

# CAL-ROYAL PRODUCTS, INC

## EXPLORER - Series

### Instructions For Installing XP-Series Lever Handle Sets

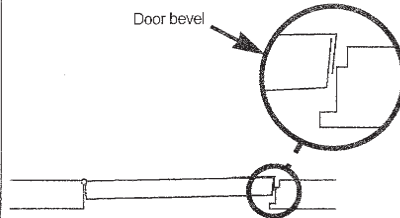
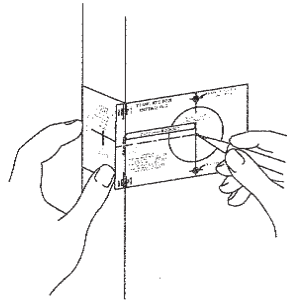
**NOTE :** Accurate door preparation is essential for proper functioning of this lock. Follow template and instructions carefully.

**AVAILABLE AN OPTIONAL  
THROUGH-BOLTS LOCATION.  
SEE ENCLOSED TEMPLATE FOR LOCATION.**

**Through- Bolts are provided and  
recommended for use on high  
frequency doors.**

The anti - sagging mechanism of handle in XP -series lever handle set has a patent pending in the U.S. and foreign countries.

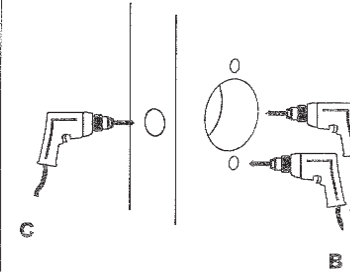
### Door and jamb preparation



### 1. Mark door

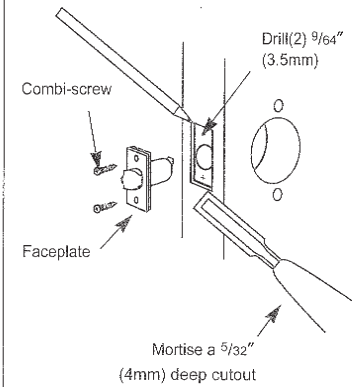
- Check lock for proper backset and body outside through - bolt type before marking.  
**NOTE :** Through-Bolts are provided and recommended for use on high frequency doors.
- Detach stub.
- Fold template at correct marking for door bevel (high or low bevel, or flat).
- Position template at correct height (recommended height for centerline is 38" (97cm) from floor).
- Mark center for  $2\frac{1}{8}"$  (54mm) hole.
- Also mark for (2)  $\frac{5}{16}"$  (8mm) holes for through-bolt type.  
**NOTE :** Do not mark the (2)  $\frac{5}{16}"$  holes for locks No through - bolt type.
- Use stub to mark center of door thickness.  
**HINT :** For retrofitting existing lock holes, fold template in half to position for the mounting screws.

### 2. Drill holes



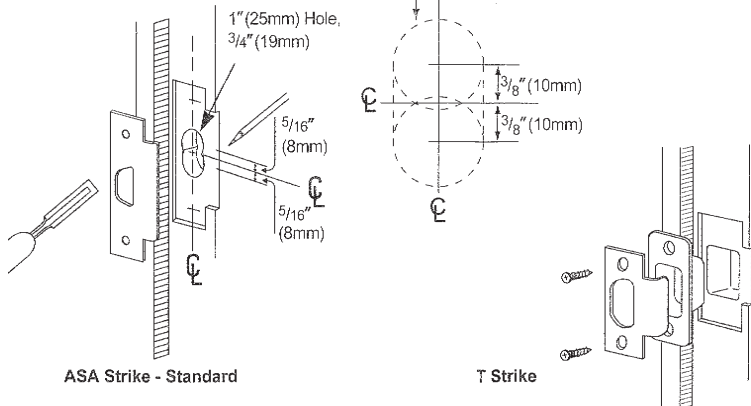
- Drill a  $2\frac{1}{8}"$  (54mm) hole through door (from both sides to avoid damaging door).
- Drill (2)  $\frac{5}{16}"$  (8mm) holes for through bolt  
**NOTE :** Do not drill the (2)  $\frac{5}{16}"$  (8mm) holes for locks No through - bolt type.
- Drill a 1" (25mm) or  $\frac{7}{8}"$  (22mm) (depending on latch housing diameter) in door edge.

### 3. Install latch



- Insert latch into hole. Trace around faceplate
- Chisel out wood until faceplate fits flat with door edge.
- Drill (2)  $\frac{9}{64}"$  (3.5mm) holes and secure latch unit with combi-screws supplied.
- Fasten latch to door so that beveled side of latchbolt faces jamb.

### 4. Install strike

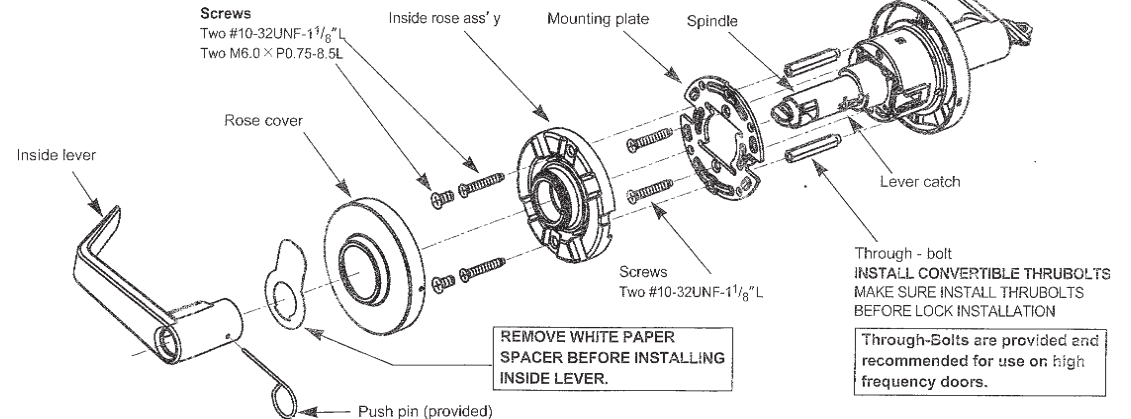


- Mark vertical line and heightline on jamb exactly opposite center of latch hole.
- Drill (2) 1" (25mm) holes,  $\frac{3}{4}"$  (19mm) deep,  $\frac{5}{16}"$  (8mm) above and below heightline.
- Use strike plate to pattern for cutout. Clean out hole and install strike.

- Mark vertical line and heightline on jamb exactly opposite center of latch hole.
- Drill (2)  $\frac{7}{8}"$  (22mm) holes,  $\frac{11}{16}"$  (17mm) deep, into doorjamb as shown.
- Mortise a cutout for the strike. Use strike as a pattern for the mortise. (Strike should fit flush with the doorjamb.)

### Lock Installation

Must use "M6.0 x P0.75-8.5L" If thru bolts not installed.  
Must use "#10-32UNF-1 $\frac{1}{8}"$ L" (packed with convertible thru bolt) in installing convertible thru bolt.



- Disassemble inside lever.
- Disassemble inside rose assembly.
- Disassemble mounting plate.

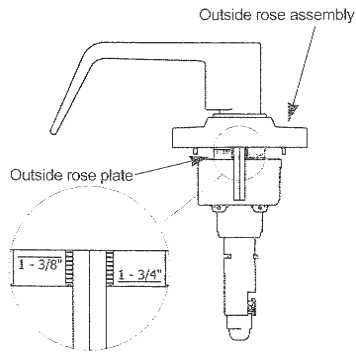
- Insert the convertible thrubolts (provided 2pcs additionally) into the tapping holes for convertible thrubolts in the outside rose ass'y.

**REMOVE WHITE PAPER  
SPACER BEFORE INSTALLING  
INSIDE LEVER.**

**Through - bolt  
INSTALL CONVERTIBLE THRU BOLTS  
MAKE SURE INSTALL THRU BOLTS  
BEFORE LOCK INSTALLATION**

**Through-Bolts are provided and  
recommended for use on high  
frequency doors.**

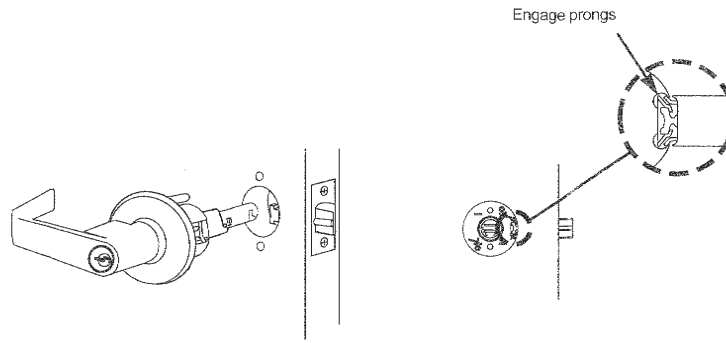
## 6. Adjust for door thickness



Lockset is factory preset for 1 3/4" (45mm) doors.

- A. It can be adjusted for door thickness range for 1 3/8" to 2"
- B. Rotate outside rose assembly until correct door thickness mark onto outside rose plate.

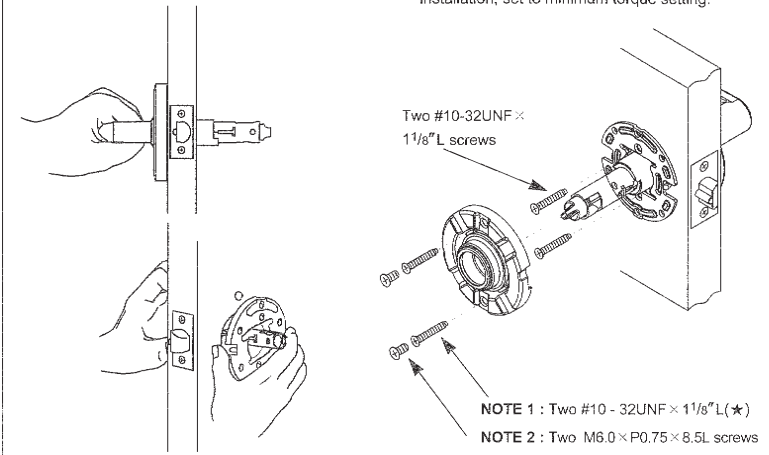
## 7. Install outside lock unit



**IMPORTANT :** Place outside lock unit into position. Make sure that latch prongs engage chassis housing, and latch retractor engages latch bar.

**IMPORTANT :** This lock is factory preset for 1 3/4" (45mm) doors.  
See Step 6. to center chassis in door or to change adjustment of other door thicknesses

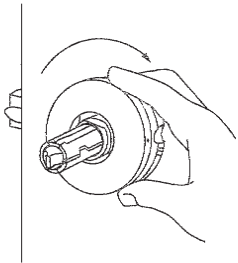
## 8. Install mounting plate.



**CAUTION :** When using power screwdriver for installation, set to minimum torque setting.

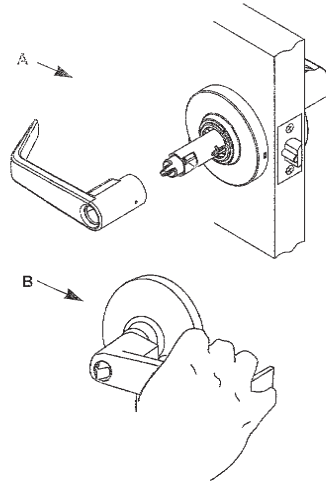
- A. Hold outside unit in place.
  - B. Put mounting plate into position on chassis.
  - C. Place mounting plate. Tighten it to lock body with two #10 - 32UNF x 1 1/8" L screws
  - D. Place inside rose ass'y. Tighten it to lock body with screws supplied.
- NOTE 1 :** Two #10 - 32UNF x 1 1/8" L (★) screws can be used for outside through - bolt type only.
- NOTE 2 :** Two M6.0 x P0.75 x 8.5L screws can be used for no through - bolt type only.

## 9. Install inside rose assembly



- A. Align dimples on rose with grooves in inside rose assembly.
- B. Place rose against door and rotate clockwise until dimples snap into slots next to the grooves.

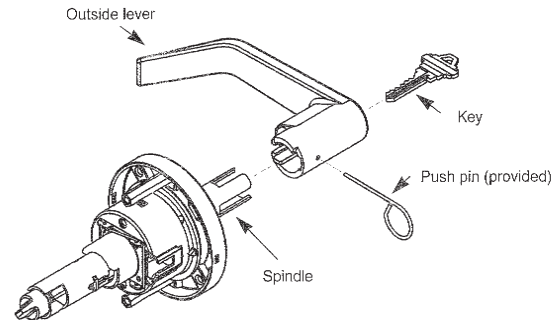
## 10. Install inside lever



- A. Slide inside lever onto spindle.  
Push lever completely into place. (Pull on lever to make sure that catch is fully engaged.)
- B. Test operation of lock to make sure you have followed instructions correctly.

## How to remove & reassemble outside lever

### 11. Remove outside lever

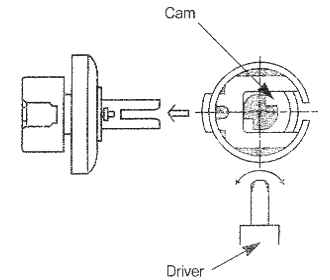


- A. Insert key into cylinder. Insert push pin (or similar tool) into hole in lever. Turn key one - quarter turn and push tool (push pin) to depress lever catch. Slide the lever from spindle.

### 12. Reassemble outside lever

- Reverse Step 11 to reassemble levers.
- A. To reassemble. Put a cylinder and key in lever.
  - B. Push cylinder further in until it engages retractor.
  - C. Turn key 90° clockwise and hold a key.
  - D. Depress lever catch and push lever (Not key) in until it clicks then release a key.

## CAUTION FOR CLASSROOM FUNCTION



Make sure to turn cam anti - clockwise by driver as far as it will go before reassembling of cylinder to prevent mis-positioning of cam for classroom function.