequence both outputs. (O2 followed by O1)

2 INSTALL Q100-2 ONTO EITHER QPS101 RECEPTACLE AS SHOWN.

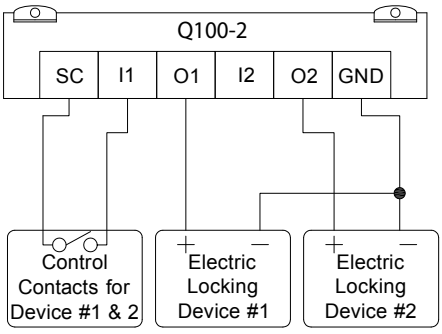


3 CONNECT INPUTS AND OUTPUTS (WIRE AS INDIVIDUAL OR SEQUENTIAL MODE).

TYPICAL WIRING - INDIVIDUAL MODE



TYPICAL WIRING - SEQUENTIAL MODE



NOTE: When using an ELR device :
Use 12 AWG stranded wire for outputs O1 and O2 between QPS100 and ELR device (200' run maximum).
Use 14 AWG stranded wire for outputs O1 and O2 between QPS100 and ELR device (100' run maximum).
Use 18 AWG stranded wire for control contact input I1 and I2 (1000' run maximum) to actuator button, access control devices, etc.

QPS101/QPS102 Class 2 Power Supply Installation Instructions (Page 8)

4 APPLY AC VOLTAGE TO QPS101 AND TEST DEVICES. OPERATION SUMMARY

Q100-2 OPERATION SUMMARY				
MODE	INPUT		OUTPUT	
	I1	I2	O1	O2
SEQUENTIAL	OV	OV	OV	OV
	24V	=I1	24V	24V
	=I2	24V	24V	24V
INDIVIDUAL	OV	OV	OV	OV
	OV	24V	OV	24V
	24V	OV	24V	OV
	24V	24V	24V	24V

All DC voltages referenced to Q100-2 ground terminal.

TROUBLE SHOOTING

SYMPTOM	CAUSE	SOLUTION
COVER GREEN LED OFF	No AC input voltage	See "QPS101 / QPS102 POWER SUPPLY"
NO QPS101 OUTPUT, GREEN LED OFF	No AC input voltage	See "QPS101 / QPS102 POWER SUPPLY"
	Output current exceeds max rating ⚠ See "CAUTION" below	1. Reduce output current. 2. Replace fuse F2. Use 4 A slow blow, 250V. ⚠ See "CAUTION" below.
	Q100-FA not properly connected	See "Q100-FA FIRE ALARM BOARD"
12V ON OUTPUT INSTEAD OF 24V OR VICE VERSA	Improper DC output selection	See "QPS101 / QPS102 POWER SUPPLY"
ELR DEVICE TRIES, BUT FAILS, TO PULL LATCHBOLT	Wire size too small from power supply to ELR device, or wire run too long	See "Q100-2 INSTALLATION"
	Device adjusted improperly	Consult factory

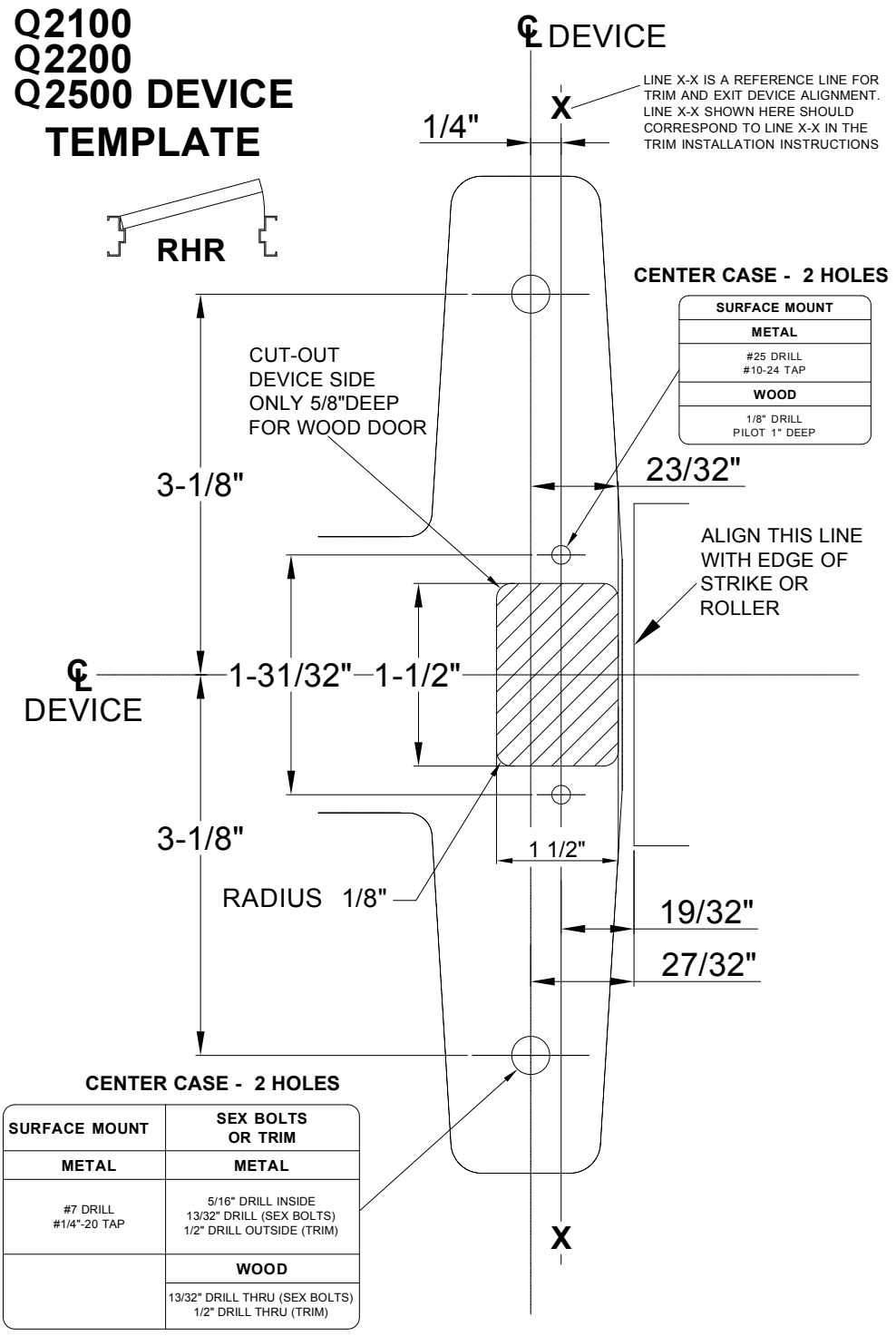
⚠ CAUTION!

FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, FOR REPLACEMENT OF FUSE, PLEASE RETURN TO MANUFACTURER / AUTHORIZED DEALERS FOR SERVICING.

WD-OD002(364)

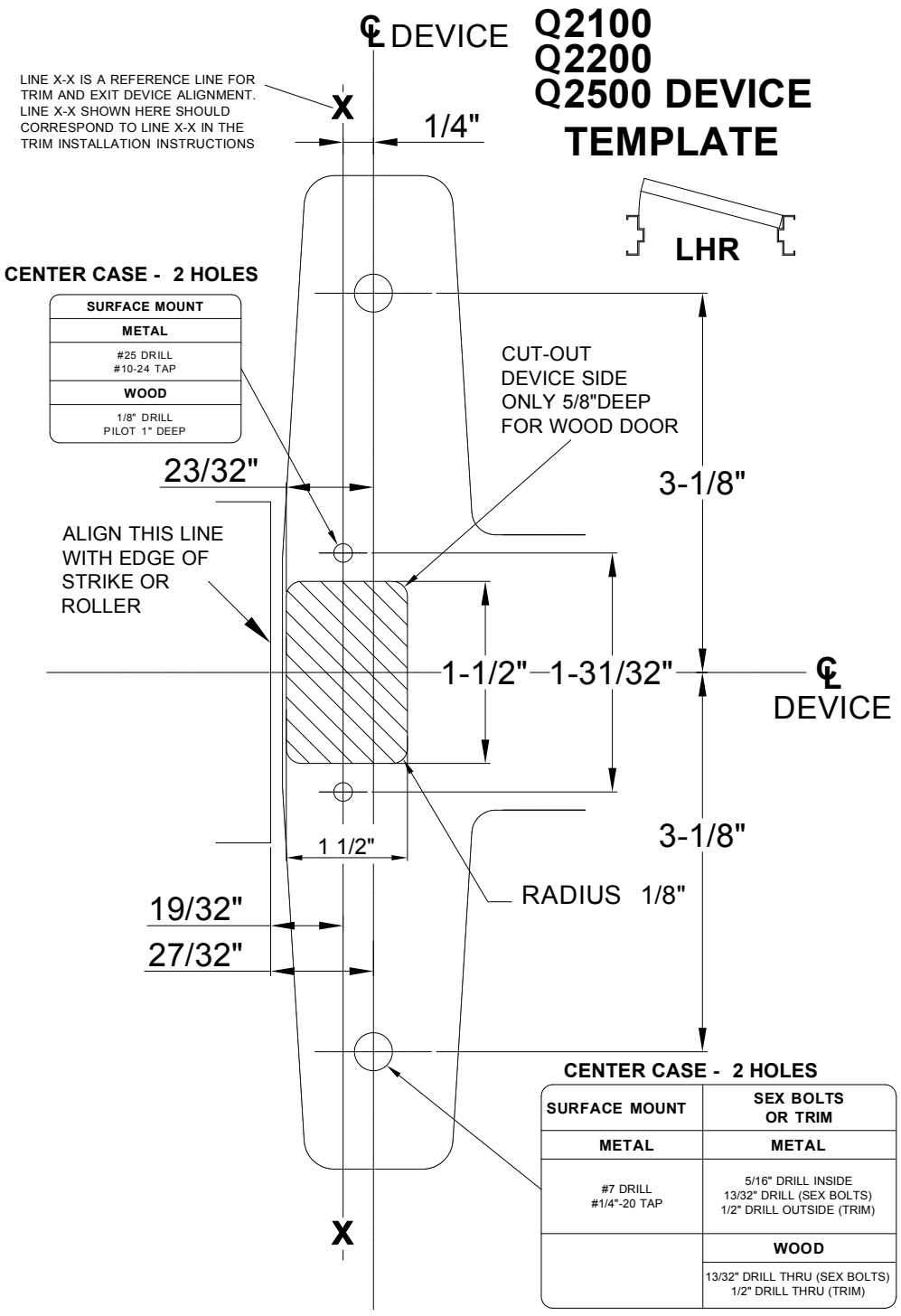
Templates

Preparation for Q2100/Q2200/Q2500 Device RHR



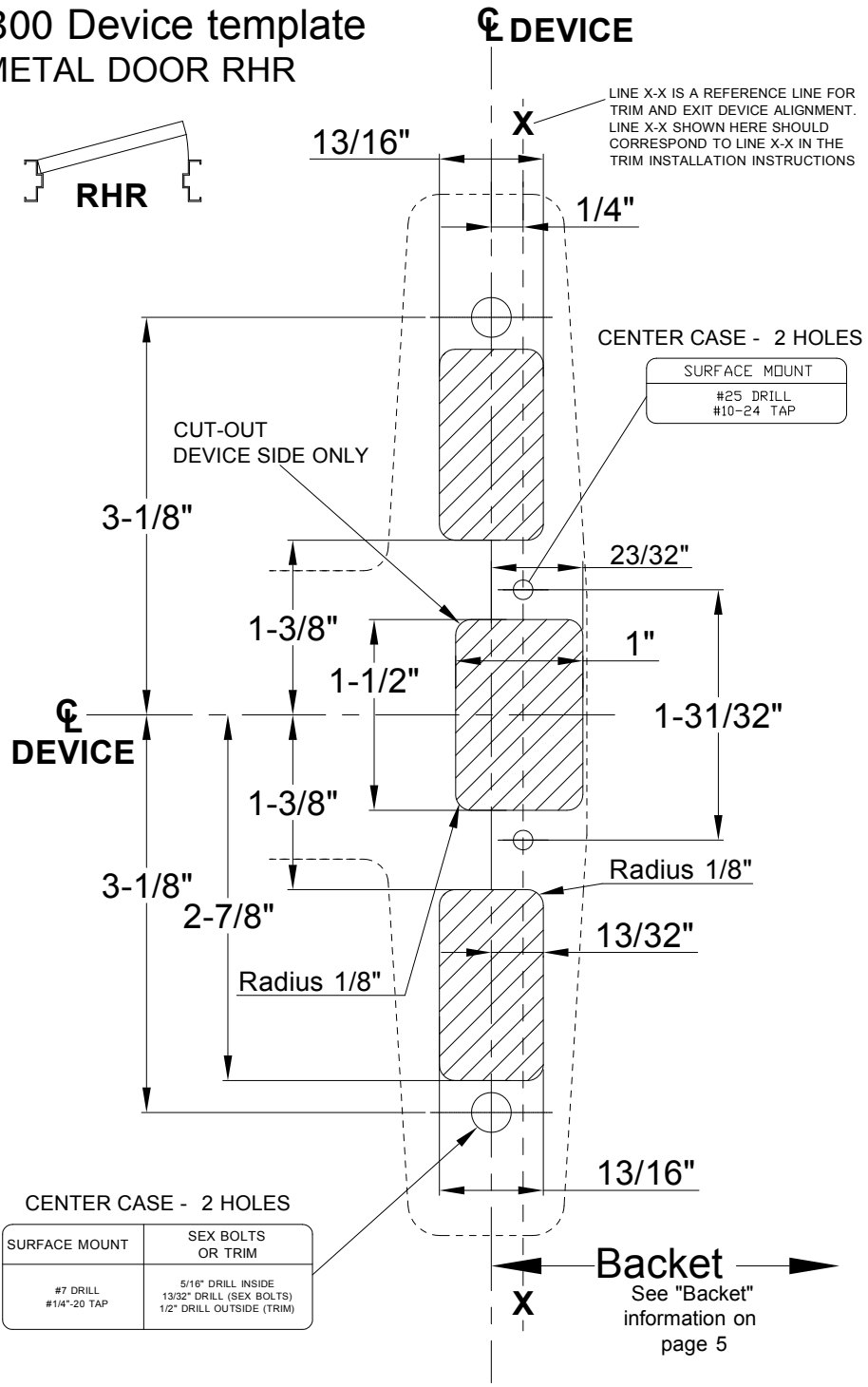
Templates

Preparation for Q2100/Q2200/Q2500 Device LHR



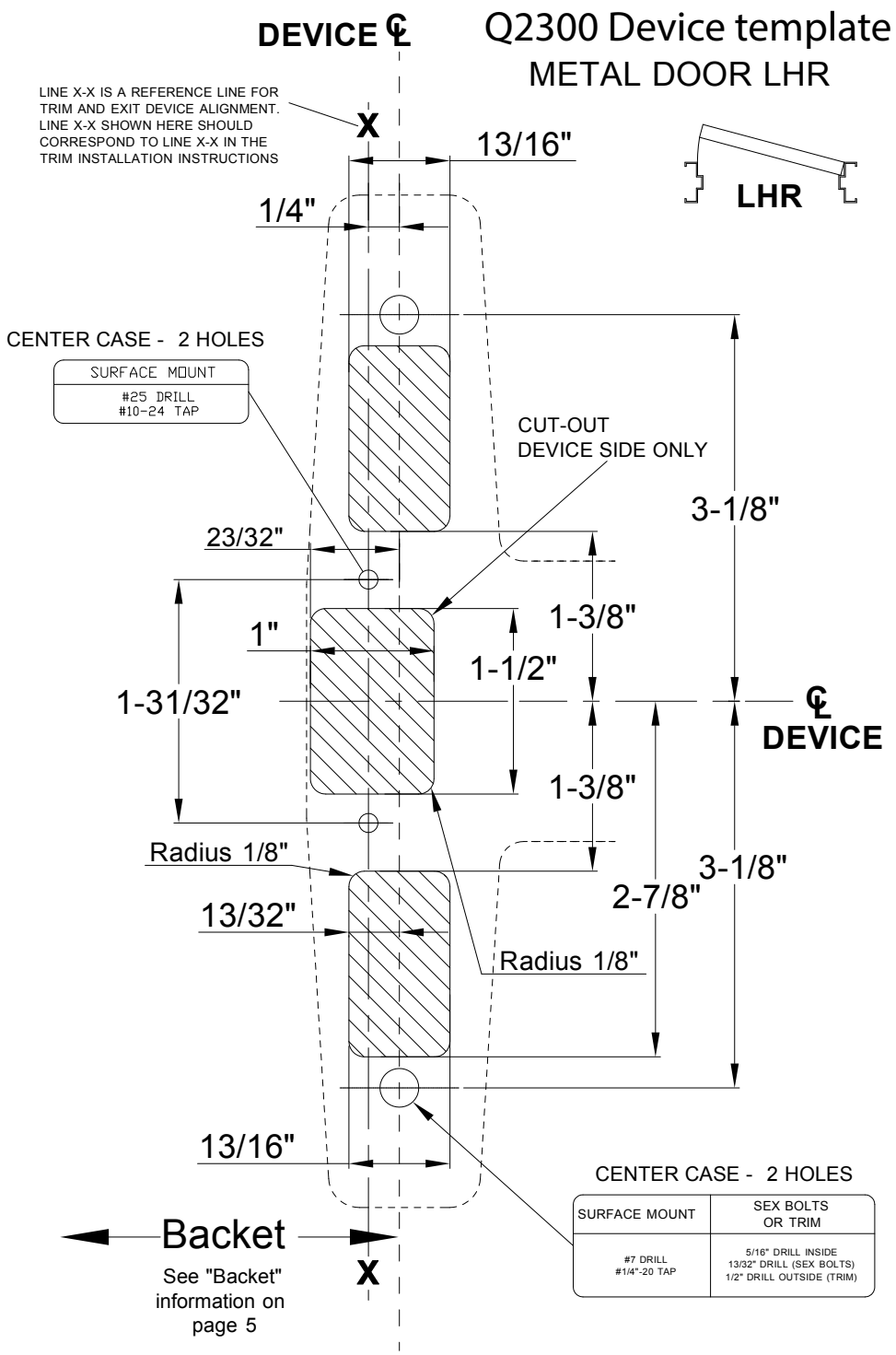
Templates

Preparation for Q2300 Device Metal Door RHR



Templates

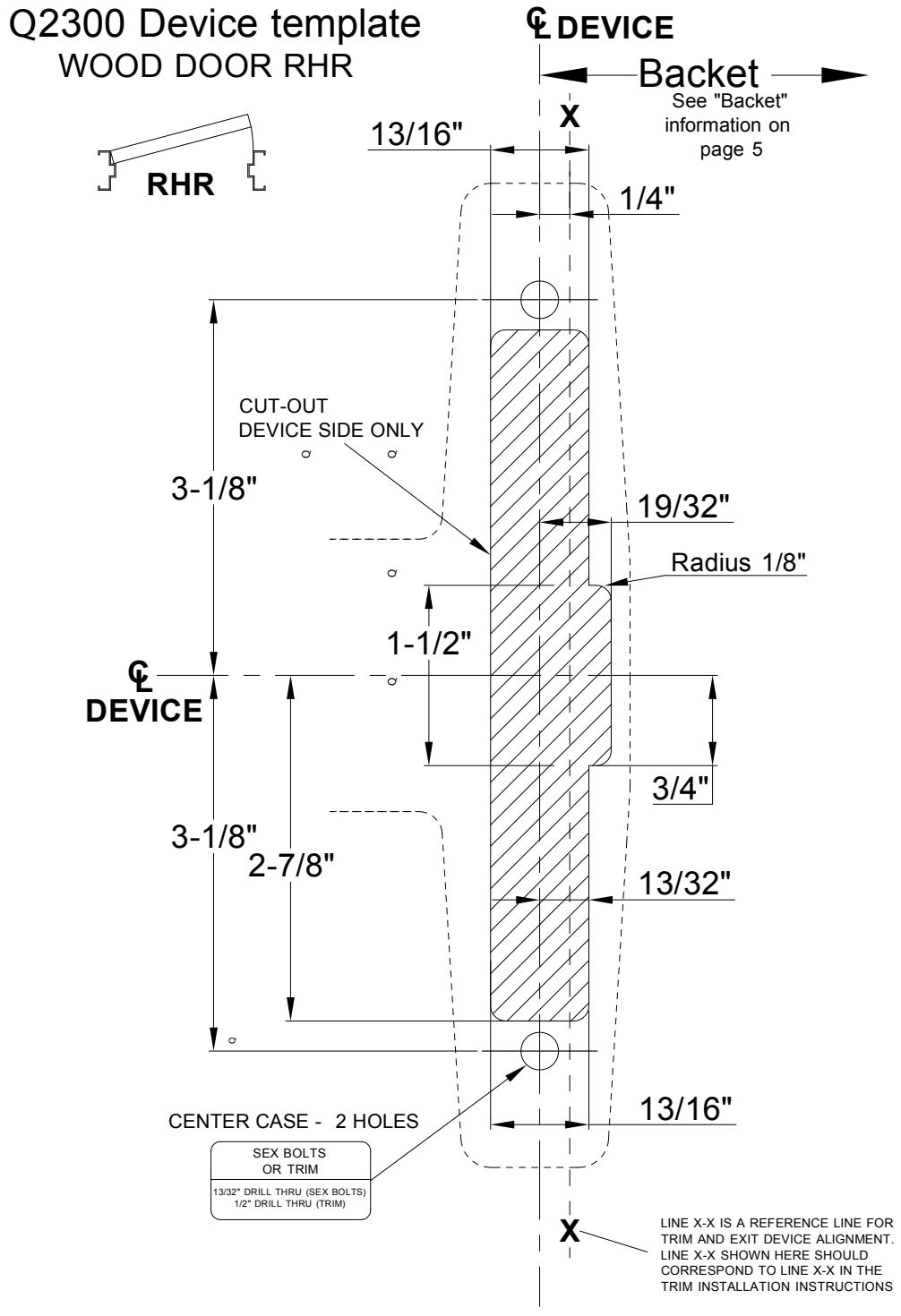
Preparation for Q2300 Device Metal Door LHR



WD-OD002(415)

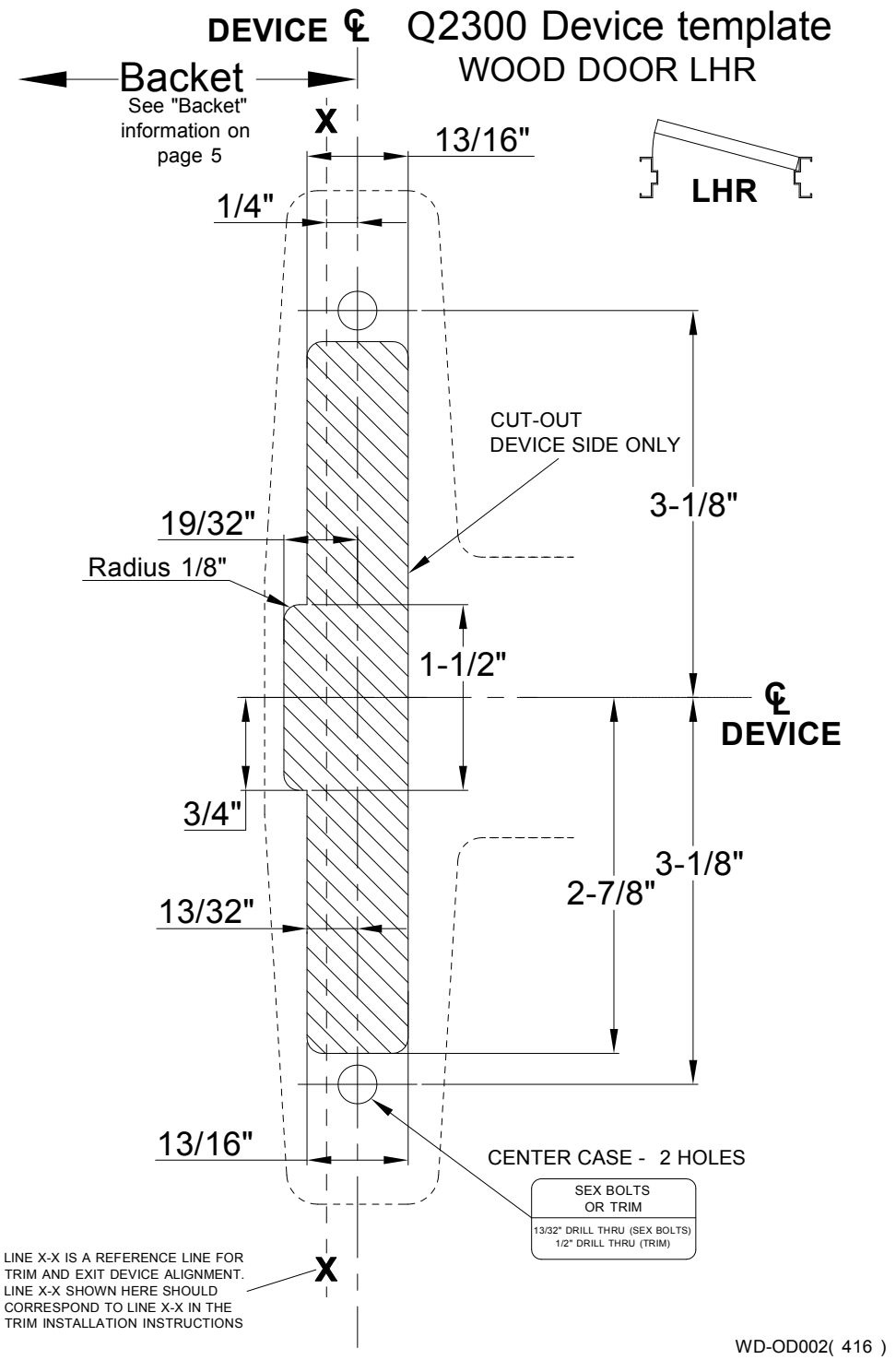
Templates

Preparation for Q2300 Device Wood Door RHR



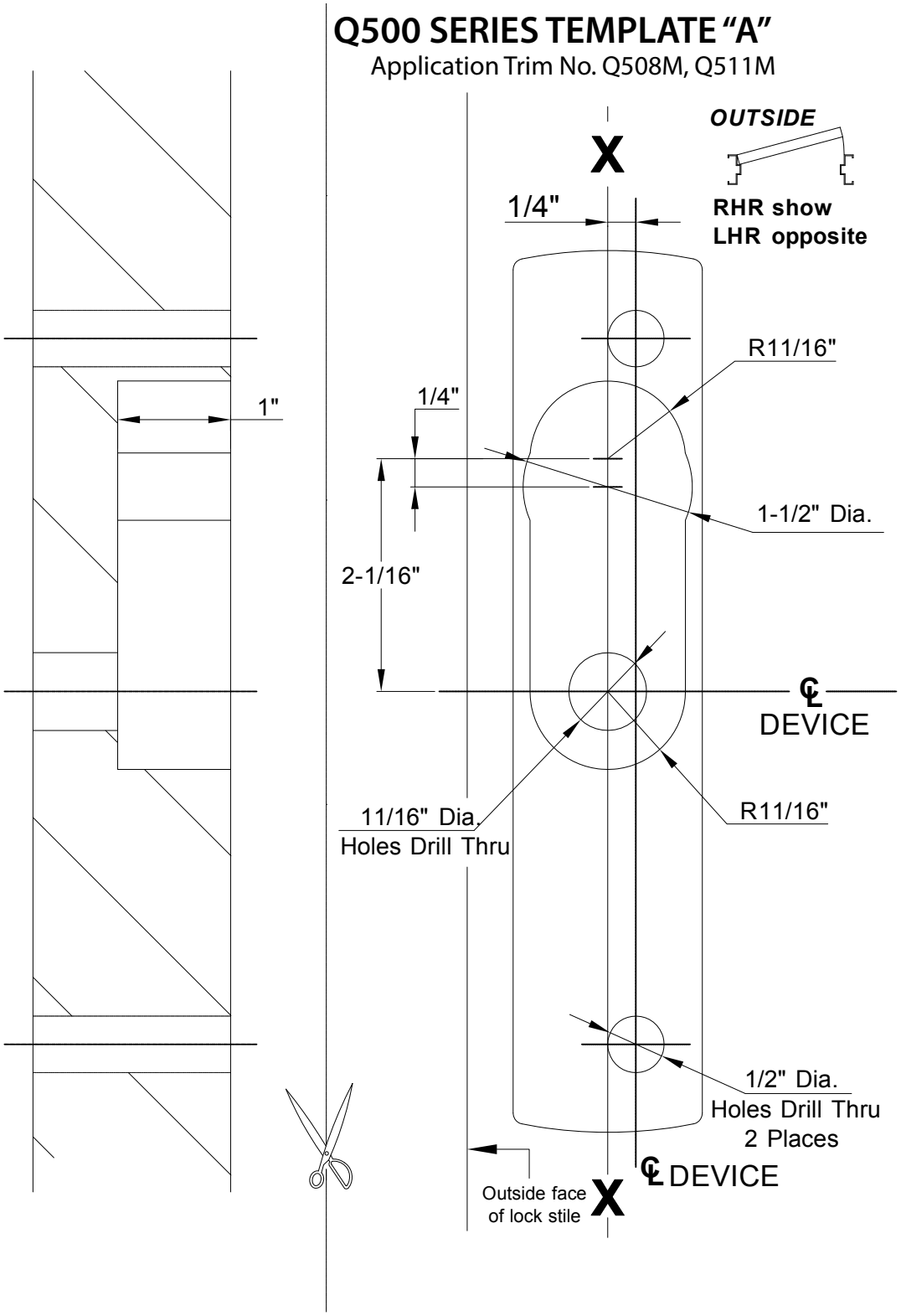
Templates

Preparation for Q2300 Device Wood Door LHR



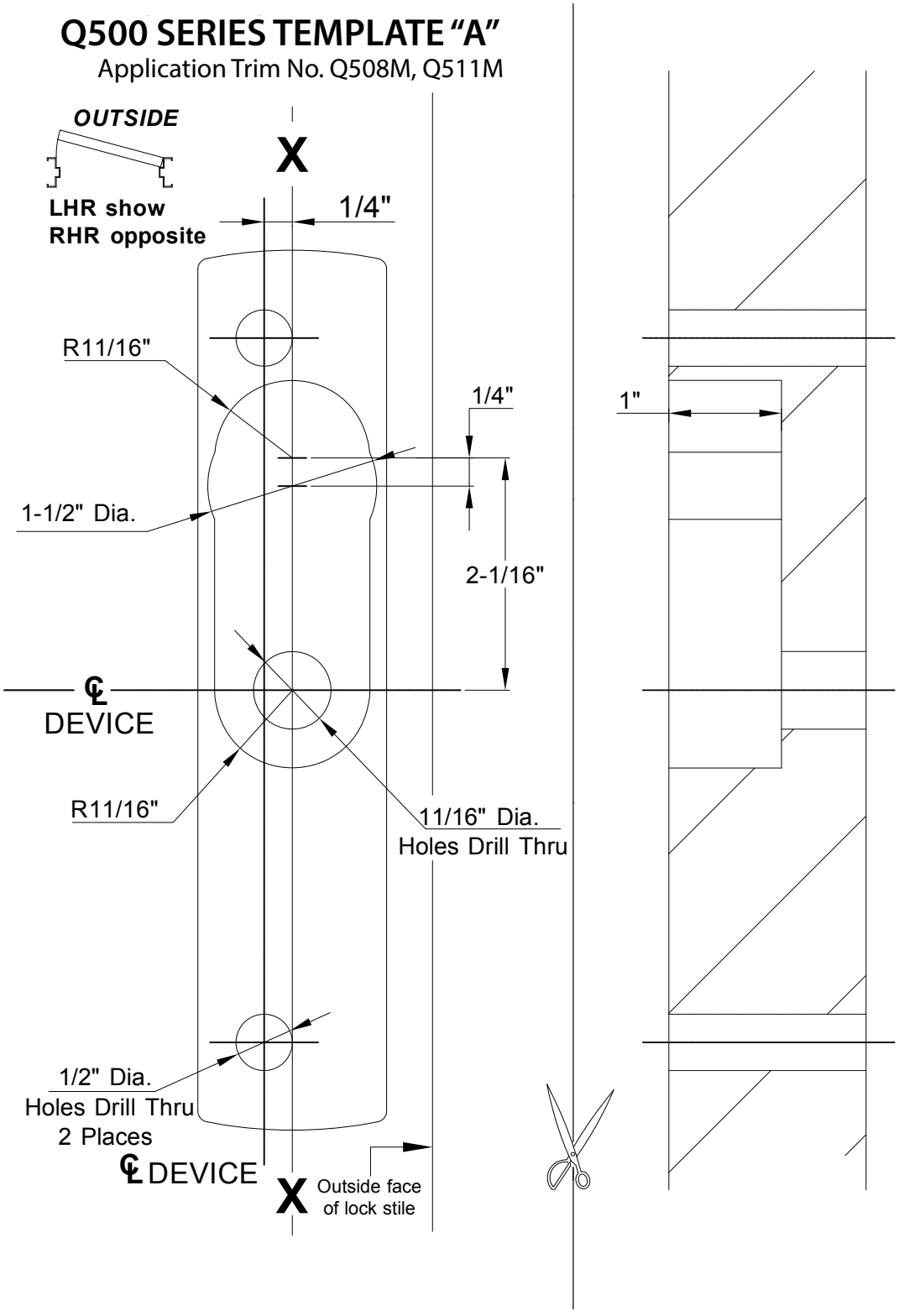
Templates

Preparation Q500 Series Trim for Q508M/Q511M RHR



Templates

Preparation Q500 Series Trim for Q508M/Q511M LHR

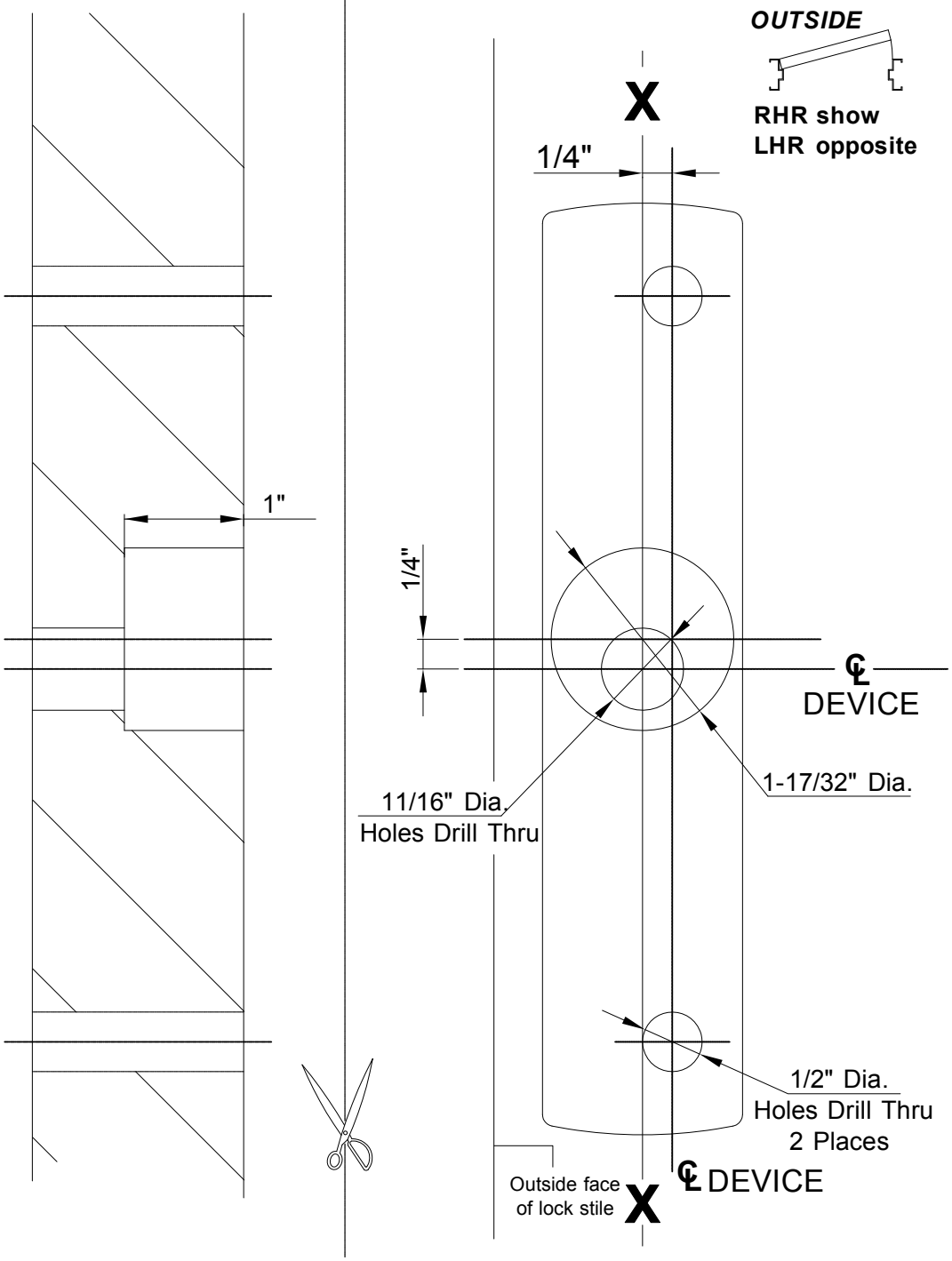


Templates

Preparation Q500 Series Trim for Q502, Q503R, Q509R, Q514, Q516 RHR

Q500 SERIES TEMPLATE "B"

Application Trim No. Q502, Q503R, Q509R, Q514, Q516

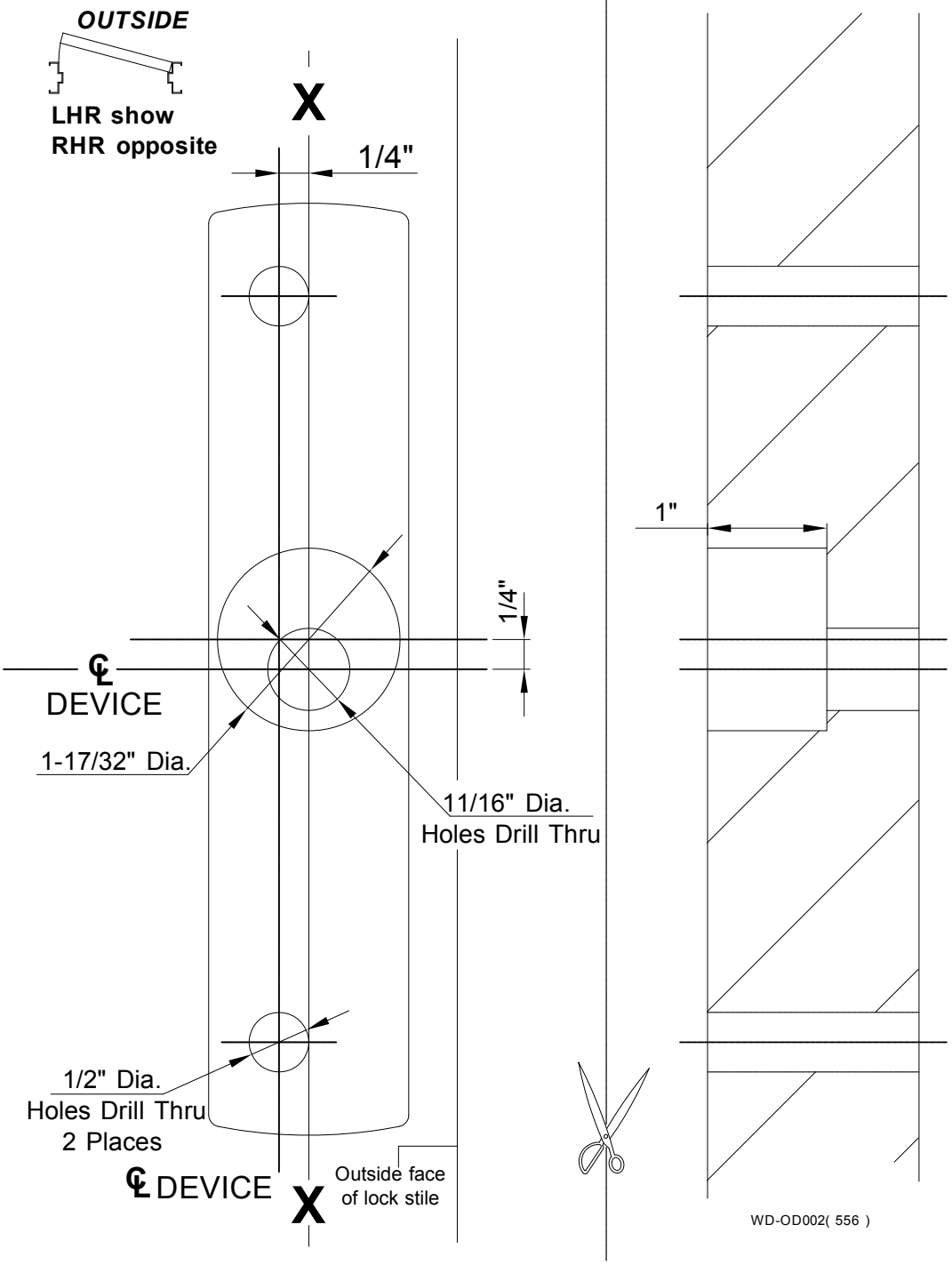


Templates

Preparation Q500 Series Trim for Q502, Q503R, Q509R, Q514, Q516 LHR

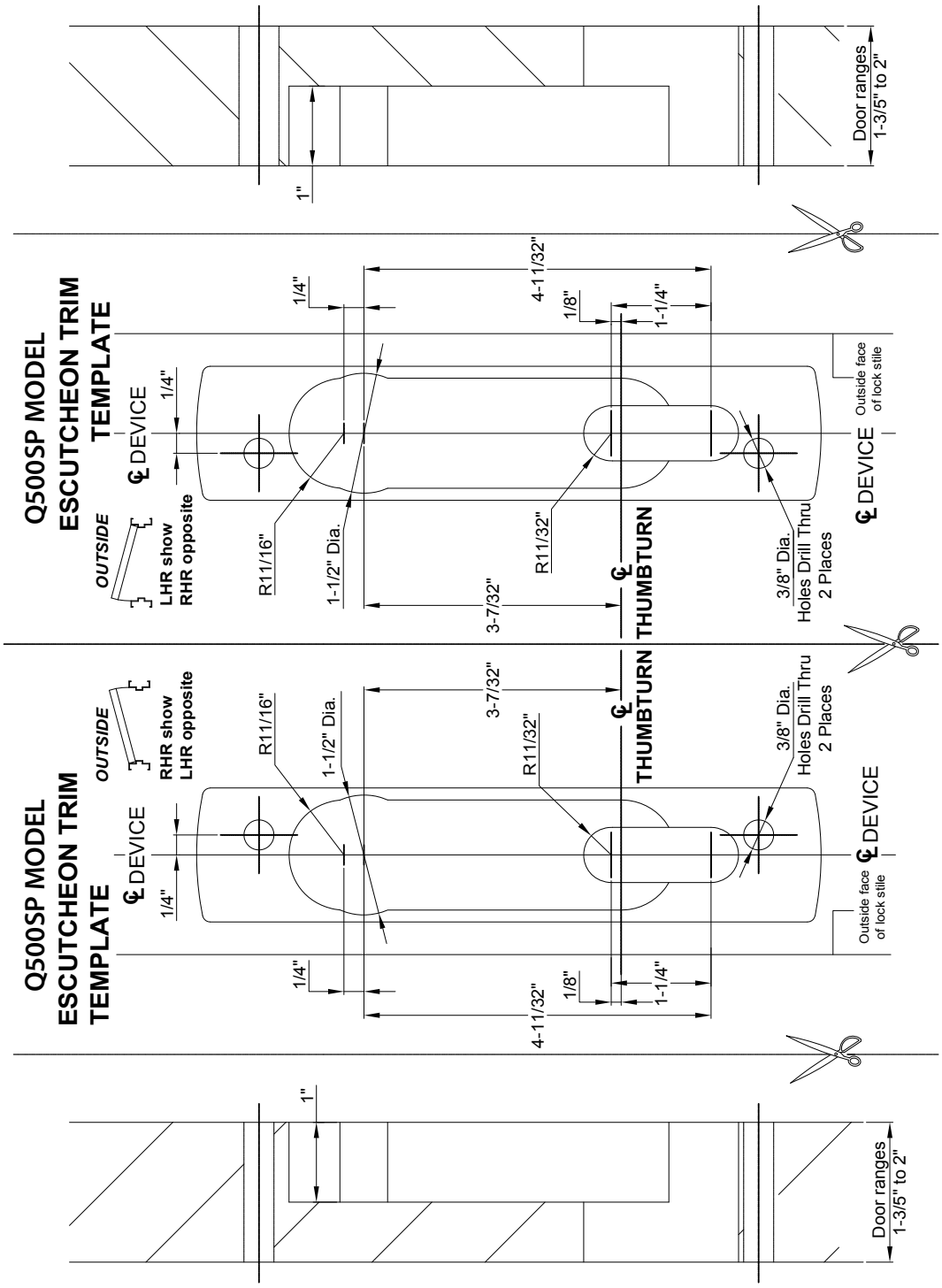
Q500 SERIES TEMPLATE "B"

Application Trim No. Q502, Q503R, Q509R, Q514, Q516



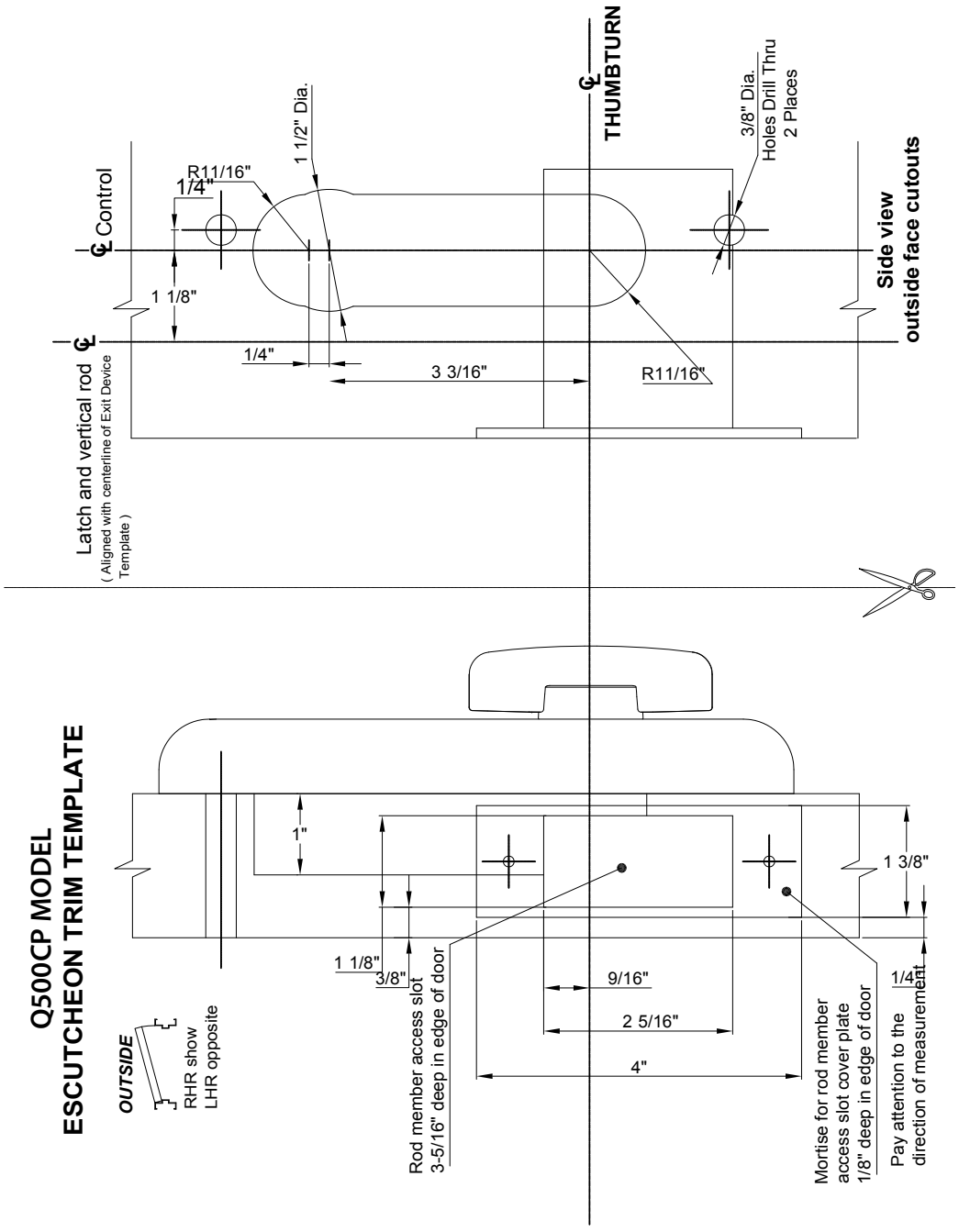
Templates

Preparation of Q500SP Series Trim



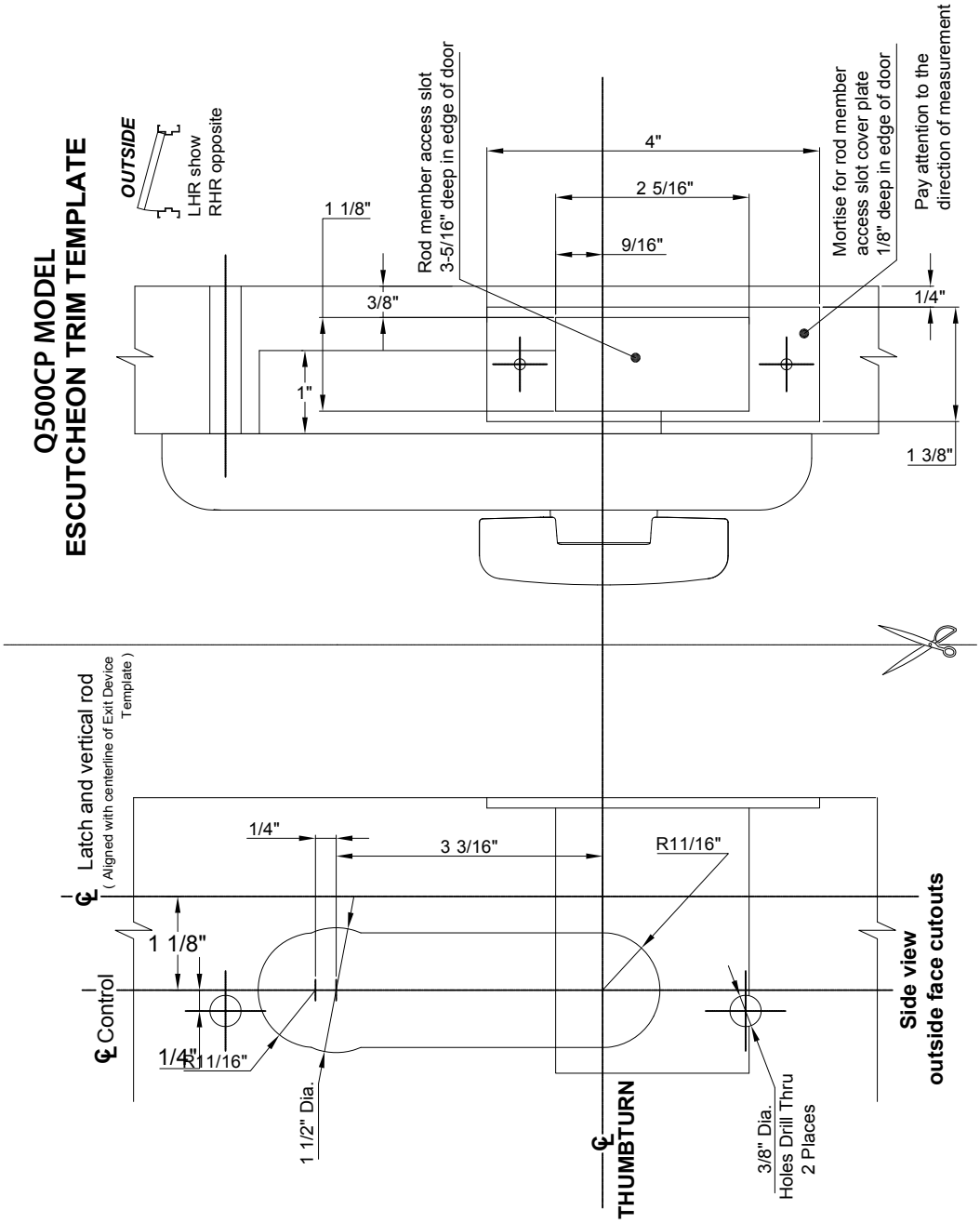
Templates

Preparation of Q500CP Series Trim RHR



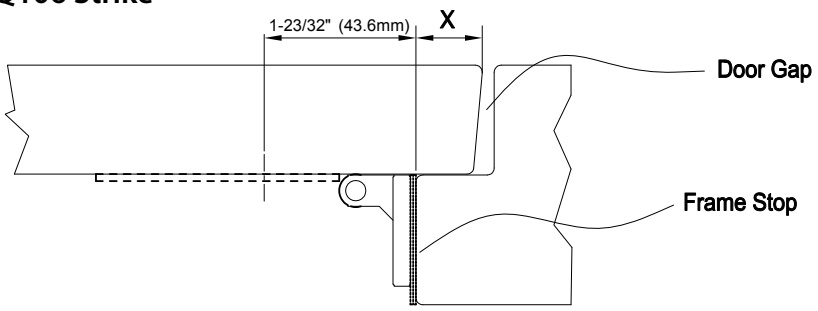
Templates

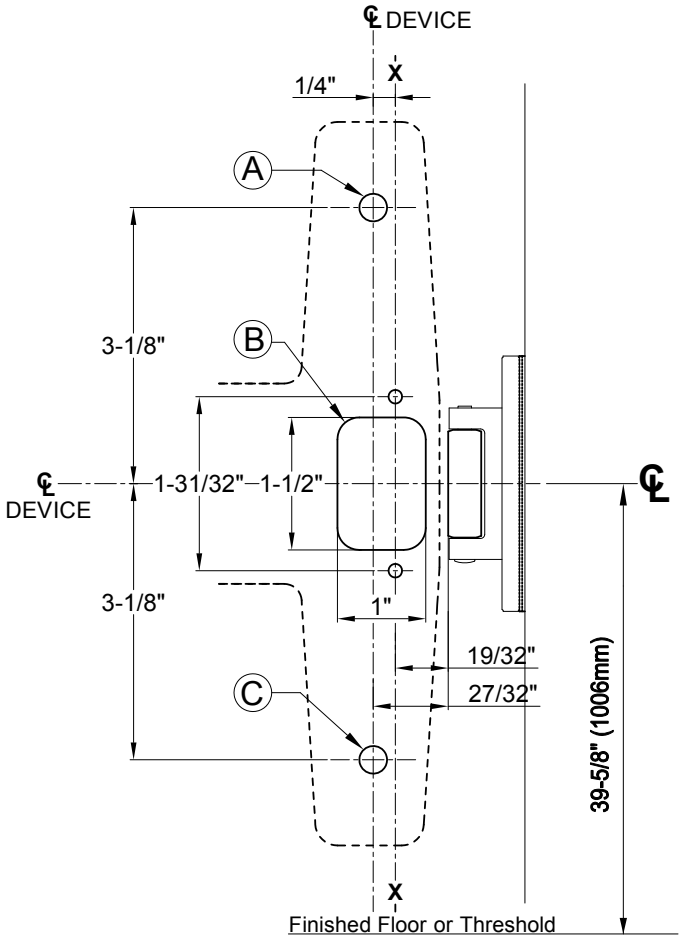
Preparation of Q500CP Series Trim LHR



Templates

Preparation for RIM/3PT with Q106 Strike

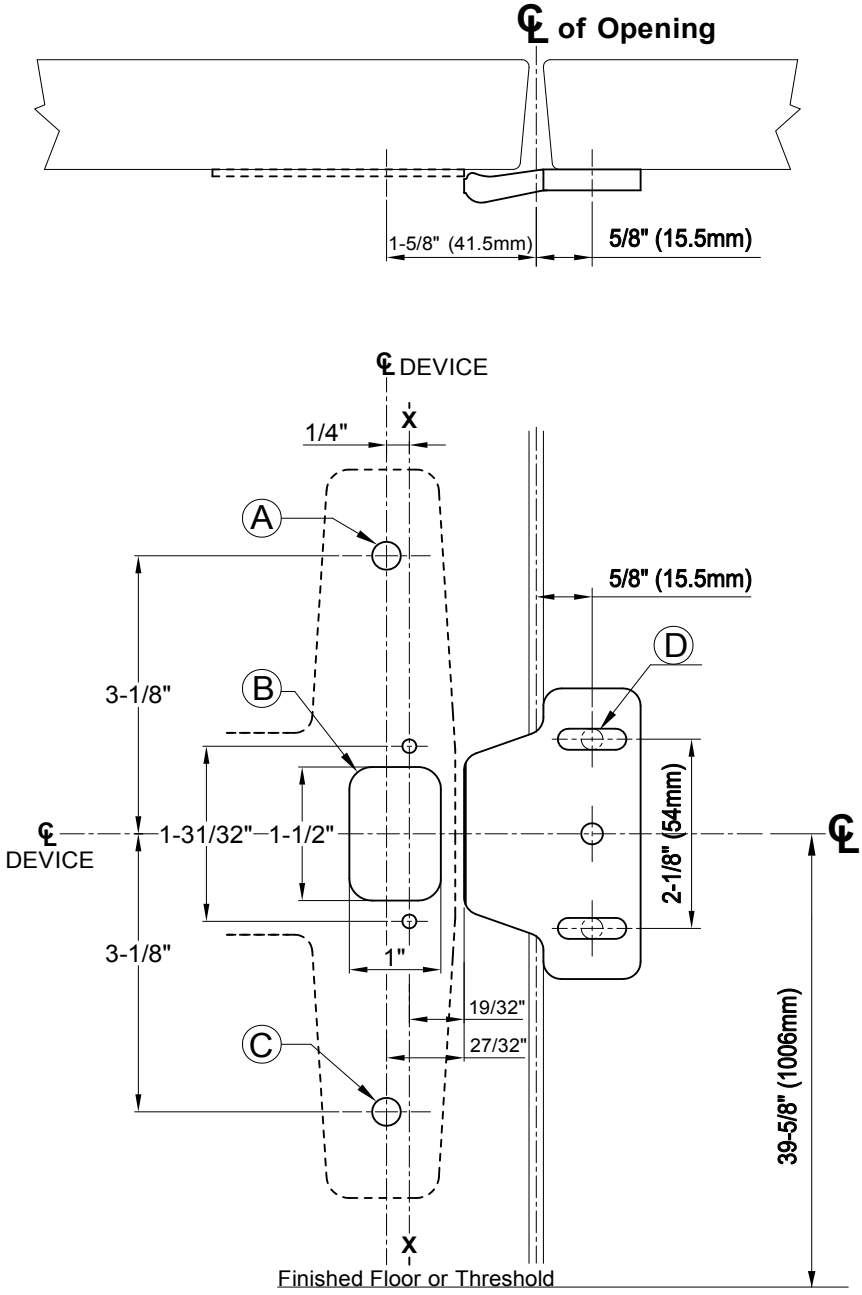




NOTATION	ILL.	APPLICATIONS	DIMENSION	
			METAL	WOOD
A	○	EXIT ONLY	#7 DRILL #1/4"-20 TAP	
		SEX BOLTS OR TRIM	5/16" DRILL INSIDE 13/32" DRILL (SEX BOLTS) 1/2" DRILL OUTSIDE (TRIM)	13/32" DRILL THRU (SEX BOLTS) 1/2" DRILL THRU (TRIM)
B	○	EXIT ONLY	#25 DRILL #10-24 TAP	1/8" DRILL PILOT 1" DEEP
C	▯	EXIT ONLY	CUT-OUT DEVICE SIDE ONLY 5/8"DEEP	

Templates

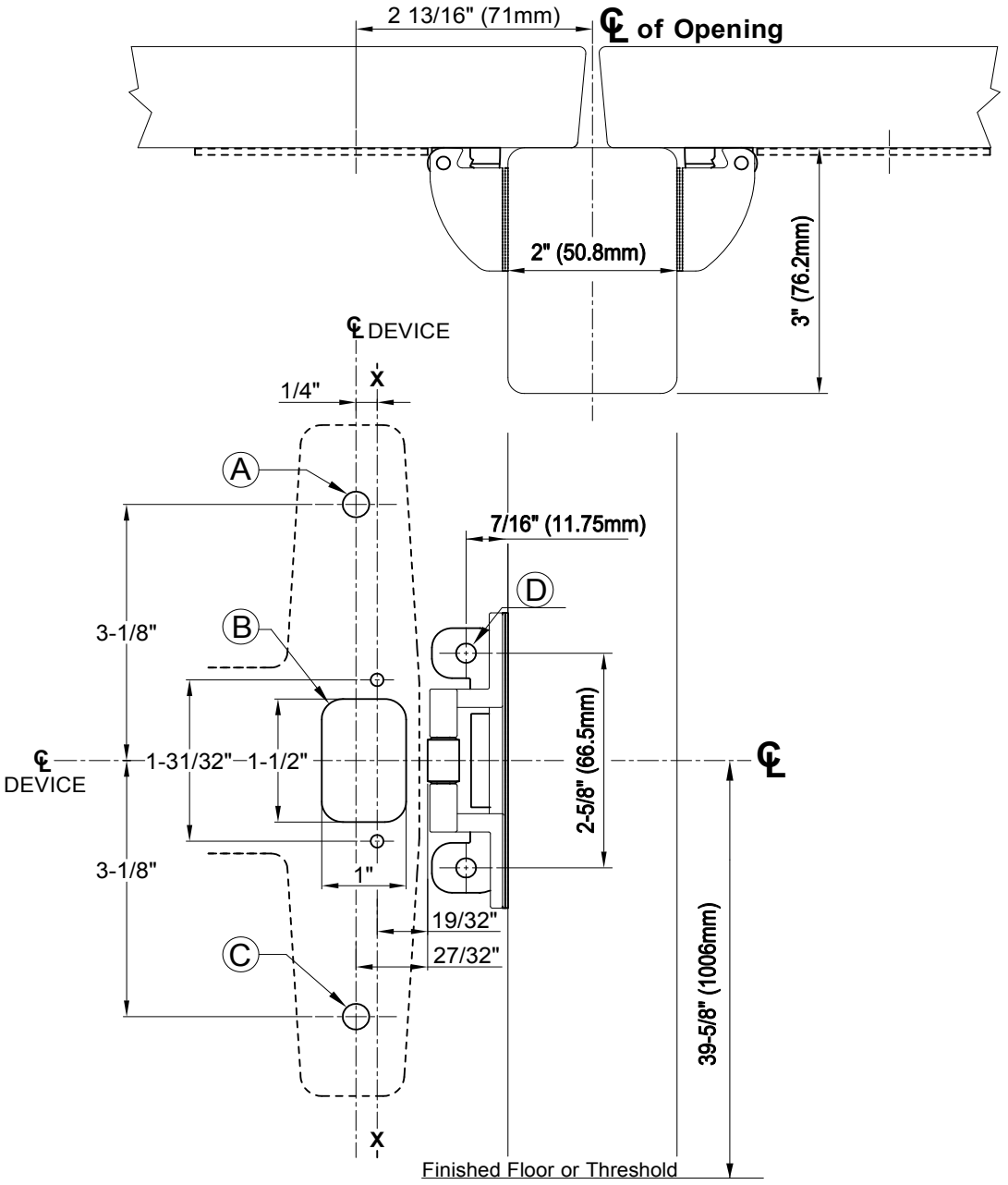
Preparation for RIM/3PT with Q136 Strike



NOTATION	ILL.	APPLICATIONS	DIMENSION	
			METAL	WOOD
A	◯	EXIT ONLY	#7 DRILL #1/4"-20 TAP	
		SEX BOLTS OR TRIM	5/16" DRILL INSIDE 13/32" DRILL (SEX BOLTS) 1/2" DRILL OUTSIDE (TRIM)	13/32" DRILL THRU (SEX BOLTS) 1/2" DRILL THRU (TRIM)
B	○	EXIT ONLY	#25 DRILL #10-24 TAP	1/8" DRILL PILOT 1" DEEP
C	▯	EXIT ONLY	CUT-OUT DEVICE SIDE ONLY 5/8"DEEP	
D	○	Q136 STRIKE	#25 DRILL #10-24 TAP	3 (1/8") DRILL PILOT 1" DEEP

Templates

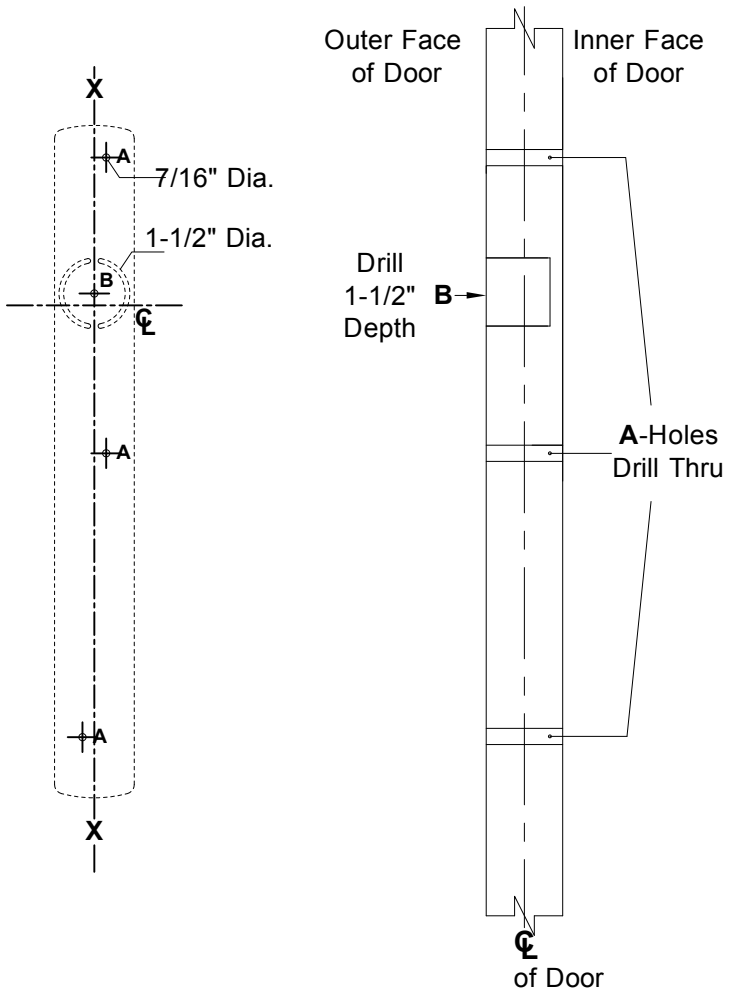
Preparation for RIM/3PT with Q108 Strike & Mullion



NOTATION	ILL.	APPLICATIONS	DIMENSION	
			METAL	WOOD
A	◯	EXIT ONLY	#7 DRILL #1/4"-20 TAP	
		SEX BOLTS OR TRIM	5/16" DRILL INSIDE 13/32" DRILL (SEX BOLTS) 1/2" DRILL OUTSIDE (TRIM)	13/32" DRILL THRU (SEX BOLTS) 1/2" DRILL THRU (TRIM)
B	○	EXIT ONLY	#25 DRILL #10-24 TAP	1/8" DRILL PILOT 1" DEEP
C	▯	EXIT ONLY	CUT-OUT DEVICE SIDE ONLY 5/8"DEEP	
D	o	Q108 STRIKE	#25 DRILL #10-24 TAP	3 (1/8") DRILL PILOT 1" DEEP

Templates

Preparation for Q400 Series Trim

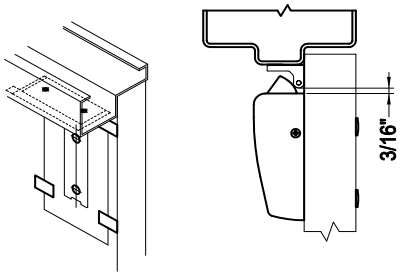


FOR RIM AND VERTICAL ROD APPLICATION			
CUT OUT ILLUSTRATION			
TRIM DESCRIPTION	Q401	Q402	Q403
FUNCTION	01	02	03
PREPARATION	A	A	A+B

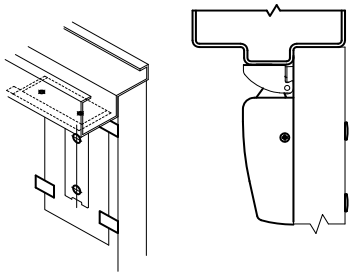
Templates

Preparation of Top Latch for SVR/3PT

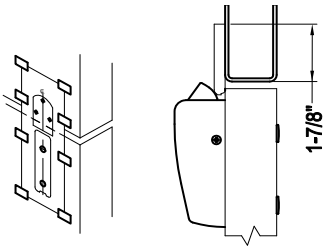
Top Latch & Q203 Strike



Top Latch & Q108 Strike



Top Latch & Q215 Strike



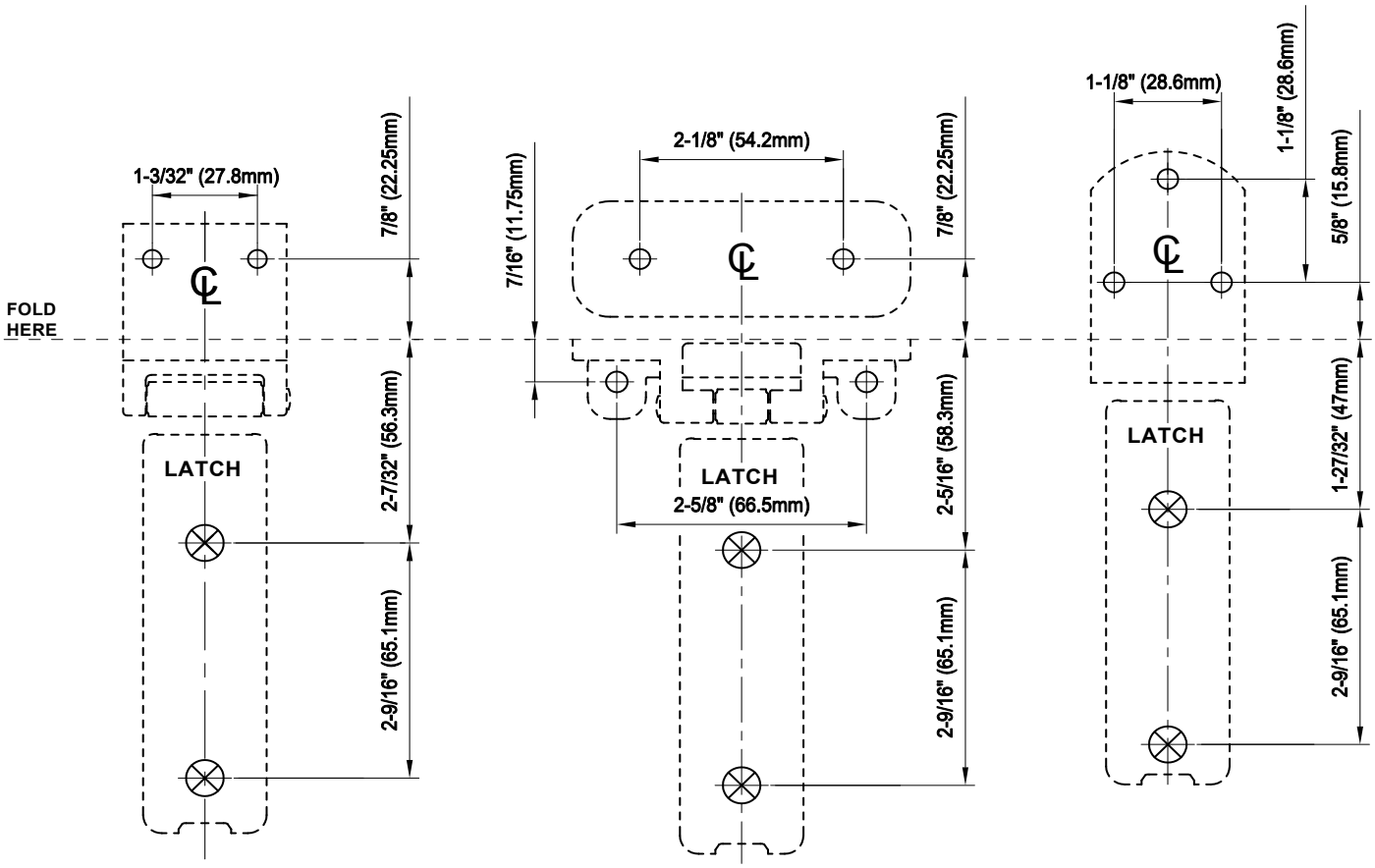
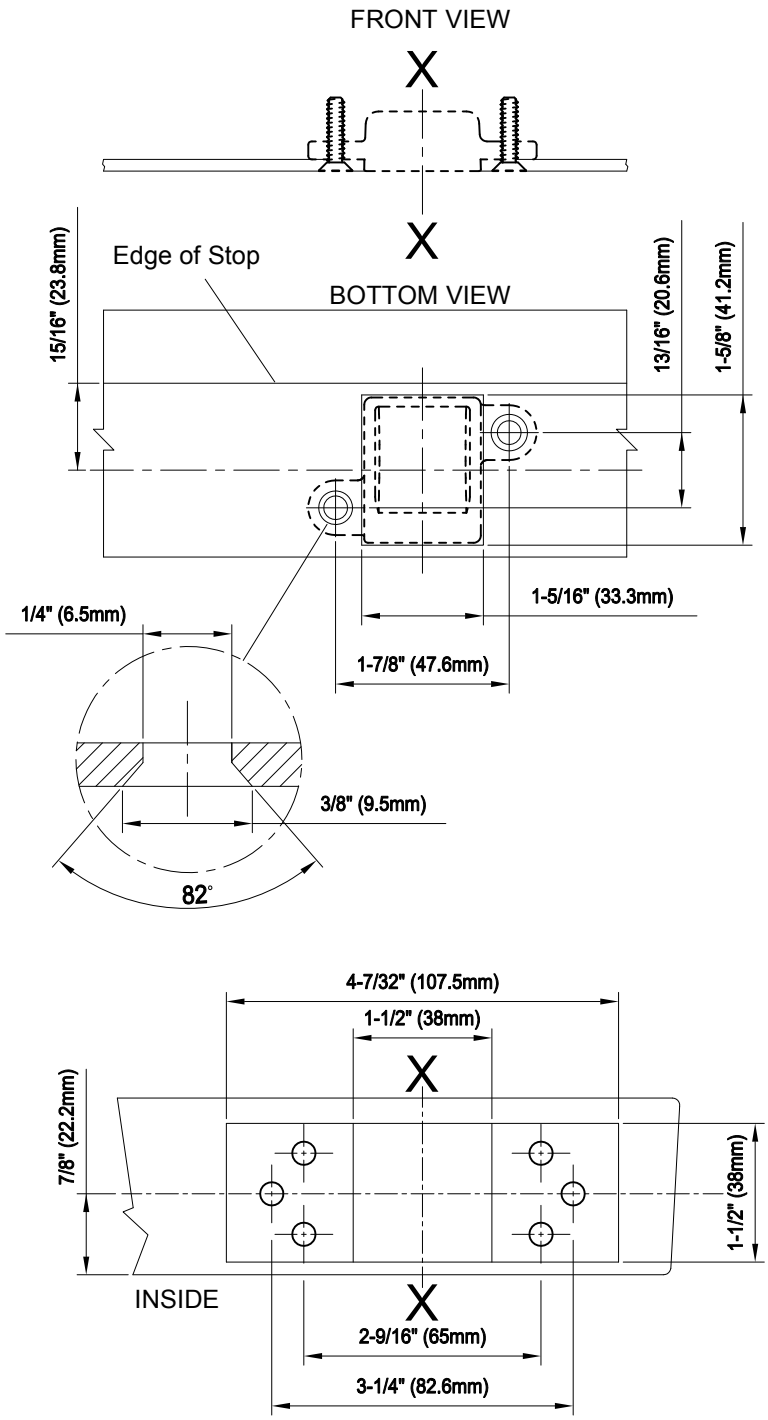


Illustration	Applications	Dimension	
		Metal	Wood
○	Strike Screw	#25 Drill #10-24 Tap	1/8" (3mm) Drill Pilot 1" Deep
⊗	Sex Bolt	5/16" (8mm) Drill (Device Side) 13/32" (10.3mm) Drill (Outside)	

Templates

Preparation of Top Latch for CVR

Top Latch & Q216 Strike



Release Plunger

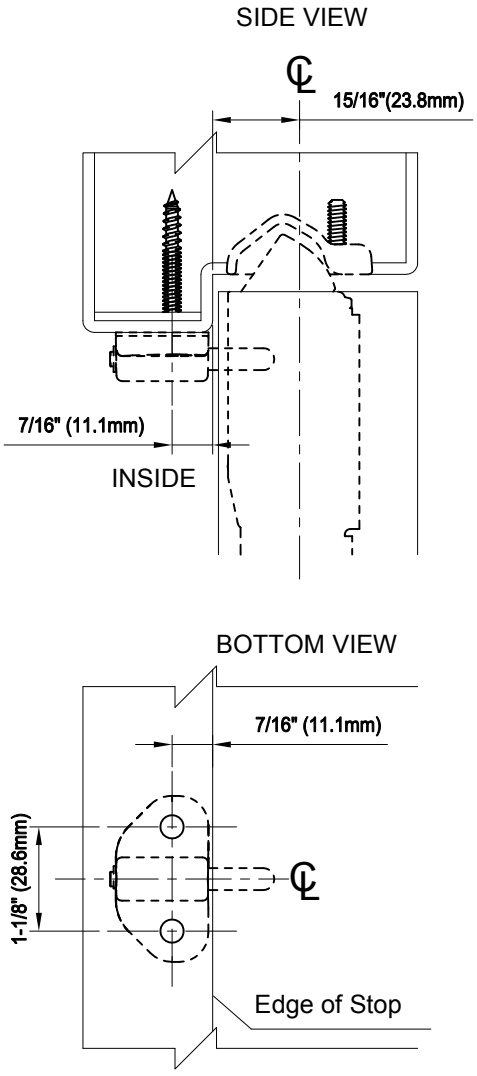
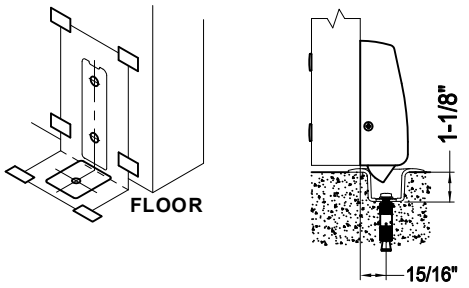


Illustration	Applications	Dimension	
		Metal	Wood
O	Latch & Release Plunger	#25 Drill #10-24 Tap	1/8" (3mm) Drill Pilot 1" Deep

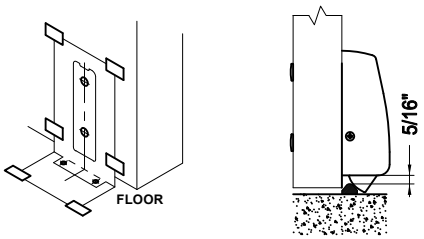
Templates

Preparation of Bottom Latch for SVR/CVR/3PT

Bottom Latch & Q227 Strike



Bottom Latch & Q224 Strike



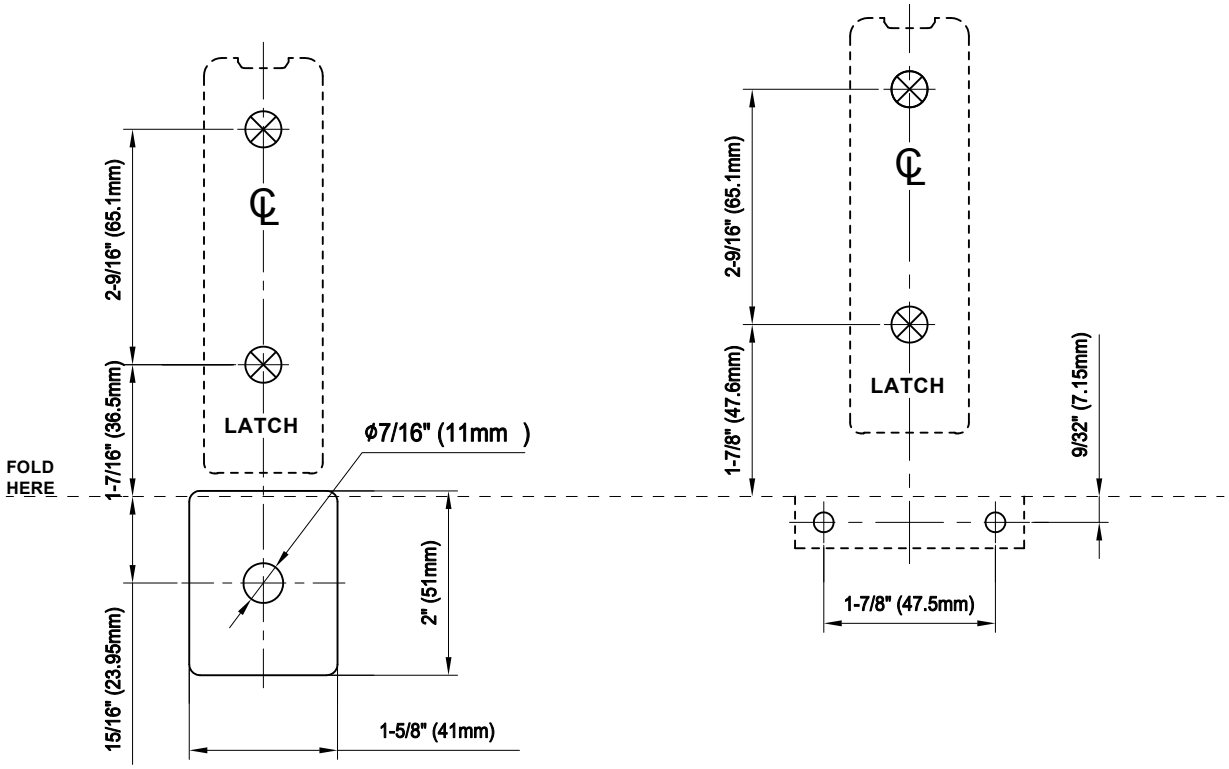
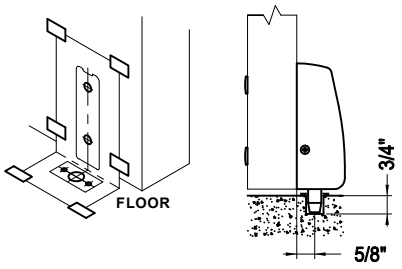


Illustration	Applications	Dimension	
		Metal	Wood
○	Strike Screw	#25 Drill #10-24 Tap	1/8" (3mm) Drill Pilot 1" Deep
⊗	Sex Bolt	5/16" (8mm) Drill (Device Side) 13/32" (10.3mm) Drill (Outside)	

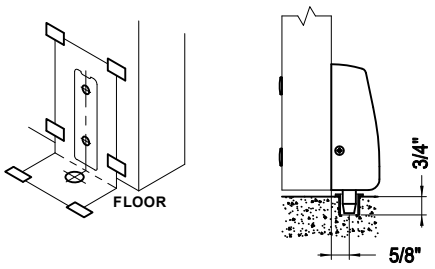
Templates

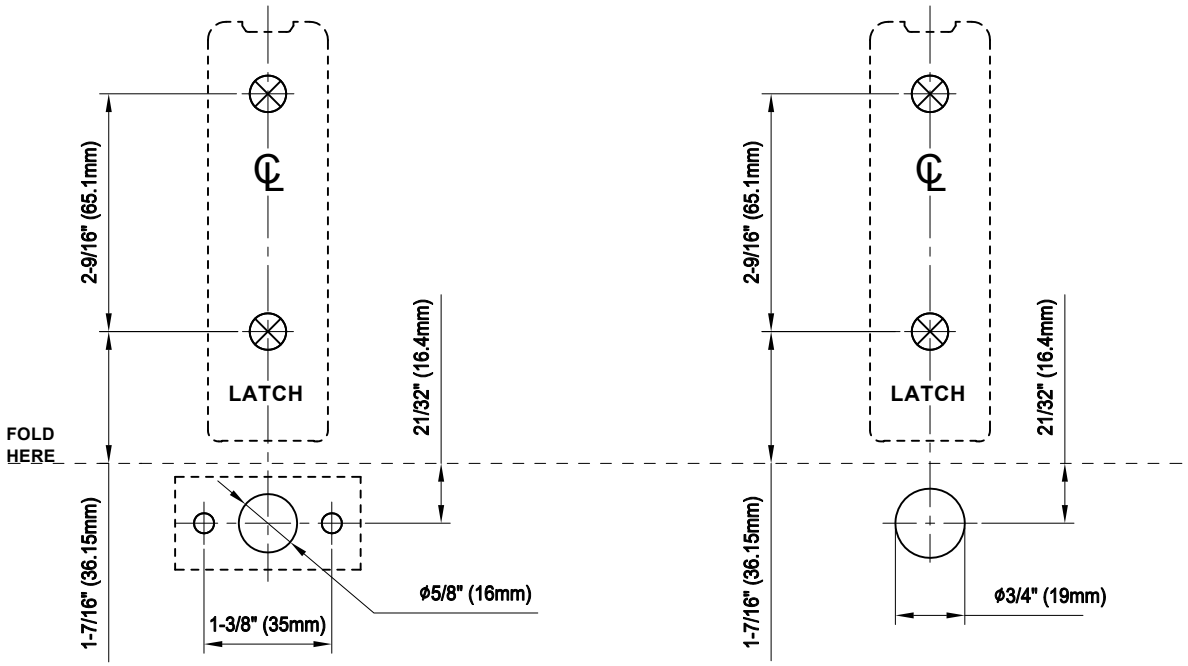
Preparation of Bottom Latch for SVR/CVR/3PT

Bottom Latch & Q225 Strike



Bottom Latch & Q226 Strike





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Maintenance Guidelines

All locks and hardware should be installed in accordance with the installation instructions and template provided, and the following maintenance items should be followed in order to maximize the life of the product:

1. Check

- Regularly check the lock body, hinge, coordinator, door closer etc to see if there are any loose screws. If the screws are loose, it must be tightened

- Regularly check the gap between the strike plate and latch bolt space to ensure it is correct and aligned. If there is an offset, it must be adjusted.

- Regularly check the cylinder, or apply lubrication when the key is inserted, pulled out, or to be unsmooth. (The cylinder lubrication: to apply small amount of lubricant to the key, then insert the key into cylinder for several rotations.)

- Regularly check the exposed parts of the lock body to ensure good operation (eg. Latchbolt, Deadbolt, Auxiliary, etc) if the operation is not smooth, apply small amount of lubricant on the moving parts and on the lip of the strike which will help make the parts operate smoothly and prevents corrosion on the metal surface.

- Regularly check the doors and frames to ensure smooth operation. For example, damaged hinges, warped doors and frames, etc., may cause excessive load on the lock body, which reduces the life of the product.

- Regularly check locks that have not been used for a long time since it may become difficult to open. If this occurs it is necessary to operate the lock several times. It is also recommended to inspect and check every month to ensure the exit device and door closer is functioning smoothly. Since, it has not been frequently used.

2. Cleaning

- All locks and hardware can only cleaned with a soft damp cloth or a soft brush to remove any dirt from the outer surface. (When using a wet towel to clean the lock make sure that the water does not penetrate into the holes of the lock body.)

- All locks and hardware surface should not be cleaned with cleaning products. Since cleaning products may contain solvents which may damage or discolor the protective coating of the product.

Maintenance Guidelines

3. Installation

- Lock bodies should be carefully installed and ensure there are no small objects (such as iron filings, wood chips, etc.) are dropped inside the lock body. Since this is the most common cause of lock body failure.

- It is important to use only the screws and accessories that come with the product. If not, it is the responsibility of the installer to ensure that the screws are compatible and does not adversely affect the life of the lock body or hardware.

- Please make sure the strike plate is correctly embedded into the door frame and is properly aligned with the door latch. The distance between the faceplate and the strike should not exceed 1/8”(3.2mm) to ensure a secure lock.

4. Notice

- Locks and hardware that are installed in high traffic usage or corrosive environments (such as shore) or areas that are prone to generate a lot of dust are recommended for maintenance for every three months.

- The internal mechanical parts of all the lock bodies are pre-lubricated; therefore it is unnecessary to apply any lubricant under normal use.

- Do not to use too much lubricant because the dust will stick on the surface potentially reducing the life of the product.

- Do not spray the WD40 lubricant into the lock body as this may cause the lubricant inside to dissolve and corrosion to the plastic and rubber parts, which may cause the lock body to operate unsmoothly.

- Keys that have high usage may wear out faster; therefore new keys should be replaced as necessary.

- Only replace new AA alkaline battery with the electronic lock. Please do not mix old and new batteries together or different brands.

If all the maintenance steps have been completed and the lock body is still not working smoothly or the function is not working properly, please contact the dealer so that the issue can be resolved. In order to avoid further damage of the lock body, please do not

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