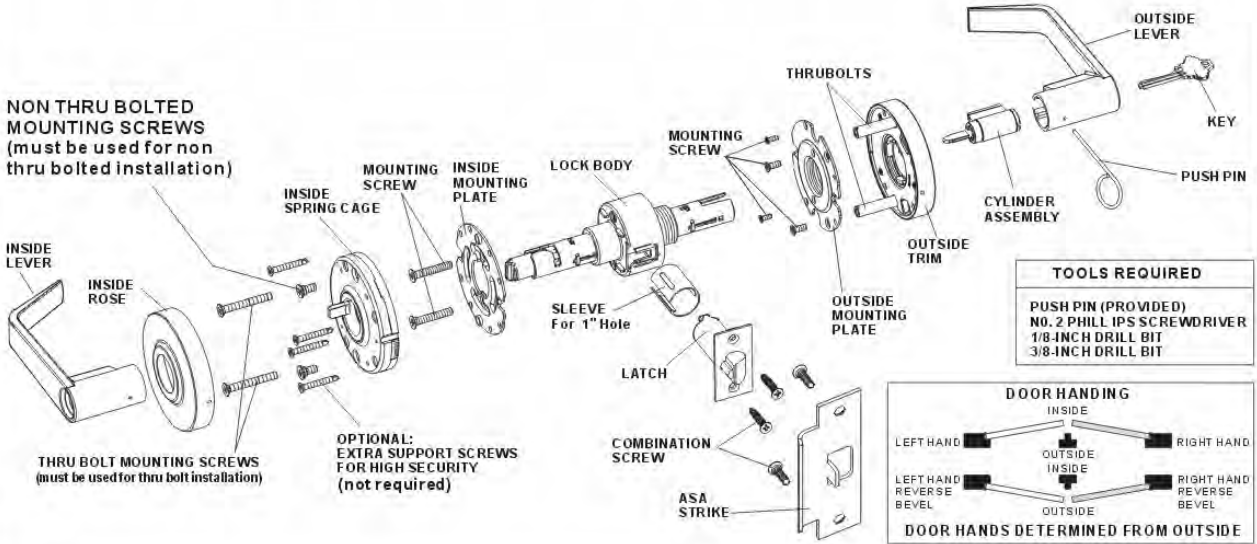


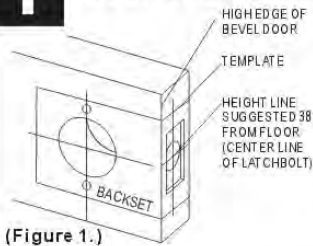
# X-Series Heavy Duty Grade 1 Lock Installation Instructions

Leverset is set for 1-3/4" thick door - Backset 2-3/4"

**\*THRUBOLTS ARE PROVIDED AND RECOMMENDED FOR USE IN HIGH SECURITY DOORS.**

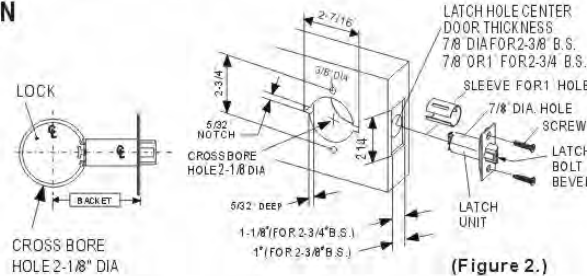


## 1 DOOR PREPARATION



(Figure 1.)

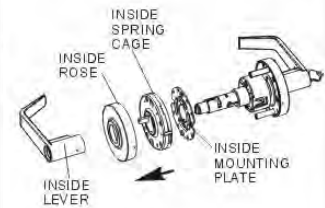
1. Check lock for proper backset and body outside stud bolt type before drilling.
  2. Place paper template (supplied) on the door and mark for holes. Drill the cross-bore holes, and then the latch holes.
- NOTE:**  
Cut notches on 2-1/8" cross-bore hole on both sides for steel or wood doors. (Refer to fig. 2)



(Figure 2.)

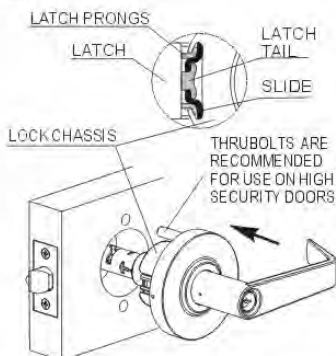
3. Drill (2) 3/8" thru bolt holes half way thru from each side of door to prevent damaging door unless lock is to be installed without thru bolts then skip to step 4.
4. Mortise latch unit front 5/32" into door edge to dimensions shown in fig. 2.
5. Insert latch unit with sleeve if hole is 1" dia, or without sleeve into 7/8" dia. Make certain that latch bolt bevel faces direction of closing door.
6. Drill two 1/8" dia. holes and secure latch unit with combi-screws supplied.

## 2 DISASSEMBLE A LOCK

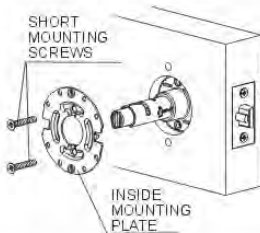


1. Disassemble inside lever.
2. Disassemble inside rose assembly and inside mounting plate.

## 3 INSTALL LOCK ONTO DOOR

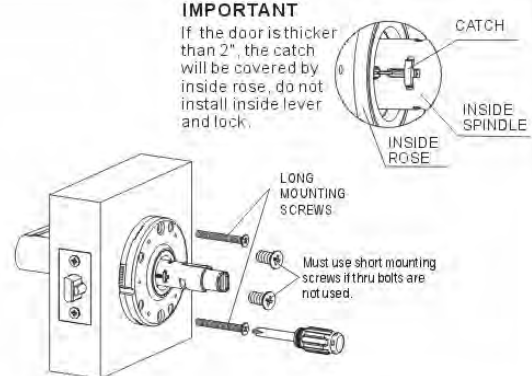


**3A:** Place lock body into position. Make sure that latch prongs engage chassis housing, and slide engages latch tail.



**3B:** Install inside mounting plate with short mounting screws.

**NOTE:** OPTIONAL if using thru bolts, but recommended for use on High Security Doors.

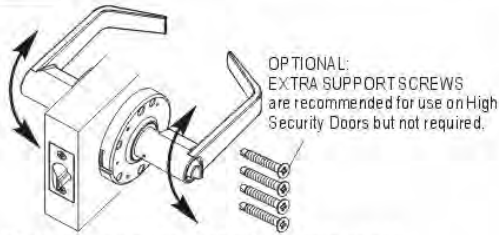


**3C:** Install inside spring cage with long mounting screws for thru bolt installation or short mounting screws for non thru bolted installation, but do not tighten these two screws yet.

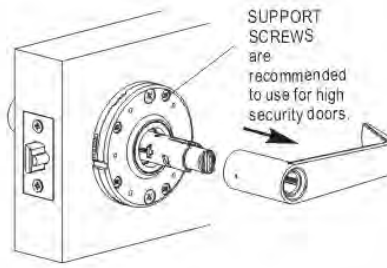
Not to scale 1:1. Measurements are for reference only. Not a drilling template.

# 3

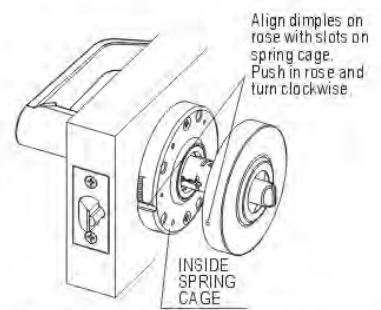
## INSTALL LOCK ONTO DOOR (Continued)



**3D:** Slide inside lever onto spindle and check to see if the rotation is smooth. Adjust the radial clearance between inside spring cage and inside lever if necessary. Then tighten two mounting screws all the way.  
**OPTIONAL:** Install the four extra support screws now for use on High Security Doors.



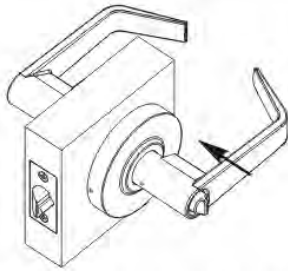
**3E:** Insert push pin into hole to depress catch and remove inside lever.



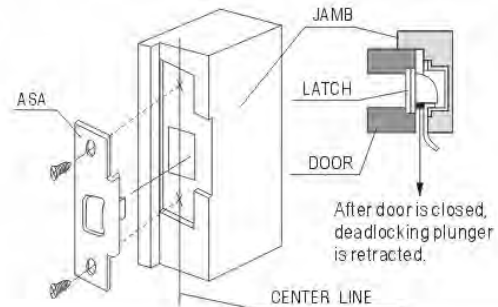
**3F:** Install inside rose, make sure inside rose and inside spring cage are secure.

# 4

## INSTALL STRIKE

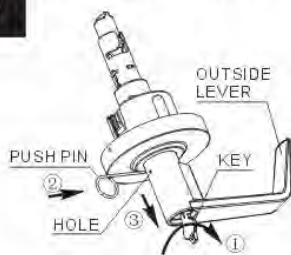


**3G:** Slide inside lever onto spindle. Push lever completely onto spindle until it locks into place. (Pull on lever to make sure that catch is fully engaged.)

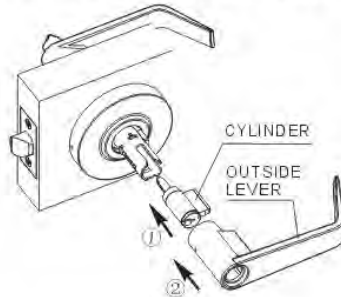


# 5

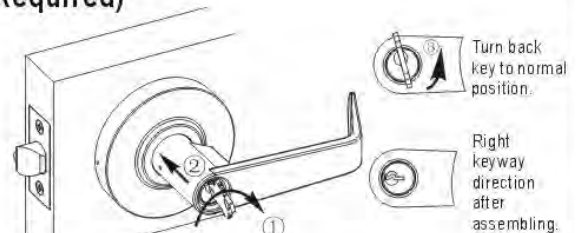
## INSTRUCTIONS FOR CYLINDER REPLACEMENT (If Required)



**5A:** Turn key 75° clockwise, insert push pin into hole in outside lever to depress catch. Remove the outside lever.

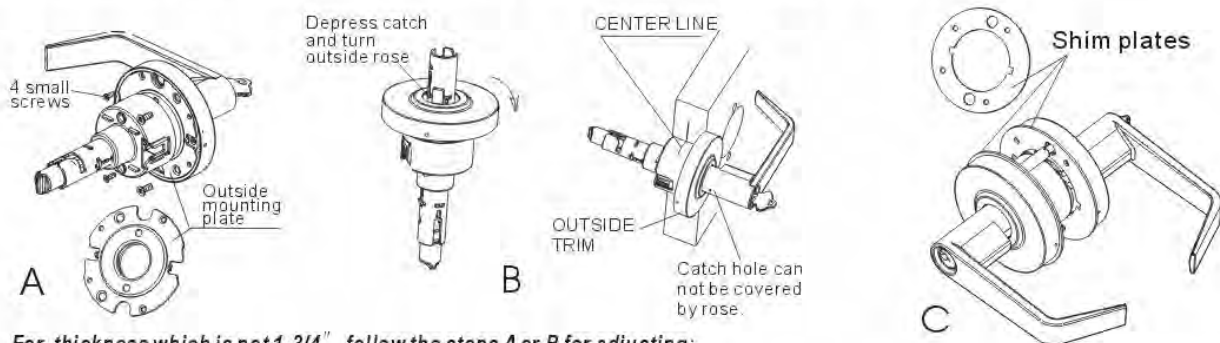


**5B:** Install cylinder and lever.



**5C:** Turn the key approximately 80° clockwise and push the lever all the way onto the spindle and then turn the key back to normal position.

## INSTRUCTIONS FOR ADJUSTING LOCK TO FIT DOOR THICKNESS OTHER THAN 1-3/4"



**For thickness which is not 1-3/4", follow the steps A or B for adjusting:**

- A**
1. Screw off two thru bolts and 4 small screws.
  2. Turn outside mounting plate to adjust center line of lock body to match the centerline of the door.
  3. Screw 4 small screws back to outside mounting plate for next installation.
- B**
1. Refer to 5A above, remove outside lever, depress catch, turn outside rose to make it fit for your door thickness. Make sure centerline of lock body matches the centerline of the door.
  2. Refer to 5B and 5C above to reinstall outside lever.

**C:** If the lock is to be used on a door 1 3/8" thick, two shim plates must be added to thicken the door. (available separately)

**NOTE:** Not recommended for non thru bolt installation.