



8800 Series Mortise Lockset Knob, Lever, Reflections® and Security Trims Installation Instructions

*** REMOVING COVER SCREWS VOIDS LOCK BODY WARRANTY**

*** USING REFLECTIONS® TRIMS WITH FL LOCKBODIES WILL VOID THE WARRANTY AND SECURITY GRADE.**

The following is a step by step approach to installing a mortise lock and trim to both wood and steel doors.

- 1) Determine Hand of Door
- 2) Position Template and Mark Door
- 3) Drill Holes in Door
- 4) Mark Frame for Strike and Mortise Cavities
- 5) Drill Mortise Cavities in Door and Frame
- 6) 8800 Lock Handing Instructions
- 7) Tools Necessary and Preparing Trim for Assembly
- 8) Install Lock (Wood or H.M Door)
- 9) Install Knob or Lever Sectional Trim
- 10) Install Knob or Lever Escutcheon Plate Trim (Thru-bolted)
- 11) Install Knob or Lever Single Operating Trim (Sectional & Escutcheon)
- 12) Install Reflections® Sectional Trim
- 13) Install Reflections® Escutcheon Trim
- 14) Install Reflections® 855 Pull Trim
- 15) Installing Thumbturn Assemblies
- 16) Install Visual Occupancy Indicator
- 17) Install Dummy Trim for 838A and 838B
- 18) Install Single Dummy Trim for 838A and 838B
- 19) Install Strike
- 20) Installation Trouble Shooting Tips

1) Determine Hand of Door

Face the door from the outside to determine its hand. Please note the outside is either the key side of an entrance door or the corridor side of a room door. The outside of a single communicating door is the side opposing the hinges. The outside of twin communicating doors is the space between the doors.



Left Hand Reverse:
Hinges on left, opens outward. For handed locks, specify LHR.



Left Hand:
Hinges on left, opens inward. For handed locks, specify LH.



Right Hand:
Hinges on right, opens inward. For handed locks, specify RH.



Right Hand Reverse:
Hinges on right, opens outward. For handed locks, specify RHR.

2) Position Template and Mark Door

- a. Draw a horizontal centerline for the lock on both sides of door at desired height above finished floor line. Standard height for horizontal centerline is 39-15/16" above finished floor.
- b. Select template by comparing handing of door to Fig. 4, 5 and 6.
- c. Compare lock function number being installed (See Fig. 3) to determine the holes to be marked.
- d. Position the installation template on the door so that the horizontal centerline lines up with the horizontal line on the door. Mark the holes to be drilled using a scribe, center punch, or nail on the inside and outside of door. To avoid shifting of the template, it may be taped to the door during this step.
- e. On the edge of the door mark the holes to be drilled for the mortise cavity and armor front attaching screw holes.

3) Drill Holes in Door

Bore marked lock trim holes (steps 2d and 2e). To avoid splintering wood, bore thru holes from both sides of door. For hole sizes refer to hole chart. Note: Hole "A" diameter is different for FL, RL & SL Applications.

4) Mark Frame for Strike Mortise Cavities

- Mark vertical position of strike on jamb using the reference centerline on installation template (see Fig. 4, 5 or 6).
- Mark location of strike lip. (FIRST DETERMINE IF SILENCERS ARE TO BE USED) To locate horizontal centerline of strike, take half the door thickness PLUS the thickness of silencer (if used). Use this dimension to locate the strike centerline from the doorstop. (See Step 19, Fig. 1)

5) Drill Mortise Cavities in Door and Frame

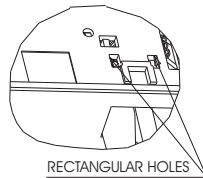
- Mortise door edge for lock body. Drill pilot holes for attaching screws.
- Slide lock body into cavity with armor front attached. Align armor front with top mark. Use lock front as template. Mark outline.
- Mortise door edge for lock front (7/32") deep.
- Mortise jamb for strike (3/32" deep). Be sure to mortise 1" (25mm) deep to accommodate lock bolts or strike box if used. (See Step 19, Fig. 1)

Note: Before installing lock, prepare door trim per sections 8, 9, 10, 11, 12, 13, or 14.

6) Handing Instructions

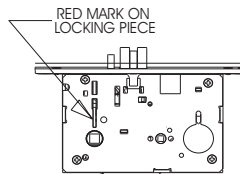
HANDING THE LATCHBOLT

- Locate and depress spring plate mechanism in one of the rectangular holes.
- While depressing spring plate pull latchbolt head.
- Rotate head for desired handing.
- Push head into lockbody until secured.
- Operate several times to insure operation.



HANDING THE HUBS (LEVER OPERATION)

- Locate RED MARK on locking piece.
- Push Toggle Button slide away from "square spindle hole"
- With blade screw driver push RED MARK on side nearest "square spindle hole"
- RED MARK indicates Locked side!



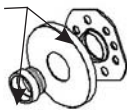
7) Tools Necessary and Preparing Trim for Assembly

Tools necessary:

- Standard #2 Phillips Screw Driver
- Standard 1/8 inch Allen Wrench
- Wrench (flat stamping provided)

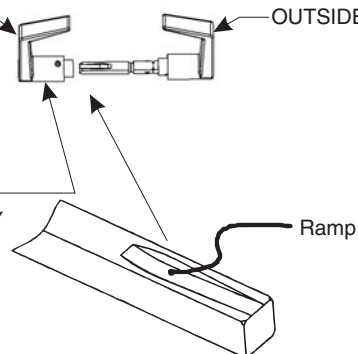
Warning: DO NOT TIGHTEN SCREWS WITH A BATTERY POWERED SCREWDRIVER, HAND TIGHTEN ALL SCREWS.

UN-SCREW METAL BUSHING FROM MOUNTING PLATE



INSIDE LEVER OUTSIDE LEVER

REMOVE INSIDE LEVER FROM OUTSIDE LEVER ASSEMBLY BY UN-SCREWING SET SCREW WITH AN 1/8" ALLEN WRENCH.

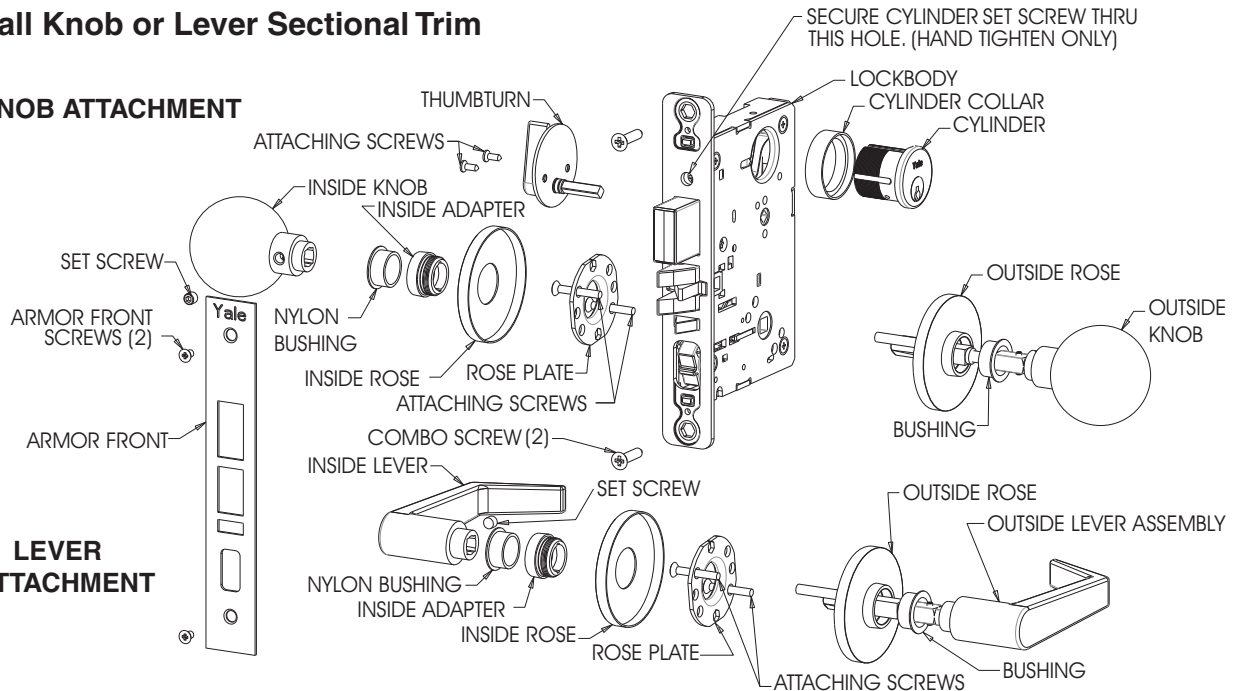


8) Install Lock (Wood or H.M. Door)

Insert lock body into cavity in door and secure base front with two #12 combination attaching screws. Make sure lock is positioned in cutout properly. Note: Installation may require leaving #12 combination screws loose until trim and cylinder are assembled in lock body.

9) Install Knob or Lever Sectional Trim

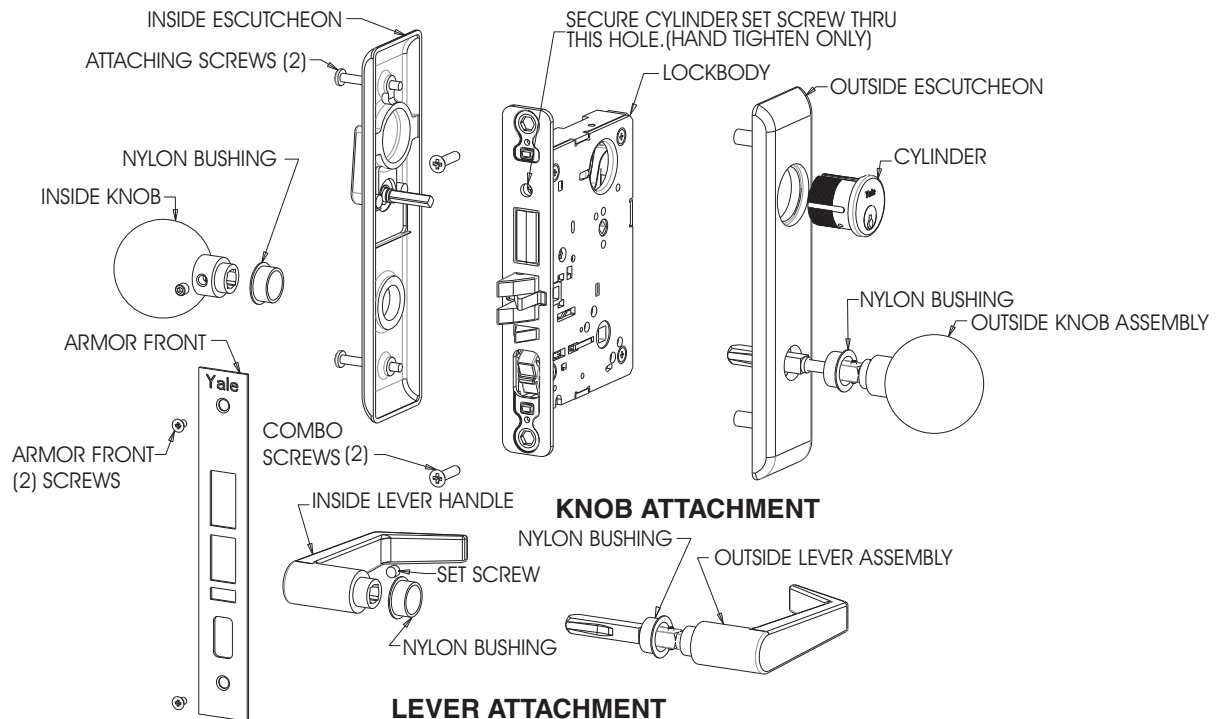
KNOB ATTACHMENT



IMPORTANT NOTE:

Before mounting the Outside Lever Handle on the door back off the inside spindle (the spindle with ramp 1 turn from outside spindle). Be sure that the ramp aligns with set screw in Inside Lever Handle. This must be done to allow proper function of the lock body.

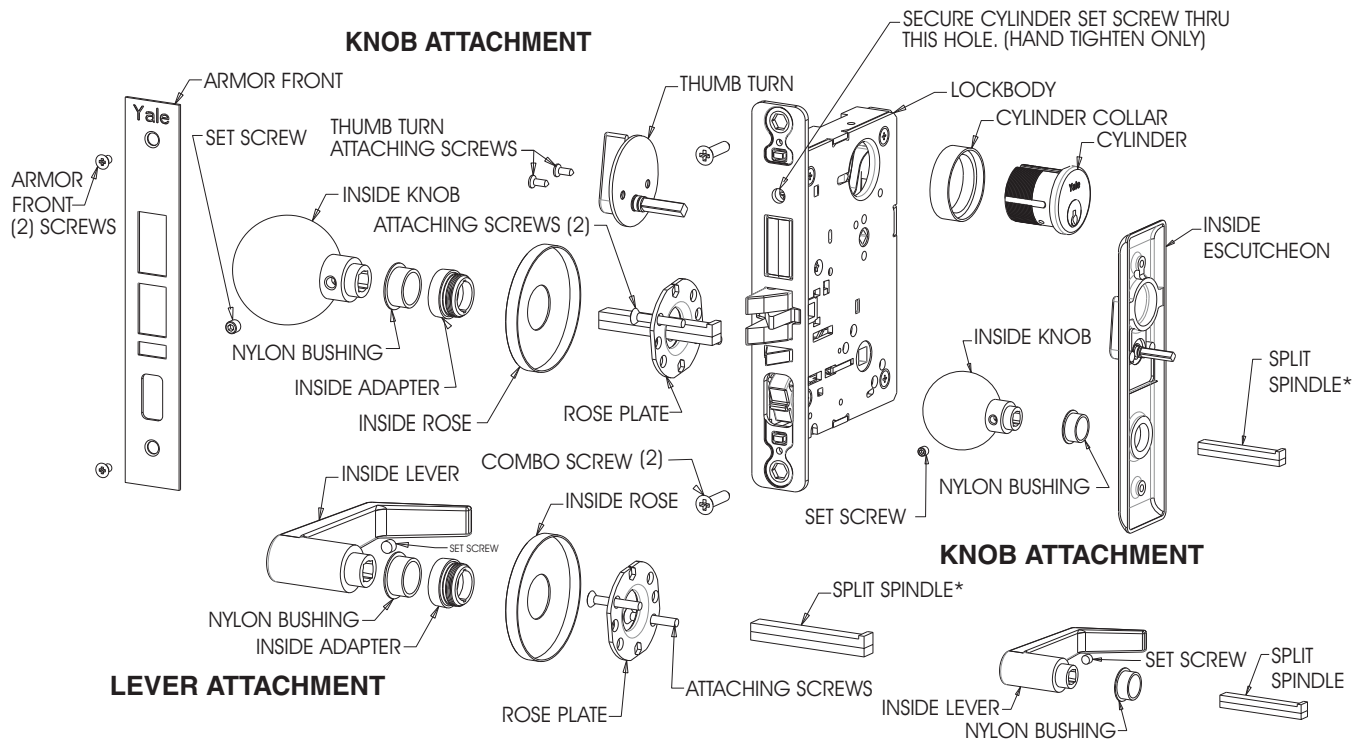
10) Install Knob or Lever Escutcheon Plate Trim (Thru-Bolted)



IMPORTANT NOTE:

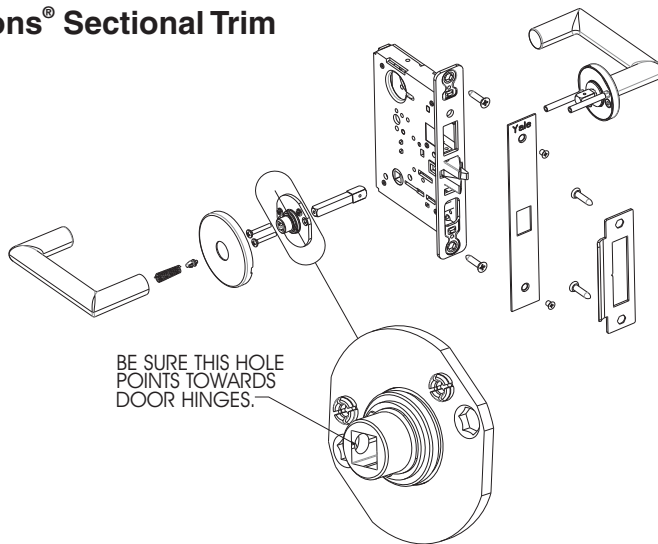
Before mounting the Outside Lever Handle on the door back off the inside spindle (the spindle with ramp 1 turn from outside spindle). Be sure that the ramp aligns with set screw in Inside Lever Handle. This must be done to allow proper function of the lock body.

11) Install Knob or Lever Single Operating Trim (Sectional and Escutcheon)

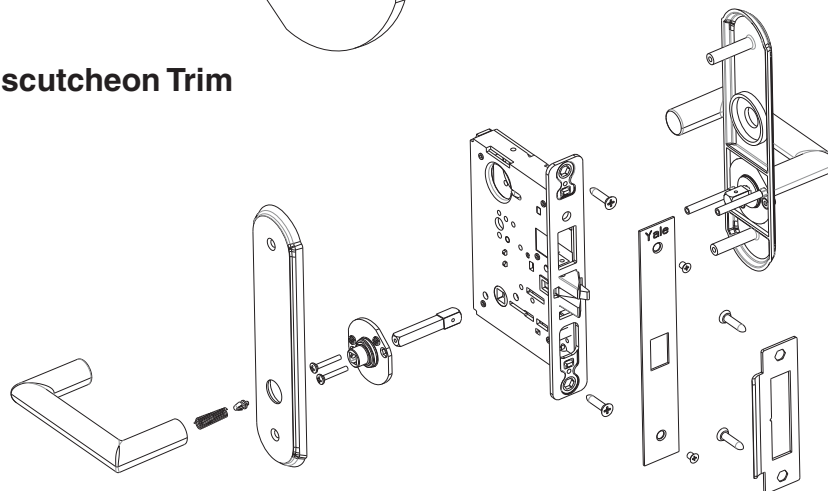


* Disassemble split spindles prior to installing into lock. Install the stepped spindle 1st, then install non-stepped spindle last.

12) Install Reflections® Sectional Trim

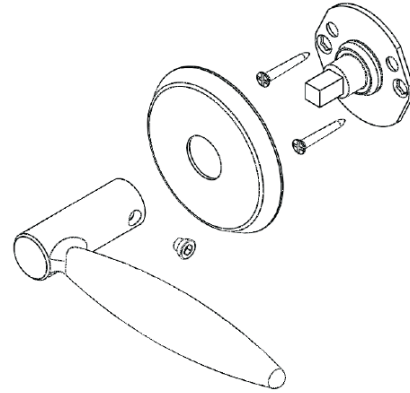


13) Install Reflections® Escutcheon Trim



14) Install Reflections® 855 Dummy Trim

- Lever height should be at 39-15/16" from finished floor.
- Before securing mounting plate assembly to door, place lever on mounting plate assembly (with set screw) and align on door so lever is parallel to floor. Mark screw hole locations.

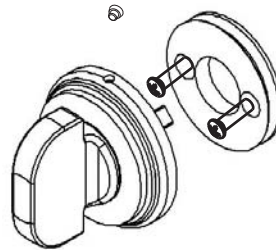
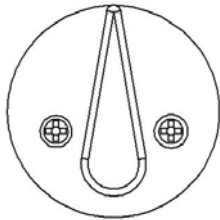


15) Installing Thumbturn Assemblies

To install the Thumbturn Assembly on the door:

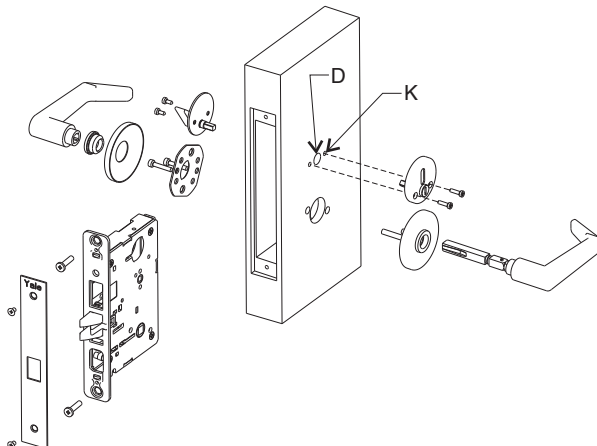
- Drill holes indicated for the function to be installed.
- Install the lockbody in the mortise pocket. Align the Thumbturn Shaft thru hole D and into the square hub in the lockbody.
- Position the thumbturn mounting plate so the attaching screw holes are horizontal to the floor.
- Mark the holes with a punch and remove thumbturn assembly.
- Drill the marked holes with a 1/16" Dia. drill bit.
- Re-install the thumbturn shaft in the square hole of lockbody.
- Install and tighten attaching screws.

Standard 8800
Thumbturn Assembly



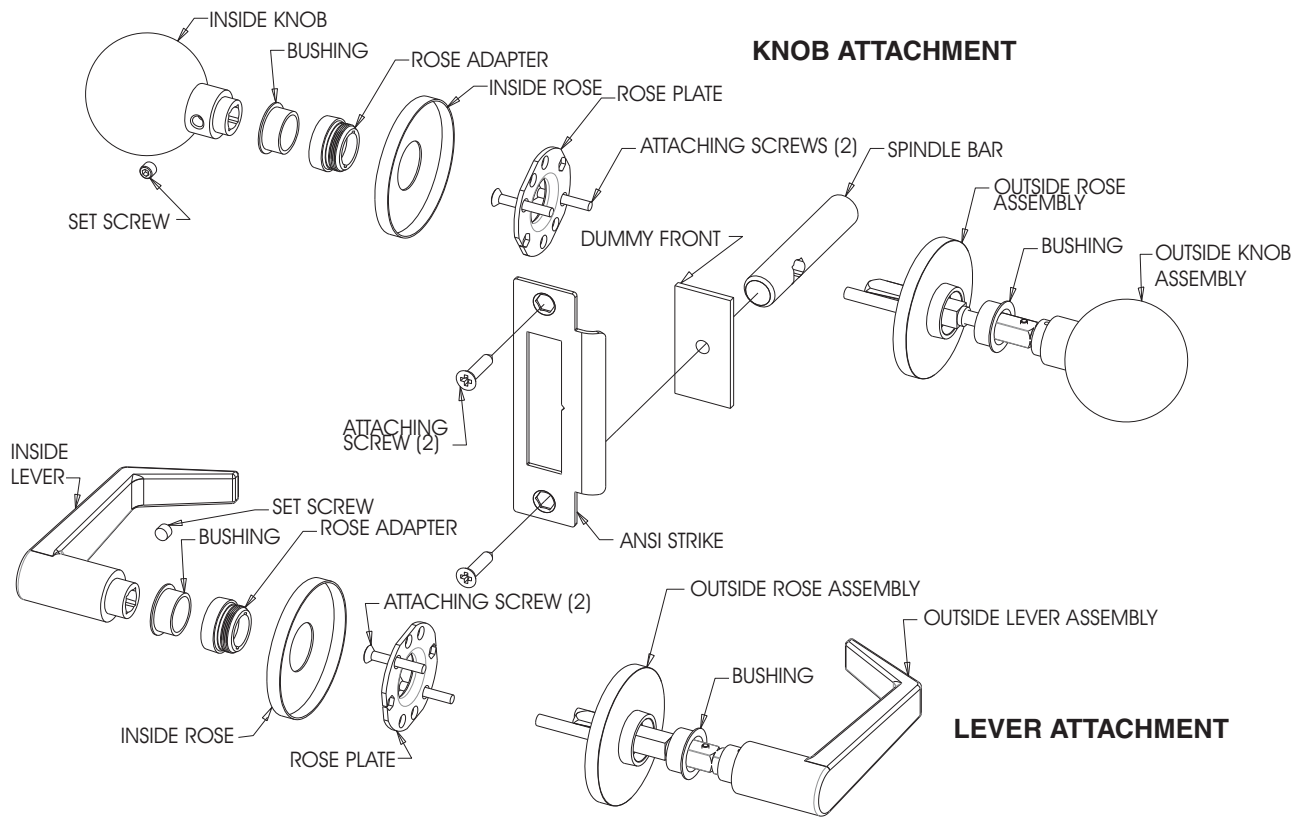
Reflections®
Thumbturn Assembly
and
Coin Turn Assembly
SEE TEMPLATE FOR
HOLE LOCATION

16) Visual Occupancy Indicator

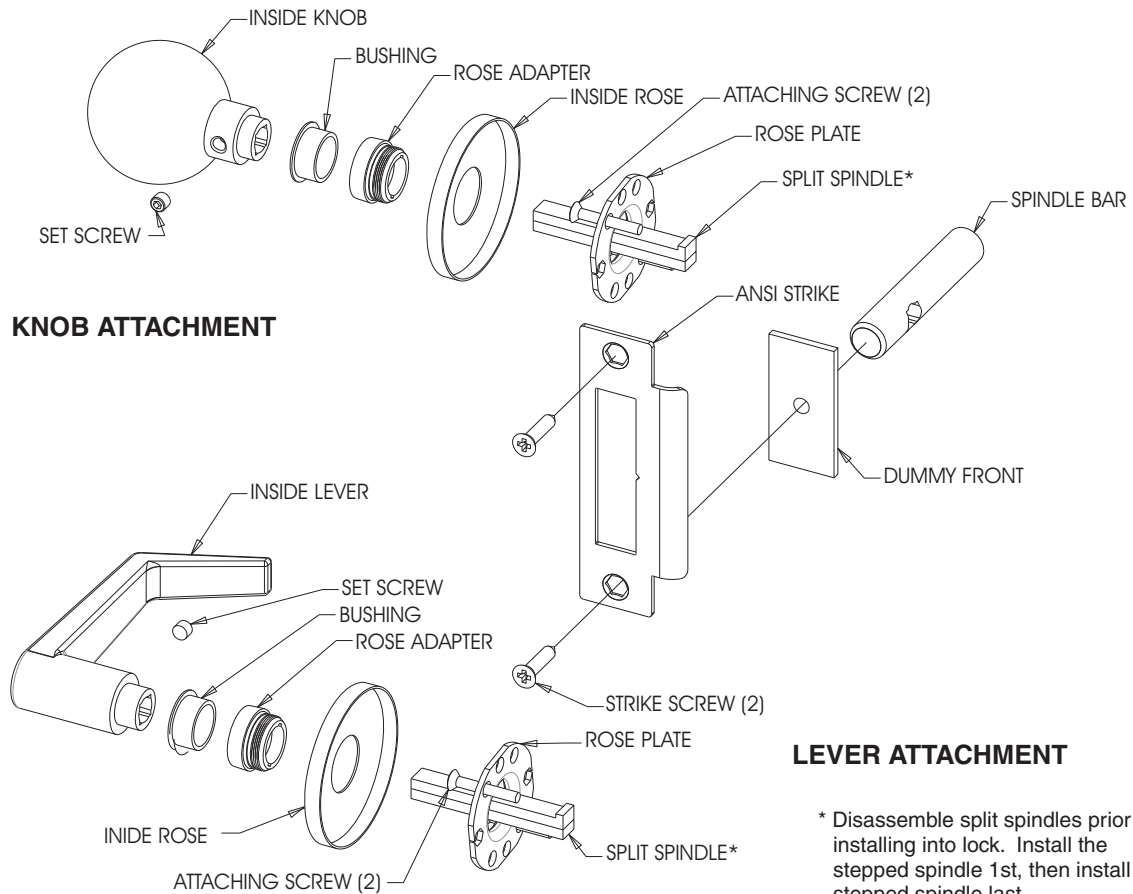


To install the Visual Occupancy Indicator on the outside of the door drill holes D and K. It is best to drill hole D first, then install lock and trim and drill the 2 (K) holes while indicator is in position.

17) Install Dummy Trim for 838A and 838B

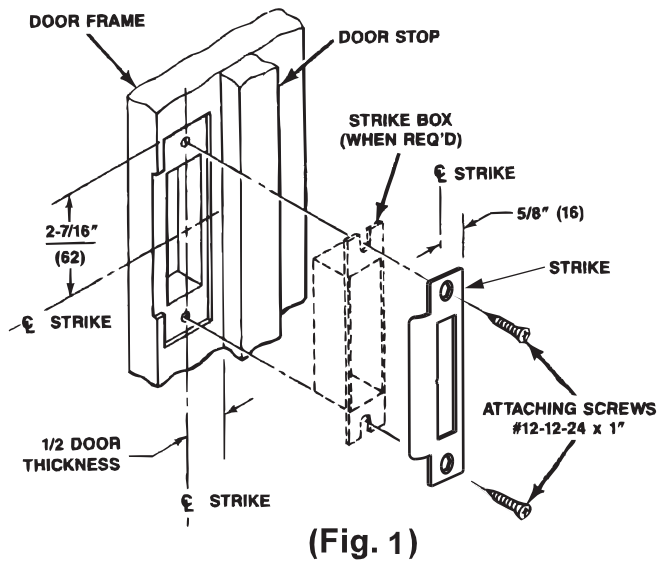


18) Install Single Dummy Trim for 838A and 838B

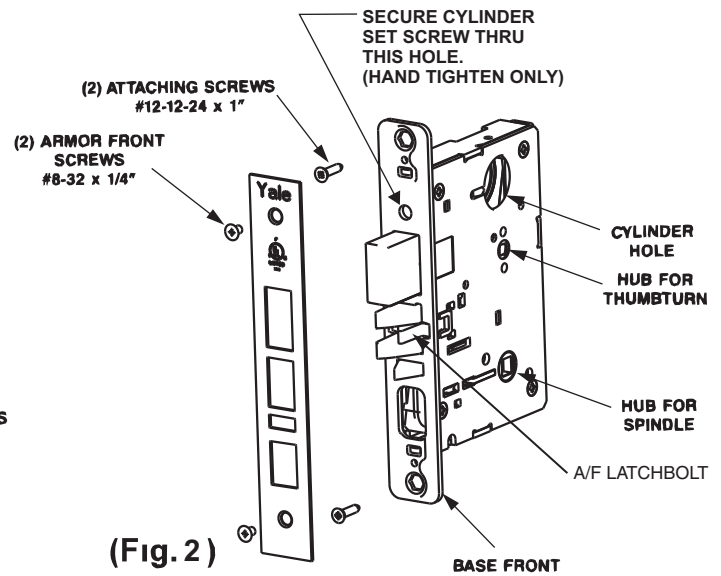


19) Install Strike

Attach strike to jamb using two #12 combination attaching screws. (See Fig. 1)



(Fig. 1)



(Fig. 2)

20) Installation Trouble Shooting Tips

Problem	Possible Cause	Solution
Difficult to operate Lock by lever or by Key.	Loose Trim (H.M. Doors) (Vibration caused by normal operation of door opening and closing can loosen attaching screws)	Adjust and Tighten - as necessary. If screws continually loosen up use a screw locking compound (such as Loctite) on all attaching screws.
	Door is warped or sagging, binding up latch bolt in strike cutout.	Check to see where latch is hanging up in strike. If door is sagging, tightening top hinge screws may solve problem. Hole in strike plate may have to be filed to relieve bind. Doors can warp when weather changes: warm inside - cold outside cool inside - hot outside (Exterior doors painted a dark color are particularly susceptible to warpage when exposed to direct sunlight.) It may take a few seasonal changes to work out all binding problems.
Loose Trim (wood doors)	Wood doors after being installed will sometimes shrink slightly as the building dries out.	Tighten all screws as needed.
Latch bolt hangs up in lock body.	Foreign object in lock body (metal shavings, saw dust, wood particles, mineral core etc.)	Remove lock from door and remove foreign object from body.* Lubricate if necessary.
	Lock body lacks lubrication or lubrication has gummed up with age.	Use penetrating or solvent type lubricant as a cleaning agent to loosen frozen or sticking components. Lubricate with silicone base or Lithium Grease.
Cylinder Jams up.	Dirt or other foreign object may be in keyway affecting operation.	Lubricate cylinder with graphite or other non-oily lubricant (such as Lock-EZE) Do not use oil based lubricants in keyway.

* Please note: Disassembling lock body will void warranty.

Hole Size Chart				
Hole	Size		Used For	
	H.M. Door	Wood Door		
A	FL	1-1/8" Dia (29)	1-1/8" Dia (29)	Knobs and Levers
	SL	1-7/8" (48)	1-7/8" (48)	
B	1-1/4" (32)		1-1/4" (32)	Cylinder
C	3/4" Dia (19)		3/4" Dia (19)	Thumbturn or Emergency Key
D	3/4" Dia (19)		3/4" Dia (19)	Hotel Indicator and Visual Indicator
E	5/16" (8)		5/16" (8)	Rose
For Thumbturn attachment holes see section 15 for details.			Standard Thumbturn Reflections Thumbturn & Coin Turn Assemblies	
G	1/2" Dia (13)	1/2" Dia (13)	Escutcheon Plate Thru-Bolted	
J	.152" Dia (3.9) #24 Drill	11/64 x 1 Dp (4.4 x 25) C'bore 1/2 x 1/8 Dp. (13 x 3)	Surface Escutcheon Plate Attaching Screws	
K	.116" Dia (2.9) #32 Drill	1/16" Dia (1.6)	Visual Indicator	
	See section 16 for details.			

**HOLE CHART
FOR 838A AND 838B**

	SECTION TRIM		THRU-BOLTED ESC.	
	OUTSIDE	INSIDE	OUTSIDE	INSIDE
	A,E	A,E	A,G	A,G
1/2 TRIM	NONE	A,E	NONE	A,J

Note:
When installing lock functions
with thumbturn see step 15 for
hole placement.

HOLE CHART	LOCK FUNCTION (KNOB, F.L., *RL and SL)			
	SECTION TRIM		THRU-BOLTED ESC.	
	OUTSIDE	INSIDE	OUTSIDE	INSIDE
8801 8870DT 8871DT 8872DT 8880 8881 8884 8885 836A&B 838A&B	A,E	A,E	A,G	A,G
8802 8865	A,C,E,F	A,C,E,F	A,C,G	A,C,G
8805 8807 8808 8824 8831	A,B,E	A,E	A,B,G	A,G
8890 8891	A,B*,E	A,B*,E	A,B*,G	A,B*,G
8808-2 8811-2 8812-2 8817-2 8818-2 8830-2 8860-2 8894-2 8895-2 8896-2 8897-2 8898-2 8899-2	A,B,E	A,B,E	A,B,G	A,B,G
8820 8827	A,B,D,E	A,C,E,F	A,B,D,G	A,C,G
8809 8822 8832 8847 8860 8861 8867 8896 8897 8898 8899	A,B,E	A,C,E,F	A,B,G	A,C,G
8813ST 8815	B	C	B, G	C, G
8828	NONE	A,E	NONE	A,J**
8833	B ONLY	A,E	B ONLY	A,J**
8823 8829	A,B,E	NONE	A,B,G	G
8813ST-2	B	B, C	B, G	B, C, G
8814	B	NONE	B, G	G
8814-2 8833-2	B	B	B, G	B, G
8835 8862	A,E,***	A,C,E,F	A,G,***	A,C,G
8834 8834-2	B	A,B,E	B,G	A,B,G
8864	A,B,C,E	A,C,E,F	A,B,C,G	A,C,G

Figure 3

CAUTION: Office copiers, printers and facsimile machines may
change the size of a drawing and make the template inaccurate to
use as a door marker. Contact Technical Product Support for
original versions if required.

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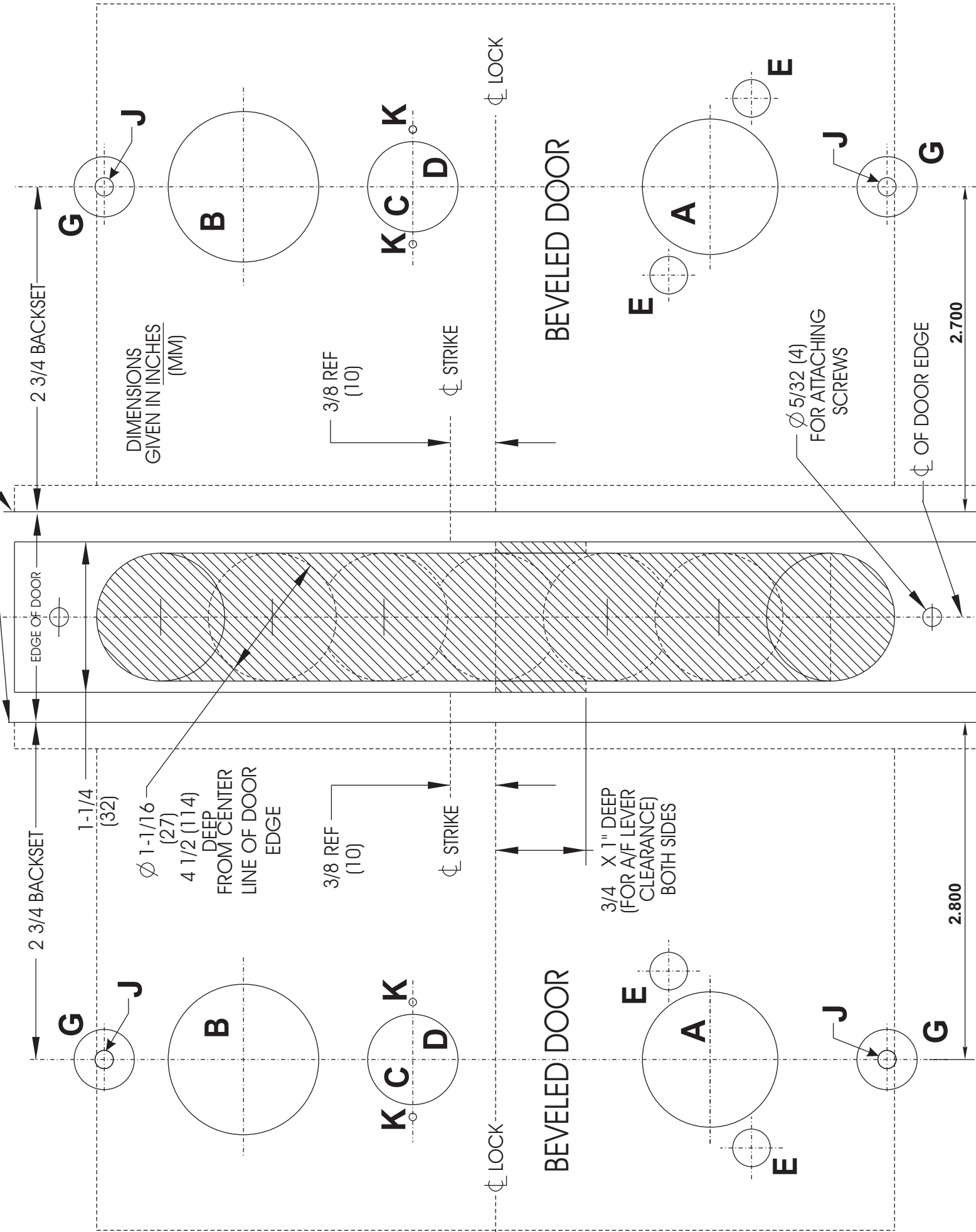
YALE, with its unique global reach and range of products, is the world's favorite lock.

ASSA ABLOY is the global leader in door opening solutions, dedicated to satisfying end-user needs for security, safety and convenience.

(Fig. 4) RH&LHR Door ONLY

CAUTION: Office copiers, printers and facsimile machines may change the size of a drawing and make the template inaccurate to use as a door marker. Contact Technical Product Support for original versions if required.

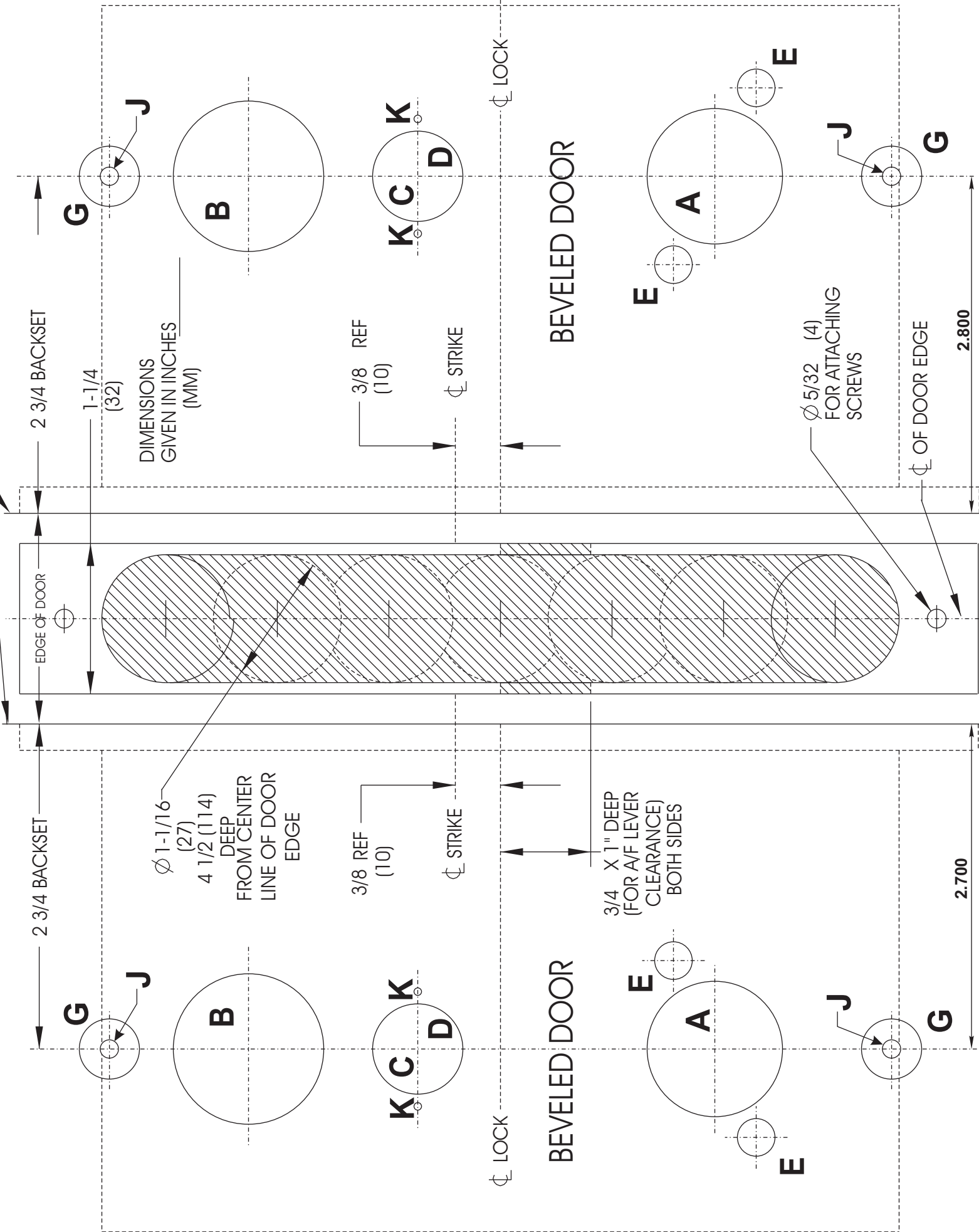
FOR DOOR SIZES OTHER THAN 1-3/4" CUT ALONG THESE LINES



(Fig. 5) LH&RHR Door ONLY

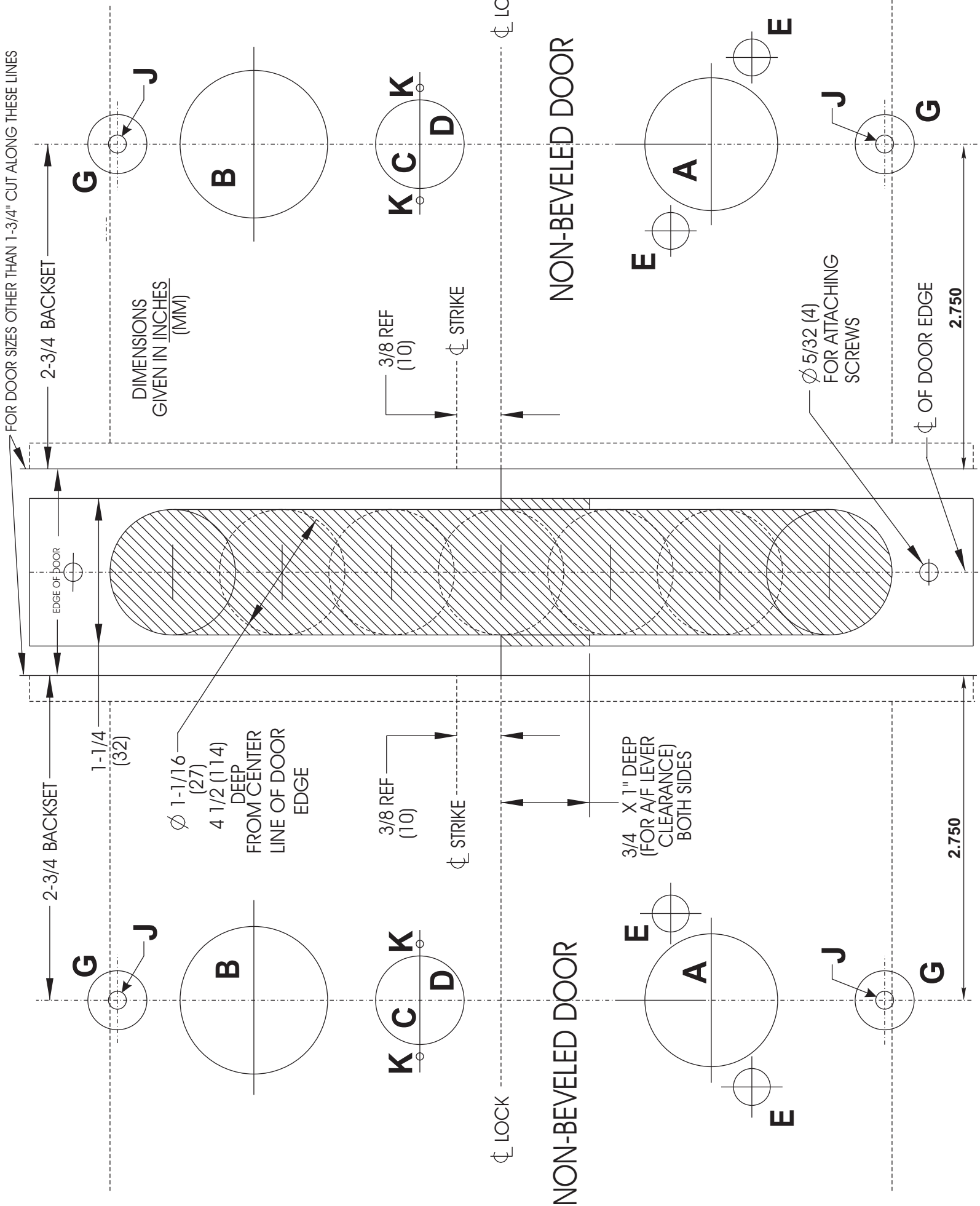
CAUTION: Office copiers, printers and facsimile machines may change the size of a drawing and make the template inaccurate to use as a door marker. Contact Technical Product Support for original versions if required.

FOR DOOR SIZES OTHER THAN 1-3/4" CUT ALONG THESE LINES



(Fig. 6) Non-Beveled Door.

CAUTION: Office copiers, printers and facsimile machines may change the size of a drawing and make the template inaccurate to use as a door marker. Contact Technical Product Support for original versions if required.



(Fig. 7) 838A AND 838B KNOB AND LEVER DUMMY TRIM

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