

Q1000 SERIES

SERVICE MANUAL

ANSI GRADE 1 EXIT DEVICES



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Q1000 Series Service Manual

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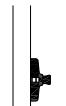

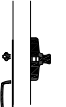
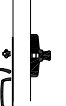








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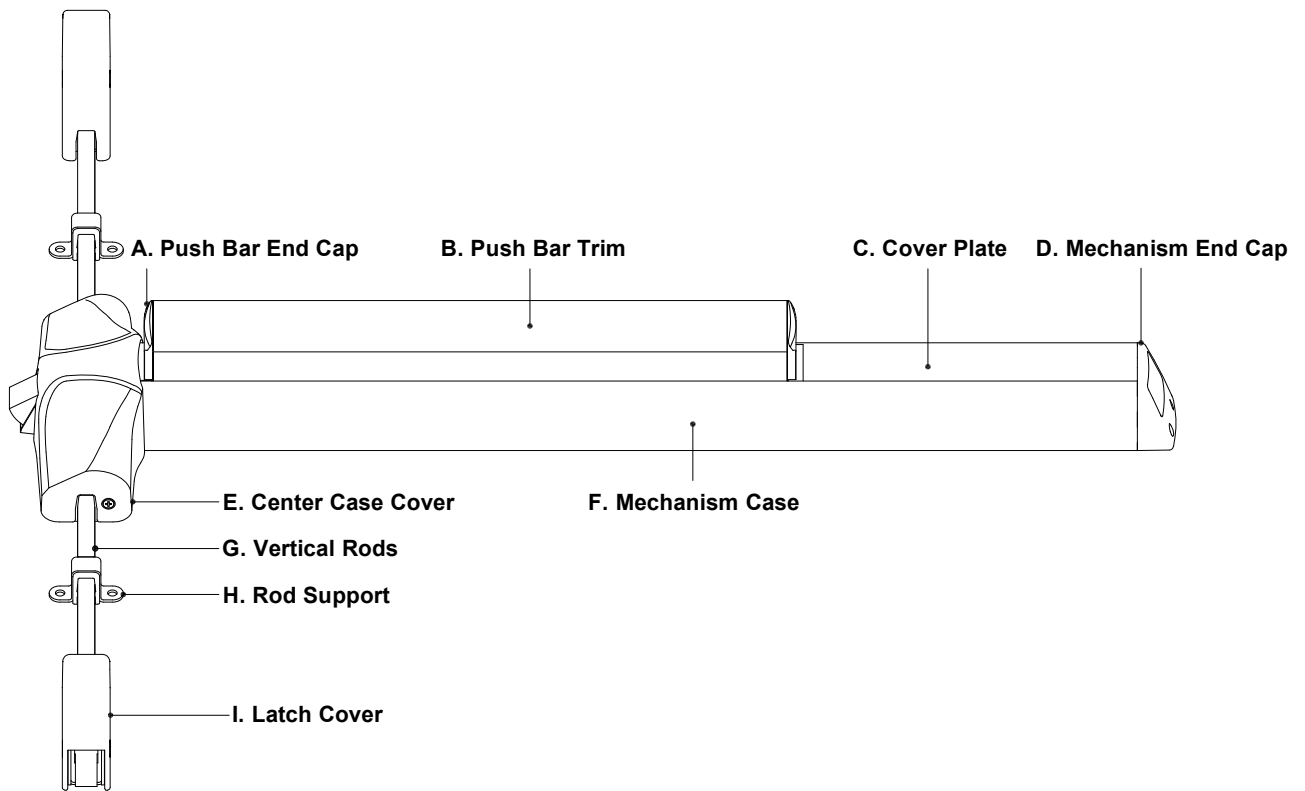
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Device Drawing Index

Funtions ANSI A156.3 Grade 1		Description	Trim Options				Page No.
No.	Illustration		Q200 Series Thumbpiece	Q300 Series Escutcheon	Q400 Series Pull Trim	Q600 Series Pull Handle	
01		Exit only Exit only, no trim or blank escutcheon.	Q201				33
02		Dummy Pull Only Entrance by trim when actuating bar is locked down.	Q202	Q302		Q602	34/42/57
03		Night Latch Key Retracts Latch Bolt Entrance by trim when latch is released by key. Key removable only when locked.	Q203R Q203M				35 38
05		Key locks or Unlocks Latch Bolt Entrance by thumbpiece. Key locks or unlocks thumbpiece.	Q205R Q205M				36 39
07		Key Locks or Unlocks Latch Bolt Entrance by thumbpiece. Inside or outside key locks or unlocks thumbpiece. Outside key releases latch.	Q205M				39
		Key Locks or Unlocks Latch Bolt Entrance by thumbpiece. Inside key locks or unlocks thumb piece.	Q215M				40
08		Key locks or Unlocks Latch Bolt Entrance by knob or lever. Key locks or unlocks knob or lever.		Q308R Q308M	HL408(RHR) HL408(LHR)	Q608R Q608M	43/52/58 46/53/59
09		Night Latch Key Retracts Latch Bolt Entrance by knob or lever only when released by key. Key removable only when locked.		Q309R Q309M		Q609R Q609M	44/60 47/61
10		Key Locks or Unlocks Latch Bolt Entrance by knob or lever. Inside or outside key locks or unlocks knob or lever. Outside key releases latch.		Q308R Q308M			
		Key Locks or Unlocks Latch Bolt Entrance by knob or lever. Inside key locks or unlocks knob or lever.		Q308R Q314M			27 28
14		Lever/Knob Always Operable Entrance by trim when latch is released by knob or lever. Always active, no cylinder.		Q314R Q314M	HL414(RHR) HL414(LHR)	Q614R Q614M	43/54/62 46/55/63
15		Thumbpiece Always Active Entrance by trim when latch is released by thumbpiece. Thumbpiece always active, no cylinder.	Q215R Q215M				37 40

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Device Finishes

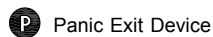
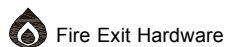


Finishes

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

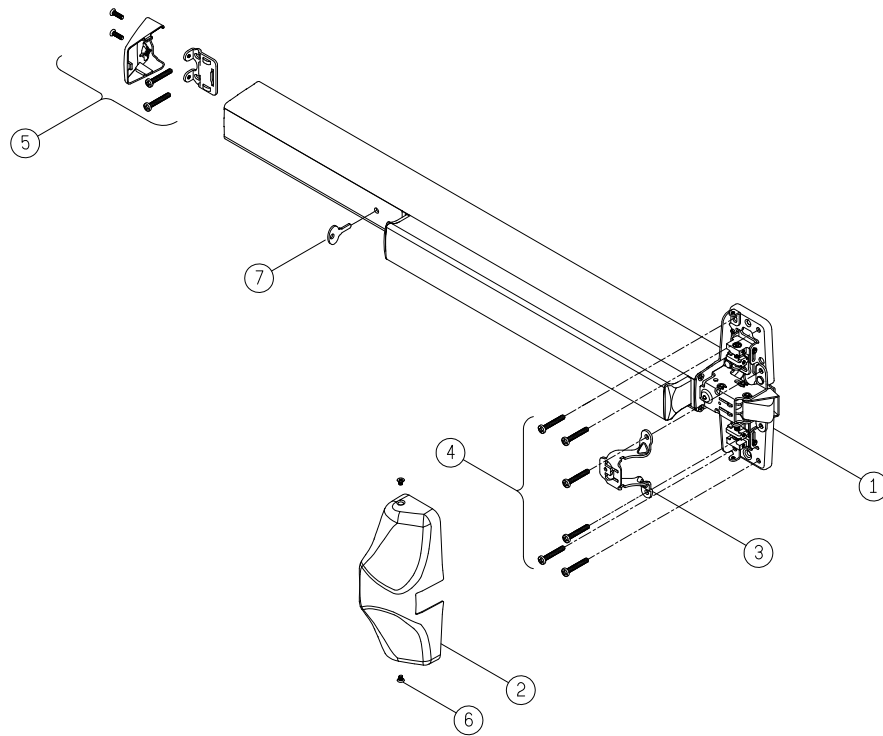
Grade	No.	Description	Grooved	Smooth
 	B.	Push Bar Trim		3'
				4'
	F.	Mechanism Case		3'
				4'
	C.	Cover Plate (Dogging Options See Page 24)	LD	3'
				4'
			HKD	3'
				4'
			CD	3'
				4'



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Q1100

Rim Exit Device - RIM



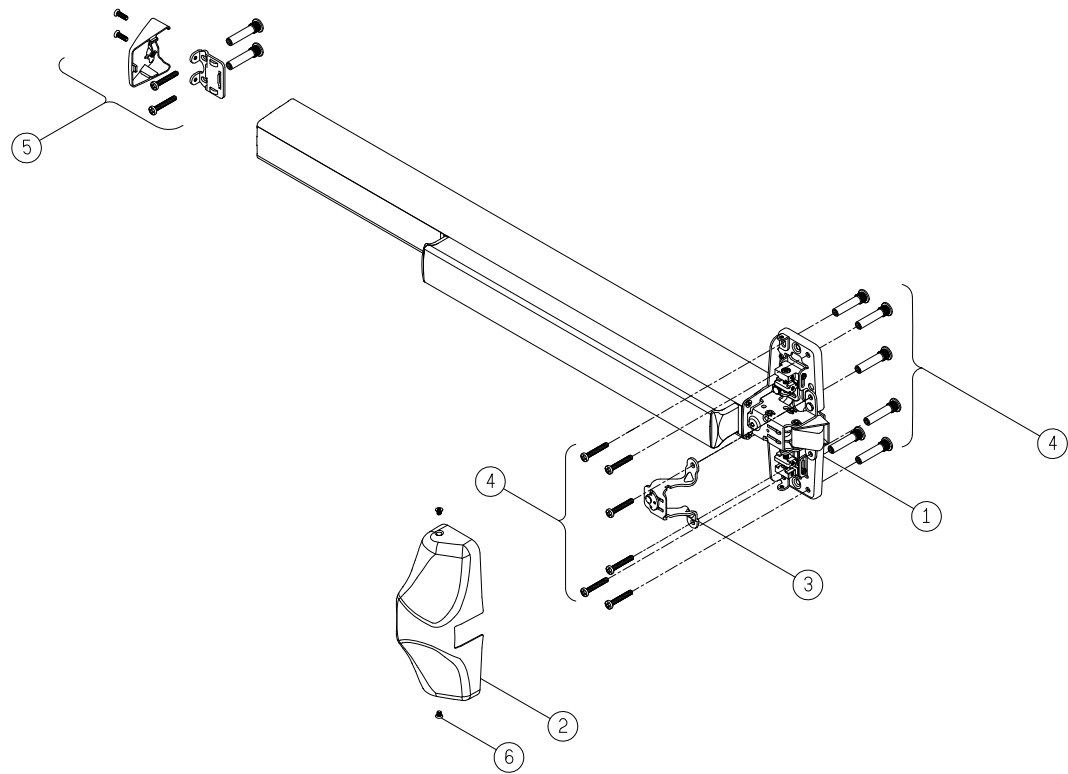
Item No.	Q'ty	Description
1	1	Q1100 Rim Device for (3' or 4')
2	1	Center Case Cover
3	1	Support Bracket
4	1	Mounting Screw - Center Case (68-5301)

Item No.	Q'ty	Description
5	1	End Cap Kit (68-59**)
6	1	Mounting Screw - Cover (553-M9010)
7	1	Dogging Key

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QF1100

Rim Fire Exit Device - RIM



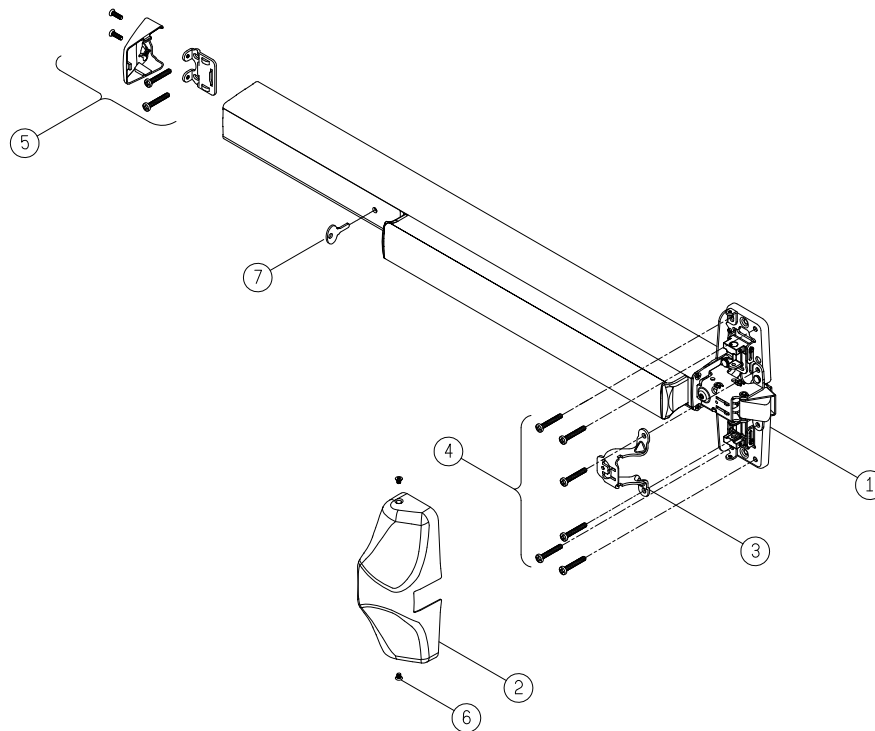
Item No.	Q'ty	Description
1	1	QF1100 Rim Device for (3' or 4')
2	1	Center Case Cover
3	1	Support Bracket Assembly

Item No.	Q'ty	Description
4	1	Mounting Screw - Center Case (68-0401)
5	1	End Cap Kit (68-59**)
6	1	Mounting Screw - Cover (553-M9010)

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Q1105

Accessible Rim Exit Device - RIM



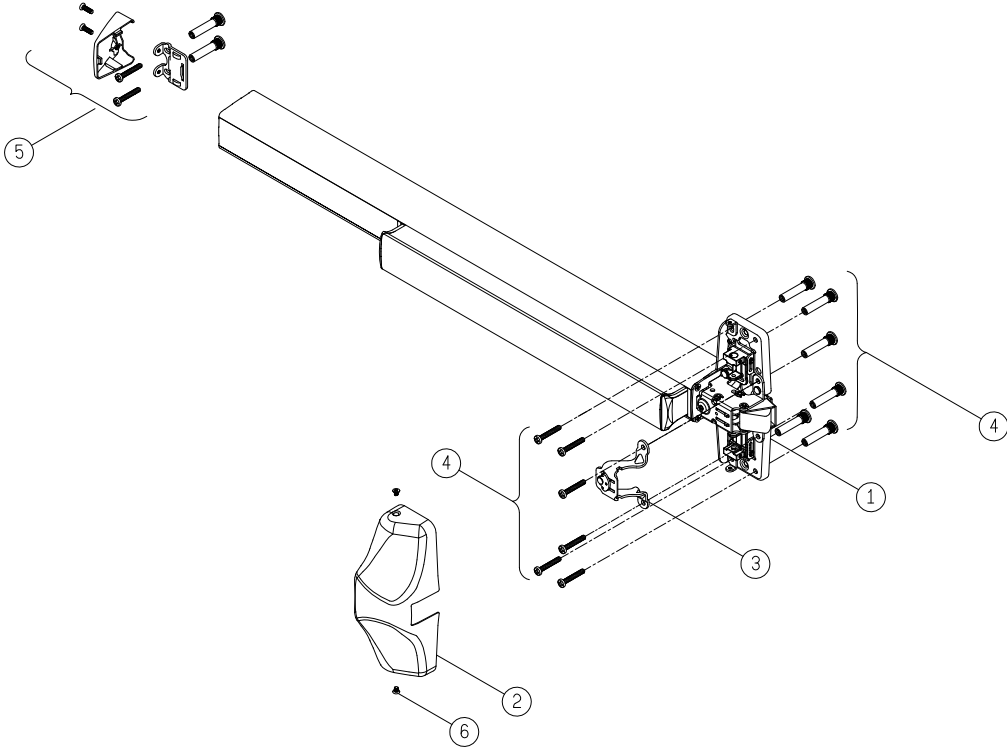
Item No.	Q'ty	Description
1	1	Q1105 Rim Device for (3' or 4')
2	1	Center Case Cover
3	1	Support Bracket
4	1	Mounting Screw - Center Case (68-5301)

Item No.	Q'ty	Description
5	1	End Cap Kit (68-59**)
6	1	Mounting Screw - Cover (553-M9010)
7	1	Dogging Key

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QF1105

Accessible Rim Fire Exit Device - RIM



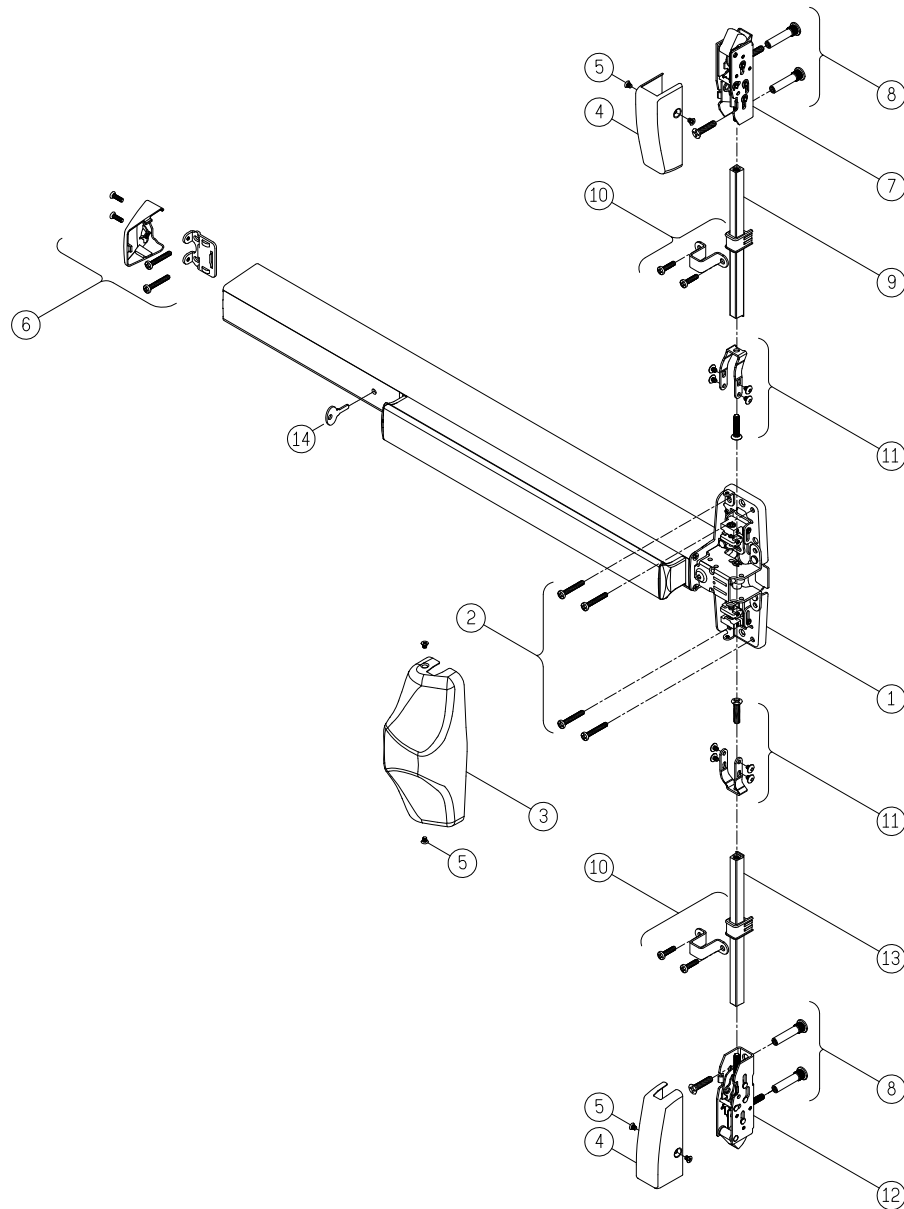
Item No.	Q'ty	Description
1	1	QF1105 Rim Device for (3' or 4')
2	1	Center Case Cover
3	1	Support Bracket Assembly

Item No.	Q'ty	Description
4	1	Mounting Screw - Center Case (68-0401)
5	1	End Cap Kit (68-59**)
6	1	Mounting Screw - Cover (553-M9010)

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QF1200

Surface Vertical Rod Device - SVR



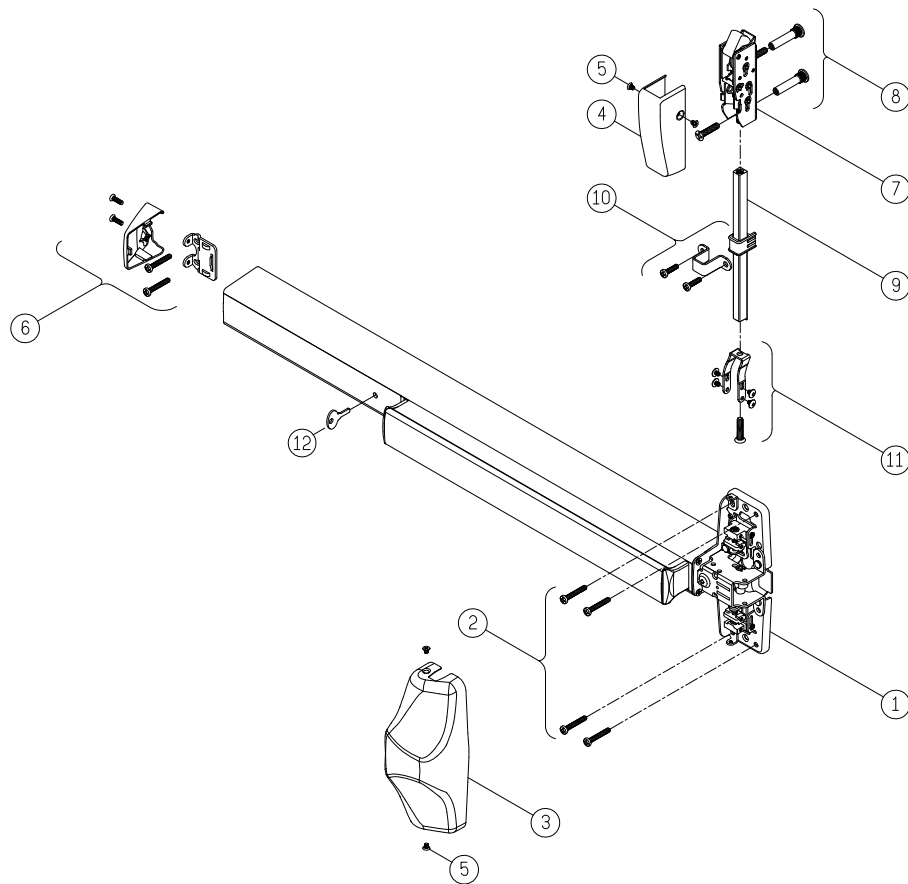
Item No.	Q'ty	Description
1	1	Q1200 SVR Device for (3' or 4')
2	1	Mounting Screw - Center Case (68-5302)
3	1	Center Case Cover
4	2	Latch Covers
5	3	Mounting Screws - Cover (553-M9010)
6	1	End Cap Kit (68-59**)
7	1	Top Latch Assembly

Item No.	Q'ty	Description
8	2	Mounting Kits - Latch (68-0402)
9	1	Top Rod (See Page 29)
10	2	Mounting Kits - Rod Support (68-2501)
11	2	Mounting Kits - Rod Connector (68-0901)
12	1	Bottom Latch Assembly
13	1	Bottom Rod (See Page 29)
14	1	Dogging Key

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QF1200

Surface Vertical Rod Device - SVR (LBR)



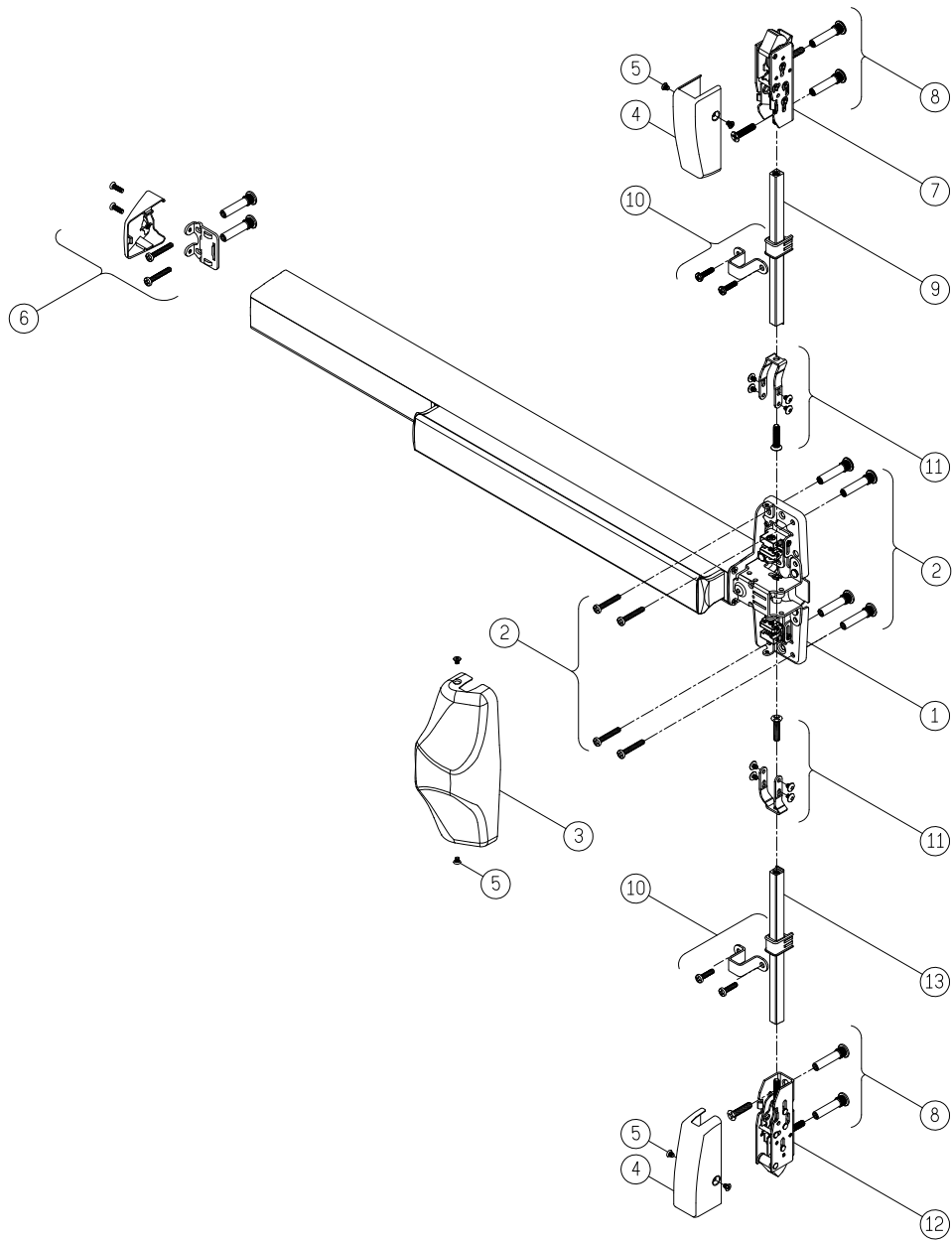
Item No.	Q'ty	Description
1	1	QF1200 SVR (LBR) Device for (3' or 4')
2	1	Mounting Screw - Center Case (68-5302)
3	1	Center Case Cover
4	1	Latch Cover
5	2	Mounting Screws - Cover (553-M9010)
6	1	End Cap Kit (68-59**)

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	Dogging Key

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QF1200

Surface Vertical Rod Fire Device - SVR



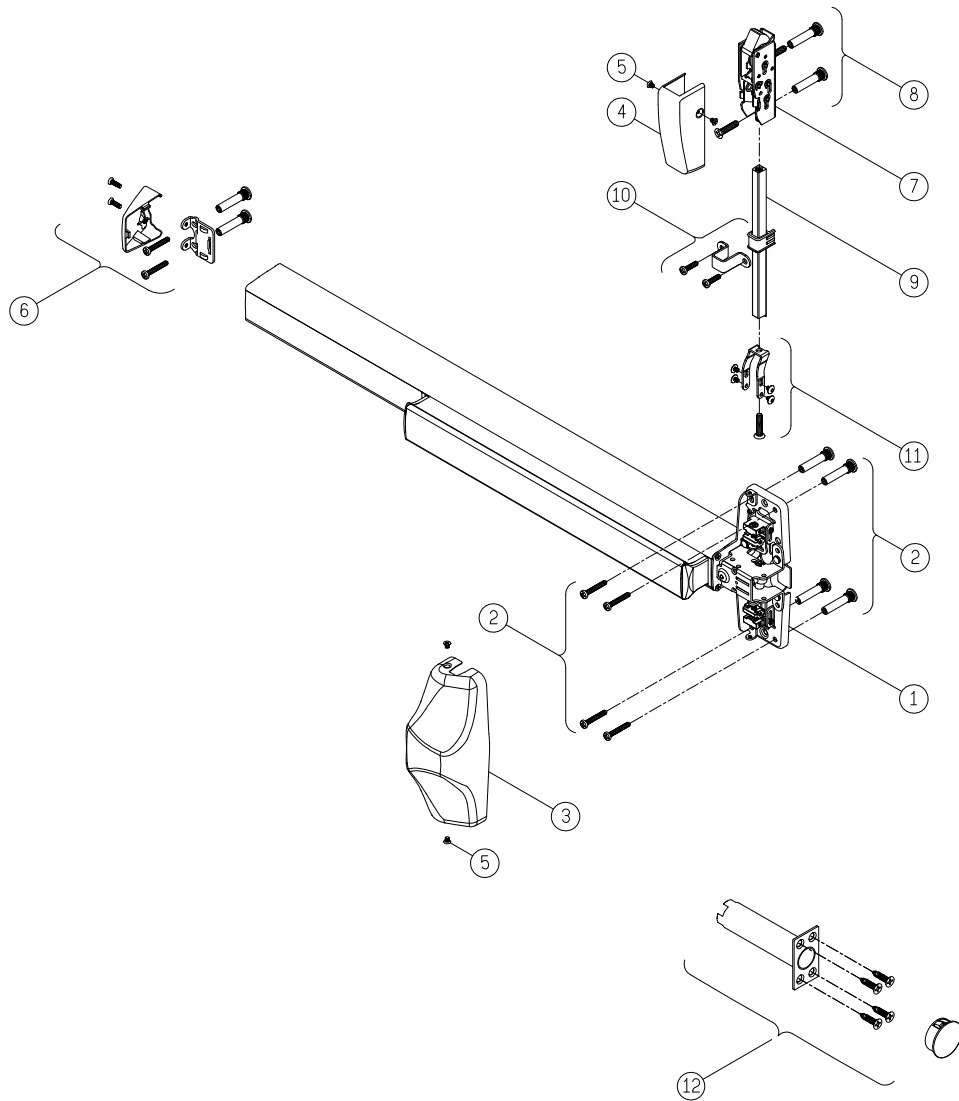
Item No.	Q'ty	Description
1	1	Q1200 SVR Device for (3' or 4')
2	1	Mounting Screw - Center Case (68-0403)
3	1	Center Case Cover
4	2	Latch Covers
5	3	Mounting Screws - Cover (553-M9010)
6	1	End Cap Kit (68-59**)
7	1	Top Latch Assembly

Item No.	Q'ty	Description
8	2	Mounting Kits - Latch (68-0402)
9	1	Top Rod (See Page 29)
10	2	Mounting Kits - Rod Support (68-2501)
11	2	Mounting Kits - Rod Connector (68-0901)
12	1	Bottom Latch Assembly
13	1	Bottom Rod (See Page 29)

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QF1200

Surface Vertical Rod Fire Device - SVR (LBR)



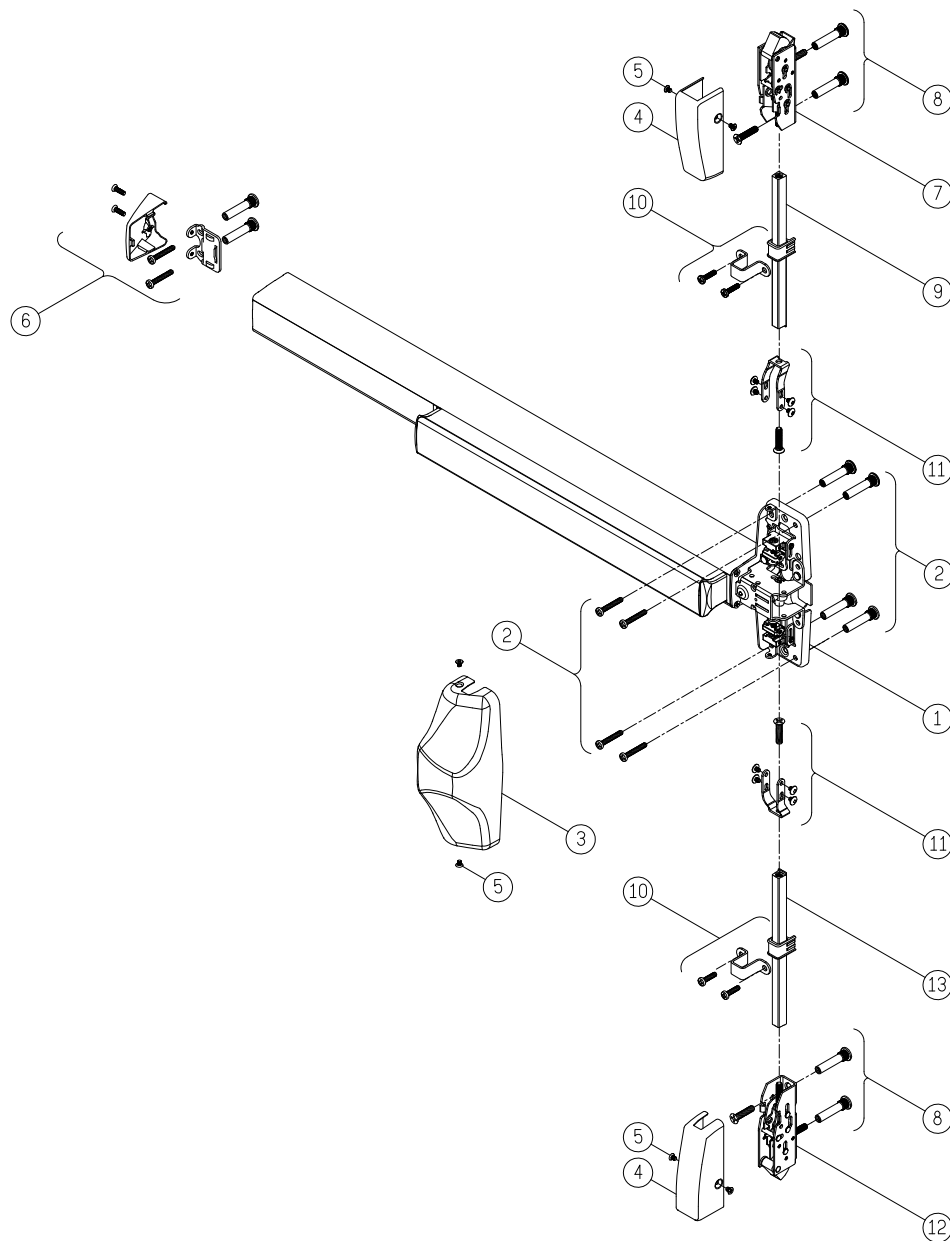
Item No.	Q'ty	Description
1	1	QF1200 SVR (LBR) Device for (3' or 4')
2	1	Mounting Screw - Center Case (68-0403)
3	1	Center Case Cover
4	1	Latch Cover
5	2	Mounting Screws - Cover (553-M9010)
6	1	End Cap Kit (68-59**)

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)

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Q1300

Surface Vertical Rod Fire Device - SVR



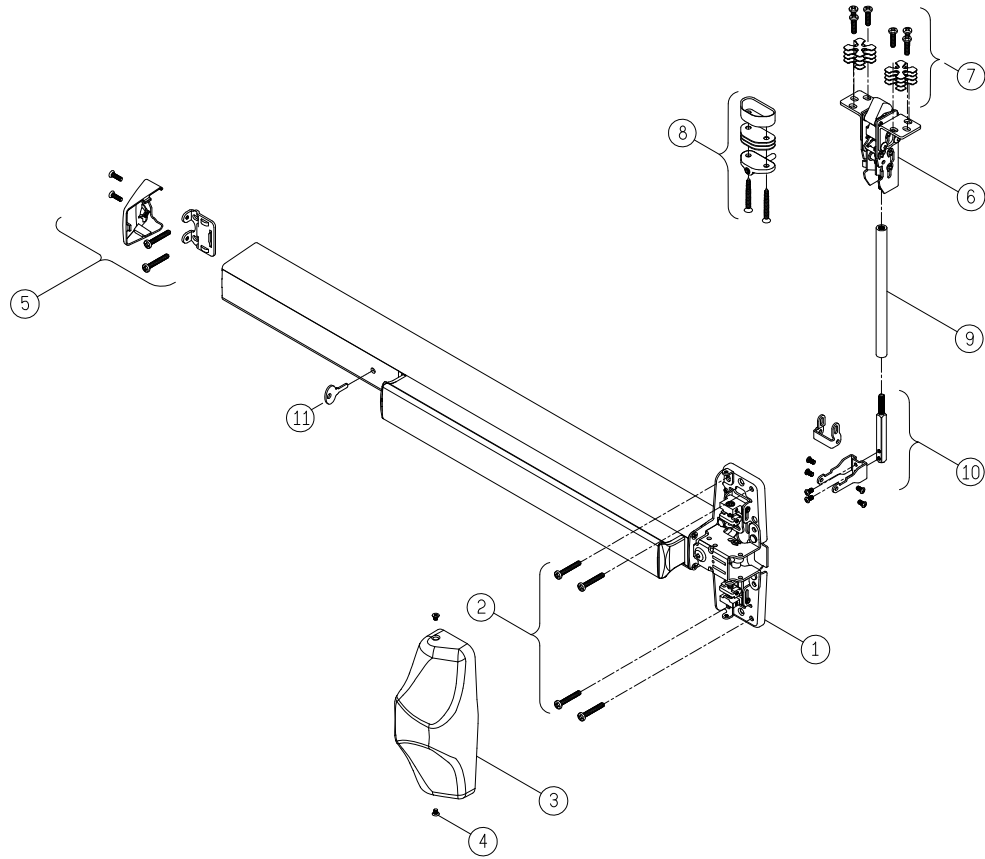
Item No.	Q'ty	Description
1	1	Q1300 SVR Device for (3' or 4')
2	1	Mounting Screw - Center Case (68-0403)
3	1	Center Case Cover
4	2	Latch Covers
5	3	Mounting Screws - Cover (553-M9010)
6	1	End Cap Kit (68-59**)
7	1	Top Latch Assembly

Item No.	Q'ty	Description
8	2	Mounting Kits - Latch (68-0402)
9	1	Top Rod (See Page 29)
10	2	Mounting Kits - Rod Support (68-2501)
11	2	Mounting Kits - Rod Connector (68-0901)
12	1	Bottom Latch Assembly
13	1	Bottom Rod (See Page 29)

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Q1300

Concealed Vertical Rod Device - CVR (LBR)



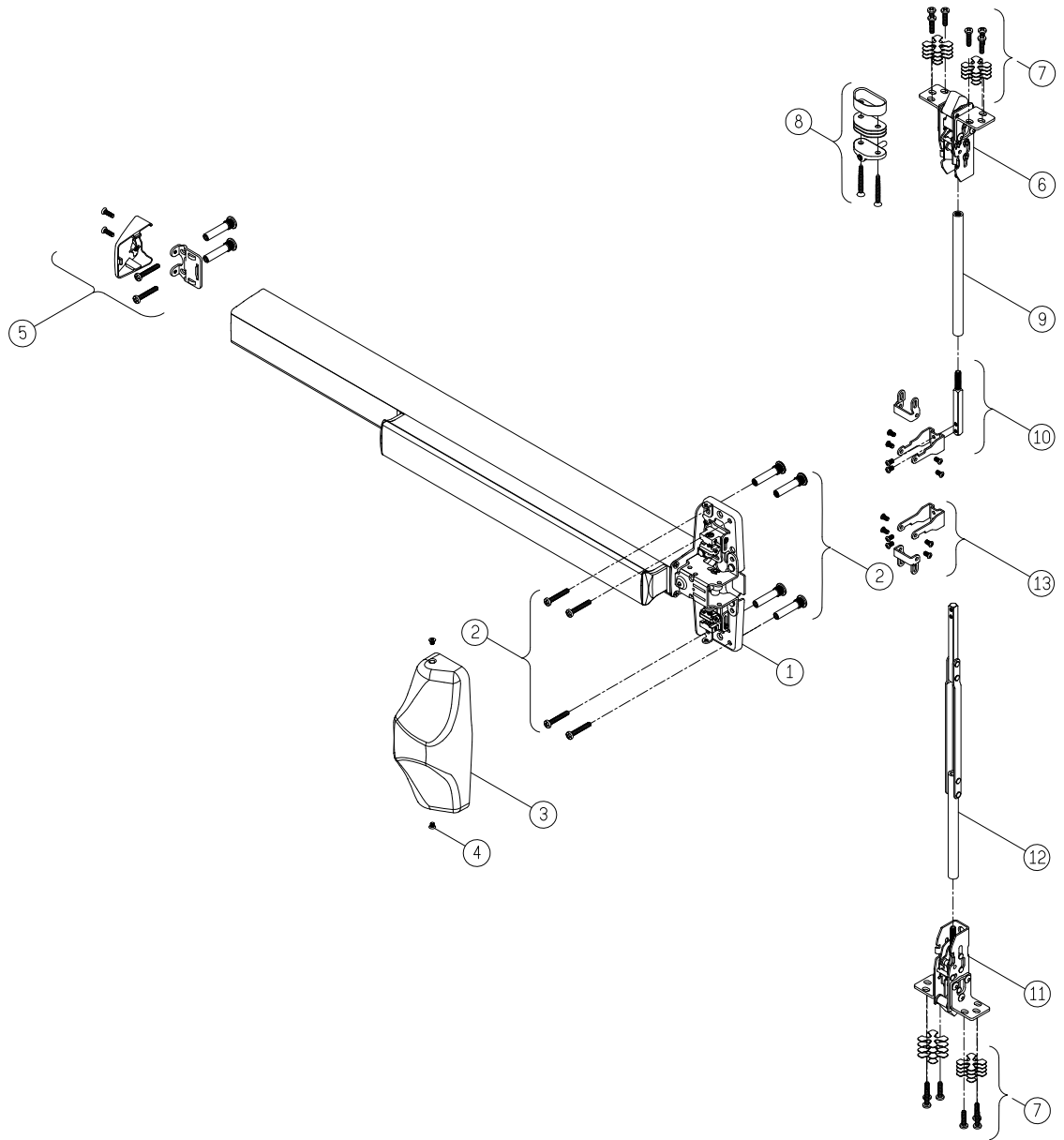
Item No.	Q'ty	Description
1	1	Q1300 CVR (LBR) Device for (3' or 4')
2	1	Mounting Screw - Center Case (68-5302)
3	1	Center Case Cover
4	1	Mounting Screw - Cover (553-M9010)
5	1	End Cap Kit (68-59**)
6	1	Top Latch Assembly

Item No.	Q'ty	Description
7	2	Mounting Kits - Latch (68-5305)
8	1	Mounting Kit - Ratchet Release (68-0801)
9	1	Top Rod (See Page 29)
10	1	Mounting Kit - Rod Connector (68-0902)
11	1	Dogging Key

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QF1300

Concealed Vertical Rod Fire Device - CVR



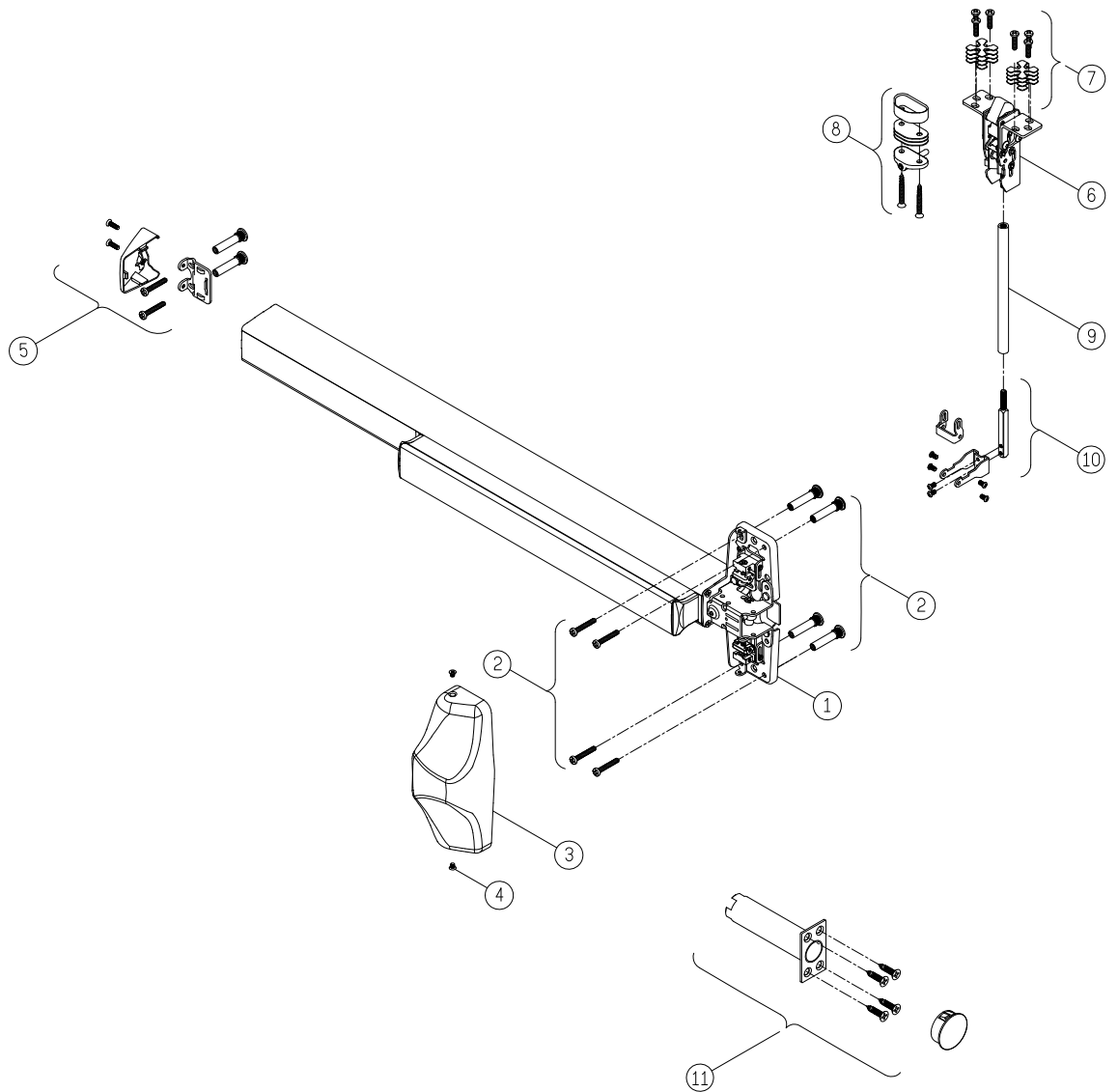
Item No.	Q'ty	Description
1	1	QF1300 CVR Device for (3' or 4')
2	1	Mounting Screw - Center Case (68-0403)
3	1	Center Case Cover
4	1	Mounting Screw - Cover (553-M9010)
5	1	End Cap Kit (68-59**)
6	1	Top Latch Assembly
7	2	Mounting Kits - Latch (68-5305)

Item No.	Q'ty	Description
8	1	Mounting Kit - Ratchet Release (68-0801)
9	1	Top Rod (See Page 29)
10	1	Mounting Kit - Rod Connector (68-0902)
11	1	Bottom Latch Assembly
12	1	Bottom Rod Assembly
13	1	Mounting Kit - Rod Connector (68-0903)

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QF1300

Concealed Vertical Rod Fire Device - CVR (LBR)



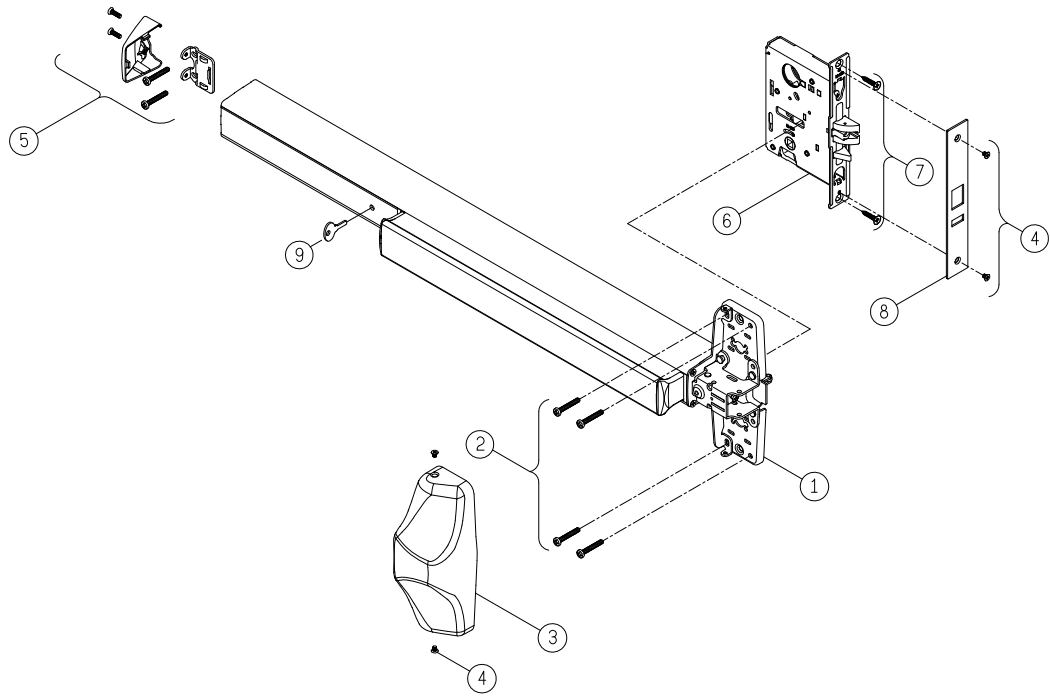
Item No.	Q'ty	Description
1	1	QF1300 CVR (LBR) Device for (3' or 4')
2	1	Mounting Screw - Center Case (68-0403)
3	1	Center Case Cover
4	1	Mounting Screw - Cover (553-M9010)
5	1	End Cap Kit (68-59**)
6	1	Top Latch Assembly

Item No.	Q'ty	Description
7	2	Mounting Kits - Latch (68-5305)
8	1	Mounting Kit - Ratchet Release (68-0801)
9	1	Top Rod (See Page 29)
10	1	Mounting Kit - Rod Connector (68-0902)
11	1	Fire Bolt (68-4502)

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Q1400

Mortise Lock Exit Device - Mortise



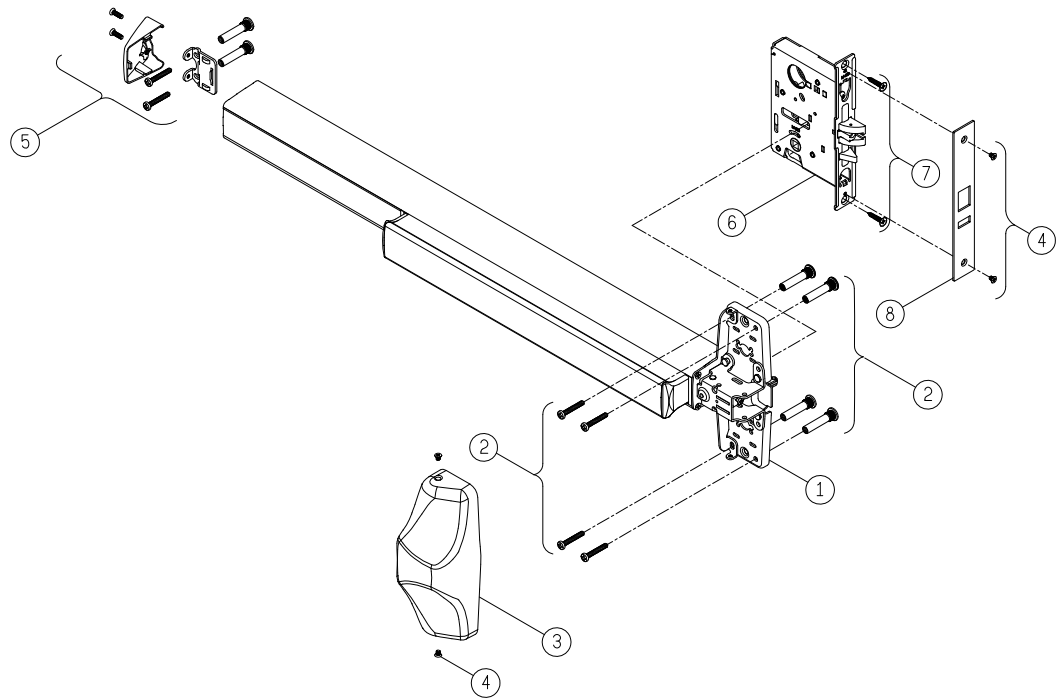
Item No.	Q'ty	Description
1	1	Q1400 Mortise Device for (3' or 4')
2	1	Mounting Screw - Center Case (68-5302)
3	1	Center Case Cover
4	2	Mounting Screws - Cover (553-M9010)

Item No.	Q'ty	Description
5	1	End Cap Kit (68-59**)
6	1	M7000 Mortise Lock Case
7	1	Mortise Case Lock Screw (554-M9010)
8	1	Armor Front

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QF1400

Mortise Lock Fire Exit Device - Mortise



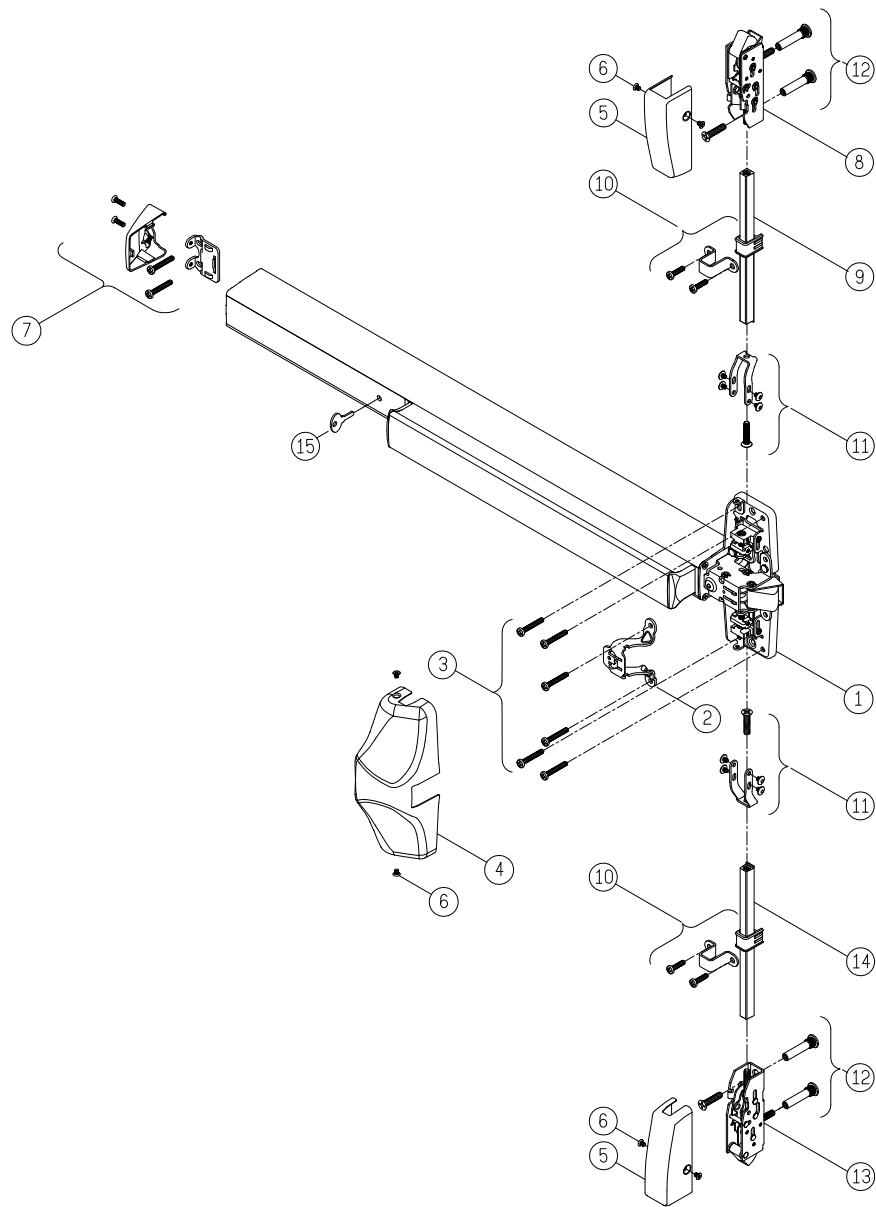
Item No.	Q'ty	Description
1	1	QF1400 Mortise Device for (3' or 4')
2	1	Mounting Screw - Center Case (68-0403)
3	1	Center Case Cover
4	2	Mounting Screws - Cover (553-M9010)

Item No.	Q'ty	Description
5	1	End Cap Kit (68-59**)
6	1	M7000 Mortise Lock Case
7	1	Mortise Case Lock Screw (554-M9010)
8	1	Armor Front

Q1000 Series Service Manual

Q1500

Three-Point Latching Device - 3PT



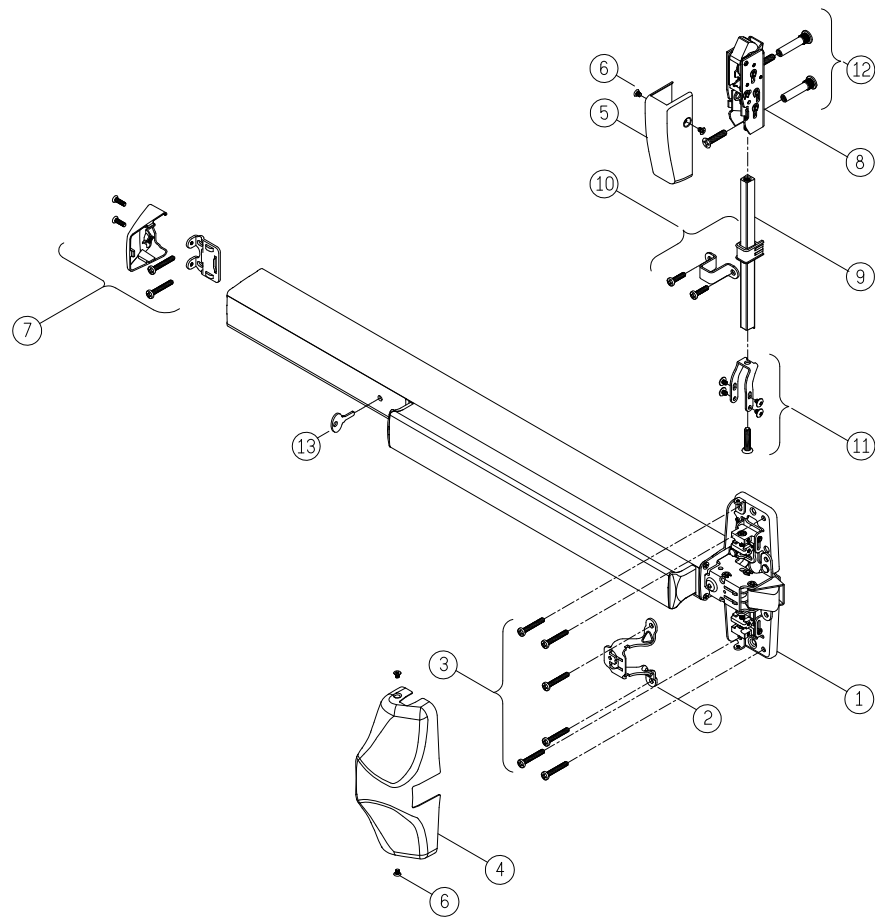
Item No.	Q'ty	Description
1	1	Q1500 3TP Device for (3' or 4')
2	1	Support Bracket
3	1	Mounting Screw - Center Case (68-5302)
4	1	Center Case Cover
5	2	Latch Covers
6	3	Mounting Screws - Cover (553-M9010)
7	1	End Cap Kit (68-59**)
8	1	Top Latch Assembly

Item No.	Q'ty	Description
9	1	Top Rod (See Page 29)
10	2	Mounting Kits - Rod Support (68-2501)
11	2	Mounting Kits - Rod Connector (68-0901)
12	2	Mounting Kits - Latch (68-0402)
13	1	Bottom Latch Assembly
14	1	Bottom Rod (See Page 29)
15	1	Dogging Key

Q1000 Series Service Manual

Q1500

Three-Point Latching Device - 3PT (LBR)



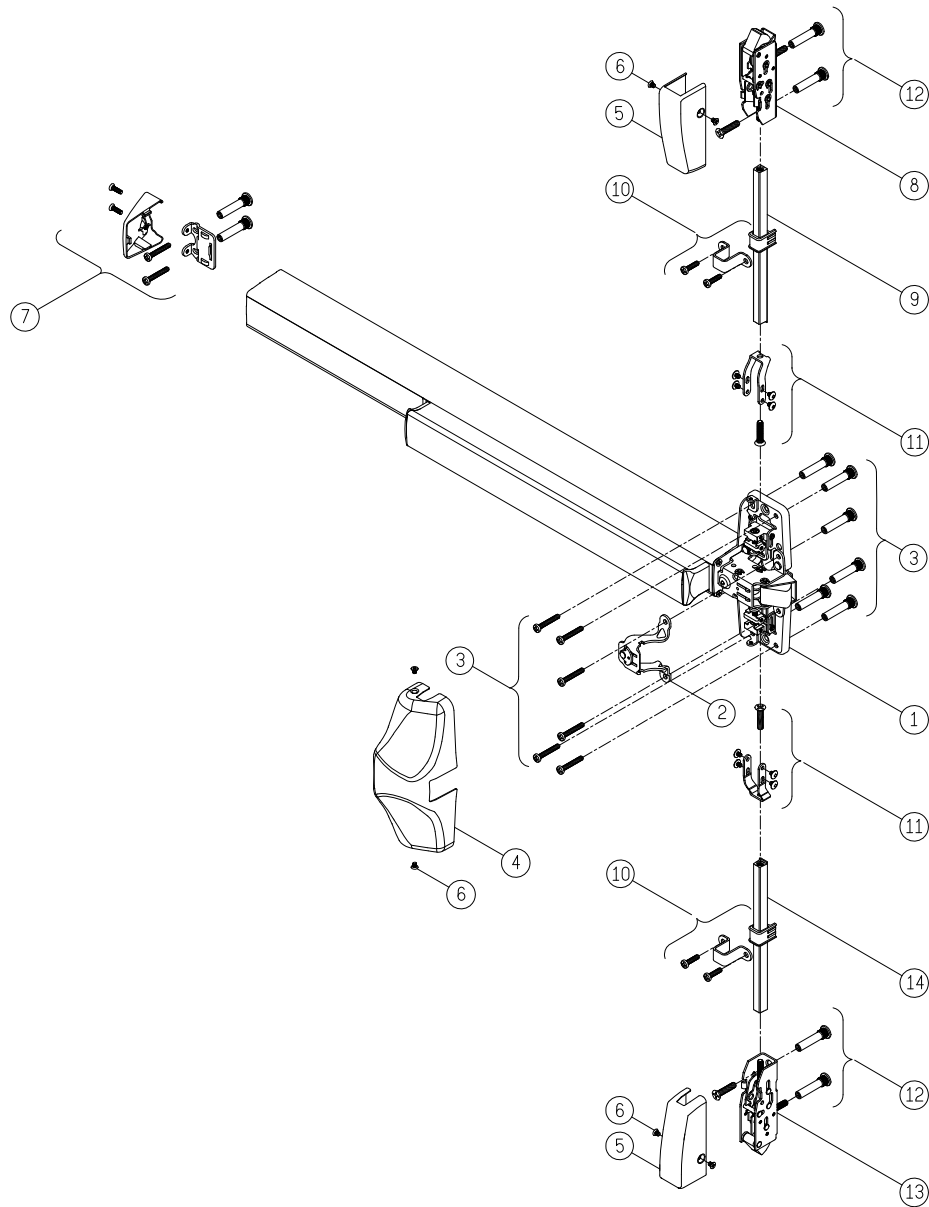
Item No.	Q'ty	Description
1	1	Q1500 3TP (LBR) Device for (3' or 4')
2	1	Support Bracket
3	1	Mounting Screw - Center Case (68-5302)
4	1	Center Case Cover
5	1	Latch Cover
6	2	Mounting Screws - Cover (553-M9010)
7	1	End Cap Kit (68-59**)

Item No.	Q'ty	Description
8	1	Top Latch Assembly
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	Mounting Kit - Latch (68-0402)
13	1	Dogging Key

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QF1500

Three-Point Latching Fire Device - 3PT



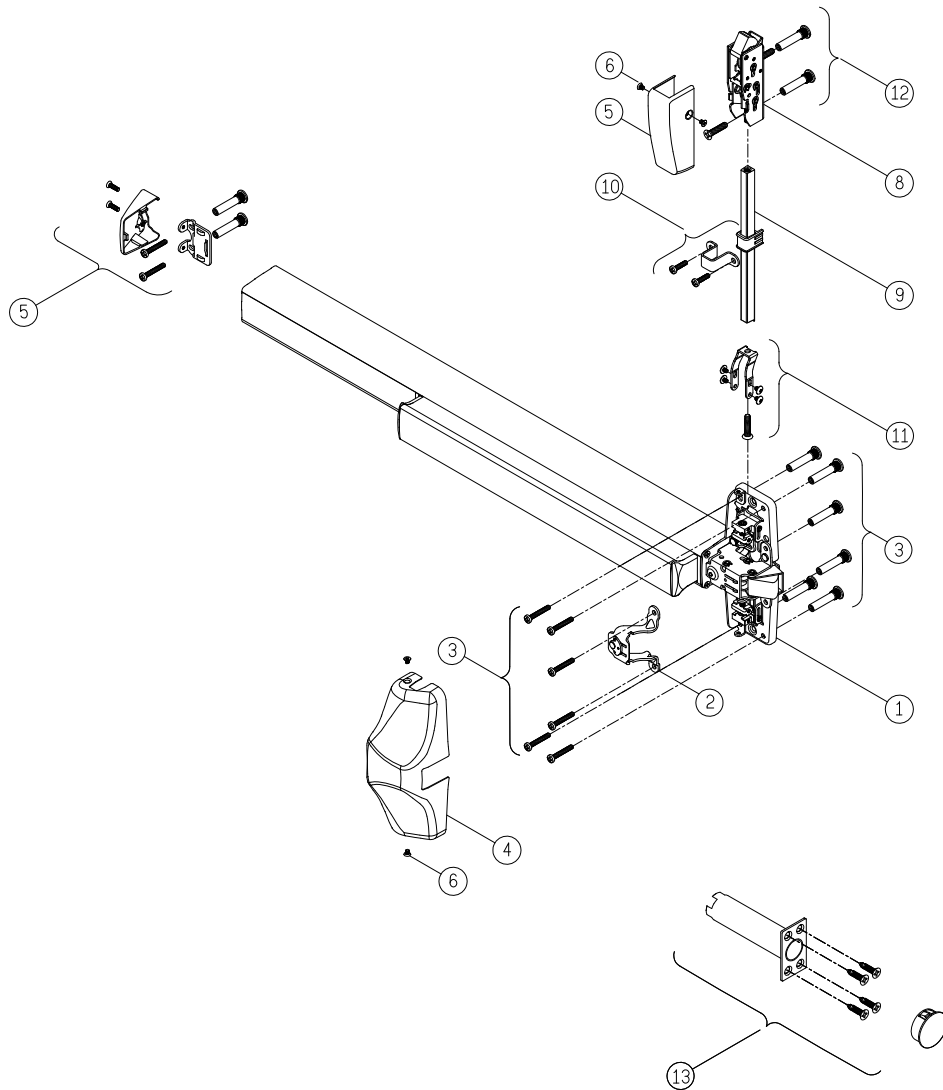
Item No.	Q'ty	Description
1	1	QF1500 3TP Device for (3' or 4')
2	1	Support Bracket
3	1	Mounting Screw - Center Case (68-5302)
4	1	Center Case Cover
5	2	Latch Covers
6	3	Mounting Screws - Cover (553-M9010)
7	1	End Cap Kit (68-59**)

Item No.	Q'ty	Description
8	1	Top Latch Assembly
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	Mounting Kit - Latch (68-0402)
13	1	Bottom Latch Assembly
14	1	Bottom Rod (See Page 29)

Q1000 Series Service Manual

QF1500

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






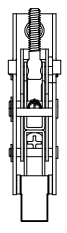
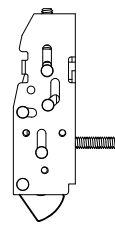
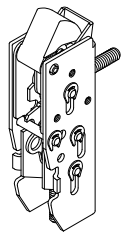
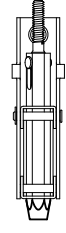
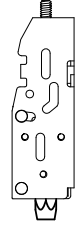
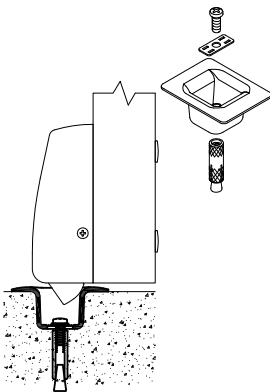
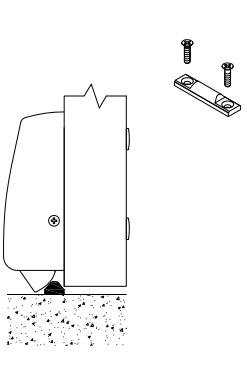
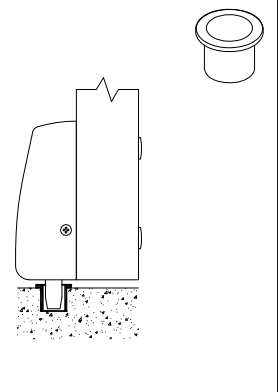
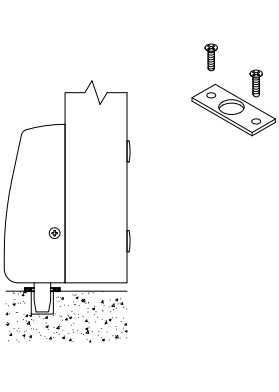
Item No.	Q'ty	Description
1	1	QF1500 3TP (LBR) Device for (3' or 4')
2	1	Support Bracket
3	1	Mounting Screw - Center Case (68-5302)
4	1	Center Case Cover
5	1	Latch Cover
6	2	Mounting Screws - Cover (553-M9010)
7	1	End Cap Kit (68-59**)

Item No.	Q'ty	Description
8	1	Top Latch Assembly
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	Mounting Kit - Latch (68-0402)
13	1	Fire Bolt Kit (68-4502)




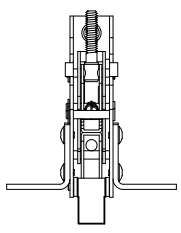
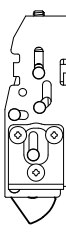
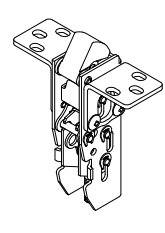
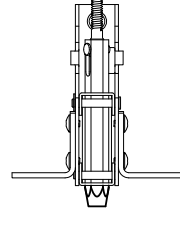
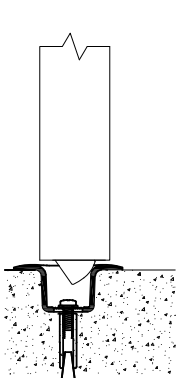
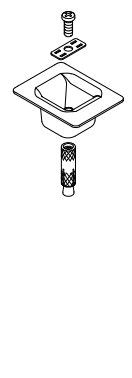
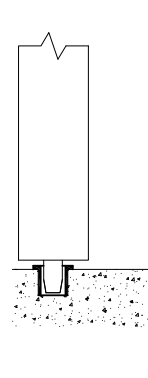
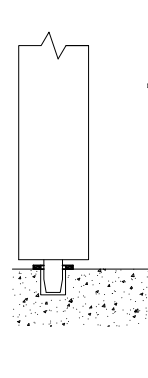
Q1000 Series Service Manual


Bottom Latches


For SVR/3PT

Latch Type	Pullman Latch  		Round Slide Bolt Latch 		
					
Strikes Applications	Q227/Q227F		Q224F	Q226F	Q225F
					

For CVR

Latch Type	Pullman Latch  		Round Slide Bolt Latch 	
				
Strikes Applications	Q227/Q227F		Q226F	Q225F
				

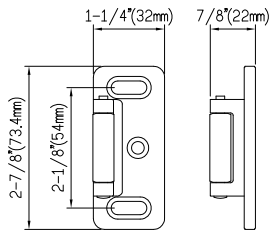
 Fire Exit Hardware

 Panic Exit Device

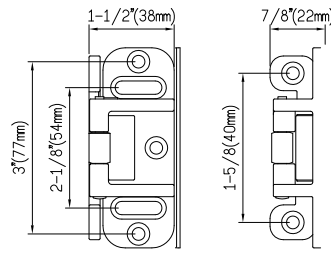
Q1000 Series Service Manual

Strikes / Shims

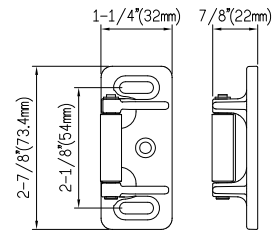
Rim Exit Device



Q106 Rim Strike
For Rim/3PT



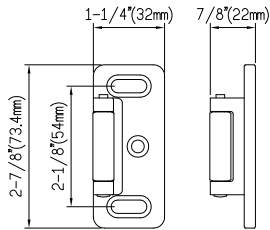
Q108 Rim Strike
For double door Rim/3PT
use with F170/F270 Mullion



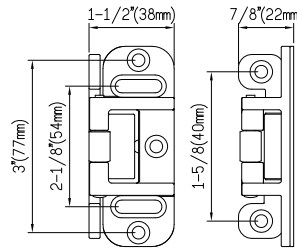
Q106Z Rim Strike
For 1105 Rim

Vertical Rod Device

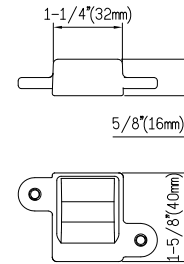
Top Strike



Q106 Rim Strike
For SVR/3PT

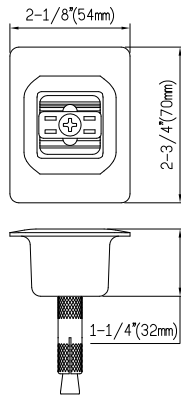


Q108 Rim Strike
For double door SVR/3PT
use with Mullion

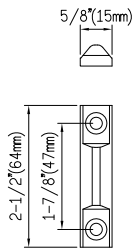


Q216 Top Strike
For CVR

Bottom Strike

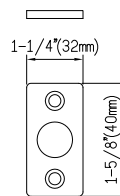


Q227F Bottom Strike
Standard furnished
for SVR/CVR/3PT

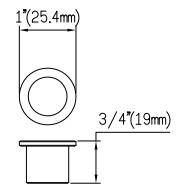


Q224 Bottom Strike
Optional for SVR/3PT

Flat Bottom Strike



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

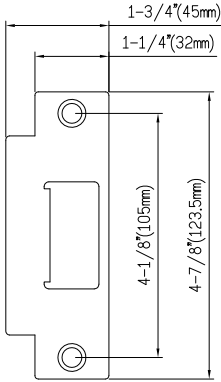


Q226 Bottom Strike
Optional for SVR/CVR/3PT
Round Slide Bolt

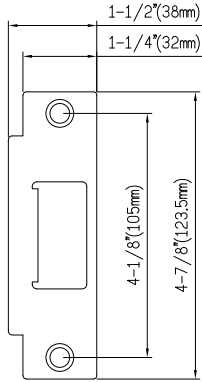
Q1000 Series Service Manual

Strikes / Shims

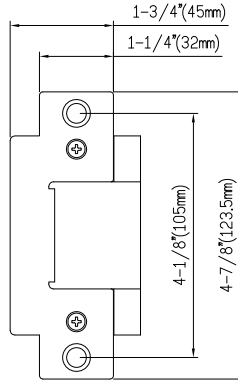
Mortise Lock Exit Device



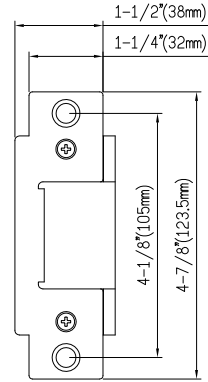
Q306 Strike
Standard furnished for use on 1-3/4"(45mm) to 2-1/4"(57mm) single door and 2-1/4"(57mm) double doors with Coordinator and Astragal



Q336 Strike
For use on 1-3/4"(45mm) Thick Double Doors with Coordinator and Astragal

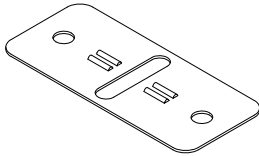


Q337 Open Back Strike
Standard furnished for 1-3/4"(45mm) thick double doors without Coordinator

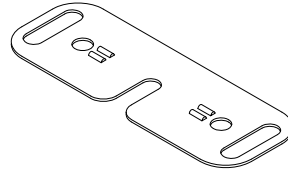
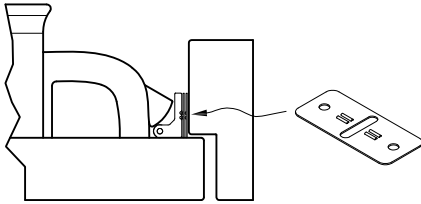


Q338 Open Back Strike
For 2-1/4"(57mm) thick double doors without Coordinator

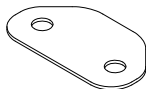
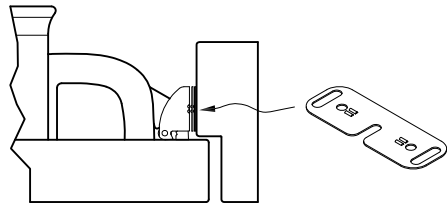
Shims



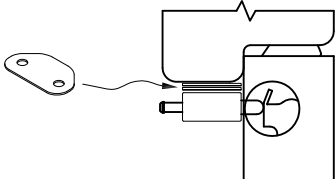
For Q106 Rim Strike
Part No.368190001100



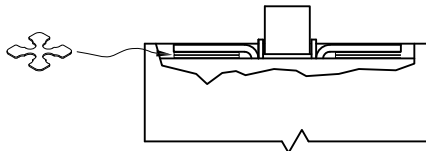
For Q108 Rim Strike
Part No.368190501100



For CVR Ratchet Release
Part No.368190105400



For CVR Top & Bottom Latches
Part No.368190301100

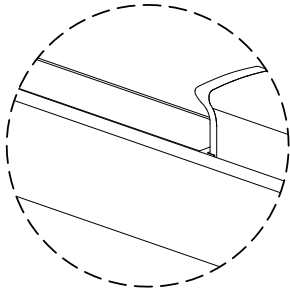


Q1000 Series Service Manual

Dogging

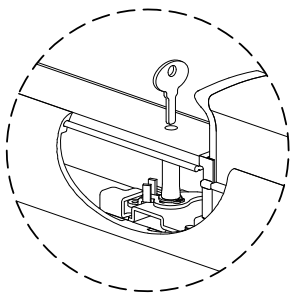
LD - Less Dogging

Less Dogging is available in all Q1000 Series Panic Exit Devices.

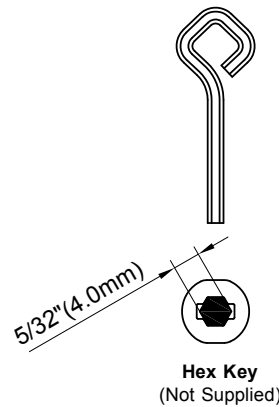


HKD - Flat / Hex Key Dogging

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



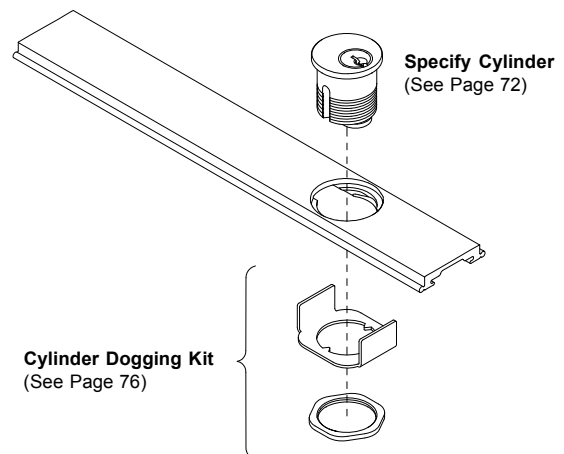
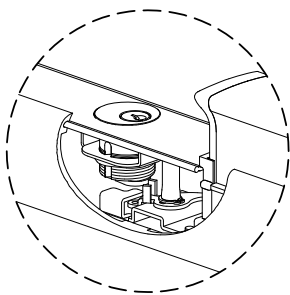
Flat Key
(Supplied)



Hex Key
(Not Supplied)

CD - Cylinder Dogging

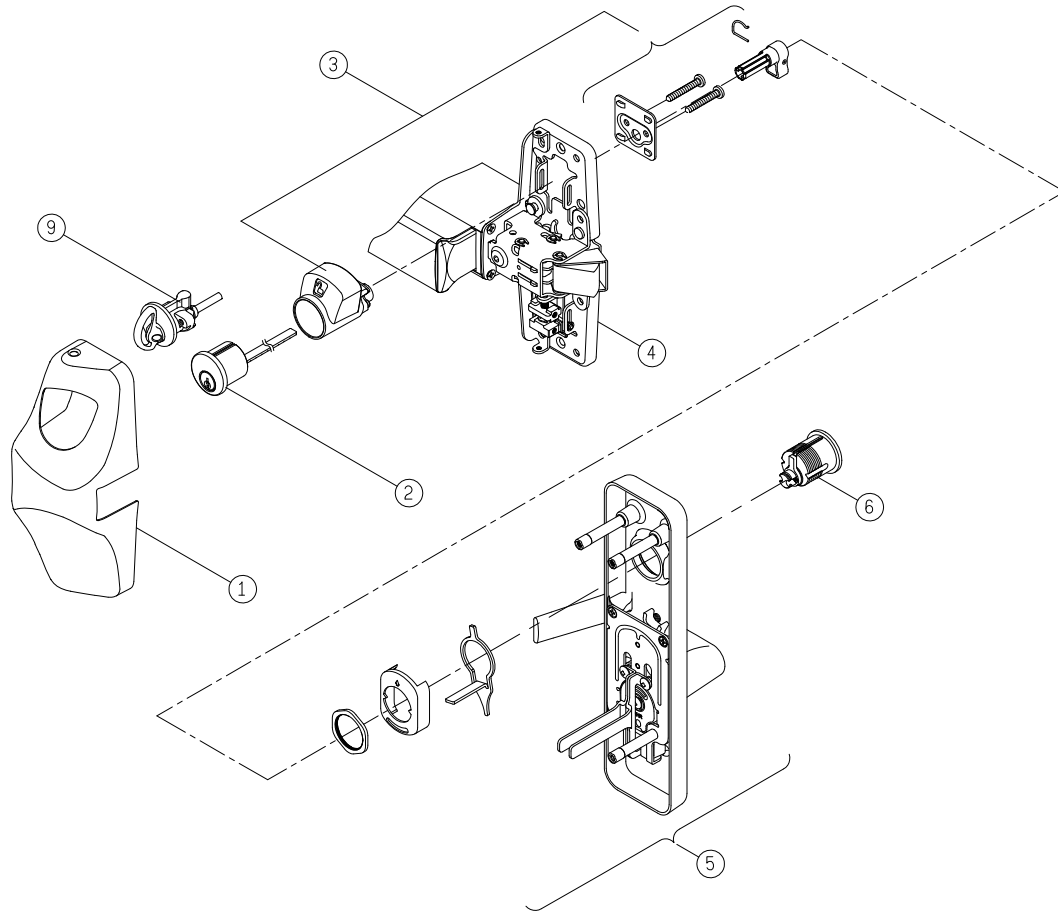
Available for all models except for Fire Exit Hardware. Cylinder Dogging provides the ability to lock down the Push Bar with a Key Cylinder, so that the door can be used in the push/pull mode. To order, specify "CD". It requires the use of a 1-1/4" Mortise Cylinder. Not Standard Furnished; specify when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



Q1000 Series Service Manual

Double Cylinder - Handed

Q1100/QF1100 Rim Exit Device



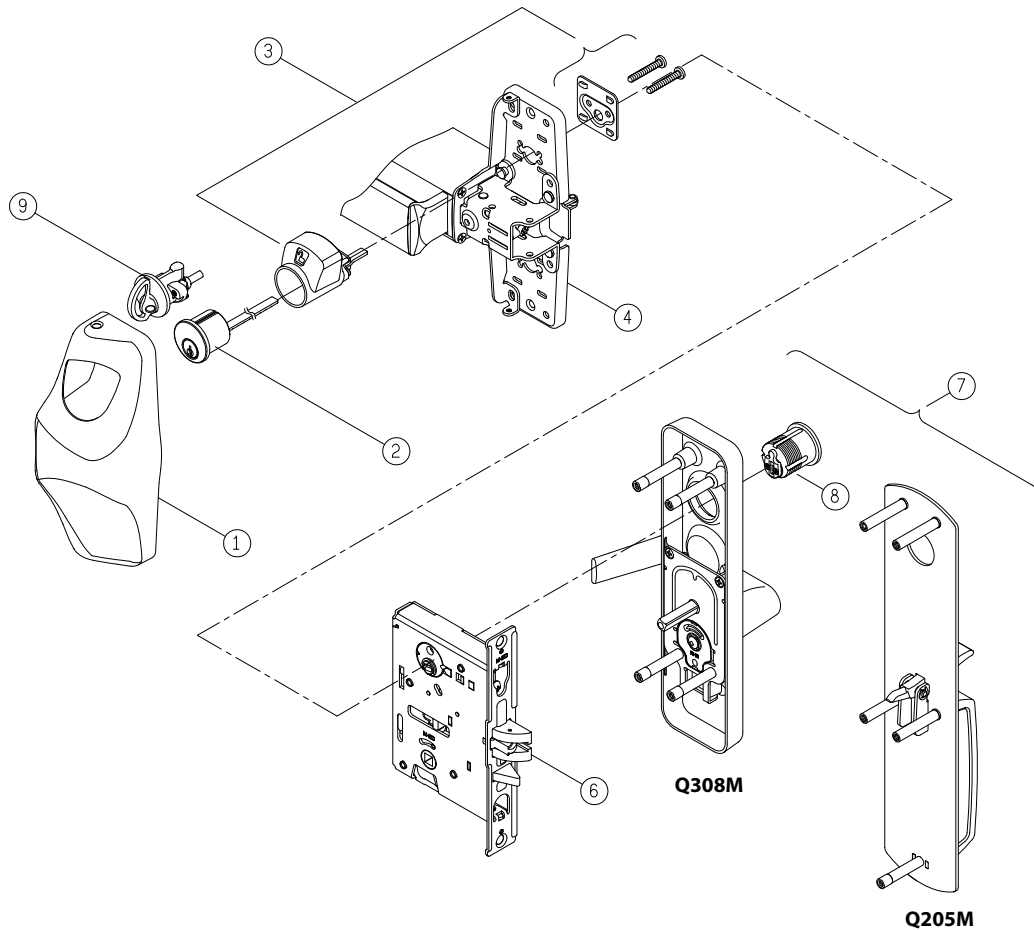
Item No.	Q'ty	Description
1	1	Center Case Cover for RHR
		Center Case Cover for LHR
2	1	Cylinder
3	1	Indicator Kit
4	1	Device Chassis for 3' RHR (P)
		Device Chassis for 3' LHR (P)
		Device Chassis for 3' RHR (A)
		Device Chassis for 3' LHR (A)
		Device Chassis for 4' RHR (P)
		Device Chassis for 4' LHR (P)
		Device Chassis for 4' RHR (A)
		Device Chassis for 4' LHR (A)
5	1	Q308R Escutcheon Trim
6	1	Mortise Cylinder
9	1	Thumbturn





*RHR Show

Q1000 Series Service Manual

Double Cylinder - Handed

Q1400/QF1400 Mortise Lock Exit Device



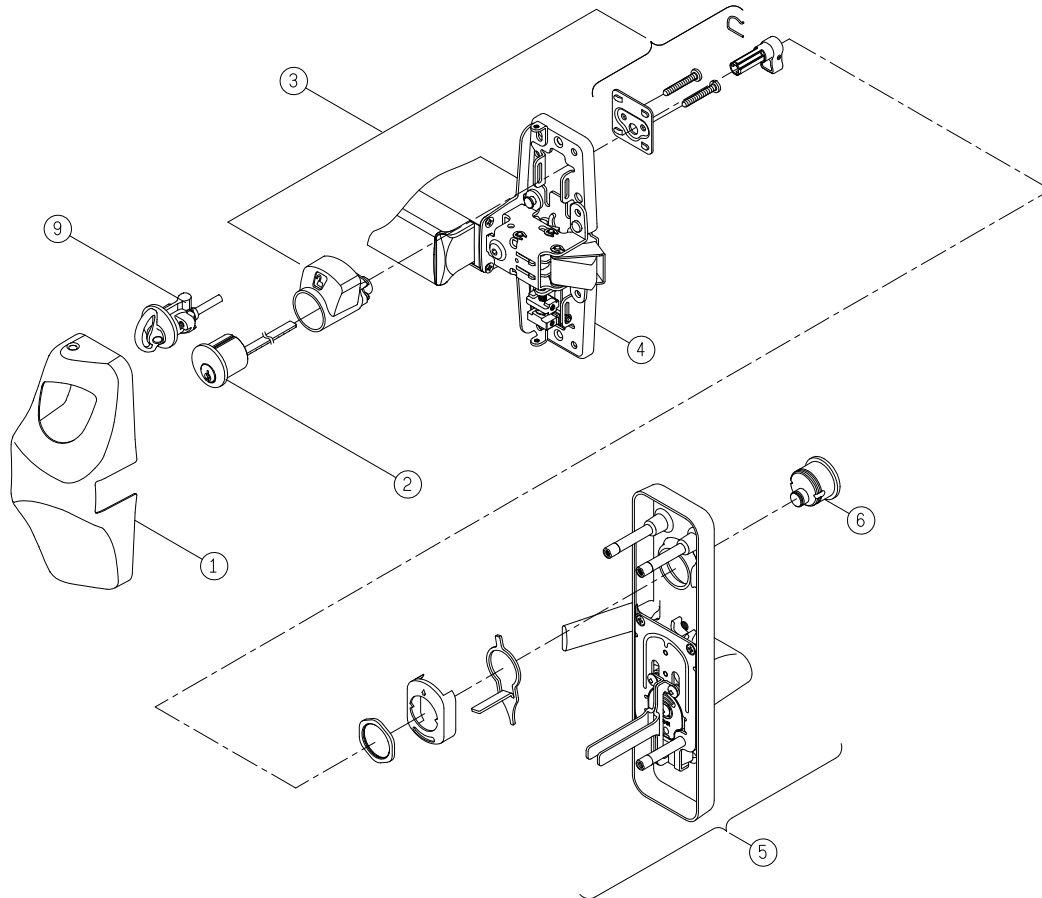
Item No.	Q'ty	Description
1	1	Center Case Cover for RHR
		Center Case Cover for LHR
2	1	Cylinder
3	1	Cylinder Retaining Kit
4	1	Device Chassis for 3' 
		Device Chassis for 3' 
		Device Chassis for 4' 
		Device Chassis for 4' 
6	1	M7000 Mortise Lock Case
7	1	Q205M Thumbpiece Trim
		Q308M Escutcheon Trim
8	1	Mortise Cylinder
9	1	Thumbturn









* RHR Show

Q1000 Series Service Manual

Inside Key Only

Q1100/QF1100 Rim Exit Device



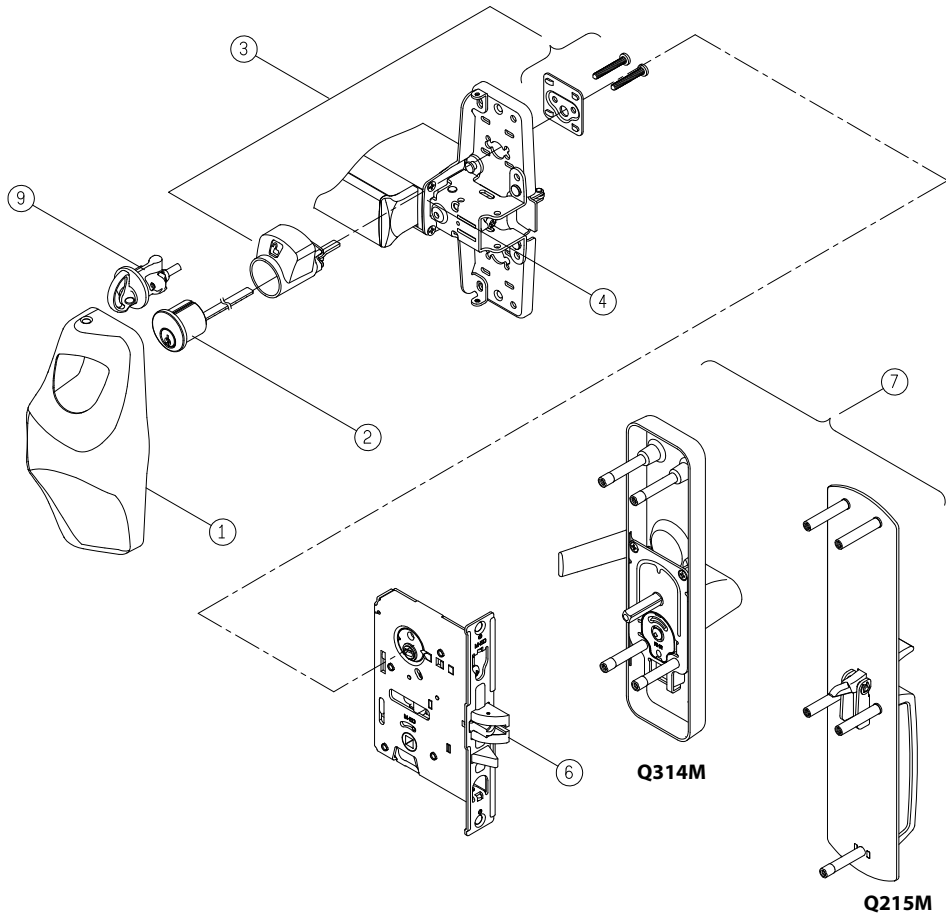
Item No.	Q'ty	Description
1	1	Center Case Cover for RHR
		Center Case Cover for LHR
2	1	Cylinder
3	1	Indicator Kit
4	1	Device Chassis for 3' RHR 
		Device Chassis for 3' LHR 
		Device Chassis for 3' RHR 
		Device Chassis for 3' LHR 
		Device Chassis for 4' RHR 
		Device Chassis for 4' LHR 
		Device Chassis for 4' RHR 
		Device Chassis for 4' LHR 
5	1	Q308R Escutcheon Trim
6	1	Mortise Cylinder with Extension Cam
9	1	Thumbturn





*RHR Show

Q1000 Series Service Manual

Inside Key Only

Q1400/QF1400 Mortise Lock Exit Device



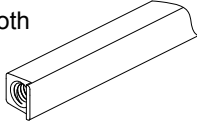

Item No.	Q'ty	Description
1	1	Center Case Cover for RHR
		Center Case Cover for LHR
2	1	Cylinder
3	1	Cylinder Retaining Kit
4	1	Device Chassis for 3' 
		Device Chassis for 3' 
		Device Chassis for 4' 
		Device Chassis for 4' 
6	1	M7000 Mortise Lock Case
7	1	Q215M Thumbpiece Trim
		Q314M Escutcheon Trim
8	1	Mortise Cylinder
9	1	Thumbturn

* RHR Show

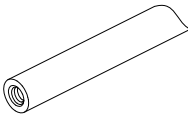
Q1000 Series Service Manual

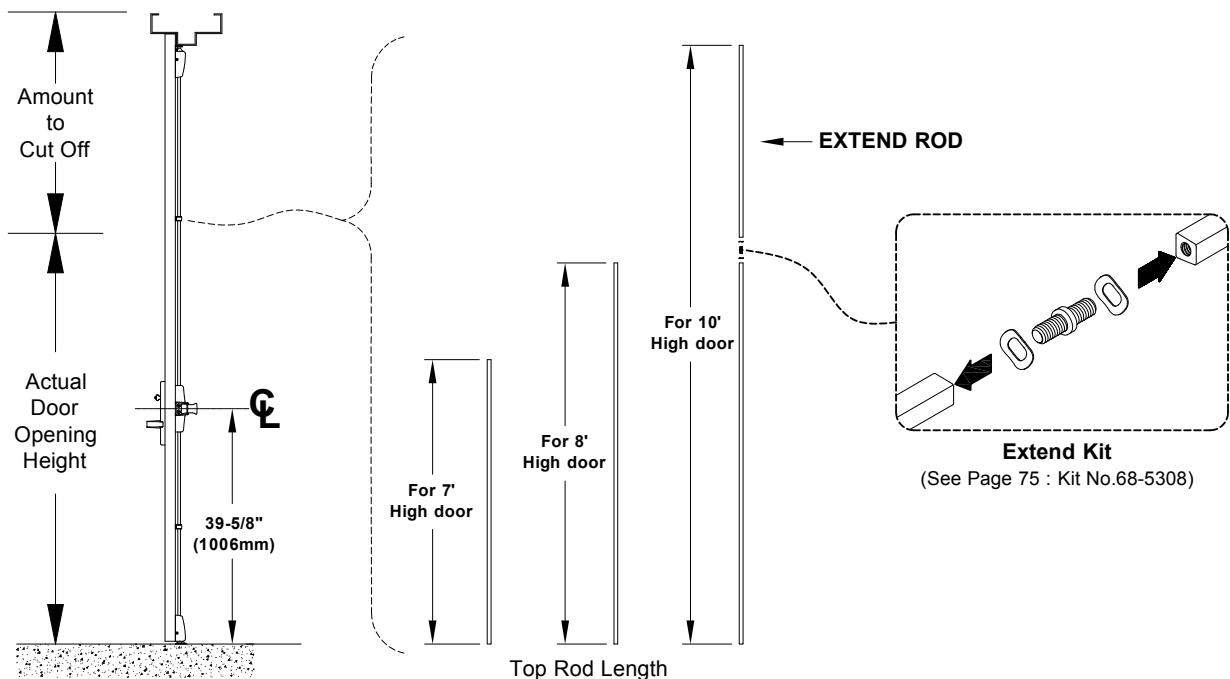
Rods

For SVR & 3PT

Illustration	Rod Type	Rod Length	Door Height
Smooth 	Top Rod	36-1/8" (916mm)	7'
		48-1/8" (1221mm)	8'
48-1/8" (1221mm) Add 24" (608mm)		10'	
Grooved 	Bottom Rod	31-7/8" (807mm)	Device Center to Finished Floor 39-5/8" (1006mm)

For CVR


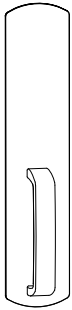

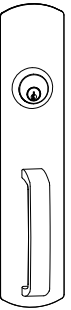
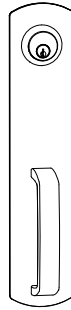




Illustration	Rod Type	Rod Length	Door Height
	Top Rod	36" (940mm)	7'
		49" (1245mm)	8'
		49" (1245mm) Add 23-7/8" (605mm)	10'
	Bottom Rod	31-3/4" (805mm)	Device Center to Finished Floor 39-5/8" (1006mm)



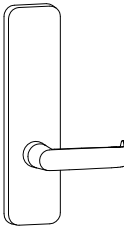
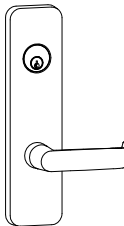
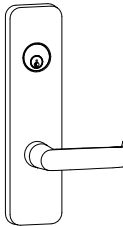
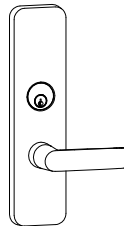
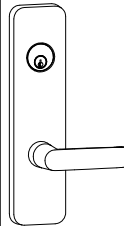
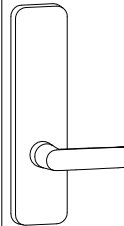
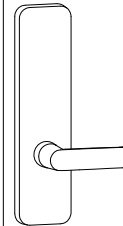
Q1000 Series Service Manual

Q200 Series Thumbpiece Finishes

Q200 Series Thumbpiece

ANSI No.	01	02	03			05	05/07*	15	
Operation	Exit Only	Dummy Pull Only	Night Latch Key Retracts Latch Bolt			Key Locks or Unlocks Latch Bolt		Thumbpiece Always Active, No Cylinder	
Illustration									
Trim No.	Q201	Q202		Q203R	Q203M	Q205R	Q205M	Q215R	Q215M
Device No.	Q 1100 Q 1200 Q 1300 Q 1400 Q 1500	Q 1100 Q 1200 Q 1300 Q 1400 Q 1500	Q1100 Q1200 Q1300 Q1400 Q1500	Q 1100 Q 1200 Q 1300 Q 1500	Q1400	Q1100 Q1200 Q1300 Q1500	Q1400	Q1100 Q1200 Q1300 Q1500	Q1400
Cylinder Type			Rim/ Mortise	Rim	Mortise	Rim	Mortise		

Q300 Series Escutcheon


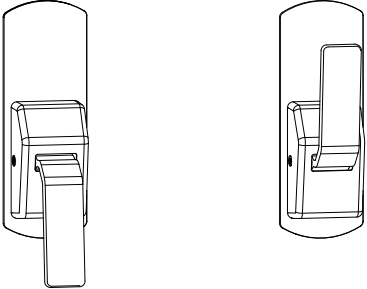
ANSI No.	01	02	08/10*		09		14	
Operation	Exit Only	Dummy Pull Only	Key Locks or Unlocks Latch Bolt		Night Latch Key Retracts Latch Bolt		Lever/Knob Always Active, No Cylinder	
Illustration								
Trim No.		Q302	Q308R	Q308M	Q309R	Q309M	Q314R	Q314M
Device No.	Q1100 Q1200 Q1300 Q1400 Q1500	Q1100 Q1200 Q1300 Q1400 Q1500	Q1100 Q1200 Q1300 Q1500	Q1400	Q1100 Q1200 Q1300 Q1500	Q1400	Q1100 Q1200 Q1300 Q1500	Q1400
Cylinder Type			Mortise	Mortise	Rim	Mortise		

* Double Cylinder-Handed See Pages 28-29 & Inside Only Key See Pages 30-31





Q1000 Series Service Manual

Trim Options

Q400 Series Pull Trim

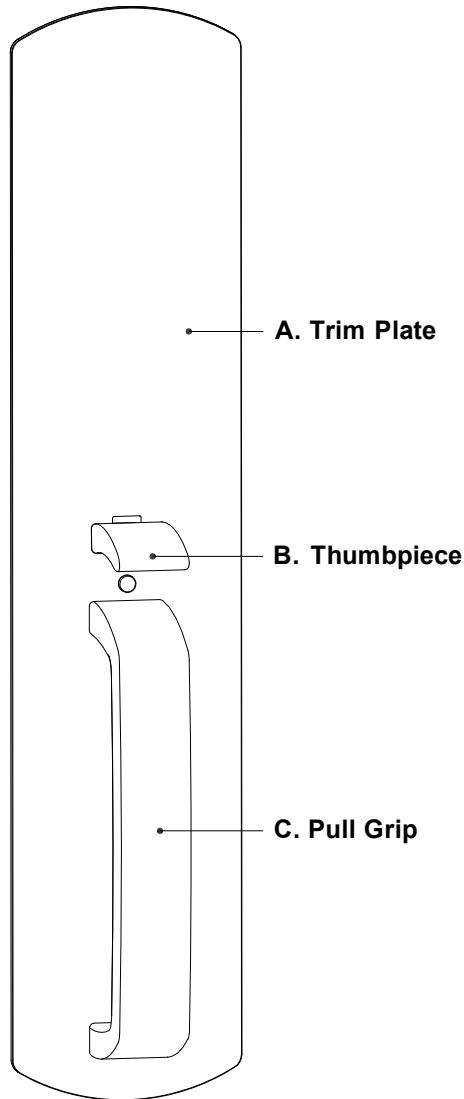
ANSI No.	08		14	
Operation	Key Locks or Unlocks Latch Bolt		Paddle Always Operable	
Illustration				
Trim No.	HL408-RHR	HL408-LHR	HL414-RHR HL414-LHR	HL414-RHR HL414-LHR
Paddle Orientation	Down		Down	Up
Device No.	Q1400		Q1400	
Cylinder Type	Mortise		Mortise	

Q600 Series Pull Handle

ANSI No.	02	08		09	14		
Operation	Dummy Pull Only	Key Locks or Unlocks Latch Bolt		Night Latch, Key Retracts Latch Bolt	Pull Handle Always Operable, No Cylinder		
Illustration							
Trim No.	Q602	Q608R	Q608M	Q609R	Q609M	Q614R	Q614M
Device No.	Q1100 Q1200 Q1300 Q1400 Q1500	Q1100 Q1200 Q1300 Q1500	Q1400	Q1100 Q1200 Q1300 Q1500	Q1400	Q1100 Q1200 Q1300 Q1500	Q1400
Cylinder Type		Mortise		Mortise			

Q1000 Series Service Manual

Q200 Series Thumbpiece Finishes



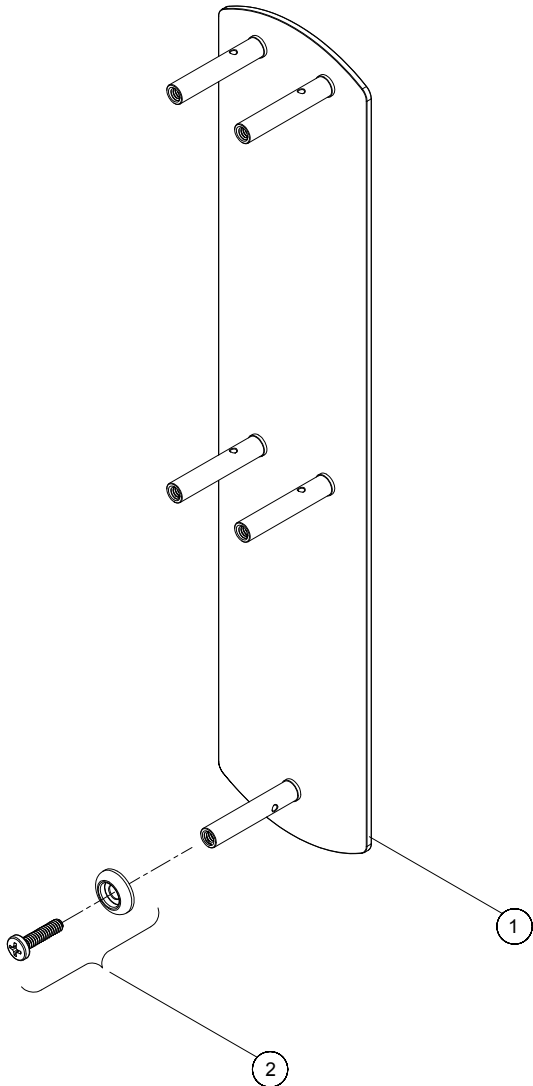
Finishes

Color	ANSI/BHMA	US	A.	B. C.	
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

Q1000 Series Service Manual

Q201

Exit Only

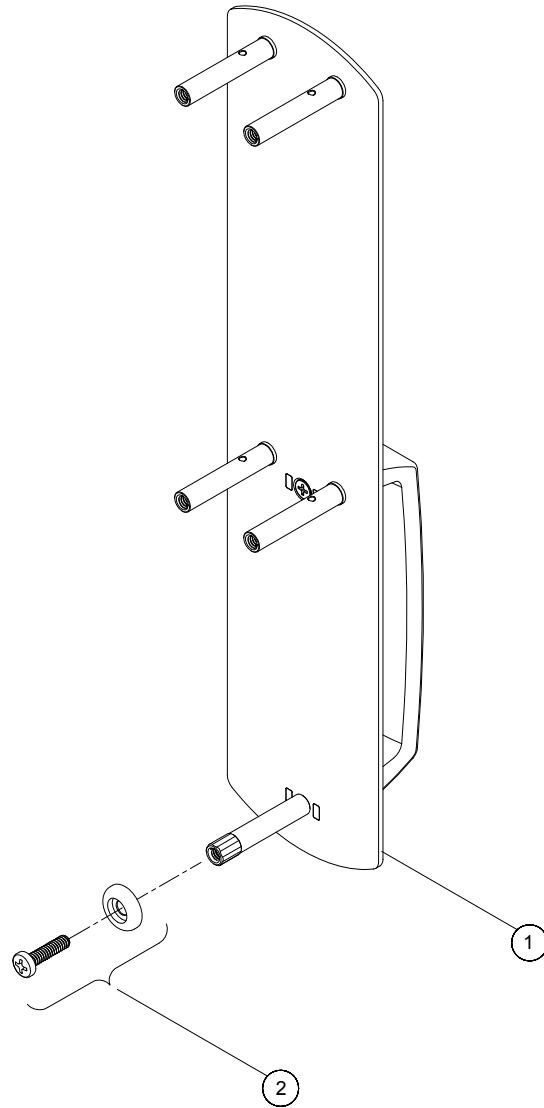


Item No.	Q'ty	Description
1	1	Q201 Thumbpiece
2	1	Mounting Kit - Trim Plate (68-5307)

Q1000 Series Service Manual

Q202

Dummy Pull Only

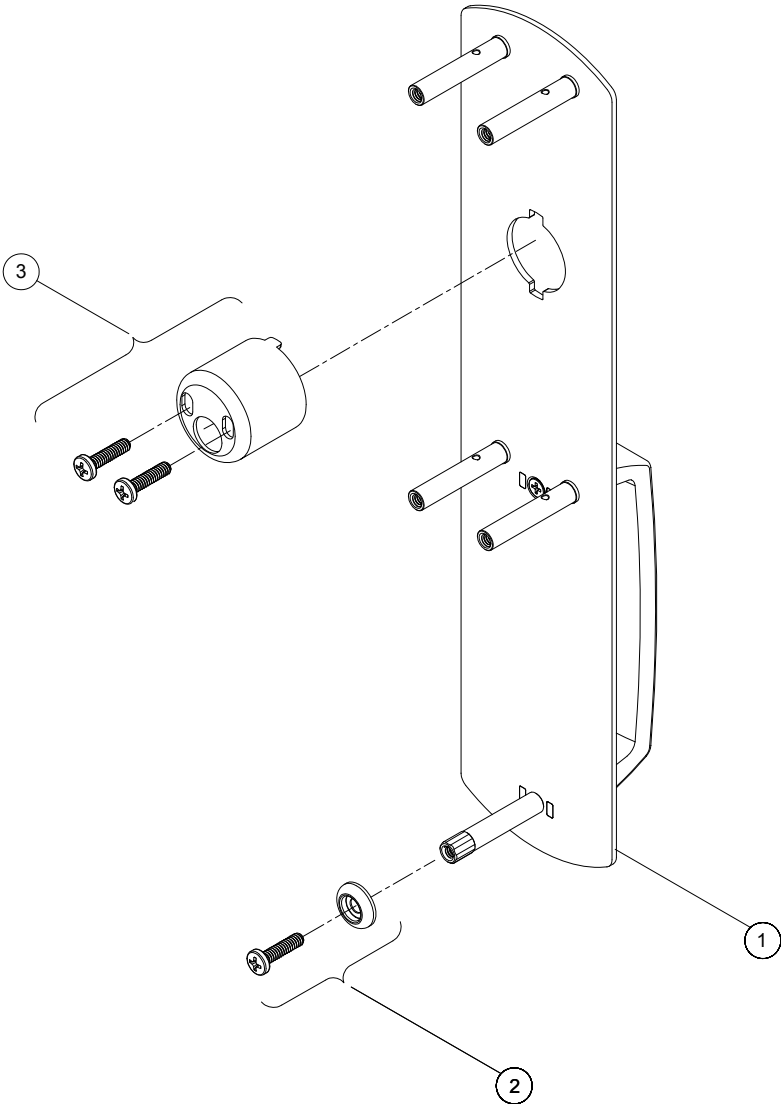


Item No.	Q'ty	Description
1	1	Q202 Thumbpiece
2	1	Mounting Kit - Trim Plate (68-5307)

Q1000 Series Service Manual

Q203R

Night Latch Key Retracts Latch Bolt

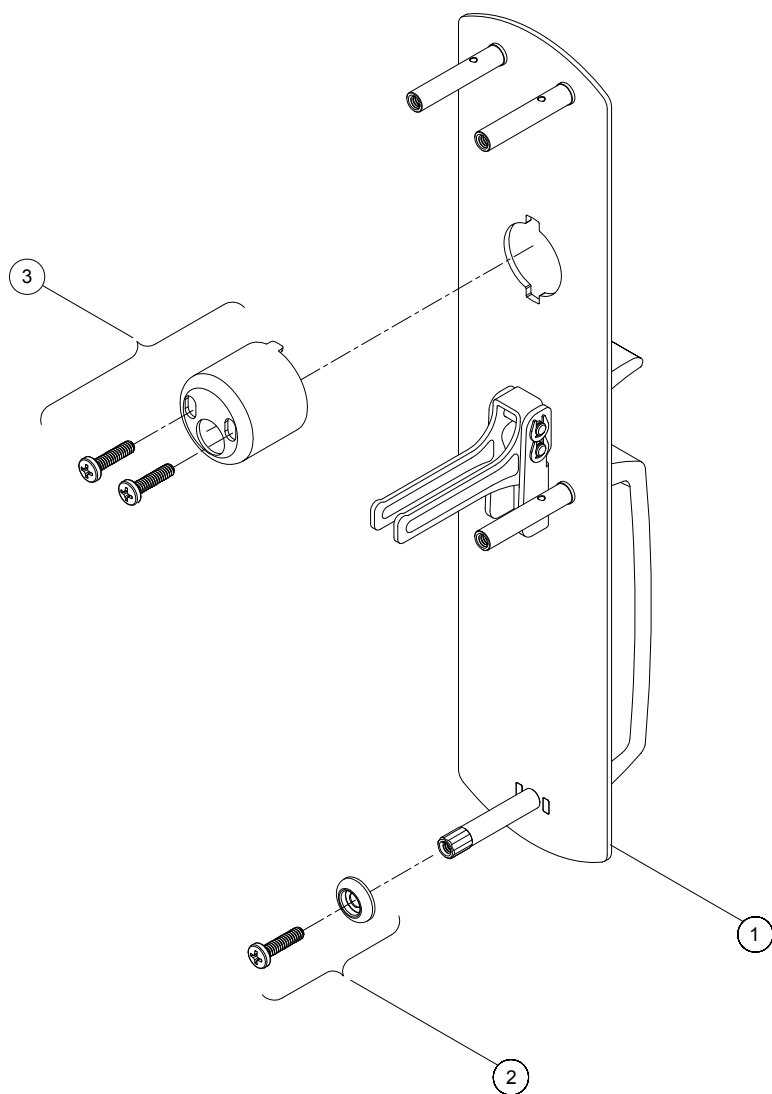


Item No.	Q'ty	Description
1	1	Q203R Thumbpiece
2	1	Mounting Kit - Trim Plate (68-5307)
3	1	Cylinder Retaining Kit (68-4001)

Q1000 Series Service Manual

Q205R

Key Locks or Unlocks Latch Bolt

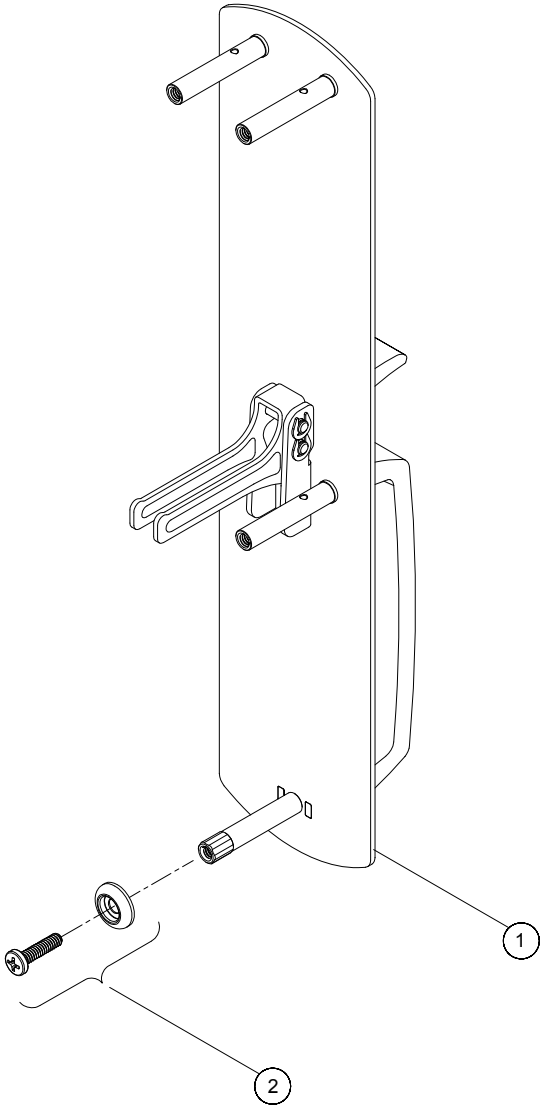


Item No.	Q'ty	Description
1	1	Q205R Thumbpiece
2	1	Mounting Kit - Trim Plate (68-5307)
3	1	Cylinder Retaining Kit (68-4001)

Q1000 Series Service Manual

Q215R

Thumbpiece Always Active

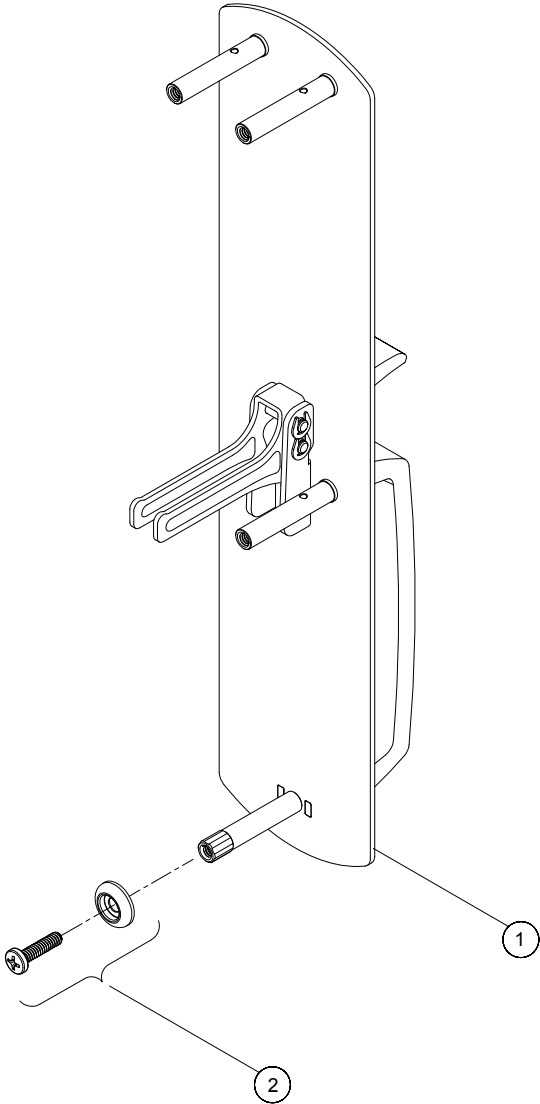


Item No.	Q'ty	Description
1	1	Q215R Thumbpiece
2	1	Mounting Kit - Trim Plate (68-5307)

Q1000 Series Service Manual

Q215M

Thumbpiece Always Active

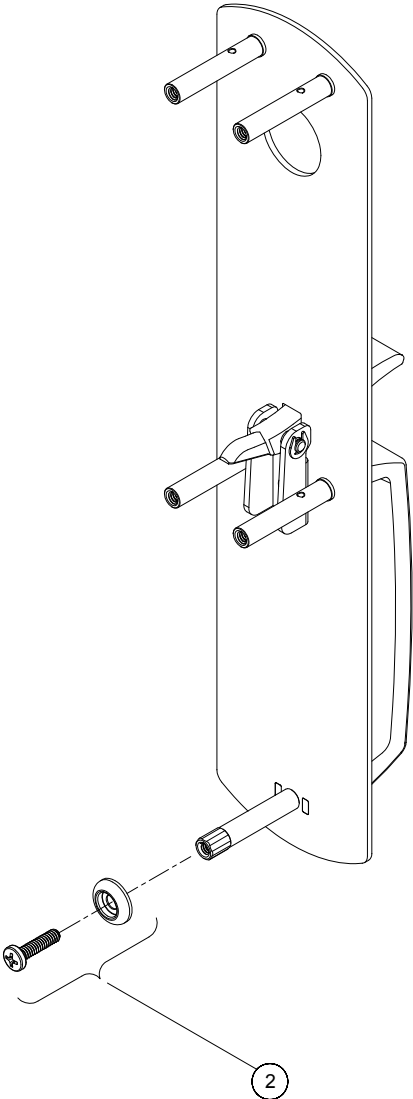


Item No.	Q'ty	Description
1	1	Q215R Thumbpiece
2	1	Mounting Kit - Trim Plate (68-5307)

Q1000 Series Service Manual

Q205M

Key Locks or Unlocks Latch Bolt

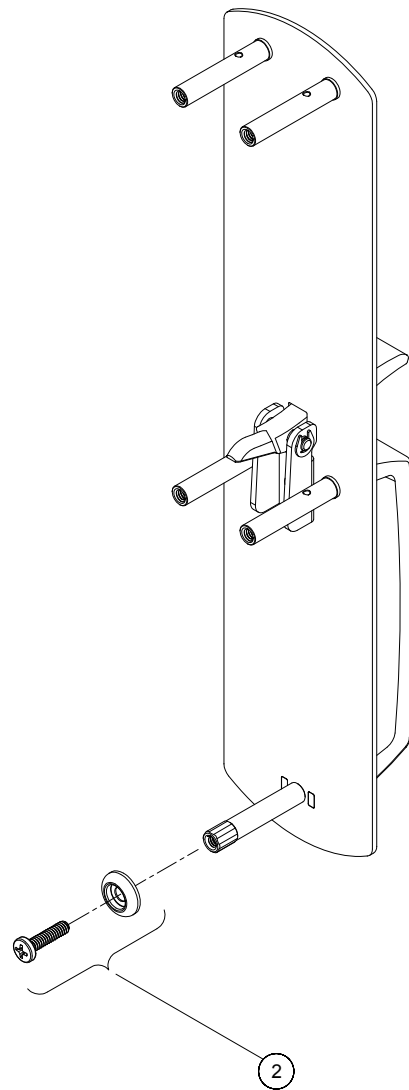


Item No.	Q'ty	Description
1	1	Q205M Thumbpiece
2	1	Mounting Kit - Trim Plate (68-5307)

Q1000 Series Service Manual

Q215M

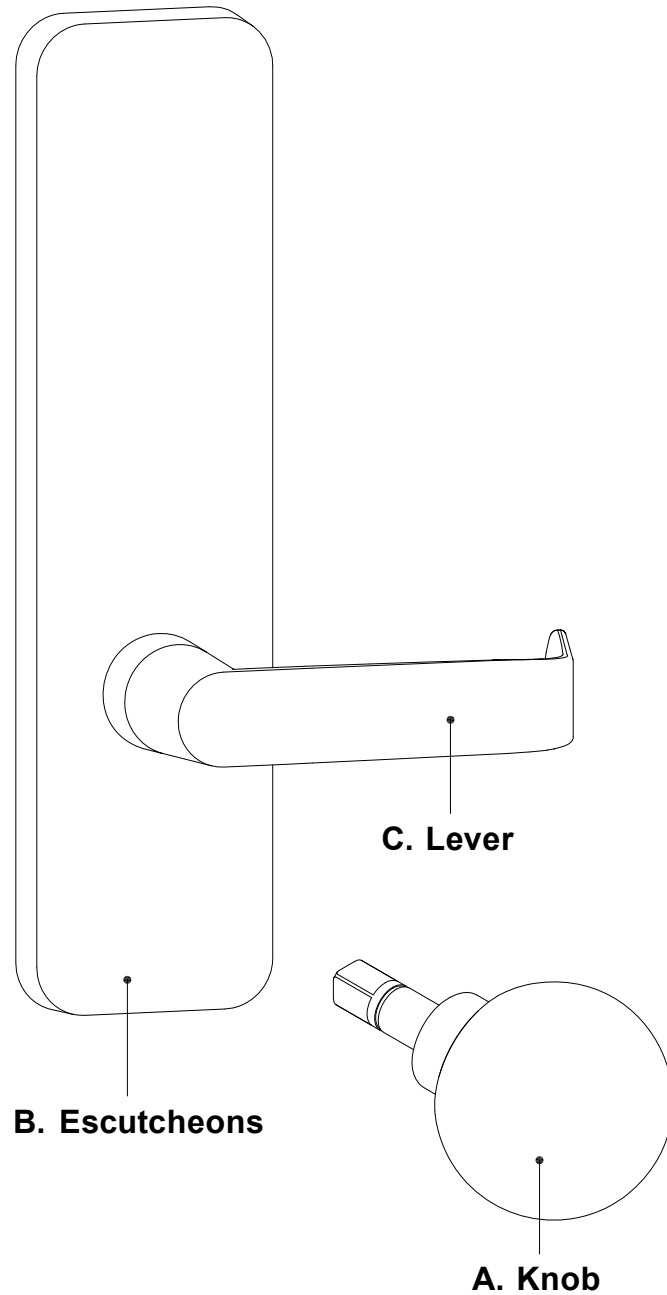
Thumbpiece Always Active



Item No.	Q'ty	Description
1	1	Q215M Thumbpiece
2	1	Mounting Kit - Trim Plate (68-5307)

Q1000 Series Service Manual

Q300 Series Escutcheon Finishes



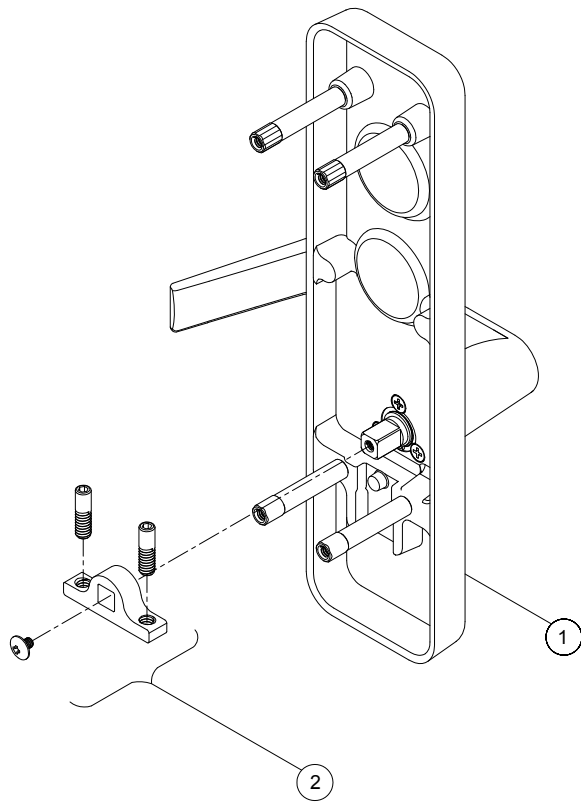
Finishes

Color	ANSI/BHMA	US	A.	B. C.	
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

Q1000 Series Service Manual

Q302

Dummy Pull Only

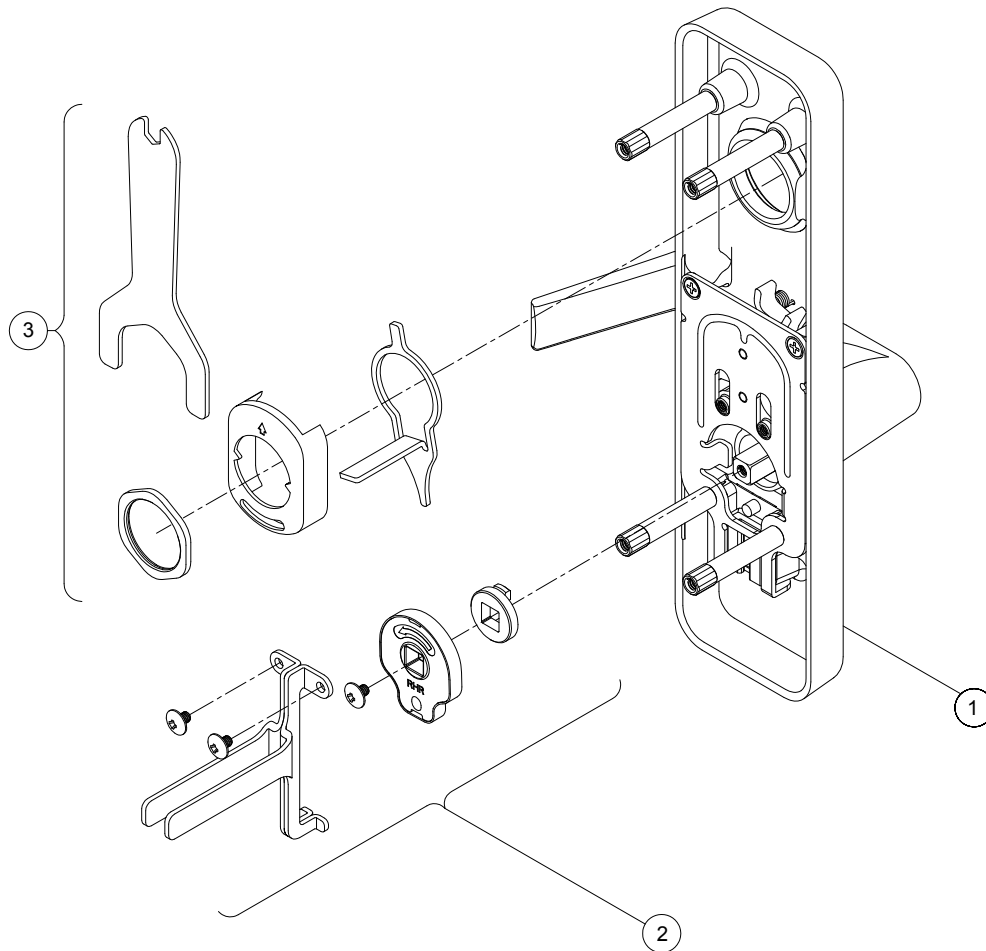


Item No.	Q'ty	Description
1	1	Q302 Escutcheon
2	1	Cylinder Retaining Kit (68-4501)

Q1000 Series Service Manual

Q308R

Key Locks or Unlocks Latch Bolt

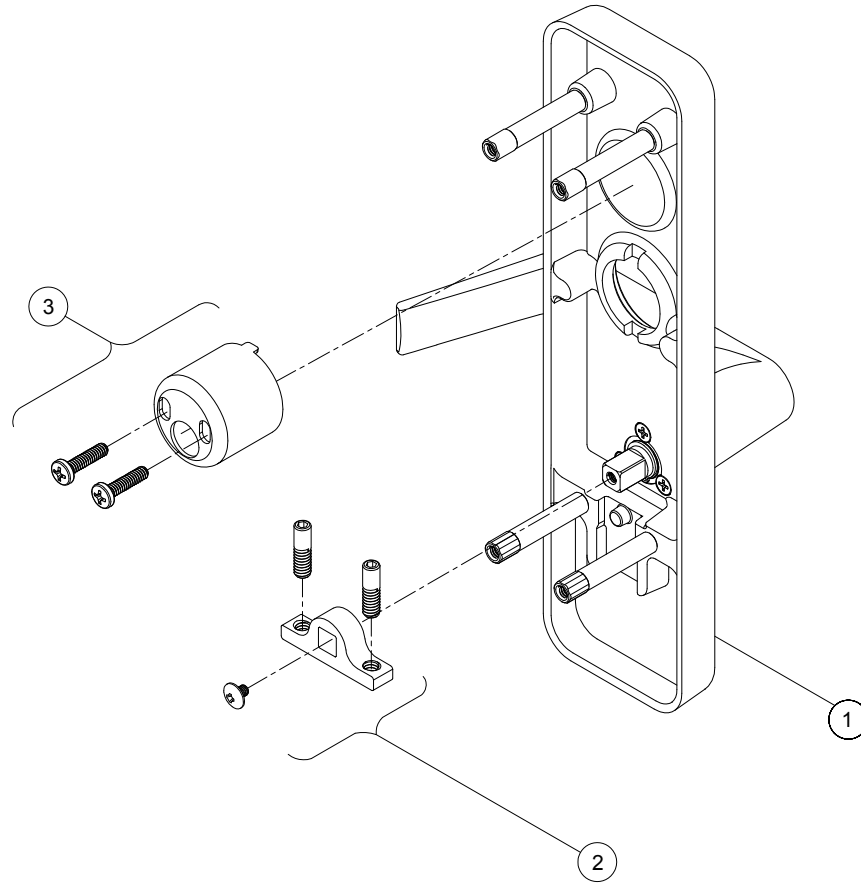


Item No.	Q'ty	Description
1	1	Q308R Escutcheon
2	1	Cylinder Retaining Kit (68-0303/68-0304)
3	1	Cylinder Retaining Kit (68-12**)

Q1000 Series Service Manual

Q309R

Night Latch Key Retracts Latch Bolt

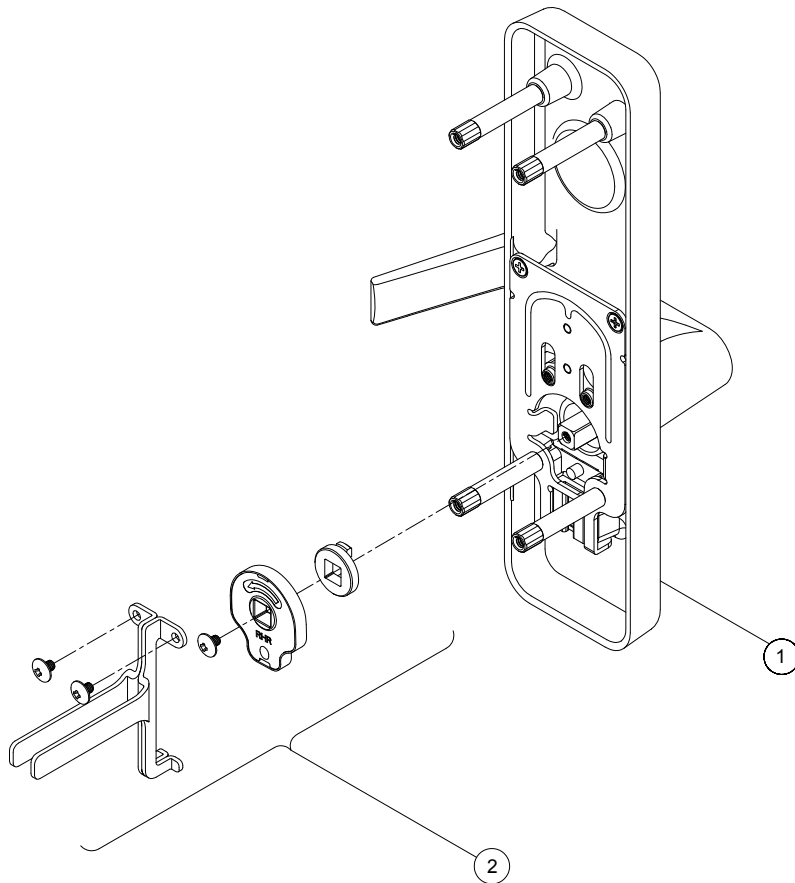


Item No.	Q'ty	Description
1	1	Q309R Escutcheon
2	1	Cylinder Retaining Kit (68-4501)
3	1	Cylinder Retaining Kit (68-4001)

Q1000 Series Service Manual

Q314R

Lever/Knob Always Active, No Cylinder

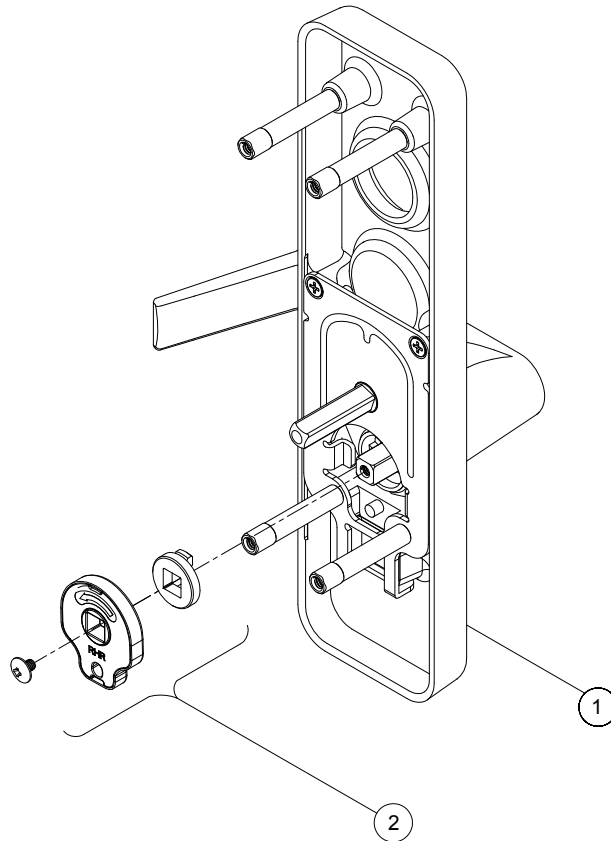


Item No.	Q'ty	Description
1	1	Q314R Escutcheon
2	1	Cylinder Retaining Kit (68-0303/68-0304)

Q1000 Series Service Manual

Q308M

Key Locks or Unlocks Latch Bolt

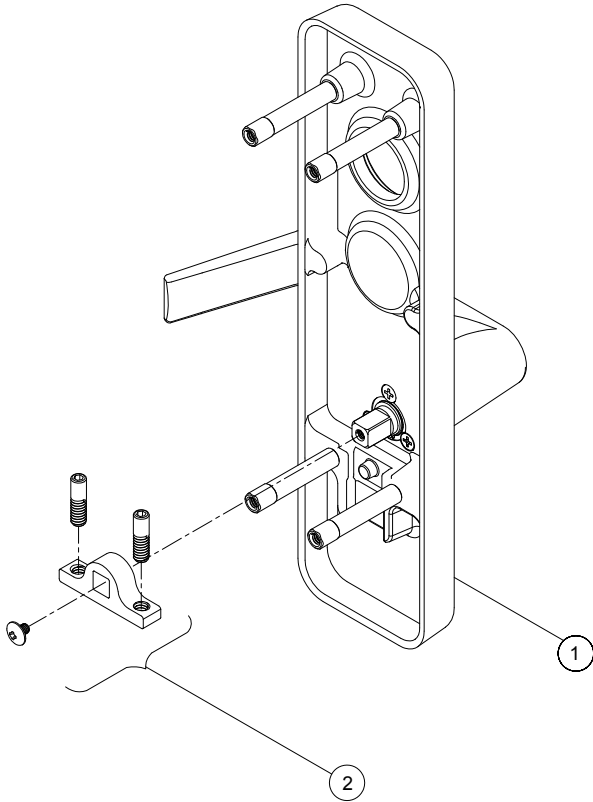


Item No.	Q'ty	Description
1	1	Q308M Escutcheon
2	1	Cylinder Retaining Kit (68-0301/68-0302)

Q1000 Series Service Manual

Q309M

Night Latch Key Retracts Latch Bolt

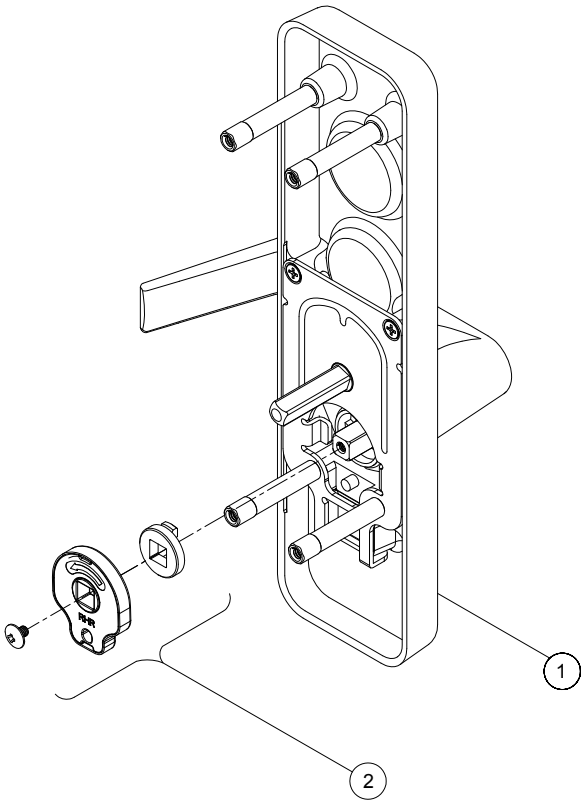


Item No.	Q'ty	Description
1	1	Q309M Escutcheon
2	1	Cylinder Retaining Kit (68-4501)

Q1000 Series Service Manual

Q314M

Lever/Knob Always Active, No Cylinder

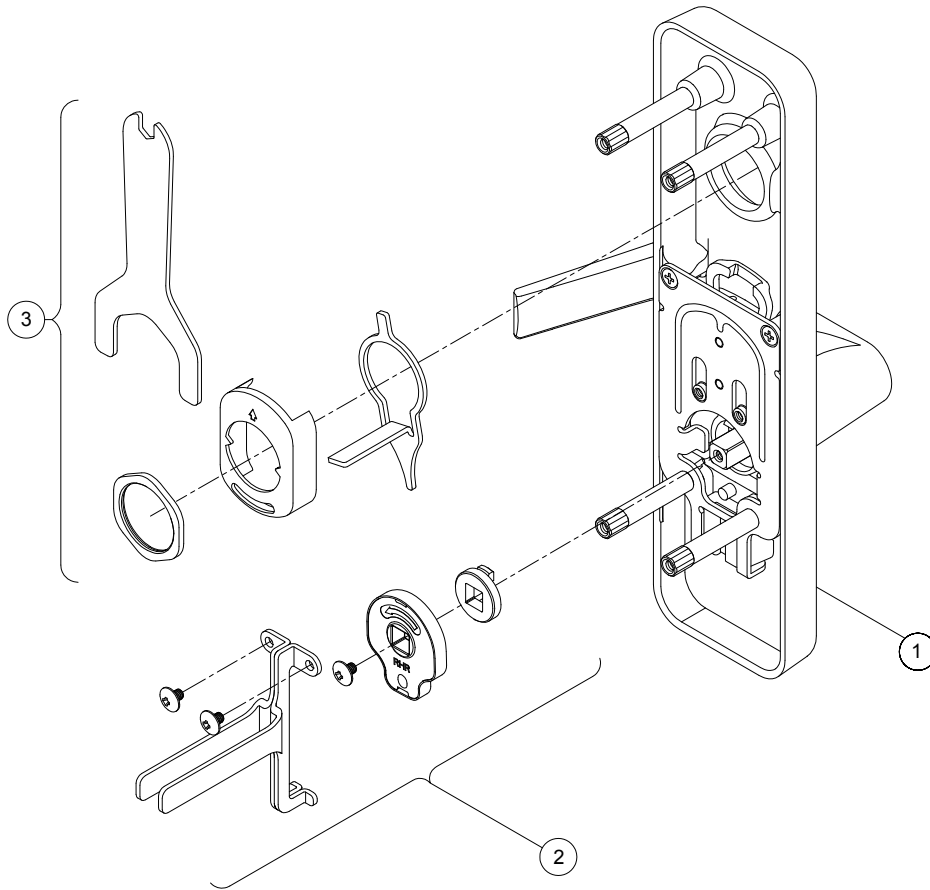


Item No.	Q'ty	Description
1	1	Q314M Escutcheon
2	1	Cylinder Retaining Kit (68-0301/68-0302)

Q1000 Series Service Manual

QC308R

Key locks or Unlocks Latch Bolt (Clutch)



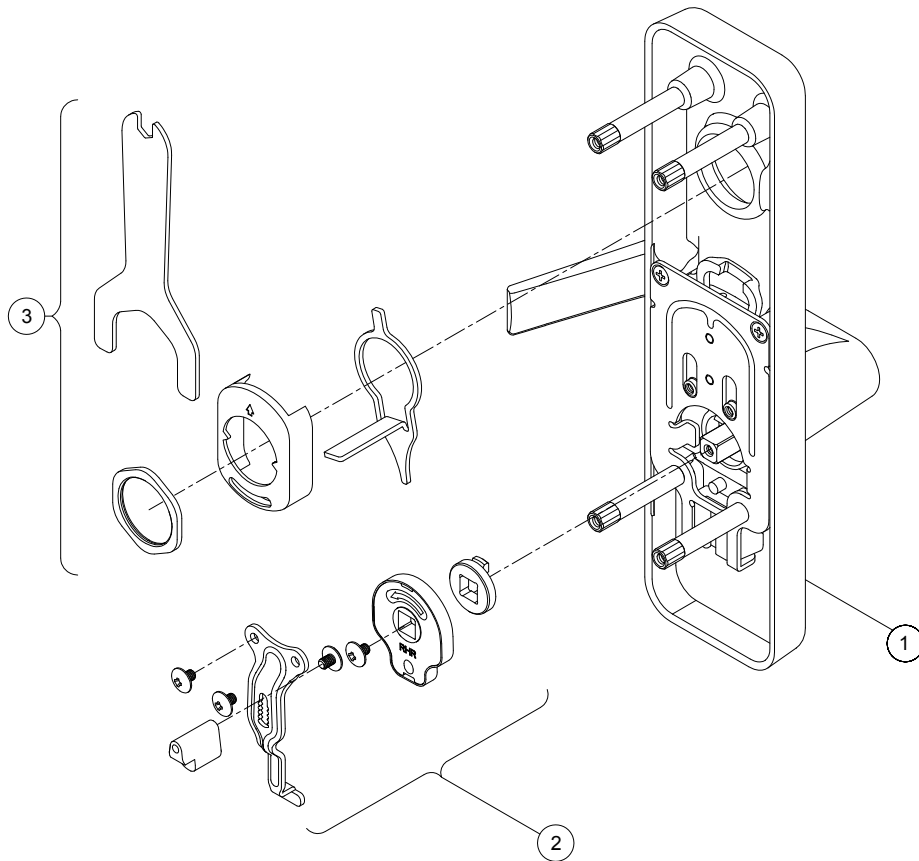
Item No.	Q'ty	Description
1	1	QC308R Escutcheon
2	1	Cylinder Retaining Kit (68-03**)
3	1	Cylinder Retaining Kit (68-12**)

NOTE : Cylinder Retaining Kit See Page 80

Q1000 Series Service Manual

QC308M

Key locks or Unlocks Latch Bolt (Clutch)

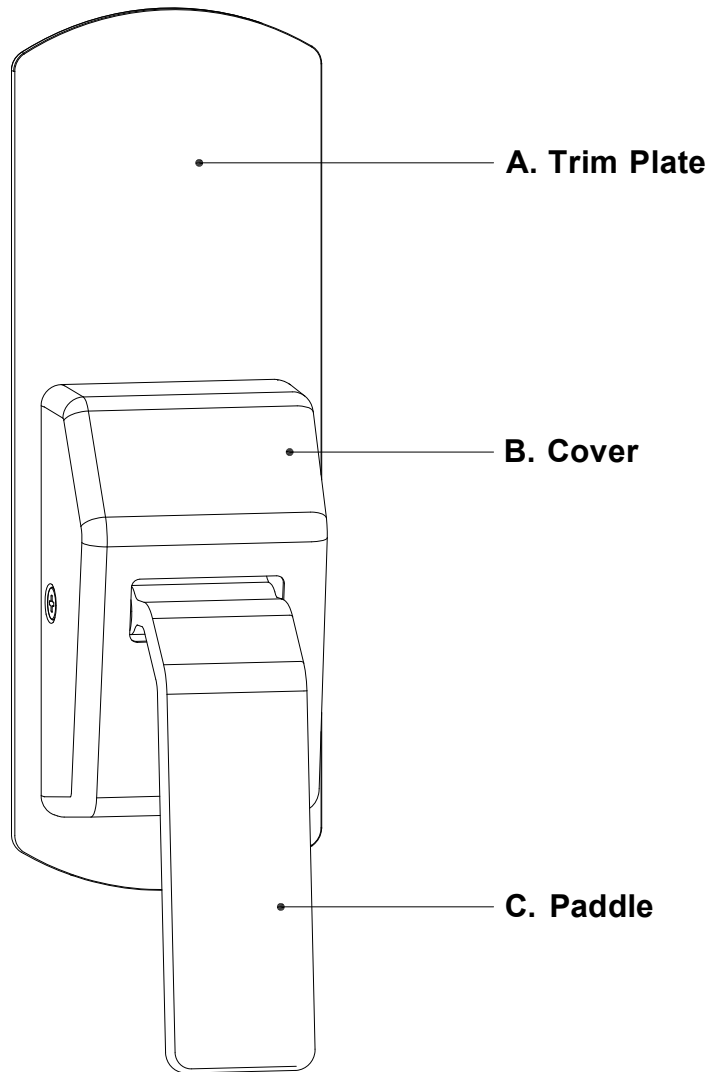


Item No.	Q'ty	Description
1	1	QC308M Escutcheon
2	1	Cylinder Retaining Kit (68-03**)
3	1	Cylinder Retaining Kit (68-12**)

NOTE : Cylinder Retaining Kit See Page 80

Q1000 Series Service Manual

Q400 Series Pull Trim Finishes



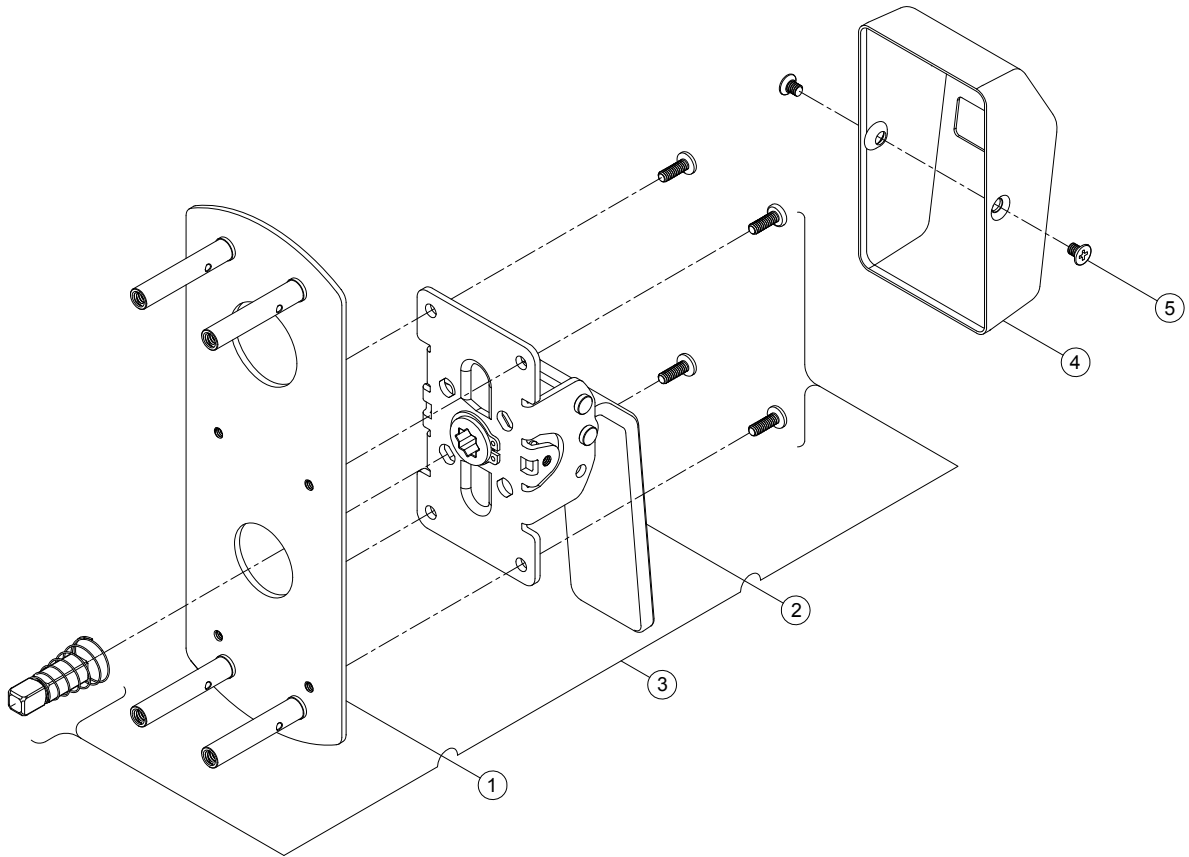
Finishes

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

Q1000 Series Service Manual

HL408-RHR Pull Trim

For Mortise Lock Exit Device (RHR)

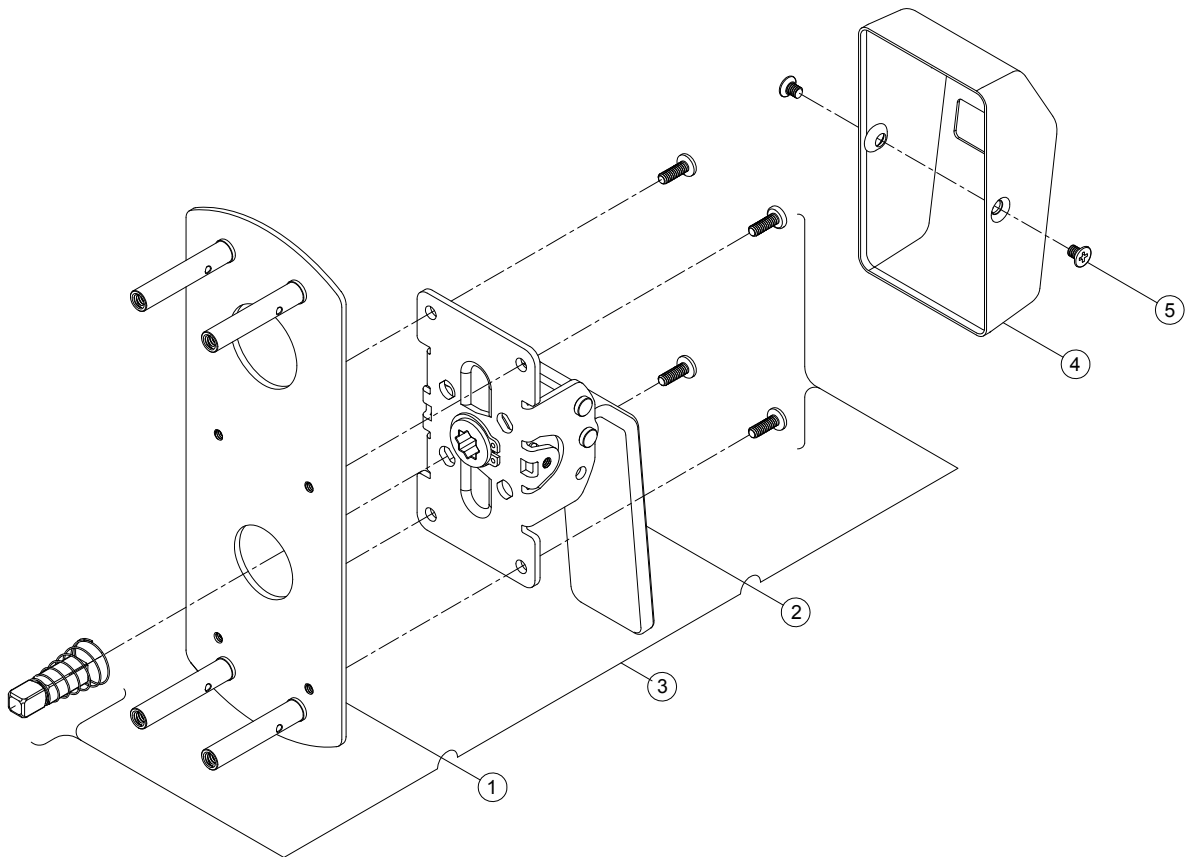


Item No.	Q'ty	Description
1	1	Trim Plate (With Cylinder)
2	1	Pull Trim - RHR
3	1	Mounting Kit - Trim (88-5301)
4	1	Cover
5	1	Mounting Screw - Cover (553-M9010)

Q1000 Series Service Manual

HL408-LHR Pull Trim

For Mortise Lock Exit Device (LHR)

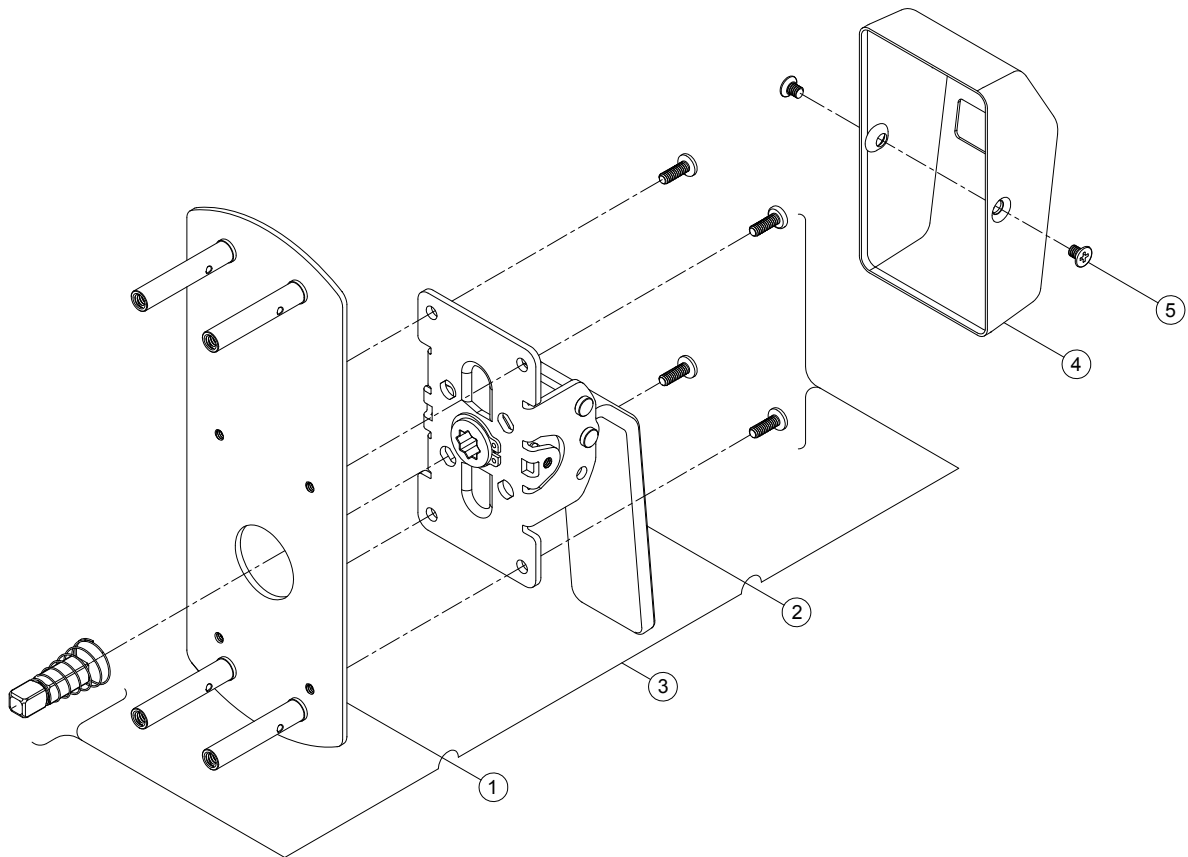


Item No.	Q'ty	Description
1	1	Trim Plate (With Cylinder)
2	1	Pull Trim - LHR
3	1	Mounting Kit - Trim (88-5301)
4	1	Cover
5	1	Mounting Screw - Cover (553-M9010)

Q1000 Series Service Manual

HL414-RHR Pull Trim

For Mortise Lock Exit Device (RHR)

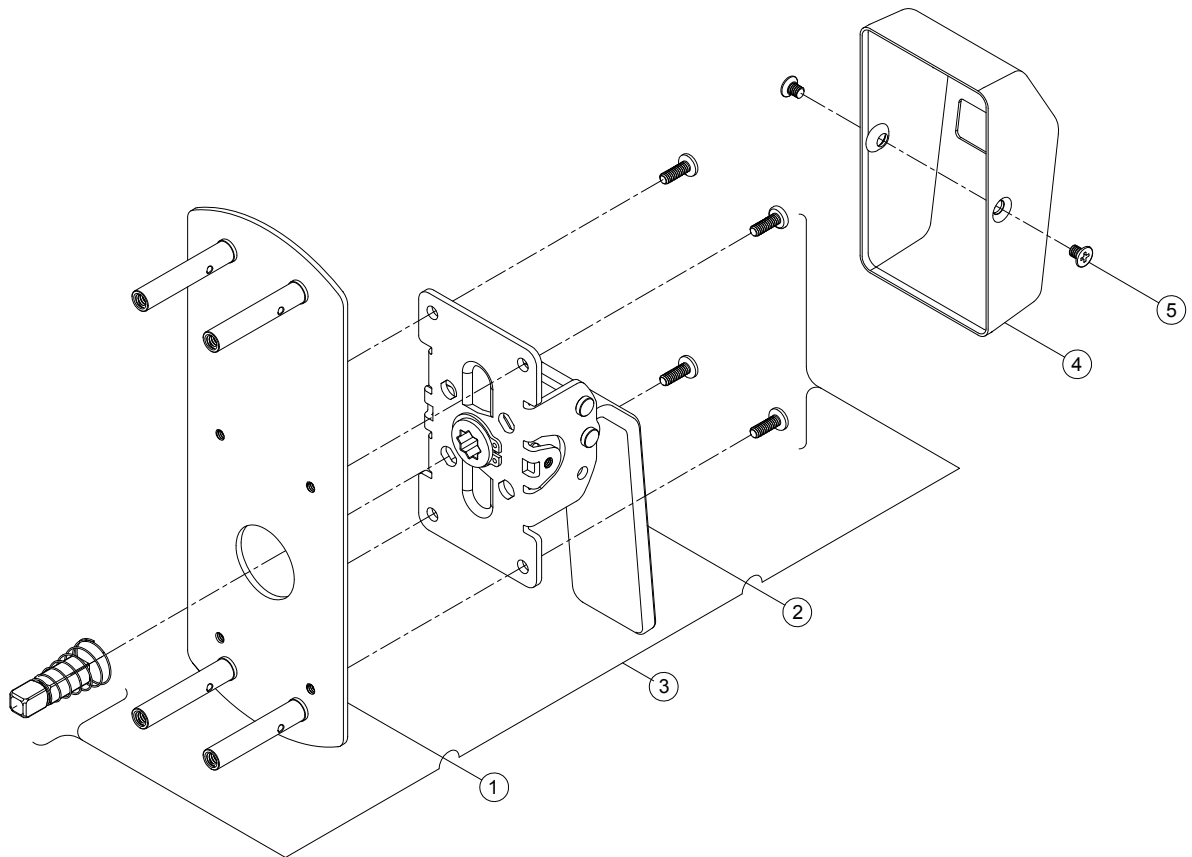


Item No.	Q'ty	Description
1	1	Trim Plate (Without Cylinder)
2	1	Pull Trim - LHR
3	1	Mounting Kit - Trim (88-5301)
4	1	Cover
5	1	Mounting Screw - Cover (553-M9010)

Q1000 Series Service Manual

HL414-LHR Push/Pull Trim

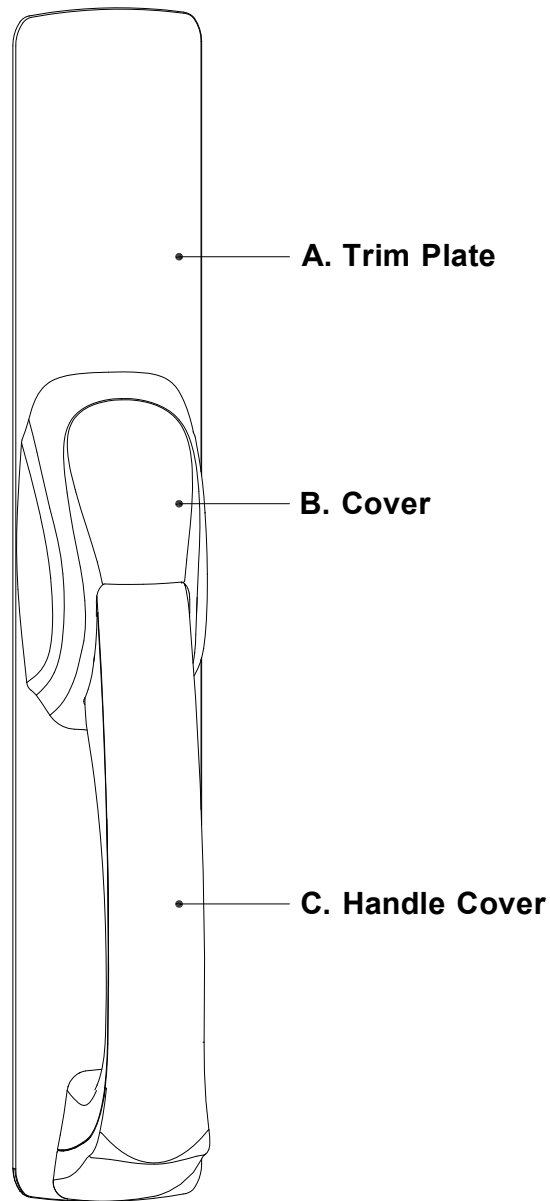
For Mortise Lock Exit Device (LHR)



Item No.	Q'ty	Description
1	1	Trim Plate (Without Cylinder)
2	1	Pull Trim - LHR
3	1	Mounting Kit - Trim (88-5301)
4	1	Cover
5	1	Mounting Screw - Cover (553-M9010)

Q1000 Series Service Manual

Q600 Series Pull Handle Trim Finishes



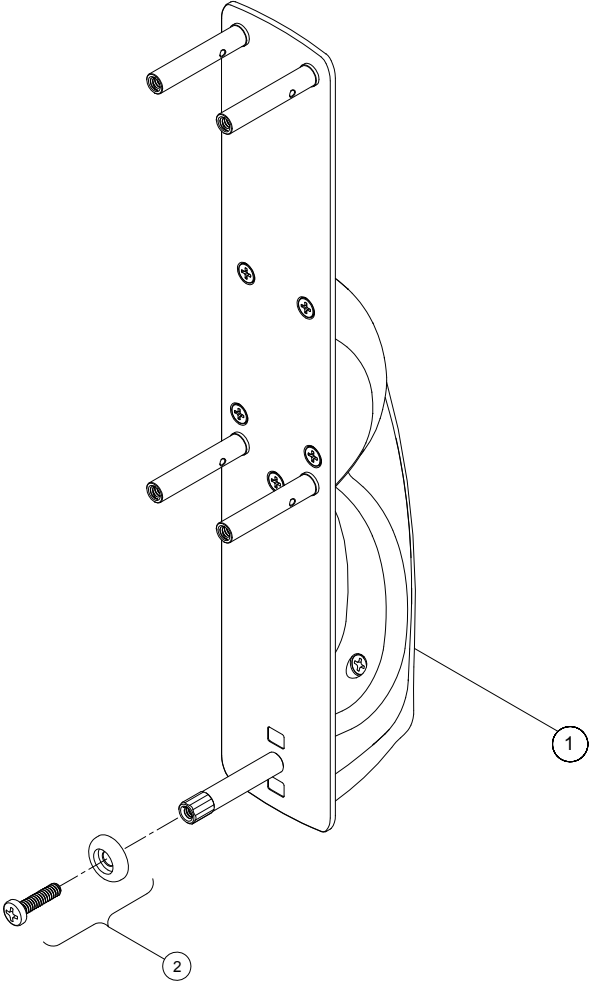
Finishes

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

Q1000 Series Service Manual

Q602

Dummy Pull Only

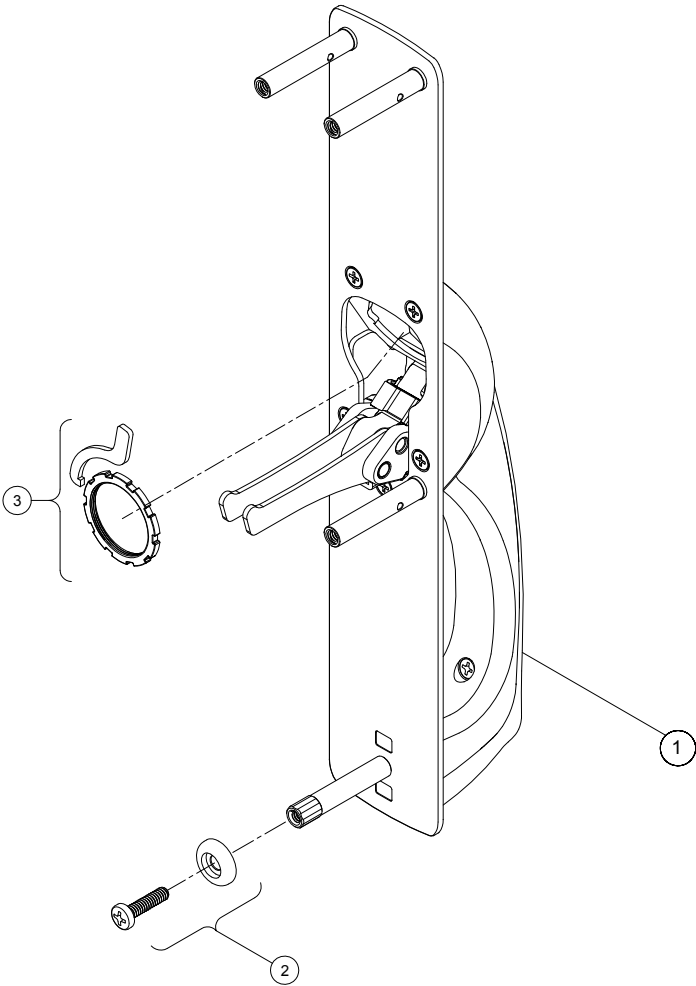


Item No.	Q'ty	Description
1	1	Q602 Pull Handle
2	1	Mounting Kit - Trim Plate (68-5307)

Q1000 Series Service Manual

Q608R

Key Locks or Unlocks Latch Bolt

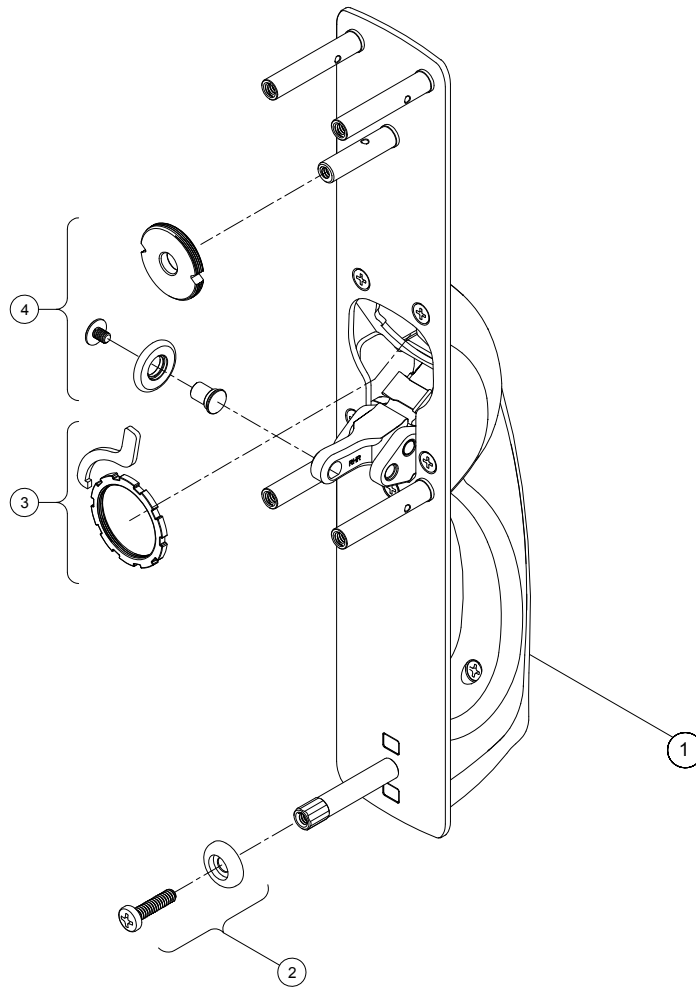


Item No.	Q'ty	Description
1	1	Q608R Pull Handle
2	1	Mounting Kit - Trim Plate (68-5307)
3	1	Cylinder Retaining Kit (68-7101)

Q1000 Series Service Manual

Q608M

Key Locks or Unlocks Latch Bolt

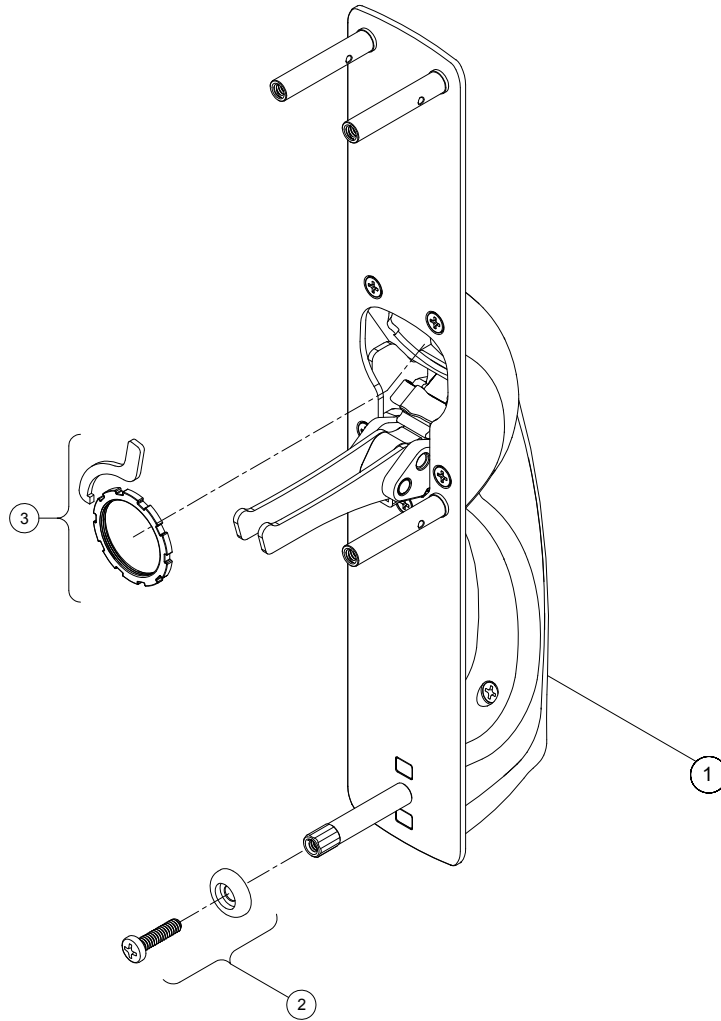


Item No.	Q'ty	Description
1	1	Q608M Pull Handle
2	1	Mounting Kit - Trim Plate (68-5307)
3	1	Cylinder Retaining Kit (68-7101)
4	1	Cylinder Retaining Kit (68-1501)

Q1000 Series Service Manual

Q609R

Night Latch Key Retracts Latch Bolt

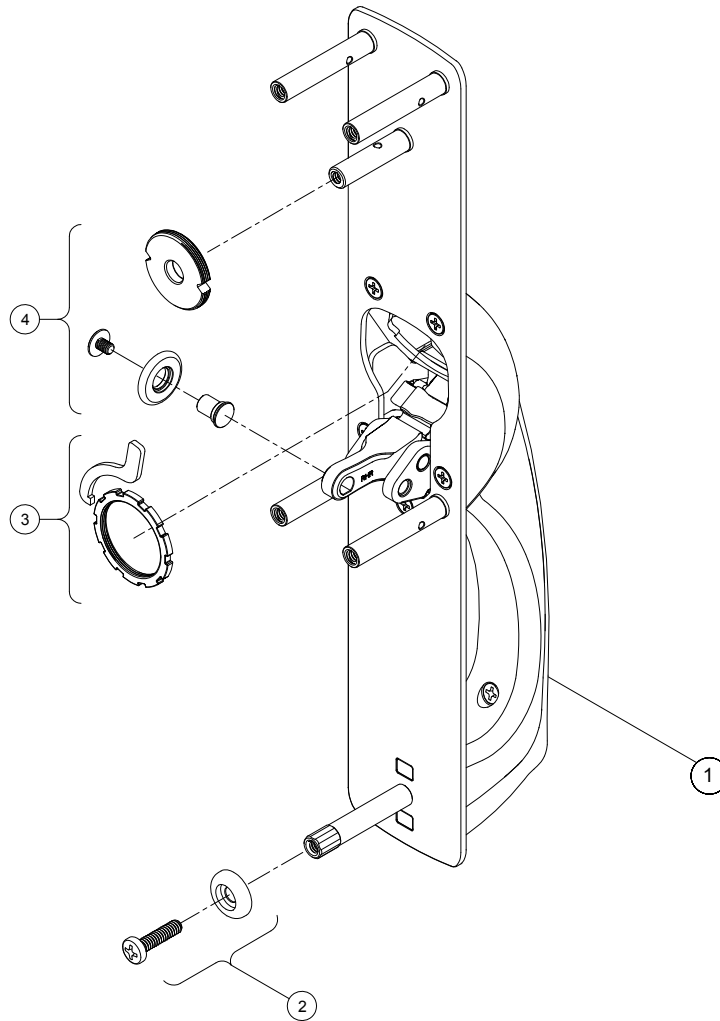


Item No.	Q'ty	Description
1	1	Q609R Pull Handle
2	1	Mounting Kit - Trim Plate (68-5307)
3	1	Cylinder Retaining Kit (68-7101)

Q1000 Series Service Manual

Q609M

Night Latch Key Retracts Latch Bolt

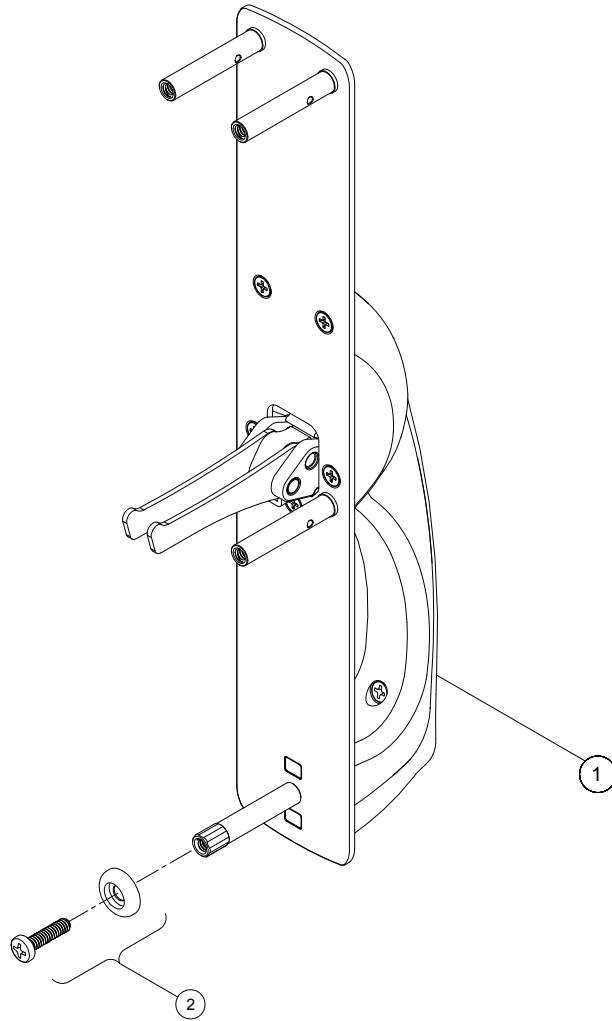


Item No.	Q'ty	Description
1	1	Q609M Pull Handle
2	1	Mounting Kit - Trim Plate (68-5307)
3	1	Cylinder Retaining Kit (68-7101)
4	1	Cylinder Retaining Kit (68-1501)

Q1000 Series Service Manual

Q614R

Pull Handle Always Active, No Cylinder

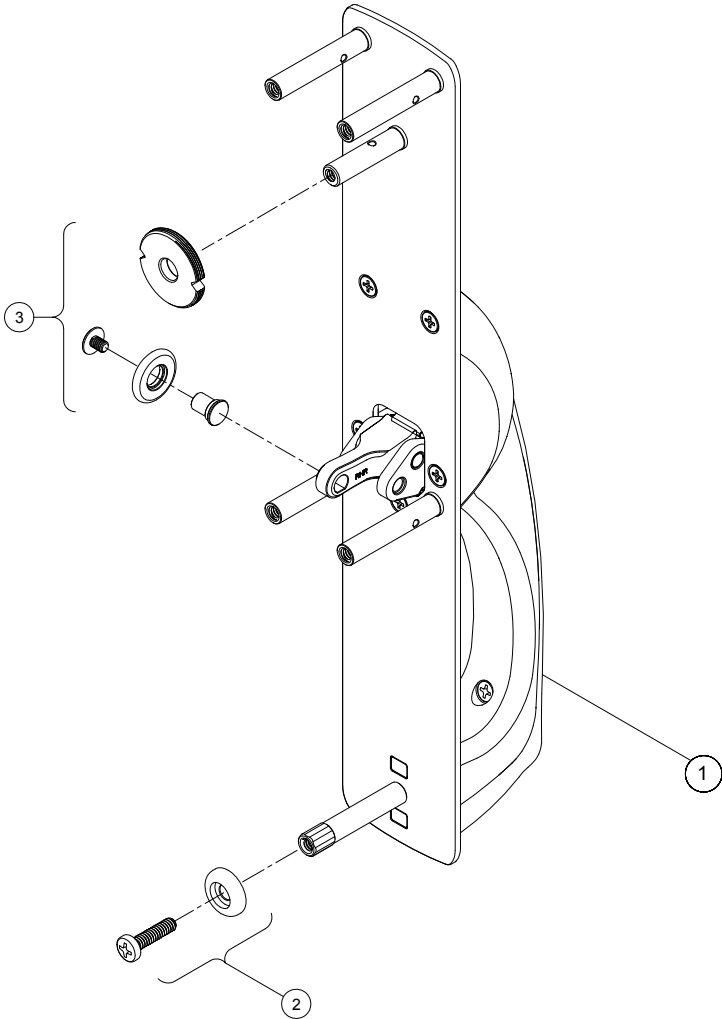


Item No.	Q'ty	Description
1	1	Q614R Pull Handle
2	1	Mounting Kit - Trim Plate (68-5307)

Q1000 Series Service Manual

Q614M

Pull Handle Always Active, No Cylinder



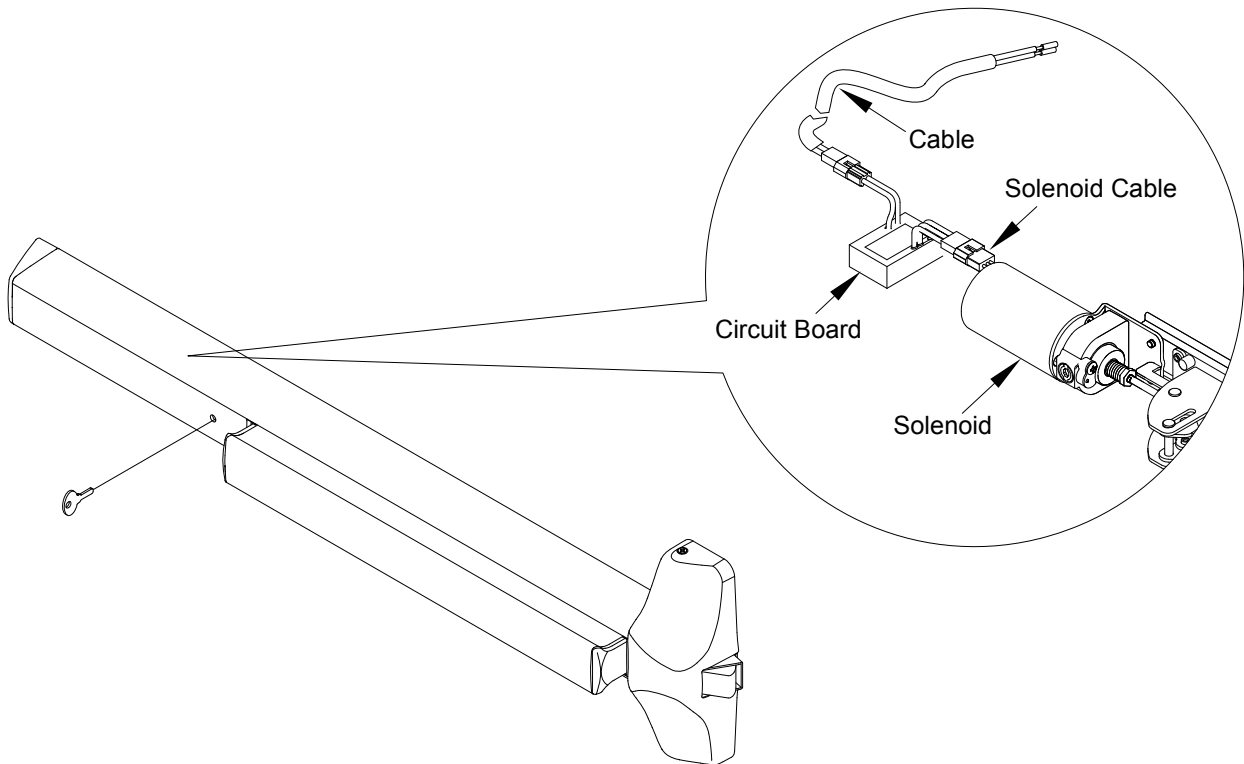
Item No.	Q'ty	Description
1	1	Q614M Pull Handle
2	1	Mounting Kit - Trim Plate (68-5307)
3	1	Cylinder Retaining Kit (68-1501)

Q1000 Series Service Manual

Electric Exit Device (ELR/SS)

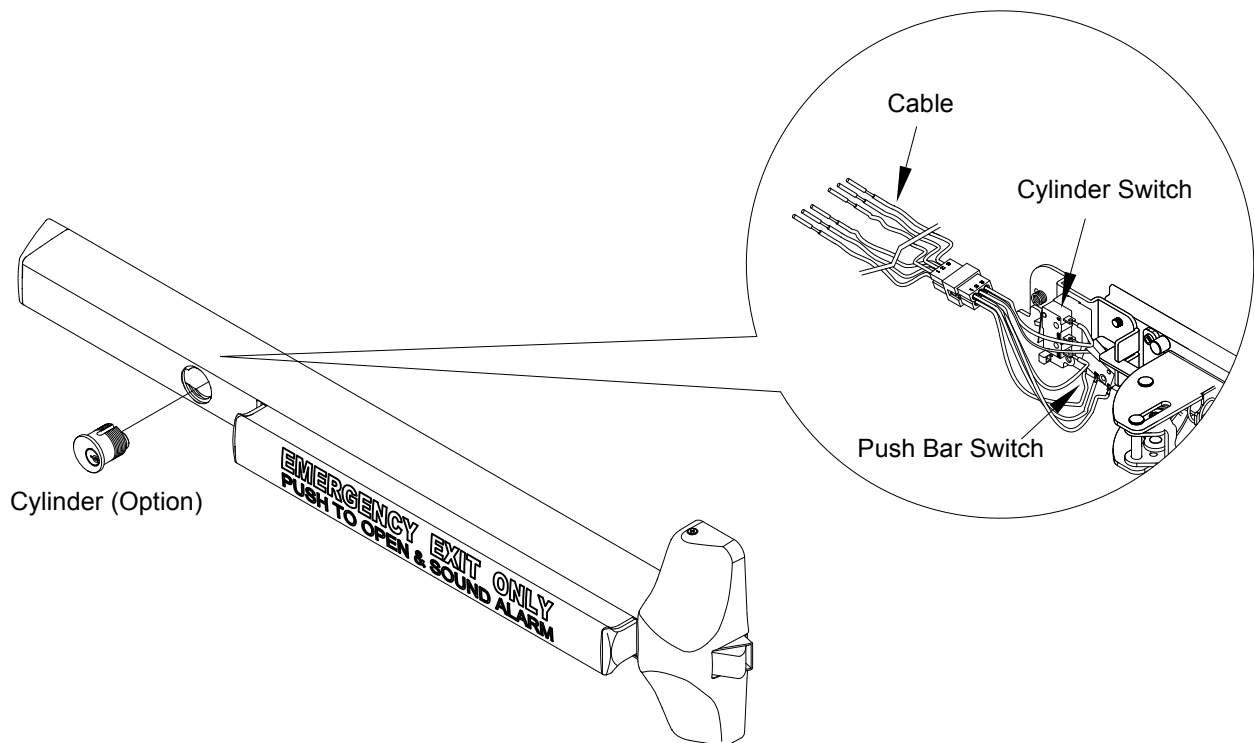
ELR - Electric Latch Retraction

The Function For - All Device



SS - Signal Switch

The Function Available - All Device

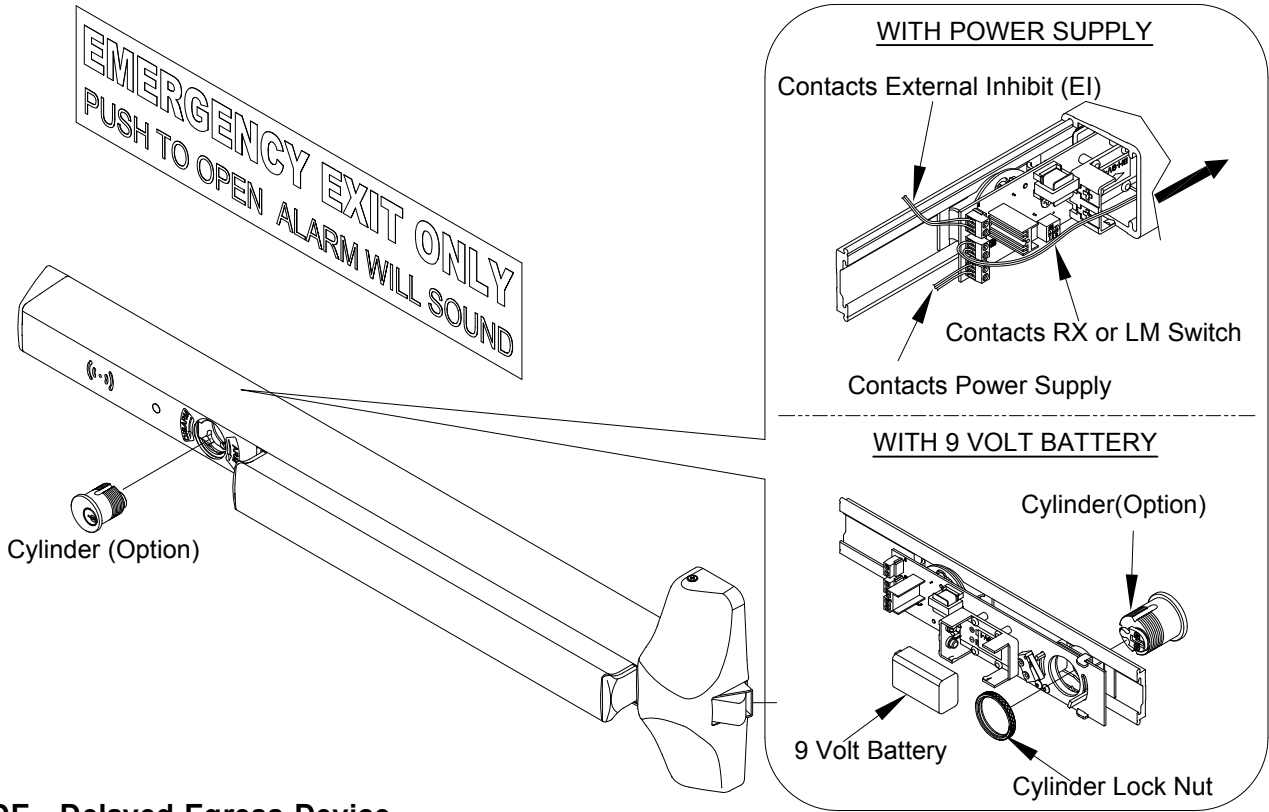


Q1000 Series Service Manual

Electric Exit Device (AL/DE)

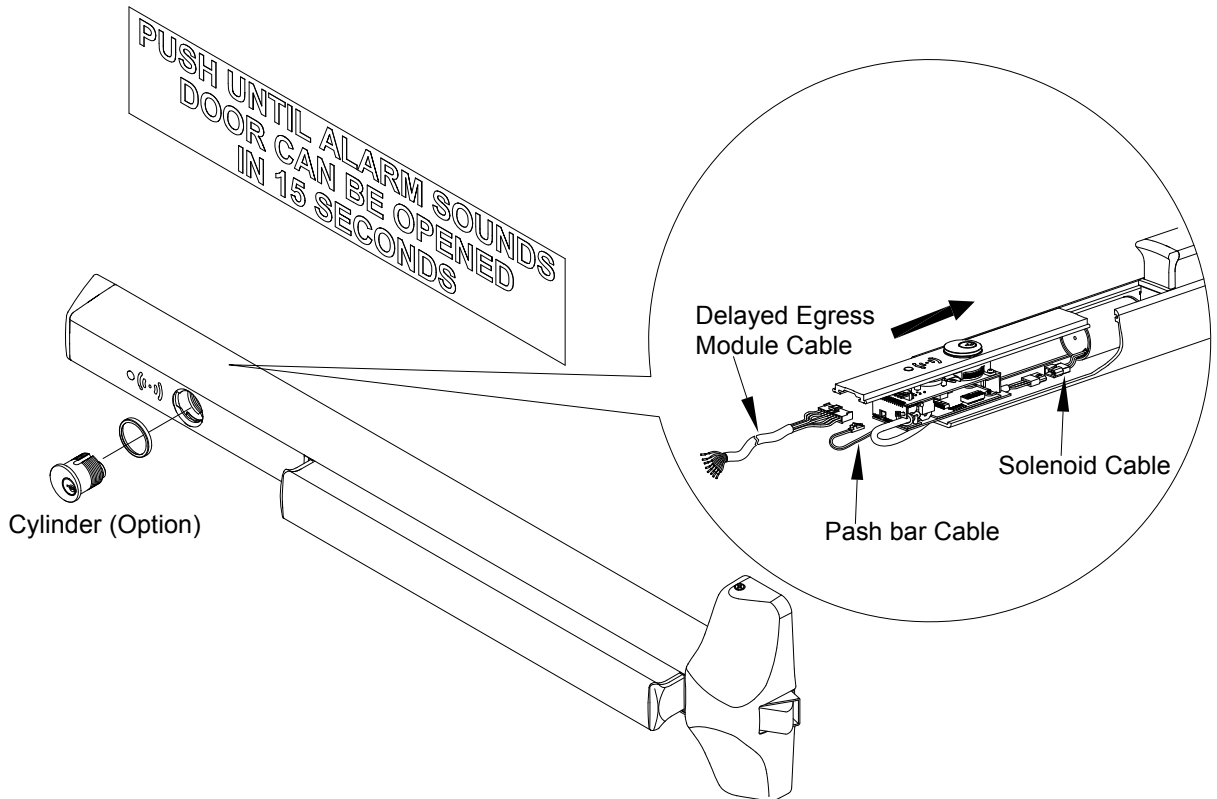
AL - Alarm Exit

The Function Available - All Device



DE - Delayed Egress Device

The Function Available - All Device

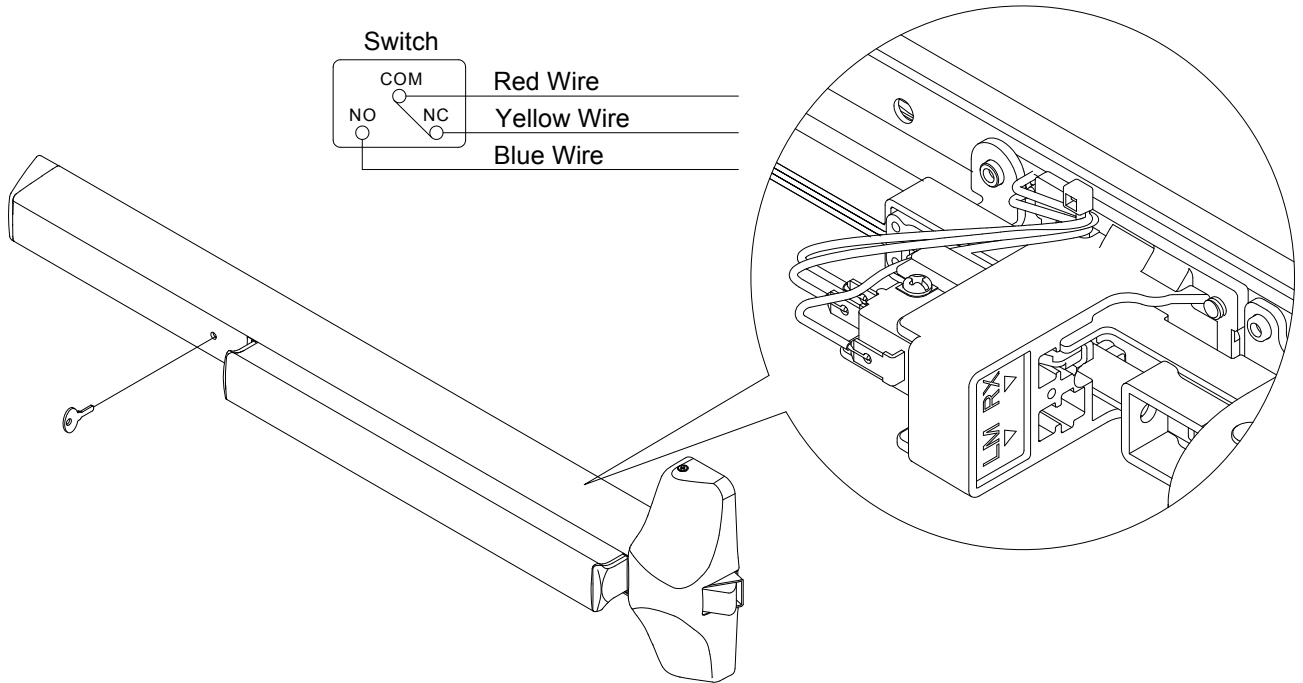


Q1000 Series Service Manual

Electric Exit Device (RX/LM)

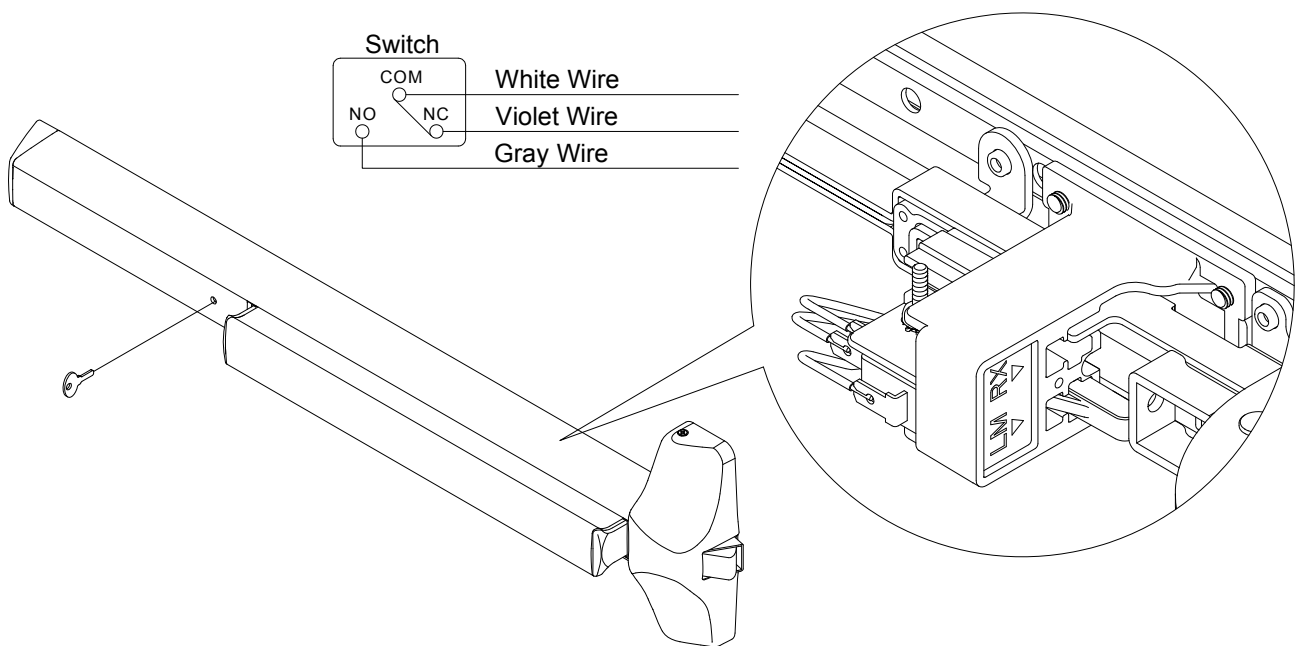
RX - Request To Exit

The Function Available - All Device



LM - Latch Bolt Monitoring

The Function Available - All Device

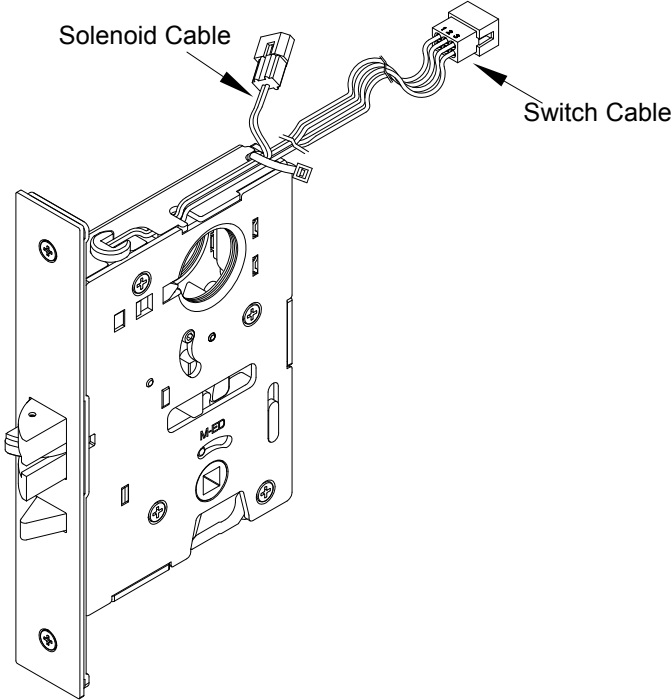


Q1000 Series Service Manual

Electric Mortise (E7000/SS7000)

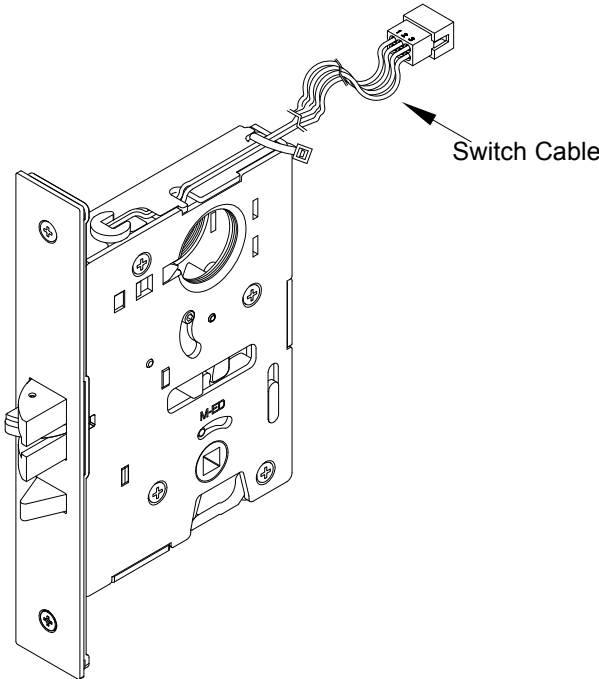
E7000

The Function Available - Q1400/QF1400



SS7000

The Function Available - Q1400/QF1400

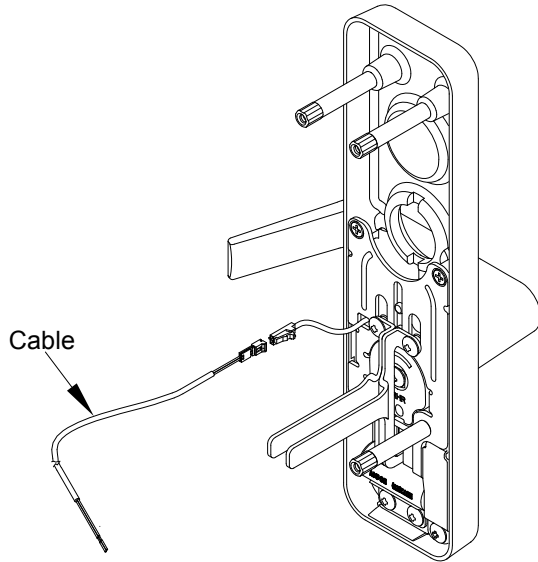


Q1000 Series Service Manual

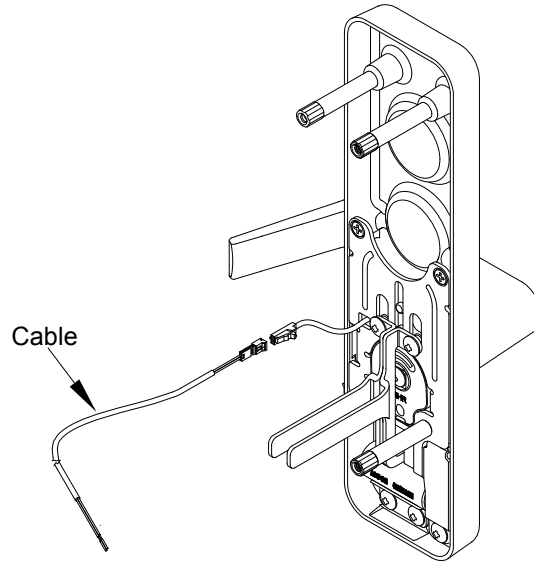
Electric Trim (QE309R/QE309M/QE314R/QE314M)

QE309R/QE314R

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



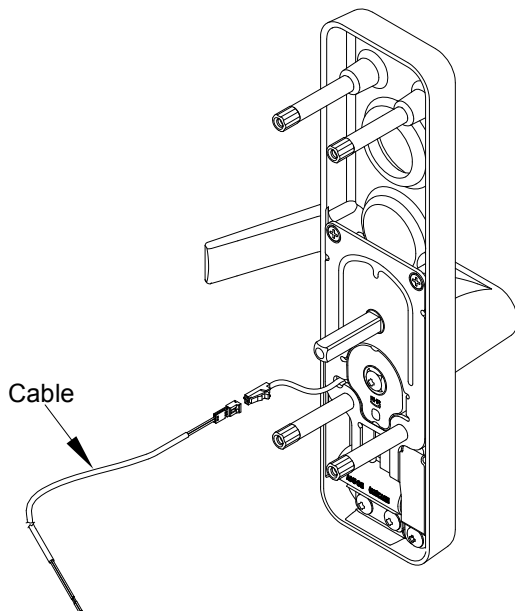
QE309R
Cylinder



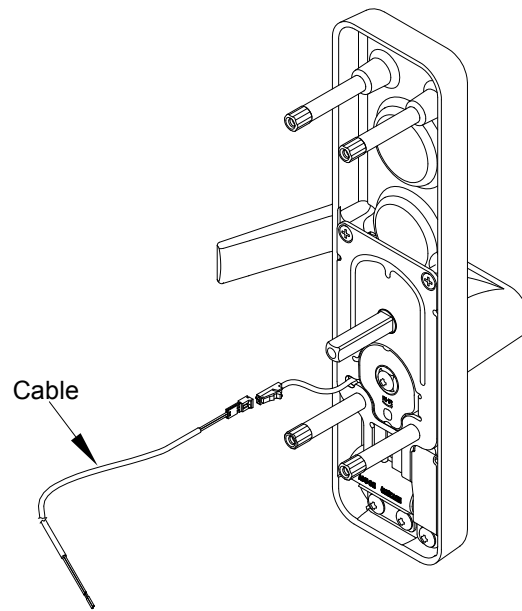
QE314R
None Cylinder

QE309M/QE314M

The Function Available - Mortise



QE309M
Cylinder

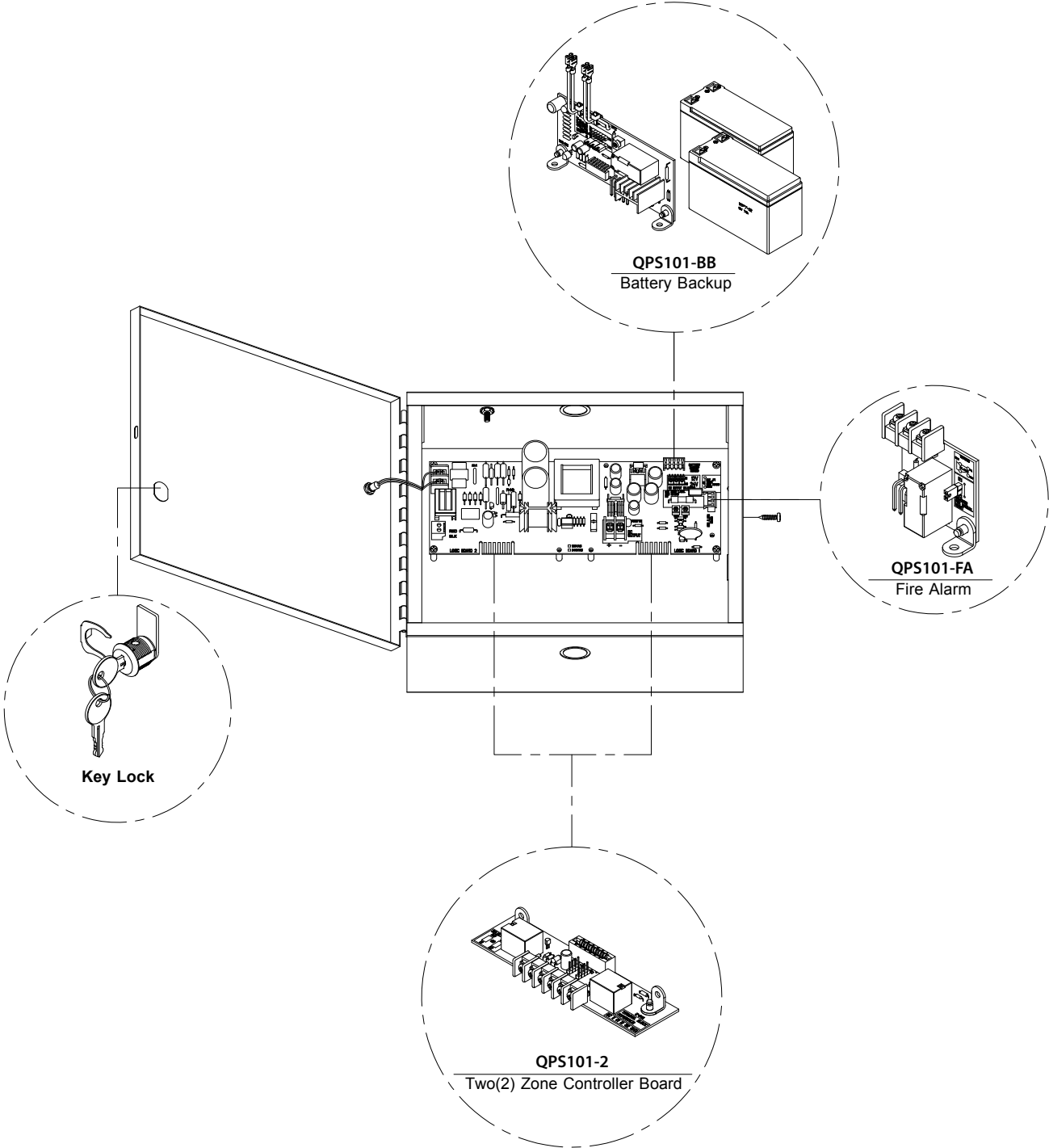


QE314M
None Cylinder

Q1000 Series Service Manual

QPS100

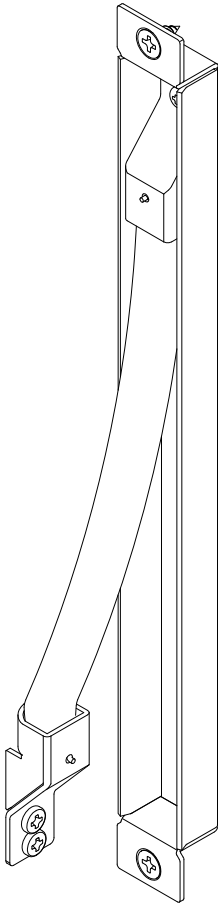
Power Supply



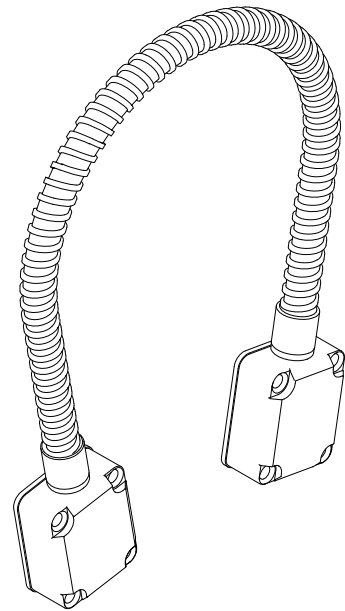
Q1000 Series Service Manual

QEPT

Power Transfer



QEPT 1

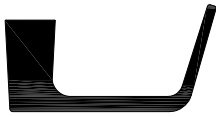


QEPT 2

Q1000 Series Service Manual

Lever/Knob/Grip Designs

Lever Options



D type (Standard)



Q type



A type



K type

Knob Options



B type (Standard)



P type



T type

Grip Options



GD type (Standard)

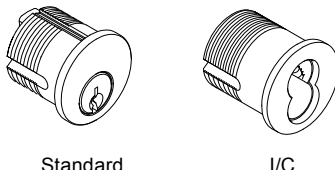
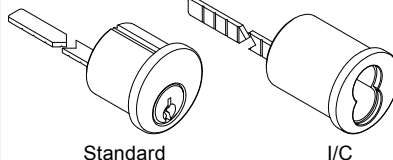


GK type

Q1000 Series Service Manual

Cylinders

Cylinder

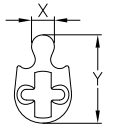
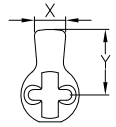
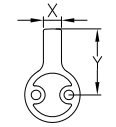
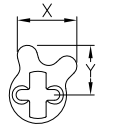
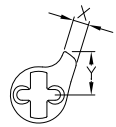
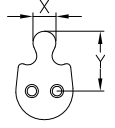
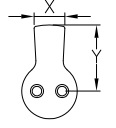
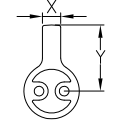
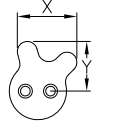
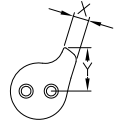
Cylinder Type	Applications	Trim	Cylinder	Cyl. Length (Part No.)	Cylinder Cam
Mortise Cylinder  Standard I/C	03* / 05* / 07* for Mortise Device	Q200	Standard	1-3/8"(441-104)	440-0702
			I/C	1-3/8"(442-701)	440-0718
	08 for RIM / SVR / CVR* / 3PT	Q300	Standard	1-1/8"(441-102)	440-0704
			I/C	1-3/8"(442-701)	440-0708
	08 / 09 / 10 for Mortise Device	Q600**	Standard	1-1/8"(441-102)	440-0710
			I/C	See note 1	440-0718
	08 for All Devices	Q600**	Standard	1-1/8"(441-102)	440-0714
			I/C	1-3/8"(442-702)	440-0715
	09 for All Devices	All Devices	Standard	1-1/8"(441-102)	440-0712
			I/C	1-3/8"(442-702)	440-0713
Cylinder Dogging		All Devices	Standard	1-1/4"(441-103)	440-0702
			I/C	1-3/8"(442-701)	440-0718
RIM Cylinder  Standard I/C	03 / 05 for RIM / SVR / CVR / 3PT	Q200	Standard I/C	Tailpiece Length 3-1/8"(79.6mm)	
	09 for RIM / SVR / CVR / 3PT	Q300			

Note 1. Use 1-1/2"(442-702) for DT 1-3/4"~1-7/8" (45~48mm), or 1-3/4"(442-704) for DT 1-7/8"~2-1/4" (48~57mm).

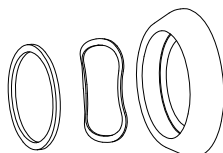
* Must use with Cylinder Guard (Part/No. 4240-0202).

** The Q600 Series trim must use with the specified cylinder and cam.

Cylinder Cam

Illustration					
Dimension	X=1/4"(6mm) Y=5/8"(15mm)	X=3/8"(9.5mm) Y=3/4"(19mm)	X=3/16"(5mm) Y=3/4"(19mm)	X=5/8"(16.4mm) Y=9/16"(13.6mm)	X=3/16"(4.4mm) Y=7/16"(11.9mm)
Cam No.	440-0702	440-0704	440-0710	440-0712	440-0714
Illustration					
Dimension	X=1/4"(6mm) Y=5/8"(15mm)	X=3/8"(9.5mm) Y=3/4"(19mm)	X=3/16"(5mm) Y=3/4"(19mm)	X=5/8"(16.4mm) Y=9/16"(13.6mm)	X=3/16"(4.4mm) Y=7/16"(11.9mm)
Cam No.	440-0718	440-0708	440-0711	440-0713	440-0715

Cylinder Guard



Part No. 4240-0202

4240-0202 / 4240-0203

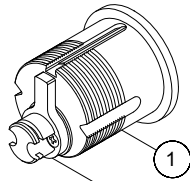
For use on Q203 / Q205 / Q207 Thumbpiece Trim.
CVR with Q308R Escutcheon Trim and Mortise with QC308R Escutcheon Trim require specialized cylinder guards.

4240-0203 is used for special door thickness applications. For specification details, please contact our sales representative.

Q1000 Series Service Manual

Cylinders

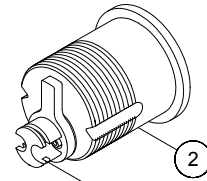
Mortise Cylinder with Extension Cam



Cam No.440-0710

Stander Mortise Cylinder

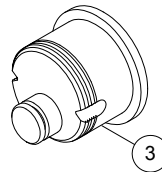
For Rim Device with Double Cylinder (10 Function)



Cam No.440-0711

I/C Mortise Cylinder

For Rim Device with Double Cylinder (10 Function)



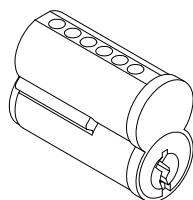
Blank Cylinder

For Rim Device with inside Cylinder lock
or unlock Outside Q308R Trim

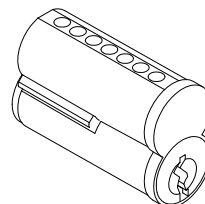
Item No.	Description	Q'ty
1	Standard Mortise Cylinder	1
2	I/C Mortise Cylinder	1
3	Blank Cylinder	1

I/C Core

"A" Keyway Standard Supplied. Finish 606 or 626



I/C Core - 6 Pin

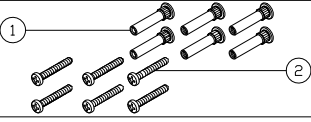


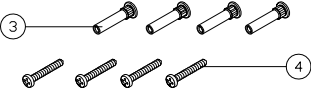



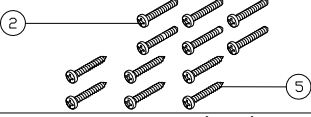


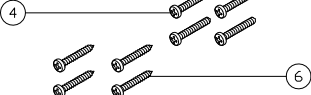





I/C Core - 7 Pin



Q1000 Series Service Manual

Mounting Screws


Center Case

Kit No.	Illustration	Applications					Description	Q'ty
		RIM	SVR	CVR	Mortise	3PT		
68-0401							① Sex Bolts	6
68-0403							③ Center Case Screws (Metal)	4
68-5301							② Center Case Screws (Metal)	6
68-5302							④ Center Case Screws (Wood)	4
							⑤ Center Case Screws (Wood)	6
							⑥ Center Case Screws (Wood)	4

Center Case Cover / Latch Cover / Armor Front

Kit No.	Illustration	Applications	Description	Q'ty
553-M9010		1. All Devices Center Case Cover 2. Top & Bottom Latch Cover 3. Mortise Lock Armor Front	Cover Screws	2
68-5401			Cover Screws (Torx)	2

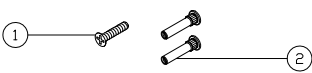




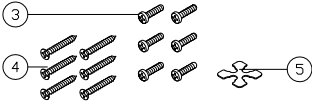


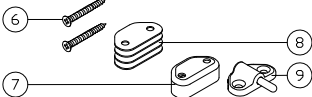


Mortise Case

Kit No.	Illustration	Applications	Description	Q'ty
554-M9010		Mortise Lock Case Installation	Mortise Lock Case Screws	2

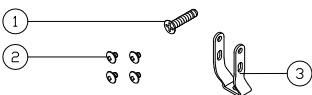




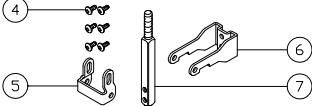


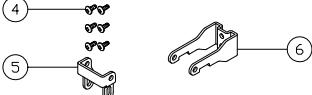


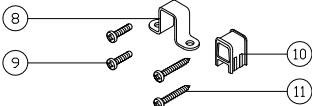




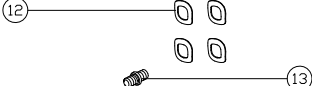






Q1000 Series Service Manual

Mounting Kits

Top / Bottom Latch

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

Top / Bottom Rod

Kit No.	Illustration	Applications			Description	Q'ty
		SVR	CVR	3PT		
68-0901		 		 	① Connector Screws	1
					② Side Screws	4
					③ Rod Connector	1
68-0902			 		④ Side Screws	6
					⑤ Support Bracket	1
					⑥ Rod Connector	1
68-0903			 		⑦ Square Rod	1
					⑧ Rod Support	1
68-2501		 		 	⑨ Mounting Screws(Metal)	2
					⑩ Rod Guide	1
					⑪ Mounting Screws(Wood)	2
68-5308		 	 	 	⑫ Spring Washers	4
					⑬ Connector Screws	1

200 Series Thumbpiece

Kit No.	Illustration	Applications	Description	Q'ty
68-5307		Trim Plate Installation	① Trim Screw	1
			② Screw Washer	1

Q1000 Series Service Manual

Cylinder Retaining Kits

Dogging

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

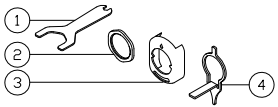
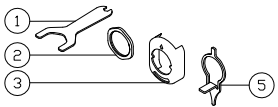
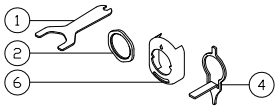
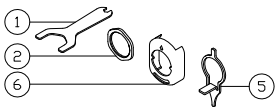
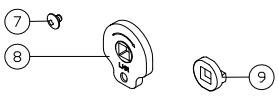
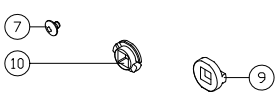
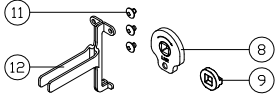
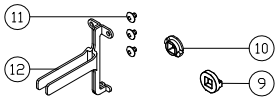
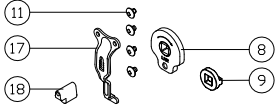
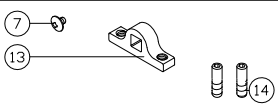
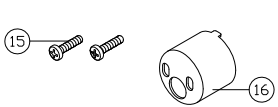
Double Cylinder - Handed

Kit No.	Illustration	Applications		Description	Q'ty	
		Std. Rim Cyl.	I/C Rim Cyl.			
68-3907		Rim Exit Device	 	①	Base Plate	1
			 	②	For RIM Cylinder Housing	1
			 	③	For Mortise Cylinder Housing	1
68-3908		Mortise Lock Exit Device	 	④	Mounting Screws	2
			 	⑤	Spring Pin	1
			 	⑥	Transmission Shaft	1

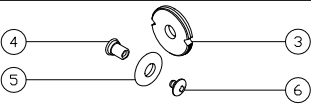
Q1000 Series Service Manual

Cylinder Retaining Kits

Q200 Series Thumbpiece / Q300 Series Escutcheon

Kit No.	Illustration	Applications			Description	Q'ty
		Trim NO.	Q300 Series Lever	Q300 Series Knob		
68-1201		Q308R	●	●	① Wrench	1
68-1202		Q308R (for CVR)	●	●	② Cylinder Nut	1
68-1203		Q308R	●	●	③ For Standard Mortise Cylinder	1
68-1204		Q308R (for CVR)	●	●	④ Lever	1
					⑤ Lever for CVR	1
					⑥ For Non-Standard Mortise Cylinder	1
					⑦ Spindle Set Screw	1
68-0301		Q308M Q314M	●		⑧ Spring Cassette	1
68-0302		Q308M Q314M		●	⑨ Breakable Cam	1
					⑩ Spring Cassette Spacer	1
68-0303		Q308R Q314R	●		⑪ Slider Screws	3
					⑫ Slider	4
68-0304		Q308R Q314R		●	⑬ Spindle Seat	1
68-0305		QC308M QCD308M	●		⑭ Set Screws	2
					⑮ Cylinder Screws	2
68-4501		Q309R Q309M	●	●	⑯ Cylinder Spacer	1
68-4001		Q309R Q203R Q205R	●	●	⑰ Slider	1
					⑱ Finger	1

Q600 Series Pull Handle

68-7101		Q600 Trim for Cylinder Locknut Kit	① Cylinder Locknut	1
			② Wrench	1
68-1501		Q600 Trim for Mortise Roller Kit	③ Guide Pin	1
			④ Pin	1
			⑤ Roller	1
			⑥ Screw	1

Q1000 Series Service Manual

Strike Kits

RIM and VR Type

Kit No.	Illustration	Applications				Description	Q'ty
		RIM	SVR	CVR	3PT		
Q106		P			P	① Q106F Strike	1
						② Strike Screws (Wood)	3
						③ Q106F Strike Shims	2
Q108F		Fire Exit Hardware	Fire Exit Hardware		Fire Exit Hardware	④ Strike Screws (Metal)	3
						⑤ Q108F Strike	1
						⑥ Strike Screws (Metal)	7
Q106Z		P				⑦ Strike Screws (Wood)	7
						⑧ Q108F Strike Shims	2
						⑨ Strike Hook	1
Q216F					Fire Exit Hardware	⑩ Q106Z Strike	1
Q224F			Fire Exit Hardware		Fire Exit Hardware	⑪ Strike Screws (Metal)	2
						⑫ Q216F Strike	1
						⑬ Strike Screws (Wood)	2
Q225F			Fire Exit Hardware	Fire Exit Hardware	Fire Exit Hardware	⑭ Q224F Strike	1
						⑮ Q225F Strike	1
Q226F			Fire Exit Hardware	Fire Exit Hardware	Fire Exit Hardware	⑯ Q226F Strike	1
						⑰ Steel Anchor	1
						⑱ Strike Screws	1
Q227F			Fire Exit Hardware	Fire Exit Hardware	Fire Exit Hardware	⑲ Q227F Strike	1
						⑳ Q227 Strike Shim	1

Mortise Type

Kit No.	Ill.	Applications	Description	Q'ty
Q306F		Fire Exit Hardware	① Strike Screws	2
			② Strike	1
Q336F		Fire Exit Hardware	③ Strike	1
			④ Mounting Screws	2
Q337F		Fire Exit Hardware	⑤ Open Back Strike	1
			⑥ Door Cover	1
Q338F		Fire Exit Hardware	⑦ Open Back Strike	1
			⑧ Door Cover	1



Fire Exit Hardware



Panic Exit Device

Q1000 Series Service Manual

Fire Bolt / End Cap Kits

Fire Bolt

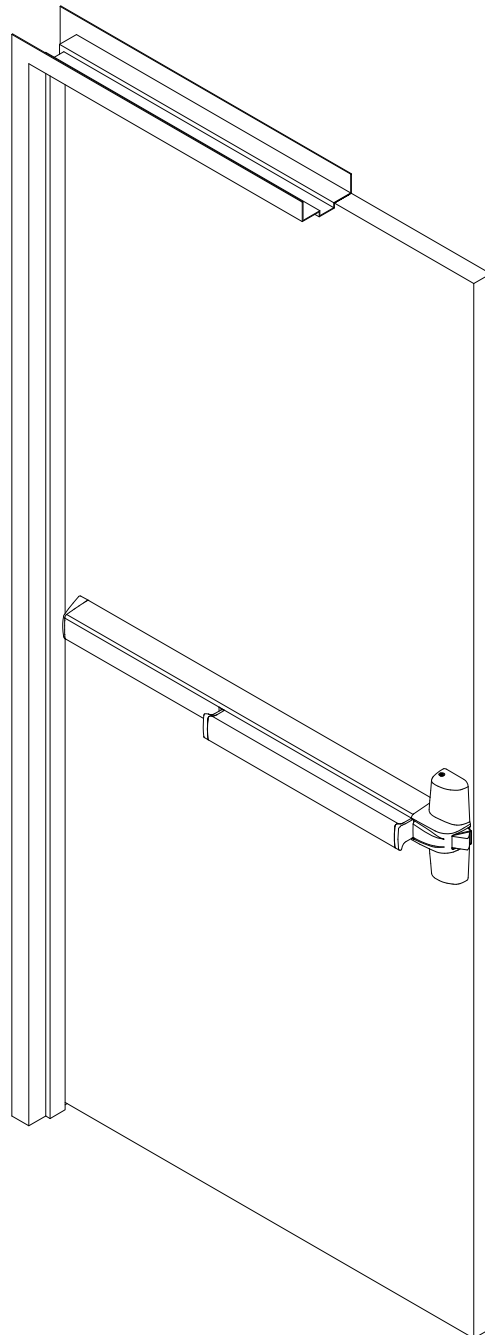
Kit No.	Illustration	Applications			Description	Q'ty
		SVR	CVR	3PT		
68-4502					① Cover	1
					② Mounting Screws	4
					③ Fire Bolt	1

End Cap Kits

Kit No.	Illustration	Applications	Description	Q'ty
68-5901			① End Cap	1
			② End Cap Bracket	1
68-5902			③ Bracket Screws (Metal)	2
			④ Bracket Screws (Wood)	2
68-5904			⑤ End Cap Screws	2
			⑥ Sex Bolts	2
68-5905			⑦ End Cap Security Screws	2

**Q1100 / QF1100 SERIES
RIM EXIT DEVICE**

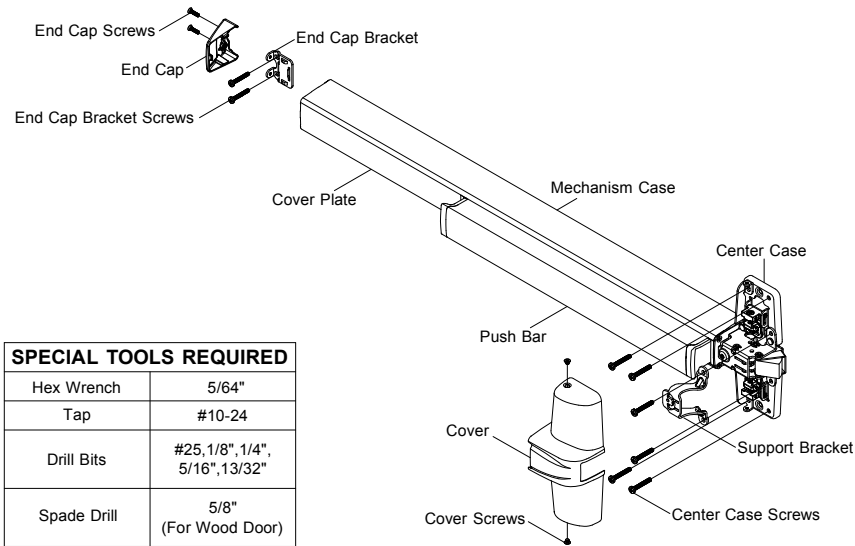
INSTALLATION INSTRUCTIONS



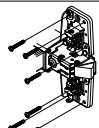


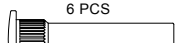




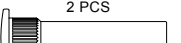
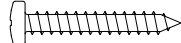


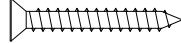







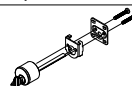

Patent No. 7,634,927 7,748,757
D623,499 7,836,738 7,887,107
and other patents pending.

Q1000 Series Service Manual

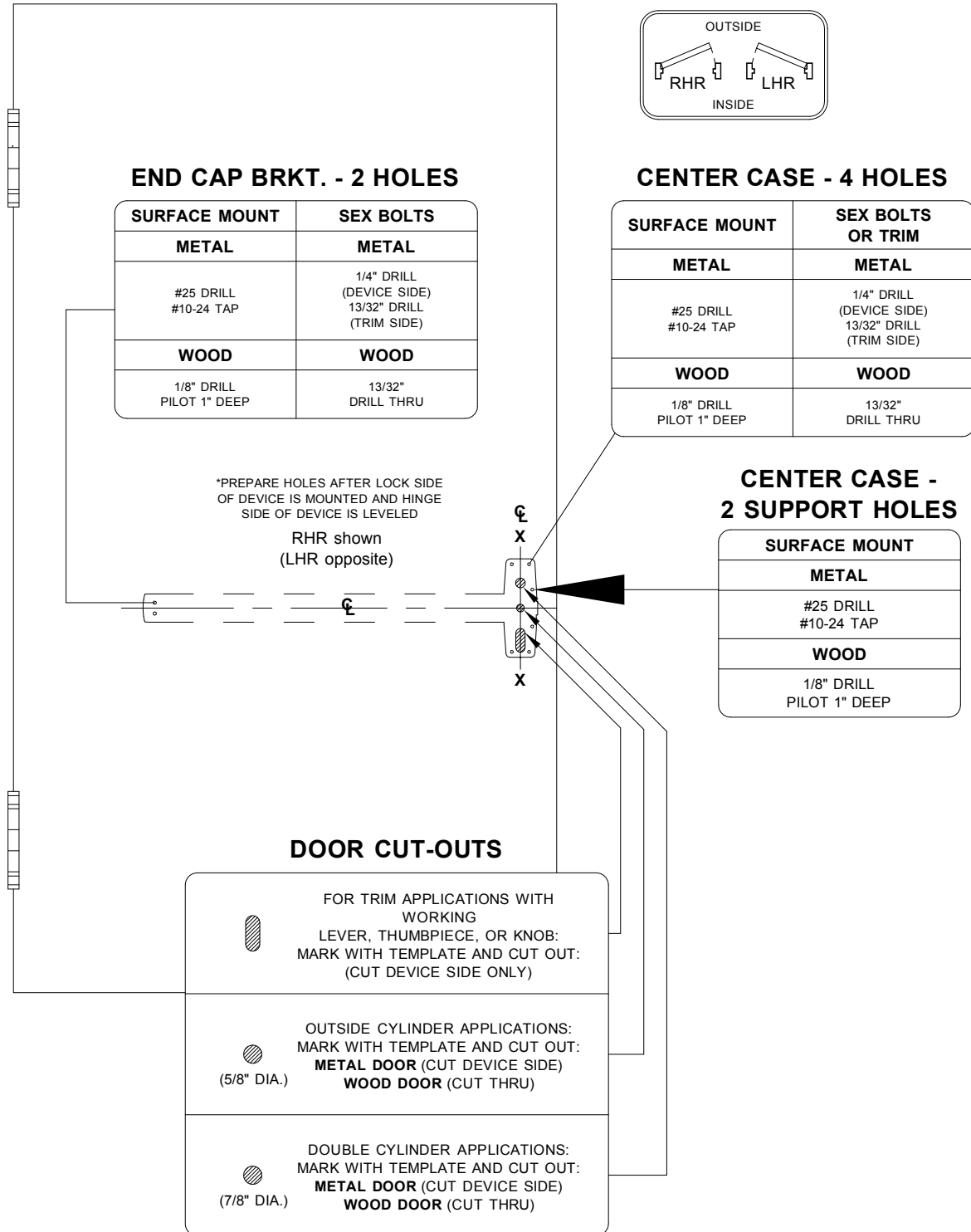
Q1100/QF1100 Installation Instructions (page 2)



SPECIAL TOOLS REQUIRED	
Hex Wrench	5/64"
Tap	#10-24
Drill Bits	#25, 1/8", 1/4", 5/16", 13/32"
Spade Drill	5/8" (For Wood Door)

SCREW CHART			
LOCATION	METAL	SEX BOLTS	WOOD
 Center Case Screws	(C)  No. 10-24 x 1-11/32" 6 PCS	(C)  No. 10-24 x 1-11/32" 6 PCS (G)  No. 10-24 x 1-3/32" 6 PCS	(A)  No. 10-12 x 1-11/32" 6 PCS
 End Cap Bracket Screws	(C)  No. 10-24 x 1-11/32" 2 PCS	(C)  No. 10-24 x 1-11/32" 2 PCS (G)  No. 10-24 x 1-3/32" 2 PCS	(A)  No. 10-12 x 1-11/32" 2 PCS
 Q106 Strike Screws	(E)  No. 10-24 x 11/16" 3 PCS		(B)  No. 10-12 x 1-11/32" 3 PCS
 Q108 Strike Screws	(E)  No. 10-24 x 11/16" 7 PCS		(B)  No. 10-12 x 1-11/32" 7 PCS
 End Cap Screws	(J)	 No. 8-32 x 5/8" 2 PCS	
 Cover Screws	(I)	 No. 8-32 x 5/32" 2 PCS	
 Cylinder Screws	(C)	 No. 10-24 x 1-11/32" 2 PCS	

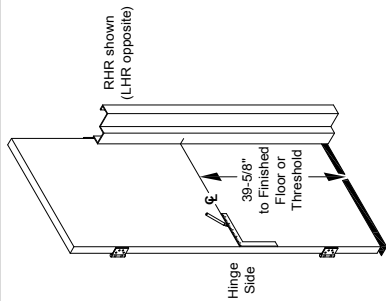
DOOR PREPARATION CHART



Q1000 Series Service Manual

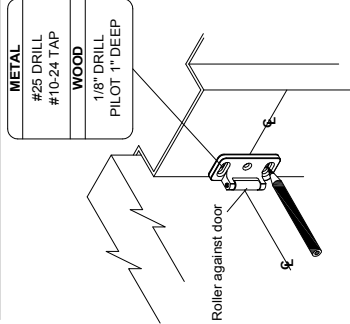
Q1100/QF1100 Installation Instructions (page 4)

1 DRAW HORIZONTAL DEVICE CENTERLINE (€) AND STRIKE CENTERLINE.



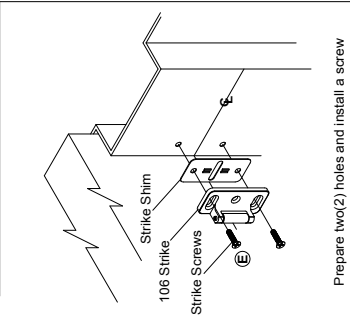
Close door, mark horizontal centerline on inside face of door and on lock side door stop. 39-5/8\"/>

2 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.

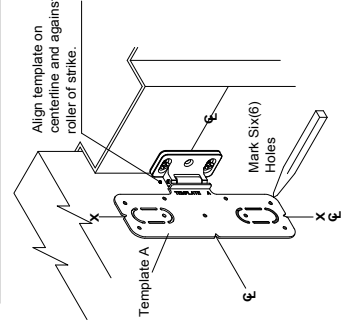
3 INSTALL STRIKE AND SHIM.



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

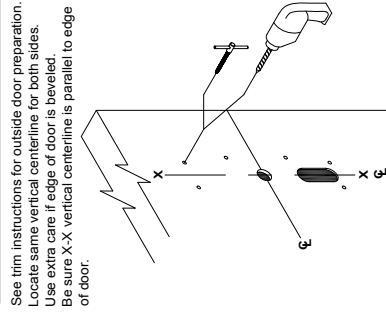
For 106 strike see back cover of this instruction.

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



Tap "TEMPLATE A" 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.

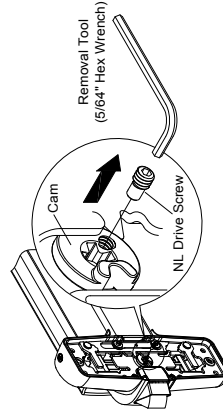
5 PREPARE DOOR FOR DEVICE AND TRIM.



See trim instructions for outside door preparation. Locate same vertical centerline for both sides. Use extra care 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 DETERMINE USE OF NL DRIVE SCREW.

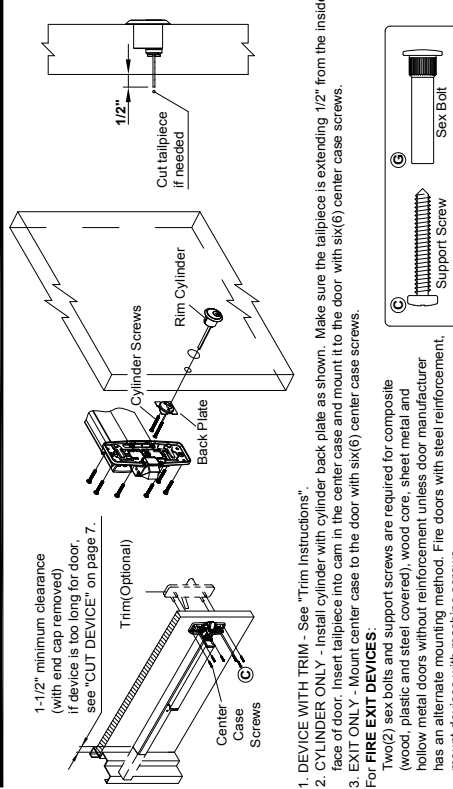


NL driver screw is factory assembled in cam on back of device center case, when the NL drive screw is left in back of center case, the outside cylinder will function only as a Night Latch.

- NOTE:**
1. **DO NOT** remove NL drive screw for Pull Plate or Escutcheon with night latch cylinder.
 2. **REMOVE** NL drive screw from back of center case when installing trim that has a functional lever, knob, or thumbpiece AND an outside cylinder to lock and unlock the trim.

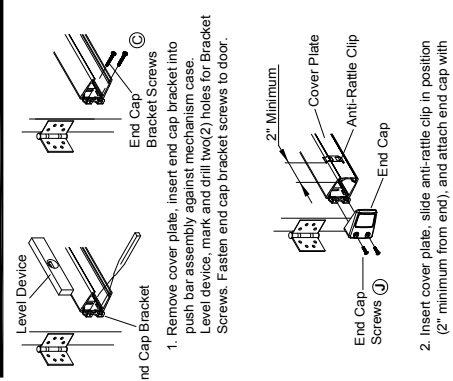
4

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



1. **DEVICE WITH TRIM** - See "Trim Instructions".
 2. **CYLINDER ONLY** - Install cylinder with cylinder back plate as shown. Make sure the tailpiece is extending 1/2" from the inside face of door. Insert tailpiece into cam in the center case and mount it to the door with six(6) center case screws.
 3. **EXIT ONLY** - Mount center case to the door with six(6) center case screws.
- For **FIRE EXIT DEVICES:**
Two(2) sex bolts and support screws are required for composite (wood, plastic and steel covered), wood core, sheet metal and hollow metal doors without reinforcement, unless door manufacturer has an alternate mounting method. Fire doors with steel reinforcement, mount devices with machine screws.

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.

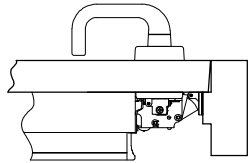
2. Insert cover plate, slide anti-rattle clip in position (2" minimum from end), and attach end cap with two(2) end cap screws.

5

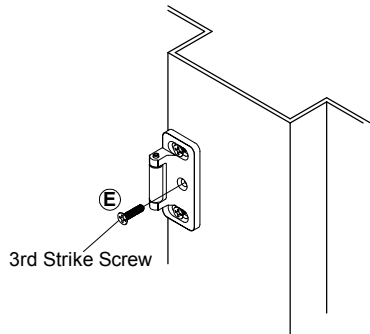
Q1000 Series Service Manual

Q1100/QF1100 Installation Instructions (page 5)

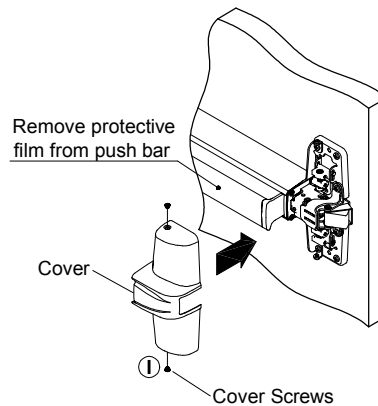
9 ADJUST AND SECURE STRIKE.



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



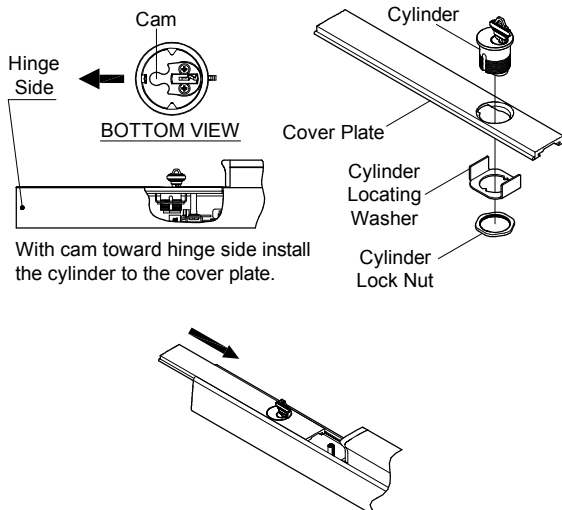
10 INSTALL COVER.



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

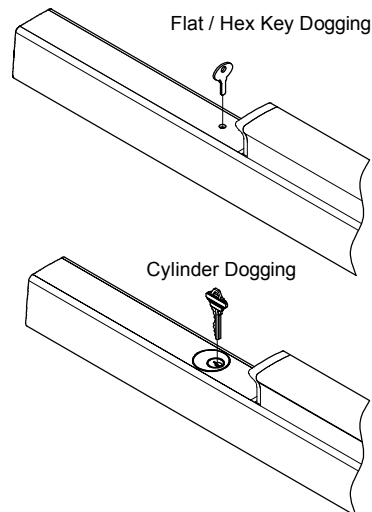
OPTIONAL DOGGING

CYLINDER DOGGING



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.

DOUBLE CYLINDER INSTALLATION

1. Remove cover.

2. Mount rim cylinder to cylinder spacer and bracket and attach assembly to center case with two (2) cylinder screws through cylinder back plate as shown.

3. Install center case and trim with center case screws. **NOTE:** See "Trim Instructions" to install trim cylinder.

4. Cut off tailpiece if necessary for different door ranges and various cylinder lengths.

CAUTION! If tailpiece is too far into cylinder cam may interfere both cylinders' operation.

Keep clearance to operate smooth.

To remove standard cam and replaced with extension cam.

CUT DEVICE (IF REQUIRED)

Recommended minimum clearance between frame and device end (with end cap removed) is 1-1/2".

Remove Anti-Rattle Clip

Cut off line

Tape

Cover Plate (Flush to Push bar)

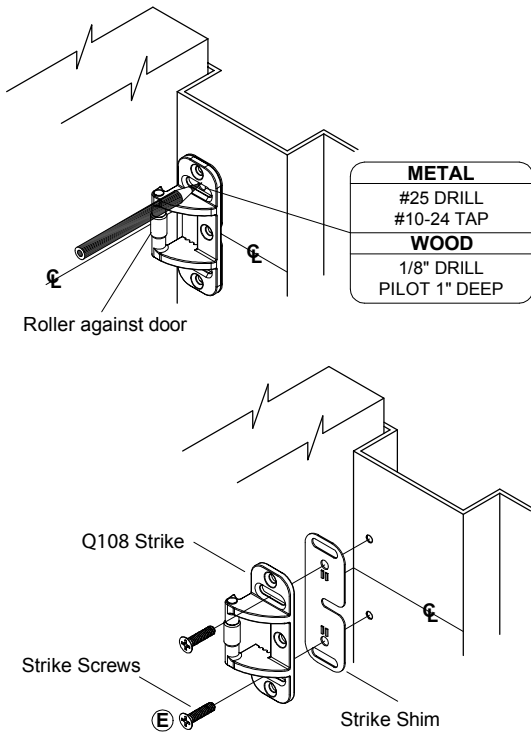
1. With anti-rattle clip removed, tape and mark area being cut.

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

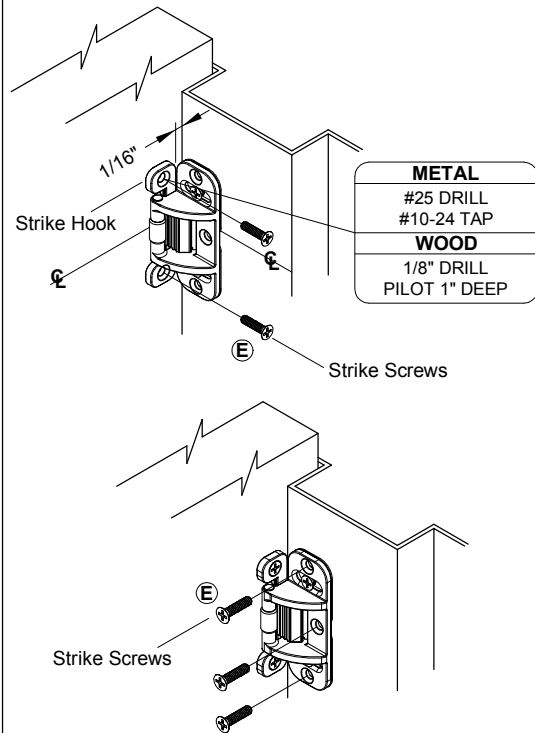
End Cap

Q108 STRIKE INSTALLATION

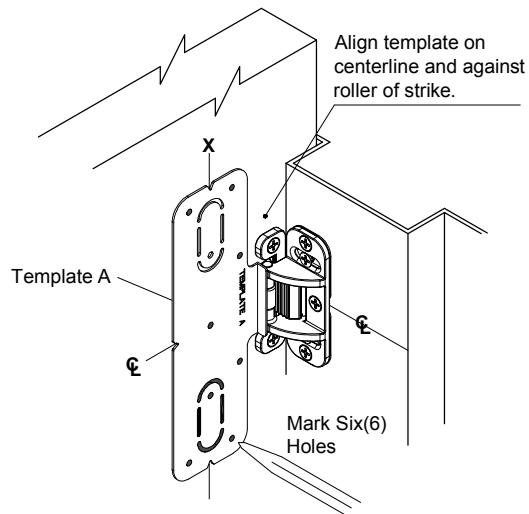
1 PREPARE AND INSTALL SCREWS THROUGH 2 STRIKE SLOTS.



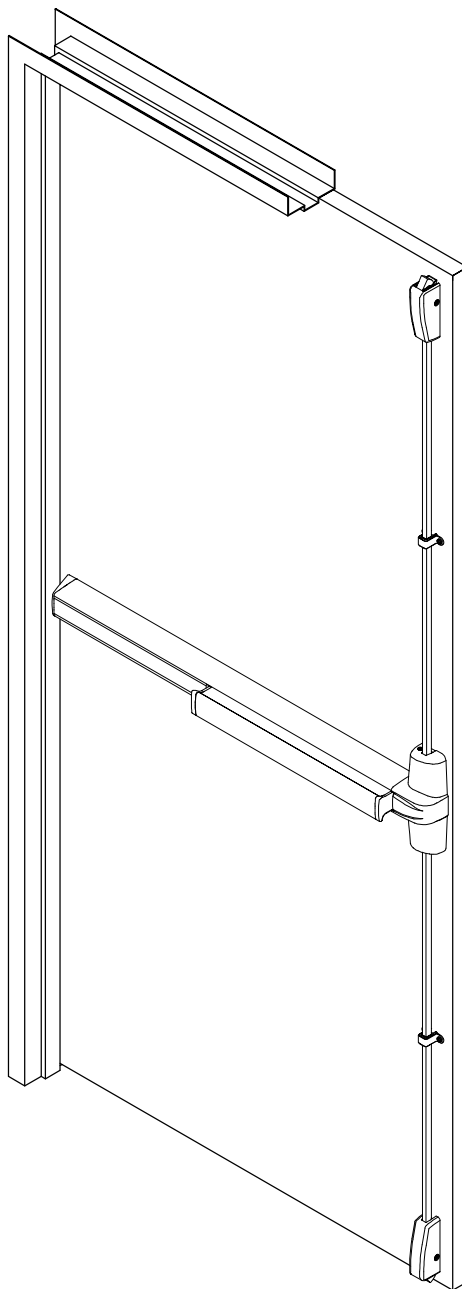
2 INSTALL STRIKE HOOK AND ADDITIONAL STRIKE SCREWS.



3 TEMPLATE ALIGNS AS SHOWN.



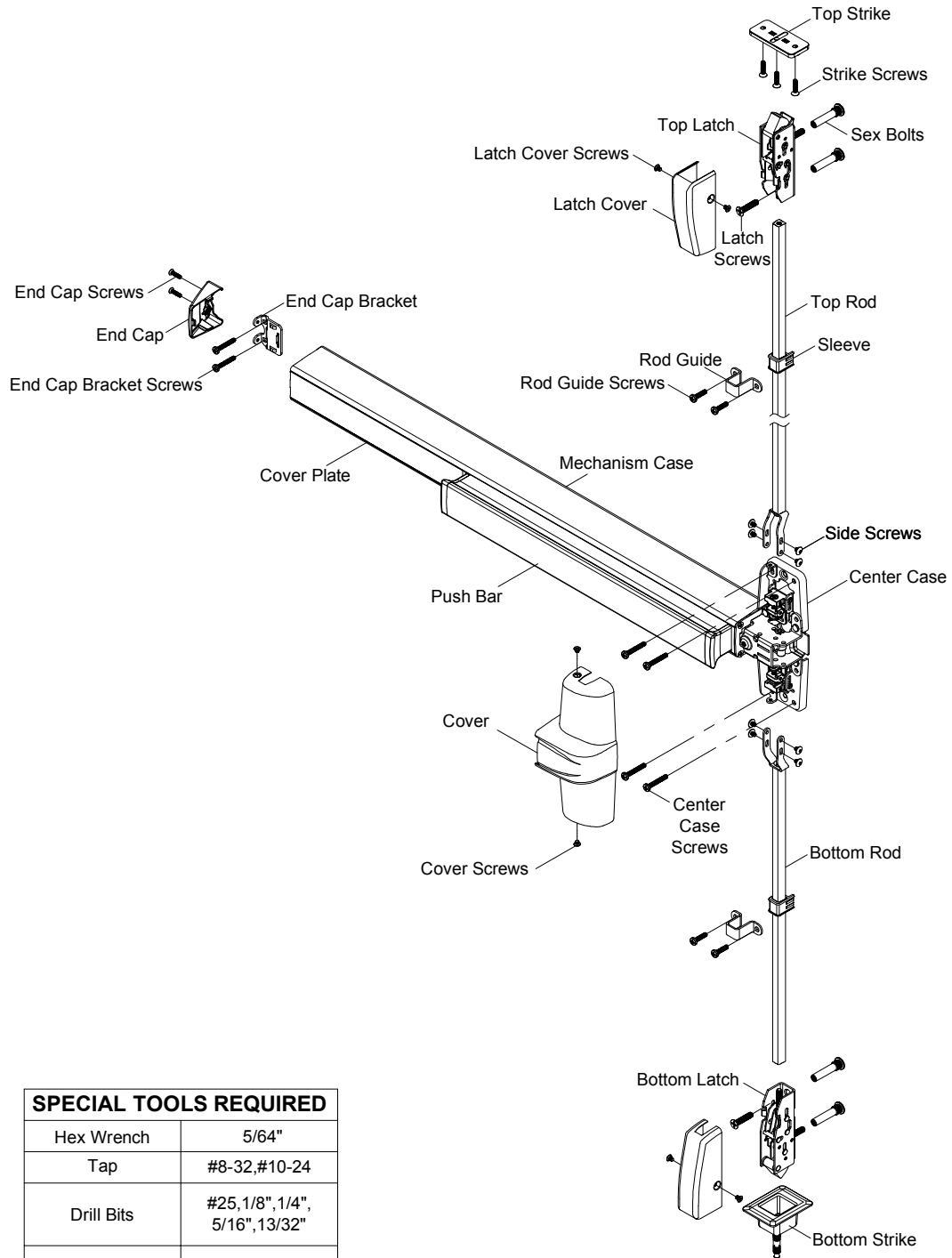
**Q1200/QF1200 SERIES
SURFACE VERTICAL ROD DEVICE
INSTALLATION INSTRUCTIONS**



Patent No. 7,634,927 7,748,757 D623,499
and other patents pending.

Q1000 Series Service Manual

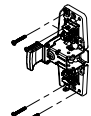


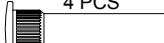
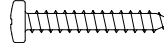
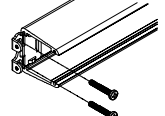


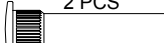
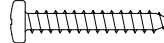
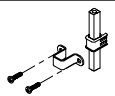

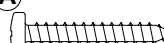
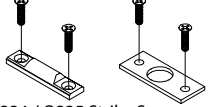

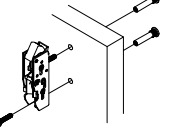

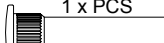
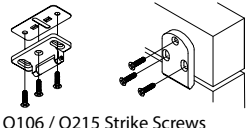

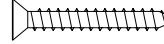
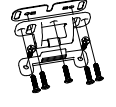

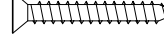


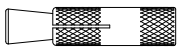
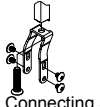
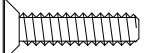



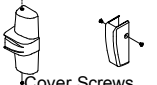

Q1200/QF1200 Installation Instructions (page 2)

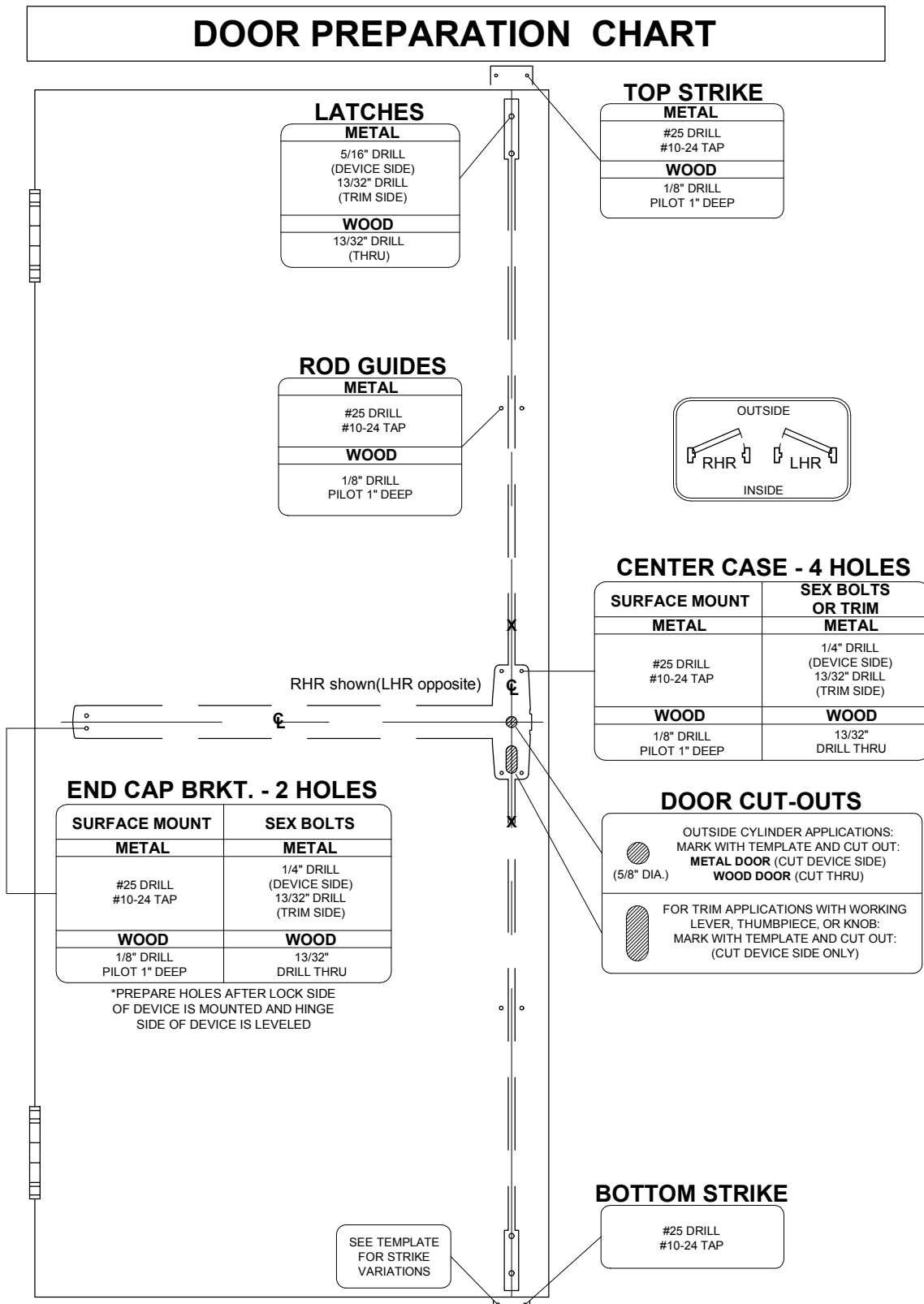


SPECIAL TOOLS REQUIRED	
Hex Wrench	5/64"
Tap	#8-32,#10-24
Drill Bits	#25, 1/8", 1/4", 5/16", 13/32"
Spade Drill	5/8" (For Wood Door)

Q1000 Series Service Manual

Q1200/QF1200 Installation Instructions (page 3)

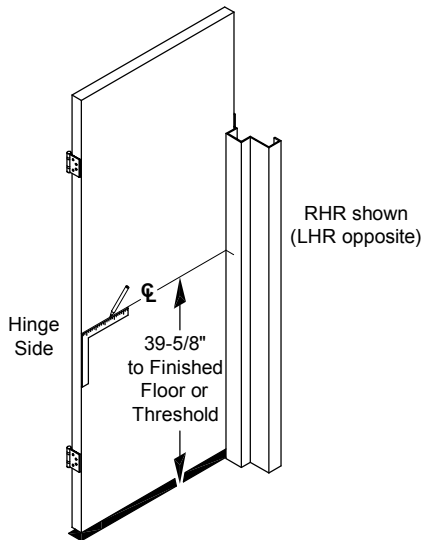
SCREW CHART			
APPLICATION	METAL	SEX BOLTS	WOOD
 Center Case Screws	C  No. 10-24 x 1-11/32" 4 PCS	C  No. 10-24 x 1-11/32" 4 PCS G  No. 10-24 x 1-3/32" 4 x PCS	A  No. 10-12 x 1-11/32" 4 x PCS
 End Cap Bracket Screws	C  No. 10-24 x 1-11/32" 2 PCS	C  No. 10-24 x 1-11/32" 2 PCS G  No. 10-24 x 1-3/32" 2 x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



Q1000 Series Service Manual

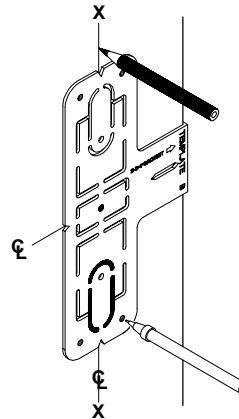
Q1200/QF1200 Installation Instructions (page 5)

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)

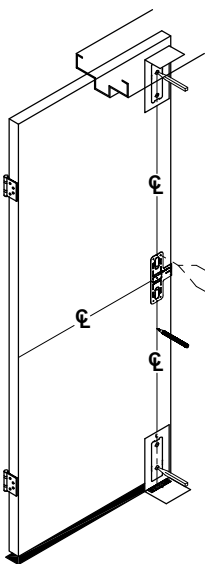
2 POSITION TEMPLATE AS SHOWN AND MARK VERTICAL ☉.



Mark vertical center line X-X above and below horizontal center line. (Mark vertical center line at lock side using same backset dimension on outside face of door if trim is using).

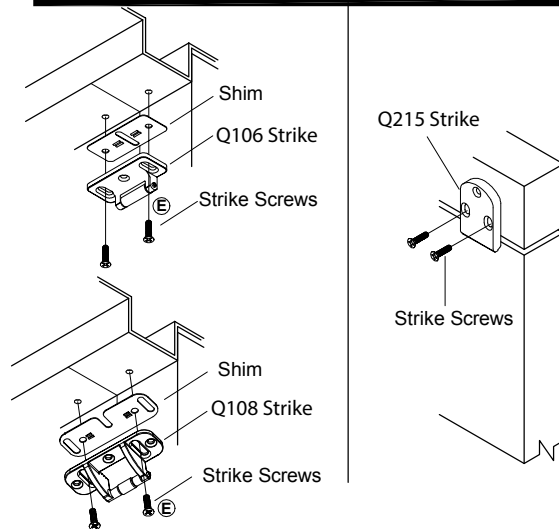
CAUTION: Vertical center lines on both sides of the door should be the same dimension from the edge of the door. Use extra care if edge of door is beveled. Be sure X-X vertical center line is parallel to edge of door.

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



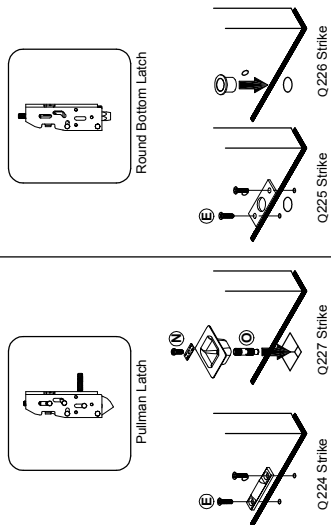
1. Fold strike template and place on door stop and inside face of door, so the vertical centerline on template lines up with the vertical centerline on door stop and door.
2. Tape template on door stop and the door face.
3. Mark centers and drill/tap holes as indicated on the template. See "DOOR PREPARATION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

4 INSTALL TOP STRIKE AND SHIM.



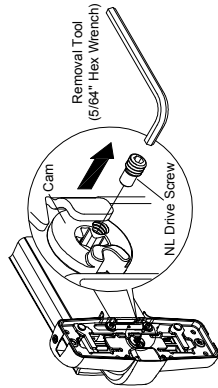
Install a screw through each slot.

5 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.

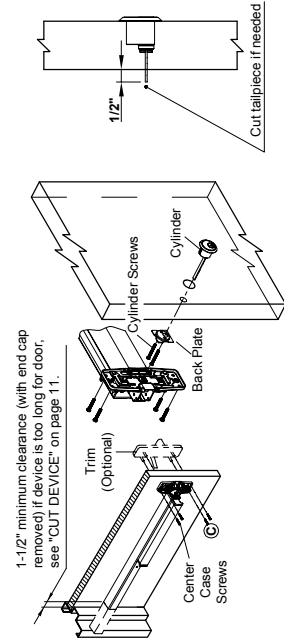
6 DETERMINE USE OF NL DRIVE SCREW.



NL driver screw is factory assembled in cam on back of device center case. When the NL drive screw is left in back of center case, the outside cylinder will function only as a Night Latch.

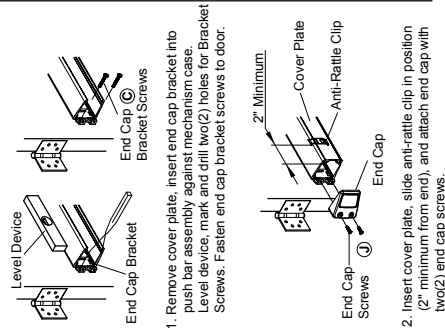
- NOTE:** 1. **DO NOT** remove NL drive screw for Pull Plate or Escutcheon with night latch cylinder.
2. **REMOVE** NL drive screw from back of center case when installing trim that has a functional lever, knob, or thumbpiece AND an outside cylinder to lock and unlock the trim.

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



1. **DEVICE WITH TRIM** - See "Trim Instructions".
2. **CYLINDER ONLY** - Install cylinder with cylinder back plate as shown. Make sure the tailpiece is extending 1/2" from the inside face of door. Insert tailpiece into cam in the center case and mount it to the door with four(4) center case screws.
3. **EXIT ONLY** - Mount center case to the door with four(4) center case screws.

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 INSTALL TOP LATCH AND ROD.

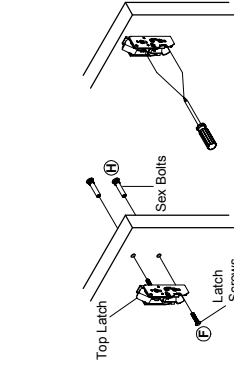


Figure 1

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 page 10.

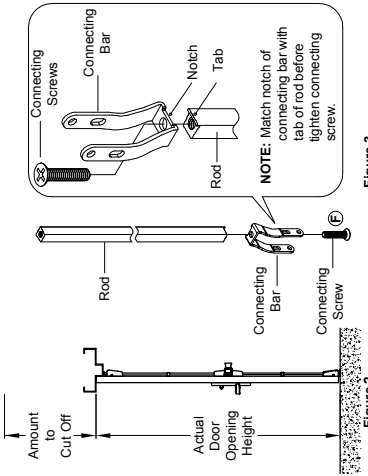
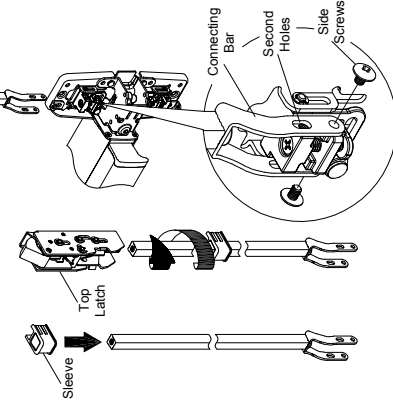


Figure 2

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

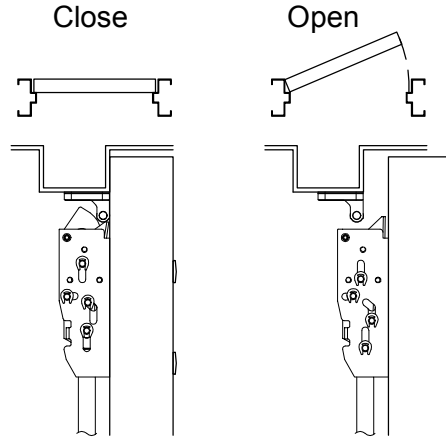
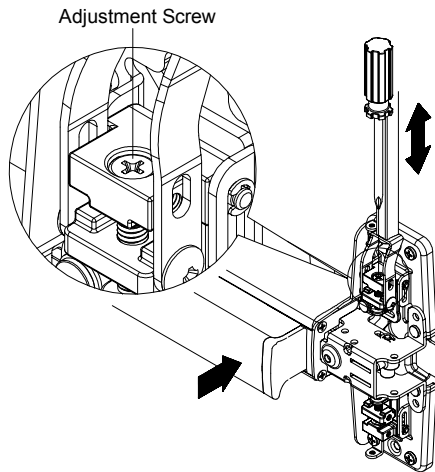


4. Assemble sleeve with rod. Thread top rod onto top latch until first hole in connecting bar align with first hole in refractor and fasten side screws.

Q1000 Series Service Manual

Q1200/QF1200 Installation Instructions (page 7)

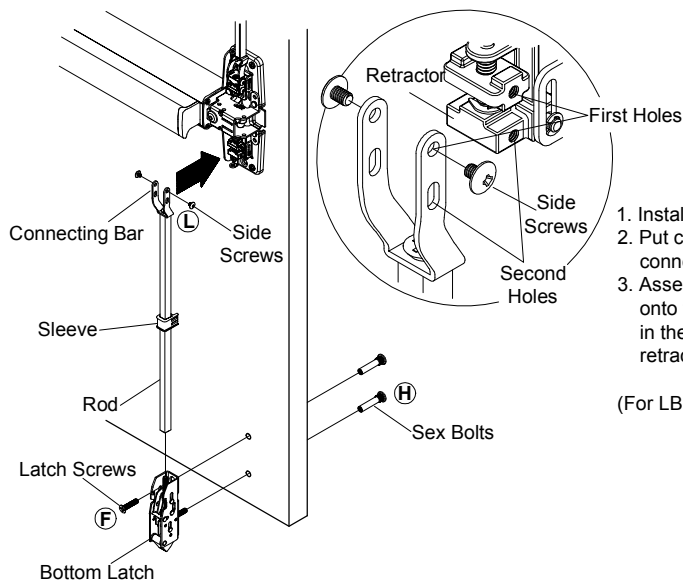
10 CHECK TOP LATCH FOR HOLDBACK AND DEADLOCK.



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.

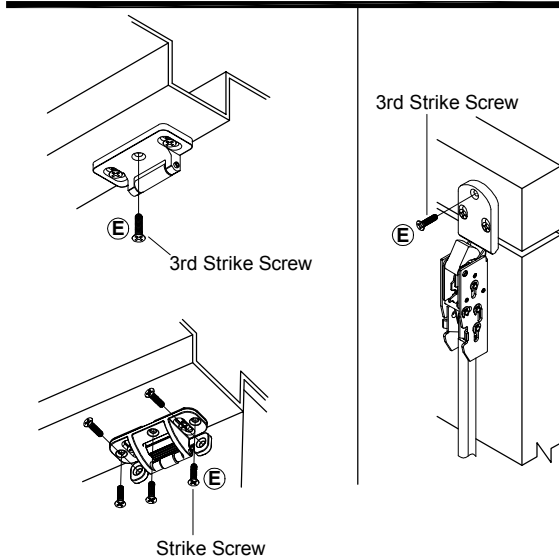
2. Fully extended latchbolt should be in deadlock. DEADLOCKED latchbolt cannot be pushed down into the latch housing. If NO DEADLOCK, loose strike screws and adjust strike position.

12 INSTALL BOTTOM LATCH AND ROD.



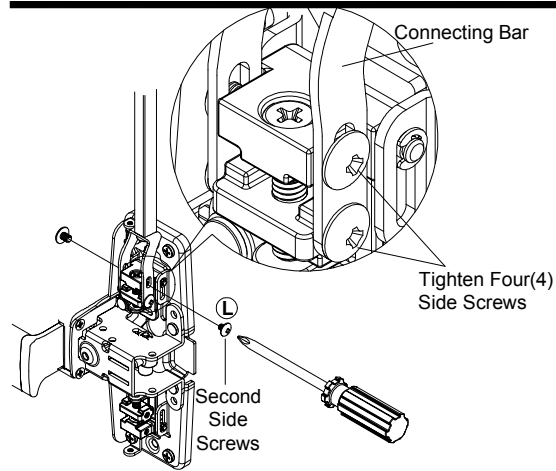
1. Install bottom latch with two(2) screws(Sex bolts).
2. Put connecting screw through round hole of connecting bar and thread into bottom rod and tighten.
3. Assemble sleeve with rod, thread the bottom rod onto the stud in the bottom latch until the first holes in the end of connecting bar align with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

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



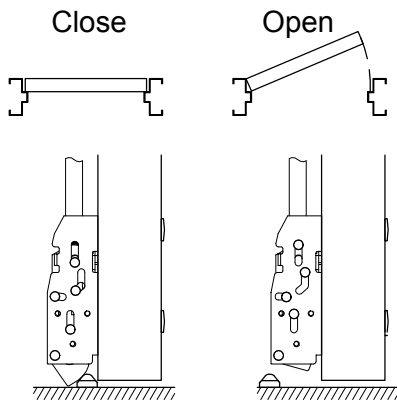
3. Apply third screw in hole of strike once adjustment is complete.

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.

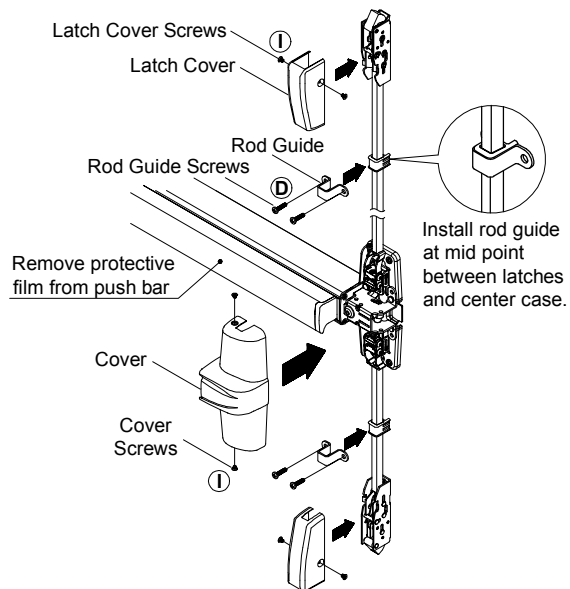
13 ADJUST BOTTOM ROD WITH DOOR OPEN (TOP LATCH RETRACTED).



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.

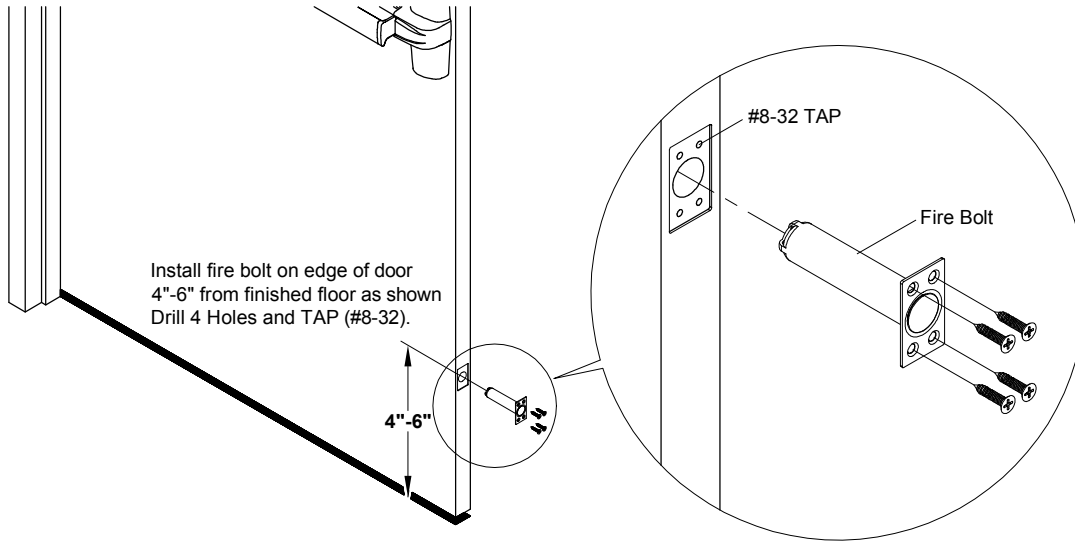
14 INSTALL ROD GUIDES AND COVERS WITH SCREWS.



Install rod guide at mid point between latches and center case.

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

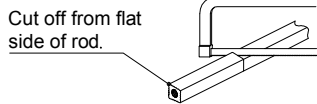
INSTALL FIRE BOLT



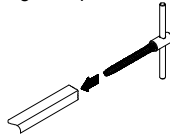
NOTE: Fire rated device with less bottom rod (LBR) applications must use FIRE BOLT.

CUT TOP ROD / EXTEND TOP ROD

CUT TOP ROD

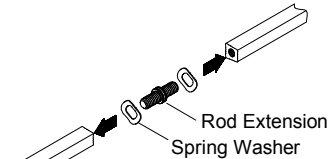


Step 1: Make sure the flat side of rod, and measure amount to cut off rod.
NOTE: Rod cutting is required for doors shorter than 7'.

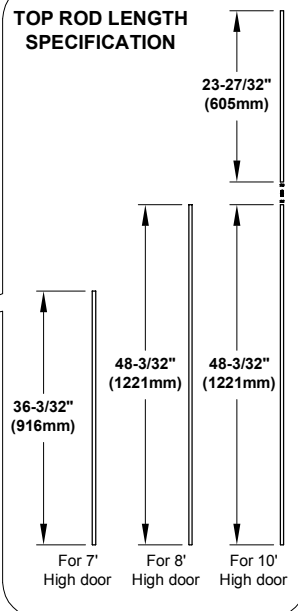
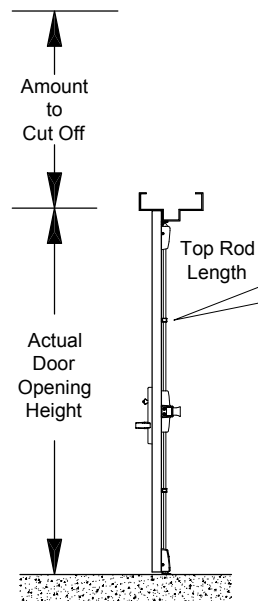


Step 2: Tap #1/4-20 ; 1" deep.

EXTEND TOP ROD



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



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.

CUT DEVICE (IF REQUIRED)

Recommended minimum clearance between frame and device end (with end cap removed) is 1-1/2".

Hinge Side

Center case aligned with mounting holes.

Remove Anti-Rattle Clip

Cut off line

Tape

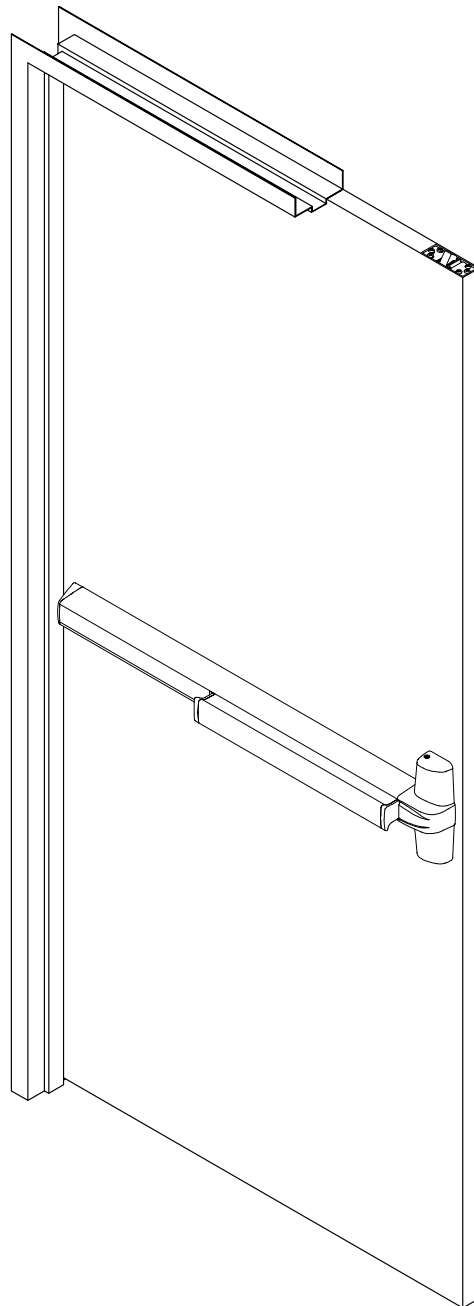
Cover Plate (Flush to Push bar)

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.

End Cap

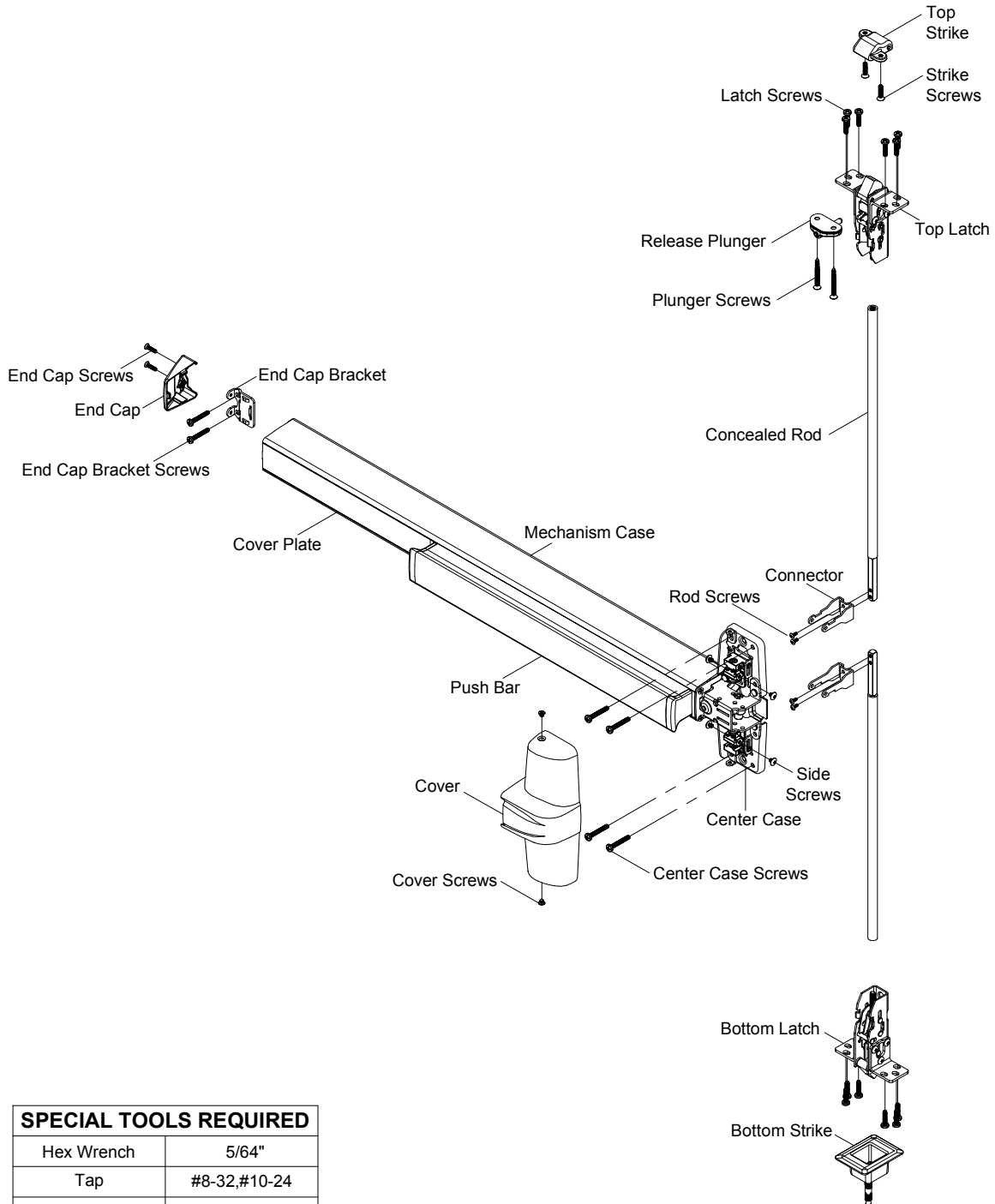
**Q1300/QF1300 SERIES
CONCEALED VERTICAL ROD DEVICE
INSTALLATION INSTRUCTIONS**



**Patent No. 7,634,927 7,748,757 D623,499
and other patents pending.**

Q1000 Series Service Manual

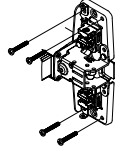


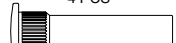
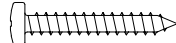
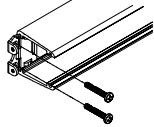

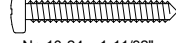
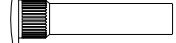
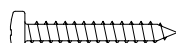
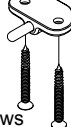

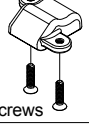


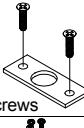



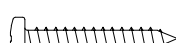



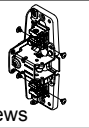


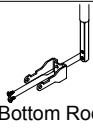


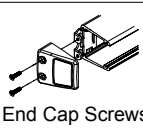





Q1300/QF1300 Installation Instructions (page 2)

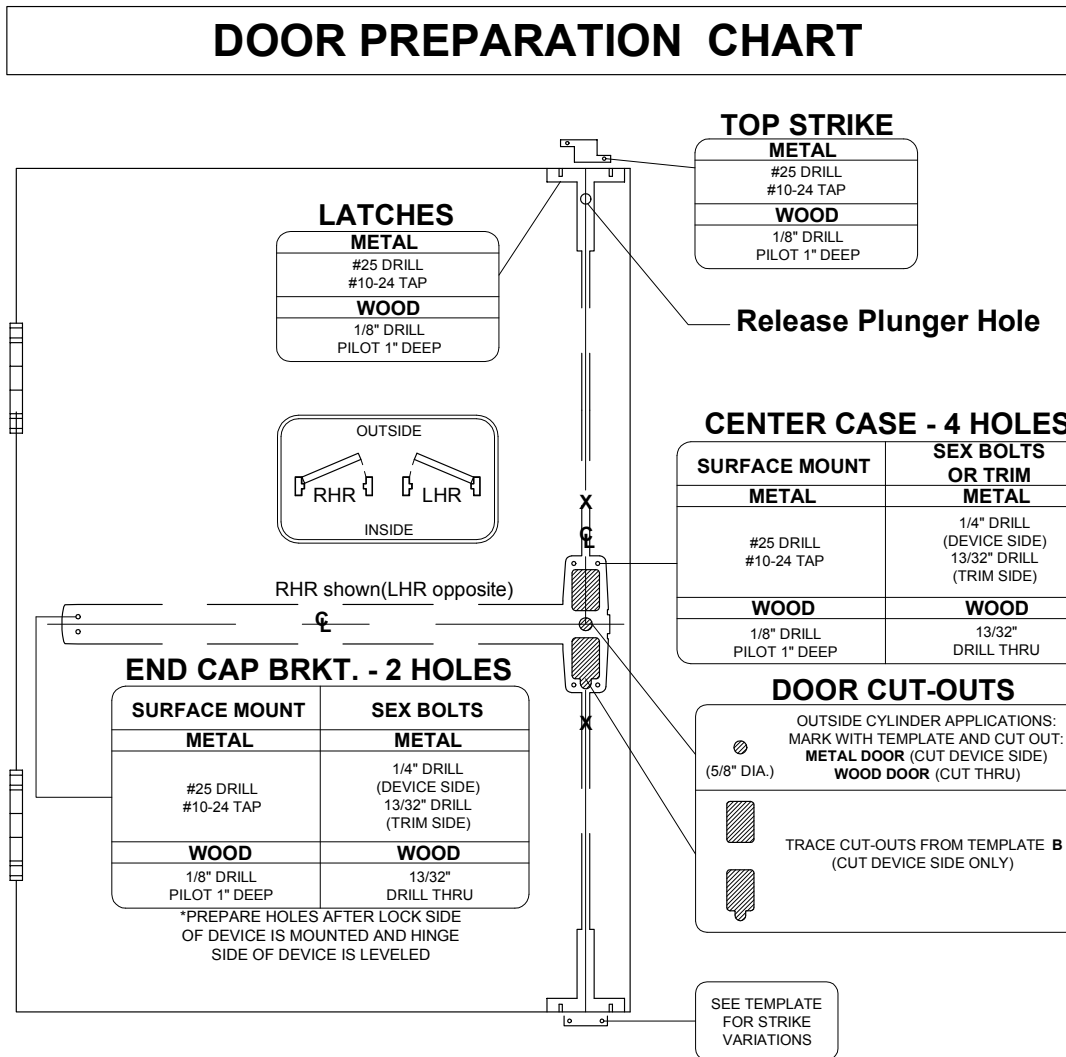


SPECIAL TOOLS REQUIRED	
Hex Wrench	5/64"
Tap	#8-32,#10-24
Drill Bits	#25, 1/8", 1/4", 5/16", 13/32"
Spade Drill	5/8" (For Wood Door)

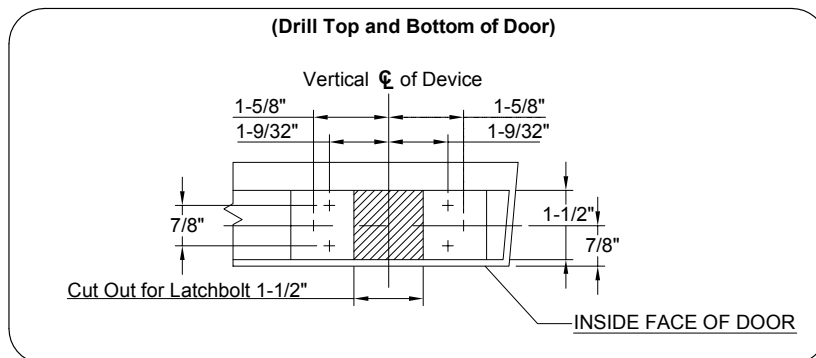
Q1000 Series Service Manual

Q1300/QF1300 Installation Instructions (page 3)

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



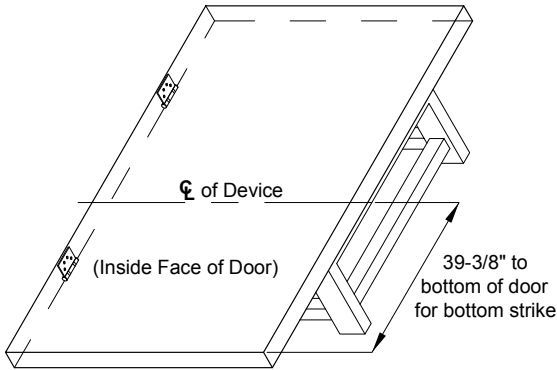
LATCH HOLE PREPARATION



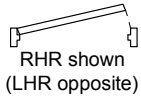
Q1000 Series Service Manual

Q1300/QF1300 Installation Instructions (page 5)

1 DRAW HORIZONTAL DEVICE CENTER LINE(☉).

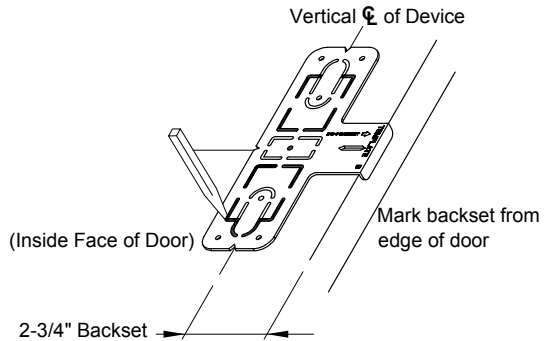


If threshold is used centerline of device must be 39-5/8" from finished floor. (bottom door gap must be 1/4")



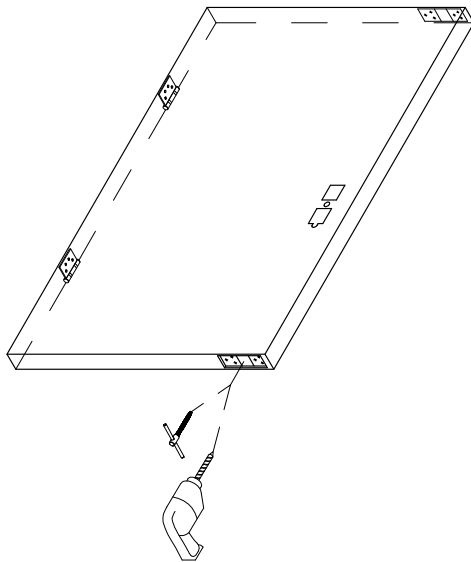
Lay door in place and draw horizontal device center line as shown.

2 DRAW VERTICAL ☉ & MARK BACKSET.



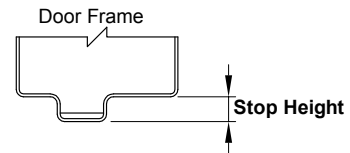
Position template as shown, then mark vertical center line for device center case.

3 PREPARE DOOR FOR DEVICE AND TOP & BOTTOM LATCH.



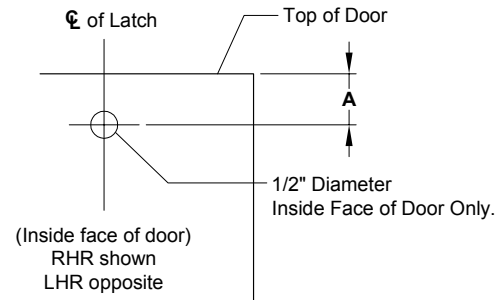
See "DOOR PREPARATION CHART" on page 4 for drill tap, and cut-out information.

4 DRILL TOP OF DOOR FOR RELEASE PLUNGER.

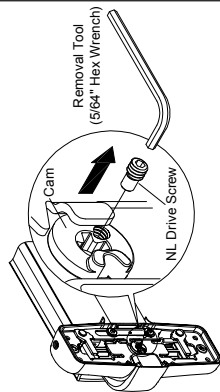


Stop Height	A
1/2"	11/16"
5/8"-Std.	13/16"
3/4"	15/16"

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



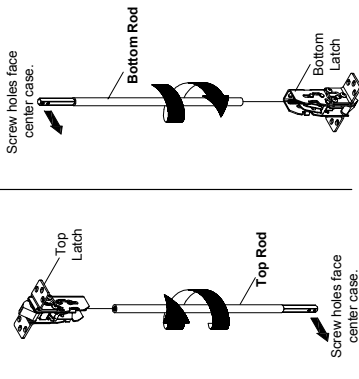
5 DETERMINE USE OF NL DRIVE SCREW.



NL driver screw is factory assembled in cam on back of device center case, when the NL drive screw is left in back of center case, the outside cylinder will function only as a Night Latch.

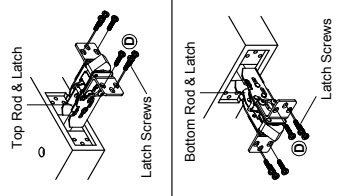
- NOTE:** 1. **DO NOT** remove NL drive screw for Pull Plate or Escutcheon with night latch cylinder.
2. **REMOVE** NL drive screw from back of center case when installing trim that has a functional lever, knob, or thumbpiece AND an outside cylinder to lock and unlock the trim.

6 ATTACH RODS TO LATCHES.



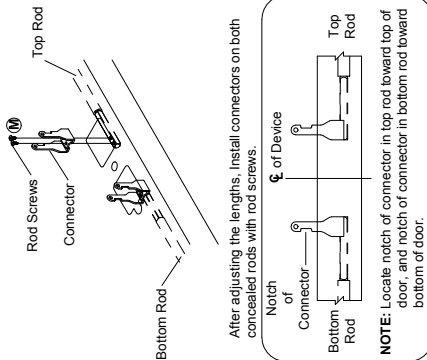
Thread rod onto latch stud until screw holes in rod bars face center case.

7 INSTALL RODS AND LATCH.

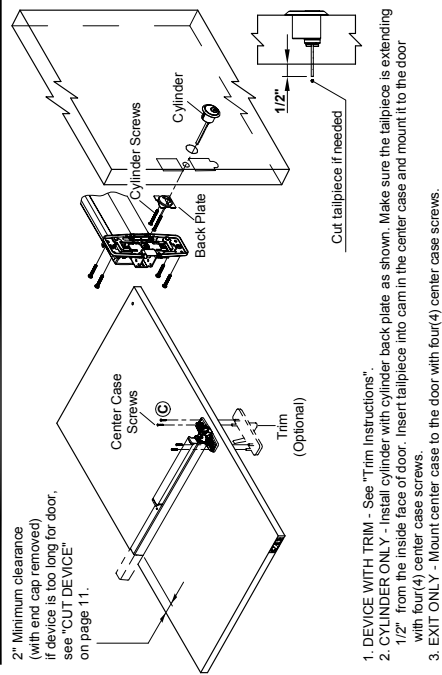


1. Install top latch and latch screws from top of door.
2. Install bottom latch and latch screws from bottom of door.
3. Fine tune the overall length by threading latch in or out of rod.

8 INSTALL CONNECTORS.

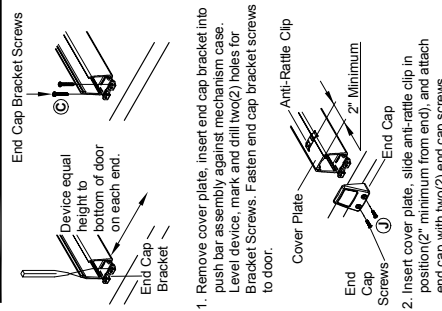


9 INSTALL TRIM (IF USING) AND SECURE DEVICE CENTER CASE TO DOOR.

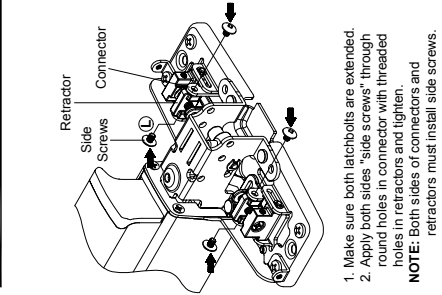


1. **DEVICE WITH TRIM** - See "Trim Instructions".
2. **CYLINDER ONLY** - Install cylinder with cylinder back plate as shown. Make sure the tailpiece is extending 1/2" from the inside face of door. Insert tailpiece into cam in the center case and mount it to the door with four(4) center case screws.
3. **EXIT ONLY** - Mount center case to the door with four(4) center case screws.

10 INSTALL MOUNTING BRACKET AND END CAP.



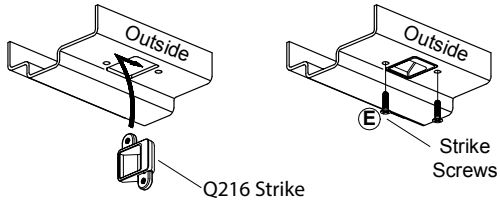
11 INSTALL SIDE SCREWS.



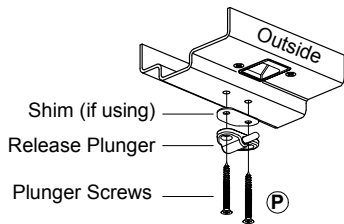
Q1000 Series Service Manual

Q1300/QF1300 Installation Instructions (page 7)

12 HANG DOOR AND INSTALL TOP STRIKE & RELEASE PLUNGER.

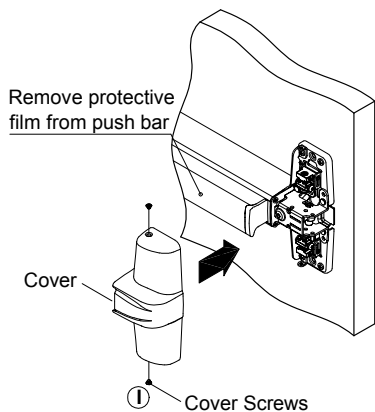


See "FRAME PREPARATION" on page 9 for cut-out and holes. After preparing, install top strike into door frame and mount two(2) strike screws.



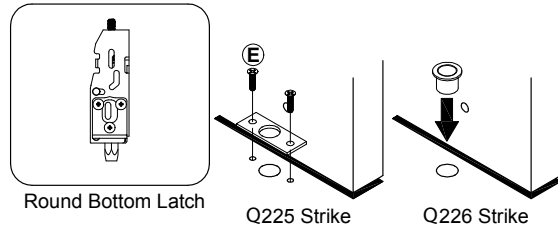
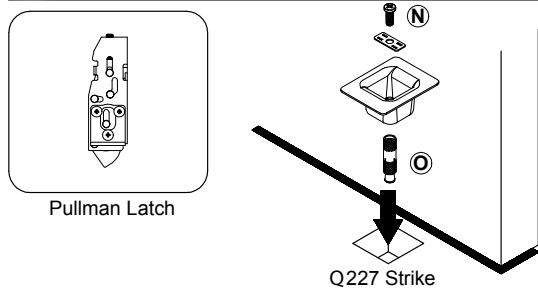
See "FRAME PREPARATION" on page 9 for holes. After preparing, install release plunger with two(2) plunger screws.

15 INSTALL CASE COVER.



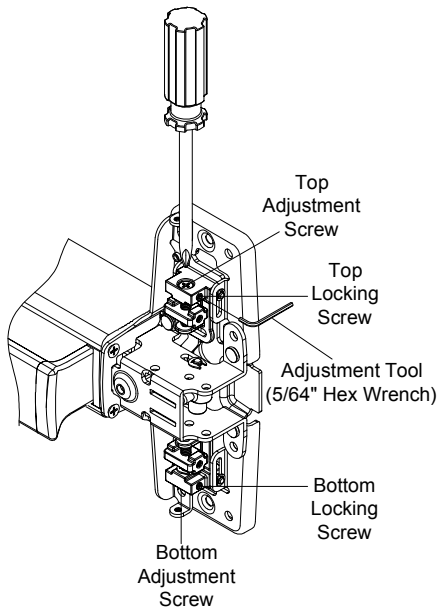
Attach cover to center case with two(2) center case screws.

13 INSTALL BOTTOM STRIKE.

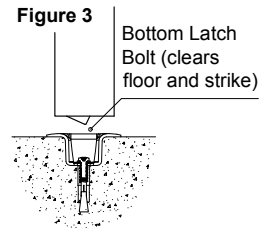
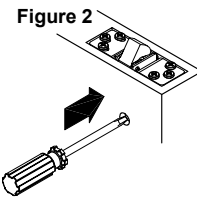
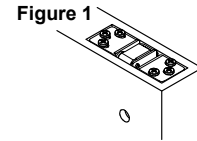


1. Mark floor for fasteners, prepare floor according to the type of strike and fastener furnished. Provide clearance in floor for bolt.
2. For threshold application: Provide hole in threshold according to type of strike and fasteners furnished.

14 ADJUST LATCHES AND SECURE TOP & BOTTOM LOCKING SCREWS.



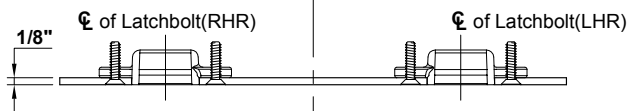
1. Depress push bar to retract the latch bolt and open the door.
2. Check top latch for HOLDBACK (Latchbolt stays retracted in latch case). **See Figure 1**
3. Loose top locking screw.
4. Rotate top adjustment screw until top latchbolt is fully retracted.
5. Release top latchbolt. **See Figure 2**
6. 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. Loose bottom locking screw.
12. With top latchbolt 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 function of DEADLOCK & HOLDBACK.



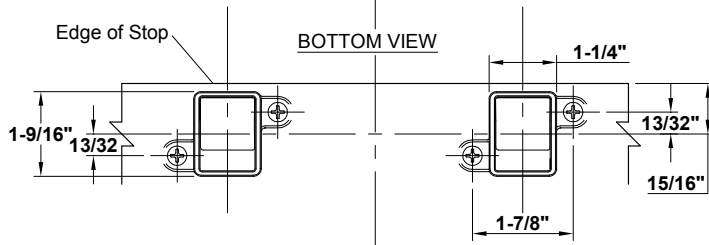
FRAME PREPARATION

Q216 STRIKES

FRONT VIEW

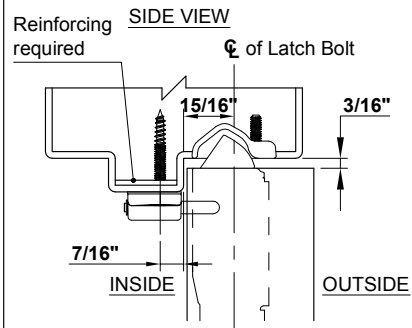


Double Door Application

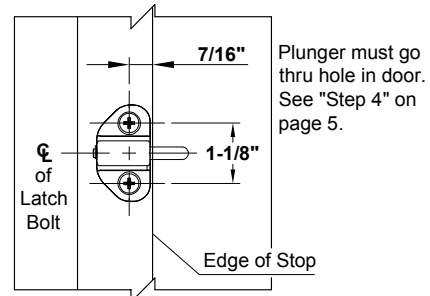


RELEASE PLUNGER

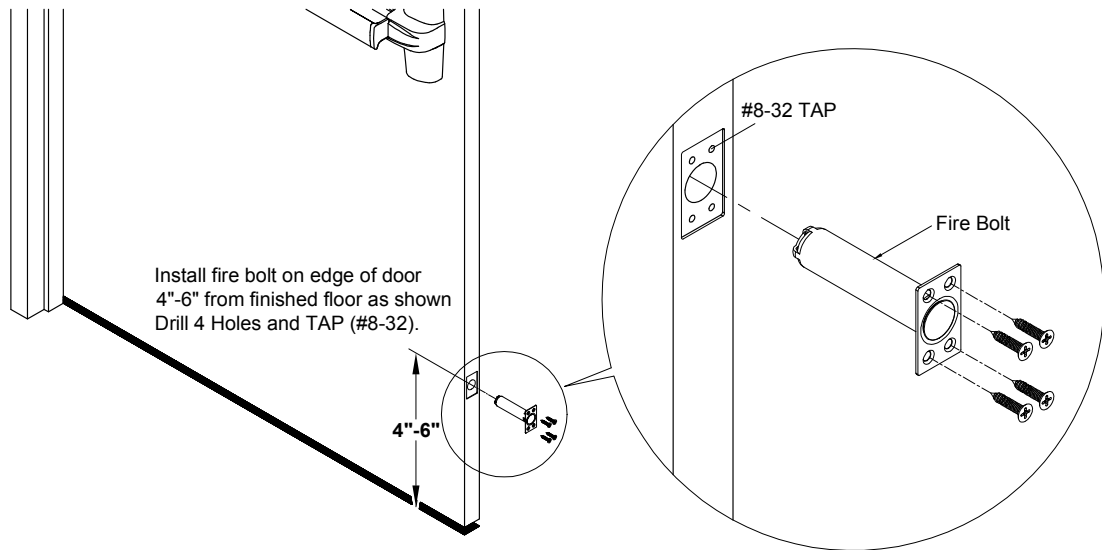
SIDE VIEW



BOTTOM VIEW



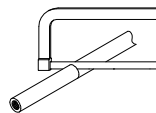
INSTALL FIRE BOLT



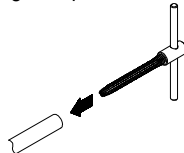
NOTE: Fire rated device with less bottom rod (LBR) applications must use FIRE BOLT.

CUT TOP ROD / EXTEND TOP ROD

CUT TOP ROD

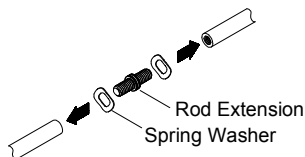


Step 1: Make sure the flat side of rod, and measure amount to cut off rod.
NOTE: Rod cutting is required for doors shorter than 7'.

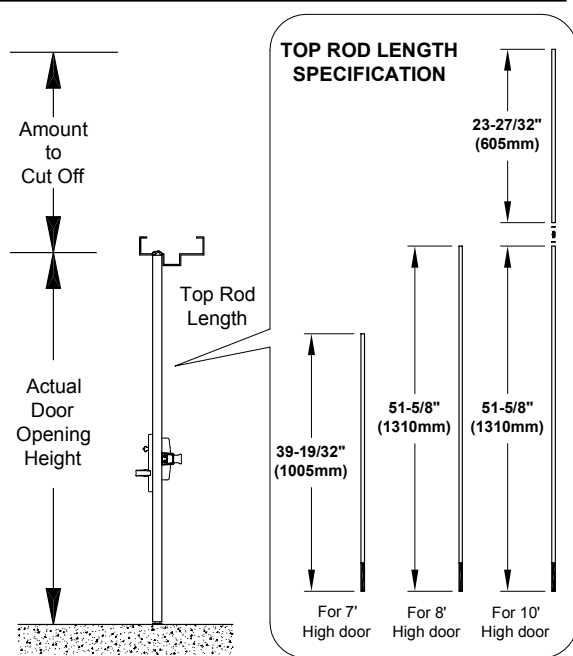


Step 2: Tap #1/4-20 ; 1" deep.

EXTEND TOP ROD

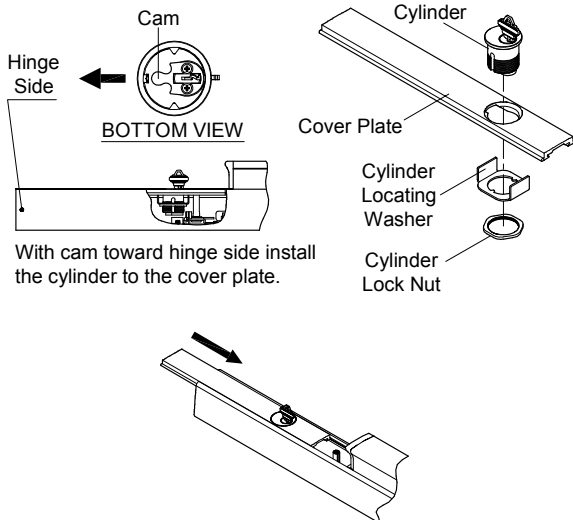


Install rod extension & spring washer to connect two(2) rods tightly.



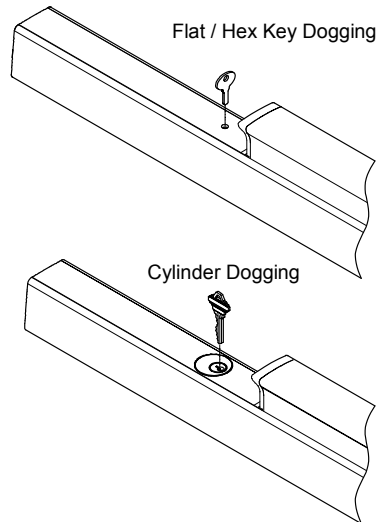
OPTIONAL DOGGING

CYLINDER DOGGING



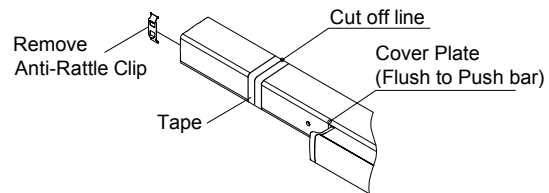
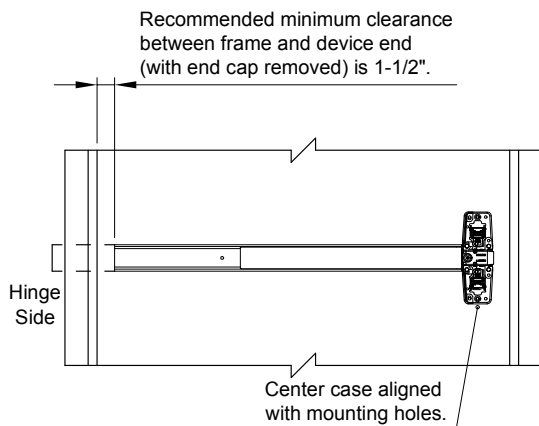
Slide cover plate in position in the mechanism case.

DOGGING CHECK

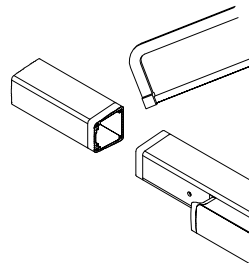


Depress push bar and turn flat / hex wrench or key one full turn for dogging check.

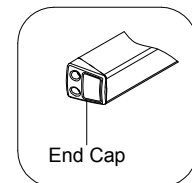
CUT DEVICE (IF REQUIRED)



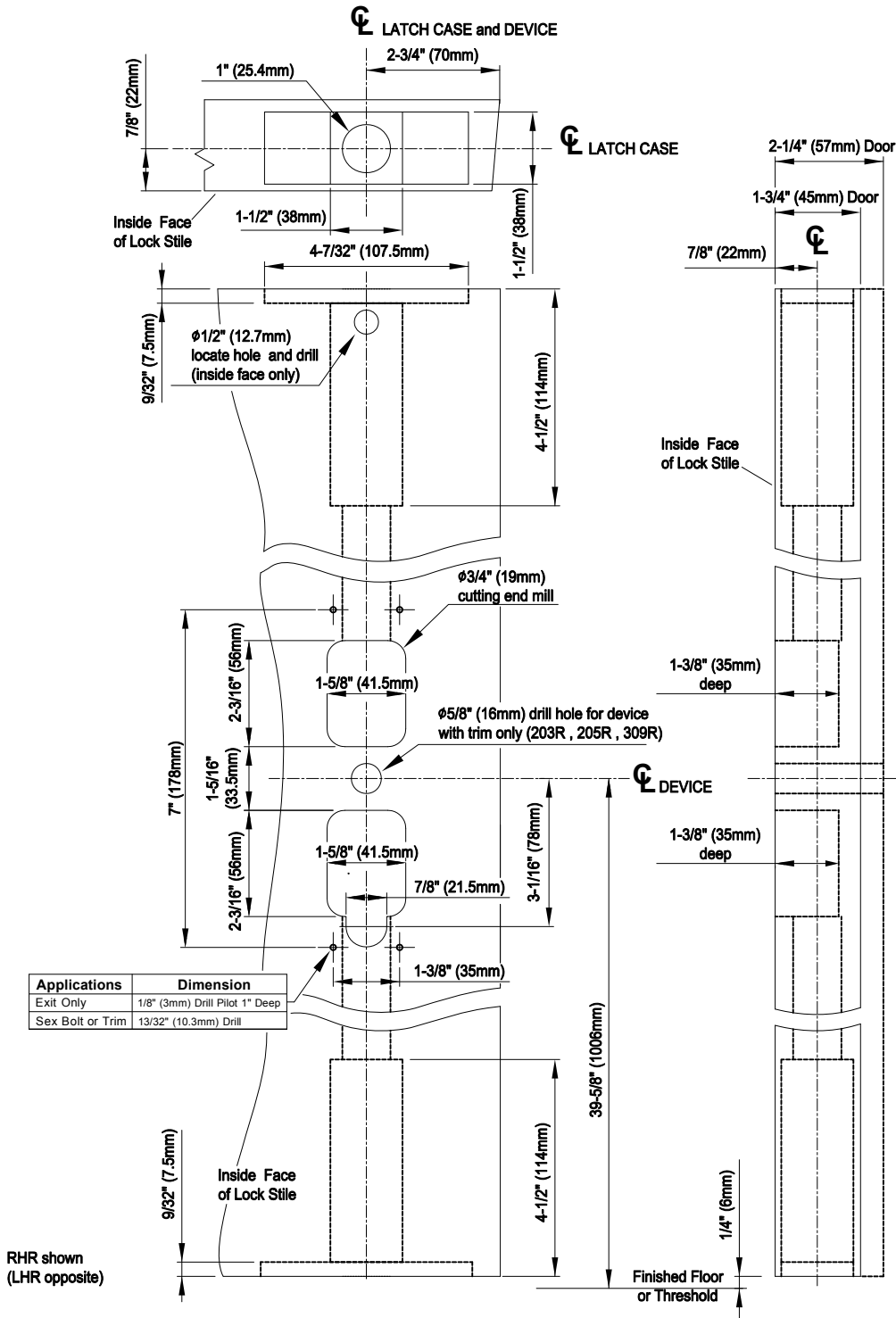
1. With anti-rattle clip removed, tape and mark area being cut.



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

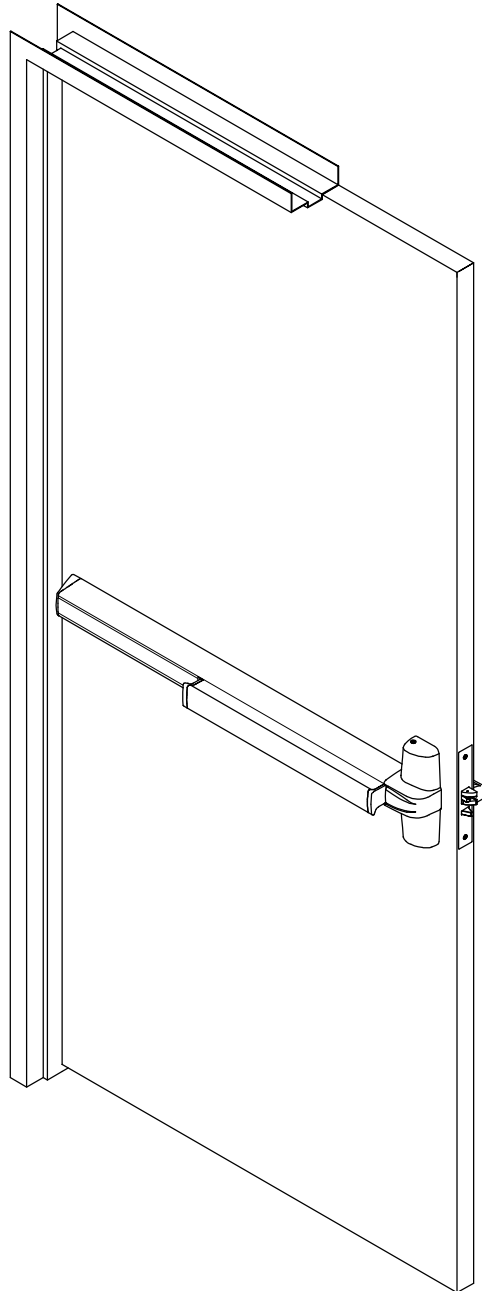


PREPARATION FOR WOOD DOOR



**Q1400/QF1400 SERIES
MORTISE LOCK EXIT DEVICE**

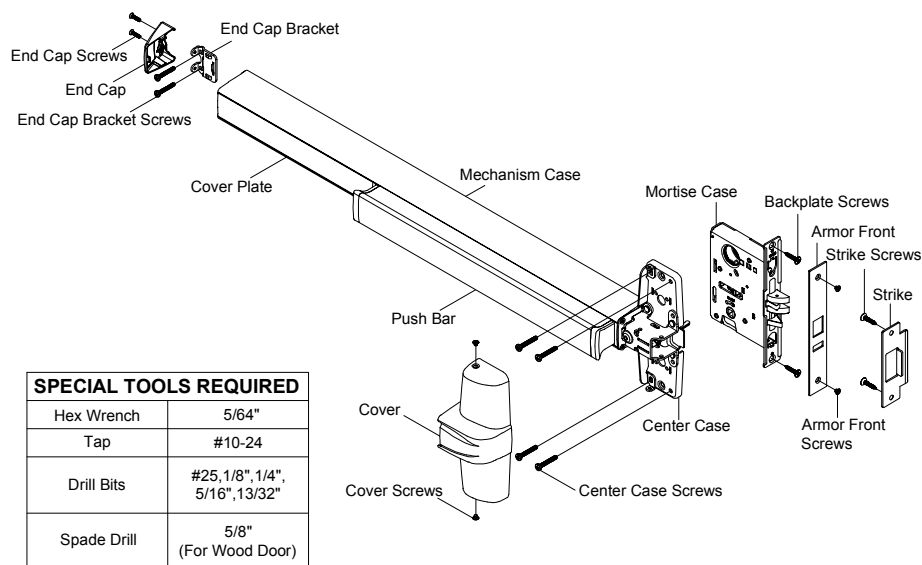
INSTALLATION INSTRUCTIONS



Patent No. 7,634,927 7,748,757 7,836,738 D623,499
and other patents pending.

Q1000 Series Service Manual

Q1400/QF1400 Installation Instructions (page 2)

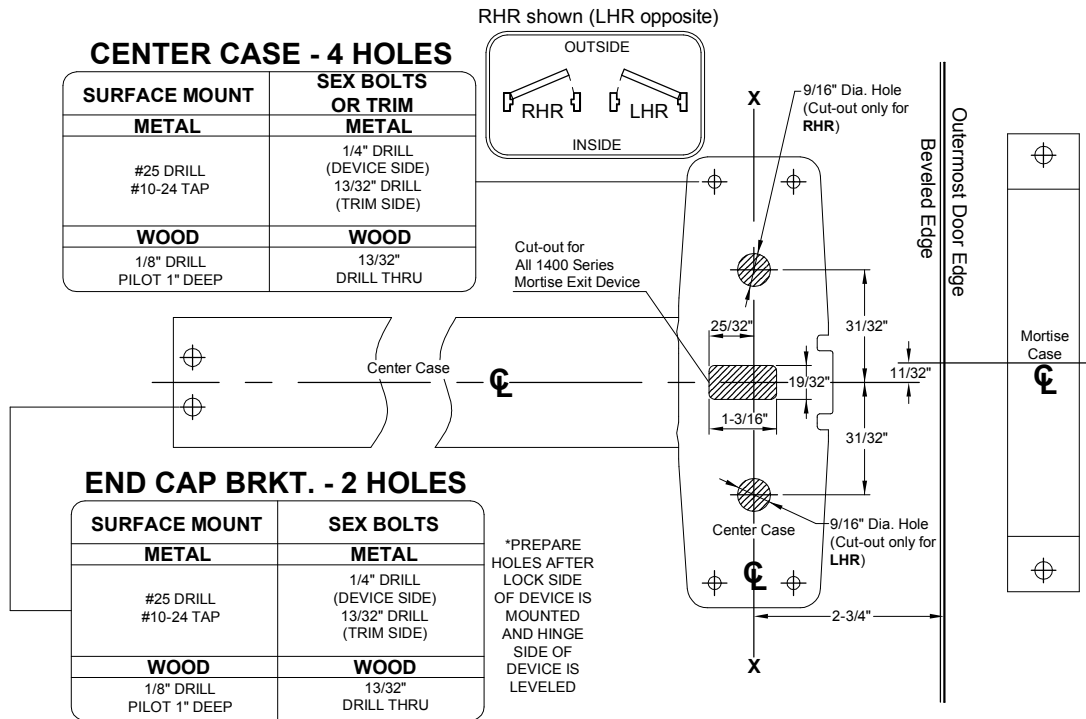


SPECIAL TOOLS REQUIRED	
Hex Wrench	5/64"
Tap	#10-24
Drill Bits	#25, 1/8", 1/4", 5/16", 13/32"
Spade Drill	5/8" (For Wood Door)

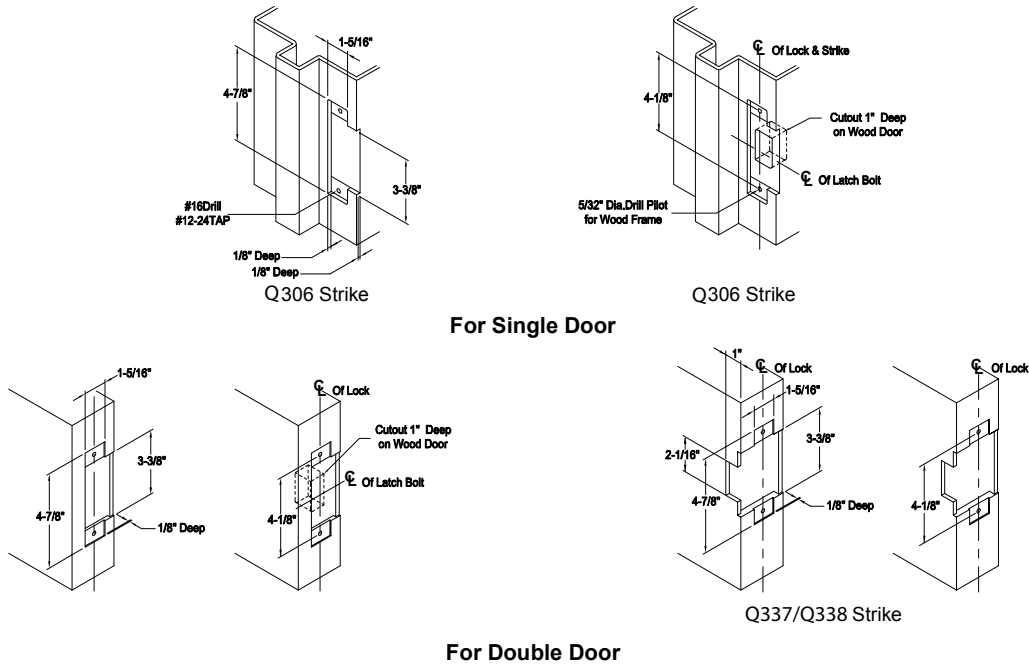
SCREW CHART

APPLICATION	METAL	SEX BOLTS	WOOD
 Center Case Screws	 No.10-24 x 1-11/32" 4 PCS	 No.10-24 x 1-11/32" 4 PCS No.10-24 x 1-3/32" 4 PCS	 No.10-12 x 1-11/32" 4 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
 End Cap Screws		 No.8-32 x 5/8" 2 PCS	
 Cover Screws		 No.8-32 x 5/32" 2 PCS	
 Cylinder Screws		 No.10-24 x 1-11/32" 2 PCS	
 Backplate Screws		 No.12-24 x 7/8" 2 PCS	
 Armor Front Screws		 No.8-32 x 5/32" 2 PCS	
 Q306/Q336/Q337/Q338 Strike Screws		 No.12-24 x 7/8" 2 PCS	

DOOR PREPARATION CHART



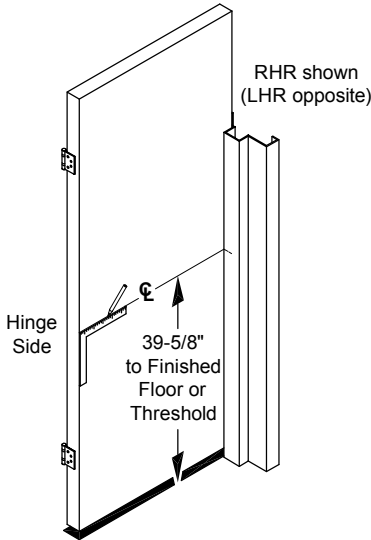
STRIKE PREPARATION



Q1000 Series Service Manual

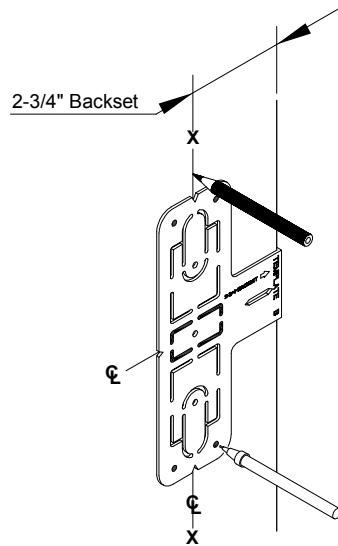
Q1400/QF1400 Installation Instructions (page 4)

1 DRAW HORIZONTAL DEVICE CENTERLINE (☉).



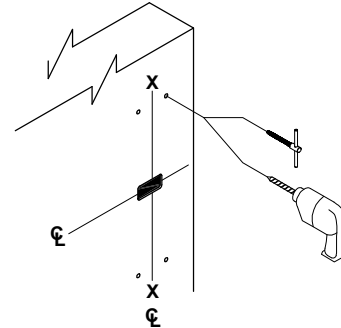
Close door, mark horizontal centerline on inside face of door and on lock side door stop 39-5/8" from finish floor as shown, (Continue horizontal centerline to outside face of door if trim is used)

2 ALIGN TEMPLATE ALONG CENTERLINE (☉) AND MARK DOOR.



Mark four(4) center case holes. Mark vertical centerline at lock side using 2-3/4" backset dimension.

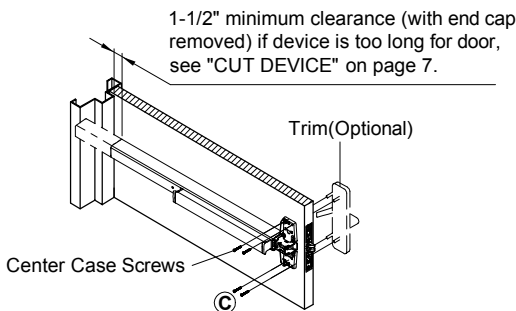
3 PREPARE FOUR(4) CENTER CASE HOLES AND MORTISE LOCK CUTOUTS.



3A. Mark vertical centerline at lock side using 2-3/4" backset dimension (If trim is using mark vertical centerline on the outside face of door. Use extra care if edge of door is beveled, be sure X-X vertical centerline is parallel to edge of door).
3B. If door is not pre-machined for mortise lock, mortise the door according to "Mortise Lock Instructions".

See "Trim Instructions" for pull side door preparation.

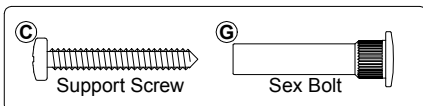
5 INSTALL TRIM (IF USING) AND SECURE DEVICE CENTER CASE TO DOOR.



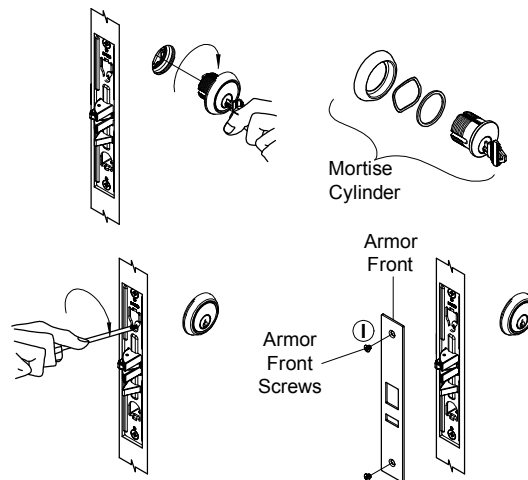
1. DEVICE WITH TRIM - See "Trim Instructions".
2. EXIT ONLY - With device adjustment finger in the mortise case, mount center case to the door with four(4) screws.

For FIRE EXIT DEVICES

Six bolts and support screws are required for composite (wood, plastic and steel covered), wood core, sheet metal and hollow metal doors without reinforcement unless door manufacturer has an alternate mounting method. Fire doors with steel reinforcement, mount devices with machine screws



6 INSTALL OUTSIDE LOCKING CYLINDER (IF USING) AND FINISH INSTALLING MORTISE LOCK.



CYLINDER ONLY - Install mortise cylinder into mortise lock as shown. Check key operation and secure cylinder in place by tightening cylinder anchor screw into groove on side of cylinder.
NOTE: See "DOUBLE CYLINDER INSTALLATION" on page 7 for double cylinder application.

Q1000 Series Service Manual

Q1400/QF1400 Installation Instructions (page 5)

4 INSTALL MORTISE LOCK INTO DOOR.

Remove and Reset Set Screw If Required.

Set Screw Removal Tool (3/32" Hex Wrench)

Set Screw Set Screw

Long Slot Short Slot

Backplate Screws

Backplate Screws

4A. Leave set screw as shipped for EO, DT and NL applications. Set screw is factory set in the long slot on one side of the mortise case.

Remove set screw and reset in short slot of the other side for TP, K, "double cylinder" and L trims with outside cylinder to lock and unlock trim function.

4B. Install mortise lock into door and fasten with backplate screws.

7 INSTALL SUPPLIED STRIKE TO FRAME OR OTHER DOOR.

Strike Screws (K)

Q306 Strike Q306/Q336 Strike

Single Door Application Double Door Application

Q337/Q338 Strike

Strike Screws (K)

Open Back Strike For Double Door Application

See "STRIKE PREPARATION" on page 3 for preparation information.

8 INSTALL MOUNTING BRACKET AND END CAP.

Level Device

End Cap Bracket

End Cap Bracket Screws (C)

2" Minimum

Cover Plate

Anti-Rattle Clip

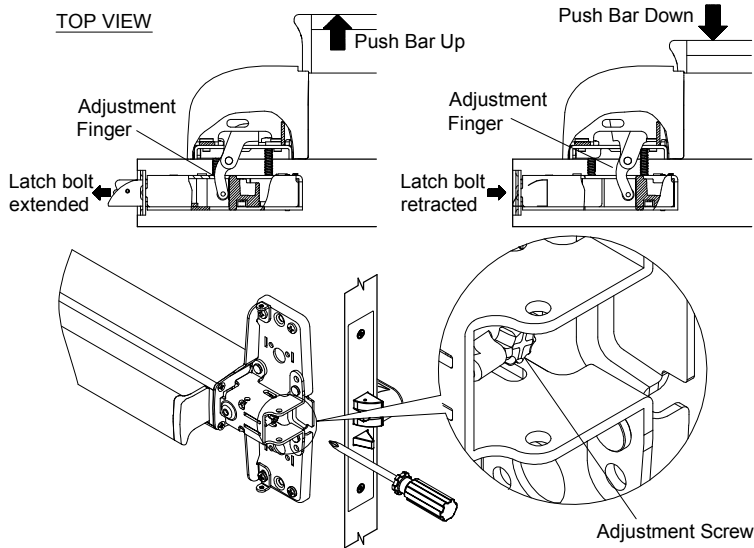
End Cap Screws (J)

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.

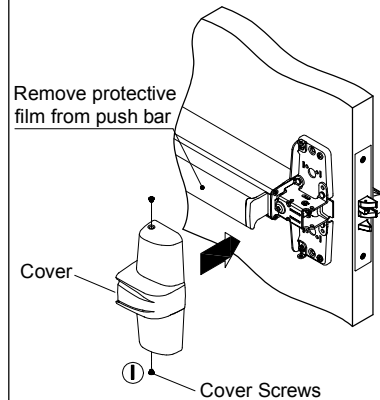
2. Insert cover plate, slide anti-rattle clip in position (2" minimum from end), and attach end cap with two(2) end cap screws.

9 ADJUSTING LATCH BOLT.



Latchbolt should be fully retracted when push bar is depressed or device is dogged down. If above condition does not exist, adjust "adjustment finger" with adjusting "adjustment screw".

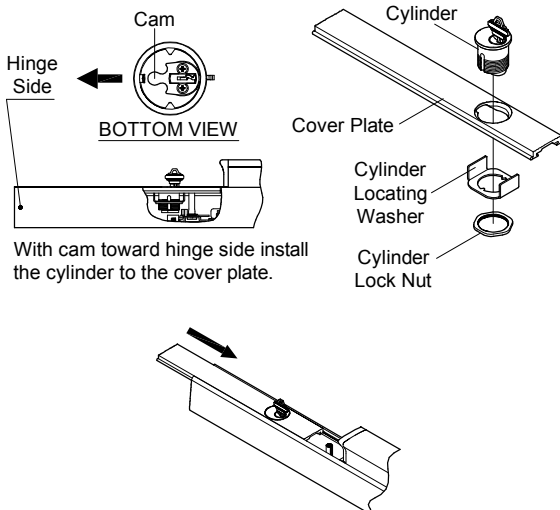
10 INSTALL CASE COVER.



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

OPTIONAL DOGGING

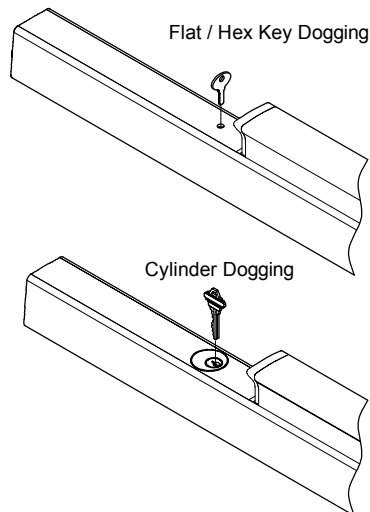
CYLINDER DOGGING



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.

DOUBLE CYLINDER INSTALLATION

1. Remove cover.

2. Mount rim cylinder to cylinder bracket assembly to center case with two(2) cylinder screws as shown.

3. Cut off tailpiece for different door ranges and various cylinder lengths.

CAUTION! If the tailpiece is too far into mortise case and interferes with outside cylinder cam, both cylinders cannot be properly operated.

Keep clearance to operate smooth

INSIDE

CUT DEVICE (IF REQUIRED)

Recommended minimum clearance between frame and device end (with end cap removed) is 1-1/2".

Hinge Side

Center case aligned with mounting holes.

Remove Anti-Rattle Clip

Tape

Cut off line

Cover Plate (Flush to Push bar)

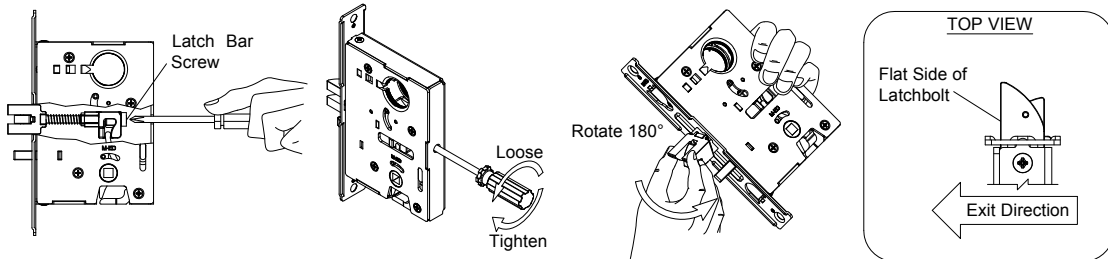
1. With anti-rattle clip removed, tape and mark area being cut.

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

End Cap

Q1400 SERIES MORTISE LOCK FOR EXIT DEVICE INSTALLATION INSTRUCTIONS

1. Prepare door for device and trim (see their instructions).
2. Prepare door for mortise lock and cylinder (see preparation on other side of these instructions).
3. Change lock handing if required:
 - (a) Loose latch bar screw to project latchbolt away from mortise case.
 - (b) After latchbolt fully projected, rotate it 180° so flat side faces exit direction, tighten latch bar screw.

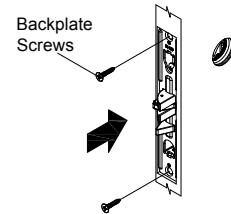
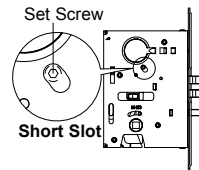
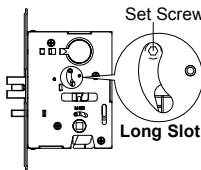
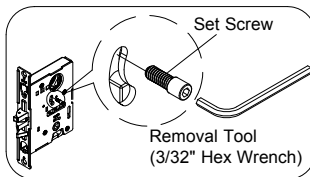


Remove and Reset Set Screw If Required.

4A. Remain set screw as shipped.
Set screw is factory set at **long slot** side for EO,DT, and NL applications.

Remove set screw and reset in short slot of the other side for TP, K, "double cylinder" and L trims with outside cylinder to lock and unlock trim function.

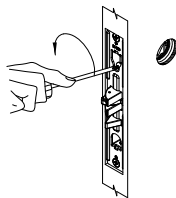
4B. Install mortise lock into door and fasten with backplate screws.



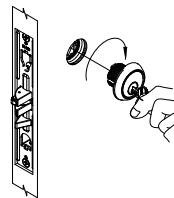
5. Install trim, if using (see "Trim Instructions").

6. If using outside cylinder:

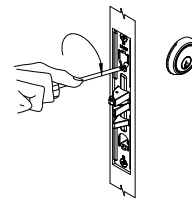
(a) Loose cylinder anchor screw sufficiently to allow cylinder to be threaded into lock case.



(b) Screw cylinder into the lock case, keyway must end up on bottom of cylinder housing.

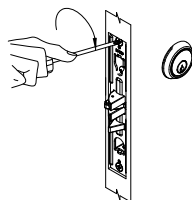


(c) Secure cylinder by tightening cylinder anchor screw into groove on side of cylinder.

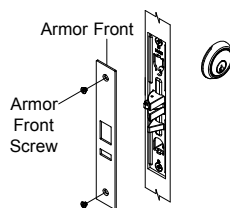


7. Finish installing mortise lock:

(a) Tighten two(2) backplate screws.

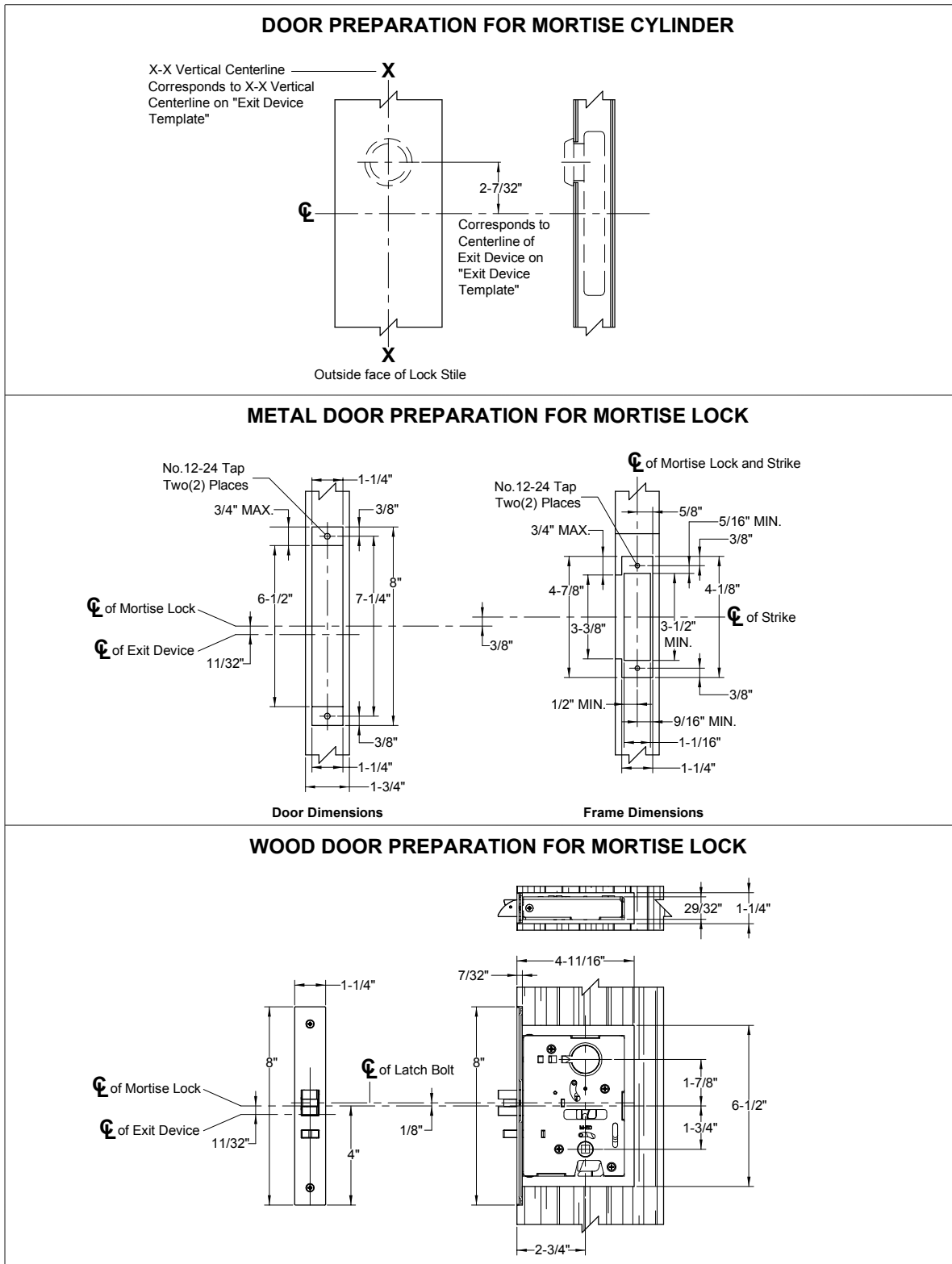


(b) Place armor front in position and install two(2) armor front screws.

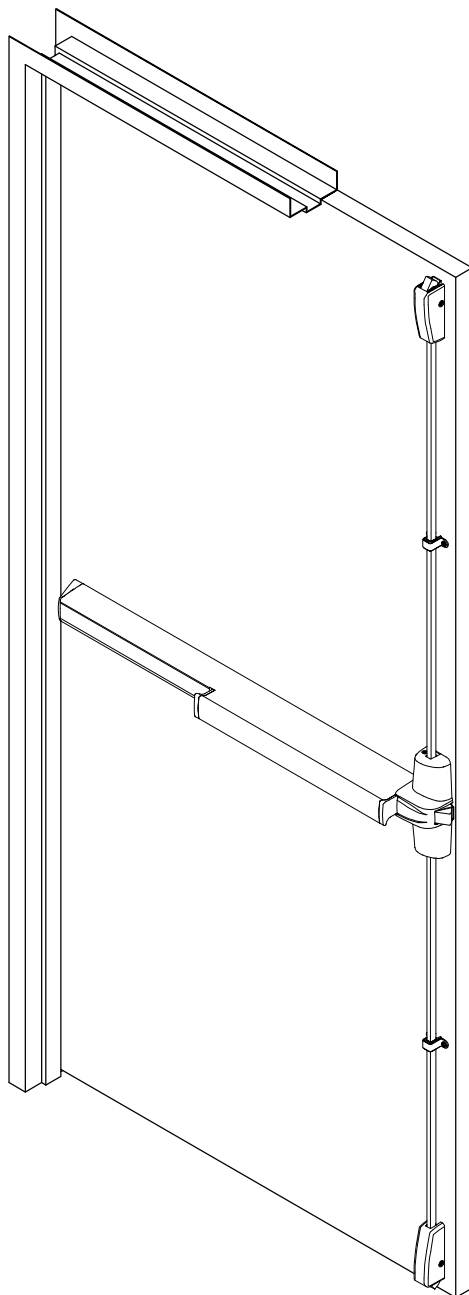


Q1000 Series Service Manual

Q1400 Mortise Lock For Exit Device Installation Instructions (page 3)



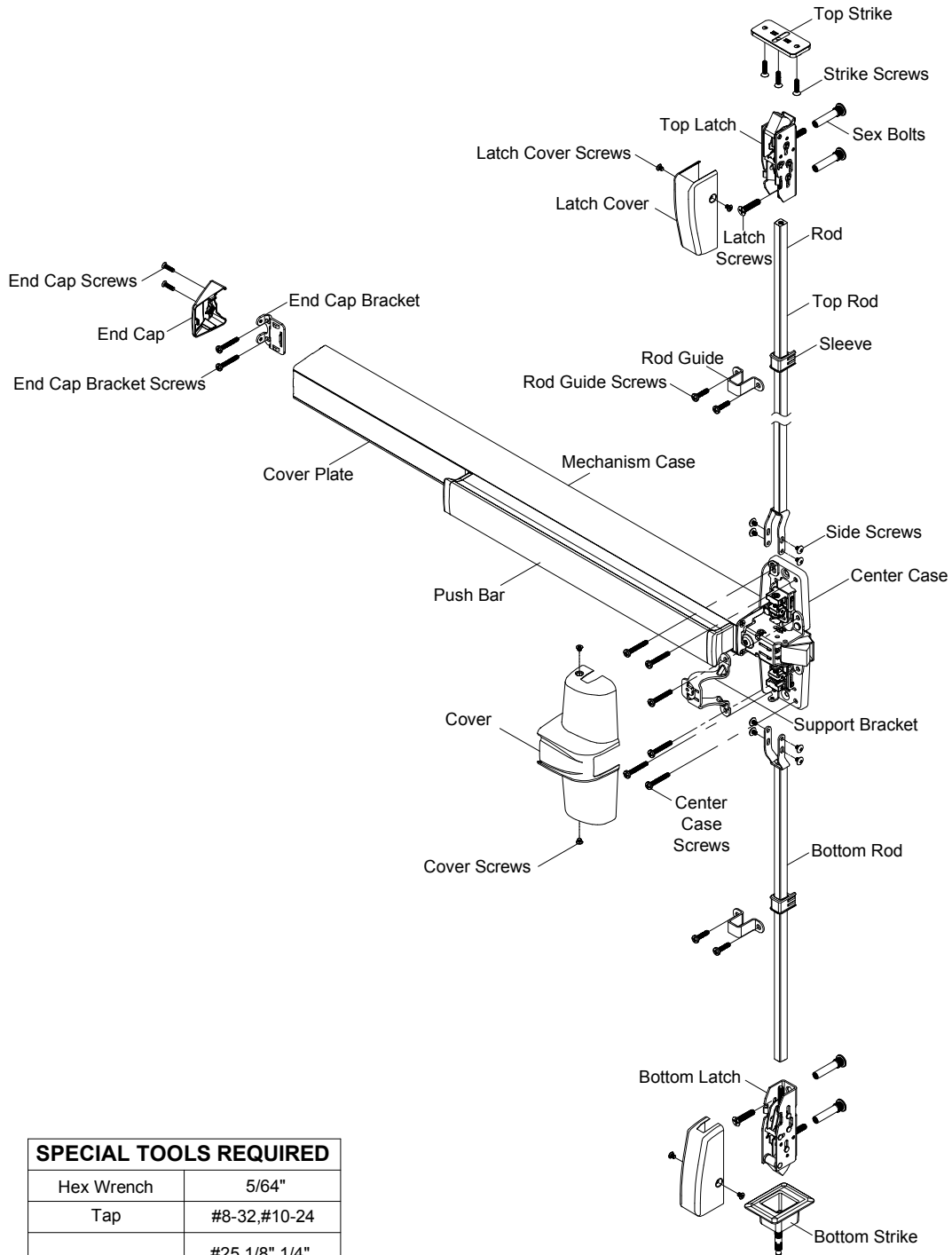
**Q1500 / QF1500 SERIES
THREE-POINT LATCHING DEVICE
INSTALLATION INSTRUCTIONS**



Patent No. 7,634,927 7,748,757 D623,499
and other patents pending.

Q1000 Series Service Manual

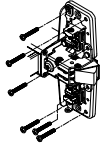


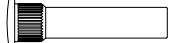
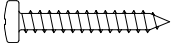
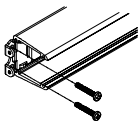

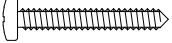
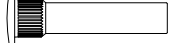
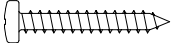



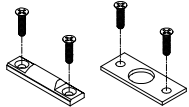

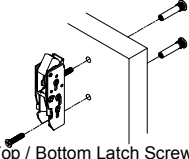
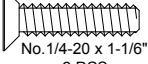
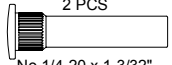
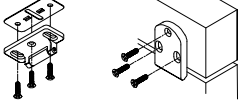
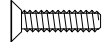
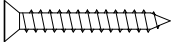
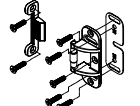

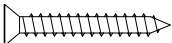




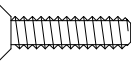





Q1500/QF1500 Installation Instructions (page 2)



SPECIAL TOOLS REQUIRED	
Hex Wrench	5/64"
Tap	#8-32,#10-24
Drill Bits	#25,1/8",1/4", 5/16",13/32"
Spade Drill	5/8" (For Wood Door)

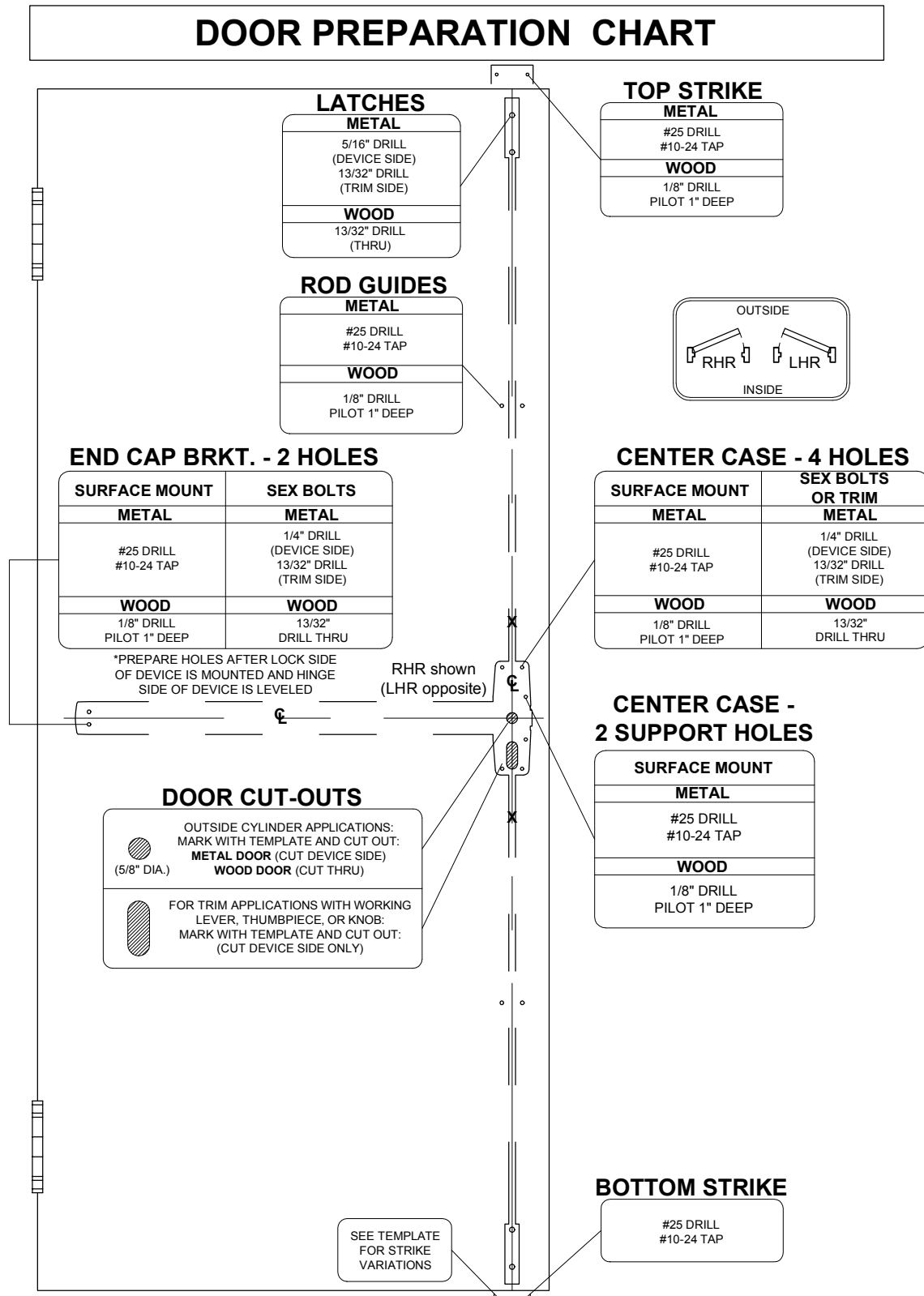
Q1000 Series Service Manual

Q1500/QF1500 Installation Instructions (page 3)

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

Q1000 Series Service Manual

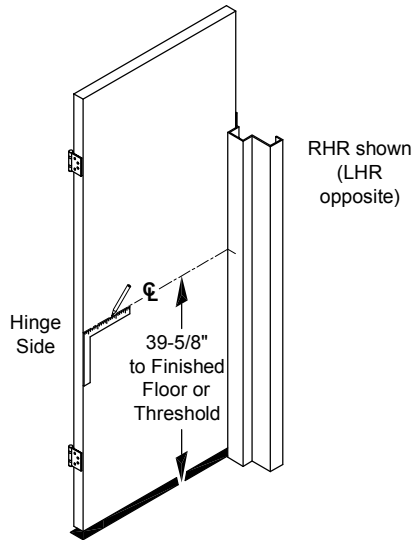
Q1500/QF1500 Installation Instructions (page 4)



Q1000 Series Service Manual

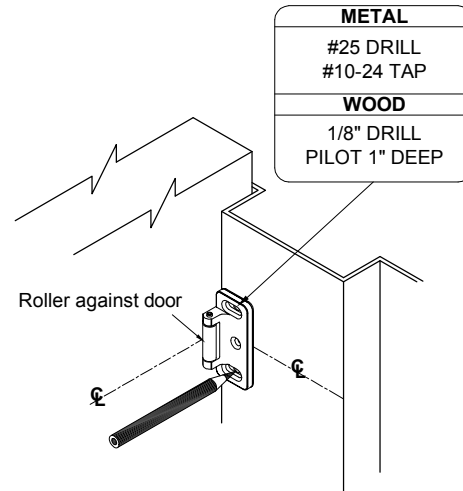
Q1500/QF1500 Installation Instructions (page 5)

1 DRAW HORIZONTAL DEVICE AND STRIKE CENTERLINE.



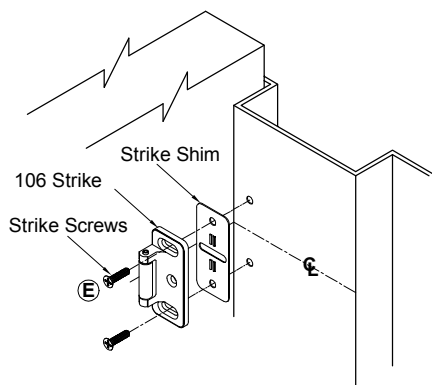
Close door, mark horizontal centerline on inside face of door and on lock side door stop 39-5/8" from finished floor as shown (continue horizontal centerline to outside face of door if trim is used).

2 ALIGN STRIKE 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.

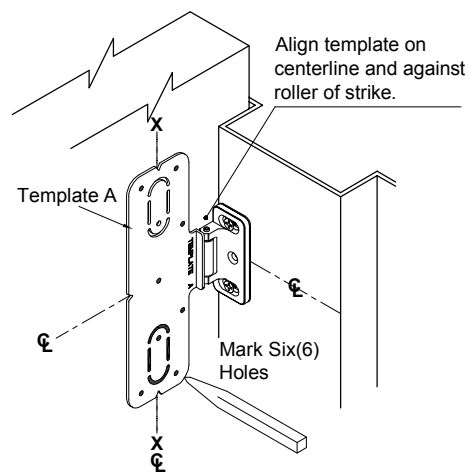
3 INSTALL STRIKE AND SHIM.



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

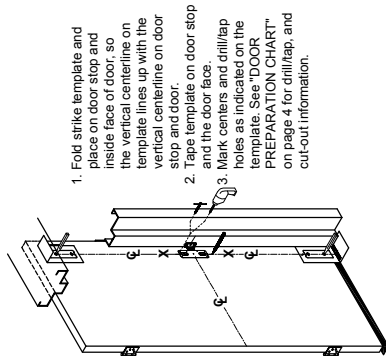
For Q108 strike see back cover of this instruction.

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



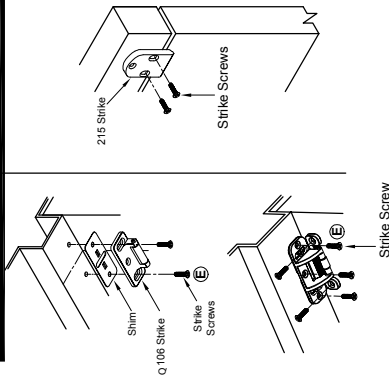
Tape "TEMPLATE A"(and trim template if trim is using) to the door so that the centerlines on the template line up with centerlines on the door. Mark centers and drill/tap the required holes as indicated on the template.

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



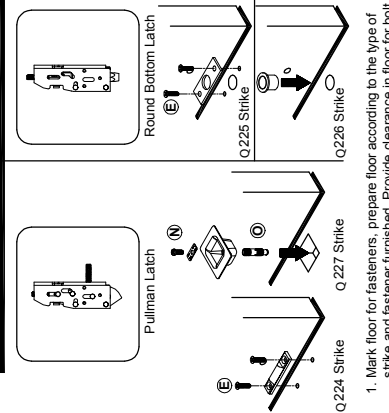
1. Fold strike template and place on door stop and inside face of door, so the vertical centerline on the template lines up with the vertical centerline on door stop and door.
2. Tape template on door stop and the door face.
3. Mark centers and drill/tap holes as indicated on the template. See "DOOR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

6 INSTALL TOP STRIKE AND SHIM.



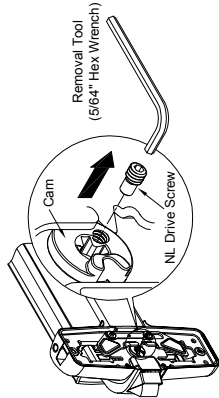
Apply third screw in hole of strike once adjustment is complete.

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 note in threshold according to type of strike and fasteners furnished.

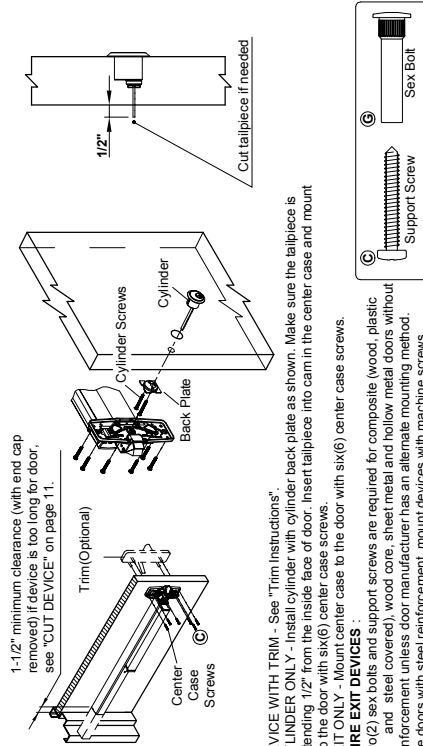
8 DETERMINE USE OF NL DRIVE SCREW.



NL driver screw is factory assembled in cam on back of device center case, when the NL drive screw is left in back or center case, the outside cylinder will function only as a Night Latch.

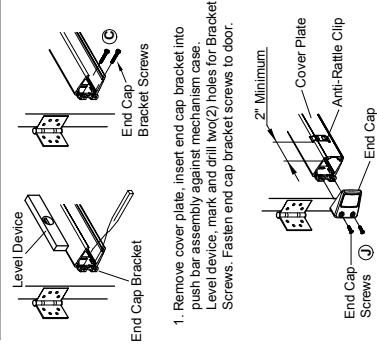
- NOTE:**
1. **DO NOT** remove NL drive screw for Pull Plate or Escutcheon with night latch cylinder.
 2. **REMOVE** NL drive screw from back of center case when installing trim that has a functional lever, knob, or thumbpiece AND an outside cylinder to lock and unlock the trim.

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



1. **DEVICE WITH TRIM:** See "Trim Instructions".
 2. **CYLINDER ONLY:** Install cylinder with cylinder back plate as shown. Make sure the tailpiece is extending 1/2" from the inside face of door. Insert tailpiece into cam in the center case and mount it to the door with six (6) center case screws.
 3. **EXT ONLY:** Mount center case to the door with six (6) center case screws.
- FOR FIRE EXIT DEVICES:**
Two (2) sex bolts and support screws are required for composite (wood, plastic and steel covered), wood core, sheet metal and hollow metal doors without reinforcement unless door manufacturer has an alternate mounting method. Fire doors with steel reinforcement, mount devices with machine screws.

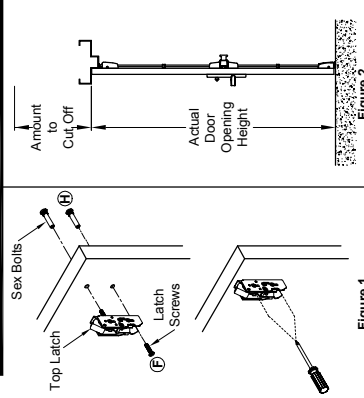
10 INSTALL MOUNTING BRACKET AND END CAP.



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.

11 INSTALL TOP LATCH AND ROD.



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 page 10.

11 INSTALL TOP LATCH AND ROD. (Continued)

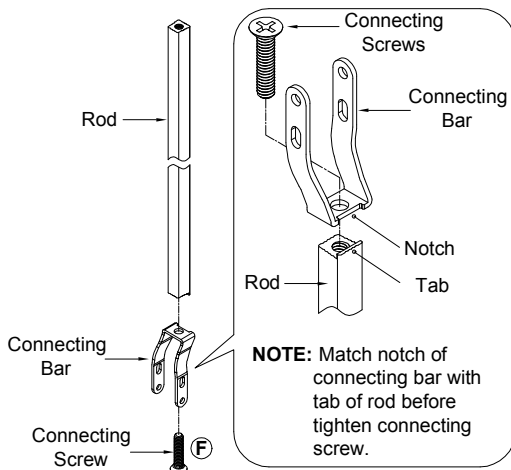
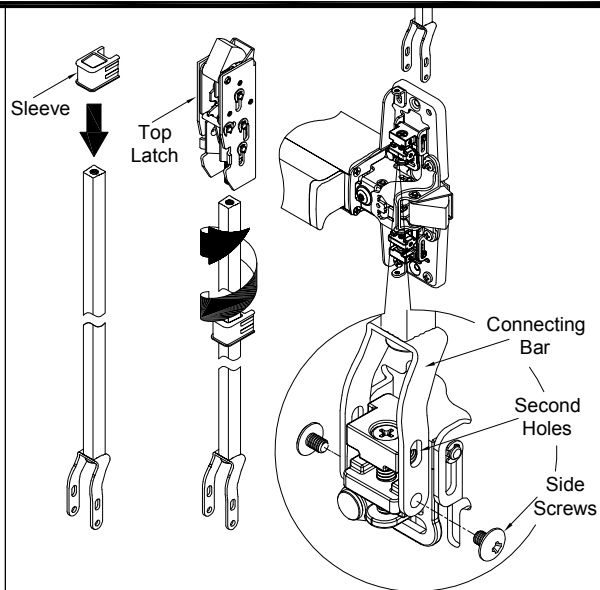


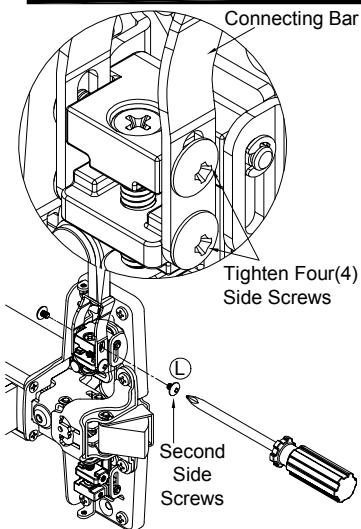
Figure 3

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



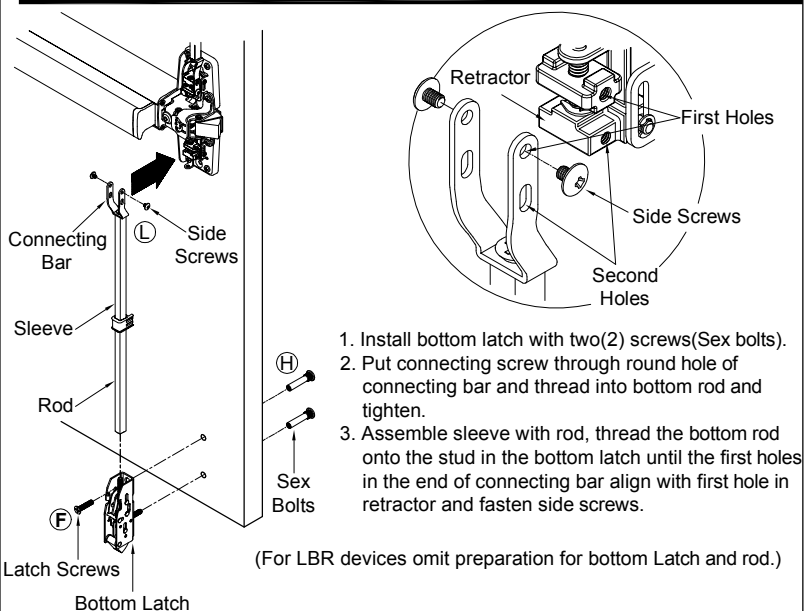
4. Assemble sleeve with rod. Thread top rod onto top latch until first hole in connecting bar align with first hole in retractor and fasten side screw.

13 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.

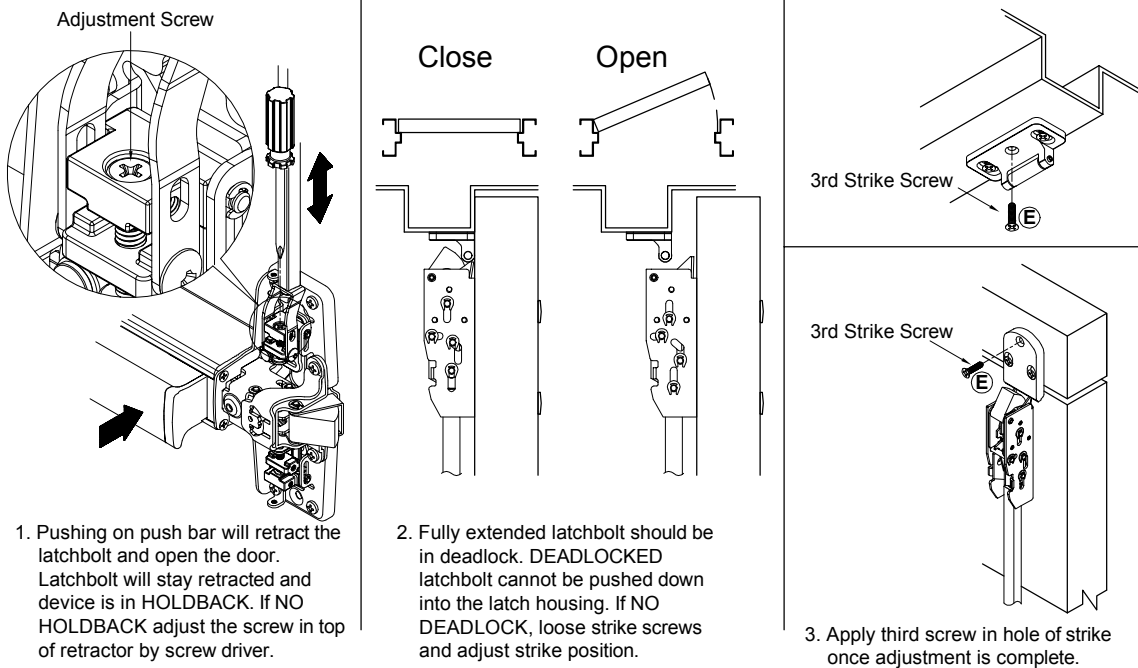
14 INSTALL BOTTOM LATCH AND ROD.



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 hole in retractor and fasten side screws.

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

12 CHECK TOP LATCH FOR HOLDBACK AND DEADLOCK.

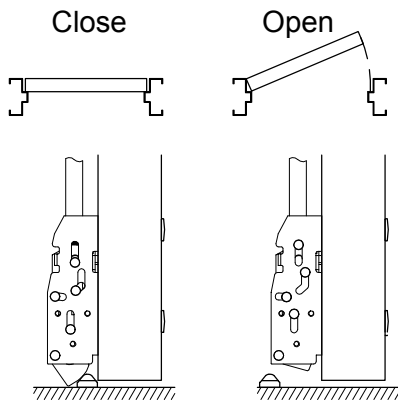


1. Pushing on push bar will retract the latchbolt and open the door. Latchbolt will stay retracted and device is in HOLDBACK. If NO HOLDBACK adjust the screw in top of retractor by screw driver.

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.

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

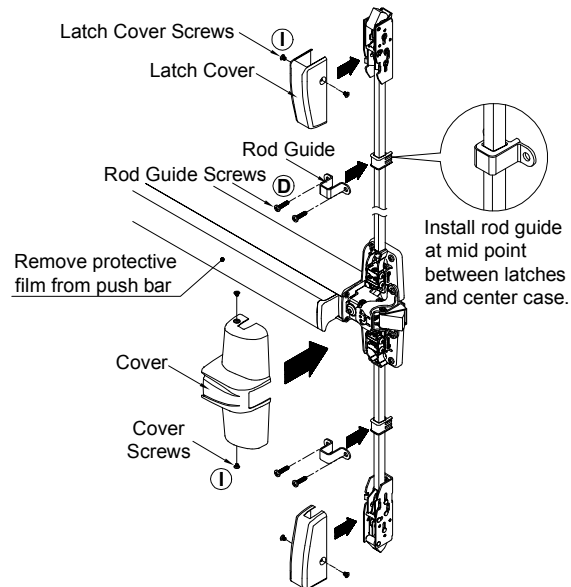
15 ADJUST BOTTOM ROD WITH DOOR OPEN (TOP LATCH RETRACTED).



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 two side screws when adjustment is completed.

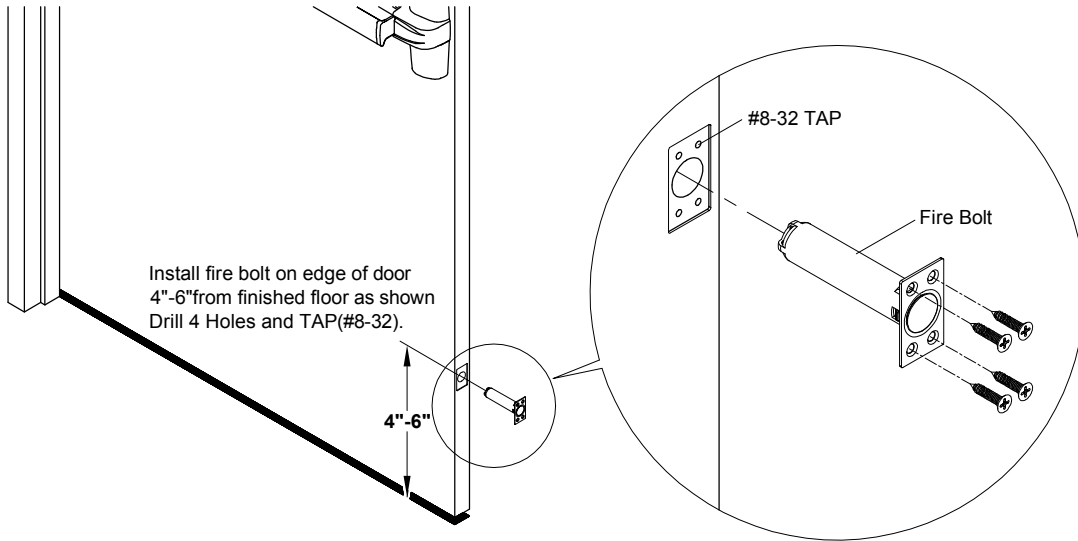
Open and close door a few times and check for deadlocking when door is closed.

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.

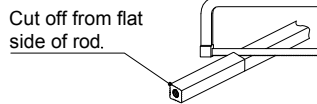
INSTALL FIRE BOLT



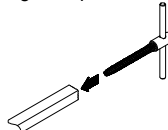
NOTE: Fire rated device with less bottom rod (LBR) applications must use FIRE BOLT.

CUT TOP ROD / EXTEND TOP ROD

CUT TOP ROD

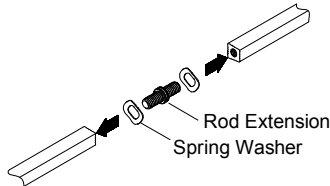


Step 1: Make sure the flat side of rod, and measure amount to cut off rod.
NOTE: Rod cutting is required for doors shorter than 7'.

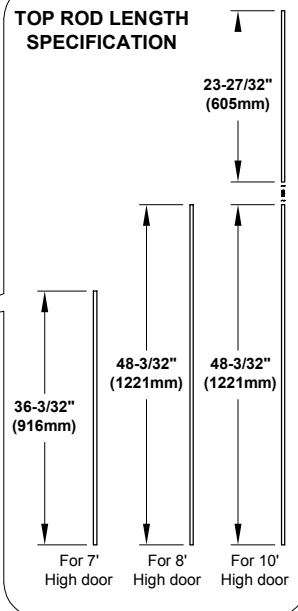
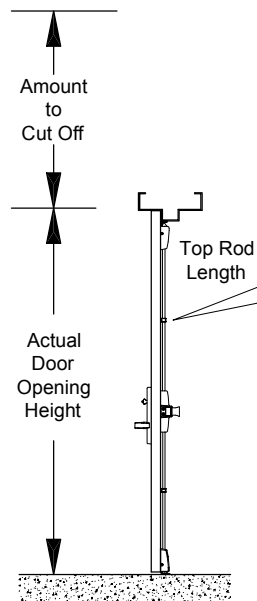


Step 2: Tap #1/4-20 ; 1" deep.

EXTEND TOP ROD

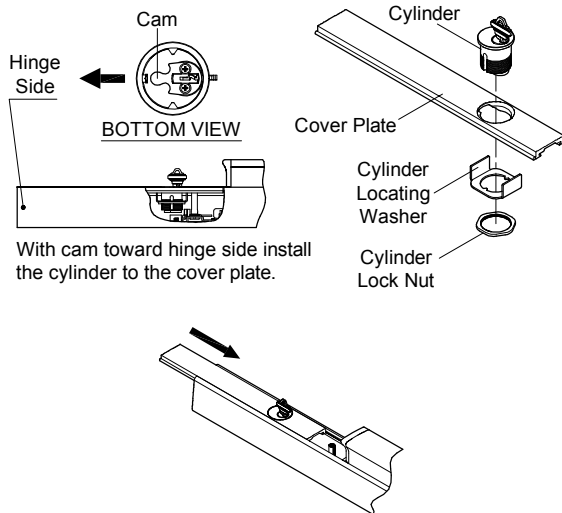


Install rod extension & spring washer to connect two(2) rods tightly.



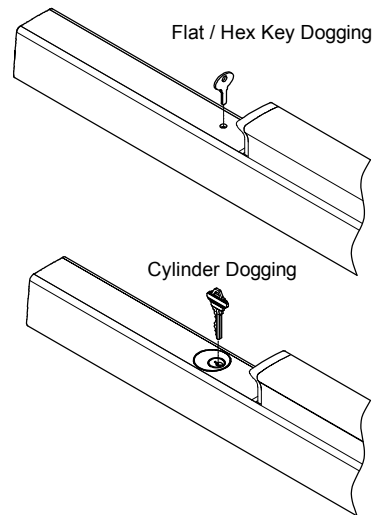
OPTIONAL DOGGING

CYLINDER DOGGING



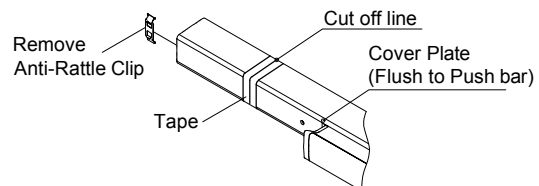
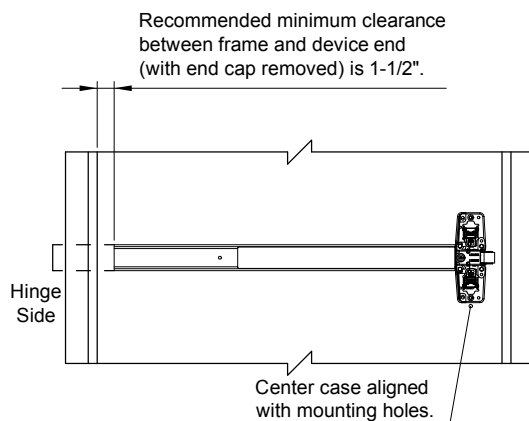
Slide cover plate in position in the mechanism case.

DOGGING CHECK

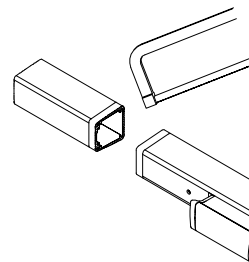


Depress push bar and turn flat / hex wrench or key one full turn for dogging check.

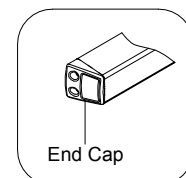
CUT DEVICE (IF REQUIRED)



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

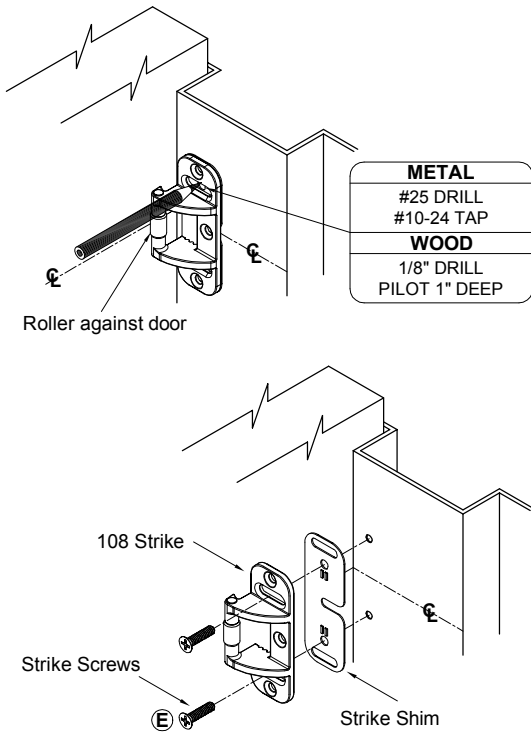


2. Cut off device and deburr.
NOTE: Device must be cut square for proper end cap fit.

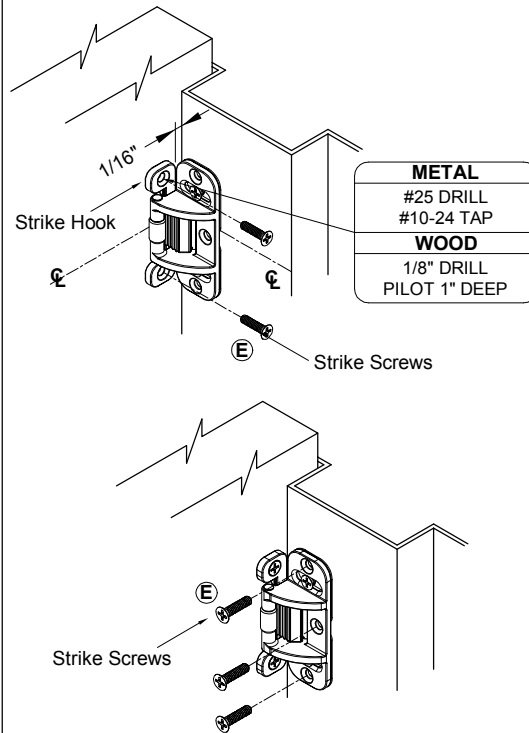


Q108 STRIKE INSTALLATION

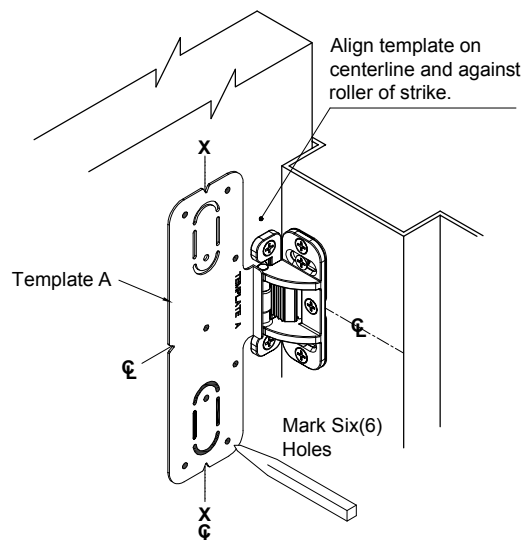
1 PREPARE AND INSTALL SCREWS THROUGH 2 STRIKE SLOTS.



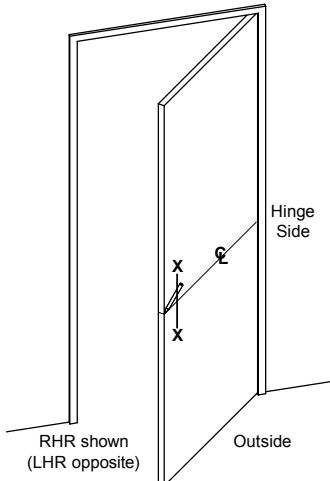
2 INSTALL STRIKE HOOK AND ADDITIONAL STRIKE SCREWS.



3 TEMPLATE ALIGNS AS SHOWN.

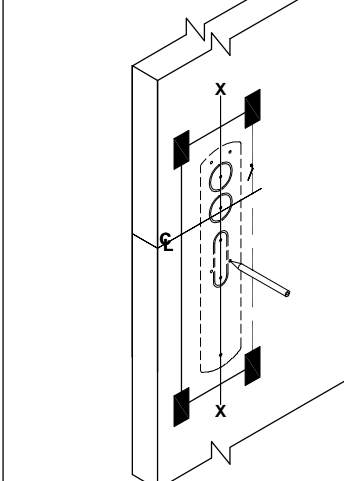


Q200 SERIES THUMBPIECE TRIM FOR EXIT DEVICE INSTALLATION INSTRUCTIONS



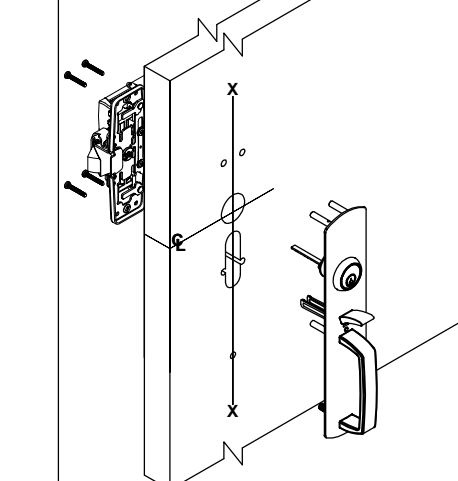
1. Prepare door for exit device. See exit device instructions for holes, backset (line X-X), and center lines.

2. Transfer line X-X from inside (exit device) side of door to outside (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.

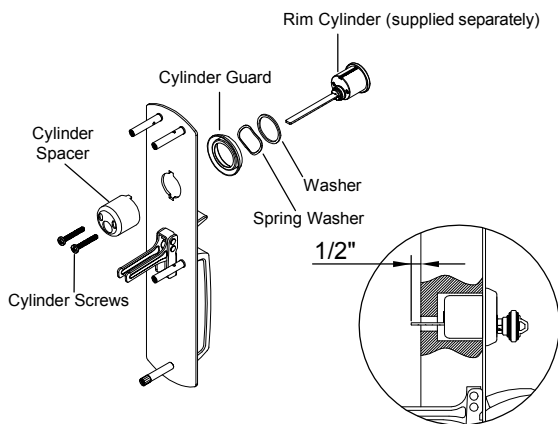
NOTE: See "APPLICATION CHART" on back page for different trim functions.



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

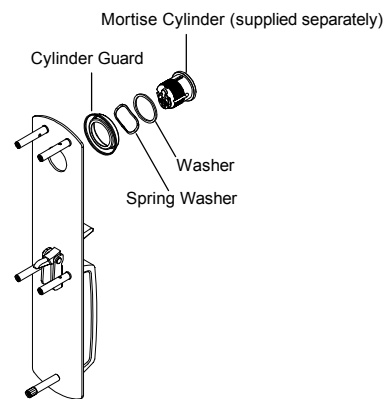
INSTALL CYLINDER

RIM CYLINDER FOR RIM AND VERTICAL ROD DEVICES

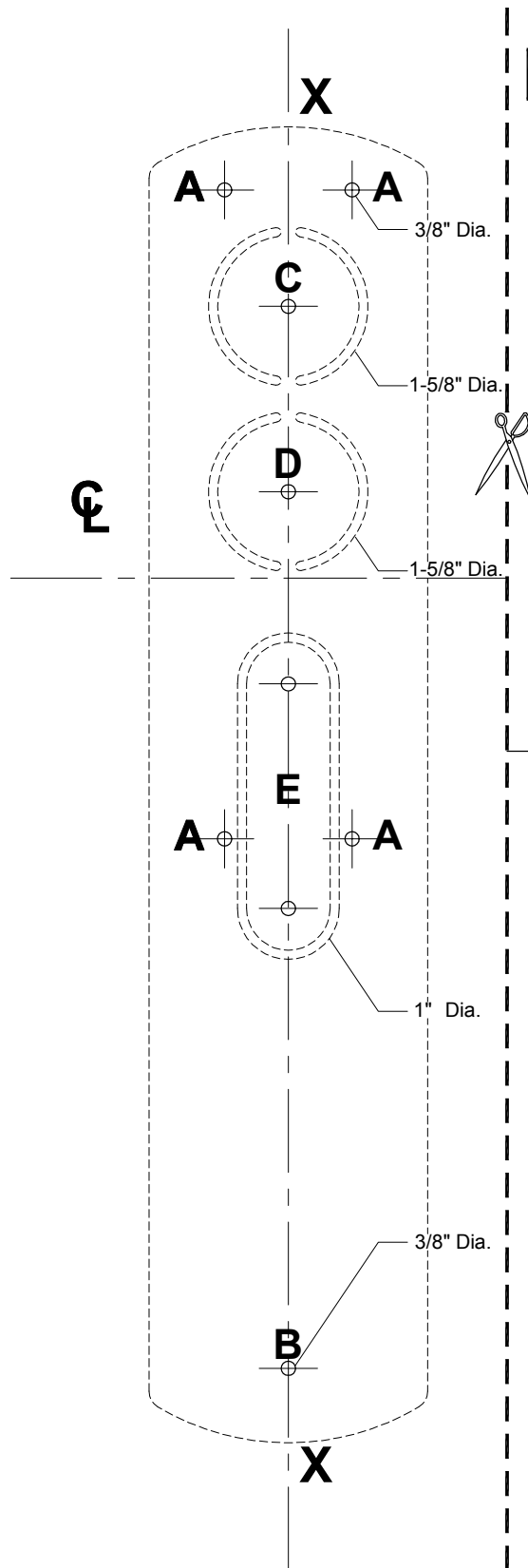


1. Mount rim cylinder to cylinder spacer and attach to outside trim with two(2) cylinder screws.
 2. Make sure the tailpiece is extending 1/2" from the inside face of door.
- NOTE:** Cut off tailpiece for different door ranges and various cylinder lengths.

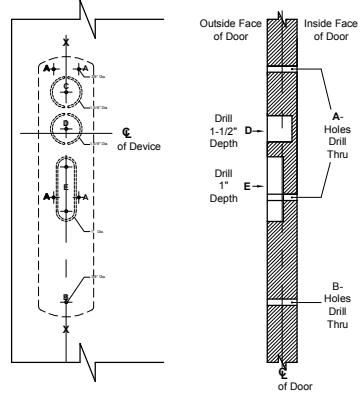
MORTISE CYLINDER FOR MORTISE DEVICE



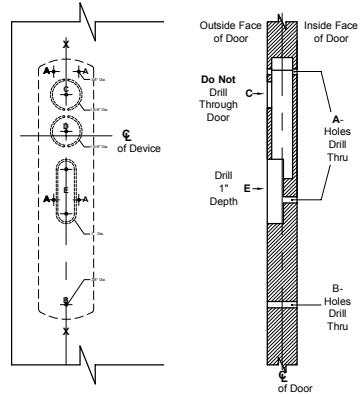
Mount mortise cylinder to mortise case.



DOOR PREPARATION

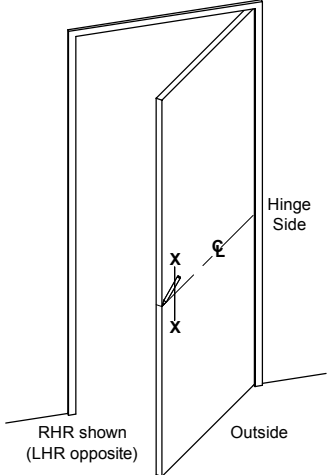
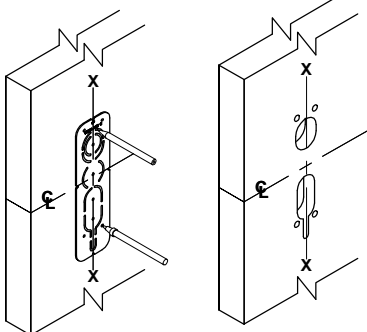
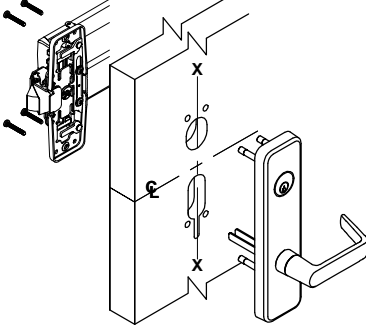


FOR RIM AND VERTICAL ROD APPLICATION				
CUT OUT ILLUSTRATION				
TRIM DESCRIPTION	Q201/Q202	Q203	Q205	Q215
FUNCTION	01/02	03	05	15
PREPARATION	A+B	A+B+D	A+B+D+E	A+B+E

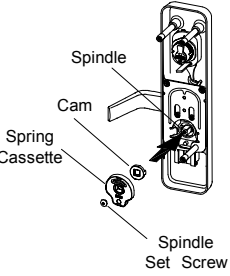
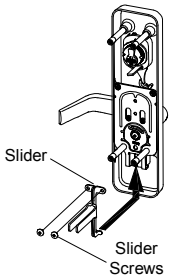
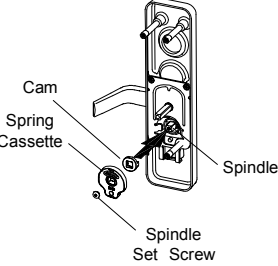
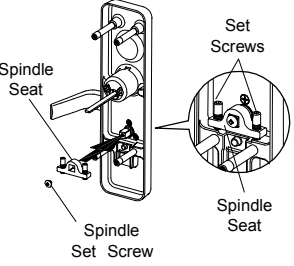


FOR MORTISE LOCK APPLICATION				
CUT OUT ILLUSTRATION				
TRIM DESCRIPTION	Q201/Q202	Q203	Q205	Q215
FUNCTION	02	03	05	15
PREPARATION	A+B	A+B+C	A+B+C+E	A+B+E

Q300 SERIES ESCUTCHEON TRIM FOR EXIT DEVICE INSTALLATION INSTRUCTIONS

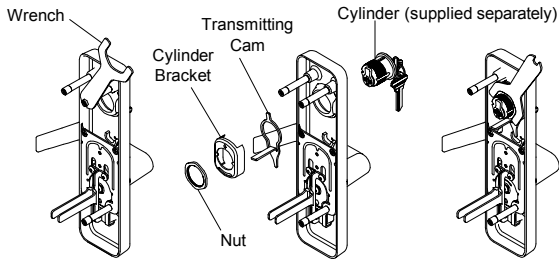
 <ol style="list-style-type: none"> 1. Prepare door for exit device. See exit device instructions for holes, backset (line X-X), and center lines. 2. Transfer line X-X from inside (exit device) side of door to outside (trim side) of door. Use extra care if edge of door is beveled. Be sure line X-X is parallel to edge of door. 	 <ol style="list-style-type: none"> 3. Locate X-X line and prepare required holes with "Template C". <p>NOTE: See "TEMPLATE APPLICATION CHART" on back page for different trim functions.</p>	 <ol style="list-style-type: none"> 4. Determine trim handing and assemble trim. (see "HOW TO ASSEMBLE TRIM" and "INSTALL CYLINDER")
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HOW TO ASSEMBLE TRIM

<h4 style="text-align: center;">FOR FUNCTIONAL LEVER</h4>  <ol style="list-style-type: none"> 1. Determine lever handing. (RHR shown; LHR opposite) 2. Insert cam on spindle. 3. Insert spring cassette and make sure the direction of spring cassette matches with lever handing. 4. Rotate lever to check function, tighten spindle set screw. 5. Install slider by fitting tabs into guide under mechanism. 6. Fasten slider set screws with moving parts in mechanism. 	<h4 style="text-align: center;">FOR MORTISE LOCK</h4>  <ol style="list-style-type: none"> 1. Determine lever handing. (RHR shown; LHR opposite) 2. Insert cam on spindle. 3. Make sure the direction of spring cassette matches with lever handing. Insert spring cassette. 4. Rotate lever to check function and tighten spindle set screw.
<h4 style="text-align: center;">FOR RIGID LEVER</h4>  <ol style="list-style-type: none"> 1. Determine lever handing. (RHR shown; LHR opposite) 2. Install spindle seat and tighten spindle set screw. 3. Tighten set screws on spindle seat and level the lever by adjusting either side set screws if necessary. 	

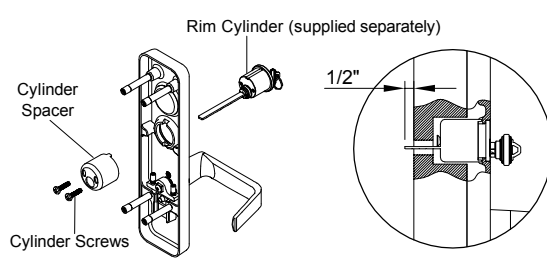
INSTALL CYLINDER

FOR MORTISE CYLINDER



1. Use the wrench provided to unscrew the thumbolt.
2. Install cylinder, transmitting cam, cylinder bracket and nut.
3. Secure nut tightly by the wrench and re-install thumbolt .

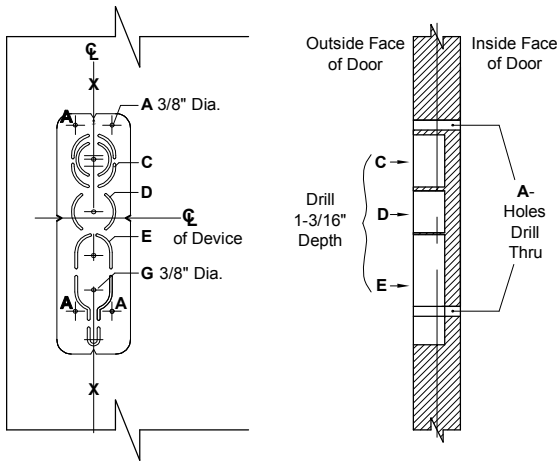
FOR RIM CYLINDER



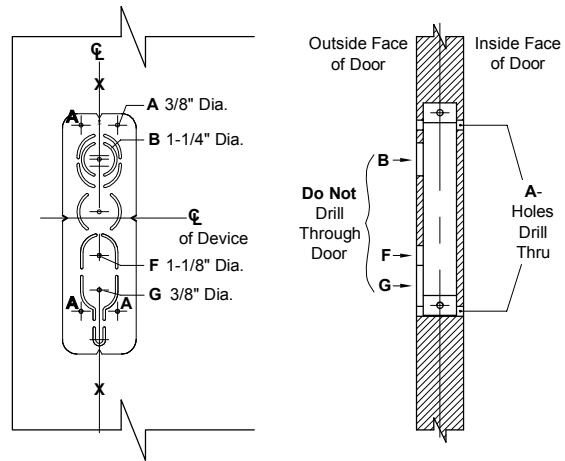
1. Mount rim cylinder to cylinder spacer and attach to outside trim with two(2) cylinder screws.
 2. Make sure the tailpiece is extending 1/2" from the inside face of door.
- NOTE:** Cut off tailpiece for different door ranges and various cylinder lengths.

DOOR PREPARATION FOR Q300 SERIES TRIM

FOR RIM AND VERTICAL ROD DEVICE



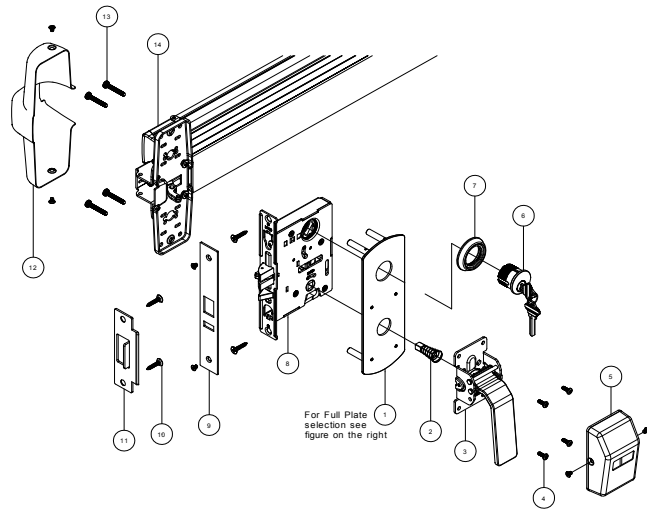
FOR MORTISE LOCK



TEMPLATE APPLICATION CHART

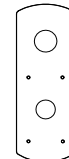
DEVICE TYPE	RIM AND VERTICAL ROD				MORTISE LOCK			
CUT OUT ILLUSTRATION								
TRIM DESCRIPTION	Q302	Q308R	Q309R	Q314R	Q302	Q308M	Q309M	Q314M
FUNCTION	02	08	09	14	02	08	09	14
PREPARATION	A+G	A+C+E	A+D	A+E	A+G	A+B+F+G	A+B+G	A+F+G

HL400 PULL LATCH INSTALLATION INSTRUCTIONS

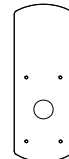


ITEM	DESCRIPTION	QTY
1	FULL PLATE	1
2	SPINDLE	1
3	PULL HANDLE ASSEMBLY	1
4	SCREW	1
5	COVER	1
6	CYLINDER	1
7	CYLINDER GUARD	1
8	MORTISE CASE	1
9	ARMOR FRONT	1
10	SCREW	4
11	STRIKE	1
12	DEVICE COVER	1
13	MOUNTING SCREW	4
14	EXIT DEVICE	1

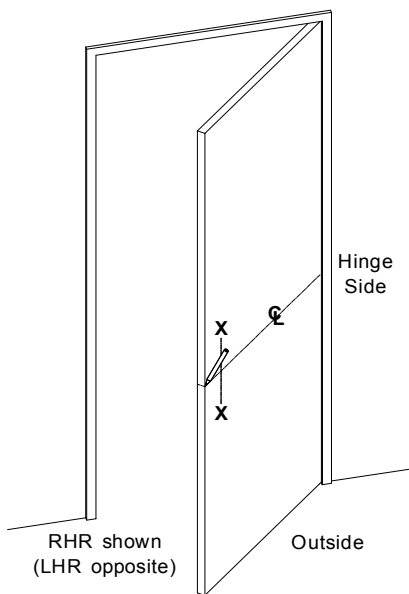
Note: 8-14 are sold separately.



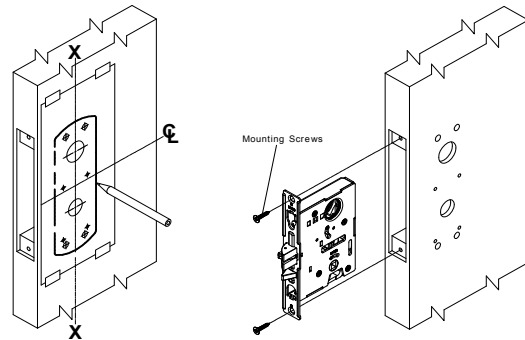
For HL408RHR
HL408LHR



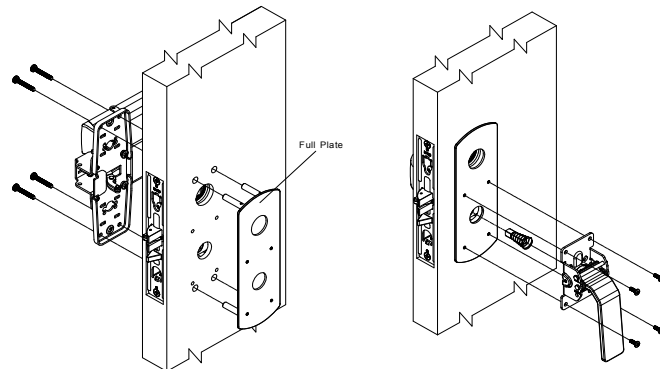
For HL414RHR
HL414LHR



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 careful if edge of door is beveled. Make sure line X-X is parallel to edge of door.



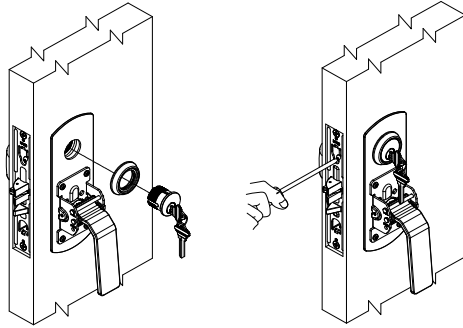
3. Align and stick template onto door, mark position and drill.
4. Install Mortise and fasten with mounting screws.



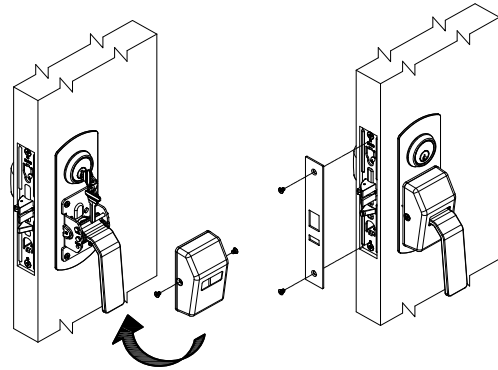
5. Place Full Plate and Exit device onto door according to product's installation instructions.
6. Install spindle and Pull Handle Assembly and fasten.

Q1000 Series Service Manual

Q400 Series Installation Instructions (page 2)



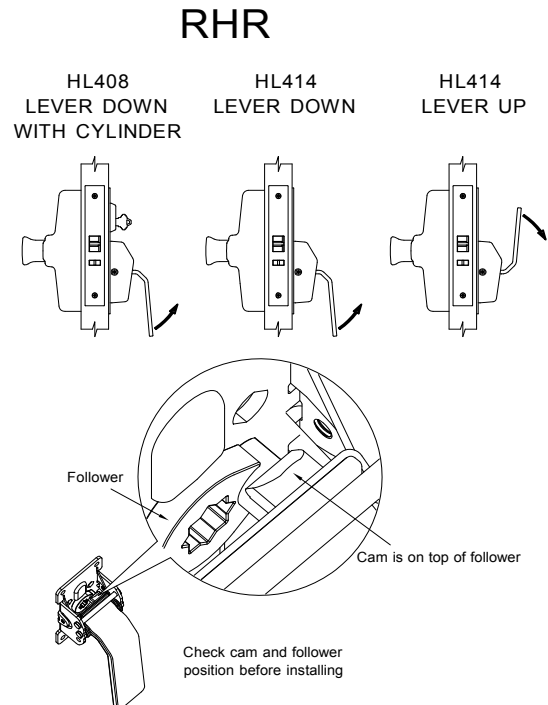
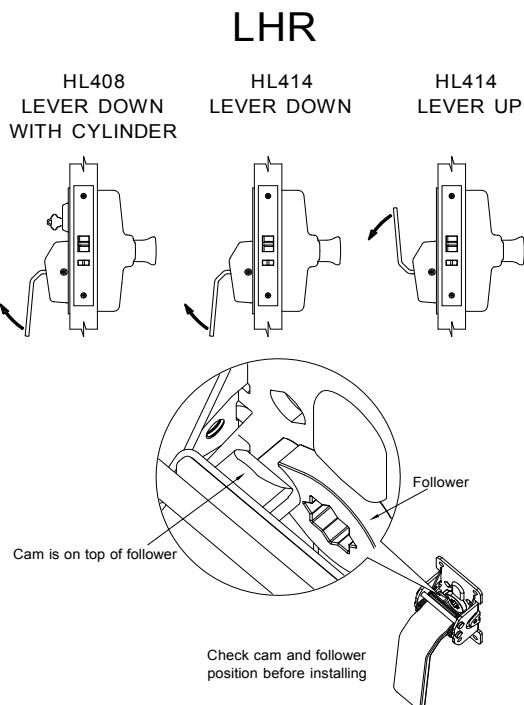
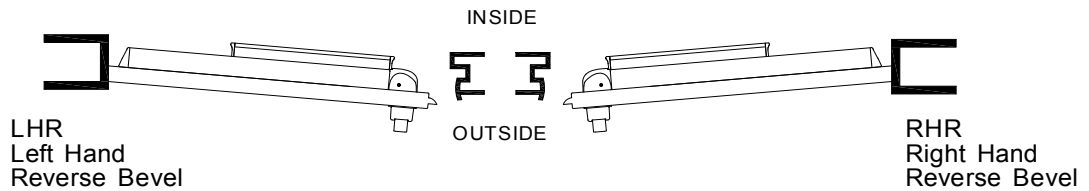
7. Place cylinder if using one.
8. Hold cylinder in position by fastening screw.



9. Insert cover through bottom of paddle.
10. Fix cover in place with screws.
11. Place armor front.

Door Handing

Product is handed - specify when ordering.



600 SERIES PULL HANDLE 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 inside (exit device) side of door to outside (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 function and assemble trim. (see "CYLINDER INSTALLATION")

NOTE: See "APPLICATION CHART" on back page for different trim functions.

The following step is only applicable for Rim and Vertical Rod Devices.

NOTE: Check that the Trim's Actuating arm engages the Exit Device correctly.

CYLINDER INSTALLATION

Cylinder Cam's Functions

For Lock or unlock Function



1. Switch between Locked and unlocked state using key, handle retracts latchbolt.

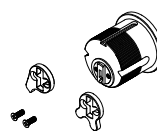
For Night Latch Function



2. Always locked.
 - ※Key can unlock the lock, but once removed, the lock will return to its locked position.

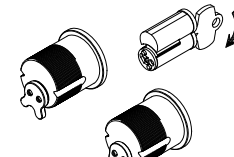
Cylinder Cam Placement for Lock or Unlock / Night Latch Installation

STD Cylinder



1. Remove screws, switch cam's direction and fasten screws back in place.
 - ※Standard Applications Length : 1-1/8"

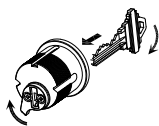
I/C Core



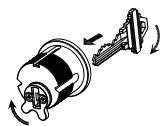
2. Adjust cam into position and insert I/C Core.
 - ※I/C Core Applications Legth : 1-3/8"

Lock or Unlock / Night Latch Function Installation

1. Use key to rotate cam upwards before installing Cylinder.

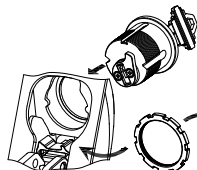


Lock/Unlock Function

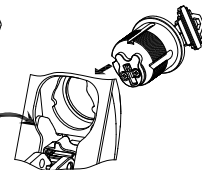


Night Latch Function

2. Insert Cylinder and screw in Cylinder Lock Nut until Cam is free to rotate.



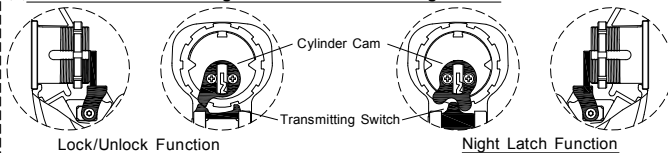
Lock/Unlock Function



Night Latch Function

Cam's position after installation

※Cam's notch must be aligned with the Transmitting Switch



Lock/Unlock Function

Night Latch Function

3. Use key to rotate Cam to the position where it can drive the transmitting switch.

(Refer to illustration according to respective function)



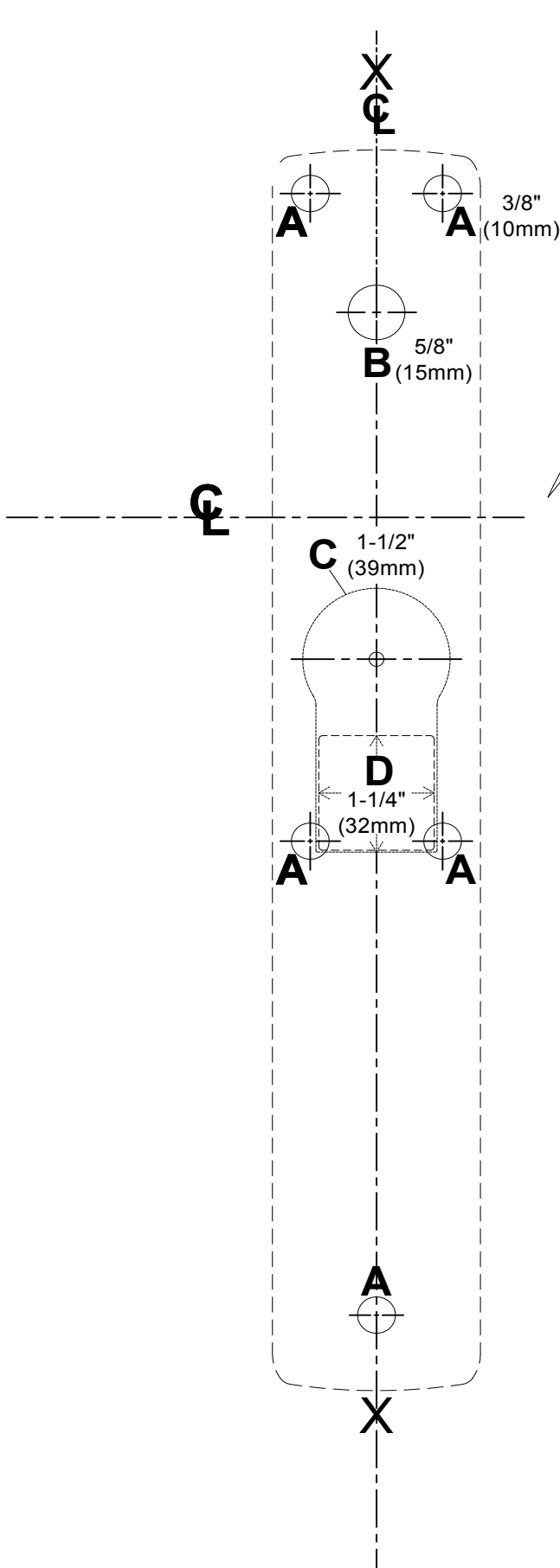
4. Fasten Cylinder Lock nut completely



5. After checking that the function is operating properly, tighten with wrench.

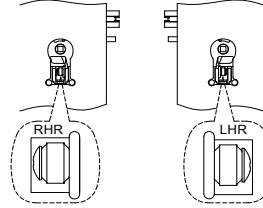


NOTE: The illustrations for steps 3, 4, 5 correspond to Night Latch Function; Lock or Unlock Function follows the same installation procedure

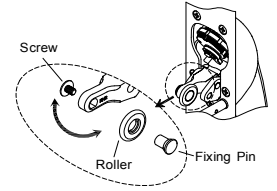


INSTALLATION for MORTISE LOCK

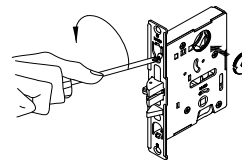
1. Roller installation for RHR and LHR.



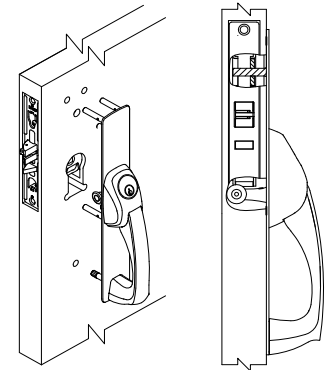
2. Insert Fixing Pin into Roller and fix with Screw.



3. Install Retaining Ring on the outer side of the Mortise Case and tighten.



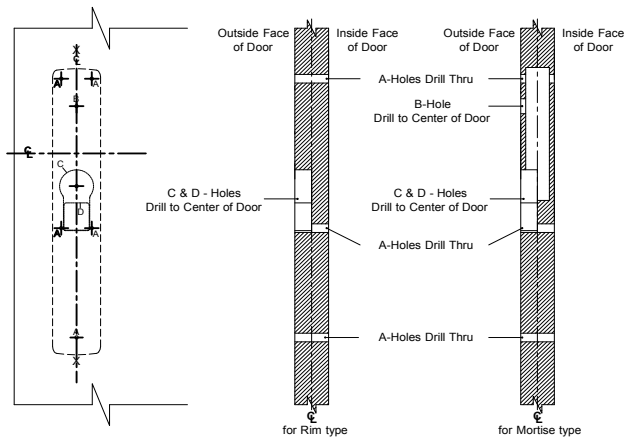
4. Place Trim onto door; check that the Pin and the Retaining rings are aligned correctly and the roller is installed accordingly.



NOTE: The retaining ring must be installed on outer side of the door.

NOTE: If roller is installed incorrectly, the latch will not retract fully.

DOOR PREPARATION



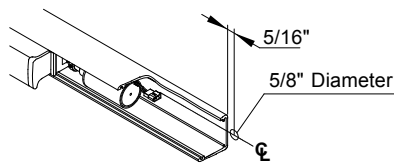
APPLICATION					
DEVICE TYPE	ALL TYPE	RIM AND VERTICAL		MORTISE LOCK	
CUT OUT ILLUSTRATION					
TRIM NO.	602	608R/609R	614R	608M/609M	614M
FUNCTION	02	08/09	14	08/09	14
PREPARATION	A	A+C	A+D	A+B+C	A+B+D

ELECTRIC LATCH RETRACTION EXIT DEVICE

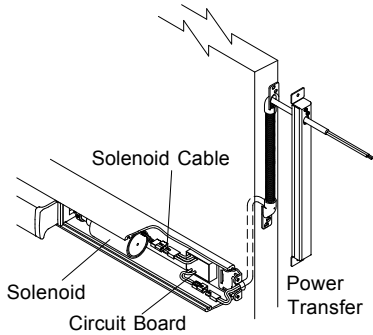
INSTALLATION INSTRUCTIONS

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.

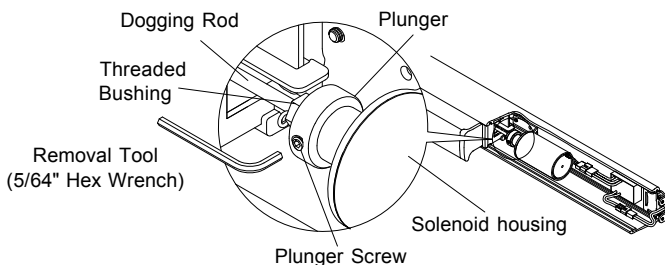
Solenoid must be wired to a PS 100 Series 100-2 logic board. Refer to installation instructions for the PS101 / PS102 Class 2 power supply.

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 with plunger (ELR-ED only).
Solenoid pulls but no complete retraction of latch.	3. Check dogging rod adjustment (see below for details).
Device works intermittently.	1. Check power supply. It must be PS100 with 100-2 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.

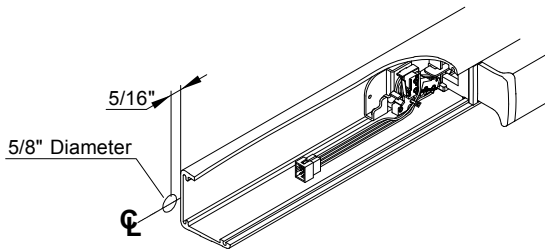
Signal Switch Exit Device Installation Instructions

SIGNAL SWITCH EXIT DEVICE

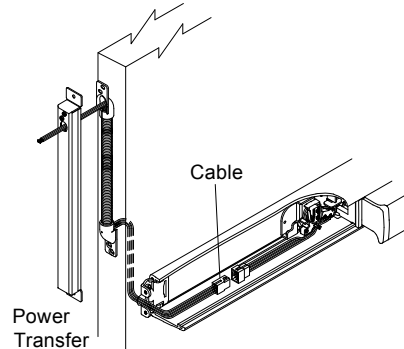
INSTALLATION INSTRUCTIONS

1 WIRING SETUP.

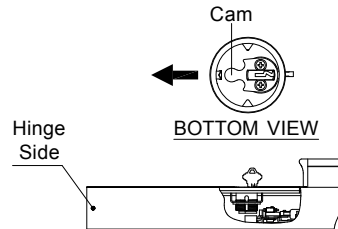
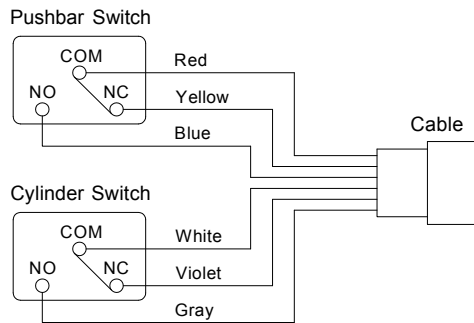
1. Drill 5/8" dia. wire access hole thru device side of door.



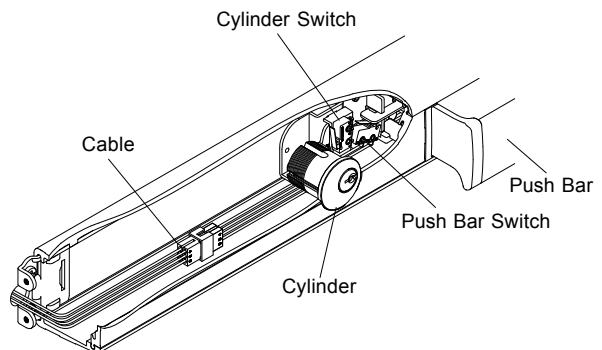
2. Route cable through hole and connect wires to power transfer (see "POWER TRANSFER" instructions as needed).



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
 Pushbar 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.

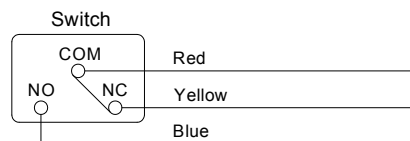
Request To Exit Device Installation Instructions

REQUEST TO EXIT DEVICE

INSTALLATION INSTRUCTIONS

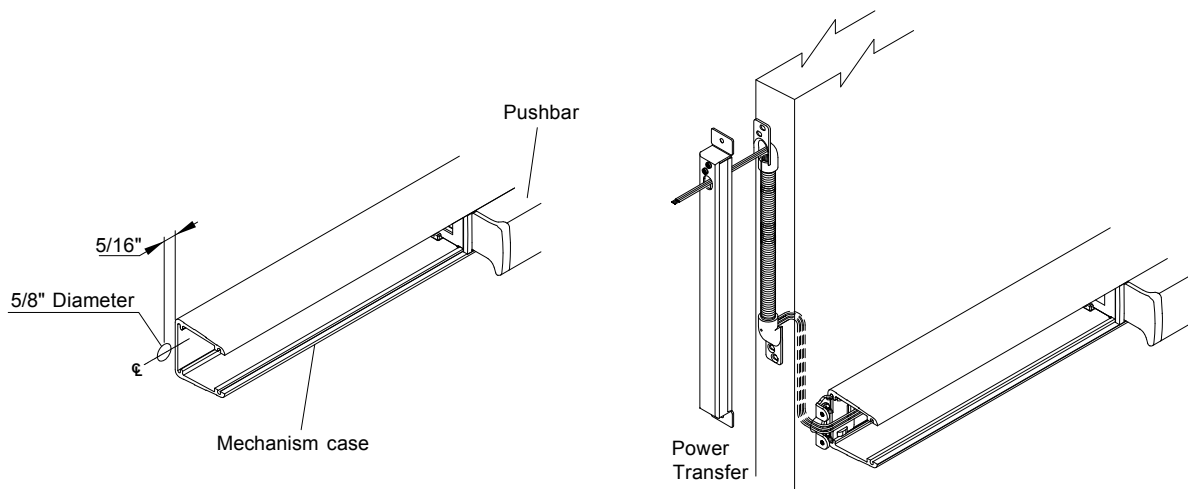
RX - Switch is designated for signaling purposes and designed to resist a maximum load of 3 amperes corresponding to a voltage value of 24V DC/AC. Application with magnetic locks or solenoid devices lowers the switch capacity.

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).



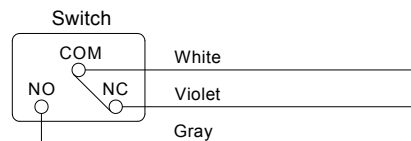
Latch Bolt Monitoring Exit Device Installation Instructions

LATCH BOLT MONITRING EXIT DEVICE

INSTALLATION INSTRUCTIONS

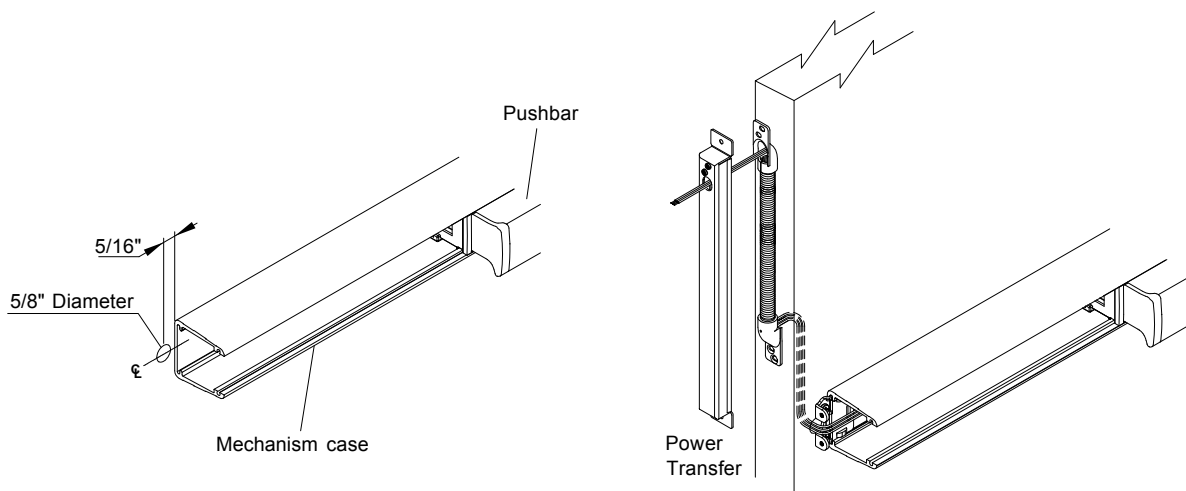
LM - Switch is designated for signaling purposes and designed to resist a maximum load of 3 amperes corresponding to a voltage value of 24V DC/AC. Application with magnetic locks or solenoid devices lowers the switch capacity.

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.



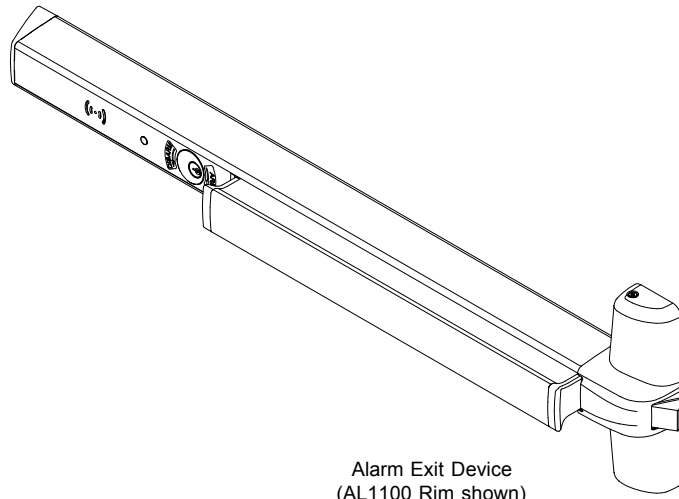
NOTE: Switch ratings are as follows :
Switch: 24VDC, 3Amp SPDT

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).

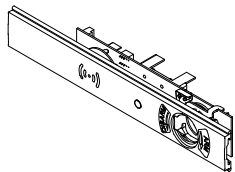


ALARM EXIT DEVICE INSTALLATION INSTRUCTIONS

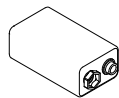
COMPONENTS:



Alarm Exit Device
(AL1100 Rim shown)



Cover Plate
(Include Alarm Exit Module)



9 Volt Battery



Cylinder Lock Nut



Emergency Exit Sign
(packed in cardboard tube)

SPECIFICATIONS:

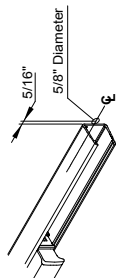
Voltage	12 to 24VDC, 12 to 24VAC
Current	0.2A
Battery	9V
Normally open inputs	External inhibit (EI)

- 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 1000 Series F1100, F1200, F1300, F1400 and F1500 Model.
2000 Series F2100, F2200, F2300, and F2500 Model.

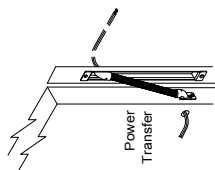
Q1000 Series Service Manual

Alarm Exit Device Installation Instructions (Page 2)

1 COMPLETE WIRING (IF REQUIRED).

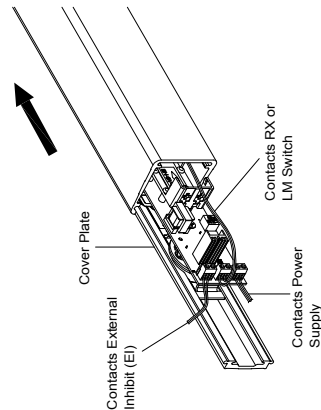


Drill 5/16" dia. wire access hole thru device side of door.



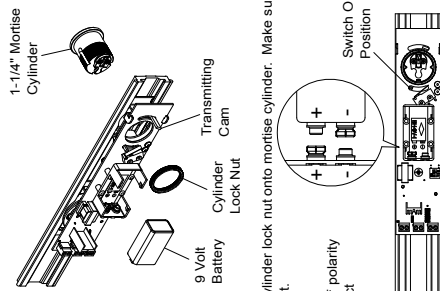
Route cable through hole and connect wires to power transfer (see "POWER TRANSFER" instructions as needed).
NOTE: Alarm Exit Device does not contain dogging option.

4 INSTALL COVER PLATE.



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

2 INSTALL CYLINDER AND BATTERY.

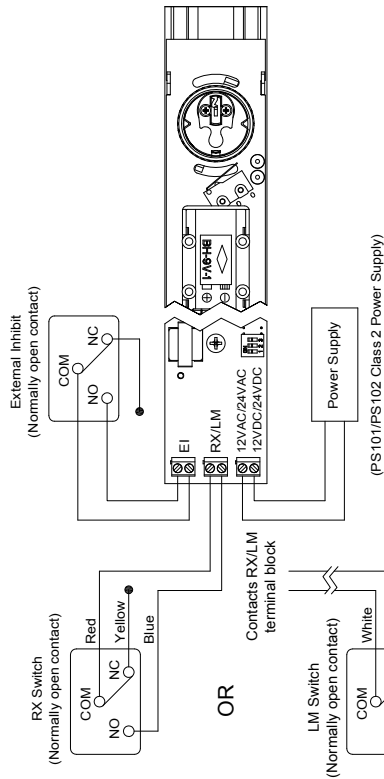


Thread cylinder lock nut onto mortise cylinder. Make sure to fasten down tight.

Check if polarity is correct

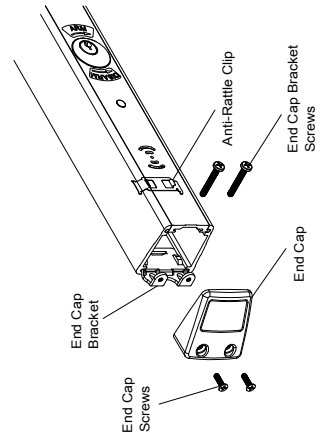
IMPORTANT: Before installing battery, make sure transmitting cam is in OFF position.

3 ATTACH WIRING TO TERMINAL BLOCKS ON ALARM EXIT MODULE.



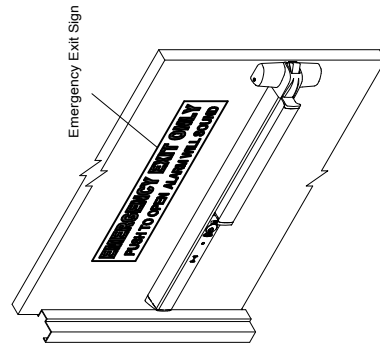
NOTE: 1. The external inhibit (EI) option uses normally open (NO) dry access control contacts to inhibit the AL.
2. Closing the access control inhibits the AL. When the access control contacts are re-opened, the AL re-arms with no delay.
3. All terminal inputs are not polarized.

5 INSTALL MOUNTING BRACKET AND END CAP.



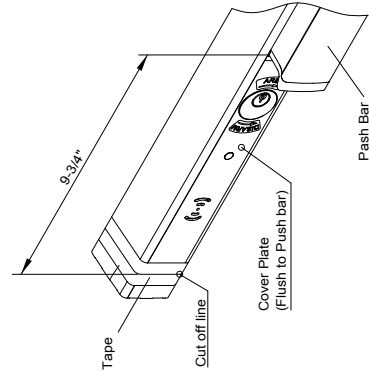
After all wire connections are made and device checked for operation, install the end cap bracket, end cap and label.

6 MOUNT EMERGENCY EXIT SIGN.



Remove protective layer and stick Emergency Exit on door.

7 CUT DEVICE (IF REQUIRED).

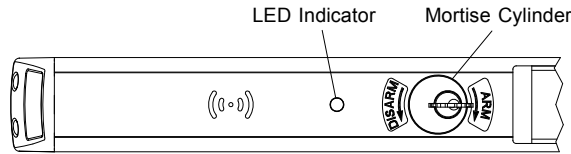


NOTE: Length measured from push bar to cutoff line must not be less than 9-3/4" long.

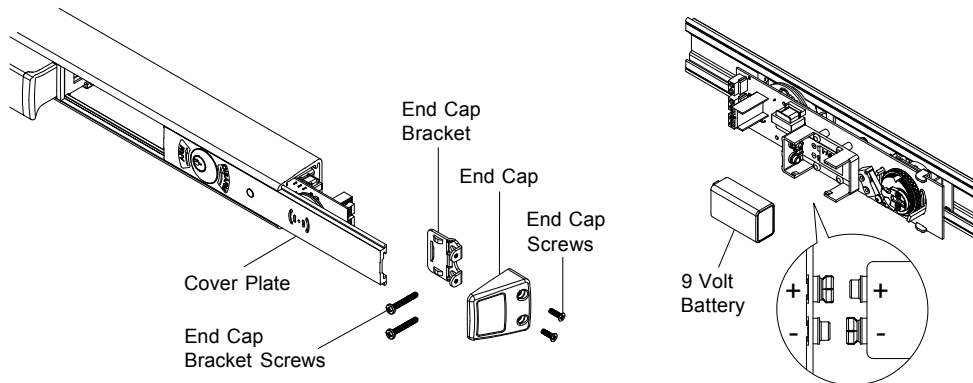
Q1000 Series Service Manual

Alarm Exit Device Installation Instructions (Page 3)

OPERATION

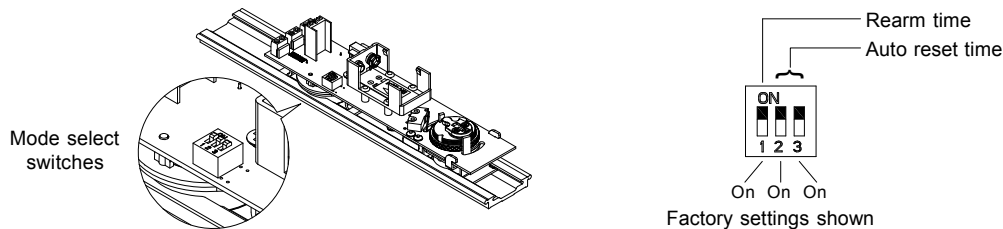


1. Insert the key into the cylinder and turn clockwise to arm unit. Rotate to initial position to remove key.
2. Arming time is of 15 seconds, during which the LED flashes green every 1.5 seconds.
3. A brief sound will indicate that the alarming time is complete. When armed the LED will flash red every 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.



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



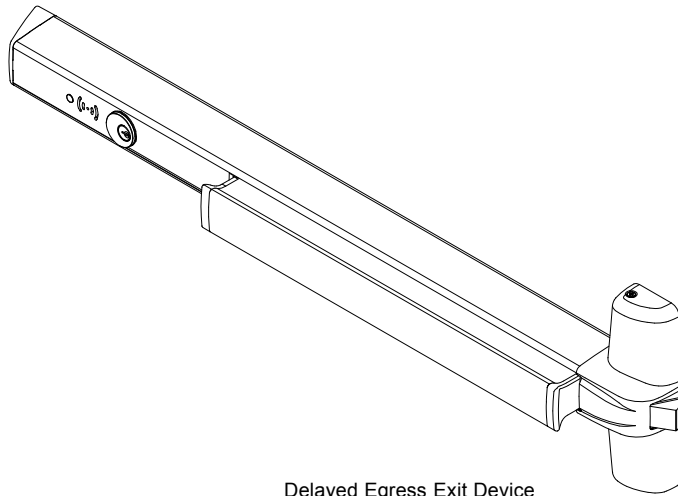
MODE SELECT SWITCHES	
Option	Function
Rearm time	If switch No. 1 is off, AL device re-arms with no delay.
Auto reset time	Set switches No. 2 and 3 for auto reset alarm time. Three setting options: 1.5, 3 or 5 minutes.

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

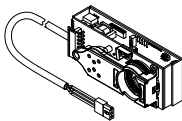
NOTE: The default configuration setting for alarm sound is set for 5 minutes before rearming.

DELAYED EGRESS EXIT DEVICE - ELECTRICAL

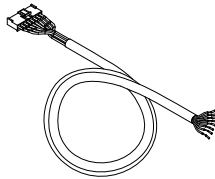
INSTALLATION INSTRUCTIONS



Delayed Egress Exit Device
(DE1100 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:

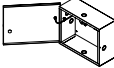
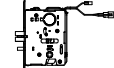
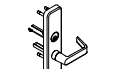





Voltage	24VDC
Current (Delayed Egress Device)	0.37A
Current (Electric Mortise)	0.25A
Current (Electric Trim)	0.25A
Current on arming	300ms 16A in-rush
External alarm dry contacts (NO and C)	23.76~24VDC, 1A
Normally closed inputs	Fire alarm (FA; required) Door position switch (DPS)
Normally closed inputs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

Q1000 Series Service Manual

Delayed Egress Exit Device Installation Instructions (Page 2)

INSTALLATION COMPONENTS

Illustration	Component	Function	Remark
	24VDC Power supply *	Supplies power to delayed egress exit device	PS101/PS102 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)	Allows authorized egress or ingress without alarm	Wire multiple external inhibit devices in series See "External inhibit Switch"
	Electric Mortise & Electric Trim Fail safe (normally closed contacts)		
	Electric Mortise & Electric Trim Fail secure (normally open contacts)		
	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

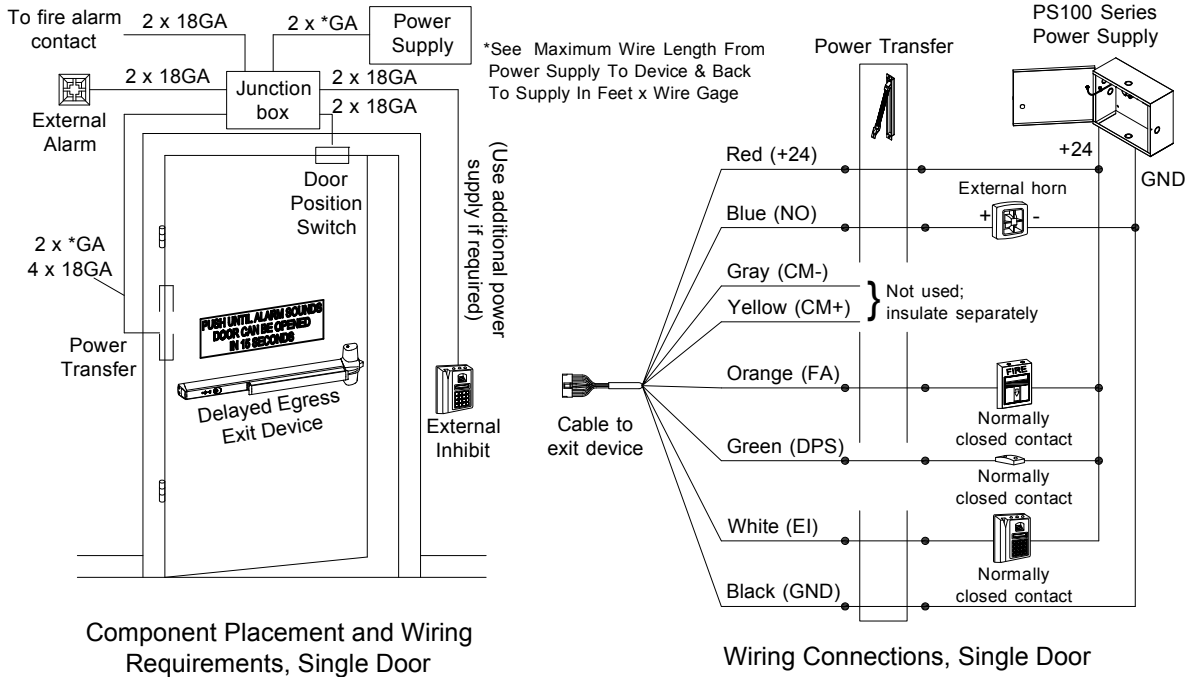
- NOTE:** 1. Always disconnect power prior to making any connections or service.
2. Components marked with (*) are required for product.

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

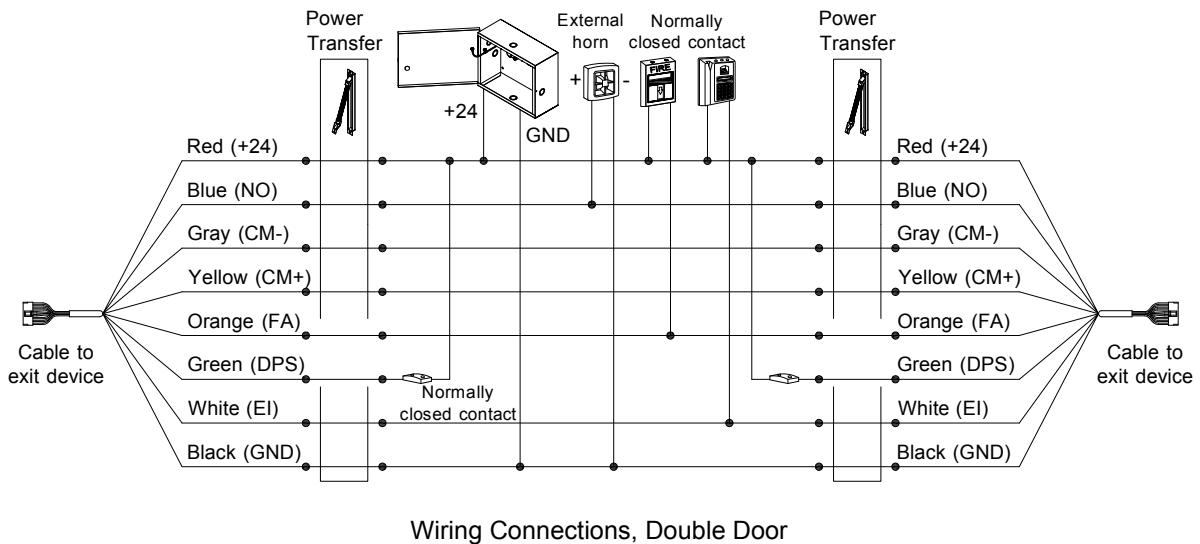
TYPICAL WIRING

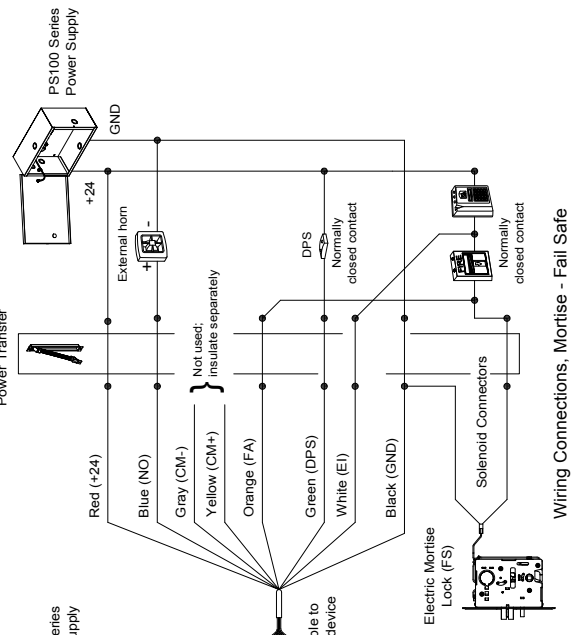
RIM/VERTICAL - SINGLE DOOR APPLICATION



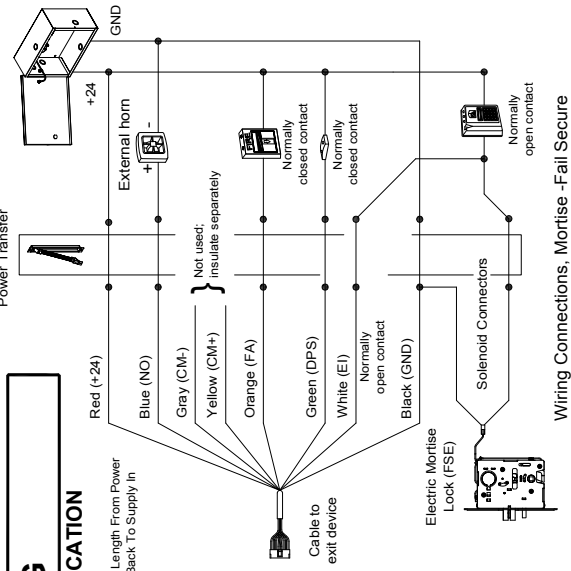
RIM/VERTICAL - DOUBLE DOOR APPLICATION

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.

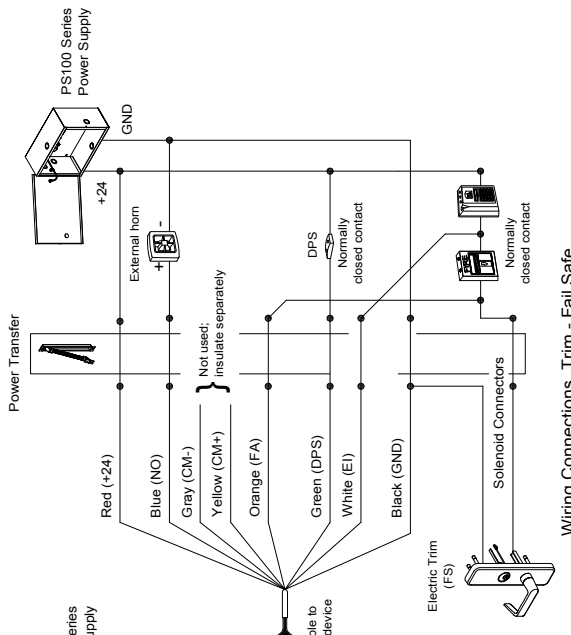




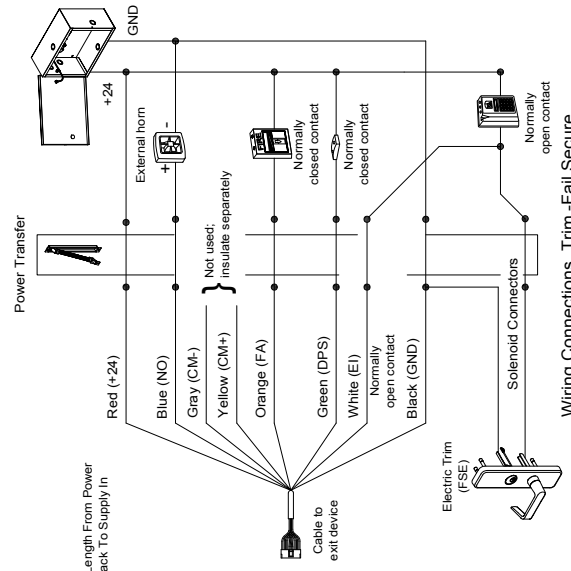
Wiring Connections, Mortise - Fail Safe



Wiring Connections, Mortise -Fail Secure



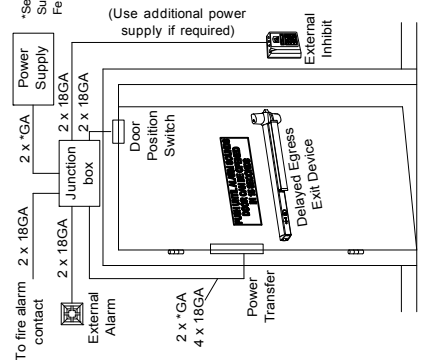
Wiring Connections, Trim - Fail Safe



Wiring Connections, Trim -Fail Secure

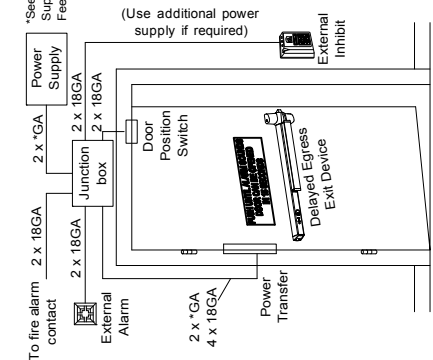
TYPICAL WIRING

ELECTRIC MORTISE LOCK APPLICATION



Component Placement and Wiring Requirements for Mortise Applications

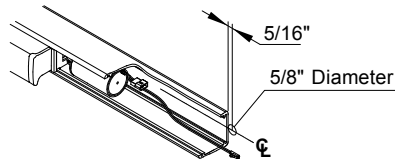
ELECTRIC TRIM APPLICATION



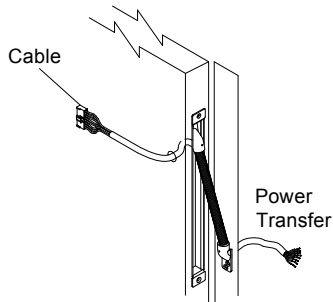
Component Placement and Wiring Requirements for Trim Applications

INSTALLATION

1 COMPLETE WIRING.

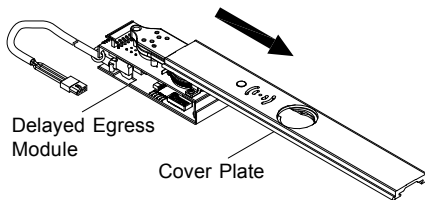


Drill 5/8" dia. wire access hole thru device side of door.

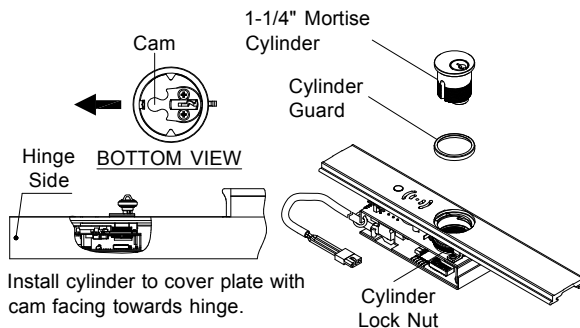


Route cable through hole and connect wires to power transfer (see "POWER TRANSFER" instructions as needed).

2 INSTALLATION DELAYED EGRESS MODULE AND CYLINDER.



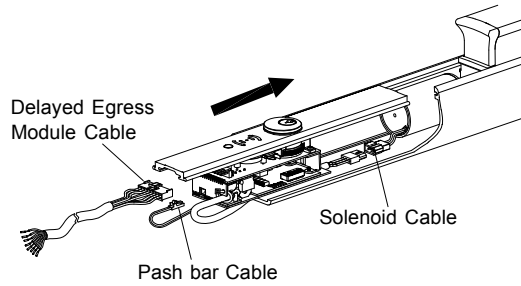
Slide delayed egress module into cover plate.



Install cylinder to cover plate with cam facing towards hinge.

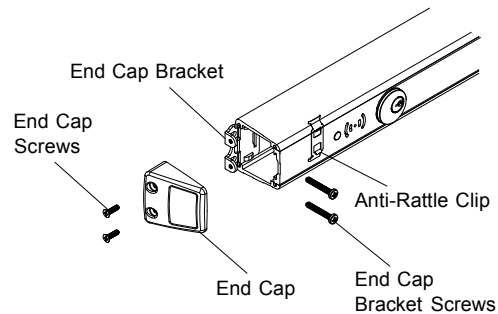
1. Insert 1-1/4" Mortise Cylinder with cylinder guard into the cover plate.
2. Thread cylinder lock nut onto mortise cylinder.
3. Make sure to fasten down tight.

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.

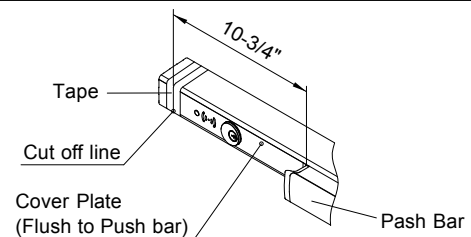
4 INSTALL MOUNTING BRACKET AND END CAP.



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.

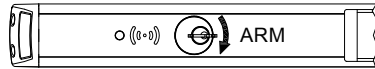
5 CUT DEVICE (IF REQUIRED).



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

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".



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.

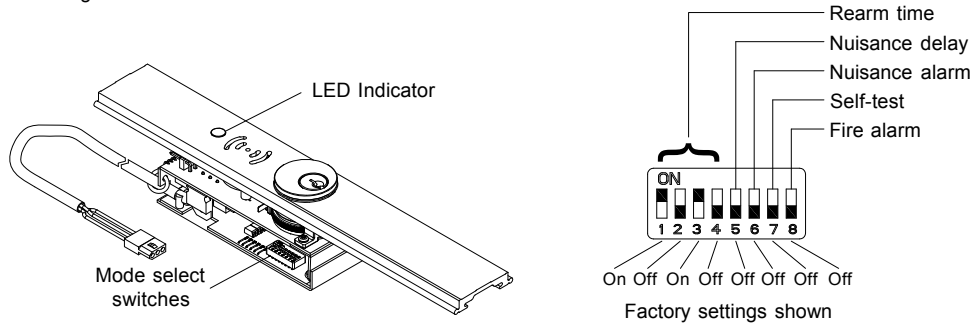
TROUBLESHOOTING

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.

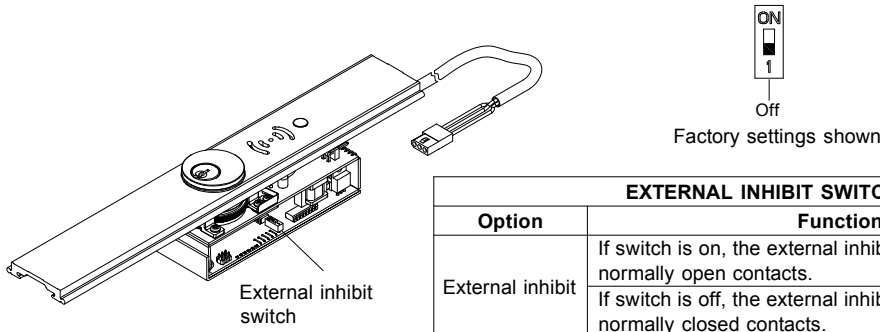
MODE SELECT SWITCHES		
Symptom	Problem	Solution
Red LED does not light	Power not reaching DE device	Replace/reset AC fuse/circuit breaker; check power supply input/output voltages; check input voltage at DE device cable connector
Red LED flashes fast and horn sounds	Fire alarm contacts open	Connect normally 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

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.



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.



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.

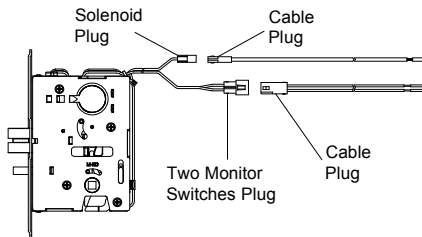
Electric Mortise Lock For Exit Device Installation Instructions (Page1)

ELECTRIC MORTISE LOCK FOR EXIT DEVICE

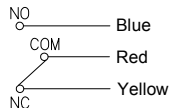
INSTALLATION INSTRUCTIONS

E MORTISE FUNCTION

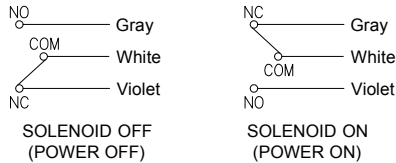
- Specifications:
Solenoid current: 24 VDC , 0.25Amp
12 VDC , 0.50Amp
Switch rate: 24VDC , 2Amp (SPDT)
- Electric Lock / Unlock:
A 24/12 VDC voltage source applied to the non-polarized solenoid connection results in the locking (fail safe) and unlocking (fail secure) of the trim. For locking function changing, see instruction at the back of this page.



- Auxiliary Bolt Monitoring: (Door closed)
When only the auxiliary bolt is depressed, i.e. when door is closed, the lock has a COM-NC (red-yellow) connection state .

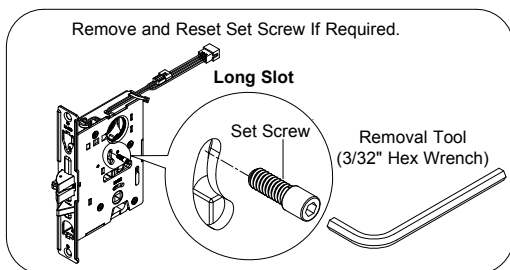


- Trim Monitoring:
Monitors the trim for locked or unlocked status; the switch swaps to its opposite configuration when the solenoid is energized.



NOTE: Wiring shown represents the case when door is closed.

- Prepare mortise lock if necessary.

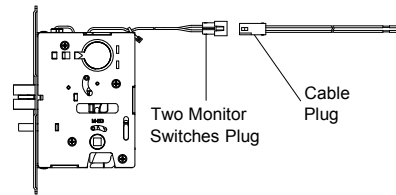


For mortise device applications, NL screw shall be set in long slot side of mortise lock for NL operations.

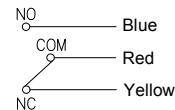
NOTE: Set screw is factory set at long slot side for TP,K,L and NL applications.

SS MORTISE FUNCTION

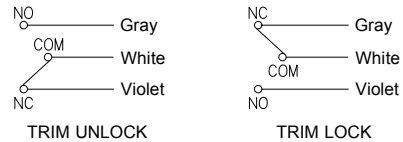
- Specifications:
Switch rate: 24VDC , 2Amp (SPDT)



- Auxiliary Bolt Monitoring (Door closed) :
When only the auxiliary bolt is depressed, i.e. when door is closed, the lock has a COM-NC (red-yellow) connection state .

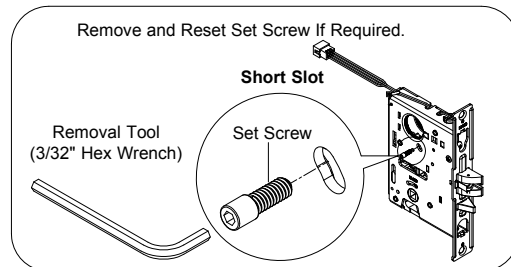


- Trim Monitoring:
Monitors the trim for locked or unlocked status.



NOTE: Wiring shown represents the case when door is closed.

- Prepare mortise lock if necessary.



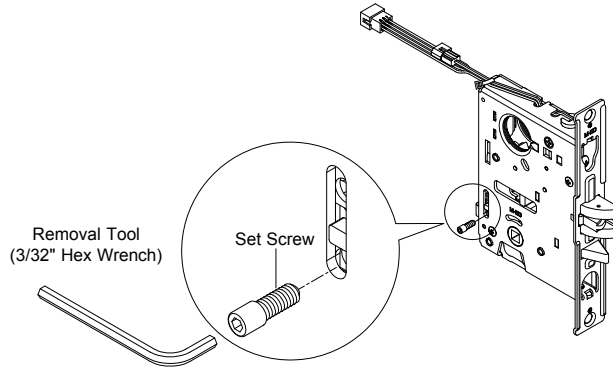
For TP, K, "double cylinder" and L trims with outside cylinder, remove set screw and insert into the short slot as shown above to lock and unlock trim functions.

Q1000 Series Service Manual

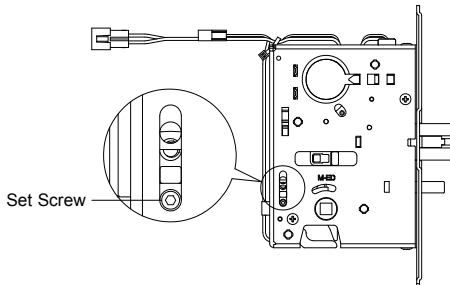
Electric Mortise Lock For Exit Device Installation Instructions (Page2)

HOW TO CHANGE LOCKING FUNCTION

1. Change lock function (fail safe or fail secure) if required.

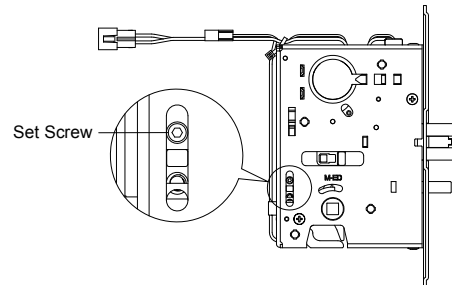


2A. FSE(fail secure) -
No changing is needed.
Set screw is factory set for FSE (fail secure) applications.



Unit unlocks when electric power is applied and locks when power is removed.

2B. FS(fail safe) -
Remove set screw and re-insert in top position for FS (fail safe) applications.



Unit locks when electric power is applied and unlocks when power is removed.

3. Test mortise lock function.

For FSE (Fail Secure) mortise lock:

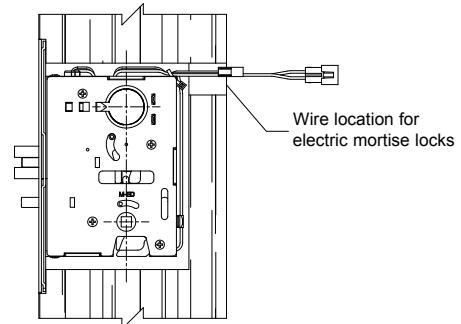
- With power engaged, the trim will be unlocked.
- When lock is in such function or is disconnected from its main power source or power supply, the trim will remain in a locked state.
- When key cylinder is present on trim, with power disengaged, check to ensure that the key override feature (night latch) functions properly. Inserting and turning key will temporarily unlock door while trim lever remains rigid. Door locks when key is removed.

For FS (Fail Safe) mortise lock:

- With power engaged, the trim will be locked.
- When lock is in such function or is disconnected from its main power source or power supply, the trim will remain in an unlocked state.
- When key cylinder is present on trim, with power engaged, check to ensure that the key override feature (night latch) functions properly. Inserting and turning key will temporarily unlock door while trim lever remains rigid. Door locks when key is removed.

5. For detailed trim installation procedure, see "Trim Instructions".

4. Prepare door for mortise lock and cylinder (see preparation on other side of these instructions).



NOTE: The wiring length provided, permit field connections on the hinge side. Enough spacing should be given in the door cutout for installation of the lock and the plug connectors on the lock side. Leave decent length of wire to allow plugging in the plug connectors before inserting the lock in the door.

Patent No. 7,634,927 7,748,757
D623,499 7,836,738 7,887,107
8,199,011 and other patents
pending.

WD-OD002(441)

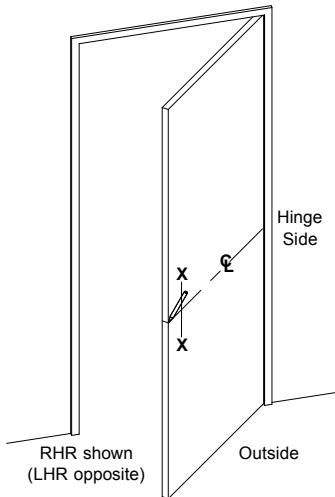
Q1000 Series Service Manual

Electric Locking Trim For Exit Device Installation Instructions (Page 1)

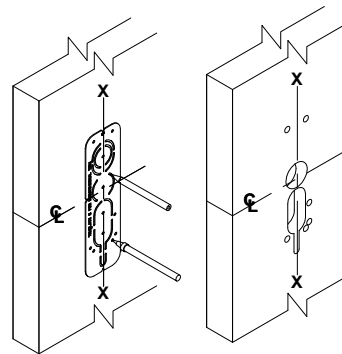
E300 SERIES ELECTRIC LOCKING TRIM FOR EXIT DEVICE

INSTALLATION INSTRUCTIONS

1 PREPARE DOOR FOR DEVICE AND TRIM.

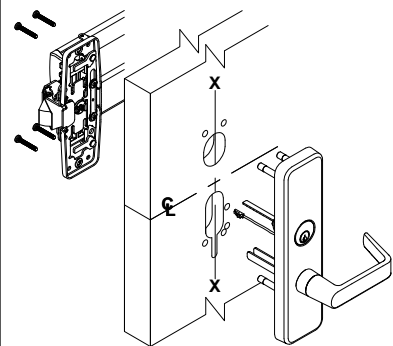


1. Prepare door for exit device. See exit device instructions for holes, backset (line X-X), and center lines.
2. Transfer line X-X from inner (exit device) side of door to outer (trim) side of door. Be extra careful if edge door of door is beveled. Be sure line X-X is parallel to edge of door.



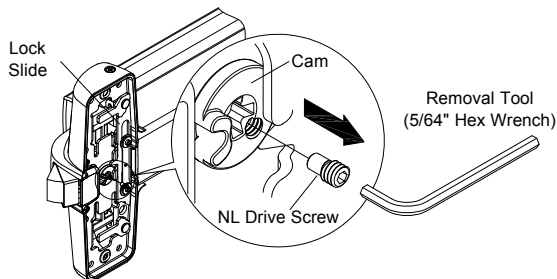
3. Locate X-X line and prepare required holes with "Template C".

NOTE: See "TEMPLATE APPLICATION CHART" on back page for different trim functions.



4. Select trim function, trim handling and assemble trim as needed. (See "HOW TO CHANGE TRIM FUNCTION", "HOW TO ASSEMBLE TRIM" and "INSTALL CYLINDER" on page 3 and 4)

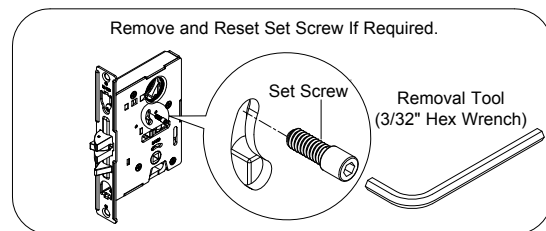
2 CHECK EXIT DEVICE NL DRIVE SCREW AND LOCK SLIDE.



Make sure the NL drive screw is installed in the exit device center case cam with the exit device lock slider in the upper position.

NOTE: If the lock slider is not in the correct position (as mentioned above), remove NL screw to unlock cam and rotate it with screwdriver to move slider to the right position and place back NL screw.

3 PREPARE MORTISE LOCK IF NECESSARY.



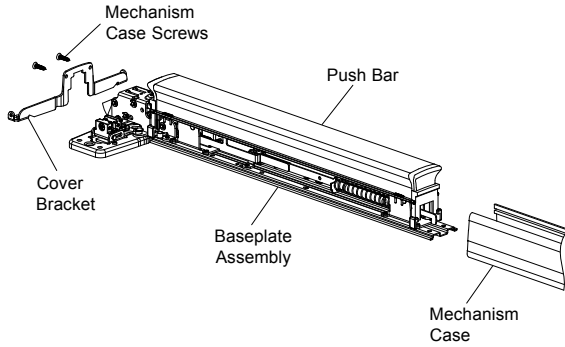
For mortise device applications, NL screw shall be set (by default) in long slot side of mortise lock for NL operations."

NOTE: Set screw is factory set at long slot side for EO,DT, and NL applications.

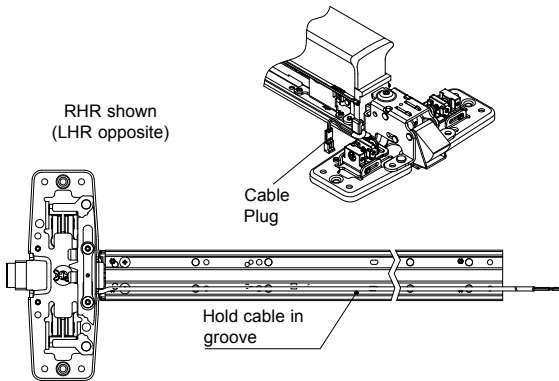
Q1000 Series Service Manual

Electric Locking Trim For Exit Device Installation Instructions (Page 2)

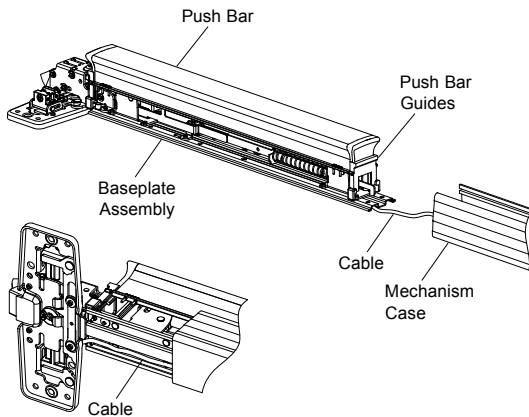
4 ROUTE CABLE THROUGH EXIT DEVICE.



1. Unscrew Mechanism case screws and remove cover bracket.
2. Slide off mechanism case.



3. Route cable through base plate assembly as shown.
4. Set cable along incision at bottom of baseplate.

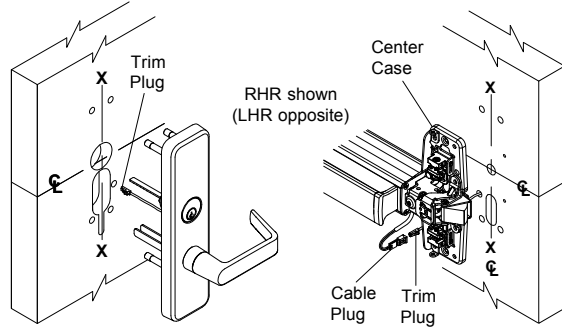


5. Slide mechanism case back to place, align plastic pushbar guides while doing so.
6. Set cover bracket back to place and fasten with case screws.

NOTE: Watch out for cable when sliding mechanism case back to place.

5 ROUTE TRIM CABLE THROUGH EXIT DEVICE.

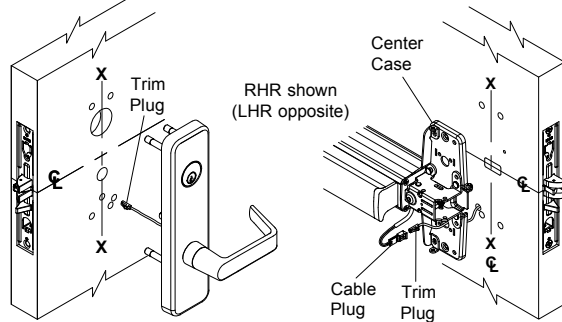
FOR RIM AND VERTICAL ROD DEVICE



1. Route trim plug through wire access hole in door.
2. Route trim cable through hole in center case.
3. Connect trim plug and cable plug.

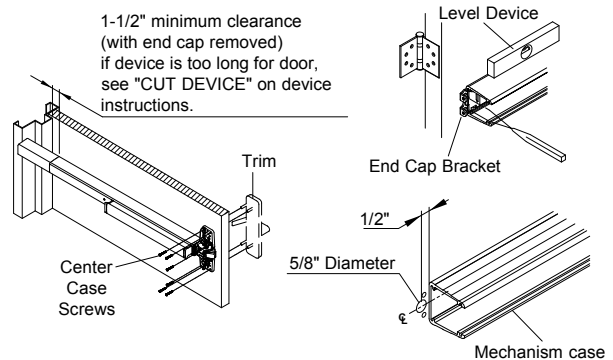
NOTE: Make sure wires are not cramped or tangled after installation.

FOR MORTISE LOCK



1. Install mortise lock, (see "Mortise lock Instructions").
2. Route trim plug through wire access hole in door.
3. Route trim cable through hole in center case.
4. Connect trim plug and cable plug.

6 INSTALL TRIM AND SECURE DEVICE CENTER CASE TO DOOR.

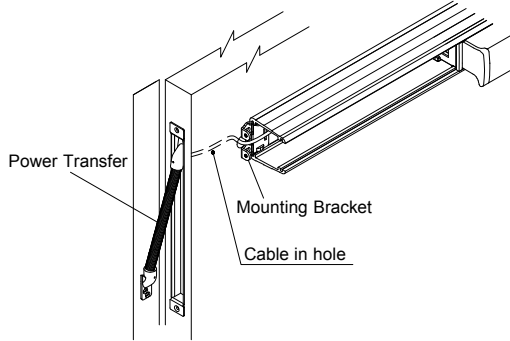


1. Momentarily fix device and trim to door with screws.
2. Insert end cap bracket into push bar assembly against mechanism case. Level device, mark and drill two(2) holes for Bracket Screws.
3. Mark and drill a 5/8" hole used for wire access and routing.

Q1000 Series Service Manual

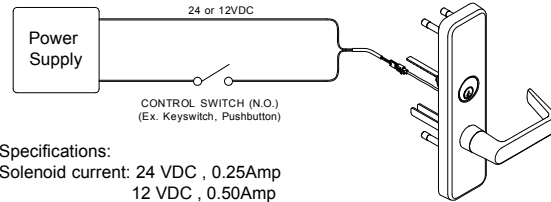
Electric Locking Trim For Exit Device Installation Instructions (Page 3)

7 INSTALL END CAP BRACKET AND ROUTE WIRING THROUGH POWER TRANSFER.



1. Slide cable into hole (mentioned in previous section).
2. Use Power Transfer to guide wiring from exit device to door frame. (For details see "Power Transfer Instructions")
3. Insert cover plate, slide anti-rattle clip in position (2" minimum from end), and attach end cap with two(2) end cap screws. (See "Exit device instructions")

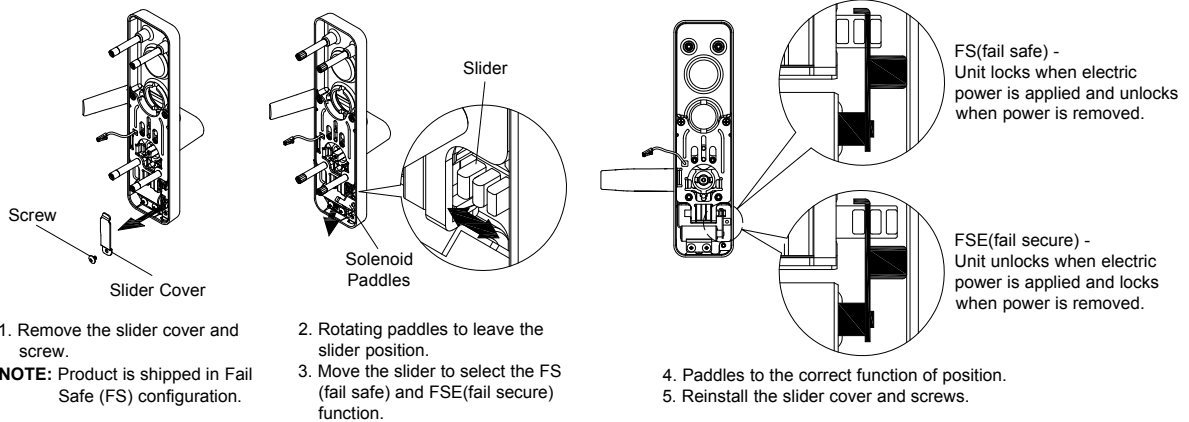
8 BASIC WIRING.



Specifications:
Solenoid current: 24 VDC , 0.25Amp
12 VDC , 0.50Amp

For the power supply wiring connection, two non-polarized wires are applied, one of which is directly connected to the power source (power supply), while the other one is attached to a control device (card reader, key pad, push button, dry contact, etc.) connected to the power source.

HOW TO CHANGE TRIM FUNCTION



1. Remove the slider cover and screw.
2. Rotating paddles to leave the slider position.
3. Move the slider to select the FS (fail safe) and FSE (fail secure) function.
4. Paddles to the correct function of position.
5. Reinstall the slider cover and screws.

TEST TRIM FUNCTION

FS (Fail Safe) Configuration:

1. Apply power to lock trim.
2. To unlock trim, disconnect from power source or actuate control device.
3. If key cylinder is present, check for key override feature (night latch) proper functioning when device is connected to power source.
Usage of the key will unlock the door without need of turning trim lever; device locks after removal of key.

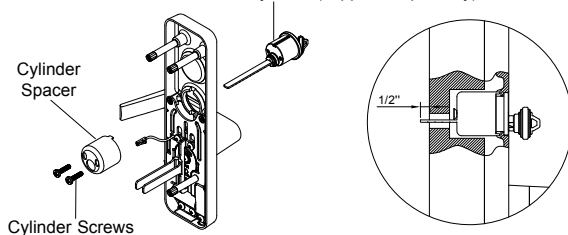
FSE (Fail Secure) Configuration:

1. Apply power to unlock trim.
2. To lock trim, disconnect from power source or actuate control device.
3. If key cylinder is present, check for key override feature (night latch) proper functioning when device is disconnected to power source.
Usage of the key will unlock the door without need of turning trim lever; device locks after removal of key.

INSTALL CYLINDER

FOR RIM CYLINDER

Rim Cylinder (supplied separately)



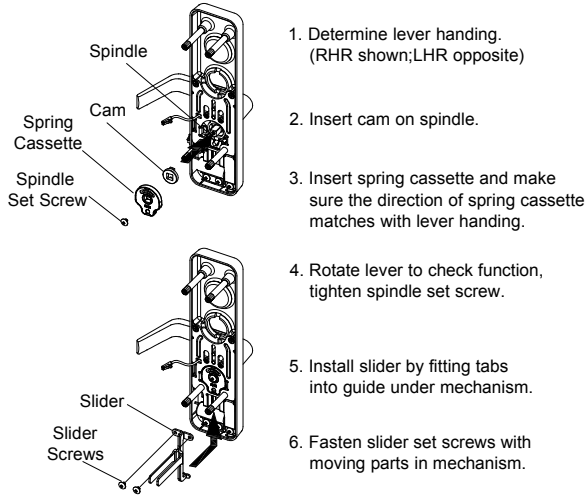
1. Mount rim cylinder to cylinder spacer and attach to outside trim with two(2) cylinder screws.
 2. Make sure the tailpiece is extending 1/2" from the inside face of door.
- NOTE:** Cut off tailpiece for different door ranges and various cylinder lengths.

Q1000 Series Service Manual

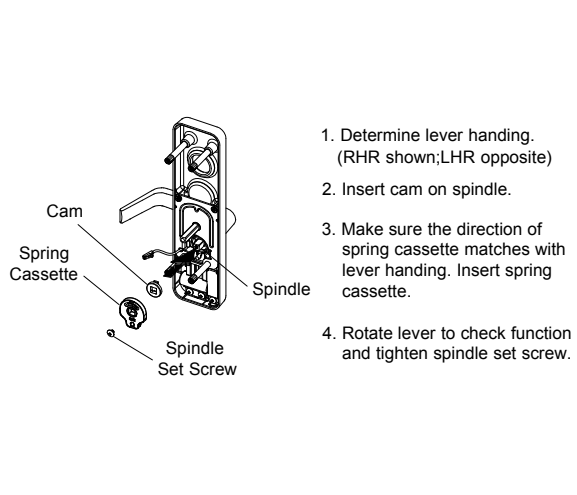
Electric Locking Trim For Exit Device Installation Instructions (Page 4)

HOW TO ASSEMBLE TRIM

FOR FUNCTIONAL LEVER

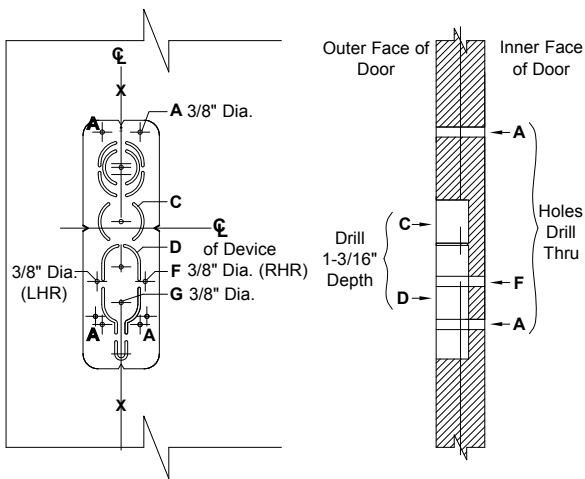


FOR MORTISE LOCK

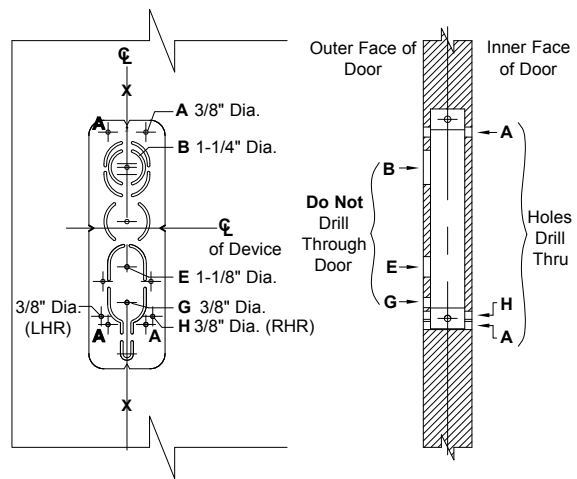


DOOR PREPARATION FOR E300 SERIES TRIM

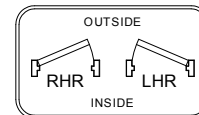
FOR RIM AND VERTICAL ROD DEVICE



FOR MORTISE LOCK



TEMPLATE APPLICATION CHART				
DEVICE TYPE	RIM AND VERTICAL ROD		MORTISE LOCK	
CUT OUT ILLUSTRATION				
TRIM DESCRIPTION	E309R	E314R	E309M	E314M
PREPARATION	A+C+D+F+G	A+D+F+G	A+B+E+G+H	A+E+G+H



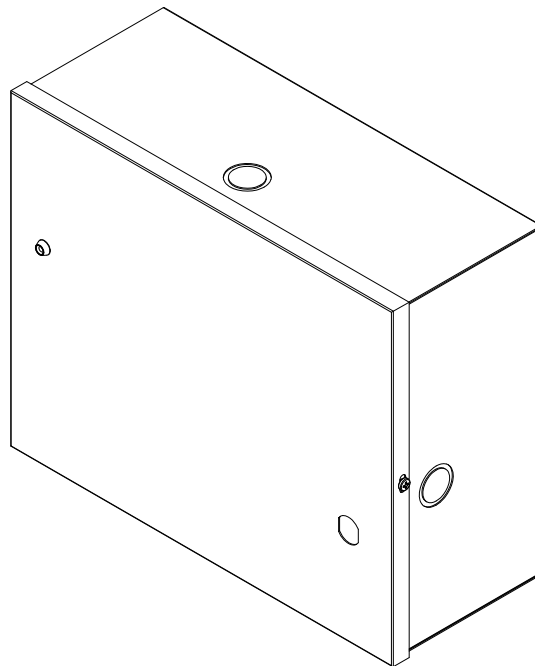
NOTE: RHR application shown
LHR application opposite

Patent No. 7,634,927 7,748,757
D623,499 7,836,738 7,887,107
and other patents pending.

WD-OD002(403)

**QPS101 / QPS102 CLASS 2
POWER SUPPLY**

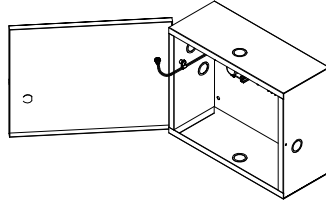
INSTALLATION INSTRUCTIONS



Q1000 Series Service Manual

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: 100-2 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 (100-BB required),
 Output range becomes 10.92-12VDC, 4 A or 22.2-23.9VDC, 2 A.

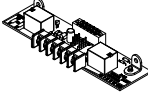

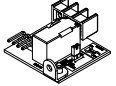




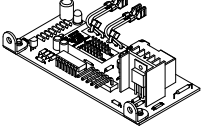




ENCLOSURE: 10" H x 12.5" W x 5.0" D Hinged cover box
 20 GA steel, five(5) 1/2" x 3/4" knockouts total

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 - ELF"
 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-C33.3 No. 1071.
 5. Product wiring methods shall be in accordance with NFPA70.
 6. For indoor work closing...
 7. For Attack Class I installation only.

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

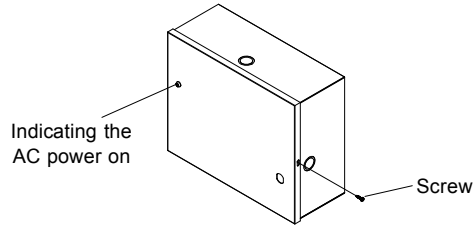
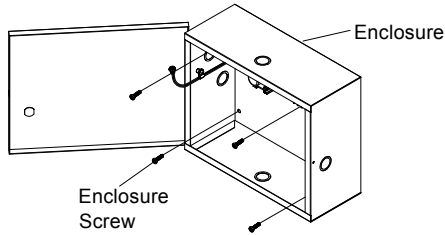
OPTIONS FUNCTION				
 <p>Q100-2 Two(2) Zone Controller Board (Page 7-8)</p>	 <p>No. 6-32 x 15/32" 2 PCS</p>	 <p>Q100-FA Fire Alarm Board (Page 5-6)</p>	 <p>No. 6-32 x 15/32" 1 PCS</p>	 <p>Q100-K Key Lock (Page 6)</p>
			 <p>Buckle piece 1 PCS</p>	 <p>Keys 1 PCS</p>
 <p>Q100-BB Battery Backup Board (Page 4)</p>	 <p>Batteries 2 PCS</p>	 <p>No. 6-32 x 15/32" 2 PCS</p>	 <p>Cable Clamp 1PCS</p>	 <p>No. 8-32 x 7/32" 1PCS</p>

Q1000 Series Service Manual

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

QPS101 / QPS102 POWER SUPPLY

1 MOUNT POWER SUPPLY.

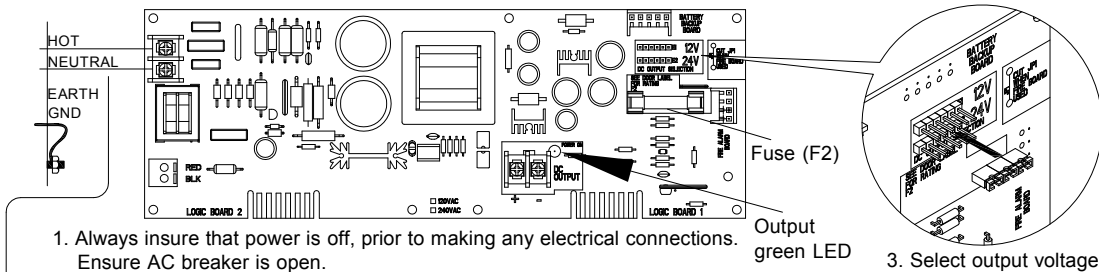


Install power supply with fore(4) screw.

- 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.



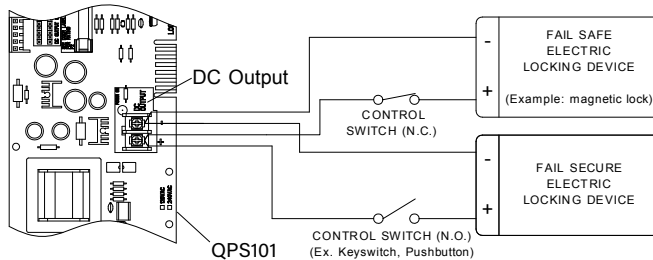
1. Always insure that power is off, prior to making any electrical connections. Ensure AC breaker is open.
2. For supply connections, use wire suitable for at least 90°C temperature.
3. Select output voltage (12 VDC or 24 VDC).
4. Connect AC voltage to two(2) 6" black and white leads (hot and neutral)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

Q100 Series Service Manual

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

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

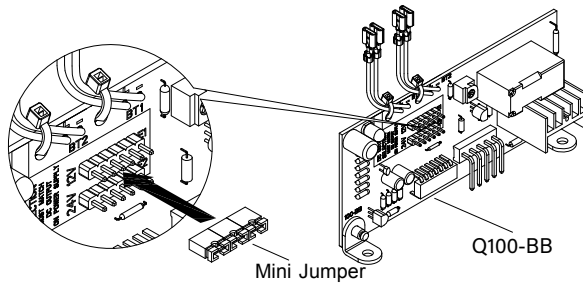
SPECIFICATIONS:

BATTERY BACKUP TIME: 2 hours at 100% load

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

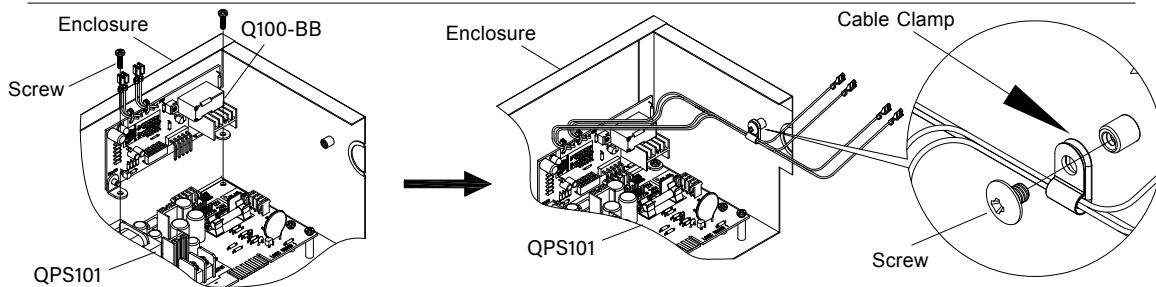
CAUTION: Charge only specifications:12V , 7AH Lead acid batteries. Other types of batteries may burst causing personal injury and damage. Observe the proper polarity when connecting the batteries.

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



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

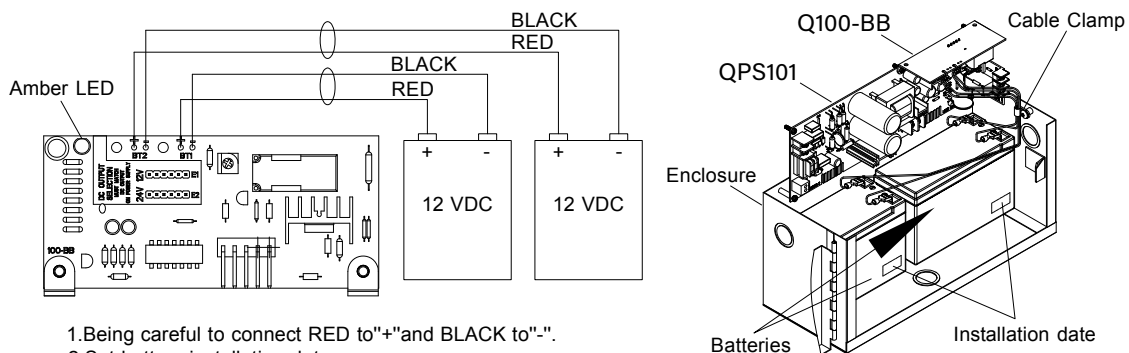
2 INSTALL Q100-BB onto QPS101



1. Inside 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.

Q100 Series Service Manual

Q100PS / QPS102 Class 2 Power Supply Installations 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.

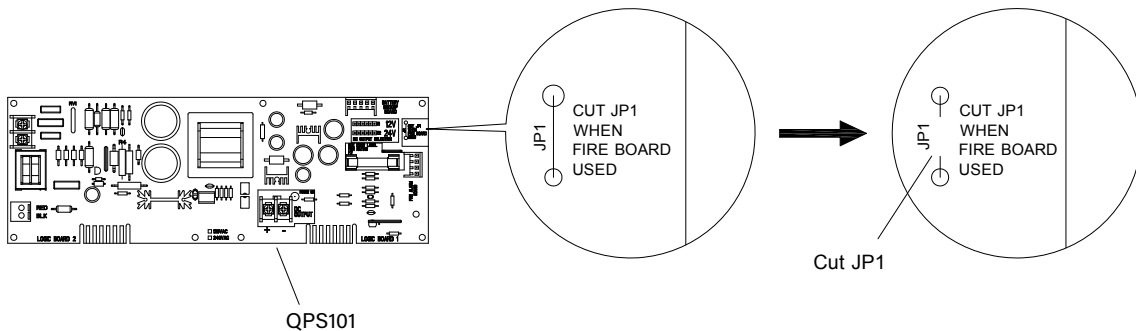
SPECIFICATIONS:

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.

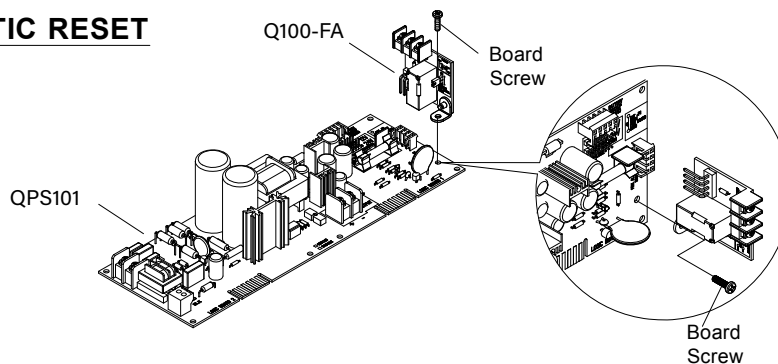
1 ENSURE AC BREAKER IS OPEN, (DISCONNECT BATTERIES IF YOU HAVE THIS OPTIONS. CUT JUMPER (JP1) FOR FIRE ALARM BOARD.



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

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

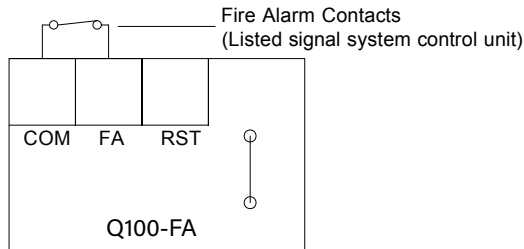
AUTOMATIC RESET



1. Install Q100-FA onto QPS101.

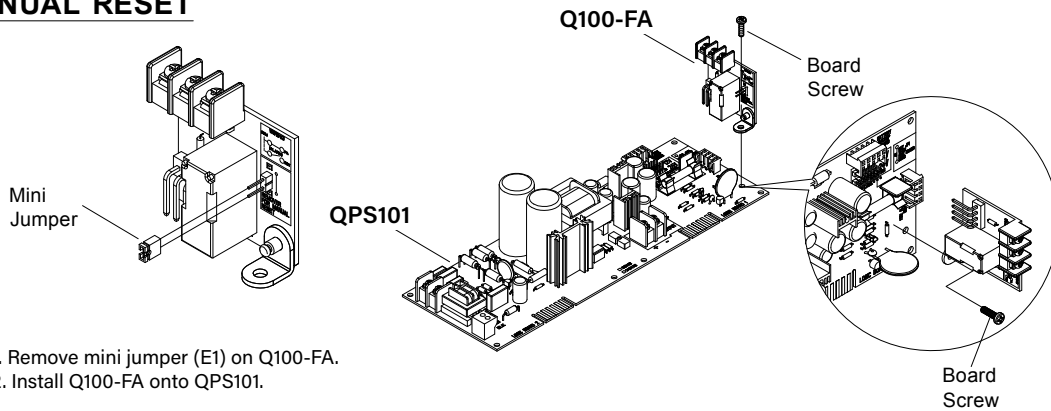
Q100 Series Service Manual

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

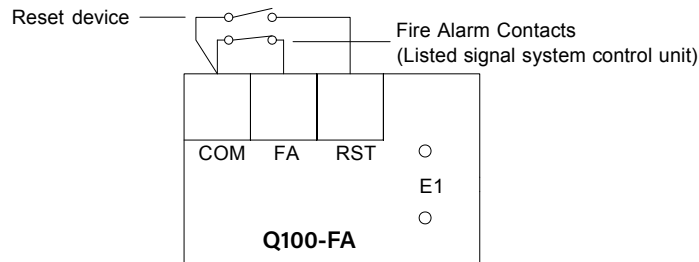


2. Connect normally closed fire alarm contacts.
3. Restore AC input voltage and reconnect batteries (if you have this option).
The green LED on the power supply will illuminate.

MANUAL RESET

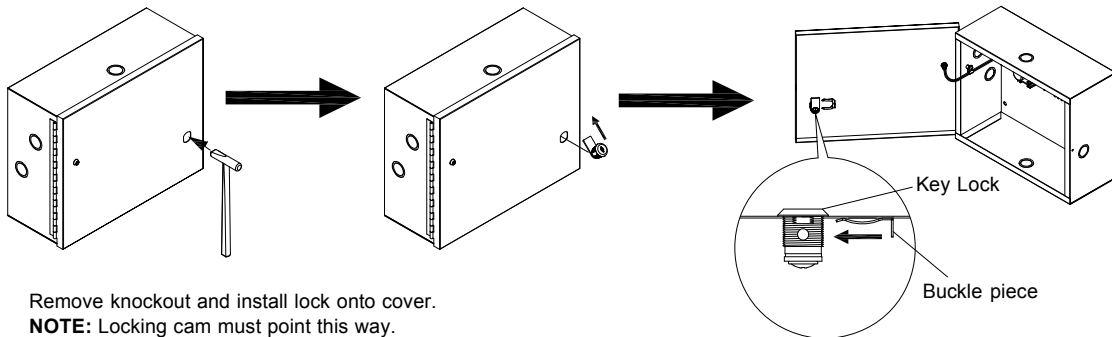


1. Remove mini jumper (E1) on Q100-FA.
2. Install Q100-FA onto QPS101.



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



Q1000 Series Service Manual

QPS100 / QPS102 Class 2 Power Supply Installation Instructions (Page7)

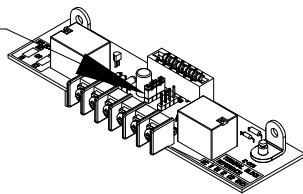
Q100-2 INSTALLATION

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 24VDC output.
2. Relay rated for 0-6 PF induction load.

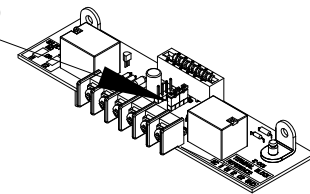
- 1 ENSURE AC BREAKER IS OPEN, (DISCONNECT BATTERIES IF YOU HAVE THIS OPTION).
SELECT BETWEEN INDIVIDUAL OR SEQUENTIAL OUTPUTS.**

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



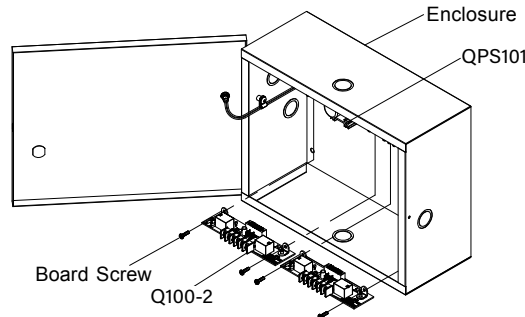
INDIVIDUAL OUTPUTS (must be field programmed):
Input 1 will control output 1.
Input 2 will control output 2.

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

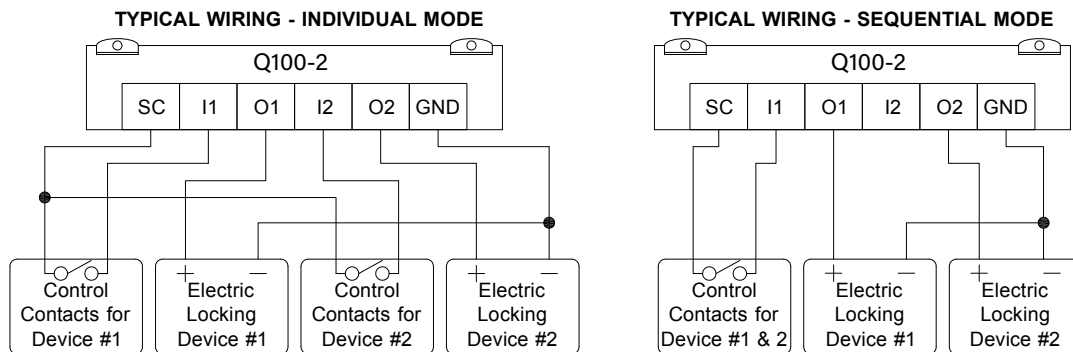


SEQUENTIAL OUTPUTS (factory shipped):
Input 1 will sequence both outputs. (O2 followed by O1)

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



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



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.

Q1000 Series Service Manual

QPS100 / QPS102 Class 2 Power Supply Installation Instructions (Page8)

4 APPLY AC VOLTAGE TO PS101 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" Q100-FA
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!

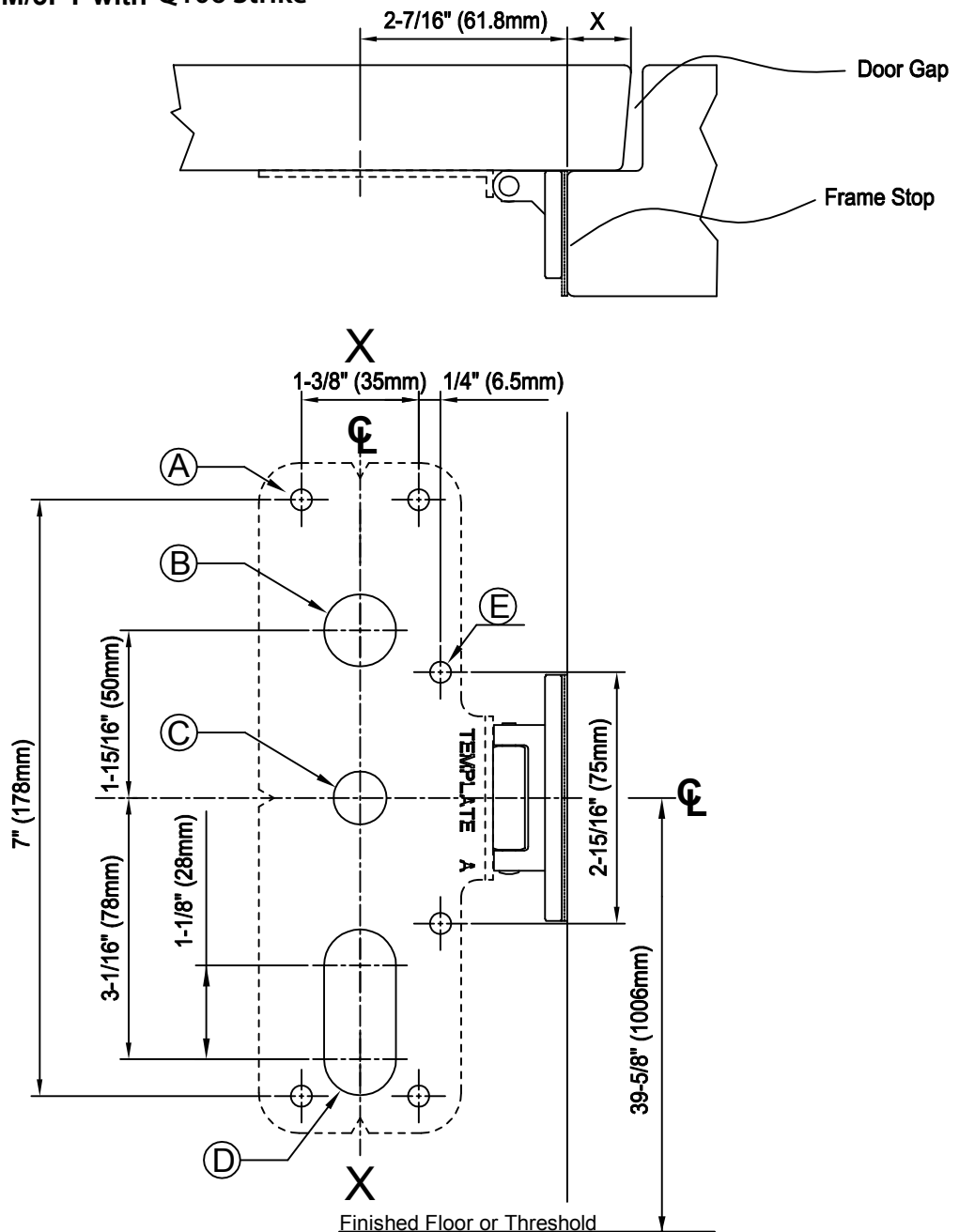
FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, FOR REPLACEMENT OF FUSE, PLEASE RETURN TO MANUFACTURER / AUTHORIZED DEALERS FOR SERVICING.

TEMPLATES

Q1000 Series Service Manual

Templates

Preparation for RIM/3PT with Q106 Strike

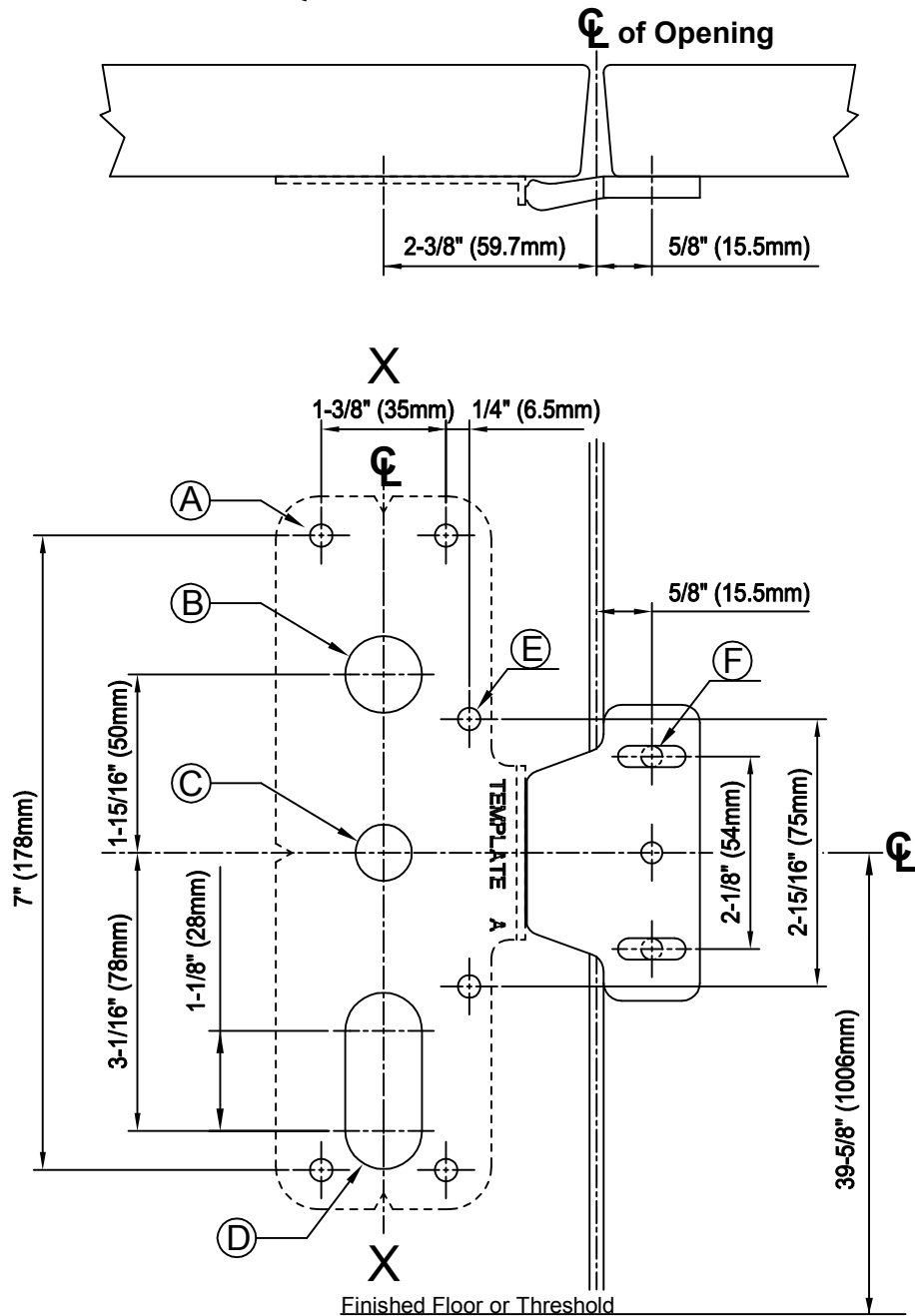


NOTATION	ILL.	APPLICATIONS	DIMENSION	
			METAL	WOOD
A	○	EXIT ONLY	#25 DRILL #10-24 TAP	3 (1/8") DRILL PILOT 1" DEEP
		SEX BOLT OR TRIM	6 (1/4") DRILL (DEVICE SIDE) 10.3 (13/32") DRILL (TRIM SIDE)	
B	○	DOUBLE CYLINDER	22 (7/8") DRILL (CUT DEVICE SIDE)	
C	○	OUTSIDE CYLINDER	16 (5/8") DRILL (CUT DEVICE SIDE)	16 (5/8") DRILL (CUT THRU)
D	⊂	TRIM WITH WORKING LEVER	22 (7/8") DRILL (CUT DEVICE SIDE ONLY)	
E	○	SUPPORT BRACKET	#25 DRILL #10-24 TAP	3 (1/8") DRILL PILOT 1" DEEP

Q1000 Series Service Manual

Templates

Preparation for RIM/3PT with Q136 Strike

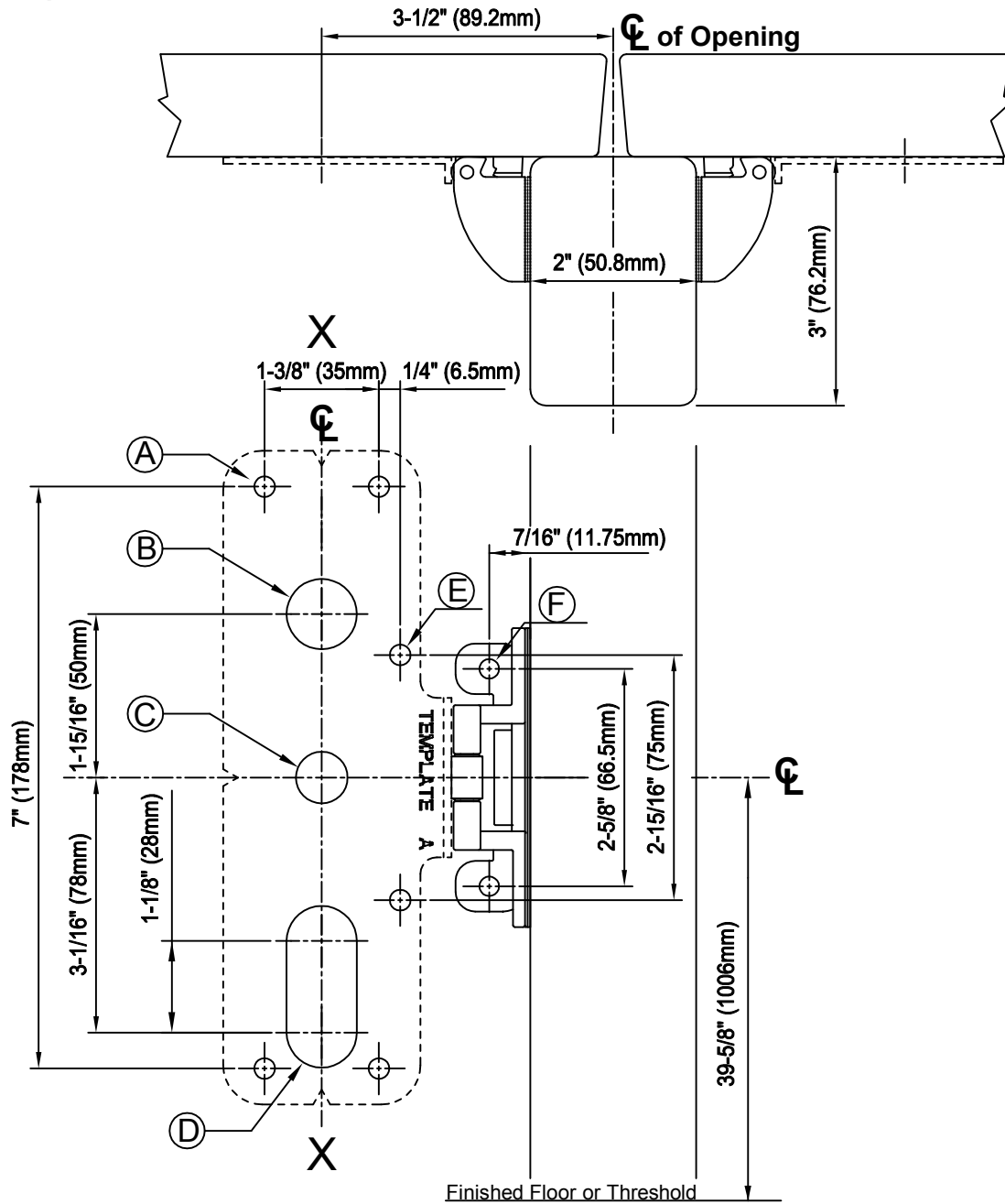


NOTATION	ILL.	APPLICATIONS	DIMENSION	
			METAL	WOOD
A	○	EXIT ONLY	#25 DRILL #10-24 TAP	3 (1/8") DRILL PILOT 1" DEEP
		SEX BOLT OR TRIM	6 (1/4") DRILL (DEVICE SIDE) 10.3 (13/32") DRILL (TRIM SIDE)	
B	○	DOUBLE CYLINDER	22 (7/8") DRILL (CUT THRU)	
C	○	OUTSIDE CYLINDER	16 (5/8") DRILL (CUT DEVICE SIDE)	16 (5/8") DRILL (CUT THRU)
D	⊂	TRIM WITH WORKING LEVER	22 (7/8") DRILL (CUT DEVICE SIDE ONLY)	
E	○	SUPPORT BRACKET	#25 DRILL #10-24 TAP	3 (1/8") DRILL PILOT 1" DEEP
F	○	Q136 STRIKE	#25 DRILL #10-24 TAP	3 (1/8") DRILL PILOT 1" DEEP

Q1000 Series Service Manual

Templates

Preparation for RIM/3PT with Q108 Strike & Mullion

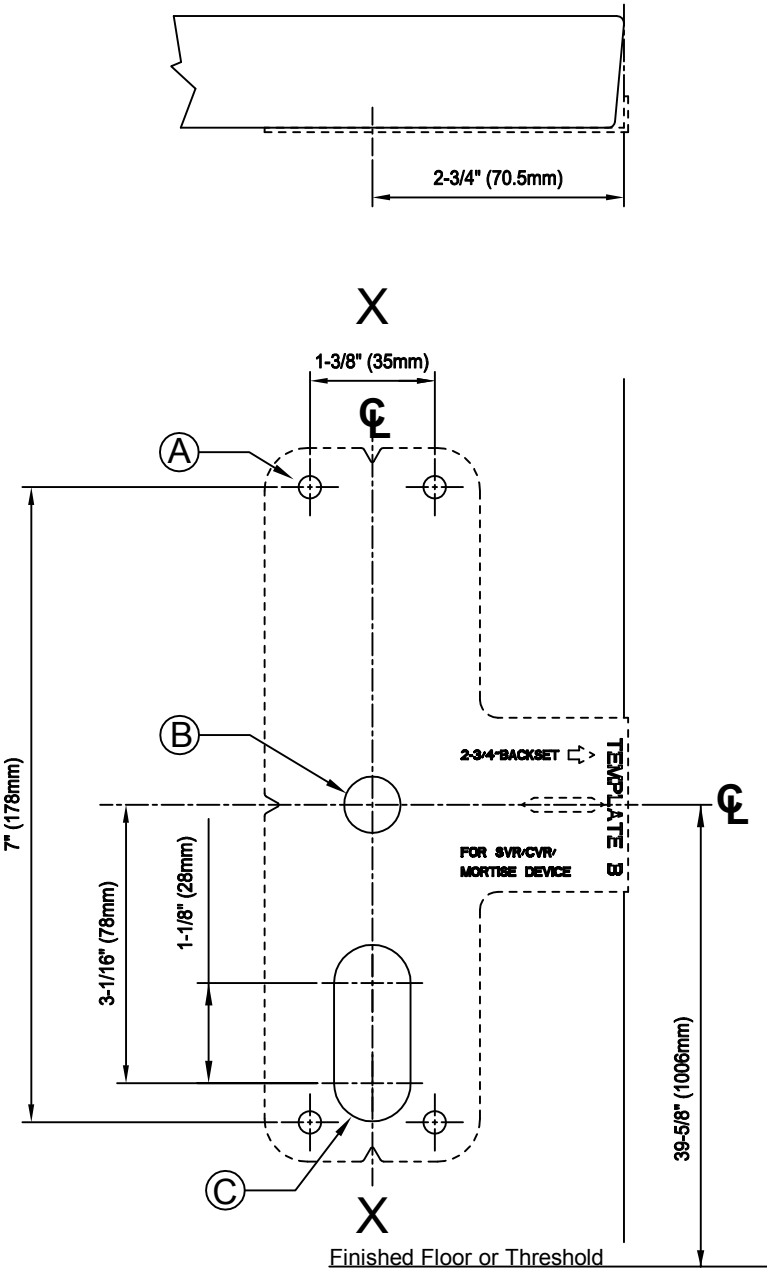


NOTATION	ILL.	APPLICATIONS	DIMENSION	
			METAL	WOOD
A	○	EXIT ONLY	#25 DRILL #10-24 TAP	3 (1/8") DRILL PILOT 1" DEEP
		SEX BOLT OR TRIM	6 (1/4") DRILL (DEVICE SIDE) 10.3 (13/32") DRILL (TRIM SIDE)	
B	○	DOUBLE CYLINDER	22 (7/8") DRILL (CUT THRU)	
C	○	OUTSIDE CYLINDER	16 (5/8") DRILL (CUT DEVICE SIDE)	16 (5/8") DRILL (CUT THRU)
D	⊂	TRIM WITH WORKING LEVER	22 (7/8") DRILL (CUT DEVICE SIDE ONLY)	
E	○	SUPPORT BRACKET	#25 DRILL #10-24 TAP	3 (1/8") DRILL PILOT 1" DEEP
F	○	1Q108 STRIKE	#25 DRILL #10-24 TAP	3 (1/8") DRILL PILOT 1" DEEP

Q1000 Series Service Manual

Templates

Preparation for SVR

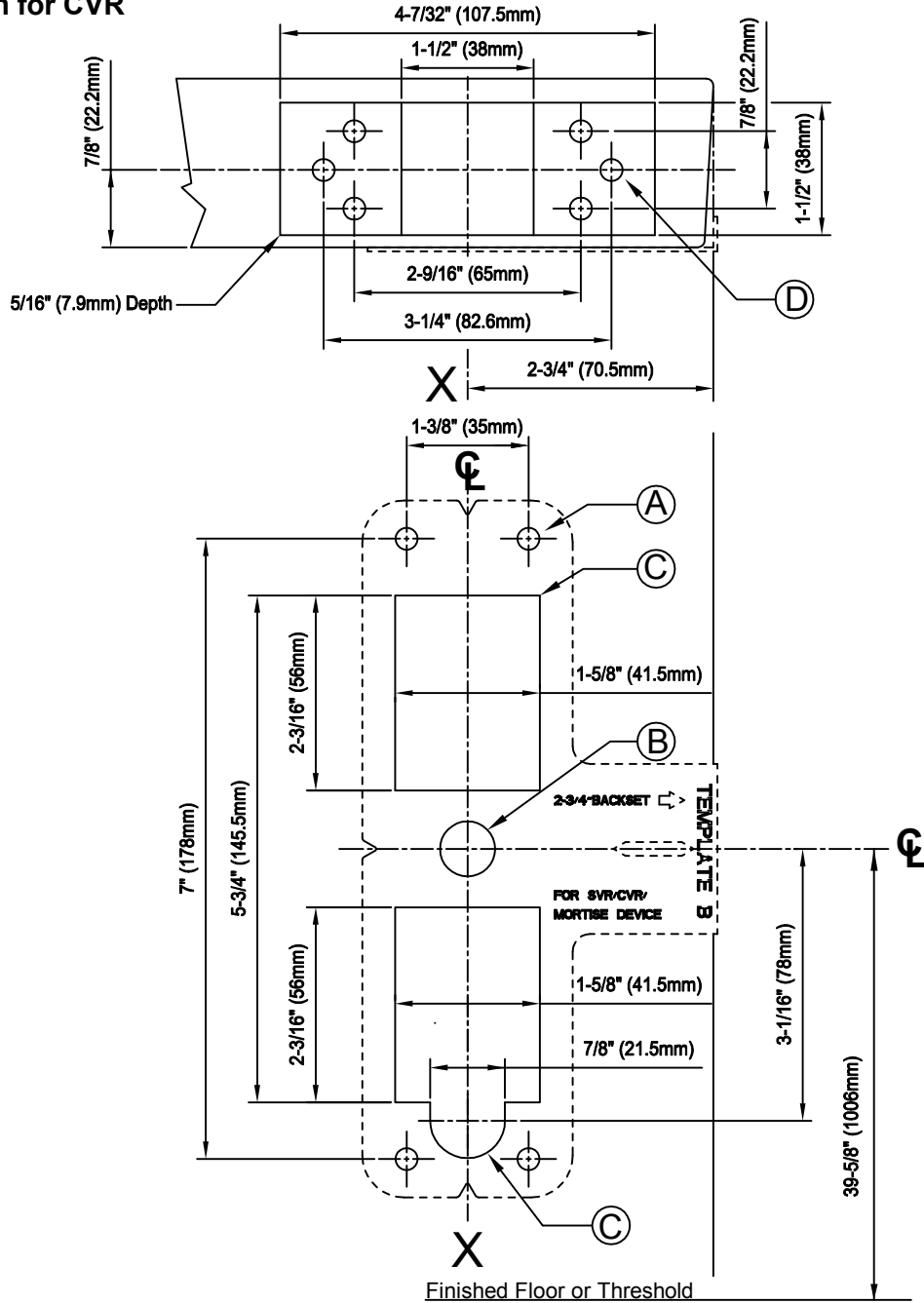


Notation	Illustration	Applications	Dimension	
			Metal	Wood
A	○	Exit Only	#25 Drill #10-24 Tap	1/8" (3mm) Drill Pilot 1" Deep
		Sex Bolt or Trim	1/4" (6mm) Drill (Device Side) 13/32" (10.3mm) Drill (Trim Side)	
B	○	Outside Cylinder	5/8" (16mm) Drill (Cut Device Side)	5/8" (16mm) Drill (Cut Thru)
C	⊂	Trim with Working Lever	7/8" (22mm) Drill (Cut Device Side Only)	

Q1000 Series Service Manual

Templates

Preparation for CVR

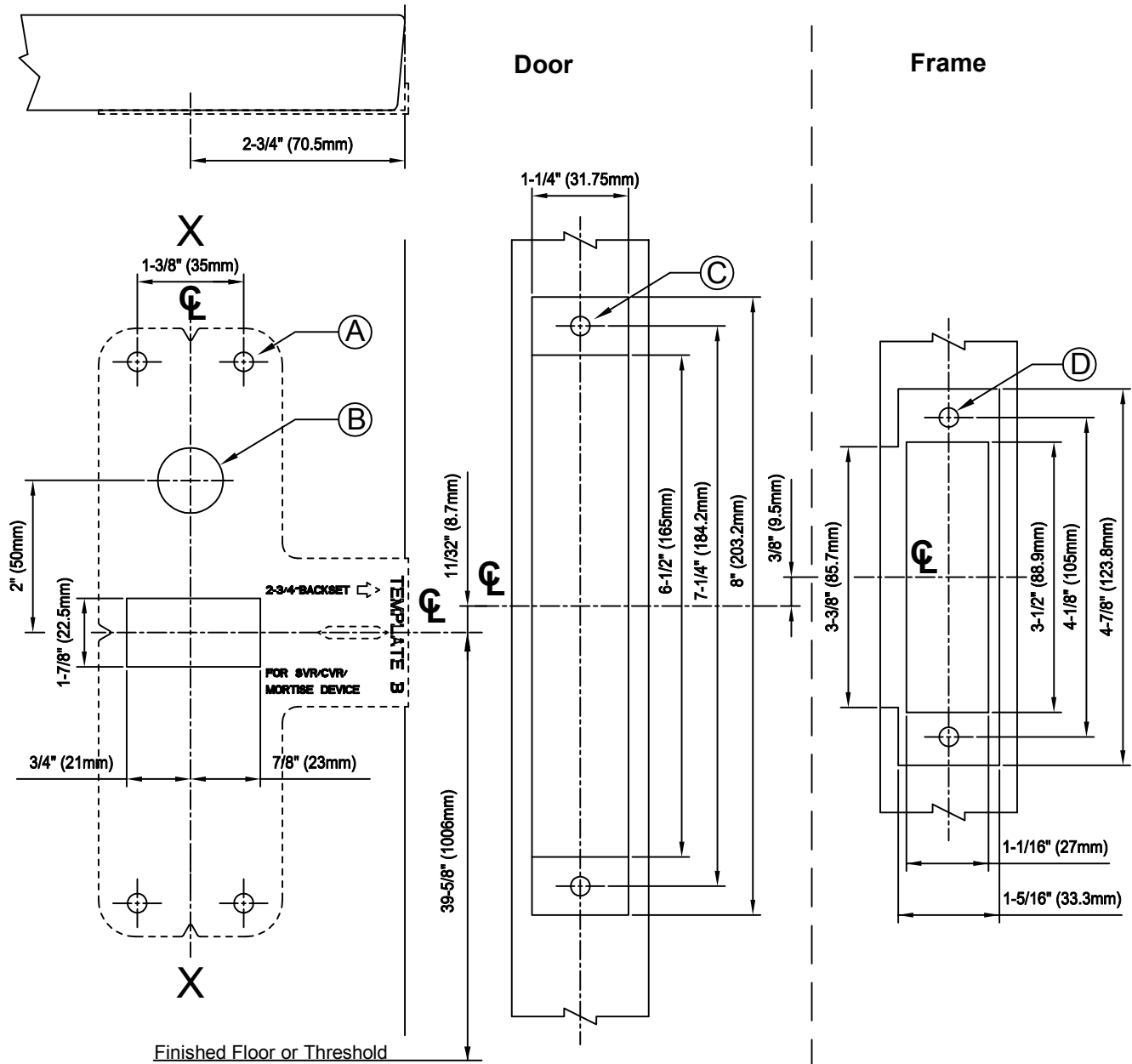


Notation	Illustration	Applications	Dimension	
			Metal	Wood
A	○	Exit Only	#25 Drill #10-24 Tap	1/8" (3mm) Drill Pilot 1" Deep
		Sex Bolt or Trim	1/4" (6mm) Drill (Device Side) 13/32" (10.3mm) Drill (Trim Side)	
B	○	Outside Cylinder	5/8" (16mm) Drill (Cut Device Side)	5/8" (16mm) Drill (Cut Thru)
C	□ □	Trim with Working Lever	Drill 1-3/8" (35mm) Depth (Cut Device Side Only)	
D	○	Top & Bottom Latch	#25 Drill #10-24 Tap	1/8" (3mm) Drill Pilot 1" Deep

Q1000 Series Service Manual

Templates

Preparation for Mortise

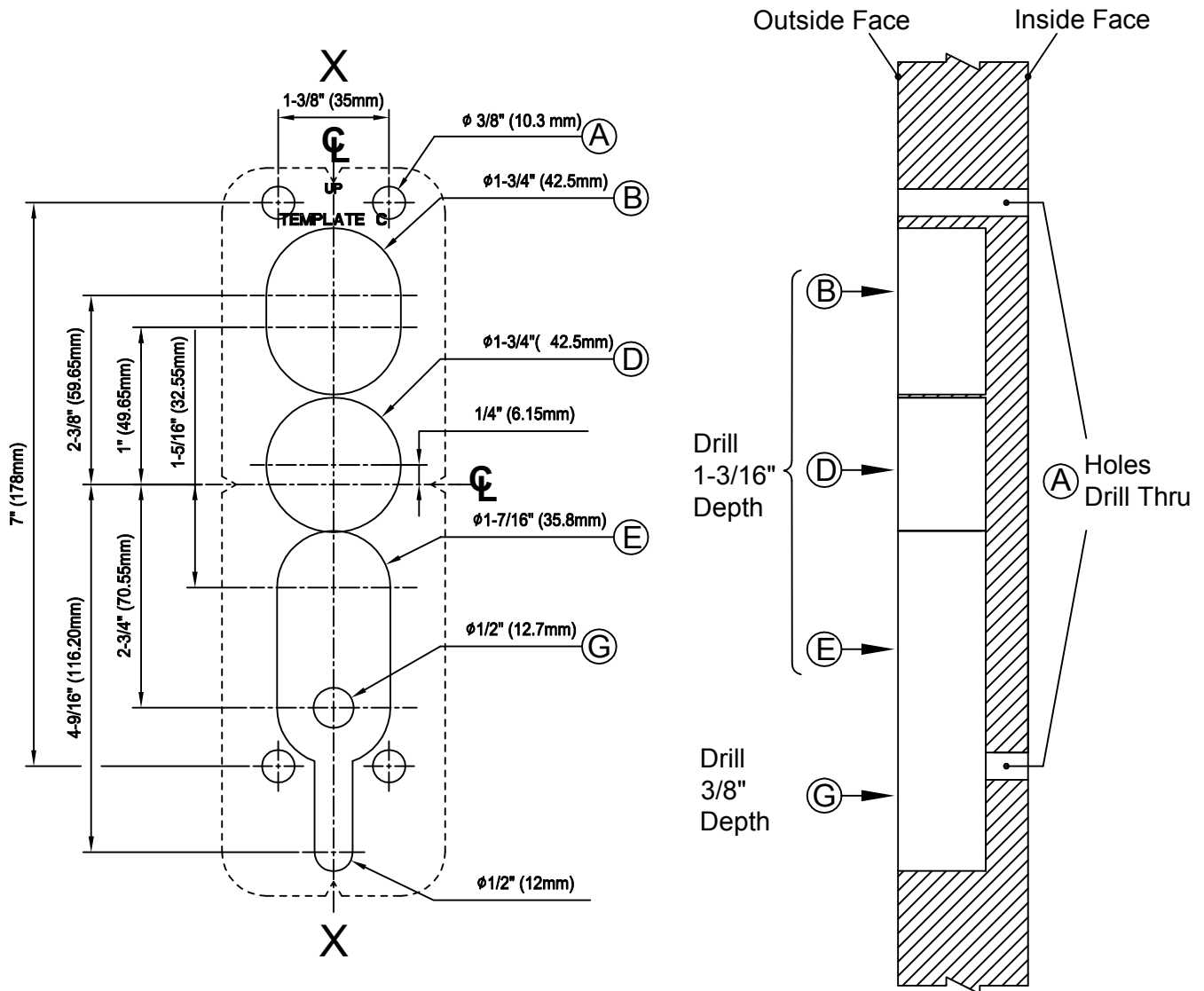


Notation	Illustration	Applications	Dimension	
			Metal	Wood
A	○	Exit Only	#25 Drill #10-24 Tap	1/8" (3mm) Drill Pilot 1" Deep
		Sex Bolt or Trim	1/4" (6mm) Drill (Device Side) 13/32" (10.3mm) Drill (Trim Side)	
B	○	Double Cylinder	7/8" (22mm) Drill (Cut Device Side Only)	
C	○	Mortise Lock Case	#16 Drill #12-24 Tap	5/32" (4mm) Drill Pilot 1" Deep
D	○	Strike	#16 Drill #12-24 Tap	5/32" (4mm) Drill Pilot 1" Deep

Q1000 Series Service Manual

Templates

Preparation of Q300 Series Trim for RIM/SVR/CVR/3PT

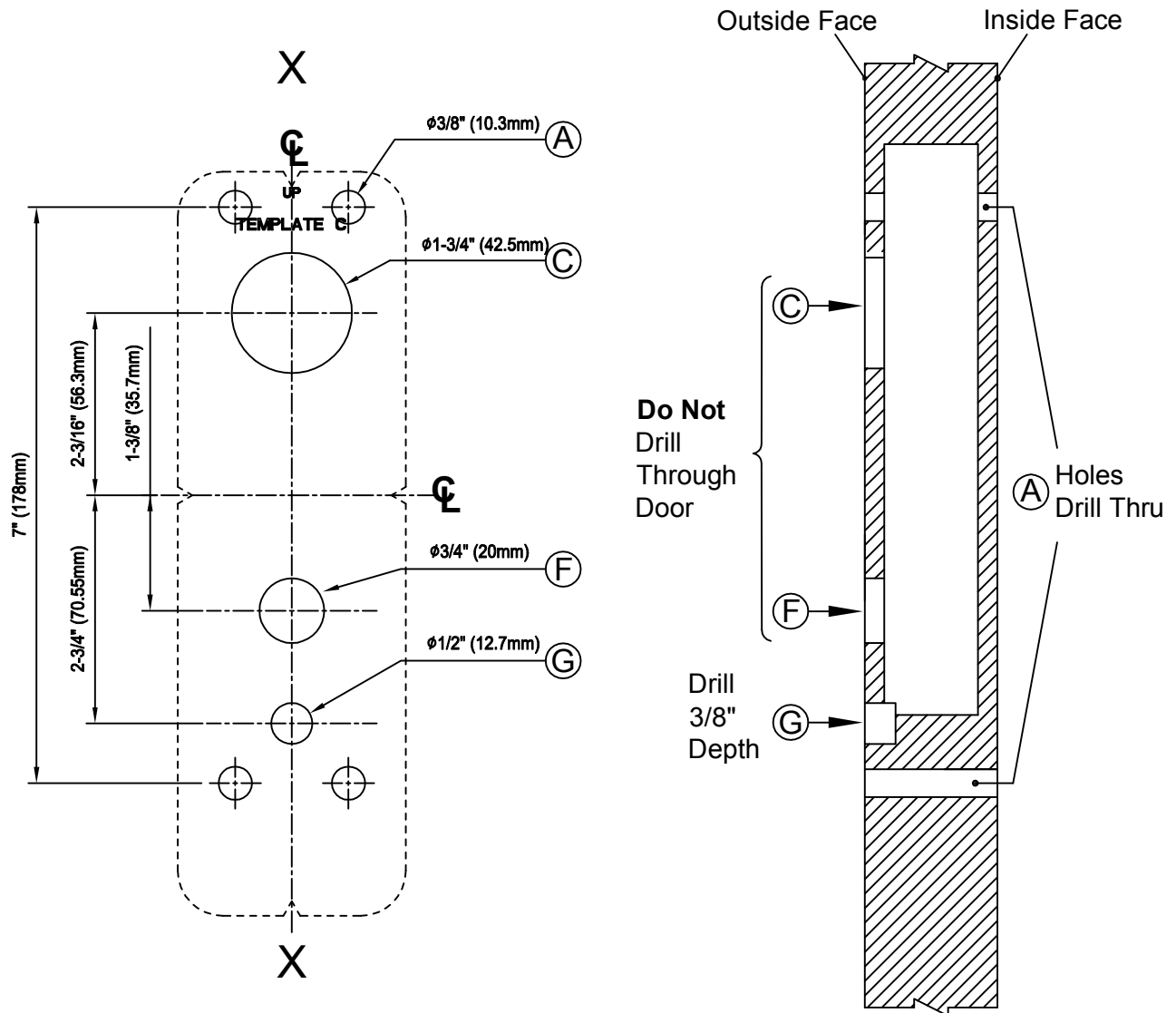


Cevice Type	RIM / SVR / CVR / 3PT			
Cut Out Illustration				
Description	Q302	Q308R	Q309R	Q314R
Function	02	08	09	14
Preparation	A+G	A+B+E	A+D+G	A+E

Q1000 Series Service Manual

Templates

Preparation of Q300 Series Trim for Mortise

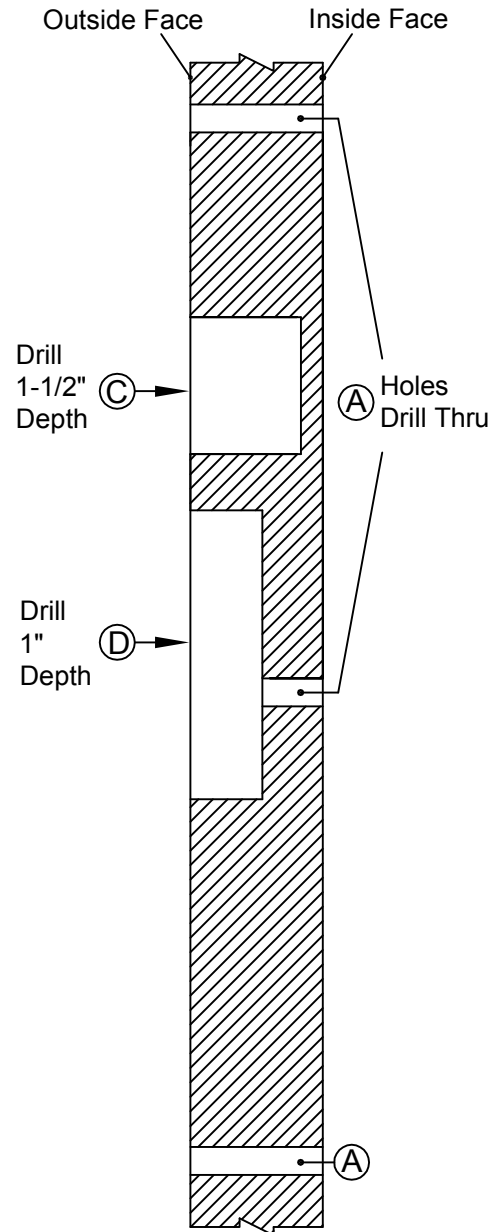
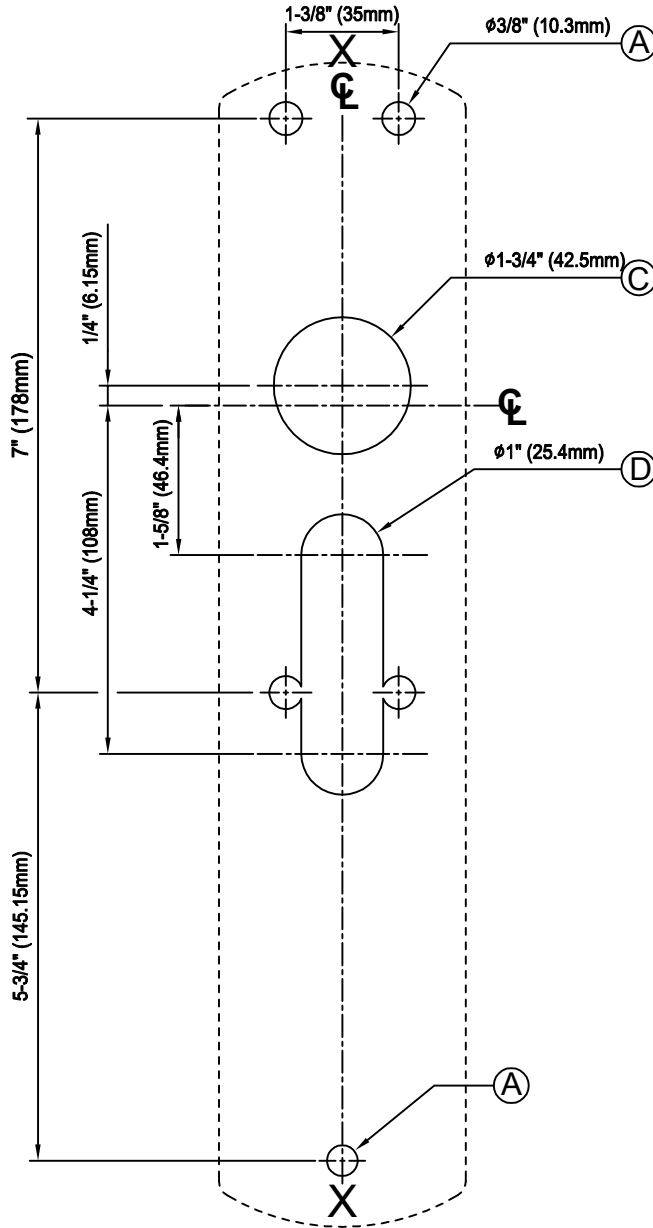


Device Type	Mortise			
Cut Out Illustration				
Description	Q302	Q308M	Q309M	Q314M
Function	02	08	09	14
Preparation	A+G	A+C+F+G	A+C+G	A+F+G

Q1000 Series Service Manual

Templates

Preparation of Q200 Series Trim for RIM/SVR/CVR/3PT

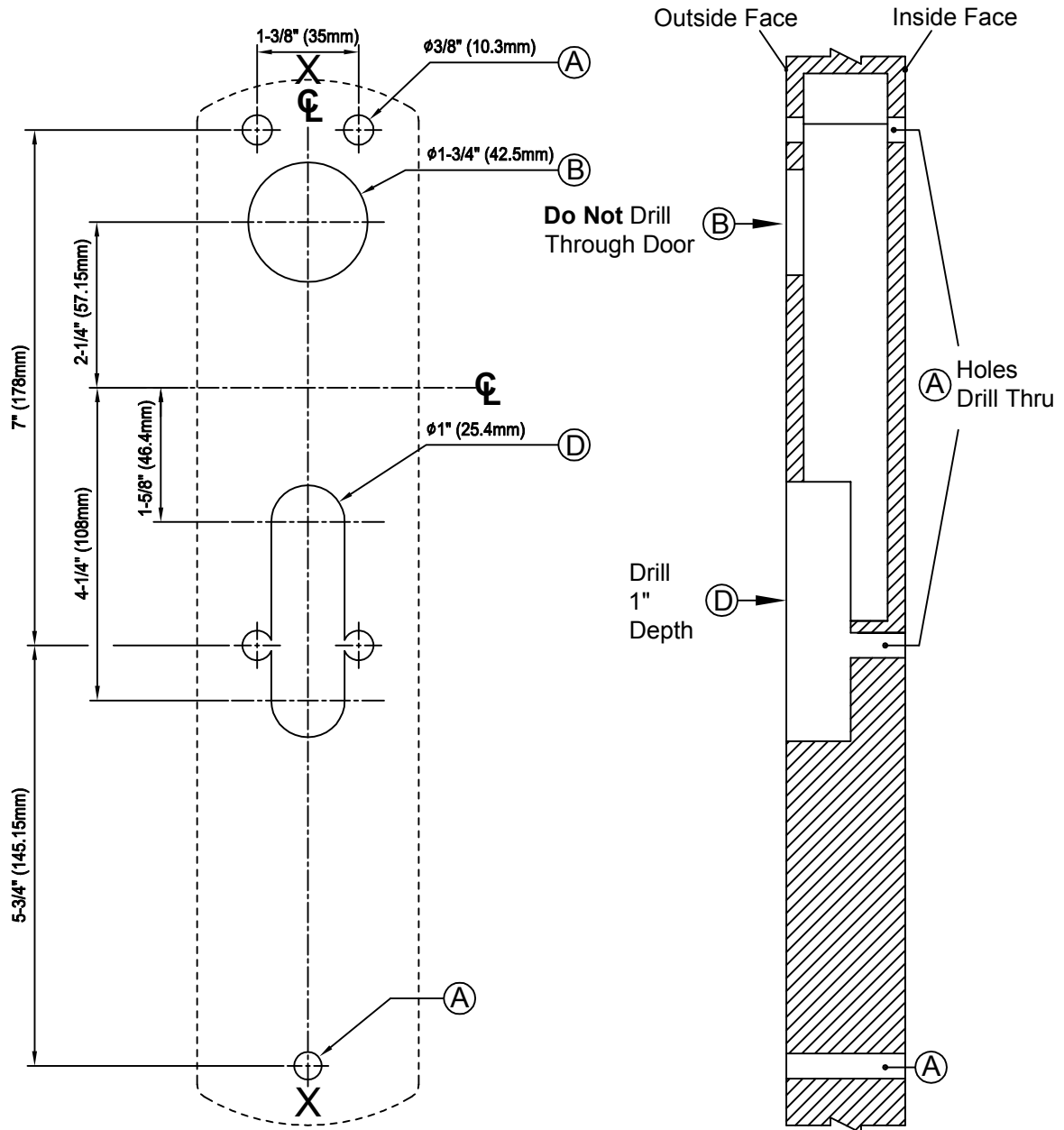


Device Type	RIM / SVR / CVR / 3PT			
Cut Out Illustration				
Description	Q201/Q202	Q203R	Q205R	Q215R
Function	01 / 02	03	05	15
Preparation	A	A+C	A+C+D	A+D

Q1000 Series Service Manual

Templates

Preparation of Q200 Series Trim for Mortise

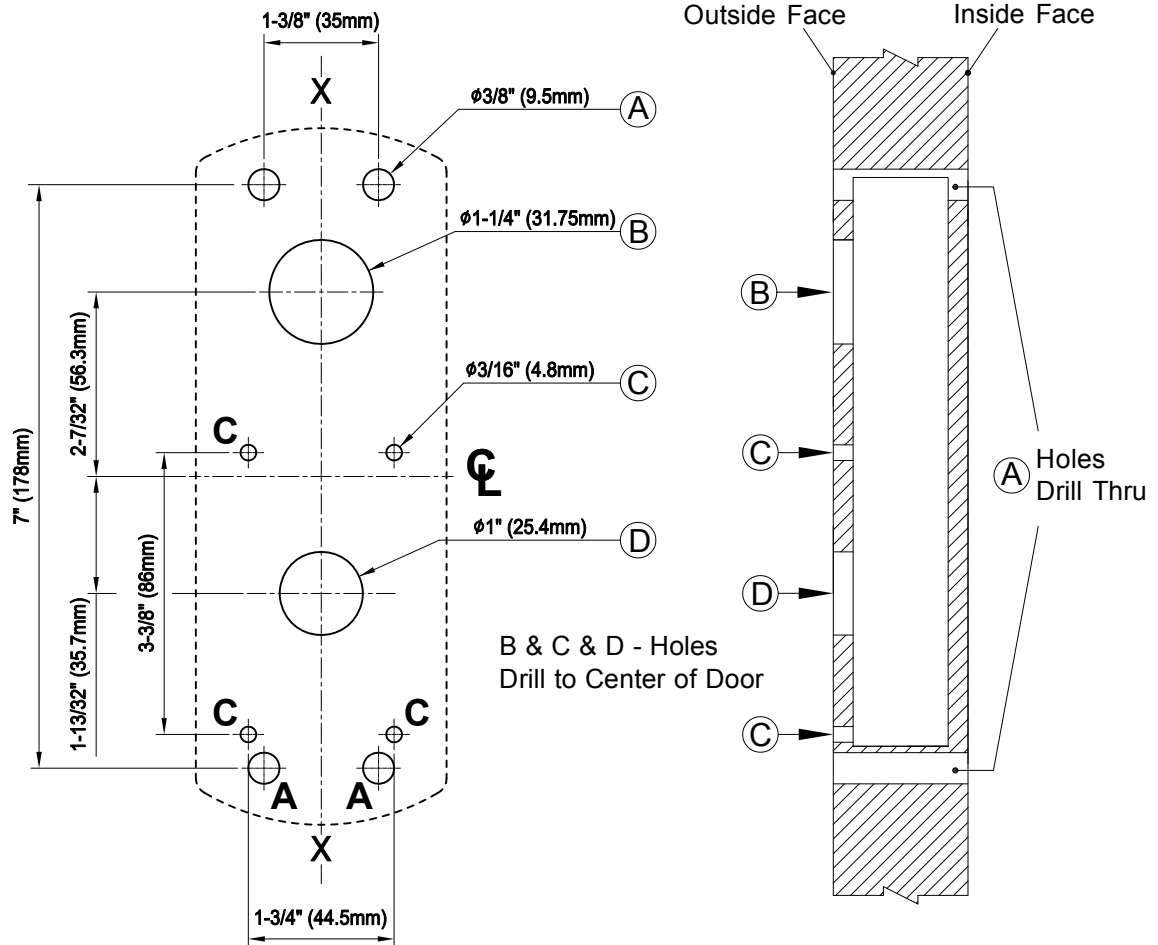


Device Type	Mortise		
Cut Out Illustration			
Description	Q203M	Q205M	Q215M
Function	03	05	15
Preparation	A+B	A+B+D	A+D

Q1000 Series Service Manual

Templates

Preparation of Q400 Series Trim for Mortise

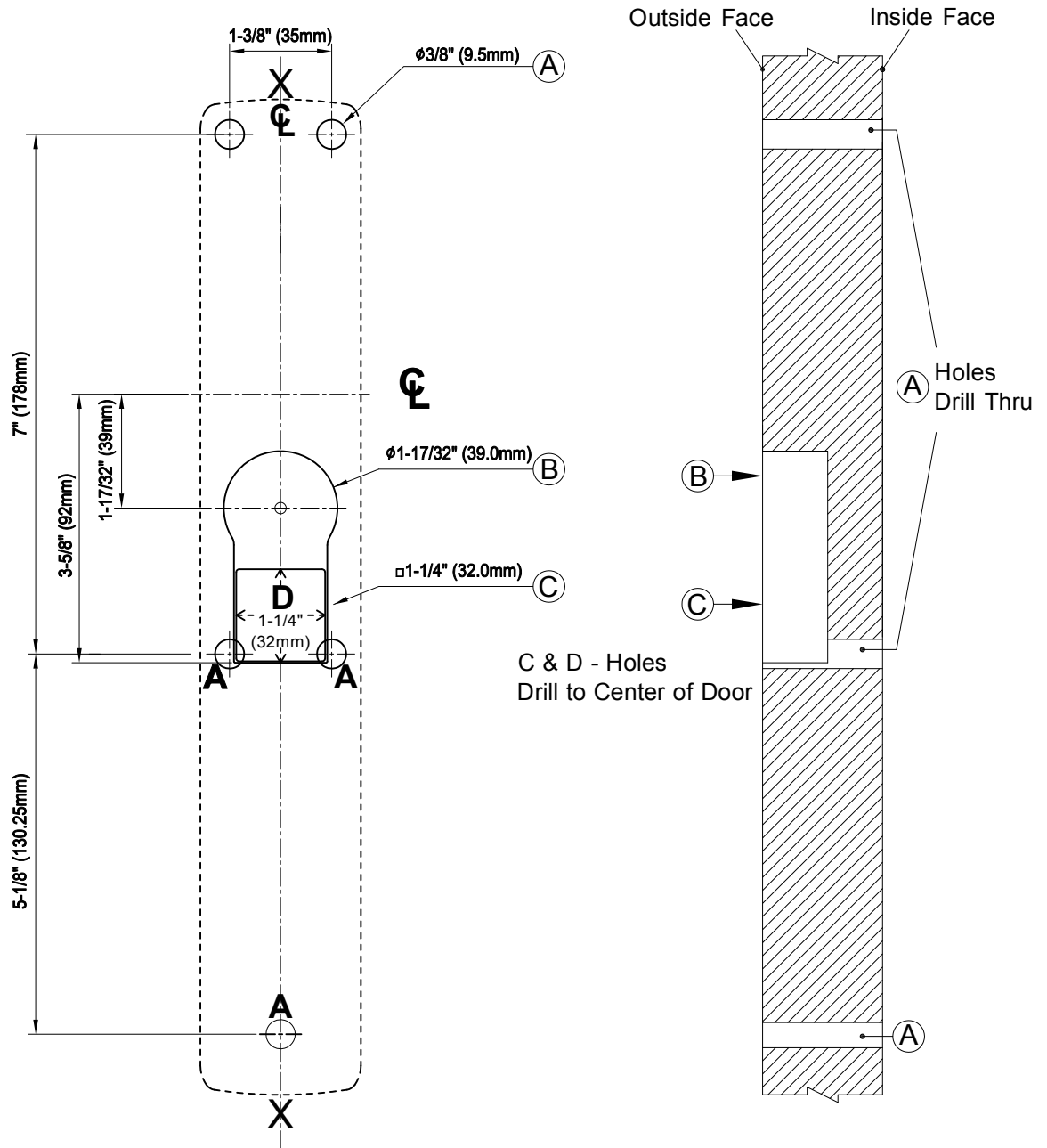


Device Type	Mortise	
Cut Out Illustration		
Description	HL408 (RHR)/HL408(LHR)	HL414(RHR)/HL414(LHR)
Function	08	14
Preparation	A+B+C+D	A+C+D

Q1000 Series Service Manual

Templates

Preparation of Q600 Series Trim for RIM/SVR/CVR/3PT

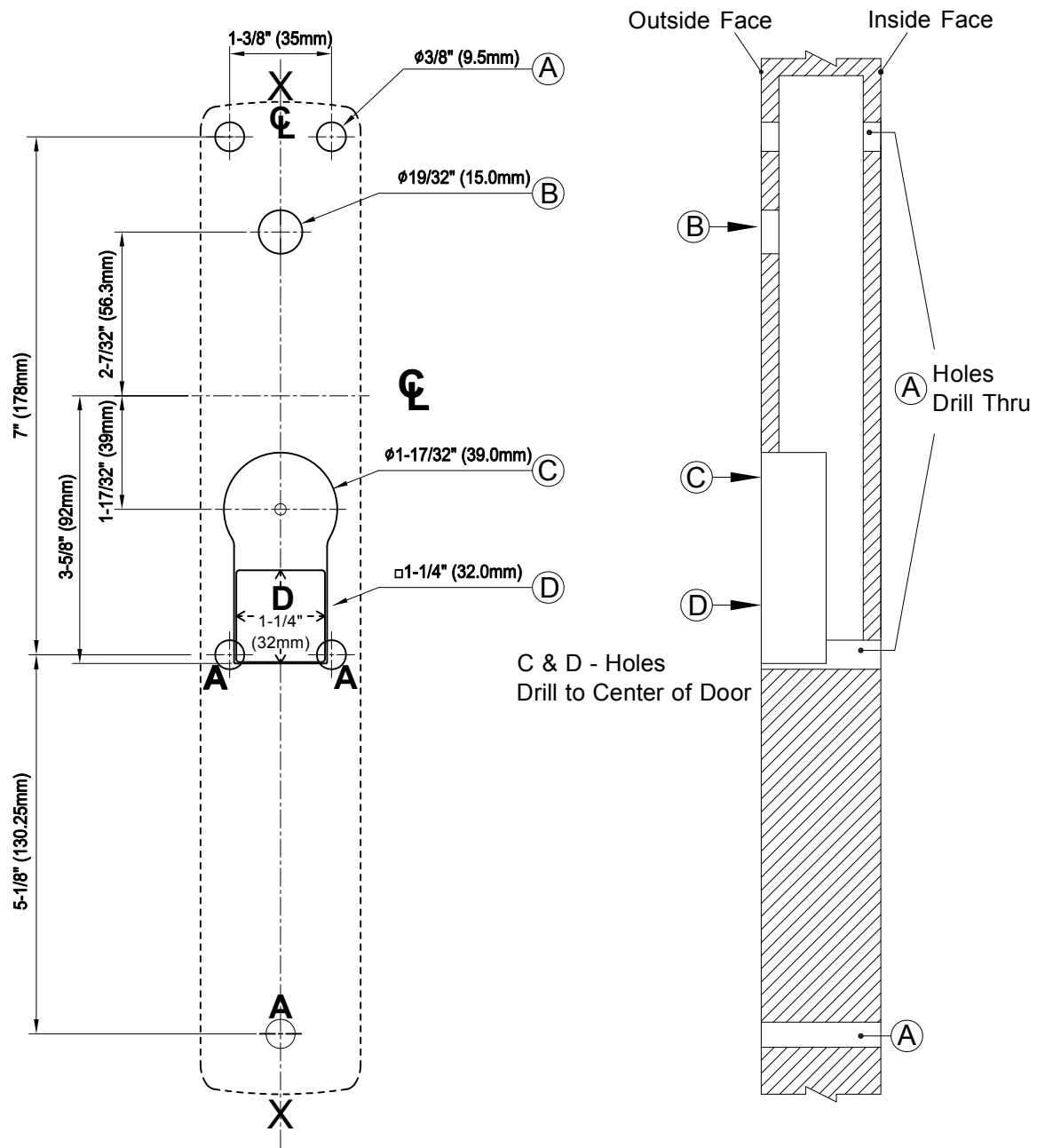


Device Type	RIM / SVR / CVR / 3PT		
Cut Out Illustration			
Description	602	608R / 609R	614R
Function	02	08 / 09	14
Preparation	A	A+C	A+D

Q1000 Series Service Manual

Templates

Preparation of Q600 Series Trim for Mortise



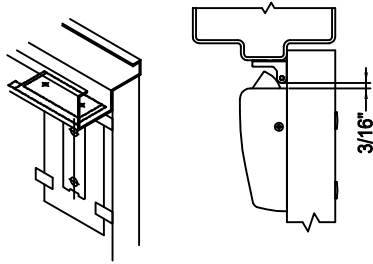
Device Type	Mortise		
Cut Out Illustration			
Description	602	608M / 609M	614M
Function	02	08 / 09	14
Preparation	A	A+B+C	A+B+D

Q1000 Series Service Manual

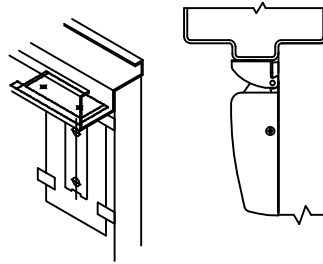
Templates

Preparation of Top Latch for SVR/3PT

Top Latch & Q106 Strike



Top Latch & Q108 Strike



Top Latch & Q215 Strike

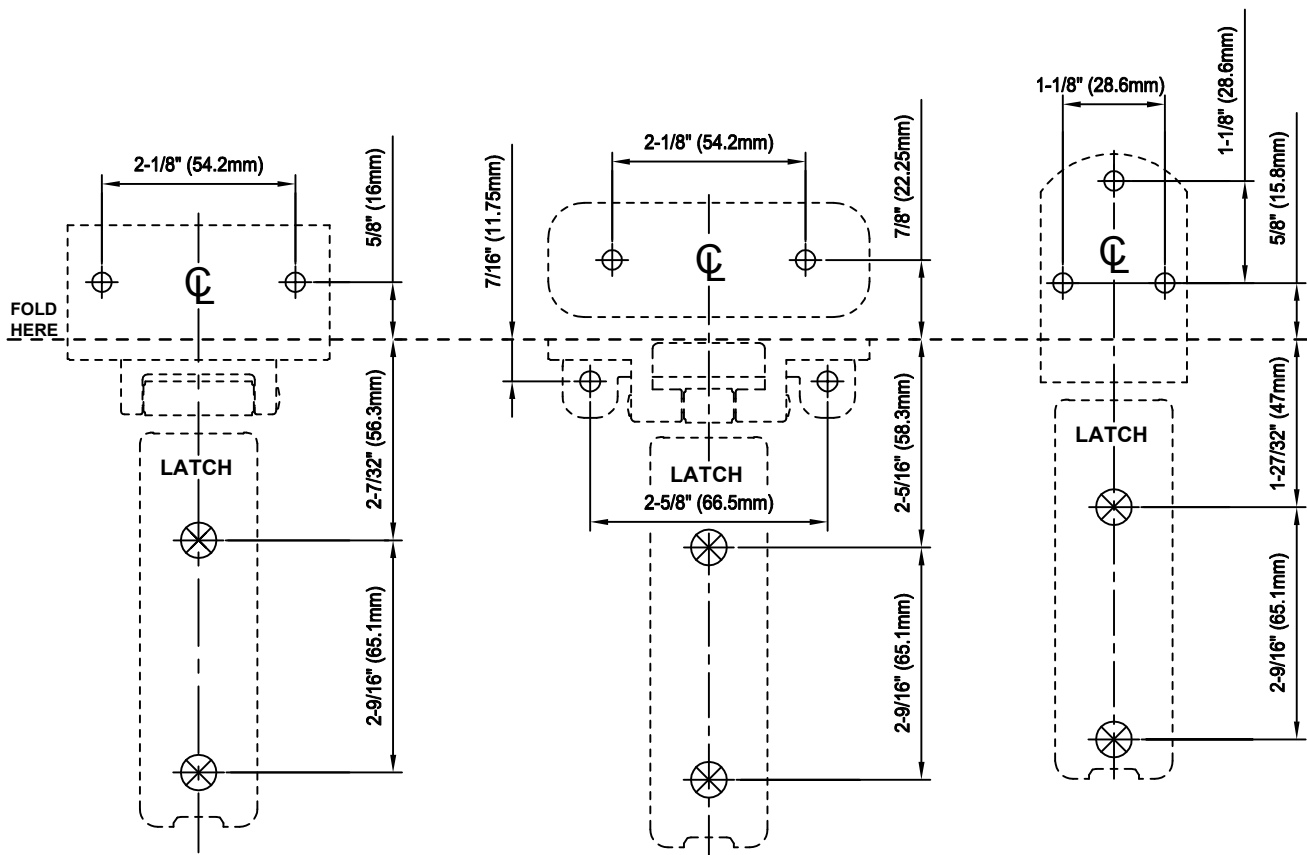
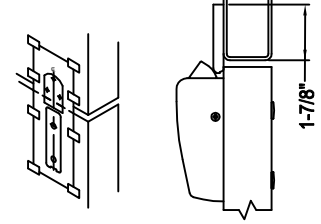


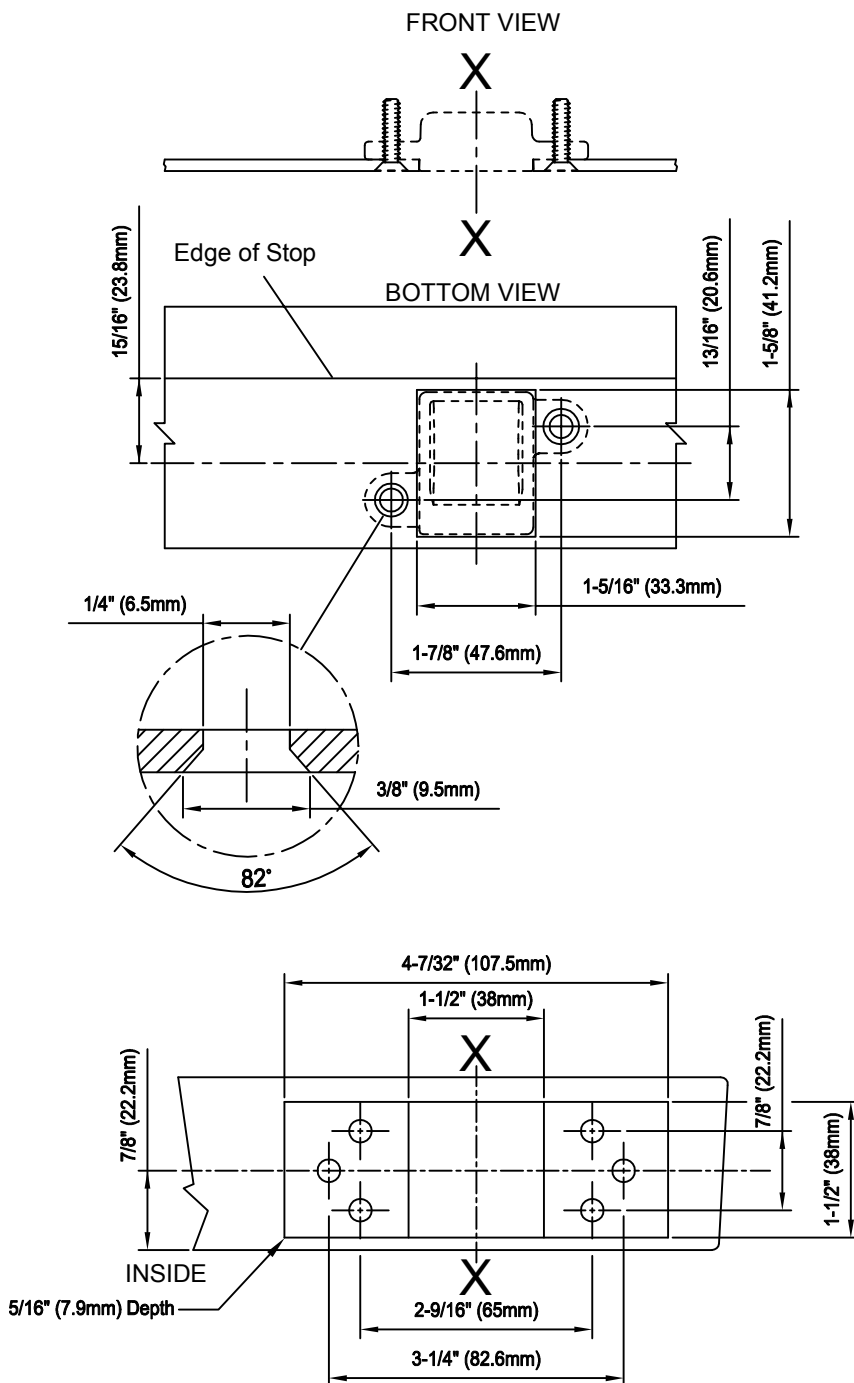
Illustration	Applications	Dimension	
		Metal	Wood
○	Strike Screw	#25 Drill #10-24 Tap	1/8" (3mm) Drill Pilot 1" Deep
⊗	Sex Bolt	5/16" (8mm) Drill (Device Side) 13/32" (10.3mm) Drill (Outside)	

Q1000 Series Service Manual

Templates

Preparation of Top Latch for CVR

Top Latch & Q216 Strike



Release Plunger

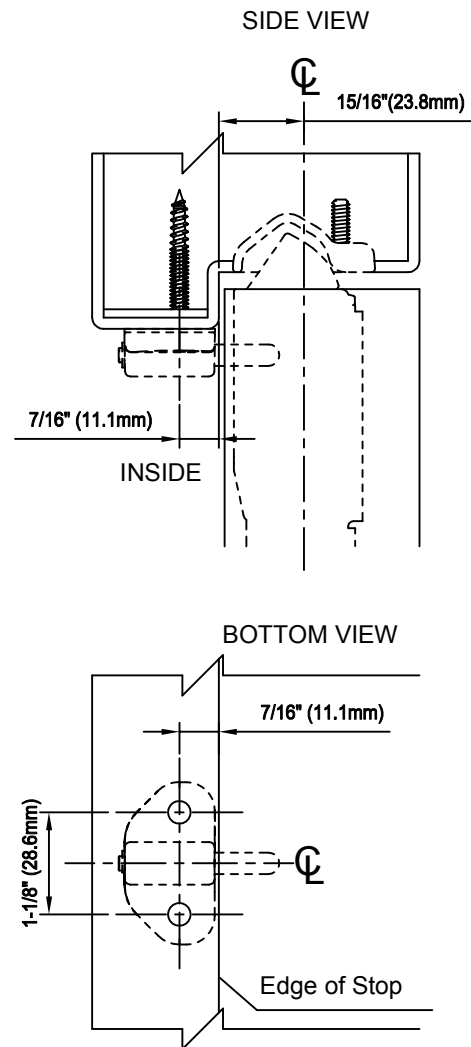


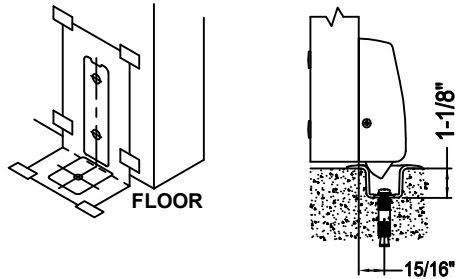
Illustration	Applications	Dimension	
		Metal	Wood
○	Latch & Release Plunger	#25 Drill #10-24 Tap	1/8" (3mm) Drill Pilot 1" Deep

Q1000 Series Service Manual

Templates

Preparation of Bottom Latch for SVR/CVR/3PT

Bottom Latch & Q227 Strike



Bottom Latch & Q224 Strike

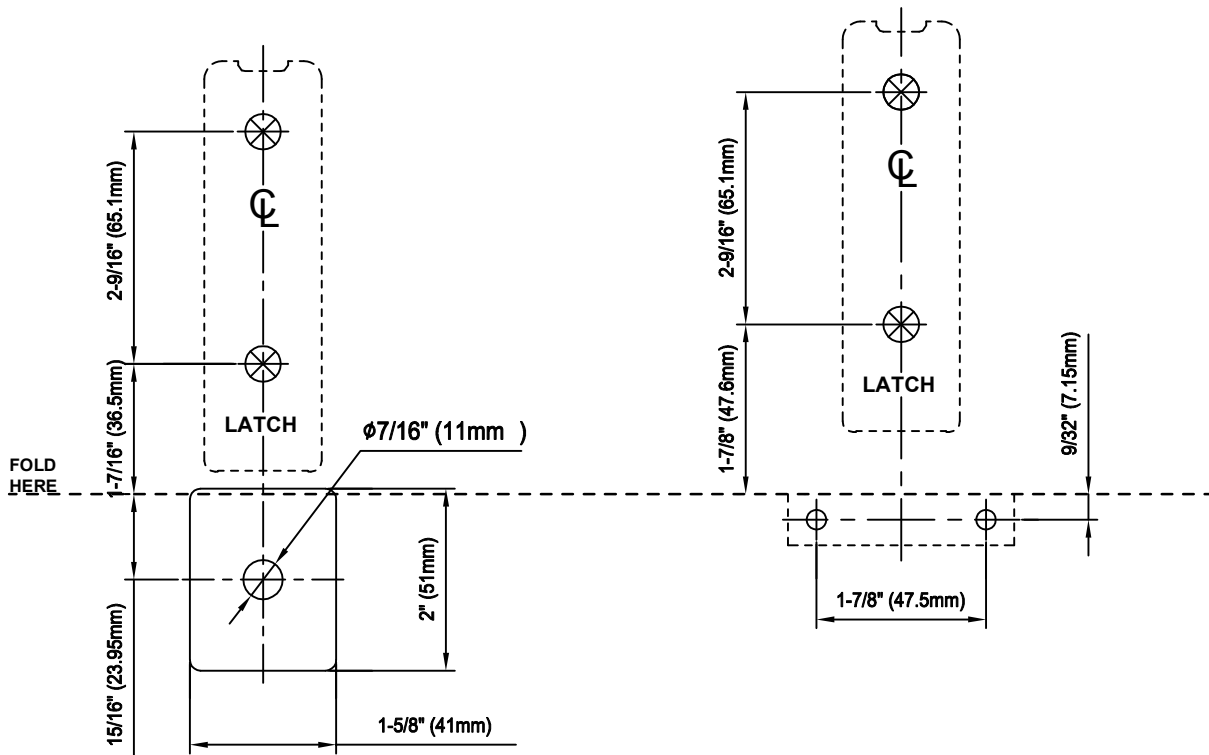
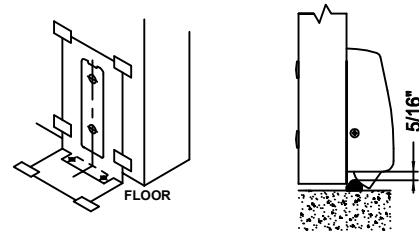


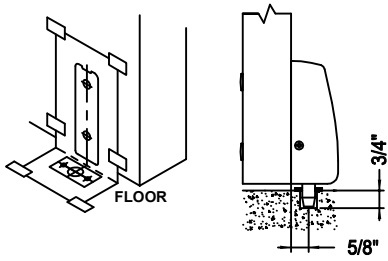
Illustration	Applications	Dimension	
		Metal	Wood
○	Strike Screw	#25 Drill #10-24 Tap	1/8" (3mm) Drill Pilot 1" Deep
⊗	Sex Bolt	5/16" (8mm) Drill (Device Side) 13/32" (10.3mm) Drill (Outside)	

Q1000 Series Service Manual

Templates

Preparation of Bottom Latch for SVR/CVR/3PT

Bottom Latch & Q225 Strike



Bottom Latch & Q226 Strike

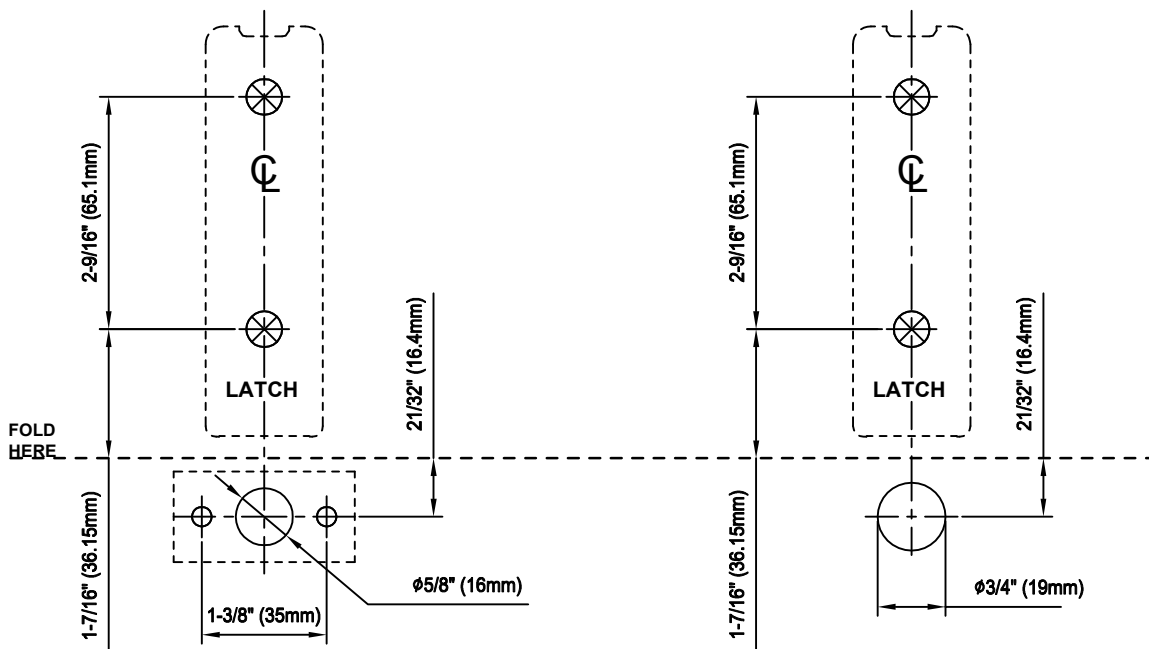
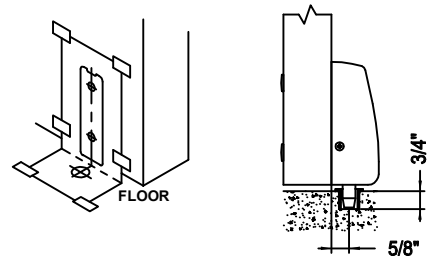


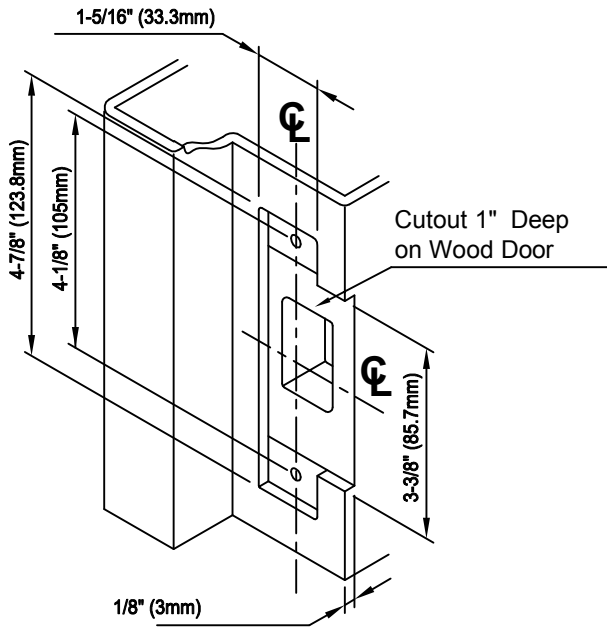
Illustration	Applications	Dimension	
		Metal	Wood
○	Strike Screw	#25 Drill #10-24 Tap	1/8" (3mm) Drill Pilot 1" Deep
⊗	Sex Bolt	5/16" (8mm) Drill (Device Side) 13/32" (10.3mm) Drill (Outside)	

Q1000 Series Service Manual

Templates

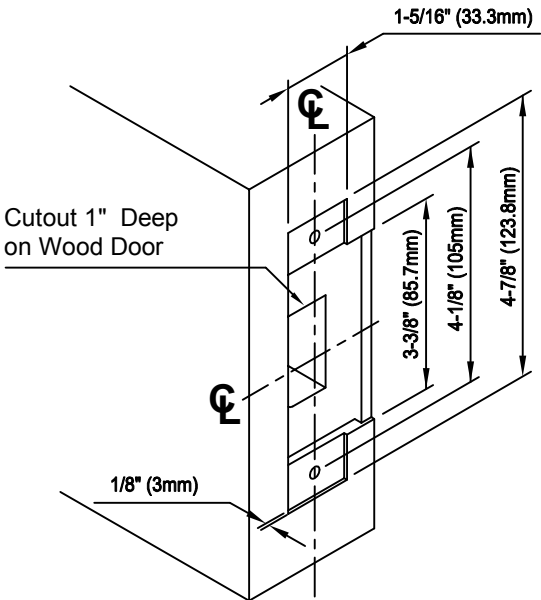
Preparation of Strike for Mortise

Q306 Strike



SINGLE DOOR

Q306 /Q336 Strike



DOUBLE DOOR

Q337 /Q338 Open Back Strike

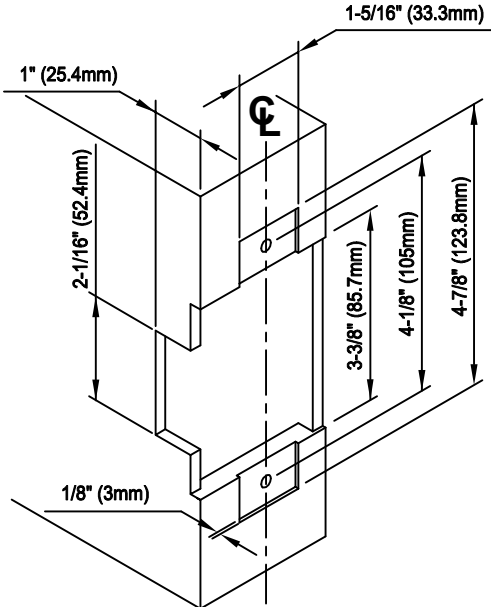


Illustration	Applications	Dimension	
		Metal	Wood
○	Strike Screw	#25 Drill #10-24 Tap	1/8" (3mm) Drill Pilot 1" Deep

Q1000 Series Service Manual

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.

Q1000 Series Service Manual

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 attempt to disassemble or reassemble the lock body.

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