

# UltraLatch<sup>®</sup> by SOSS<sup>®</sup>

## Installation Instructions Models L1, L2, L3

### Before installation, please check carton contents:

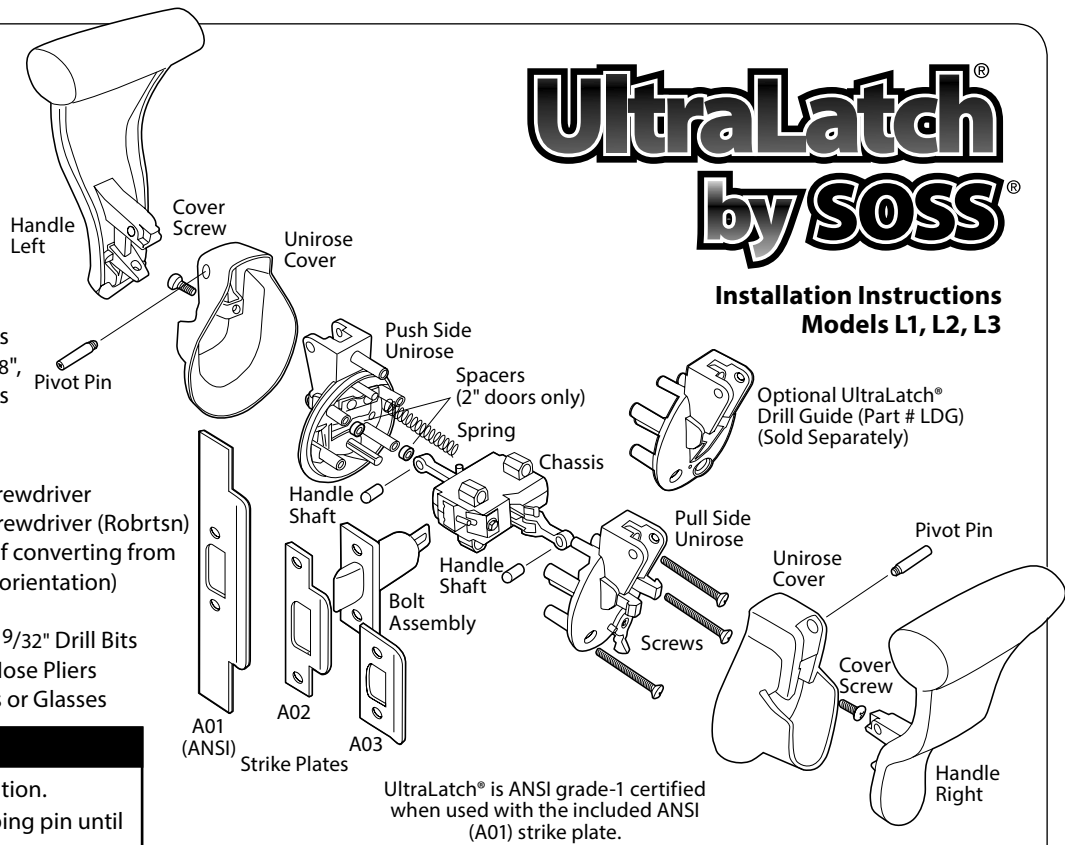
- Bolt Assembly: Includes 2 Mounting Screws and 2 Face Plates 1" and 1 1/8"
- Unirose/Chassis Assembly: Includes Mounting Hardware, Lock Trip Key
- 2 Handles: 1 Left and 1 Right
- 2 Rose Covers
- Strike Plates: L1 Model will include 1 1/8" x 2 3/4" and 1 1/4" x 2 1/4" Strike Plates  
L2 and L3 Models will include 1 1/4" x 4 7/8", 1 1/8" x 2 3/4" and 1 1/4" x 2 1/4" Strike Plates

### Tools needed to install the SOSS<sup>®</sup> UltraLatch<sup>®</sup>

- Flat Screwdriver
- Torpedo Level
- Adjustable Square
- 1" Flat Wood Chisel
- Pencil
- UltraLatch Drill Guide
- Hammer
- #2 Phillips Screwdriver
- T-15 6-Lobe Screwdriver
- #2 Sq. Drive Screwdriver (Robrtsn) (Only needed if converting from LH to RH door orientation)
- Electric Drill
- 1/8", 11/64" and 9/32" Drill Bits
- Small Needle Nose Pliers
- Safety Goggles or Glasses

### Important Notes

Please DO NOT remove factory lubrication.  
DO NOT remove the Linear-Cam shipping pin until instructed to do so.



UltraLatch<sup>®</sup> is ANSI grade-1 certified when used with the included ANSI (A01) strike plate.

## 1 Door Preparation

For new slab door, start at least 36" above floor.

Fold and apply template to high side of door bevel.

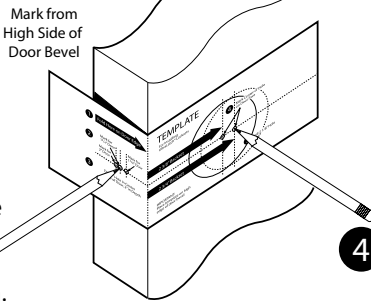
Ensure that template is level and square.

Mark center hole on door face through guide on template for 2 3/8" or 2 3/4" backset.

Repeat on door edge for latch.

With template in place, transfer center line to door jamb.

UltraLatch<sup>®</sup> units are packed to a specific backset (2 3/8" or 2 3/4") depending upon door thickness. Normally if your door is 1 3/8" thick, you will have a 2 3/8" backset; if your door is 1 3/4" or thicker, the backset is 2 3/4".



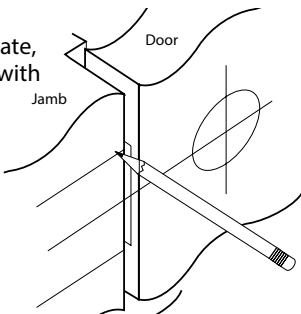
## 2 To determine position for strike plate,

ensure that center of hole is level with center of 2 1/8" face hole on door.

To measure, insert end of template against flat of latch bolt and close door against stop.

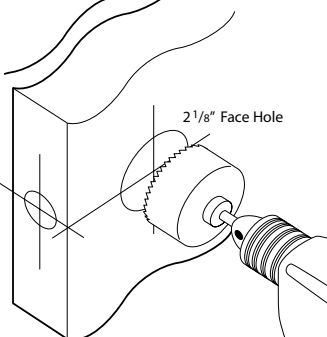
Mark template from edge of jamb and transfer lines around face of jamb to locate strike opening.

Mark center line for screws and 1" hole.



## 3 Drill 2 1/8" hole through door face

as marked for lockset. Hole must be drilled perpendicular to the door face and level. Drill the 2 1/8" hole first. To avoid splintering, stop when pilot bit starts to exit opposite side. Reverse drill to remove and repeat on opposite side using pilot hole as a guide.



### Important Notes

If you are prepping the door for a standard round deadbolt, leave at least 8" between the center of deadbolt and center of UltraLatch<sup>®</sup> bolt to allow clearance for UltraLatch<sup>®</sup> handles. If using any other type of deadbolt, measure before placing hole to ensure that you have enough clearance.

4 Use 1" hole saw to drill door edge 2" deep. Hole must be drilled parallel to the door face and perpendicular to door edge.

5 It is very important that the bolt assembly is flush in the mortise. If the door is beveled, ensure that the bolt assembly is flush with the low side of the bevel. The barrel of the bolt must be parallel to the door face and perpendicular to door edge. Trace with pencil or utility knife to outline mortise. Mortise edge of door to accept bolt assembly and face plate.

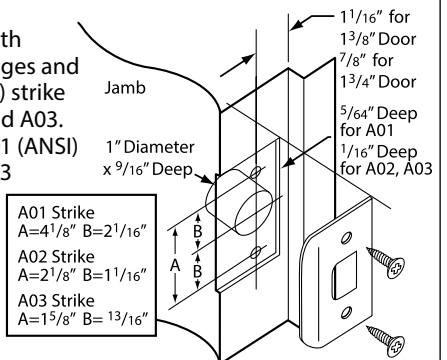
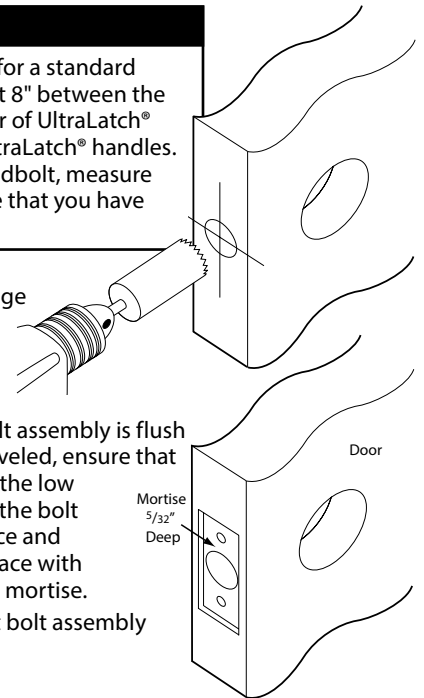
Insert bolt and tighten screws.

6 Drill door jamb using 1" hole saw 9/16" deep in door jamb on center line of screws.

Locate screw holes on strike with center line on jamb. Outline edges and chisel 5/64" deep for A01 (ANSI) strike plate and 1/16" deep for A02 and A03. Predrill 11/64" pilot holes for A01 (ANSI) or 1/8" pilot holes for A02 or A03 strike plates.

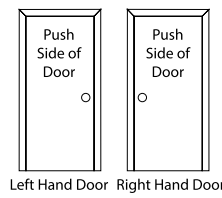
Install strike plate and tighten screws.

Adjustable tang on A03 strike plate permits bending to eliminate loose fit between door and stop.



## Determining Door Orientation

Before installing the Unirose/Chassis Assembly you must determine if your door is a **Right** or **Left** hand door. This is accomplished by noticing hinge location when facing the **Push** side of the door. If the hinges are on the left, it's a left hand door and if on the right, it's a right hand door. The assembly is set at the factory for a left hand door.

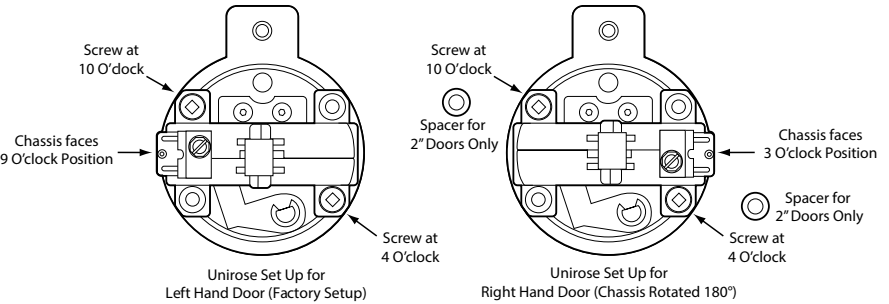


## Important Notes

- DO NOT use power tools to secure screws.
- DO NOT remove lubrication from internal parts.
- DO NOT remove linear cam shipping pin until told to do so.

## Set Up for a Right Hand Door

Remove the 2 screws that secure the chassis to the Push Unirose using a #2 Square Drive Screwdriver. Rotate the Chassis 180° so that the Linear Cam now faces the 3 o'clock position (as shown). Reinstall and tighten the screws at the 4 and 10 o'clock positions. If this is a 2" door installation (L3) then you must also reinstall the Spacers between the Chassis and Unirose at the 4 and 10 o'clock positions.



## Important Note

The UltraLatch® requires a precisely located screw hole drilled perpendicular to the door face above the face hole. Follow instructions in 7 or 7a below to locate this hole. We highly recommend the purchase of the optional UltraLatch® drill guide to ensure proper location of this hole.

## 7 Installation using Optional UltraLatch® Drill Guide

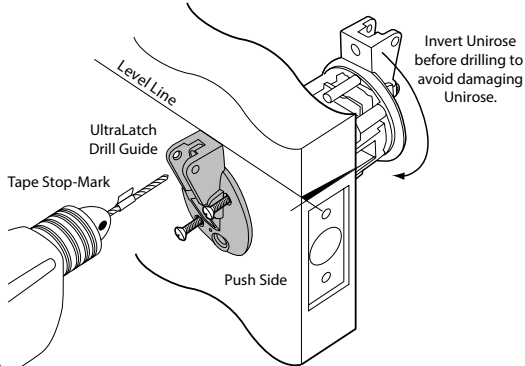
Prepare  $\frac{9}{32}$ " drill bit by marking a stop-mark with tape to allow 2" max penetration for  $\frac{13}{4}$ " and 2" thick doors or  $\frac{15}{8}$ " for  $\frac{13}{8}$ " thick doors. Measurement should be made from tip of drill to tape marker.

Open Chassis Assembly, remove the 3 screws from Pull Side Unirose.

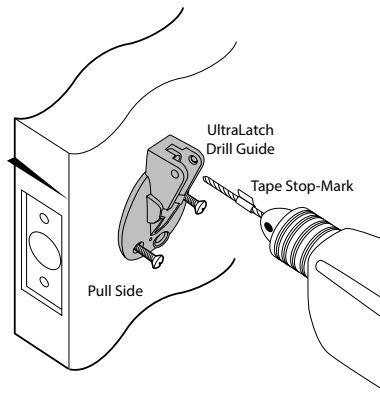
Invert Unirose to avoid drilling into it and place in the  $2\frac{1}{8}$ " face hole on door.

Insert **UltraLatch® Drill Guide** on other side of door, attach with 2 lower screws to snug.

Check with Torpedo Level only if door is plumb – adjust if necessary.



If door is not plumb, use measurements as noted in #7a. When level, tighten screws.



## DO NOT USE POWER TOOLS TO SECURE SCREWS

We recommend drilling the push side of the door first. Drill hole through Drill Guide to the tape mark. Do not drill completely through the door. Remove drill guide and Unirose, repeat procedure on opposite side of door. Drilling in two steps will prevent splintering on the door.

When holes meet, go to step 8.

To save time, we recommend using 2 UltraLatch® Drill Guides. Please refer to section 12 on page 4.

## 7a Installation without Drill Guide

If not using Drill Guide, prepare  $\frac{9}{32}$ " Drill Bit by marking a Stop-Mark with tape to allow 1" max penetration for  $\frac{13}{8}$ " door,  $\frac{13}{4}$ " for  $\frac{13}{4}$ " door or  $\frac{15}{8}$ " for 2" Door. Measurement should be made from tip of drill to tape marker.

Open Chassis Assembly, remove the 3 screws from Pull Side Unirose.

As long as door is plumb, insert Pull Side Unirose into the  $2\frac{1}{8}$ " hole. Check measurements and mark location of  $\frac{9}{32}$ " hole with a pencil.

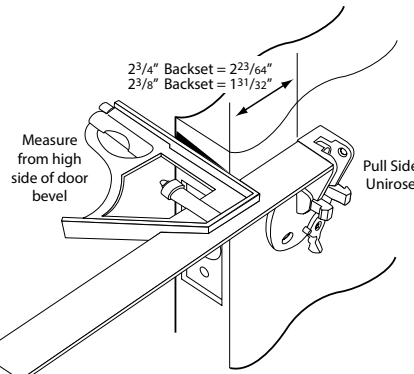
Remove Unirose and repeat procedure on opposite side of door.

## If not using Drill Guide or Level

Many doors are beveled on the edge. Be sure to start measurement from the highest point of the bevel when using an adjustable square. Prepare  $\frac{9}{32}$ " Drill Bit by marking a Stop-Mark with tape to allow 1" max. penetration for  $\frac{13}{8}$ " door,  $\frac{13}{4}$ " for  $\frac{13}{4}$ " door or  $\frac{15}{8}$ " for 2" Door. Measurement should be made from tip of drill to tape marker.

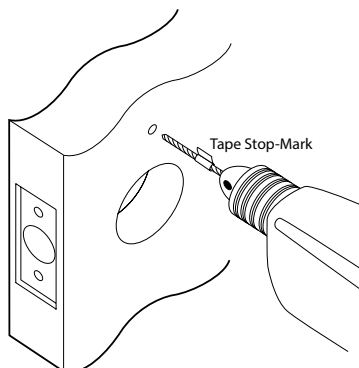
Optionally, you can use an adjustable square to determine position for the Unirose. If your backset is  $2\frac{3}{4}$ ", set square to  $2\frac{23}{64}$ " from outside of door to the top side of the Unirose.

Mark your drill hole with pencil, repeat on other side. If your door has a  $2\frac{3}{8}$ " backset, the distance needed is  $1\frac{31}{32}$ ".



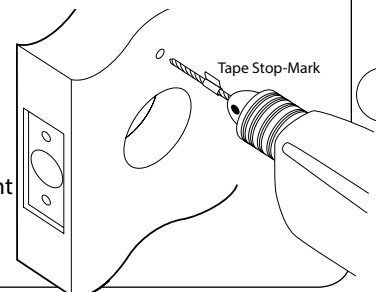
Carefully drill hole, insuring the bit is perpendicular to the door face. Do not drill completely through the door. Drilling in two steps will prevent splintering on the door.

When holes meet, go to step 8.



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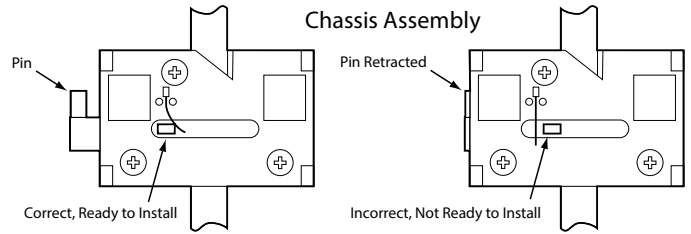


## Important Note

Do not actuate the Linear-Cam by pushing it in or by actuating the Racks.

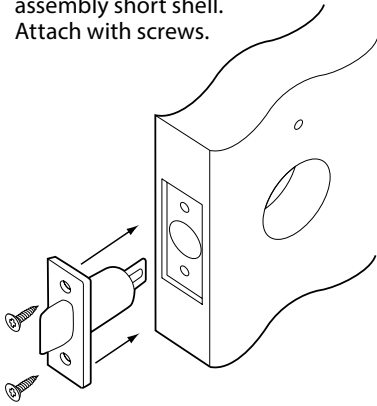
The Linear Cam must be in the forward position to be installed.

If by accident you have done so, then you must reposition the Chassis Spring as shown at right using needle nose pliers or a small, flat blade screwdriver.



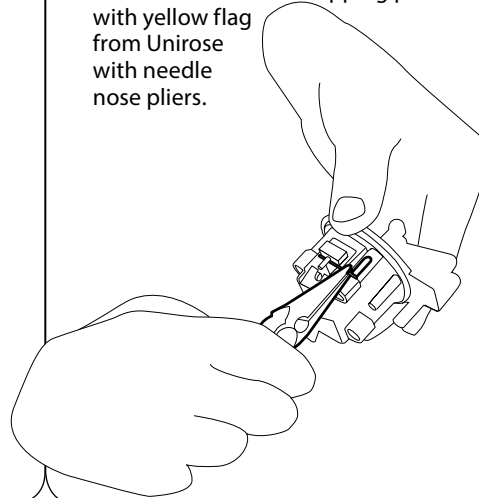
## 8 Install Bolt Assembly

Install bolt assembly through outside edge of door. Tapered end of bolt should face the strike plate in the jamb. Attach face plate (1" or 1 1/8"), snap on to bolt assembly short shell. Attach with screws.

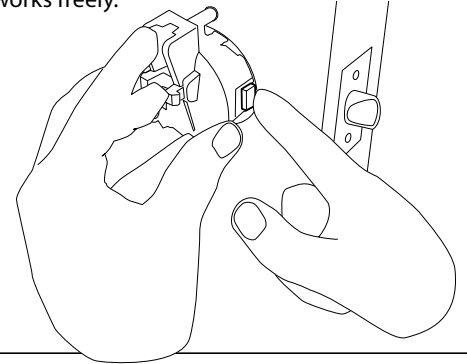


## 9 Installation of Chassis Assembly

Remove Linear Cam Shipping pin with yellow flag from Unirose with needle nose pliers.

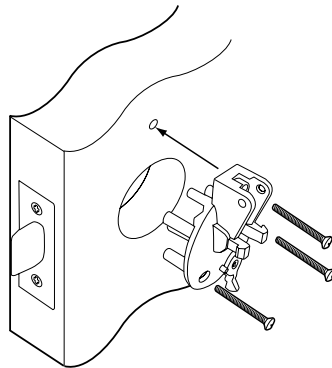


Insert Push Side Unirose into door, slightly depressing the linear cam to clear the 2 1/8" hole. When Push Side is approximately 1/4" from face of door, push bolt inwards to depress retention clip, allowing linear cam to engage into slot in bolt. It should click into place with the Bolt Assembly. Manually test to ensure bolt action works freely.



## 10 Attach Pull Side Unirose

Secure with 3 screws to snug. Test bolt action again. Check for level with Torpedo Level, if correct, tighten the screws with #2 Phillips screwdriver. If your UltraLatch® is equipped with a Privacy Lock, the lever will be facing the right. Turn the locking shaft on the Push side to the right (Clockwise). (To test the bolt, on the PULL SIDE of door, push the rack, on the PUSH SIDE of the door, pull rack to test).

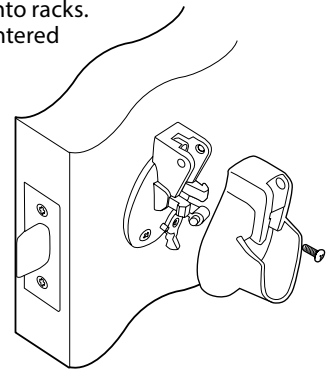


Remove the following from your Hardware Bag: 2 each of the Handle Pivot Screws, 2 each of the Handle Shaft and 2 each of the Cover Screws.

Install Handle Shafts into racks. Make sure they are centered on each side.

Install Rose Covers w/cover screws.

Note: Fasteners may require re-tightening after extended use.

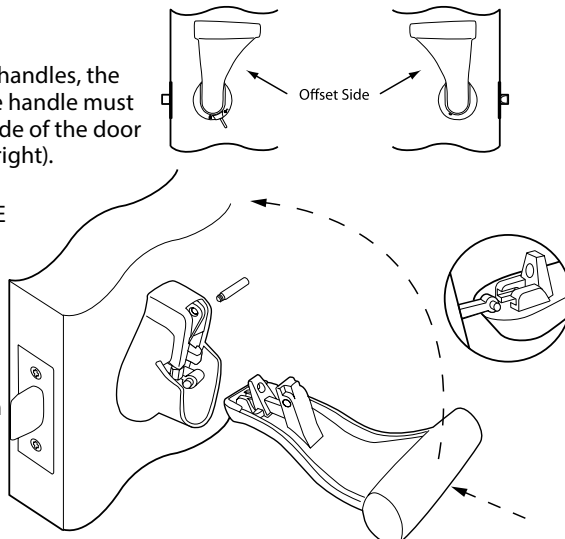


## 11 Install Handles

When installing handles, the offset side of the handle must face the hinge side of the door (see diagram at right).

Install PUSH SIDE Handle. Place handle almost flat sliding over handle shaft.

Tip forward, insert Pivot Pin and tighten with T-15 6-Lobe Screwdriver.



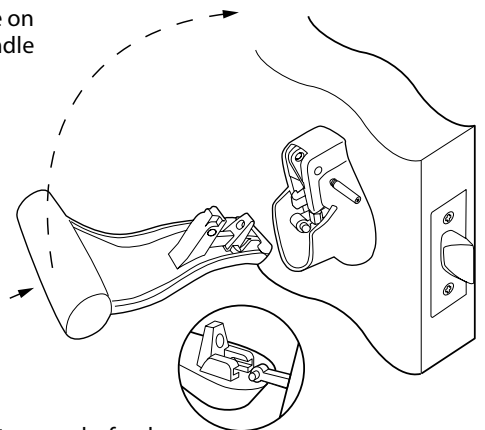
Repeat procedure on the PULL Side handle

Handle Pivot Pins come with thread locking material preapplied. We recommend a 72 hour period before excessive use of door, to allow thread locking material to cure.

Test to ensure system works freely.

Congratulations, your installation is complete!

Note: Fasteners may require re-tightening after extended use.



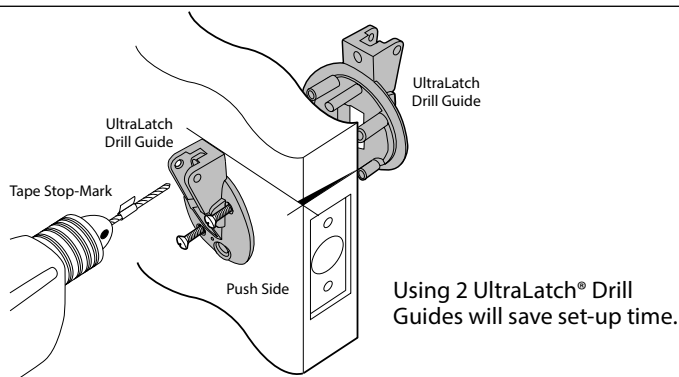
## 12 Using Two UltraLatch® Drill Guides

Prepare  $\frac{9}{32}$ " drill bit by marking a stop mark with tape to allow 2" maximum penetration for  $1\frac{3}{4}$ " or 2" doors or  $1\frac{5}{8}$ " for  $1\frac{3}{8}$ " thick doors.

Measurement should be made from tip of drill bit to the tape marker.

Insert UltraLatch® Drill Guide into  $2\frac{1}{8}$ " hole on the Push Side of the door, insert screws to align for second Drill Guide on Pull Side of door.

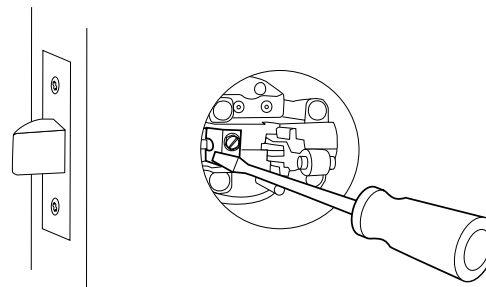
Tighten screws slightly, check with torpedo level to ensure that Drill Guides are level. If both sides are level, tighten screws and recheck for level. Adjust if necessary. Drill first hole from the Push-Side of the door, then go to the Pull-Side and drill until the holes meet.



### If Latch Disassembly from Door is Required.

Remove Pull Side handle, cover and Unirose by removing the three screws. Depress spring clip while gently pulling on the Push Side Unirose to free bolt to allow removal. While removing assembly, depress clip from Pull Side, depress rack slightly to allow clearance for the one inch hole.

Before attempting to reinstall, reset the Chassis Spring as shown on the top of page 3.



### About the Privacy Lock

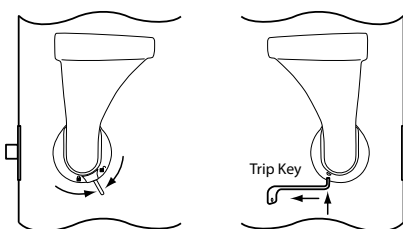
The Privacy Lock on the SOSS® UltraLatch® will secure your door from the inside (Pull Side) of the room. Slide lever to the LEFT to activate.

Operating the Pull Side handle will disengage the Privacy Lock.

For instructions on how to configure the Privacy Lock on the push side of the door, please see change over instructions insert or contact the factory.

A Trip Key is provided. To deactivate the Privacy Lock from outside of door, insert Trip Key into small hole on the Unirose Cover. For LH Doors pull slightly toward the hinge side of the door. For RH doors push key toward the door jamb.

For added security, use the SOSS® Single Cylinder Deadbolt by Medeco. (See separate installation instructions).



#### Important Note

Both handles must be installed before activating the Privacy Lock.

### For Bifold Closet Doors

Additional Tools needed:  $\frac{1}{8}$ " Drill bit

If installing UltraLatch® on bi-fold closet door, please use the following procedure.

If other UltraLatch® handles are used in the room, try to match height for consistency. Please follow Door manufacturer's instructions for location of the handles.

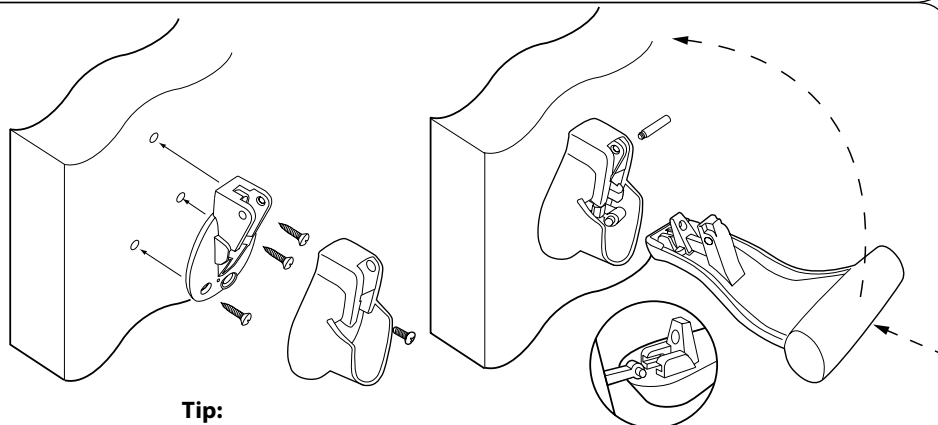
Determine the best distance from the door's edge to install the handle.

No  $2\frac{1}{8}$ " hole is necessary. Once your placement is determined, place Closet Unirose on face of door, check for level, then mark for screw holes.

Pre-drill to  $\frac{7}{8}$ " depth with  $\frac{1}{8}$ " drill bit.

Attach Closet Unirose with the provided screws.

Attach rose cover and handle as directed in step 10 and 11 of basic instructions.



#### Tip:

Mark top hole at 12 o'clock. Drill pilot hole and attach with screw to snug, check for level. Mark other screw holes with pencil. Loosen Unirose and rotate 180°. Drill other pilot holes. Return Unirose to original position and install remaining screws.

May be covered by one or more U.S. Patent Nos. 7,950,703; D603,244; D600,531; D592,486; D584,594 and D502,641. Other Patents Pending.

# SOSS®

Door Hardware

UltraLatch® is made in the U.S.A. of domestic and imported components.

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