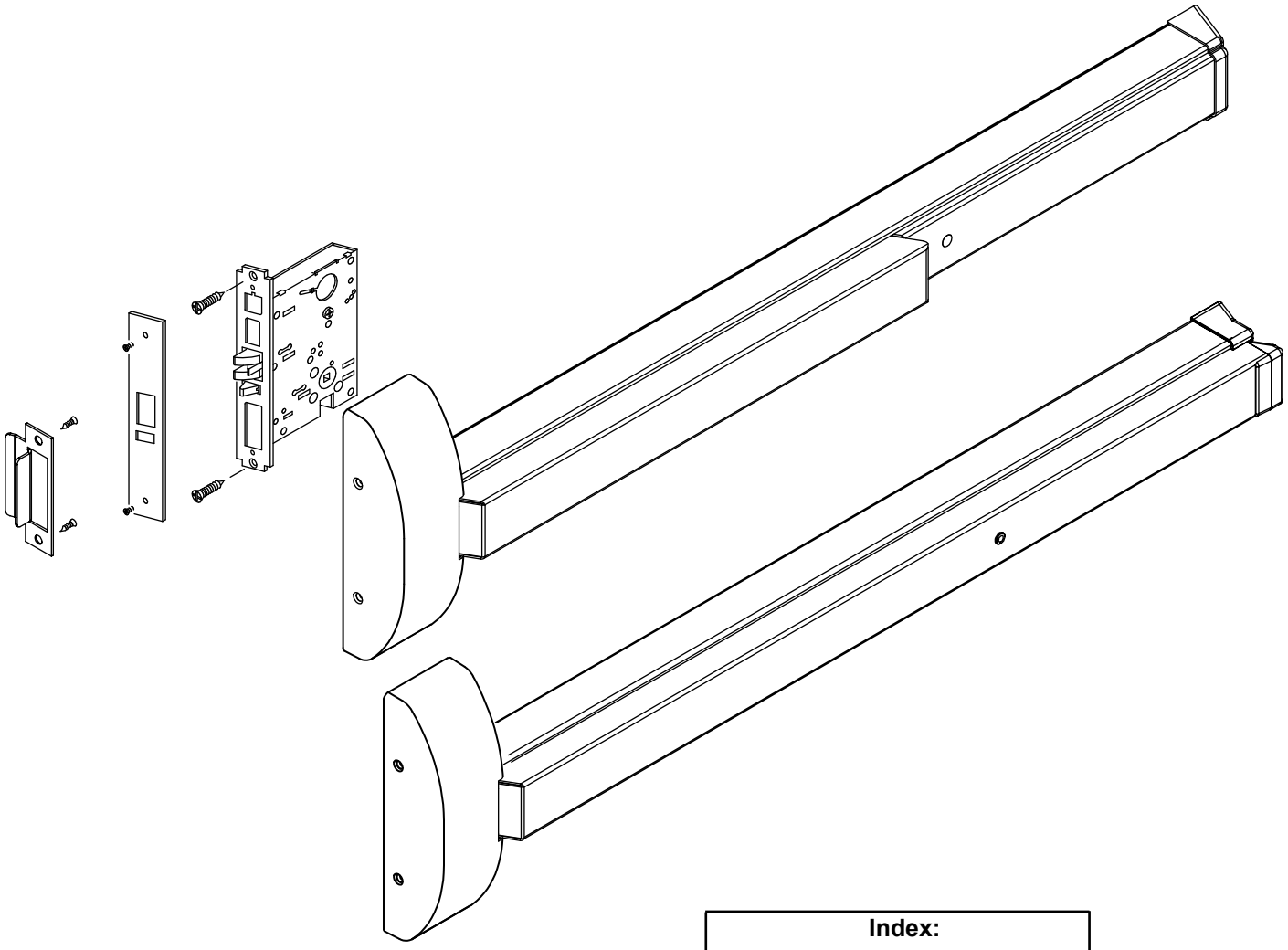
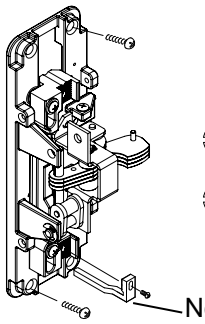
9500/F9500 & 9500FL/F9500FL SERIES MORTISE EXIT DEVICE



Index:

Note: One set of instructions should be left with building owner after device has been installed.

SCREW CHART

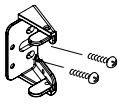


(4) 12-24 x 1" R.H.P.M.S. (Metal or Thru Bolts) — Chassis Mounting

(4) #12 x 1 1/4" R.H.P.T.S. (Wood Door) — Chassis Mounting

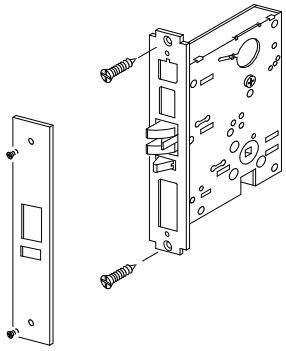
(1) 10-32 x 5/8" R.H.P.T.S. — Lifter arm Mounting

Note: Lifter arm (Part is handed).



(2) 12-24 x 1" R.H.P.M.S. (Metal or Thru Bolts) — End Cap Bracket

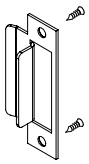
(2) #12 x 1 1/4" R.H.P.T.S. (Wood Door) — End Cap Bracket



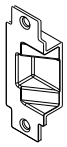
(2) 1/4-20 x 1/2" F.H.P.M.S. — Lock Body Mounting

(2) #12 x 1" F.H.P.T.S. (Wood Door) — Lock Body Mounting

(2) 8-32 x 1/4" F.H.P.M.S. — Face Plate Mounting



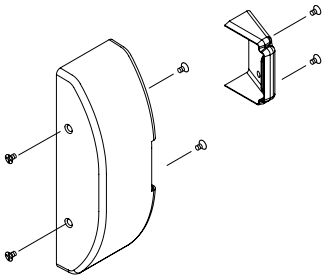
465



565M

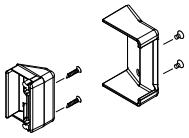
(2) 1/4-20 x 1/2" F.H.P.M.S. — Strike Mounting

(2) #12 x 1" F.H.P.T.S. (Wood Door) — Strike Mounting



(4) 8-32 x 1/4" F.H.P.M.S. — Chassis Cover

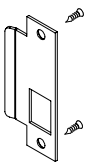
(2) 8-32 x 3/8" T.H.P.M.S. — End Cap



"FL" Full length touch bar & rail series.

(2) 8-32 x 1/4" F.H.P.M.S. — Chassis Cover & End Cap

(2) #10 x 1" F.H.P.T.S. — End Cover Mounting

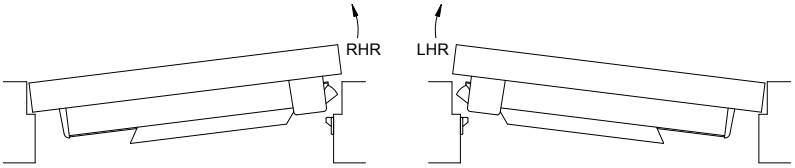


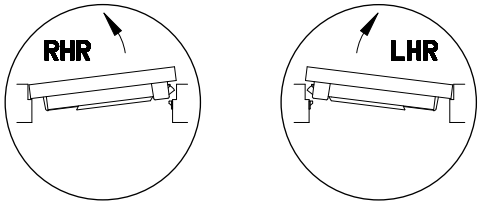
HC Strike for Hurricane rated devices only

(2) 1/4-20 x 1/2" F.H.P.M.S. — Strike Mounting

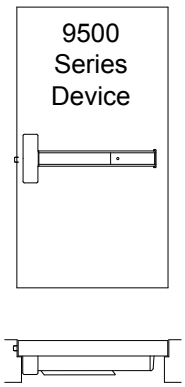
(2) #12 x 1" F.H.P.T.S. (Wood Door) — Strike Mounting

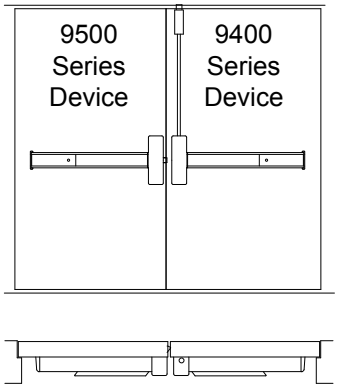
HANDING OF DOOR

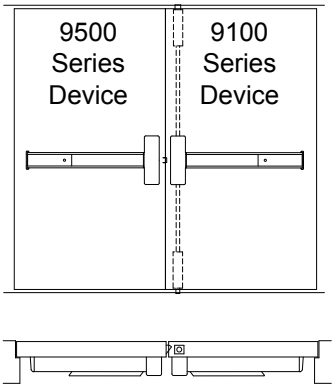




TYPICAL APPLICATIONS



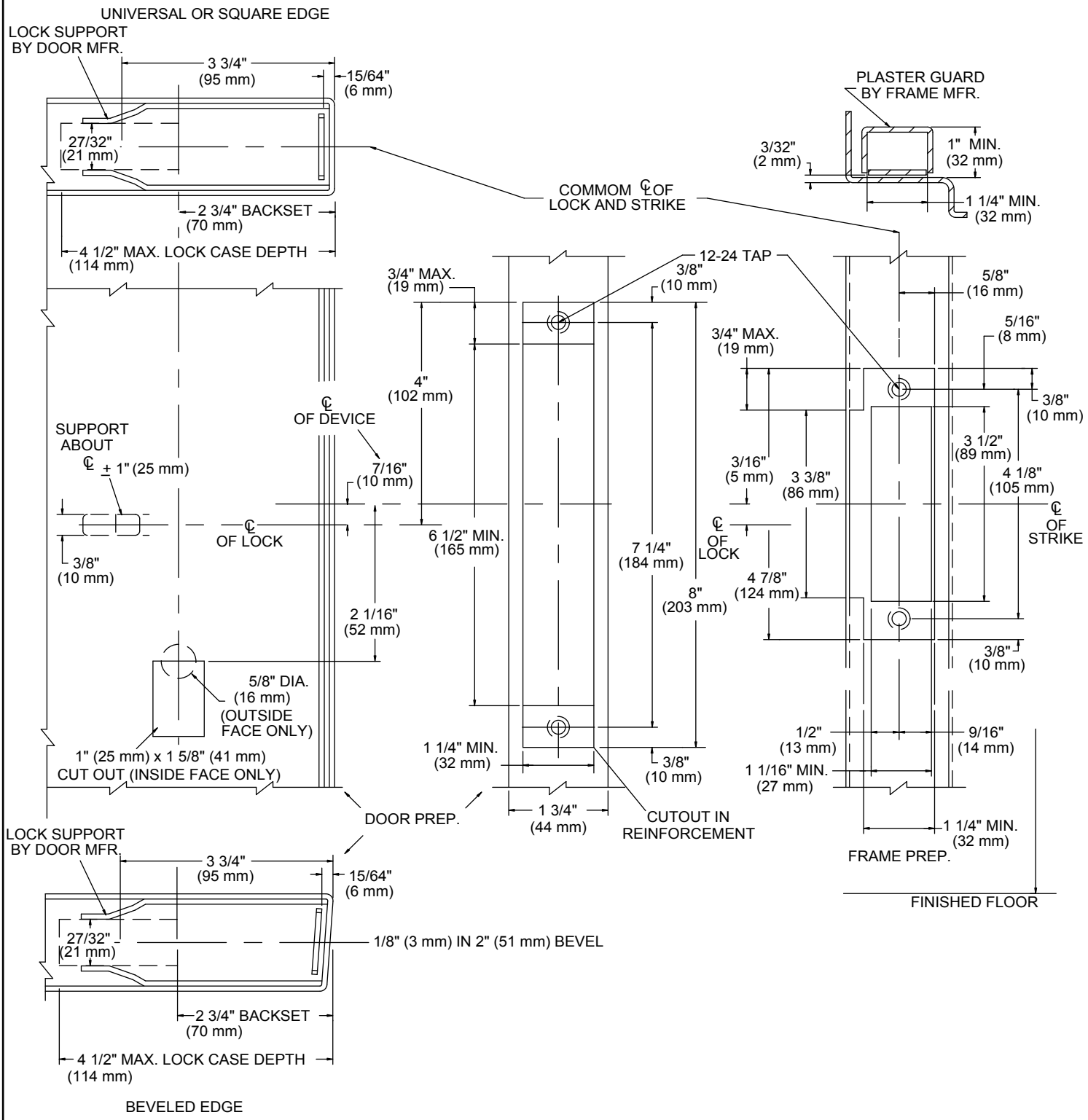




SPECIAL TOOLS FOR INSTALLATION

12-24 Tap
Drill bits: 1/8", #25, #16, #21 & 3/8"
Hole saws: 1", 1 1/4", & 2 1/8" diameter for trim (if required).
Jig saw or router may be required.

ANSI 115.1 STANDARD MORTISE LOCK DOOR & FRAME PREP.



1 Installation

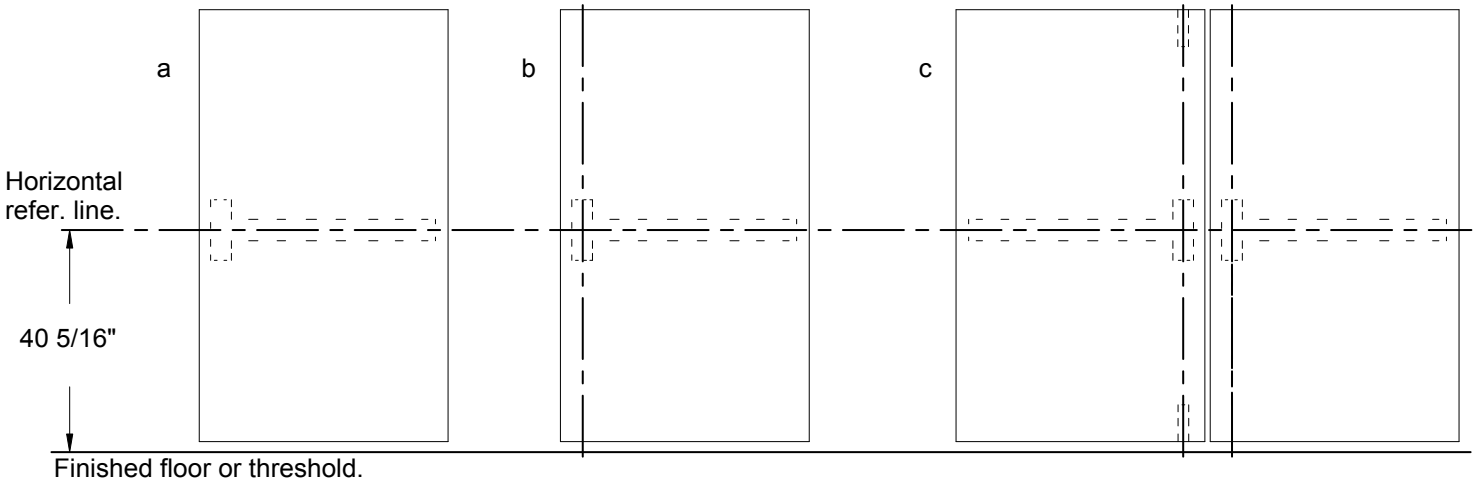
Read the entire instruction sheet prior to installation.

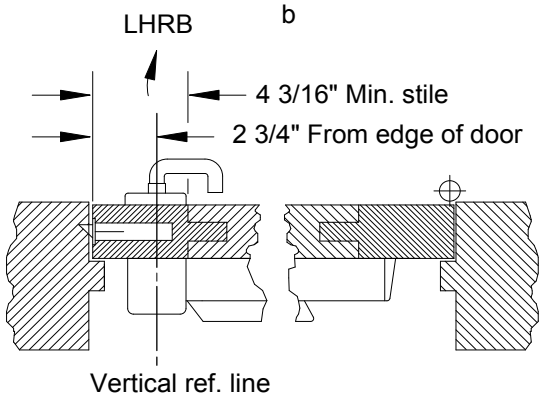
Before Installing Hardware:

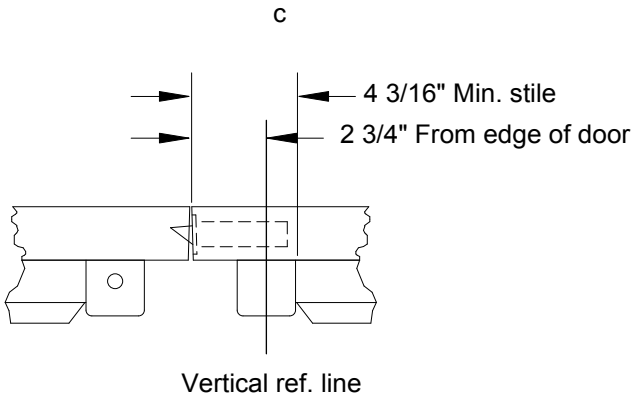
1. Door should be fitted and hung.
2. Verify door width, with carton label for correct exit device length. (See Step 9)
3. For hand reversal of chassis assembly see Step 3.
4. For hand reversal of mortise lock body see Step 4.

Note: If device is being installed over glass lite panels, shim kit may be required. Order GK9000.

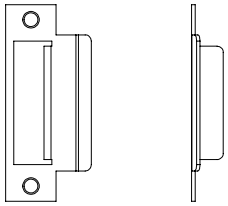
2 Door preperation



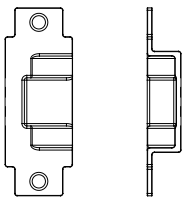




No. 465 Strike standard

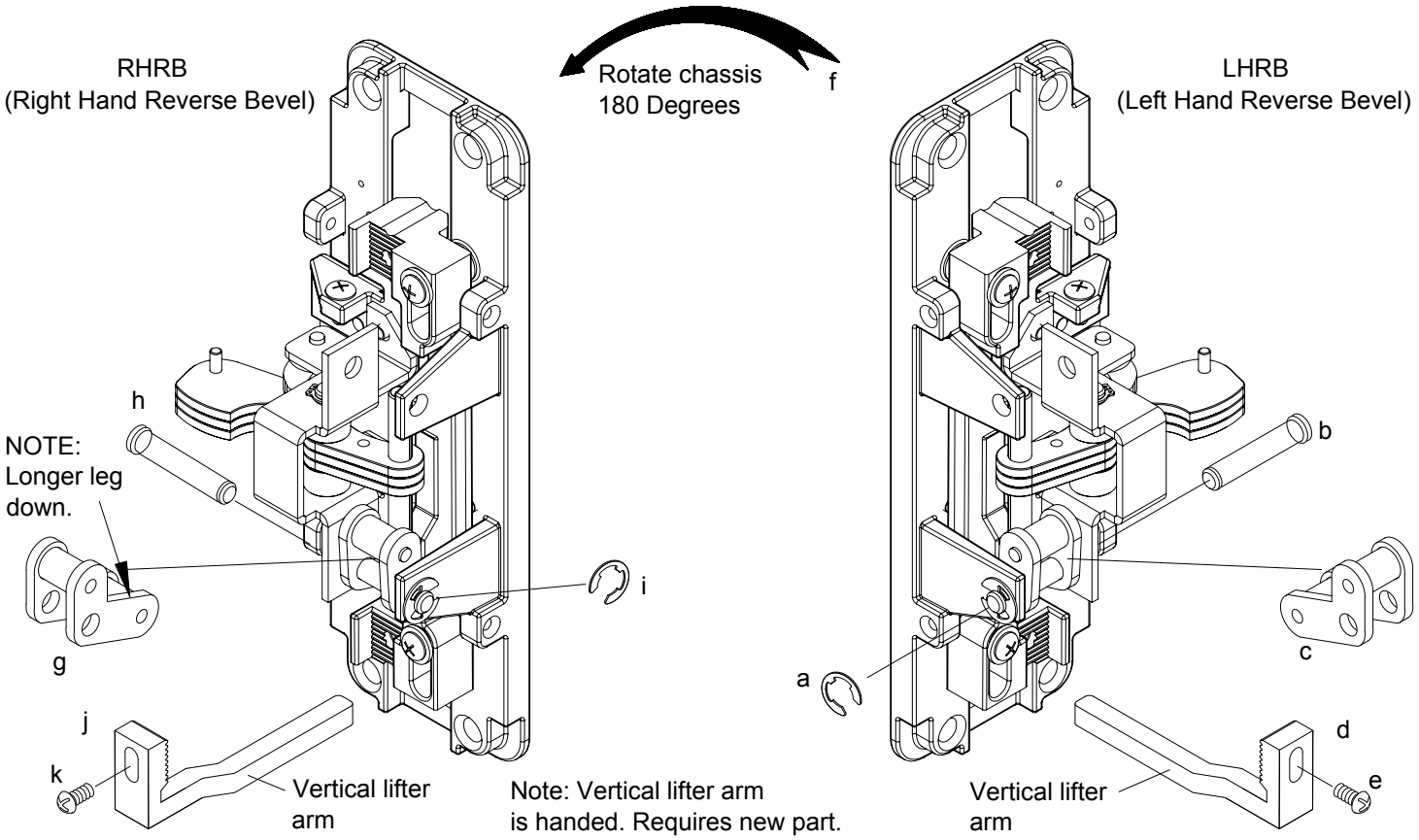


No. 565M Open Back Strike (Non handed)



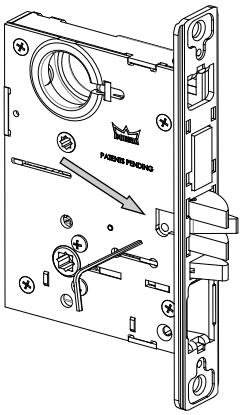
See website or contact DORMA techinical department for correct door prep template.

3 Hand reversal of chassis (if required).

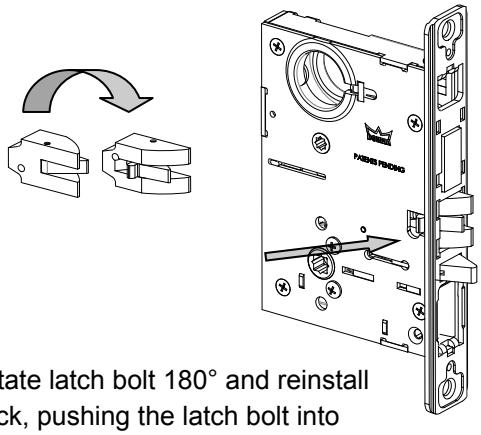


Note: Vertical lifter arm is handed. Requires new part.

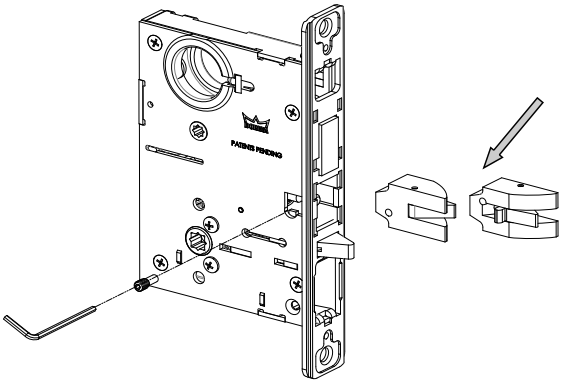
4 Hand reversal of mortise lock body (if required).



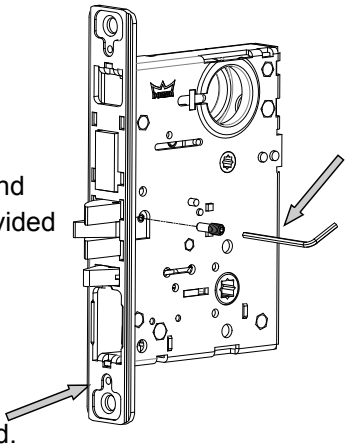
1) Remove special screw with provided 5/32” Allen wrench.



3) Rotate latch bolt 180° and reinstall into lock, pushing the latch bolt into the lock and then releasing



2) Firmly grip latch bolt and pull latch out of lock



4) Install the special screw and tighten securely with the provided allen wrench

5) Change backplate bevel as required.

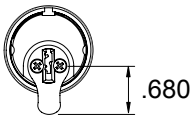
5 Handing of trim, cylinder specification & installation

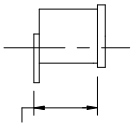
Note: For specific trim functions, cylinder type, and handing information; see additional instructions packed with trim.

Standard 2" "V" Plate Trim
1 1/8"

Standard 3" "H" Plate Trim
1 1/8"

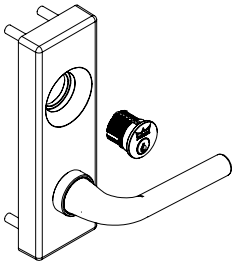
DORMA No. 12
For 05 & 08 functions:

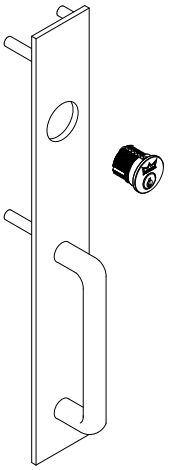


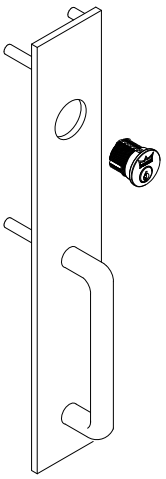


Accepts standard
1 1/8" cylinder.

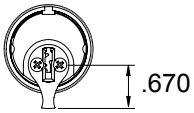
Standard "YM" Trim
1 1/8"



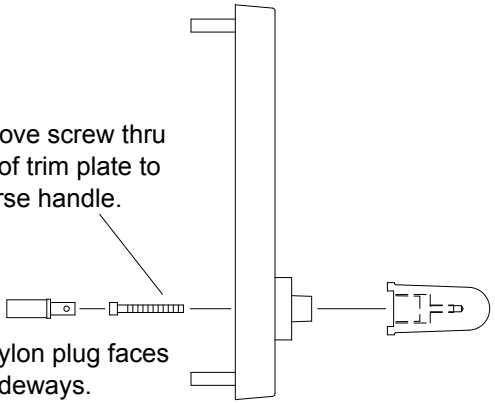




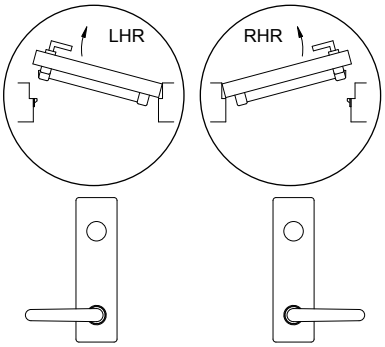
DORMA No. 13
For 03 function:



Remove screw thru
rear of trim plate to
reverse handle.

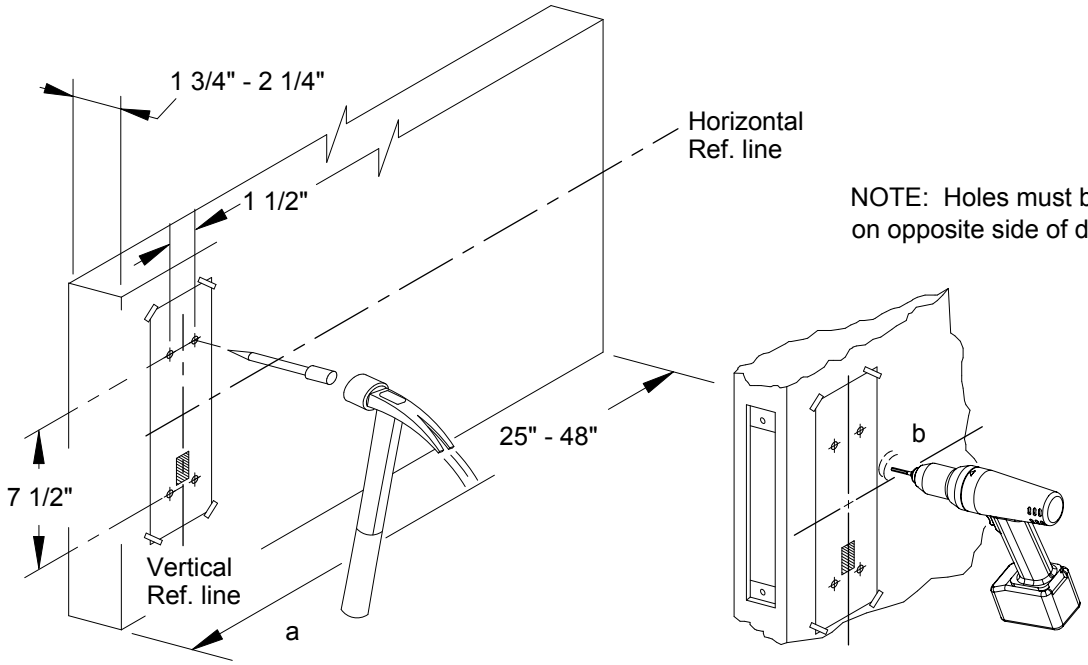


Nylon plug faces
sideways.

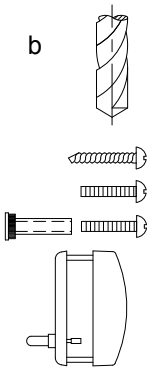


6 Refer to carton label for model and trim description prior to drilling.

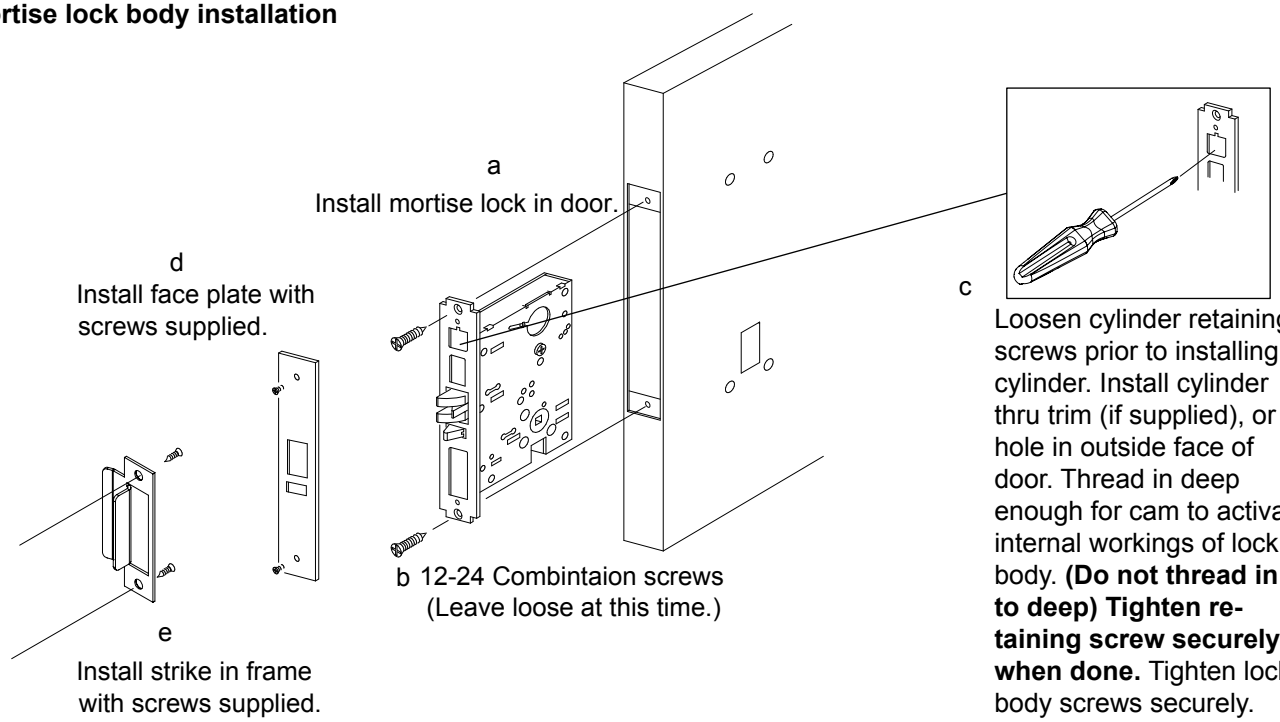
Refer to Template T9500, located at rear of instruction booklet for specific hole locations, drill size and screw sizes.



NOTE: Holes must be parrell
on opposite side of door.



7 Mortise lock body installation



a
Install mortise lock in door.

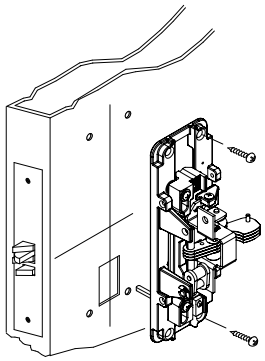
b 12-24 Combintaion screws
(Leave loose at this time.)

c
Loosen cylinder retaining screws prior to installing cylinder. Install cylinder thru trim (if supplied), or hole in outside face of door. Thread in deep enough for cam to activate internal workings of lock body. **(Do not thread in to deep) Tighten retaining screw securely when done.** Tighten lock body screws securely.

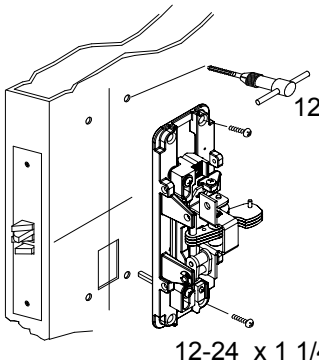
d
Install face plate with screws supplied.

e
Install strike in frame with screws supplied.

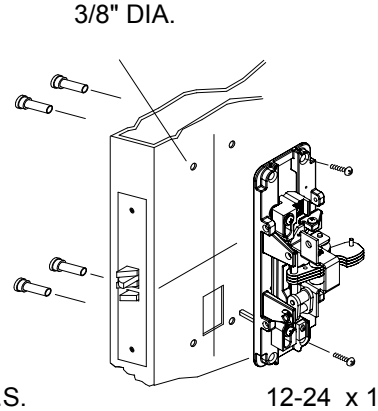
8 Chassis installation (if using GK9000 install shims at this time).



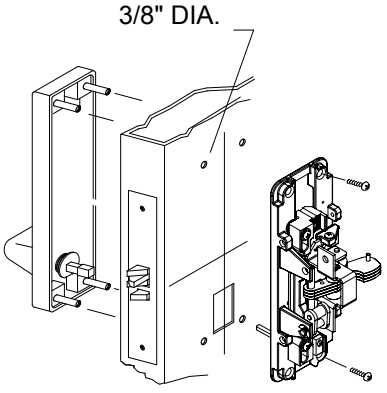
#12 x 1 1/4" R.H.P.T.S.
a1 (Wood)
(No trim)



12-24 x 1 1/4" R.H.P.M.S.
a2 (Metal)
(No trim)

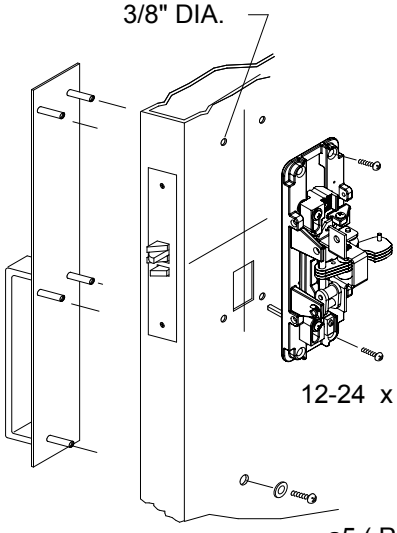


12-24 x 1 1/4" R.H.P.M.S.
a3 (Thru bolts)
(Wood or metal)
(No trim)



12-24 x 1 1/4" R.H.P.M.S.

a4 ("Y" Trim)



12-24 x 1 1/4" R.H.P.M.S.

a5 (Plate trim)

Prepare to install touch and rail on door.

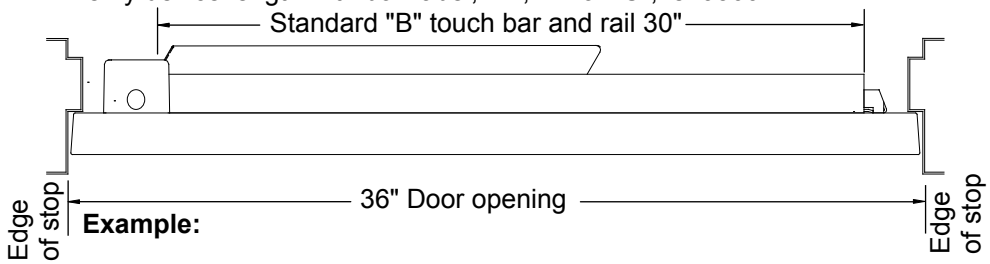
NOTE: All dimensions are based on 5/8" stop height; Verify strikes, stile width, any trim and stop height prior to making any cuts. If cutting is required follow instructions below.

Size A:
Fits 48" door opening without cutting.
Can be cut to fit a 34" minimum door opening.
Size B:
Fits 36" door opening without cutting.
Can be cut to fit a 28" minimum door opening.
Size C:
Fits 36" door opening with out cutting.
Using a shorter touch pad then the standard "B" size allows it to be cut to 25" door opening.

Note: Models with prefix options such as "ES", "DE" etc. may not be cut down to minimums shown to left. Consult factory or catalog for details.

NOTE: If carton label list prefix; "ES", "MS", "LM", "BPA", "BPAR", "DWA", "LM/MS/BP" or "CD" prefix see Options pages at rear.

Verify device length with box label; "A", "B" or "C", ie. 9300B

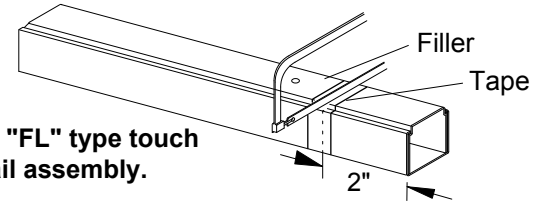


Example:

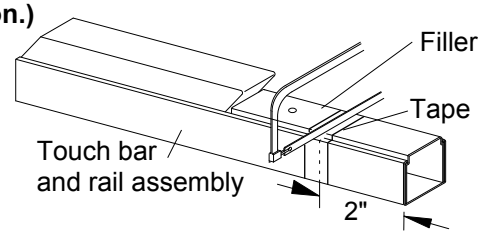
IMPORTANT

Use caution when cutting touchbar and rail to size on models with "ES", "MS", "LM" or "DWA" prefix options. These units contain internal wiring.
For models with prefix options "BPA", BPAR" or "DE" remove filler containing electronics before cutting.

Note: If door opening width is less then standard touch bar will have to be cut down. ie: door opening width 34" subtract 2" from rear of touch bar and rail, tape and cut to length as shown. **(Note: On "FL" series depress touch bar as shown, tape and cut to length. Touch bar should be approximately 3/16" longer than rail when released to upward position.)**



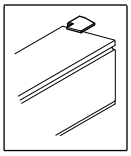
Cutting of "FL" type touch bar and rail assembly.



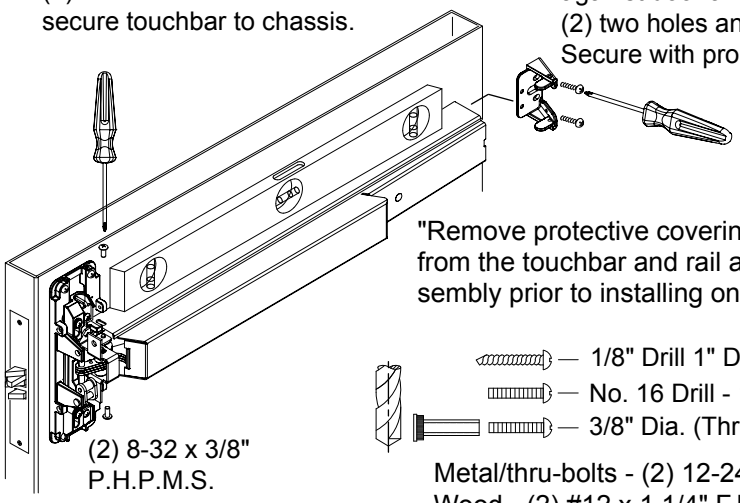
10

Install touch bar and rail assembly and end cap bracket to door.

Remove two 8-32 screws from chassis, slide touch bar and rail assembly under rear of chassis. **Note: If device has prefix "ES" ensure that pins in lever bolt align with slots in actuator located inside nose of touch bar.** See instruction sheet IES-7 packed with device. Install (2) two 8-32 x 3/8" P.H.P.M.S. to secure touchbar to chassis.



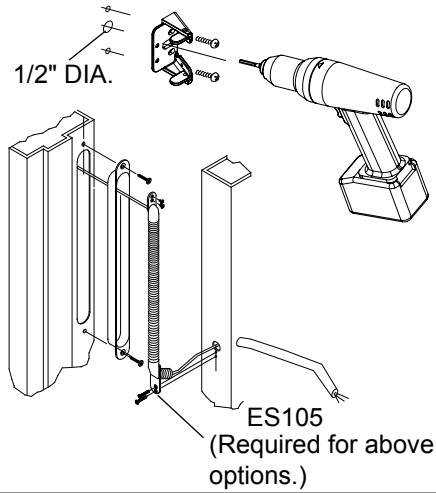
Hold rear mounting bracket tightly against door and rear of rail. Mark (2) two holes and drill per chart. Secure with proper fasteners.



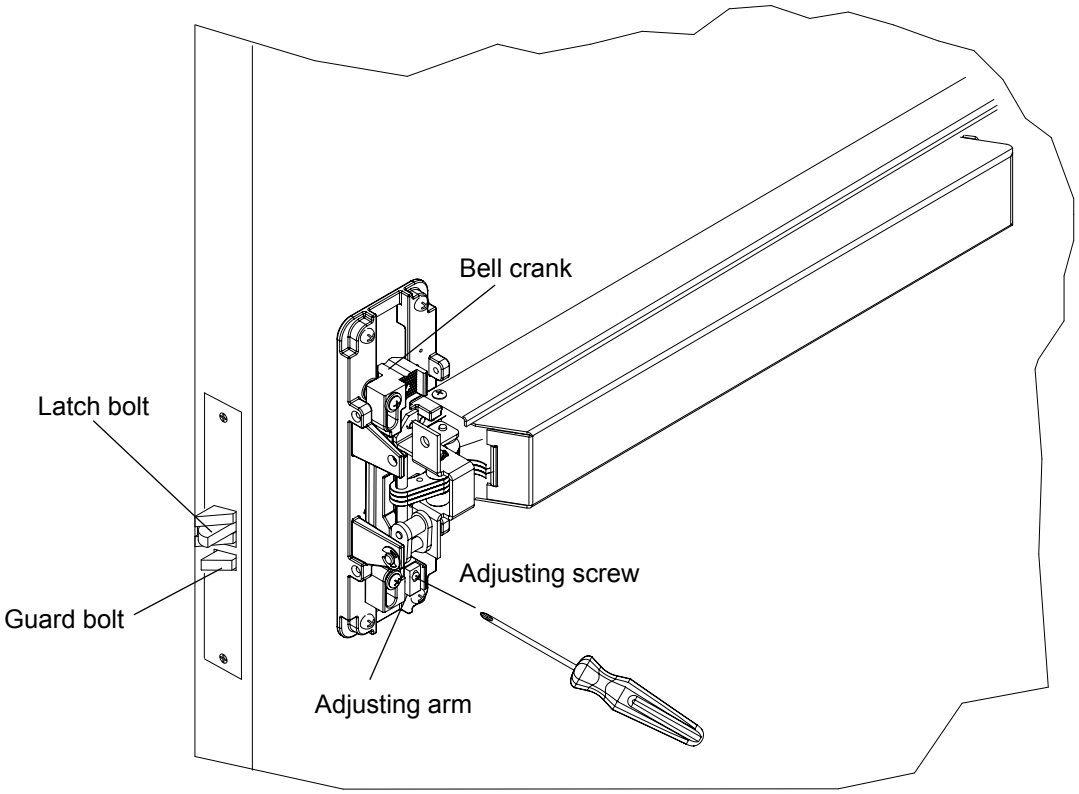
"Remove protective covering from the touchbar and rail assembly prior to installing on door."

Metal/thru-bolts - (2) 12-24 x 1" F.H.P.M.S.
Wood - (2) #12 x 1 1/4" F.H.P.T.S.

For the following models prefixes: "ES", "MS", "LM" or "DWA" drill an additional 1/2" diameter hole as shown. See options pages at rear for addtional information.



11 Adjustment of mortise lock and chassis assembly



To adjust lock body and chassis for proper function follow steps below: (Door open and blocked)
Loosen adjusting screw in adjusting arm, do not remove. Ensure bellcrank is fully down, push up on adjusting arm until it just touches the actuator arm in the lock body, then secure adjusting screw. Depress touch bar slowly while watching latch bolt, with touch bar fully depressed, bellcrank upward, the latch bolt should be fully recessed in edge of door. If not, adjust adjusting arm upward a little more, "arm **should not** be prematurely retracting the latch."

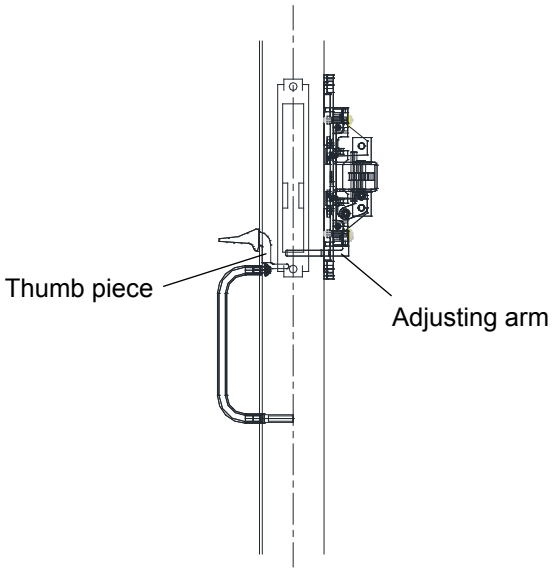
Release touch bar, latch bolt should extend fully. Push inward on guard bolt, then attempt to push inward on latch bolt. Latch bolt should be dead latched and not retract. If latch bolt is not dead latched readjust adjusting arm slightly down ward. Recheck operation above. Check all outside trim functions at this time if installed. Once all of the above functions have been checked and rechecked you may allow door to close.

Allow door to close and check for proper strike alignment and engagement of latch bolt.

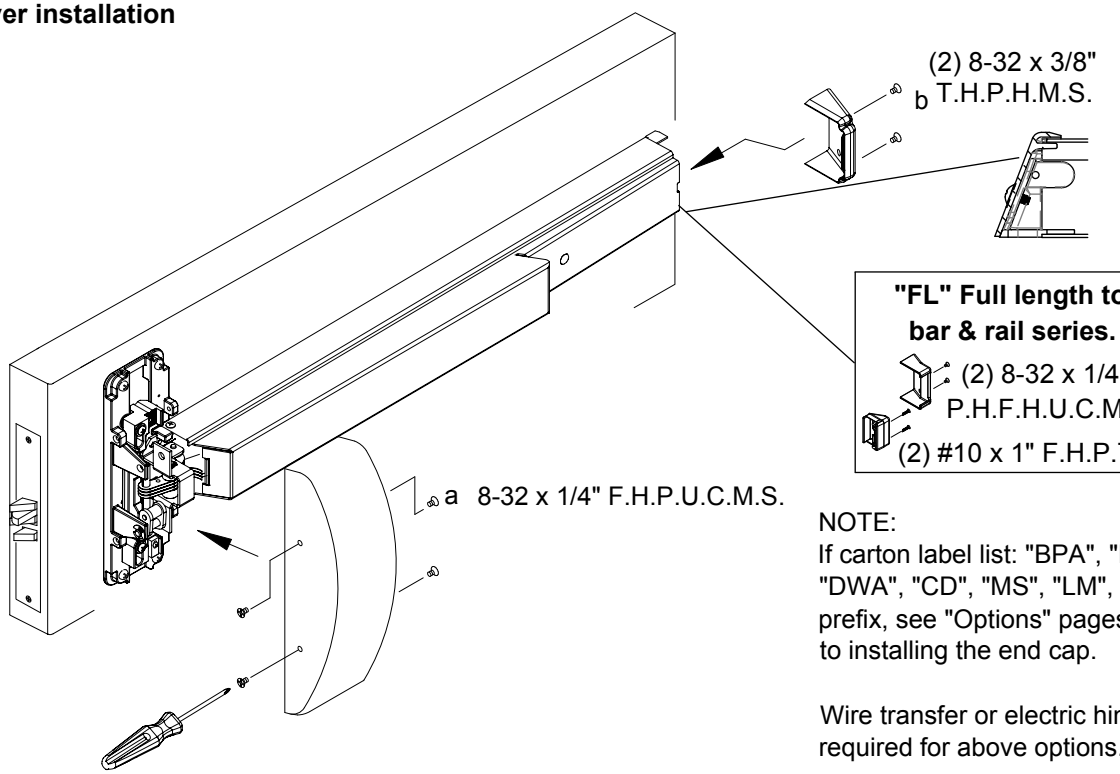
Note:

If door is under standard 1 3/4" adjusting arm may require to be cut down to ensure it does not rub on interior face of opposite side of door. For doors over 2 1/4" a special length adjusting arm can be ordered "special" from the factory.

On installations with thumb piece trim ensure that the adjusting arm does not interfere with the thumb piece during normal operation.



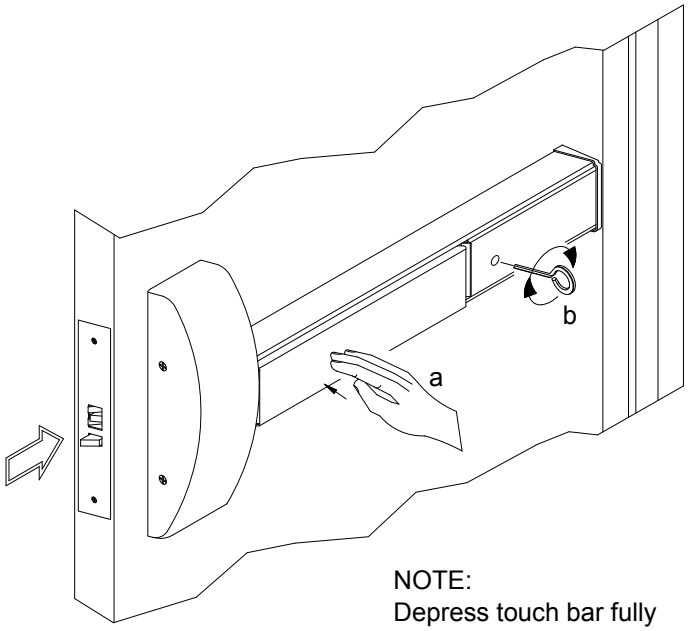
12 Cover installation



NOTE:
If carton label list: "BPA", "BPAR", "DWA", "CD", "MS", "LM", "MD" or "LM/MS-BP" prefix, see "Options" pages 11 & 12, prior to installing the end cap.

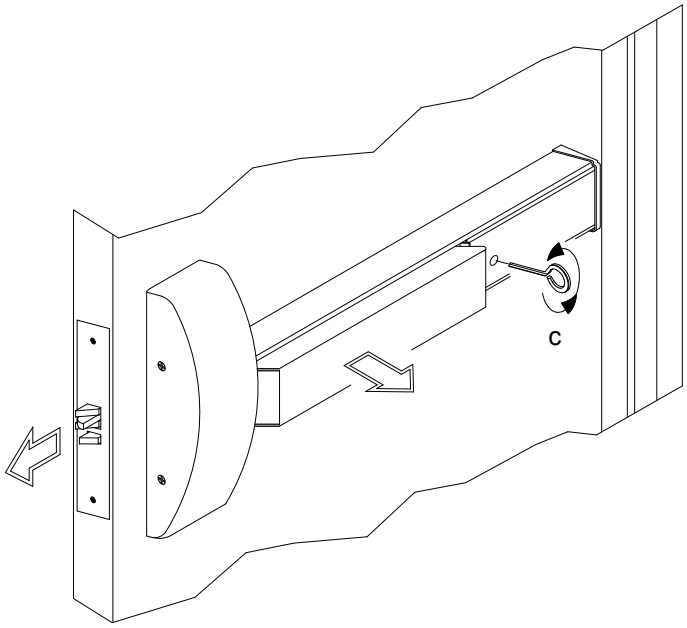
Wire transfer or electric hinge may be required for above options.

13 Standard hex key dogging



Retracted

NOTE:
Depress touch bar fully retracting latchbolt, then dog down.

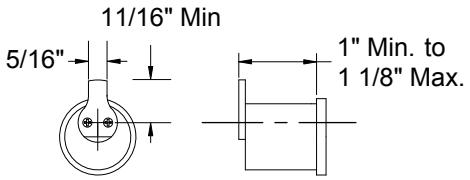


Extended

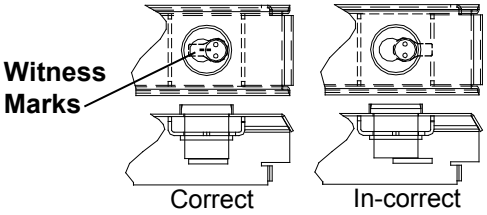
General Maintenance Notes:
The DORMA 9000 Series Exit Devices are designed to give years of trouble free service, however depending on installation, location, climate conditions etc. routine maintenance is recommended in all latch bolt locations. The device should be periodically cleaned and re-lubricated to ensure proper function and operation of all moving parts.

OPTIONS:

"CD" (Cylinder Dogging) Option: Cylinder specifications and cams;



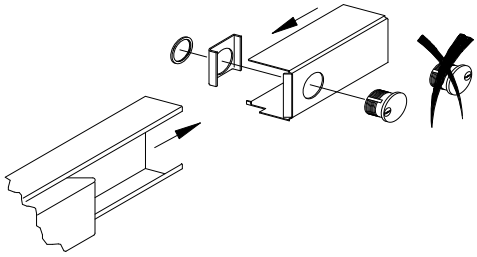
Note: When using IC core cylinders, ensure that cam is in proper position prior to installing the new core.



Useable Cams

Arrow	001	Ilco/Unican	SC1
Assa	Std. (Yale)	Lori	SC1 4200-82-2002 Std.
Best	C136	Sargent	13-0664 or 13-0660
Corbin	A02	Schlage	001
Falcon	12667-3	Yale	2160

Cylinder dogging option on standard touch bar and rail;

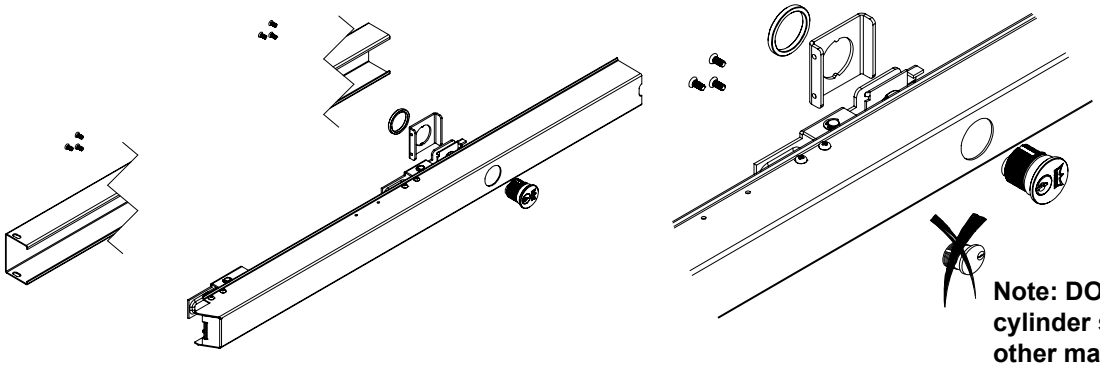


Note: DORMA mortise cylinder supplied. To use other manufacture cylinders, "L" less cylinder is available.

To change cylinder:

1. Dog down touch bar.
2. Remove end cap and end cap mounting bracket.
3. Slide out filler from rear of rail.
4. Remove cylinder nut on underside of filler.
5. Remove cylinder and mounting plate.
6. Insert new cylinder facing as shown in detail.
7. Install mounting bracket and cylinder nut.
8. Slide filler back into rear of rail.
9. Install end cap mounting bracket and end cap.
10. Undog touch bar.

Cylinder dogging option on full length touch bar and rail; (See cam specifications above.)

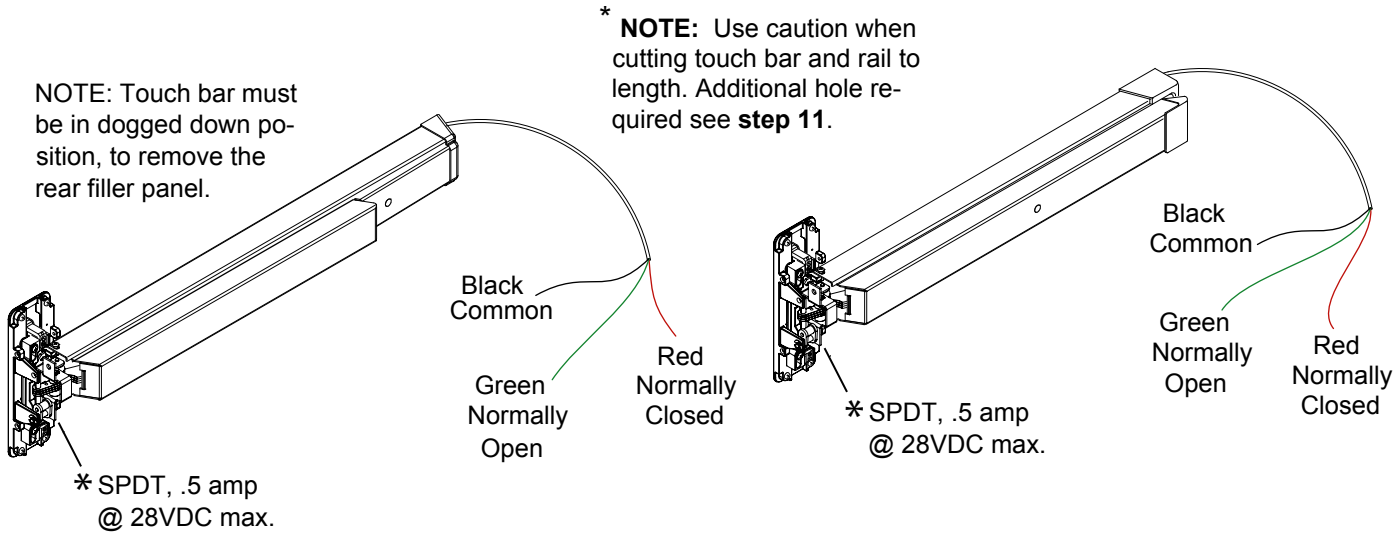


Note: DORMA mortise cylinder supplied. To use other manufacture cylinders, "L" less cylinder is available.

To change cylinder:

1. Remove end cap, end cover & end cap mounting bracket.
2. Remove cover from chassis and two chassis to touch bar mounting screws.
3. Remove (6) touch bar to rail mounting screw from underside of rail.
4. Flip rear arm assembly outward from underside of touch bar.
5. Remove cylinder nut on underside of touch bar.
6. Remove cylinder and mounting plate.
6. Insert new cylinder facing as shown in detail.
7. Install mounting bracket and cylinder nut.
8. Flip rear arm assembly back under touch bar.
9. Re-install touch bar to rail with (6) screws.
10. Install touch bar & rail back on to chassis with (2) screws.
11. Re-install end cap mounting bracket.
12. Re-install end cap, end cover & chassis cover.

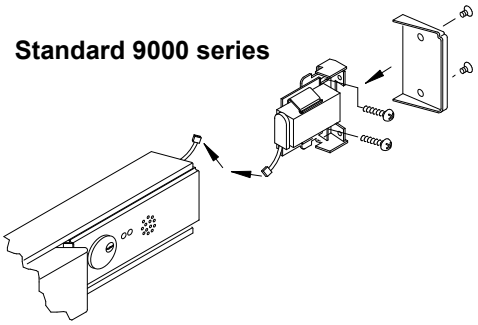
Option: "LM" Latch monitor; monitors movement of latch bolt with or without depressing of touch bar. May be wired either normally open or normally closed.



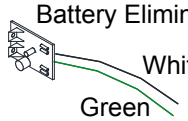
"BPA", "BPAR" & DWA (ALARM) Options; "BPA" Battery powered alarm, sounds continuous until reset. "BPAR" alarm sounds for 4 minutes then will automaticaly reset. **Alarm mode set at factory**.

Note: On either the standard 9000 alarm or the 9000"FL" versions caution must be used when cutting touch bar and rail to length due to the wires running inside of the assembly. A standard DORMA cylinder is supplied on both units, to change to a customer supplied cylinder follow steps under **"cylinder dogging". Refer to addtional instruction sheet packed with device for operational instructions etc.**

Standard 9000 series

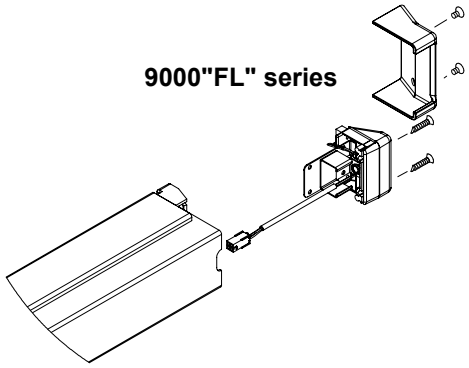


"DWA" OPTION:
Battery Eliminator



(Non-polarized)
Connected to outside power source; 12-24V AC/DC supply. ie: Dorma ES-100 etc. Contact Dorma **1-800-523-8483** for other supplies available.

9000"FL" series



To change battery:
1. Prop open door.
2. Remove (2) end cap mounting screws.
3. Remove (2) end cap mounting bracket screws.
4. Remove mounting bracket & replace battery.
5. Re-install in reverse order.

To change battery:
1. Prop open door.
2. Remove (2) end cover mounting screws.
3. Remove (2) end cap screws.
4. Remove end cap & replace battery.
5. Re-install in reverse order.

Size A:
Fits 48" door opening without cutting.
Can be cut to fit a 37 1/2" minimum door opening.
Size B:
Fits 36" door opening without cutting.
Can be cut to fit a 31 1/2" minimum door opening.
Size C:
Fits 36" door opening with out cutting.
Using a shorter touch pad then the standard "B" size allows it to be cut to 28 1/2" door opening.

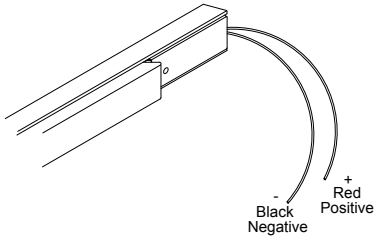
Note: Cylilnders are installed at factory, should cylinder be changed, note postion of keyway prior to removal. Cylinder must be installed in same direction for proper operation. Cam of cylinder must break internal photo cell to function. Proper cam also required.

OPTIONS

"MD" (MAGNETIC DOGGING) OPTION:

Electrically dogs touch bar when energized by power supply, then depressed. Releases upon interuption of power.

***NOTE: Use caution when cutting touch bar and rail to length.**



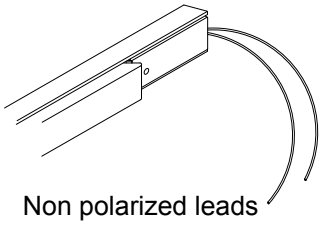
Requires DORMA PS-610RF power supply, set on 12VDC. Fits standard length touch bar and rail on all 9000 series exit devices. Not available with other options. Maximum holding force of 40-60#. Immediate release upon loss of power.

"MLR" MOTORIZED LATCH RETRACTION OPTION:

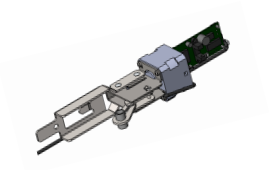
Specifications:

Electrical input requirements:
24Vdc +10% Filtered and regulated power supply;
ie: DORMA PS610RF or PS532RF.
The unit may also be powered by the DORMA ED900 operator.
Current: .888A max. inrush, 400mA max. hold

Provides simultaneous electric latch retraction and dogging (depressed touch bar).



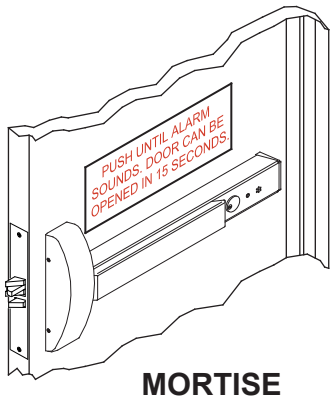
Non polarized leads



***NOTE: Use caution when cutting touch bar and rail to length.**

"DE" (DELAYED EGRESS) OPTION:

Note: Refer to 9000 series installation instructions for templating and installation of device, addtional "Delayed Egress" instructions are shipped in the box, for operation and function of the unit.



MORTISE
9500DE

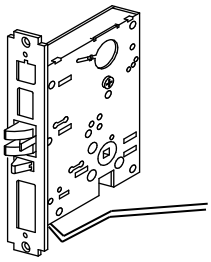
85 Decibel Alarm - Standard
LED Status Indicator - Standard
Nuisance Alarm - Standard, DIP Switch Settable
Key Switch Control - Standard
Remote Authorized Egress - Standard, DIP Switch Settable
Remote Re-Arm - Standard
Remote Bypass - Standard
Door Position Input - Standard, DIP Switch Settable
Auto Reset or Manual Reset, DIP Switch Settable
Auto - Stanadard (Manual - in CA)
Additional Form "C" Relays For Optional Horn etc. (Rated 1 amp @ 30 vdc)
Fire Alarm Connection
Paired Doors Connection

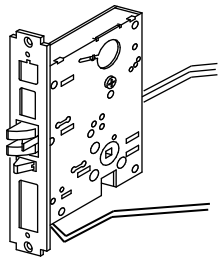
REQUIRES DORMA ES-100 or AD100 POWER SUPPLY.

ELECTRIFIED LOCK BODY OPTIONS:

Fail Safe - LFSF
Fail Secure - LFSC

Fail Safe - LFSF (LM) w/ latch monitor
Fail Secure - LFSC (LM) w/ lacth monitor





An internally mounted solenoid locks or unlocks the outside trim hub.

Solenoid rating: 24VDC @ .21 amps

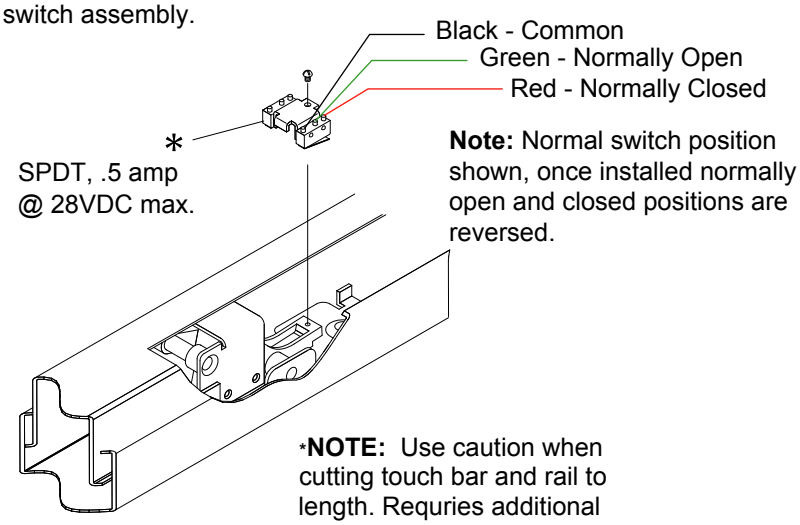
LM switch rating: 125VAC 3A or 30VDC 0.5A

Red - N.C.
Black - Common
White - N.O.

OPTIONS

Option: "MS" Monitor Switch: Monitors movement of touch bar, or can be used to signal an external light, horn etc.

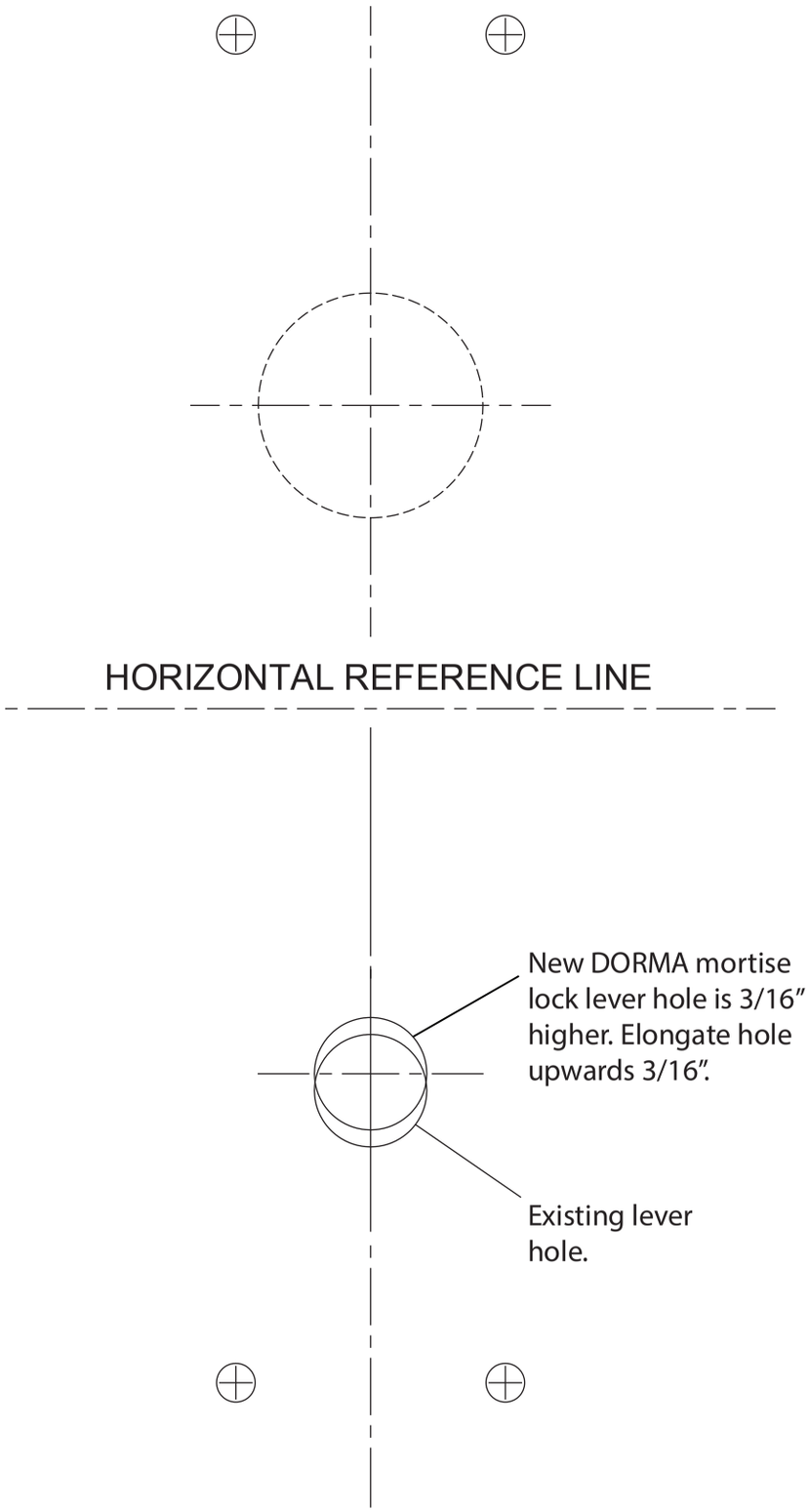
Located on the rear arm assembly as shown;
Comes standard with (2) two micro switches.
Both can be wired normally open or normally closed.
On the standard 9000 series it can be added in the field by removing rear filler. On the "FL" series it can be added, however the touch bar must be removed completely from the rail to install switch assembly.



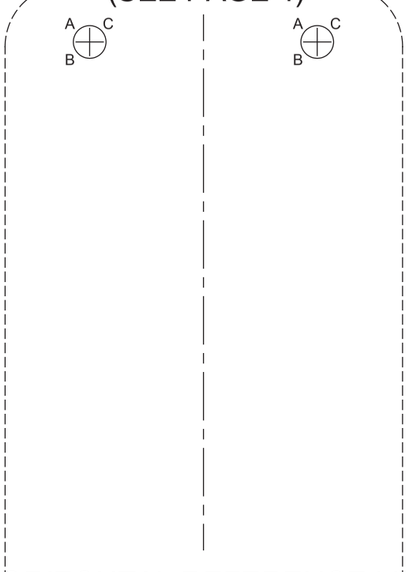
*__NOTE:__ Use caution when cutting touch bar and rail to length. Requries additional hole see **step 11.**

9500 Exit Mortise Retro-fit Instructions

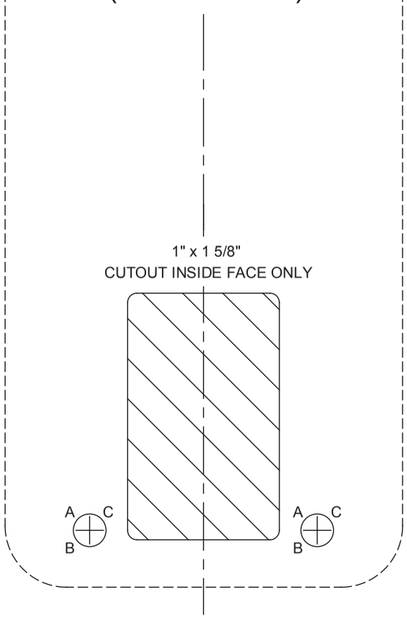
OUTSIDE DOOR PREP
VERTICAL REFERENCE



INSIDE DOOR PREP
VERTICAL REFERENCE
(SEE PAGE 4)



HORIZONTAL REFERENCE LINE
(SEE PAGE 4)



DRILL CHART

A 1/8" DIA. DRILL 1" DEEP

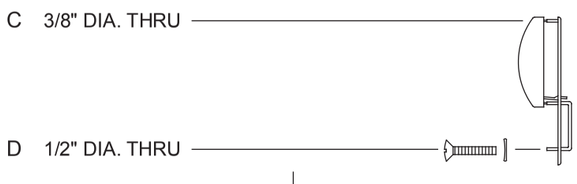
B NO. 14 DRILL 12-24 TAP

C 3/8" DIA. THRU

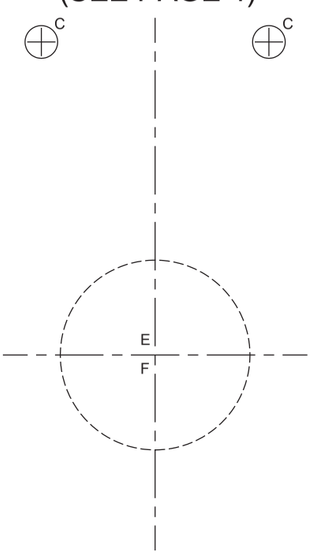
C 3/8" DIA. THRU

C 3/8" DIA. THRU

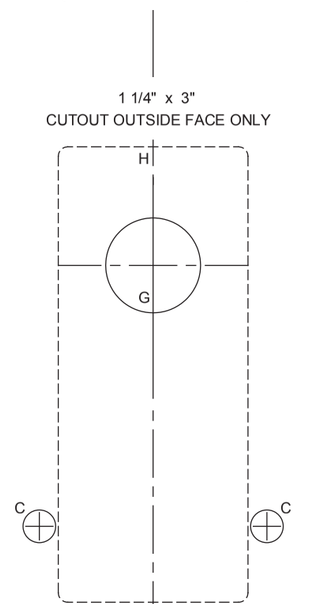
D 1/2" DIA. THRU



OUTSIDE DOOR PREP
VERTICAL REFERENCE
(SEE PAGE 4)



HORIZONTAL REFERENCE LINE
(SEE PAGE 4)



DRILL CHART

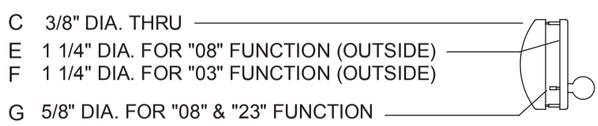
C 3/8" DIA. THRU

C 3/8" DIA. THRU

E 1 1/4" DIA. FOR "08" FUNCTION (OUTSIDE)

F 1 1/4" DIA. FOR "03" FUNCTION (OUTSIDE)

G 5/8" DIA. FOR "08" & "23" FUNCTION (OUTSIDE FACE)

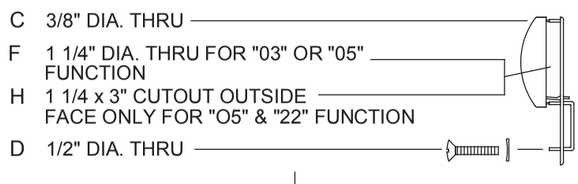


C 3/8" DIA. THRU

F 1 1/4" DIA. THRU FOR "03" OR "05" FUNCTION

H 1 1/4 x 3" CUTOUT OUTSIDE FACE ONLY FOR "O5" & "22" FUNCTION

D 1/2" DIA. THRU



T9500 6/14

9500 Exit Mortise Retro-fit Instructions

OUTSIDE DOOR PREP
VERTICAL REFERENCE