

**Grade 1 Key-In-Lever
VR Lever Lock
CL3100 Series
U.S. Patent No. 6,626,018**

In U.S.: Corbin Russwin, Inc.
225 Episcopal Road
Berlin, CT 06037-4004
www.corbinrusswin.com

TPS-Phone: 888-607-5703
TPS-Fax: 800-828-7277

In Canada: ASSA ABLOY Door
Security Solutions Canada
160 Four Valley Drive
Vaughan, Ontario, Canada L4K 4T9
www.assaabloy.ca

Installation Instructions

FM 345 08/12

Attention Installer

Please read these instructions carefully to prevent missing important steps.

Please note: Improper installation may result in damage to the lock and void the factory warranty.

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

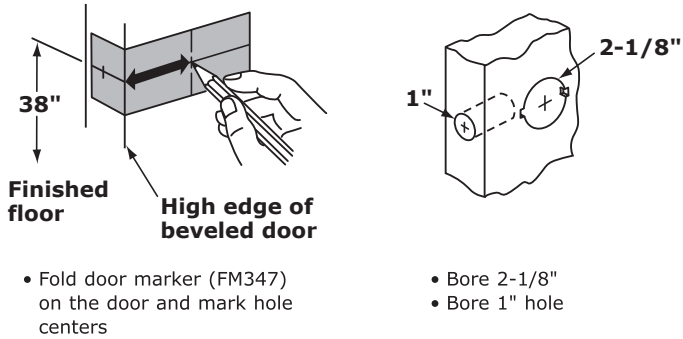
Installation Step	Lock Components	Parts
3	Latch bolt	1-4
5	Sleeves	5-7
7	Rose	8-10
8	Levers	11-14
13	High security lever	optional
14	Dummy trim	optional

Item	Description	Qty
1	Bearing SA	1
2	Latch SA	1
3	Aligning Pin	1
4	Screw packet	1
5	Inside Sleeve SA	1
6	Outside Seeve SA	1
7	Collar, Sleeve SA	1
8	Plate, Rose Support	2
9	Collar, Rose Support Plate	2
10	Rose	2
11	Cylinder	1
12	Outside Lever	1
13	Inside Lever	1
14	6 Lobe Security Set Screw 1/4-28 x11/64	2

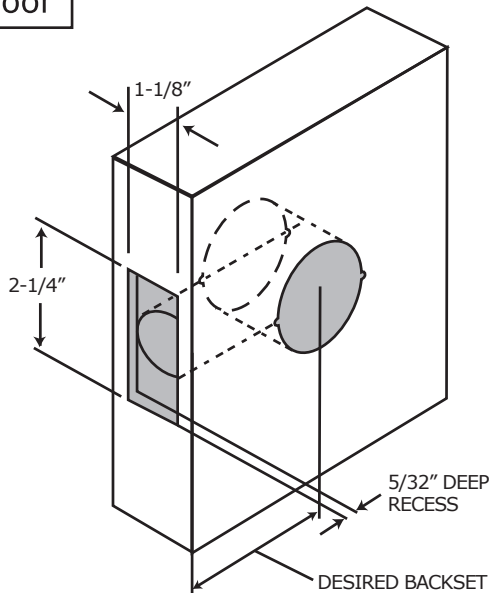
To view helpful video installation tips, scan the Microsoft® Tags with your mobile phone. Download the free app at <http://gettag.mobi>.

1 Door & Frame Preparation

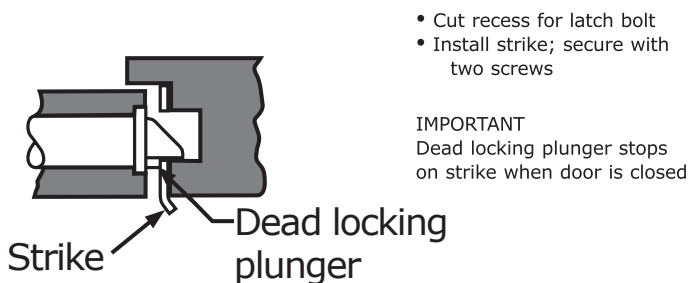
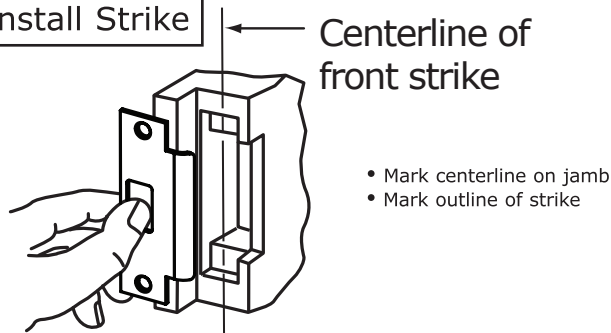
1A Mark Door



1B Drill Door

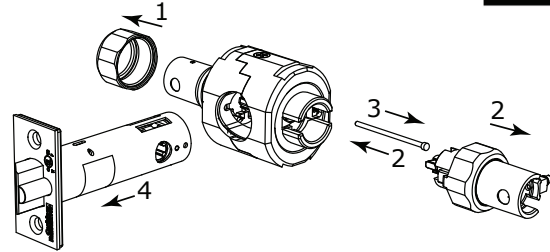
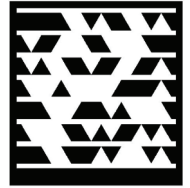


1C Install Strike



2 Lock Disassembly

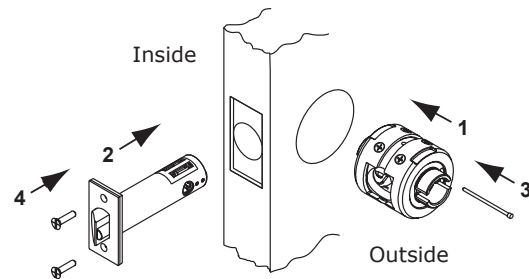
1. Unthread and remove INSIDE collar and sleeve.
2. Unthread and remove OUTSIDE collar and sleeve.
NOTE: push aligning pin out of the way of the the outside collar.
3. Remove aligning pin from bearing assembly.
4. Separate latch from bearing assembly.



3 Latch Installation

Hold door open with door stop

1. Insert bearing assembly.
2. Insert latch assembly.
3. Insert aligning pin from secure side (outside) of door.
4. Install latch plate screws. Do not tighten completely until lock installation is finished.

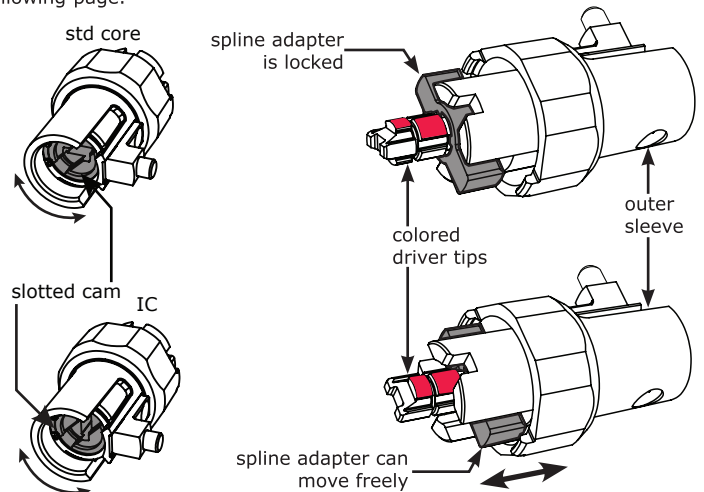


4 Driver Tip Alignment



IMPORTANT: Sleeves with colored driver tips require that the slotted cam be rotated allowing the spring loaded spline adapter to move freely in and out of the outside sleeve.

Driver Tips with red markings must match up before assembling lock. Test to insure that spline adapter can move freely. NOTE: Some driver tips have two color markings for function identification. See chart on the following page.



Function Specific Instructions - Sleeve Installation

See Specific Instructions Per Function. Identify Function On Box (Example: CL3151)
 For functions not shown proceed to next step. sleeve installation.

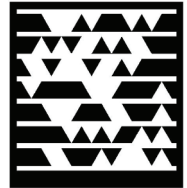
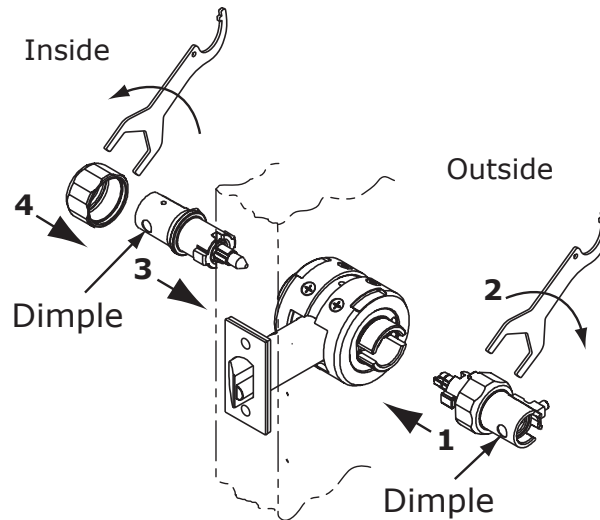
Outside Sleeve	Driver Tip Color	Function Number	Function Description	Inside Sleeve
Align driver tips, and orient the cam as illustrated on (page 2 step 4). Spline adapter will move freely.	NONE	CL3132	Utility/Institutional	Sleeve Installation (page 3 step 5)
	RED	CL3157	Storeroom/Closet	
	RED	CL3172	Exits/Public Toilets/ Apartment	
	RED	CL3151	Entrance/Office	
	RED	CL3161	Entry/Office	
	RED	CL3193	Service Station	
Align driver tips (page 2 step 4) Spline adapter always moves freely.	RED & BLUE	CL3120	Privacy/Bedroom/ Bathroom	
	RED & GREEN	CL3152	Classroom Intruder	
	RED & GREEN	CL3175	Corridor/ Dormitory Lock	

5

Sleeve Installation

1. With driver tips aligned, insert outside sleeve first. Dimple must face door edge.
2. Thread outside collar by hand. Tighten to bearing assembly with wrench.
3. Insert inside sleeve. Dimple must face door edge.
4. Thread inside collar by hand. Tighten to bearing assembly with wrench.

Caution: If excessive wrench torque is required, stop and check alignment of driver tips: page 2 step 4.

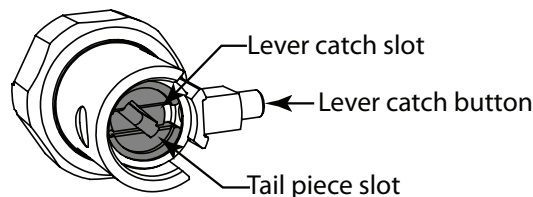


6

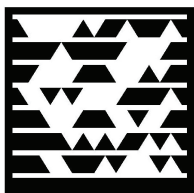
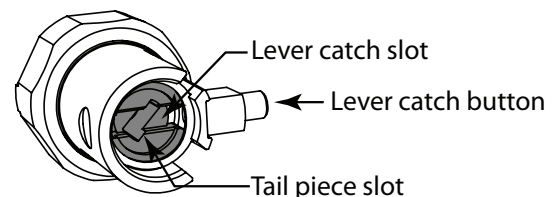
Cam Orientation

1. Lock lever by button if applicable
2. Turn slotted cam until lever catch button can be depressed.

**Slotted Cam Orientation:
Standard Cylinder**



**Slotted Cam Orientation:
IC Cylinder**



Rose Installation

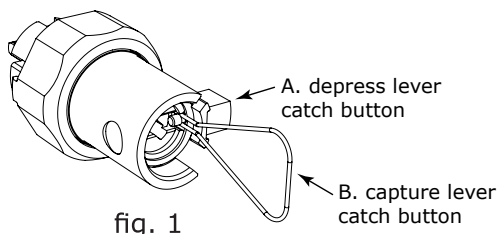
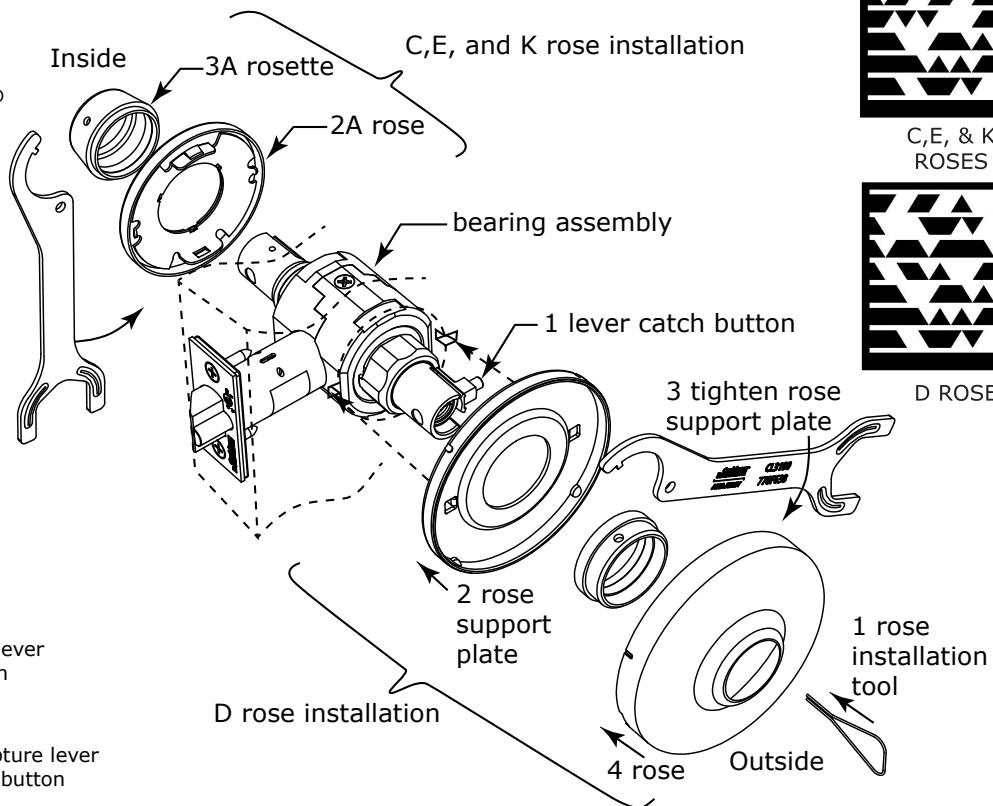
D Rose

1. Orient cam and depress lever catch button(see cam orientation diagram page 3 step 6). The lever catch button will slide into the lever catch slot in the cam. Use the rose installation tool (RIT) to retain the lever catch button-see fig.1 below for RIT instructions (for D rose installation only). Lock lever by button if applicable.
2. Install rose support plate. Note the flange orientation and door prep.
3. Install rose support plate collar and tighten with CL3100 wrench.
4. Install rose onto rose support plate.

C,E, and K Rose

- 2A. Install C, E, or K rose. Note flange and bearing orientation.
- 3A. Install rosette and tighten with the CL3100 wrench.

Caution: If excessive wrench torque is required, stop & check for cross-threading



Function Specific Directions - Lever Installation

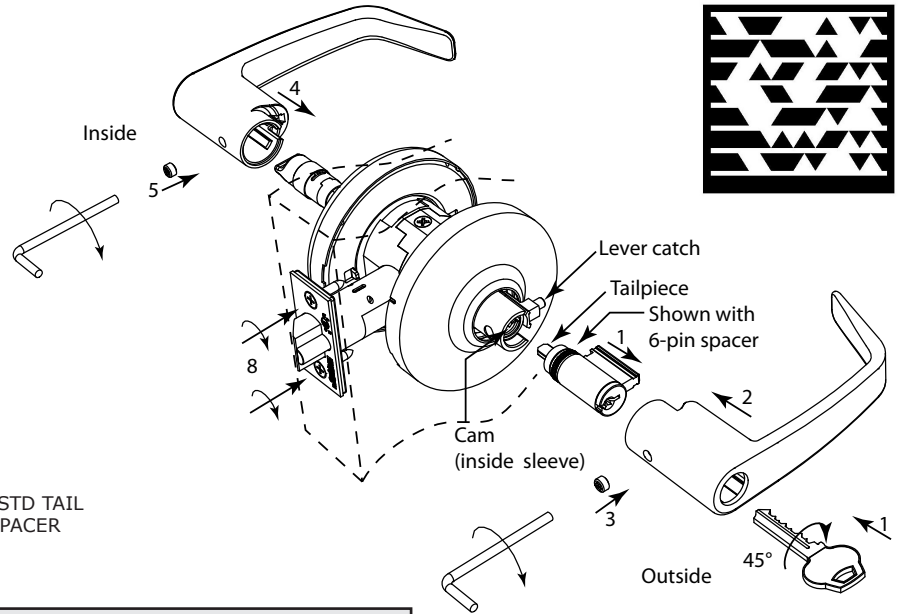
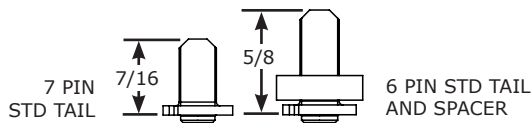
For functions not shown proceed to page 5 step 8

Inside Sleeve	Function Number	Function Description	Outside Sleeve
Lock lever by button	CL3120	Privacy/Bedroom/Bathroom	Rotate cam with emergency key until lever catch button can be depressed.
	CL3161	Entry/Office	Rotate cam until lever catch button can be depressed
	CL3151	Entrance/Office	
	CL3193	Service Station	
	CL3157	Storeroom/Closet	
Align tailpiece and tailpiece slot in cam. Rotate key 45° CW until lever catch button can be depressed. Install lever.	CL3132	Utility/Institutional	Align tailpiece and tailpiece slot in cam. Rotate key 45° CW until lever catch button can be depressed. Install lever.
Rotate cam CCW until it stops.	CL3172	Exits/Public Toilets/ Apartment	Rotate cam until lever catch button can be depressed
Rotate cam CCW until it stops. Then rotate back 45 degrees until lever catch button can be depressed.	CL3162	Communicating	Rotate cam CCW until it stops. Then rotate back 45 degrees until lever catch button can be depressed.
Rotate cam CCW until it stops.	CL3152	Classroom Intruder	
	CL3155	Classroom	
	CL3175	Corridor/ Dormitory Lock	

8

Lever Installation

1. For conventional cylinder, place cylinder into lever. Insert key and turn 45° CLOCKWISE to align cylinder tailpiece with cylinder tail piece slot in cam (cam orientation-page 3 step 6). Note: 6 pin std. cylinder requires a spacer for cylinder to seat properly in the lever. For IC cylinder/lever removal and installation (page 6 step 12).
2. Install outside lever. Push on until lever catch engages.
3. Secure with 6 lobe security set screw until tight.
4. Install inside lever.
5. Secure with 6 lobe security set screw until tight.
6. Complete tightening of two latch bolt screws.
7. Check operation of levers and latch bolt before closing door.



TEST OPERATION: Rotate levers to see that latchbolt moves freely. **DO NOT FORCE.**

If lockset does not operate properly, remove lockset from door and check door preparation.

9

CL3152 Classroom Intruder Operation Check

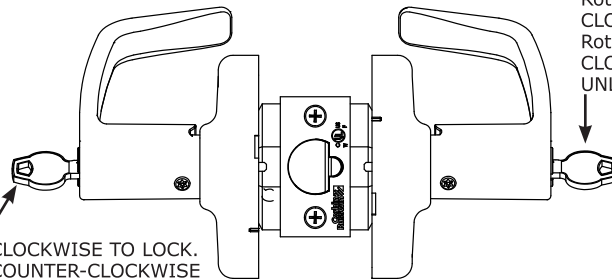
Please Note – When inside key locks outside lever, outside key retracts the latchbolt but cannot unlock the outside lever. Outside key must be rotated back completely clockwise before removing the key.

Inside lever is marked with "Lock" and direction arrows to indicate locking direction



INSIDE:
Rotate key CLOCKWISE TO LOCK.
Rotate key COUNTER-CLOCKWISE TO UNLOCK

OUTSIDE:
Rotate key COUNTER CLOCKWISE TO LOCK.
Rotate key CLOCKWISE TO UNLOCK.

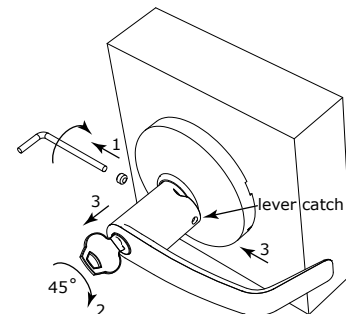


10

Cylinder Removal (Conventional)

1. Remove 6 lobe security set screw.
2. Insert key and rotate 45° clockwise to release lever catch.
3. Depress lever catch and remove lever.

Please Note: Interchangeable core cylinders do not require removing the lever to remove (page 6 step 12D).



11

CL3120 Outside Lever Removal

1. Remove 6 lobe security set screw.
2. Orient cam in outside sleeve with flat blade screwdriver to release lever catch button (page 3 step 6).
3. Depress lever catch and remove lever.

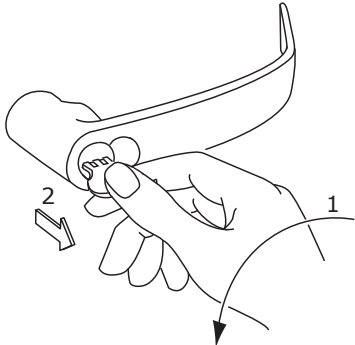
12

IC CYLINDER AND LEVERS - INSTALLATION / REMOVAL

CORBIN RUSSWIN INTERCHANGABLE CORES (C6, CL6, CT6, CTP, C7, CL7, CT7)
 SMALL FORMAT INTERCHANGEABLE CORES SFIC (M08). SCHLAGE LFIC (M69)

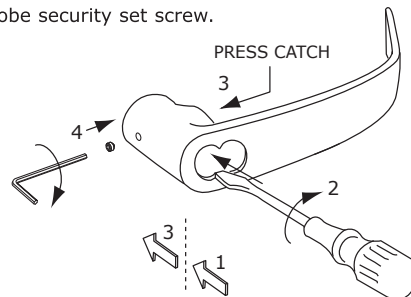
12A Removing IC Core

1. Insert control key and turn counter-clockwise until stop is reached.
2. With key in this position - pull out core.
3. Remove key.



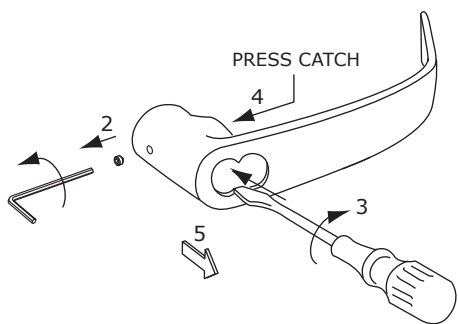
12C Installing IC Core Lever

1. Assemble lever onto sleeve.
2. Use a flat blade screwdriver to rotate cam within lever sleeve 45° clockwise to align wide slot with lever retainer catch. (See cam orientation page 3 step 6)
3. Push lever until catch engages. Check engagement.
4. Secure with 6 lobe security set screw.



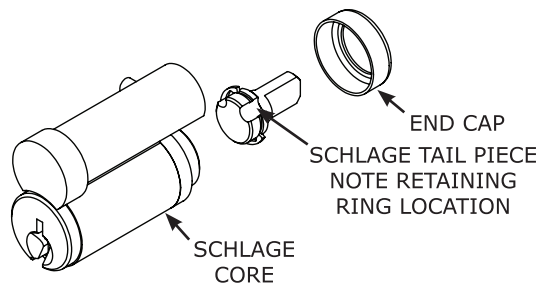
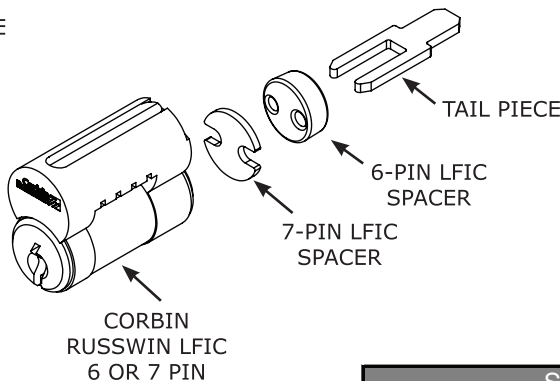
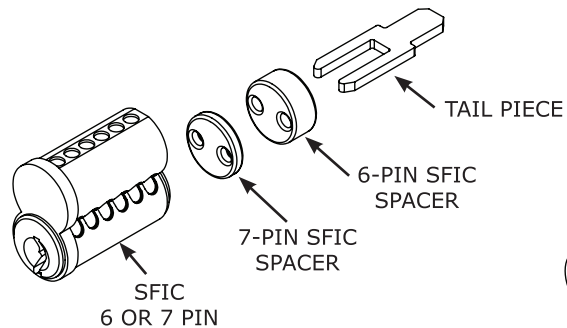
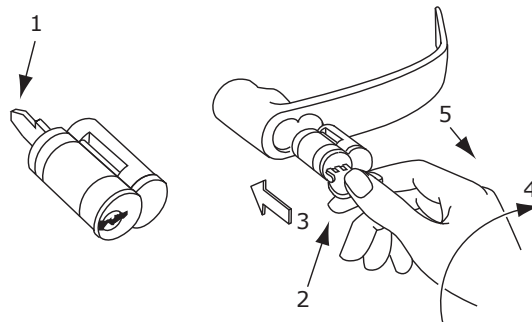
12B Removing IC Core Lever

1. Remove cylinder (as above).
2. Remove 6 lobe security set screw.
3. Use a flat blade screwdriver to rotate cam within lever sleeve 45° clockwise to align lever catch slot with lever catch button. (See cam orientation page 3 step 6)
4. Depress catch and remove lever.



12D Inserting IC Core

1. Insert 6 or 7 pin tail piece - with appropriate spacer disk - into the two holes on the back of the cylinder core (see spacer type below)
2. Insert control key and turn counter clockwise.
3. Slide core into lever.
4. Rotate control key clockwise to lock in lever.
5. Remove control key. Hold cylinder with finger and remove key.



Spacer Type		
Core type	Thickness	Color/Material
6 Pin LFIC Pyramid	0.197	Blue/Delrin
7Pin LFIC	0.055	Steel-Zinc plate
6 Pin SFIC	0.234	Black/Delrin
7 Pin SFIC	0.093	Black/Delrin

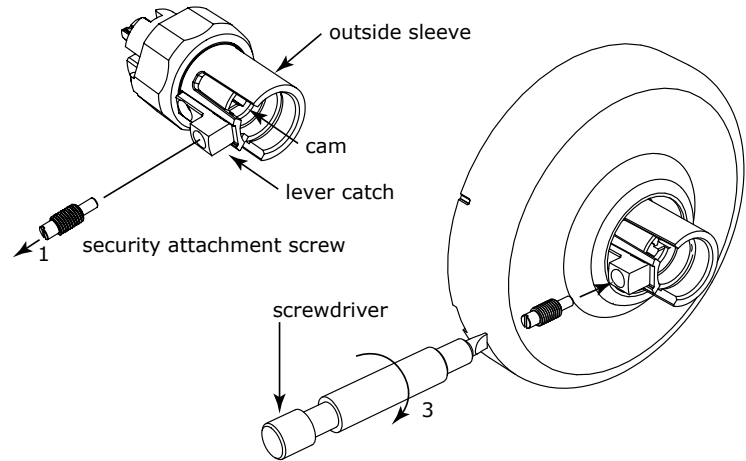
13 INSTALLATION : CL3100 LEVER LOCK WITH HIGH SECURITY LEVER (M111)

13A Lock Body Assembly

1. Prep door and install lock bearing and latch according to door and frame preps that appear on page 2 step 1.
2. Complete assembly of lock with Security Lever Attachment according to the following steps.

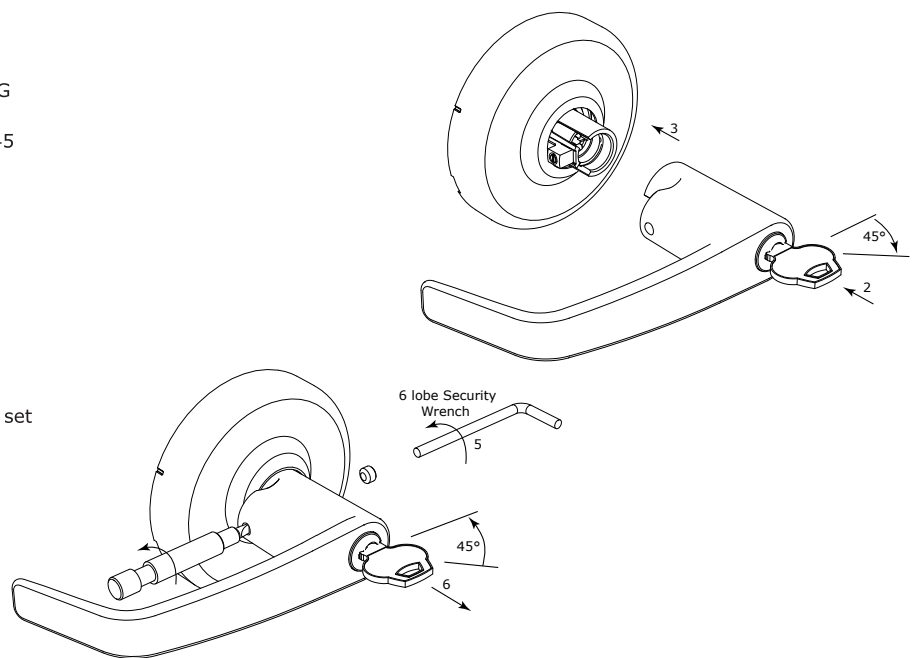
13B Security Attachment Screw

1. Using screwdriver provided, unscrew the Security Attachment Screw from lever catch on the outside sleeve. **IMPORTANT** - Keep screw for reinstallation.
2. Install outside and inside sleeves and roses according to sleeve installation instruction on page 3 step 5.
3. **PLEASE NOTE** - THE CAM IN THE OUTSIDE SLEEVE MUST BE ROTATED SO THE LARGE SLOT IS HORIZONTAL. THIS ALLOWS THE SECURITY SCREW TO THREAD INTO THE CAM - SEE CAM ORIENTATION PAGE 3 STEP 6. Insert the Security Attachment Screw into lever catch assembly and tighten until screw head is within approximately 1/8" of lever catch. **DO NOT OVERTIGHTEN.**



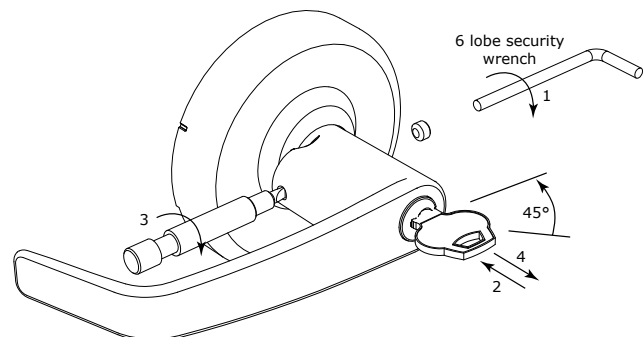
13C Lever Installation

1. **IMPORTANT:** Before installing levers read "SPECIFIC INSTRUCTIONS PER FUNCTION - BEFORE INSTALLING LEVER" on page 3.
2. Place cylinder in outside lever. Insert key and rotate 45 degrees clockwise.
3. With key rotated, push lever onto sleeve until hole on inside of lever is over Security Attachment Screw. If screw interferes with assembly, check that screw is fully threaded into lever catch.
4. Using screwdriver provided, rotate Security Attachment Screw counter-clockwise until flush with surface of lever.
5. Secure lever with 6 lobe security set screw.
6. Rotate key to horizontal and remove.
7. Assemble inside lever and secure with 6 lobe security set screw.



13D Cylinder Removal

1. Remove security screw on outside of lever with 6 lobe wrench.
2. Insert key and rotate key 45° clockwise; keep key in this position.
3. Using screwdriver, tighten the security attachment screw clockwise until it clears the lever.
4. Remove lever and remove key.
5. Remove cylinder from lever and install new cylinder.
6. Reinstall lever following step 3 above.

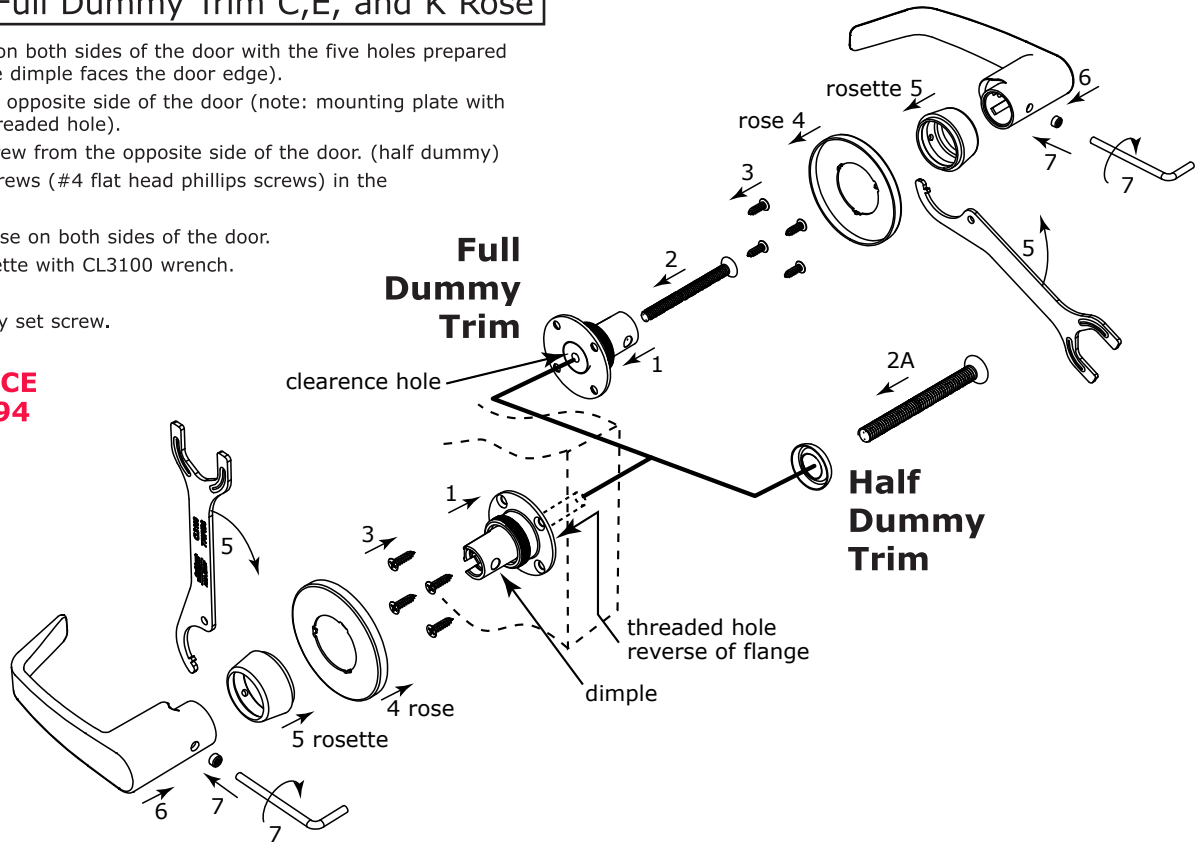


Dummy Trim Installation

CL3150/70 Half/Full Dummy Trim C,E, and K Rose

1. Align mounting plate on both sides of the door with the five holes prepared in the door. (note: the dimple faces the door edge).
2. Install screw from the opposite side of the door (note: mounting plate with clearance hole and threaded hole).
- 2A. Install washer and screw from the opposite side of the door. (half dummy)
3. Install four surface screws (#4 flat head phillips screws) in the mounting plate.
4. Align and place the rose on both sides of the door.
5. Place and tighten rosette with CL3100 wrench.
6. install lever.
7. Tighten 6 lobe security set screw.

**PLEASE REFERENCE
TEMPLATE: T31194**



CL3350/70 Half/Full Dummy Trim D Rose

1. Align mounting plate on both sides of the door with the five holes prepared in the door. (note: the dimple faces the door edge).
2. Install screw from the opposite side of the door (note: mounting plate with clearance hole and threaded hole).
- 2A. Install washer and screw from the opposite side of the door. (half dummy)
3. Install four surface screws (#4 flat head phillips head screws) in the mounting plate.
4. Align and place the rose support plate on both sides of the door (Note: the flanges are pointing away from the door).
5. Place and tighten rose support plate collar with CL3100 wrench.
6. Install rose.
7. Install lever.
8. Tighten 6 lobe security set screw.

**PLEASE REFERENCE
TEMPLATE: T31194**

