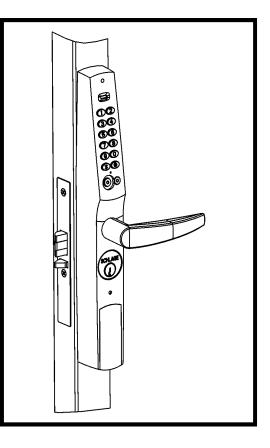


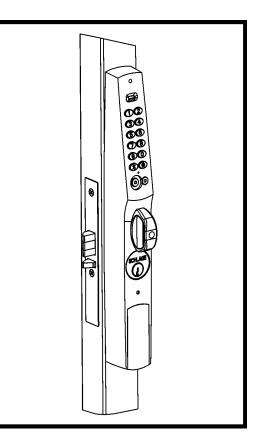
KING COBRA/KING COBRA-2 NARROW STILE SERIES

INSTALLATION MANUAL

KC9111/KC9111-2



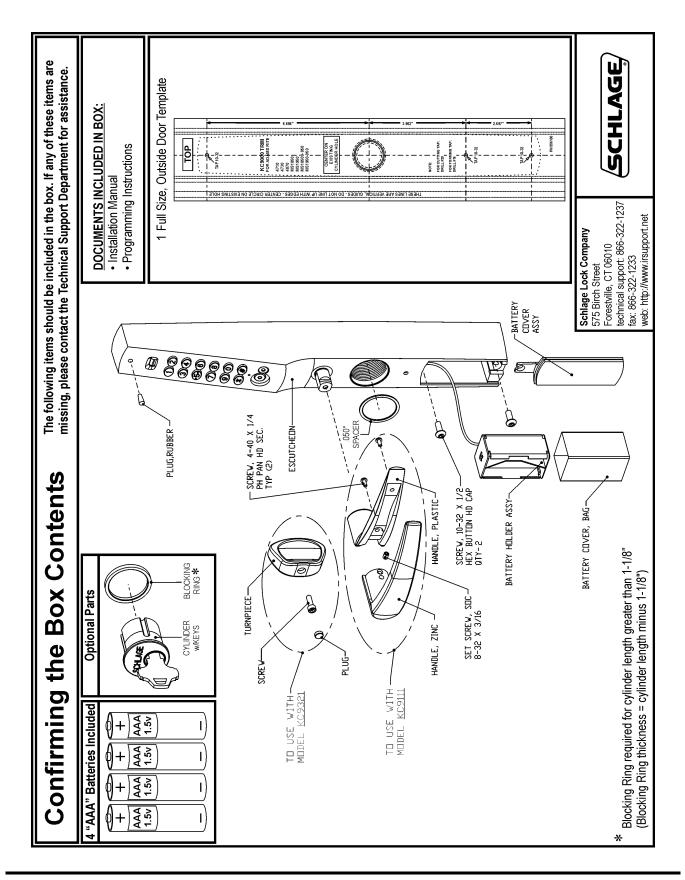
KC9321/KC9321-2



Keypad Programmable and SNAP Compatible Trim For Narrow Stile Doors



KC9111/KC9111-2 & KC9321/KC9321-2 INSTALLATION Contents of the Box



KC9111/KC9111-2 & KC9321/KC9321-2 INSTALLATION Introduction / Tools and Materials Needed / Contact Info

Introduction:

The KC9111/KC9111-2 and KC9321/KC9321-2 are designed to replace existing exterior trim on Adams Rite® deadlatches. The trim will retract the latch when an access code or iButton is entered and the lever is depressed or the turnpiece is turned. Mechanical key override is standard. The trim is compatible with any interior device such as a pushpaddle or Adams Rite® mortise exit device. When a 'toggle' code or iButton is entered the lever or turnpiece will be continuously engaged allowing latched passage mode until a 'toggle' code or iButton is entered again to relock trim. Audit Trail feature is available on the KC9111-2 & KC9321-2

The KC9111/KC9111-2 (trim w/lever & MS Hook interface) and the KC9321/ KC9321-2 (trim w/turnpiece & MS Hook interface) are both compatible with Adams Rite® 4710 & 4730 deadlatch locks and 8400 Series mortise narrow stile exit devices.

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. Long nose needle-nose pliers
- 6. Center punch
- 7. Hammer
- 8. Pencil
- 9. Drill & Tap for 10-32 threads

Contact Information:

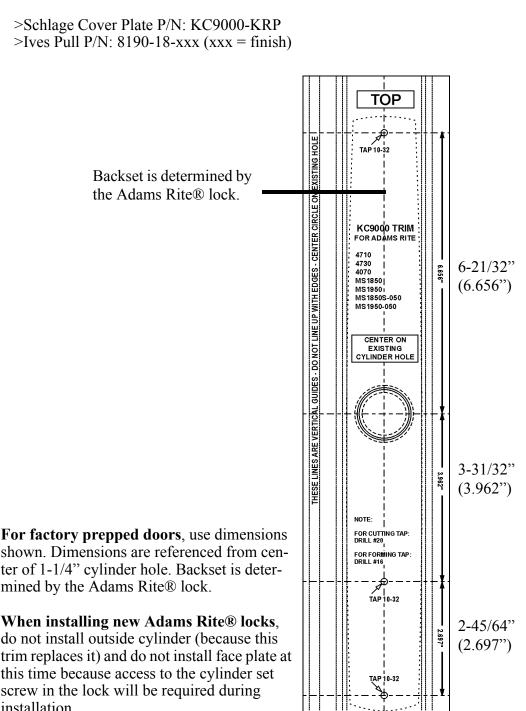
Schlage Lock Company

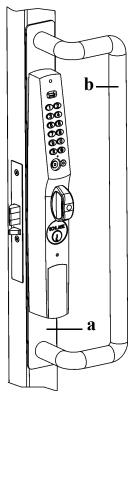
575 Birch Street Forestville, CT 06010 technical support: 866-322-1237 fax: 866-322-1233 web: http://www.irsupport.net

KC9111/KC9111-2 & KC9321/KC9321-2 INSTALLATION **Door Preparation**

Door Conditions:

Installation may require the use of a cover plate (a) to cover the holes left in the door. If the KC9321/KC9321-2 (trim w/turnpiece) is used and the existing pull (b) must be removed, Ives offers a compatible pull.





shown. Dimensions are referenced from center of 1-1/4" cylinder hole. Backset is determined by the Adams Rite® lock.

do not install outside cylinder (because this trim replaces it) and do not install face plate at this time because access to the cylinder set screw in the lock will be required during installation.

PN 556100

KC9111/KC9111-2 & KC9321/KC9321-2 INSTALLATION Cams, Cores, Cylinders and Blocking Rings

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 Everes	t: L583-153
	S	chlage 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>



a

Cylinders / Blocking Rings:

The KC9000 can use a 1-1/8" mortise cylinder without 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"1/4" 30 2/9" 24

1/2"



36-079-050-<FINISH>

Installing the KC9111/KC9111-2 or KC9321/KC9321-2

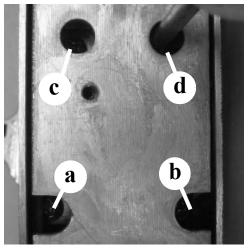
If your trim has a key cylinder already installed, skip to **Determine Hand: on page 12**. Otherwise, continue with **Loosen the Baseplate Screws: on this page.**

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.

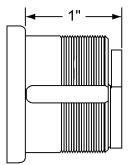


2) A Key Cylinder That Is At Least 1-1/8" Long Must Be Installed:

> The key cylinder that you install must be 1-1/8" long or longer.

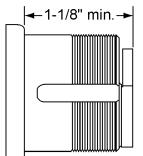
>>>> Do not attempt to install a key cylinder that is shorter than 1-1/8"

> The two illustrations below show the difference between a 1" and a 1-1/8" key cylinder.



1" long key cylinder.

DO NOT ATTEMPT TO INSTALL A 1" LONG KEY CYLINDER.



1-1/8" long key cylinder

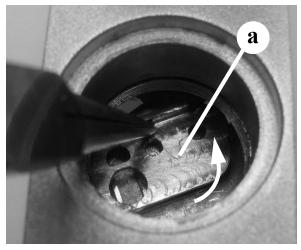
ONLY INSTALL A KEY CYLINDER THAT IS AT LEAST 1-1/8" LONG.

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.



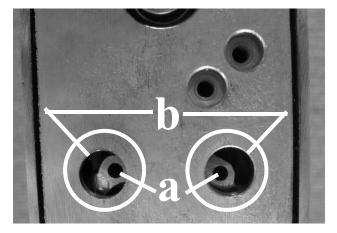
4) Hold Dead Latch in Place:

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

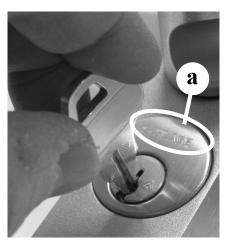
Key Cylinder Length	Blocking Ring (Schlage P/N; XXX = finish)
• 1-1/4"	1/8" (36-079-012-XXX)
• 1-3/8"	1/4" (36-079-025-XXX)
• 1-1/2"	3/8" (36-079-037-XXX)
• 1-5/8"	1/2" (36-079-050-XXX)

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.



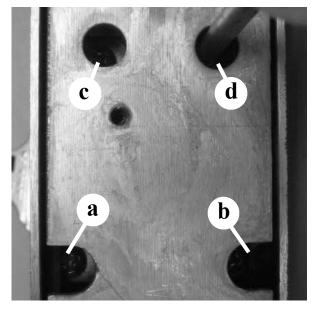
8) Alignment of Interchangeable Cores:

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



- 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.

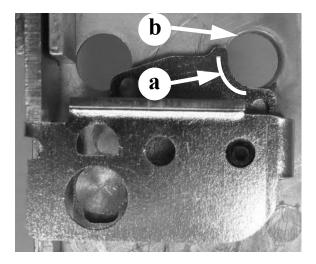




10) The Dead Latch's "Critical Edge:"

- 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

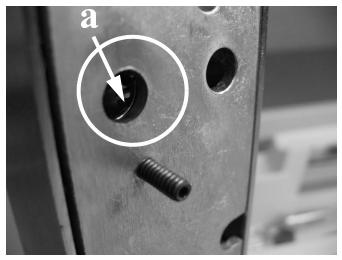


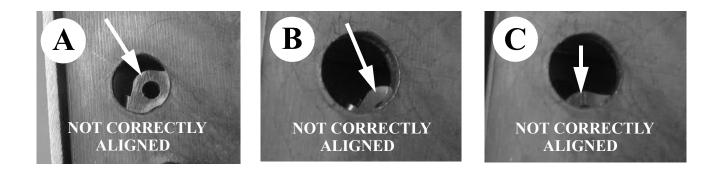
11) Position the Dead Latch's Set Screw Hole:

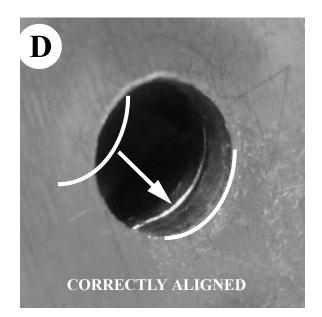
• Tilt the trim until you see the "critical edge" align with the larger hole in the baseplate as shown in photo on right. Look closely at edge of dead latch's "critical edge" (a) when doing this.

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.







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.



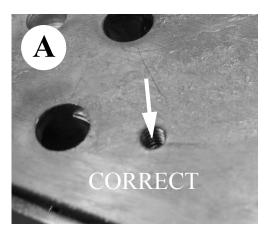
13) Fully Tighten the Set Screw:

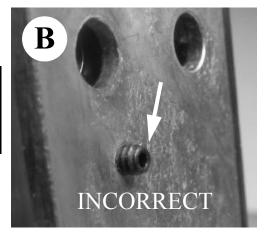
• Finish turning in the set screw until it hits the stop. **IMPORTANT:** At this time, outer end of set screw should be a little bit below the surface of the baseplate, as shown in photo A. If you have turned in set screw as far as it will go and it is protruding beyond the surface of baseplate, as shown 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.



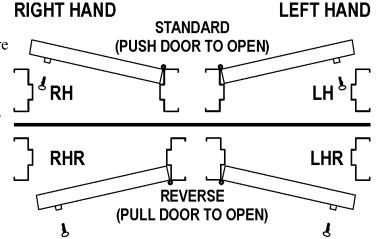


14) Determine Hand:

To determine hand:	
--------------------	--

- Stand on outside of door.
- Determine which arm the hinges are closest to.
- If door is pulled to open, it is "Reverse."

NOTE: All narrow stile trim is "Reverse."



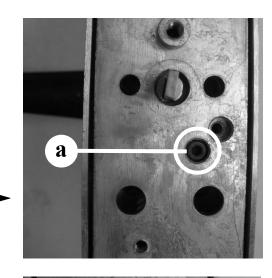
15) Verify Lever / Turnpiece Stop Screw Direction:

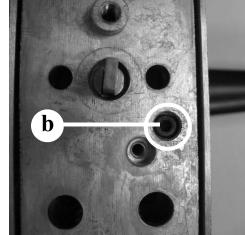
Once the handing of the installation is determined, you may have to change the location of the stop screw in the baseplate.

To change the location of the stop screw:

- Use a 3/32" Allen wrench.
- For RHR installations:—
 - > Refer to photo on the right for stop screw location (a).
- For LHR installations:-
 - > Refer to photo on the right for stop screw location (b) for LHR.

IMPORTANT: Stop screw must be set for proper rotation. This applies to both lever and turnpiece models.

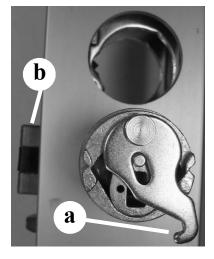




16) Verifying the Interface Hand:

• Photo on right shows how your interface should look for a RHR installation. Note direction of hook (a) in respect to latch (b).

NOTE: Hook can be reversed.



Verify the Interface Hand (continued):

• Photo on right shows how the assembled interface should look for a LHR installation. Note direction of hook (a) in respect to latch (b).

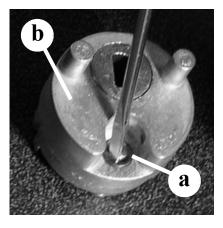
NOTE: Hook can be reversed.



If the hook on your interface has to be reversed, continue with, **Remove Retaining Ring: on** page 13. Otherwise, skip to, **Orientation of the Interface: on page 18.**

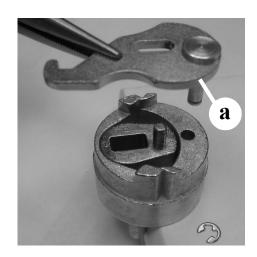
17) Remove Retaining Ring:

- Using a small, flat blade screwdriver, pry off retaining ring
 (a) from interface (b).
- NOTE: Do not discard retaining ring.



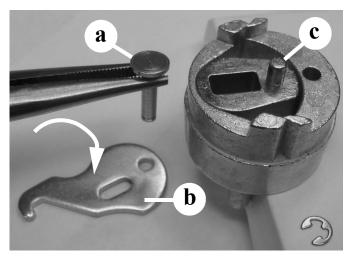
18) Remove Interface's Hook Assembly:

• Lift off hook assembly (a) from interface.



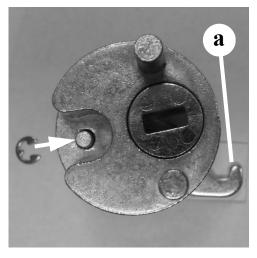
19) Flip Hook Over:

- Remove pin (**a**) from hook (**b**).
- Flip hook over.
- Insert pin back into hook.
- Install hook assembly back onto interface.
- Pin (c) on interface must go through slot in hook



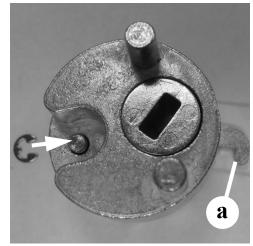
20) Install New Retaining Ring-RHR:

- Photo on right shows an interface that will be used in a RHR installation. Observe direction of "finger" (a) on hook assembly.
- Push new retaining ring (included in screw pack) back onto pin.



21) Install New Retaining Ring-LHR:

- Photo on right shows an interface that will be used in a LHR installation. Observe direction of "finger" (a) on hook assembly.
- Push new retaining ring (included in screw pack) back onto pin.



If you are installing a KC9111/KC9111-2, continue with, **Install the Lever: on page 15.** Otherwise, skip to, **What To Do With the Adams Rite® Product: on page 16.**

22) Install the Lever:

• Determine correct orientation for door and lock hand and slide lever onto shaft accordingly.

NOTE: A RHR installation is shown in the photo on the right.

• Using a 5/64" hex wrench, tighten the set screw.

IMPORTANT: After set screw has been completely tightened, top of set screw should be at or a little bit below surface of lever. If not, check to insure that lever is pushed completely over shaft.



23) Install the Lever Cover:

• Place lever cover onto inside of lever.



24) Secure the Lever Cover:

• Secure lever cover with two Phillips head screws.



25) What To Do With the Adams Rite® Product:

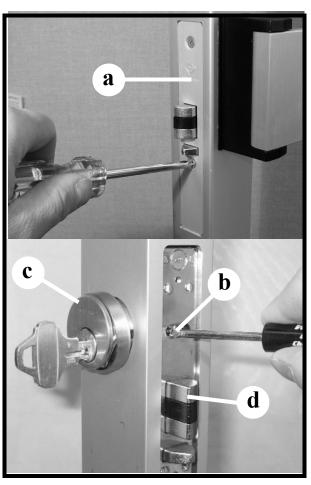
Retrofit Installation -

- 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 page 17**. Otherwise, skip to, **Orientation of the Interface: on page 18**.

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

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

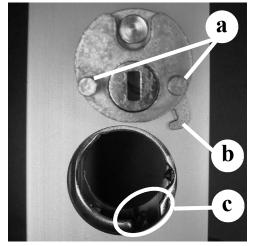
- > If necessary, lift off template and reposition.
- Drill and tap holes.

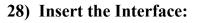
NOTE: If optional blind nuts are used, see blind nut installation instructions (Schlage Lock Company form number: 57057) for correct hole size and mounting method.



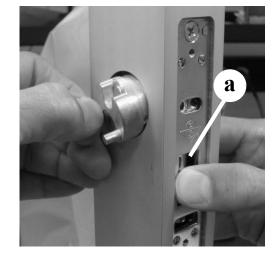
27) Orientation of the Interface:

- From the outside of the door, posts (**a**) on interface should be pointing at you and hook (**b**) on interface should be facing down.
- Photo on right shows an interface that is prepared for a LHR installation, but whether you have a LHR or a RHR installation, the hook on the interface has to go through the slot (c) at the bottom of the latch mechanism.





• Keep latch (a) pushed in while inserting the interface into cylinder hole.



29) Check the Interface Installation:

Photo on right shows a LHR installation.

- Viewed from the <u>inside</u> of the door, this is what the interface should look like within the door when assembling a LHR installation.
 - > Observe that hook on interface (a) is on the left side of the latch mechanism's "finger" (b).

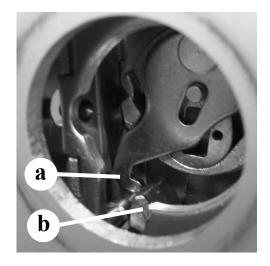
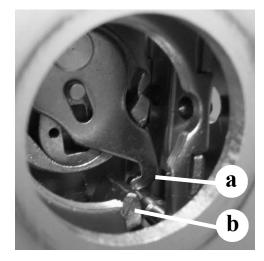


Photo on right shows a RHR installation.

- Viewed from the <u>inside</u> of the door, this is what the interface should look like within the door when assembling a RHR installation.
 - > Observe that hook on interface (a) is on the right side of the latch mechanism's "finger" (b).



30) Align the Interface:

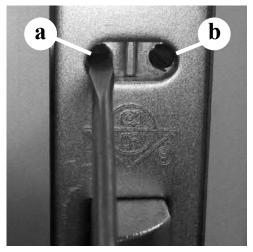
• Center the interface and position it flush with surface of door.



31) Secure the Interface:

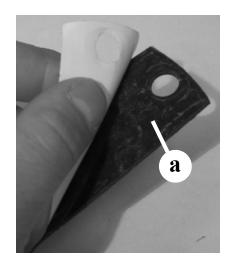
- Tighten the set screw (a) in latch mechanism to secure the interface within the latch mechanism.
- Verify that the other set screw (**b**) in latch mechanism (closest to inside of door) is fully tightened.
- Verify that both latch mechanism mounting screws (top and bottom of latch mechanism) are fully tight-ened.

NOTE: You may find it beneficial to hold the interface steady while you tighten the set screw.



32) Prepare the Exterior Gasket:

• Peel paper backing off of exterior gasket (a).



33) Apply the Exterior Gasket:

• Apply gasket to back of trim.



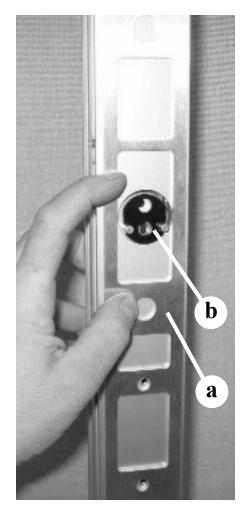
If you are installing a prep cover plate, continue with, **Install the Interface Spacer: on page 21**. Otherwise, skip to, **Place Trim On Door: on page 21**

34) Install the Interface Spacer:

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

- Place interface spacer (b) onto door.
- Place prep cover plate onto door.

NOTE: Both parts are included in the prep cover plate kit.



35) Place Trim On Door:

- Line up parts for proper engagement.
- Carefully slide trim against door.

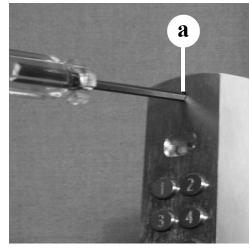
NOTE: It may be necessary to turn the lever or thumbturn a little to properly engage the parts.



36) Tighten Top Mounting Screw:

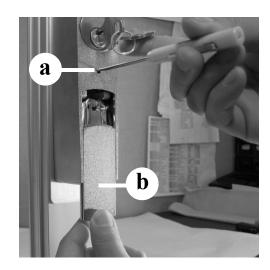
• Using a ball-end, 1/8" Allen wrench, partially tighten the top screw in trim.

IMPORTANT: Do not completely tighten the top screw. Leave loose.



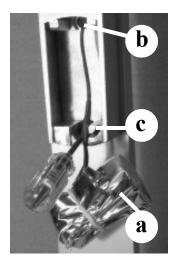
37) Remove Battery Cover:

- 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.



38) 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.



39) 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.



40) Fold Battery Bag:

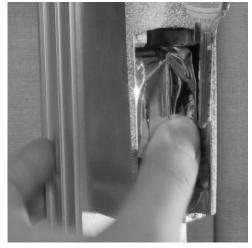
• Fold battery bag over.

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



41) Install Battery Pack:

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



42) 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.



43) Install Face Plate:

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



44) 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.



Test Operation:

- 1. For KC9111/KC9111-2: Lever should be able to be pushed down, but not up.
 - If you find that this is not correct, see, Verify Lever / Turnpiece Stop Screw Direction: on page 12
- 2. <u>For KC9321/KC9321-2:</u> Turnpiece should rotate clockwise for Right Hand/Right Hand Reverse and counterclockwise for Left Hand/Left Hand Reverse.
 - > If you find that this is not correct, see, Verify Lever / Turnpiece Stop Screw Direction: on page 12
- 3. Insert key into cylinder and rotate it counterclockwise.
 - > Lever/turnpiece should retract latch.

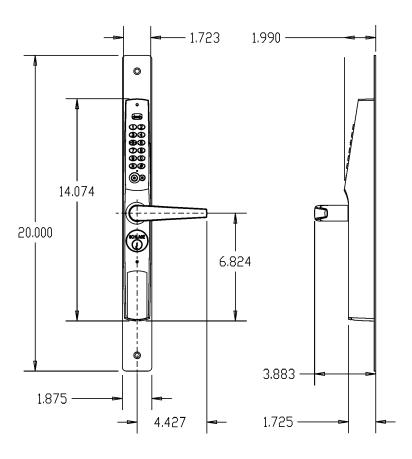
NOTE: The key should only rotate counterclockwise, <u>not clockwise</u>. If you find that this is not correct, see, Partially Tighten the Set Screw: on page 11.

- 4. Rotate key back to original position and remove it.
 - > Lever/turnpiece should no longer retract latch.
- 5. 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 during which time the lever/turnpiece should retract the latch.
- 6. Test inside egress device (paddle/exit device, etc.) to make sure it is properly operating.

SEE PROGRAMMING GUIDE FOR PROGRAMMING INFORMATION

KC9111/KC9111-2 & KC9321/KC9321-2 INSTALLATION Dimensions

Dimensions:



KC9111/KC9111-2 & KC9321/KC9321-2 INSTALLATION NOTES

<u>NOTES</u>

KC9111/KC9111-2 & KC9321/KC9321-2 INSTALLATION NOTES

<u>NOTES</u>