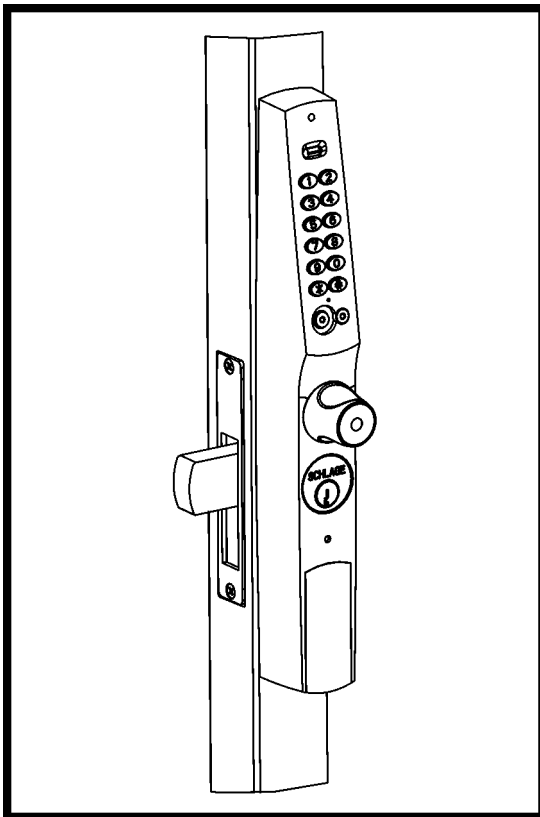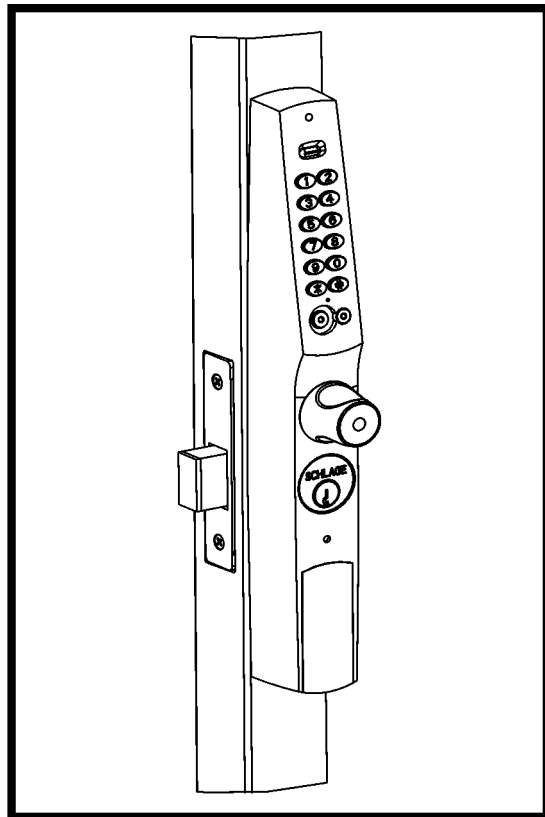# SCHLAGE®

KING COBRA/KING COBRA-2
NARROW STILE SERIES

INSTALLATION MANUAL

KC9232/KC9232-2

KC9233/KC9233-2

Keypad Programmable
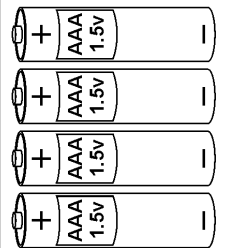## and SNAP Compatible Trim
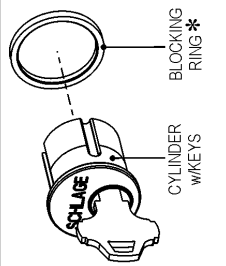## For Narrow Stile Doors

Ingersoll Rand
Security Technologies

Confirming the Box Contents

The following items should be included in the box. If any of these items are missing, please contact the Technical Support Department for assistance.
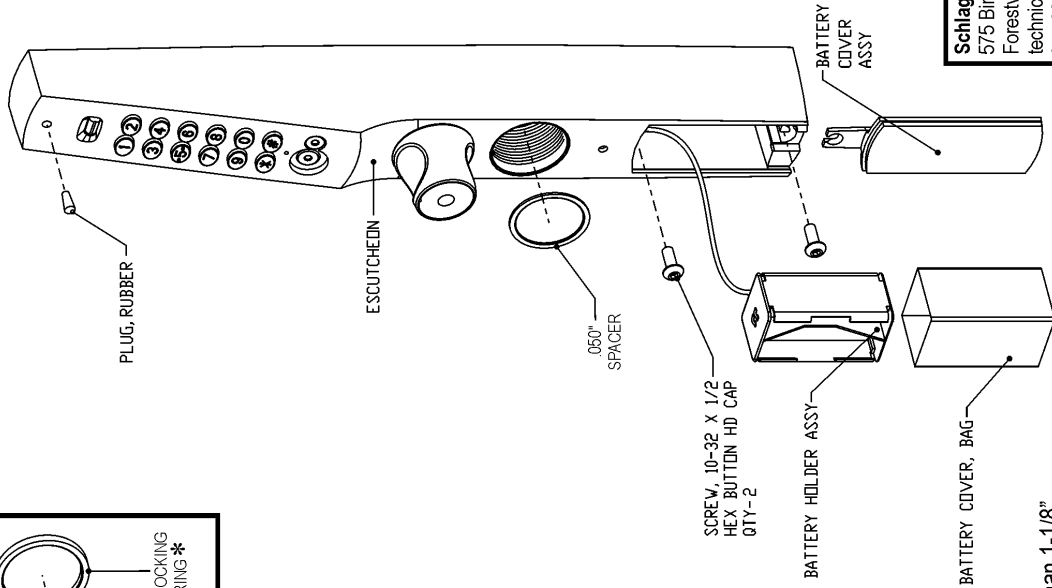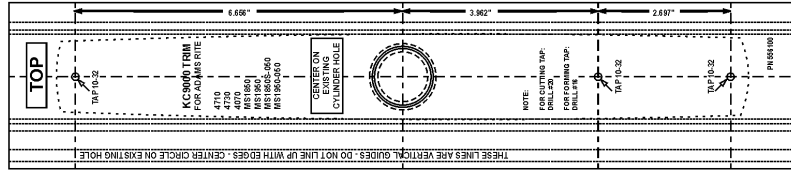
DOCUMENTS INCLUDED IN BOX:
- Installation Manual
- Programming Instructions

1 Full Size, Outside Door Template

Schlage Lock Company
575 Birch Street
Forestville, CT 06010
technical support: 866-322-1237
fax: 866-322-1233
web: http://www.irsupport.net

SCHLAGE

Optional Parts

BLOCKING RING *

CYLINDER w/KEYS

4 "AAA" Batteries Included

| AAA 1.5v |
| AAA 1.5v |
| AAA 1.5v |
| AAA 1.5v |

PLUG, RUBBER

ESCUTCHEON

.050" SPACER

SCREW, 10-32 X 1/2 HEX BUTTON HD CAP QTY-2

BATTERY HOLDER ASSY

BATTERY COVER ASSY

BATTERY COVER, BAG

* Blocking Ring required for cylinder length greater than 1-1/8"
(Blocking Ring thickness = cylinder length minus 1-1/8")

Introduction:

The KC9232/KC9232-2 and KC9233/KC9233-2 are designed to replace existing exterior cylinders or trim on Adams Rite® deadlatches. The trim will retract the deadbolt or latch when an access code or iButton is entered and the knob is turned. Mechanical key override is standard. The trim is compatible with interior devices such as a thumbturn or mortise cylinder. Adams Rite® deadbolt accessories 4015 threshold bolt and 4016 header bolt are also compatible with these models of the KC9000 series trim. With existing or new Adams Rite® trim on the inside the 'hold back' feature is still possible for a continued unlatched function (see Adams Rite® instructions where applicable). An Audit Trail feature is available on the KC9232-2 and the KC9233-2 models.

The KC9232/KC9232-2 (trim w/knob & MS Cam interface) is compatible with Adams Rite® MS1850, MS1850-050, MS1950, 4070 Deadbolts, 4710 Deadlatch locks and 8400 mortise exit devices.

The KC9233/KC9233-2 (trim w/knob and 4070 Cam interface) is compatible with Adams Rite® 4070 Short Throw Deadbolt.

Tools and Materials Needed:

1. Flat head screwdriver w/straight, 1/8" wide blade.

2. Small Philips head screwdriver

3. 3/32" Allen wrench

4. 1/16" Allen wrench

5. Center punch

6. Hammer

7. Pencil

8. Drill & Tap for 10-32 threads

Contact Information:

Schlage Lock Company
575 Birch Street
Forestville, CT 06010
technical support: 866-322-1237
fax: 866-322-1233
web: http://www.irsupport.net
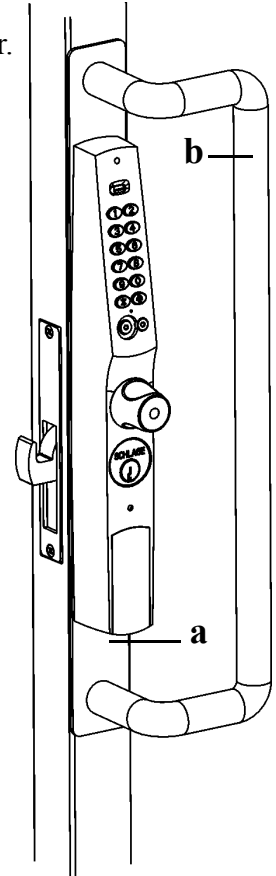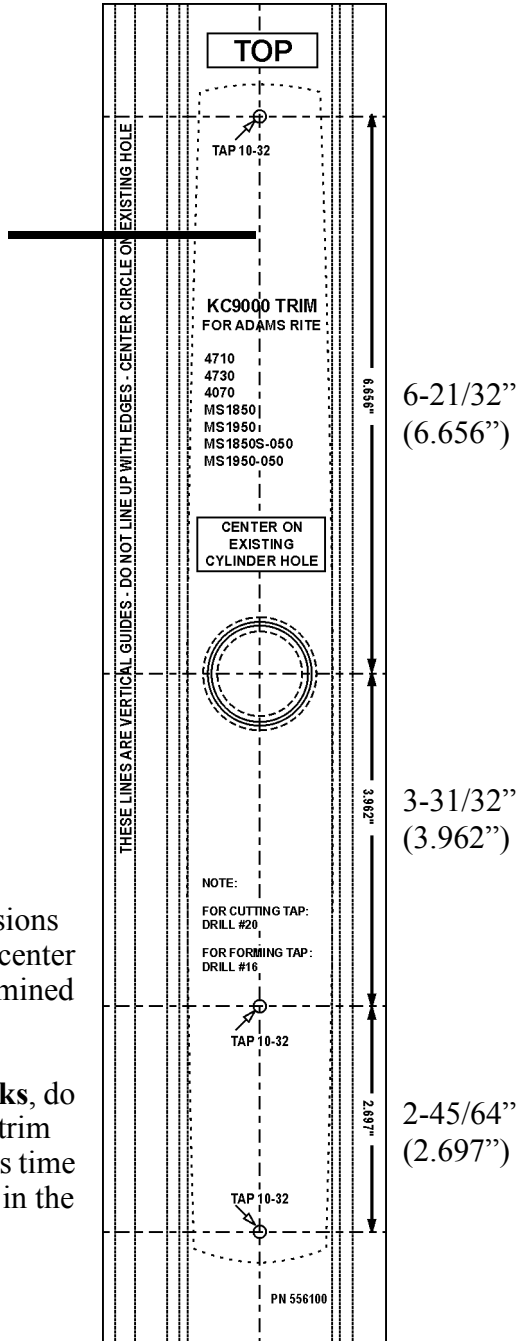
Door Conditions:
Installation may require the use of a cover plate (**a**) to cover the holes left in the door. If the existing pull (**b**) must be removed, Ives offers a compatible pull.

>Schlage Cover Plate P/N: KC9000-KRP
>Ives Pull P/N: 8190-18-xxx (xxx = finish)

Backset is determined by the Adams Rite® lock.

For factory prepped doors, use dimensions shown. Dimensions are referenced from center of 1-1/4" cylinder hole. Backset is determined by the Adams Rite® lock.

When installing new Adams Rite® locks, do not install outside cylinder because this trim replaces it. Do not install face plate at this time because access to the cylinder set screw in the lock will be required during installation.

TOP

TAP 10-32

THESE LINES ARE VERTICAL GUIDES - DO NOT LINE UP WITH EDGES - CENTER CIRCLE ON EXISTING HOLE

KC9000 TRIM
FOR ADAMS RITE

4710
4730
4070
MS1850
MS1950
MS1850S-050
MS1950-050

6.656"

6-21/32"
(6.656")

CENTER ON
EXISTING
CYLINDER HOLE

3.962"

3-31/32"
(3.962")

NOTE:

FOR CUTTING TAP:
DRILL #20

FOR FORMING TAP:
DRILL #16

TAP 10-32

2.697"

2-45/64"
(2.697")

TAP 10-32

PN 556100

Cams For Mechanical Override Cylinder:

The KC9000 trim requires the use of a clover leaf cam (**a**). This is a list of compatible Schlage parts. For other manufacturers, consult cross-reference charts.

> Cam for Standard Mortise cylinder: Schlage Everest: L583-153
> Schlage Classic: L583-254

> Cam for Interchangeable Core: Schlage IC Cam: L583-255
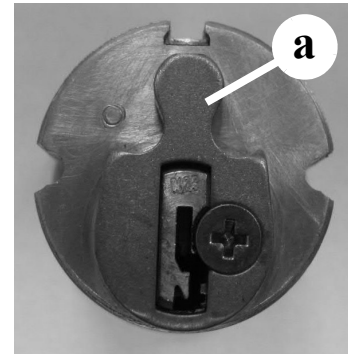
IC Cores:

> Small Format IC core w/ cam: Schlage: 80-108-<FINISH>
> *NOTE: This core requires the use of 1/4" blocking ring:*
> Schlage: 36-079-025-<FINISH>

> Full Size IC core w/ cam: Schlage: 30-016-<FINISH>
> *NOTE: This core requires the use of 3/8" blocking ring:*
> Schlage: 36-079-037-<FINISH>

Cylinders / Blocking Rings:

The KC9000 can use a 1-1/8" mortise cylinder <u>without</u> the use of a blocking ring. For cylinders <u>longer</u> than 1-1/8" a blocking ring is required. The blocking ring thickness is equal to the cylinder length, minus 1-1/8". For example, if you use a 1-1/2" cylinder you need a 3/8" blocking ring. Compression rings can be ordered from a Schlage distributor:

	Thickness:	Schlage Part Number:
No compression ring:	1/8"	36-079-012-<FINISH>
	1/4"	36-079-025-<FINISH>
	3/8"	36-079-037-<FINISH>
	1/2"	36-079-050-<FINISH>

Installing the KC9232/KC9232-2 or KC9233/KC9233-2

If your trim has a key cylinder already installed, skip to **Position the Dead Latch's Set Screw Hole: on page 10**. Otherwise, continue with **Loosen the Baseplate Screws: on this page .**
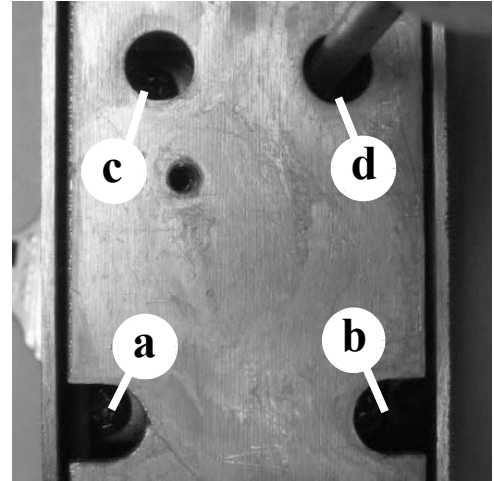
1) Loosen the Baseplate Screws:

IMPORTANT: Do not <u>remove</u> any of the screws in the following step or it will be difficult to reinstall them.

- Using a small Philips head screwdriver, <u>**loosen**</u> screws **a** & **b** in baseplate, around key cylinder hole, <u>one turn</u>.

NOTE: Screws a, b, c & d are set at the factory.
*Screws a & b are tightened and screws c & d are left loose.*

2) A Key Cylinder That Is At Least 1-1/8" Long Must Be Installed:

> The key cylinder that you install must be 1-1/8" long or longer.
>>>> Do not attempt to install a key cylinder that is shorter than 1-1/8"
> The two illustrations below show the difference between a 1" and a 1-1/8" key cylinder.
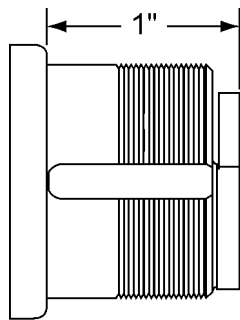
1" long key cylinder.

<u>DO NOT ATTEMPT TO INSTALL A 1"</u>
<u>LONG KEY CYLINDER.</u>
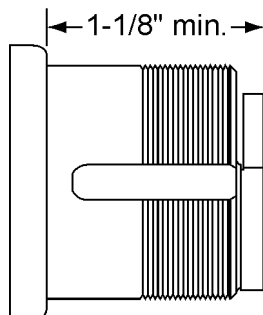
1-1/8" long key cylinder

**ONLY INSTALL A KEY CYLINDER**
THAT IS AT LEAST 1-1/8" LONG.

3) Make Room for Key Cylinder:

Due to the diameter of the key cylinder, it is necessary to have dead latch (a) placed out of the way when installing the key cylinder. Therefore...

- Using your finger or a pair of needle-nose pliers, push dead latch towards the top end of trim as indicated by arrow in photo.

NOTE: As indicated by arrow in photo, you'll notice that when you push the dead latch forward, it will swing a little bit in a counterclockwise direction.
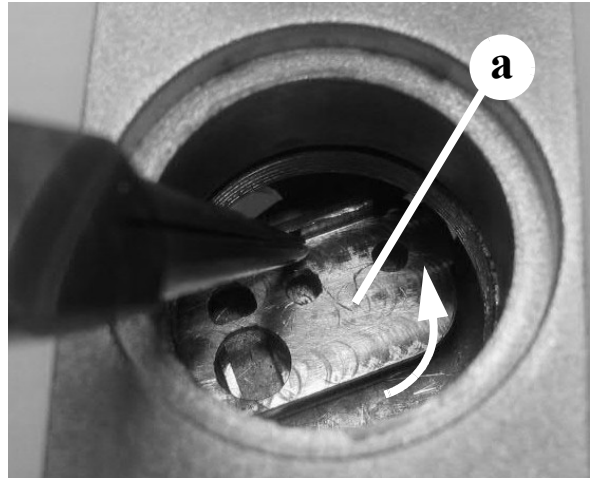
4) Hold Dead Latch in Place:

To insure that dead latch is placed far enough out of the way to allow key cylinder to be threaded in properly:

- Insert a finger into key cylinder hole and hold dead latch firmly in place.
- Carefully turn the trim over while keeping the dead latch in position.
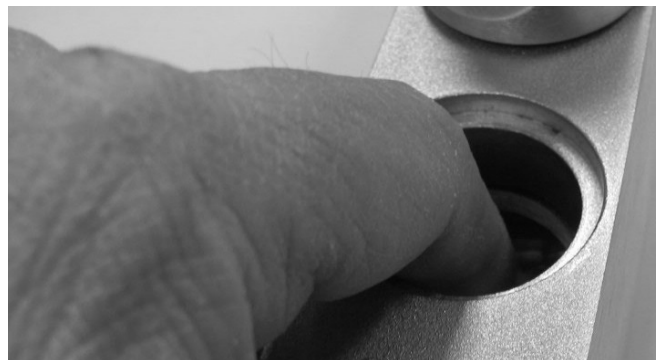
5) Verify Placement of Dead Latch:

Two holes on dead latch (**a**) should be showing within the two holes (**b**) in baseplate.
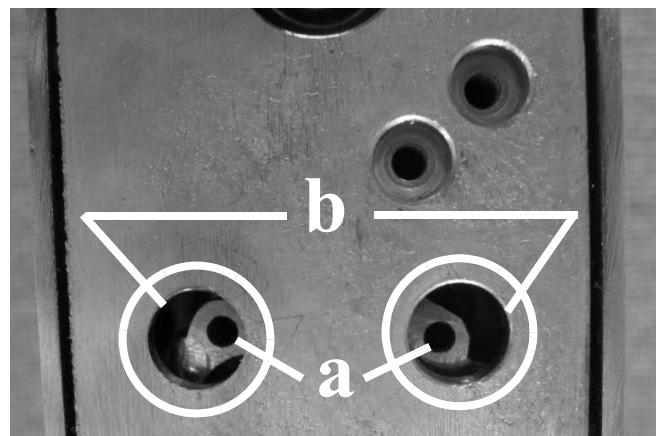
**6) Install the Key Cylinder:**

- Install .050" cylinder washer.

IMPORTANT: A .050" cylinder washer must be used IN ALL CASES, regardless of the key cylinder length.

- If you are installing a cylinder that is <u>longer</u> than 1-1/8", you must also install a blocking ring (see **Table 1: Blocking Rings, on page 8**).

A simple formula for determining blocking ring thickness is:

Blocking ring thickness = length of cylinder minus 1-1/8"

- If not already done, install cam onto cylinder. Cam must be clover leaf design (see **Table 2: Recommended Cams, on page 8**).
- Tilt top of trim down at a sharp angle.
- Screw in key cylinder until it stops. Use mechanical key as a handle for turning if necessary.
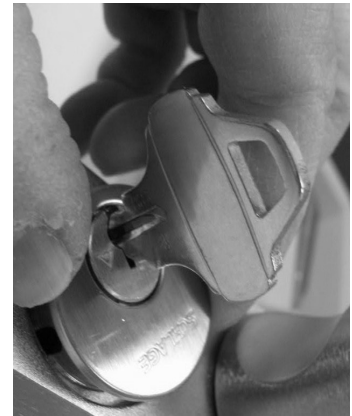
Table 1: Blocking Rings

Key Cylinder Length	Blocking Ring (Schlage P/N; XXX = finish)
• 1-1/4"	1/8" (36-079-012-XXX)
• 1-3/8"	1/4" (36-079-025-XXX)
• 1-1/2"	3/8" (36-079-037-XXX)
• 1-5/8"	1/2" (36-079-050-XXX)

Table 2: Recommended Cams

Cylinder/Core	Schlage Type	Part Number
• Standard Mortise Cyl	Everest	L583-153
• Standard Mortise Cyl	Classic	L583-254
• Interchangeable Core	IC Cam	L583-255

7) Align Key Cylinder:

- After screwing it all the way in, back off on key cylinder (no more than one turn) until key is at the bottom. If key cylinder has a logo (**a**), logo should be at the top of key cylinder.
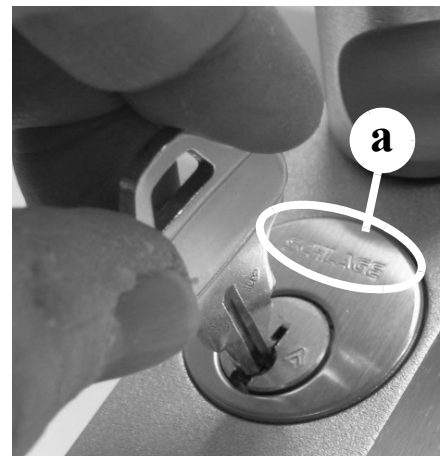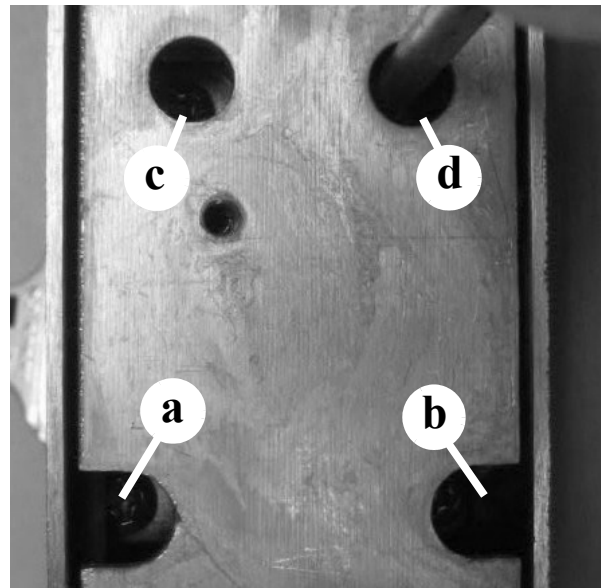
8) Alignment of Interchangeable Cores:

- If an IC Core is used, center the interface toward the bottom.

**9) Tighten the Four Screws in the Baseplate:**

- Tighten the four baseplate screws in the following order:
  - > Tighten **a** and **b** until snug.
  - > Tighten **c** and **d** until snug.
  - > Fully tighten **a** and **b**.
  - > Fully tighten **c** and **d**.
  - > Check all four screws to make sure that all four are completely tight.

10) The Dead Latch's "Critical Edge:"

- For clarity purposes only, photo on the right is a view of deadlatch with escutcheon removed.
- Edge (**a**) is referred to as the dead latch's "**critical edge**."

IMPORTANT: In the next step, the "critical edge" on deadlatch will have to be lined up with hole (b) in baseplate. See **Position the Dead Latch's Set Screw Hole: on page 10**
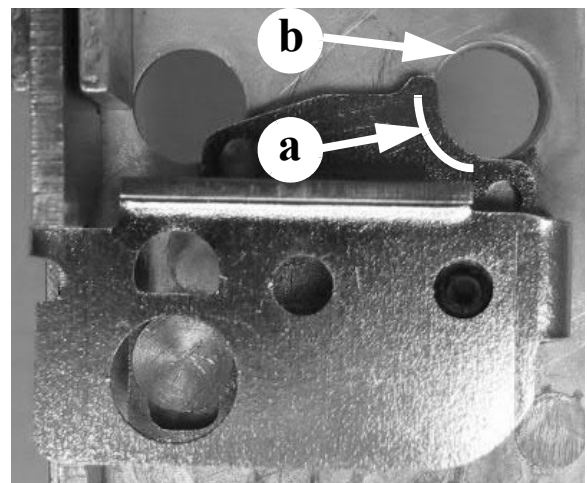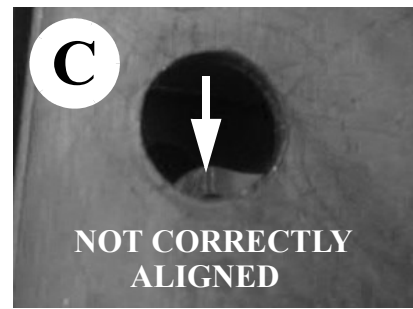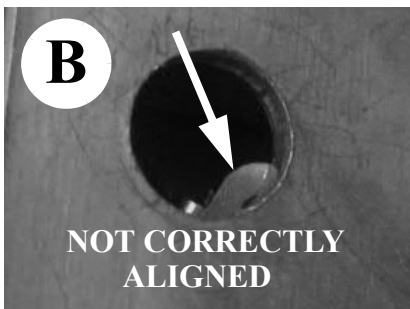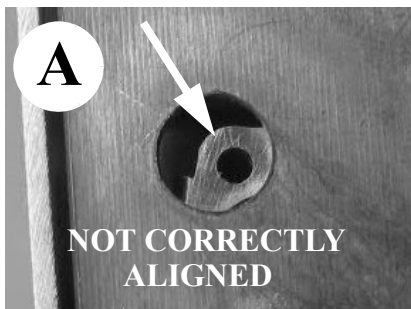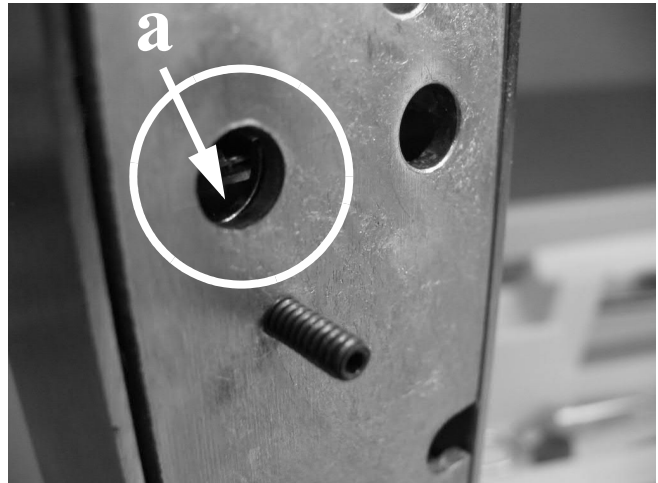
11) Position the Dead Latch's Set Screw Hole:

- Tilt the trim until you see the "critical edge" align with the larger hole in the baseplate as shown in photo on right. Look closely at edge of dead latch's "critical edge" (**a**) when doing this.

IMPORTANT: When the dead latch's "critical edge" is correctly aligned, the dead latch's set screw hole will likewise be correctly aligned.

Photos A, B and C below illustrate examples of an incorrectly aligned critical edge. Photo D is an example of a correctly aligned critical edge.
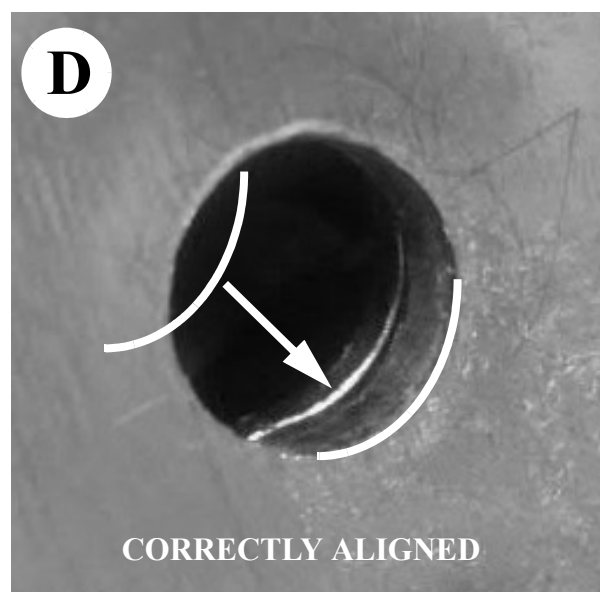
A NOT CORRECTLY ALIGNED

B NOT CORRECTLY ALIGNED

C NOT CORRECTLY ALIGNED

D CORRECTLY ALIGNED

12) Partially Tighten the Set Screw:

- Using a 1/16" Allen wrench, partially turn in the set screw until outer end of set screw is about flush with surface of baseplate.


13) Fully Tighten the Set Screw:

- Finish turning in the set screw until it hits the stop.

IMPORTANT: At this time, outer end of set screw should be a little bit below the surface of the baseplate, as shown in photo A. If you have turned in set screw as far as it will go and it is protruding beyond the surface of baseplate, as shown in photo B, the most probable cause is that dead latch was not positioned properly (see **Position the Dead Latch's Set Screw Hole: on page 10***).*

If you have turned the set screw in as far as it will go and it is protruding from the surface of the baseplate, do the following:

- Turn set screw back out so that about 1/4" is protruding from surface of baseplate.
- Reposition critical edge on dead latch according to the instructions on page 10).
- Turn set screw in until it **just hits the stop**.

IMPORTANT: Do not overtighten set screw because the baseplate may start to bow outward resulting in a gap between trim and door when trim is mounted.
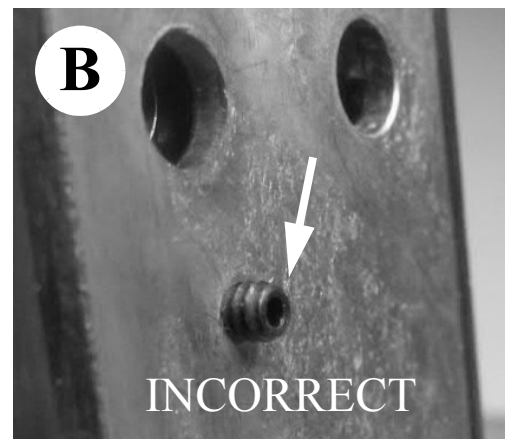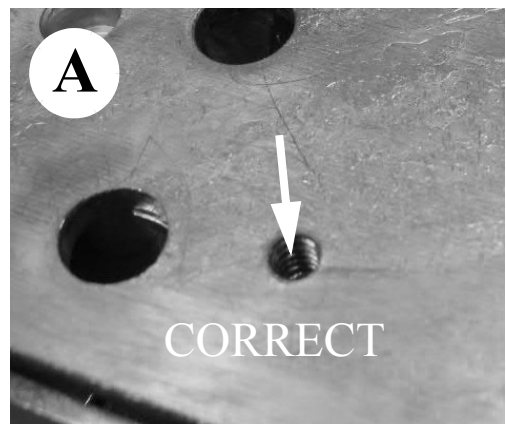
A

CORRECT

B

INCORRECT

**14) What To Do With the Adams Rite® Product:**

Retrofit Installation -
- Remove face plate (**a**).
- Loosen key cylinder set screw (**b**).
- Remove key cylinder (**c**).
- Remove any Adams Rite® trim if present.

NOTE: Key cylinder can be reused if refitted with the proper cam. See **Cams For Mechanical Override Cylinder: on page 5.**

New Installation -
- Using the Adams Rite® installation instructions, install the Adams Rite® latch mechanism (**d**).
- <u>DO NOT</u> INSTALL KEY CYLINDER (**c**).
- <u>DO NOT</u> INSTALL FACE PLATE (**a**).
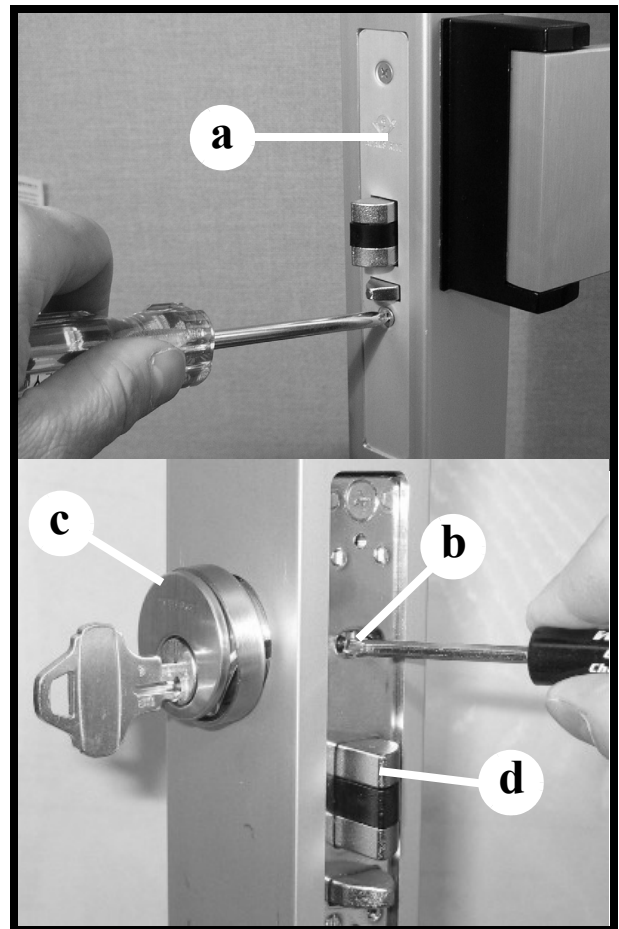
If this is a retrofit installation, continue with, **Prepare the Door: on this page** . Otherwise, skip to, **Prepare the Exterior Gasket: on page 14**.

15) Prepare the Door:

- Apply the self-adhering transparent template onto door as follows:
  - > Line up template with existing cylinder hole.
  - > Vertical guidelines must be **<u>parallel</u>** with vertical edges of door.

NOTE: The vertical lines are for vertical guidance only, Do not <u>overlap</u> with edges of door. Make only <u>parallel</u> to door edges.

  - > If necessary, lift off template and reposition.
- Drill and tap holes.

NOTE: If optional blind nuts are used, see blind nut installation instructions (Schlage Lock Company form number: 57057) for correct hole size and mounting method.

If you are installing a prep cover plate, continue with, **Install the Interface Spacer: on page 13**. Otherwise, skip to, **Install the Interface: on page 14**

16) Install the Interface Spacer:

IMPORTANT: This step to be performed <u>ONLY</u> if installing a prep cover plate.

- Place interface spacer (**a**) onto baseplate.
- Place prep cover plate onto door.

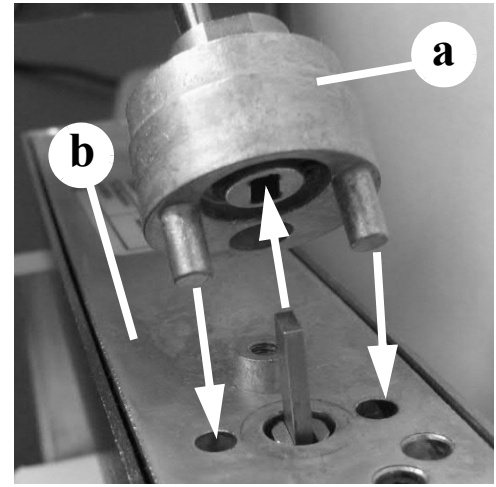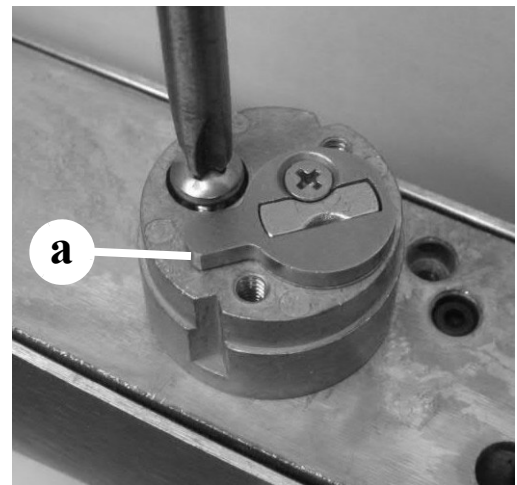*NOTE: Both parts are included in the prep cover plate kit.*
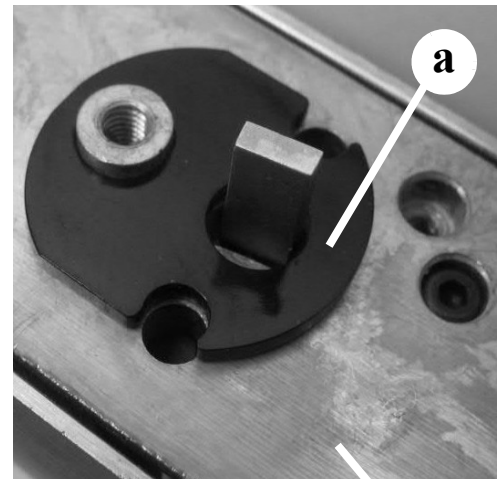
17) **Install the Interface:**

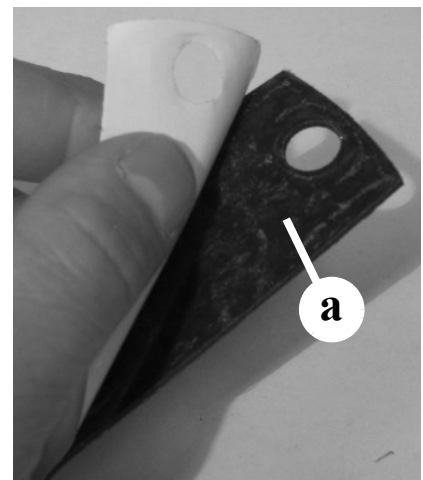- Install interface (**a**) onto trim's baseplate assembly (**b**).

18) **Secure the Interface:**

- With cam (**a**) turned a little out of the way, secure the interface with the supplied screw.

19) **Prepare the Exterior Gasket:**
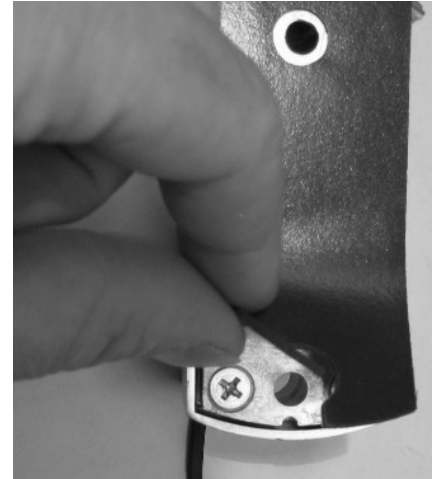
- Peel paper backing off of exterior gasket (**a**).

20) Apply the Exterior Gasket:

- Apply gasket to back of trim.

21) Place Trim On Door:

- With key in cylinder, turn key counterclockwise until it stops.
- Line up parts for proper engagement.
- Carefully slide trim against door.

NOTE: Turning the key will make a part inside the trim move, allowing access to the upper mounting and battery cover screws in the next step. It must remain in this position to continue with the installation. When the key is turned back and removed, the part inside the trim will again restrict access to the upper mounting and battery cover screws.
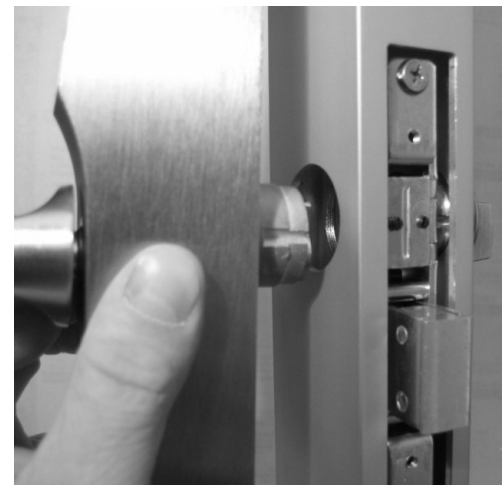
22) Tighten Top Mounting Screw:

- Using a ball-end, 1/8" Allen wrench, __partially tighten__ the top screw in trim.

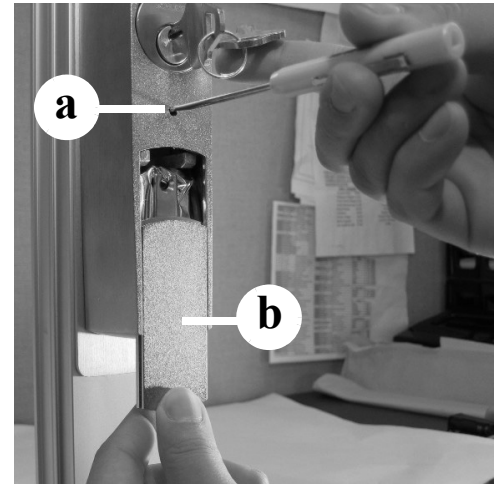*NOTE: Do not completely tighten the top screw. Leave loose.*
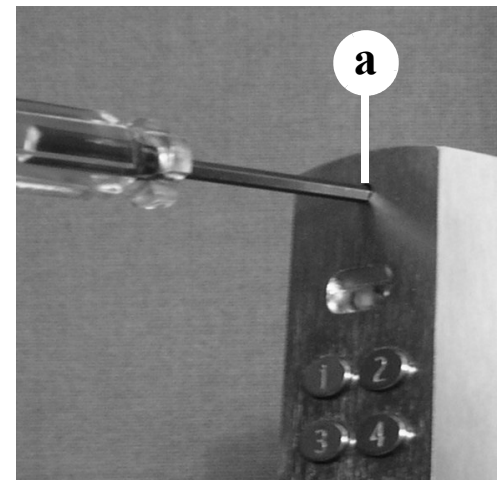
23) Remove Battery Cover:

- If not already done, insert key into cylinder and turn it counterclockwise.
- Using a small, flat blade screwdriver, loosen the battery cover screw (**a**) **ONLY <u>TWO</u> TURNS COUNTERCLOCKWISE**.
- Slide off battery cover (**b**) from bottom.

24) Install Lower Mounting Screws:

- Remove battery pack (**a**).
- Install and completely tighten both lower mounting screws (**b**) and (**c**) located within battery compartment.
- Finish tightening top mounting screw.
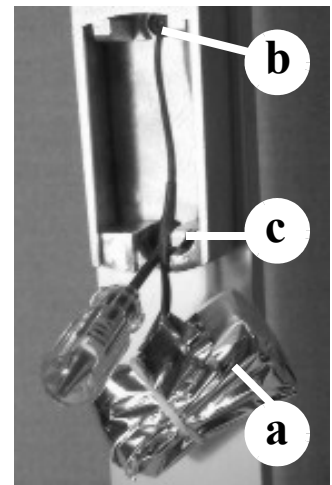
25) Install Batteries:

- Remove and retain battery bag.

IMPORTANT: DO NOT DISCARD BATTERY BAG. IT IS IMPORTANT THAT IT IS REINSTALLED AFTER THE BATTERIES ARE INSTALLED IN BATTERY HOLDER.

- Observe the polarity markings indicated on battery holder and install four, AAA batteries accordingly.
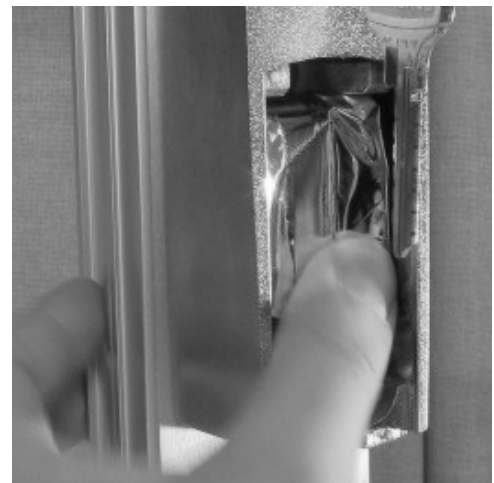- Slide battery bag onto battery holder.

26) Fold Battery Bag:

- Fold battery bag over.

IMPORTANT: The battery bag is used to protect the batteries from moisture and to insulate them electrically from metallic parts.

27) Install Battery Pack:

- Install battery pack into compartment with bag opening facing down.
- Tuck wiring neatly into compartment

28) Install Battery Compartment Cover:

- Slide battery compartment cover on from the bottom.

IMPORTANT: Use caution not to pinch the battery wires.

- Tighten battery cover screw.
- Rotate key clockwise.
- Remove key.

29) Tighten Latch Mechanism Set Screws:

- Tighten set screw in Adams Rite® latch mechanism.
- Verify that the other set screw in latch mechanism (closest to inside of door) is fully tightened.
- Verify that both latch mechanism mounting screws (top and bottom of latch mechanism) are fully tightened.
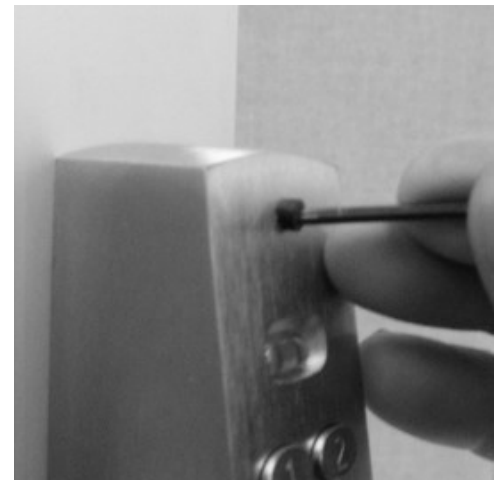
30) Install Face Plate:

- Place face plate (**a**) onto latch mechanism.
- Secure with two screws.

31) Install Water Plug.

- Insert water plug (a) into top mounting screw hole.
- Using the end of a small Allen wrench or similar tool, push plug into hole past surface.

Testing:

1. Knob should rotate freely.

2. Insert key into cylinder and rotate knob in direction required to retract latch.
    > Direction of knob rotation depends on door hand - if it doesn't work in one direction, try the other.
    > You should be able to lock and unlock the deadbolt.
    > For 4710 deadlatches, you should be able to retract the latch.

3. Rotate key back to original position and remove it.
    > Knob should rotate freely and not retract the deadbolt/latch.

4. Using the keypad, enter the default access code: 1 3 5 7 9.
    > The red LED should light each time the first four numbers are pressed and when the 9 is pressed, the green LED should flash for five seconds.
    > While the green light is flashing, the knob should be engaged and you should be able to lock or unlock the deadlatch.

5. Test inside cylinder or thumbturn (for 4710/4730/8400 models: paddle/exit device, etc.) to insure that it is operating properly.

SEE PROGRAMMING GUIDE FOR PROGRAMMING INFORMATION.

Operational Recommendations:

The models with a knob operate the deadbolt much like a key, therefore more time to operate the dead-bolt/latch might be desired. *See programming guide to change the relock time delay to a longer time.*

The Adams Rite® 4710 can be operated by the knob to achieve the 'hold back' condition where the latch is held in the unlatched position for passage mode. To do this, enter a code/iButton, push the latch all the way in and rotate the knob (counterclockwise if the latch is to your left or clockwise if the latch is to your right). When you feel a little resistance, turn a little harder. This will move a part to keep the latch from springing out. To reverse the condition and release the latch, enter a code/iButton again and turn the knob (clockwise if the latch is to your left and counterclockwise if the latch is to your right). This will move the part out of the way and release the latch.

Dimensions: