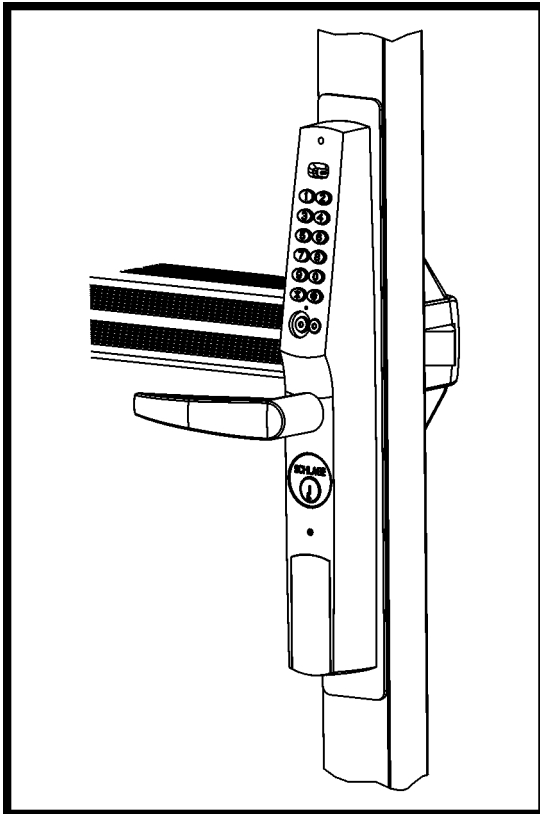




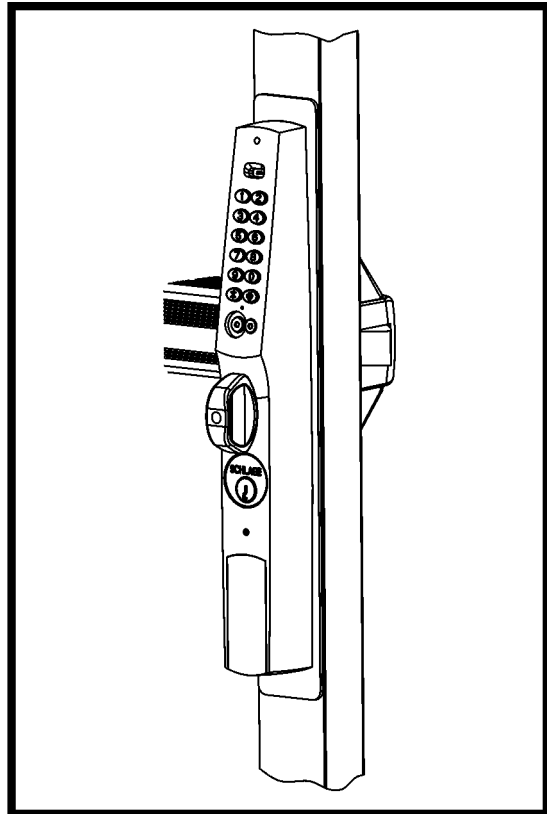
KING COBRA/KING COBRA-2 NARROW STILE SERIES

INSTALLATION MANUAL

KC9116/KC9116-2



KC9326/KC9326-2



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

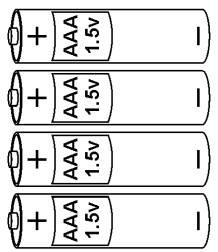
KC9116/KC9116-2 & KC9326/KC9326-2 INSTALLATION

Contents of the Box

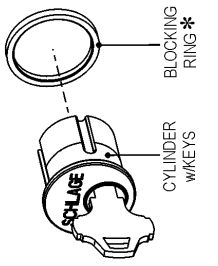
Confirming the Box Contents

The following items should be included in the box. If any of these items are missing, please contact the Technical Support Department for assistance.

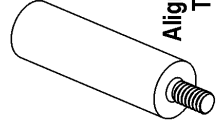
4 "AAA" Batteries Included



Optional Parts



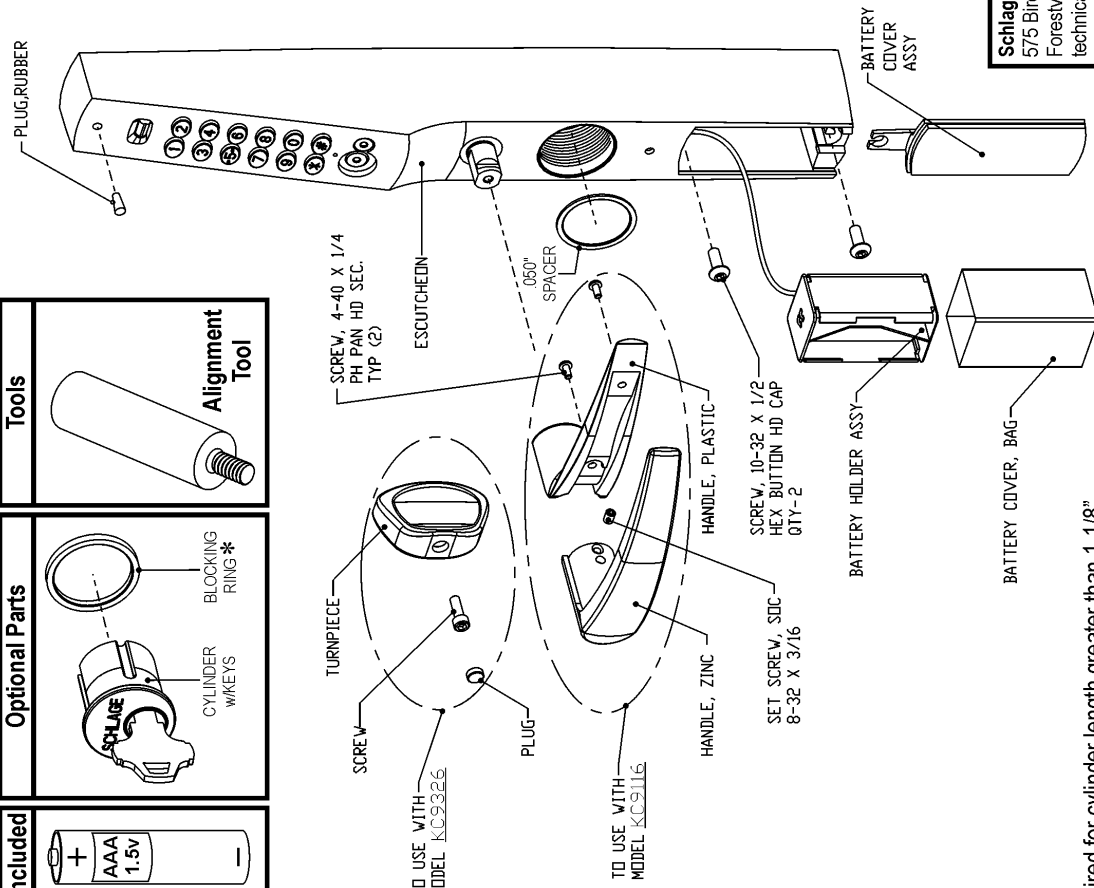
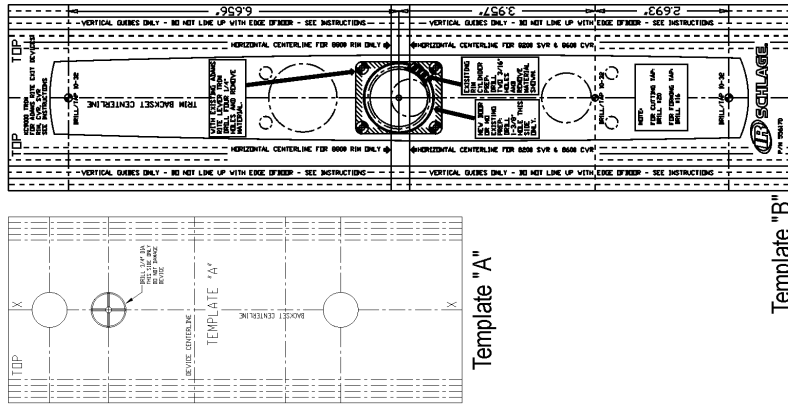

Tools



DOCUMENTS INCLUDED IN BOX:

- Installation Manual
- Programming Instructions

2 Full Size, Outside Door Templates

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

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

KC9116/KC9116-2 & KC9326/KC9326-2 INSTALLATION

Introduction / Tools and Materials Needed / Contact Info

Introduction:

The KC9116/KC9116-2 and KC9326/KC9326-2 are designed to replace existing exterior trim for Von Duprin old style concealed vertical rod exit devices. The trim will retract the latch(es) when an access code or iButton is entered and the lever is depressed or the turnpiece is turned. Mechanical key override is standard. 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 the trim.

The KC9116/KC9116-2 (trim w/lever) and the KC9326/KC9326-2 (trim w/turnpiece) are both compatible with Von Duprin (old style) 3347/3547 concealed vertical rod exit devices.

Tools and Materials Needed:

1. Flat head screwdriver w/straight, 1/8" wide blade
2. Small Philips head screwdriver
3. 1/16" Allen wrench
4. Long nose needle-nose pliers
5. Center punch
6. Hammer
7. Power drill
8. 19/32" drill bit
9. 1/4" drill bit
10. Jig saw w/blade
11. 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>

KC9116/KC9116-2 & KC9326/KC9326-2 INSTALLATION

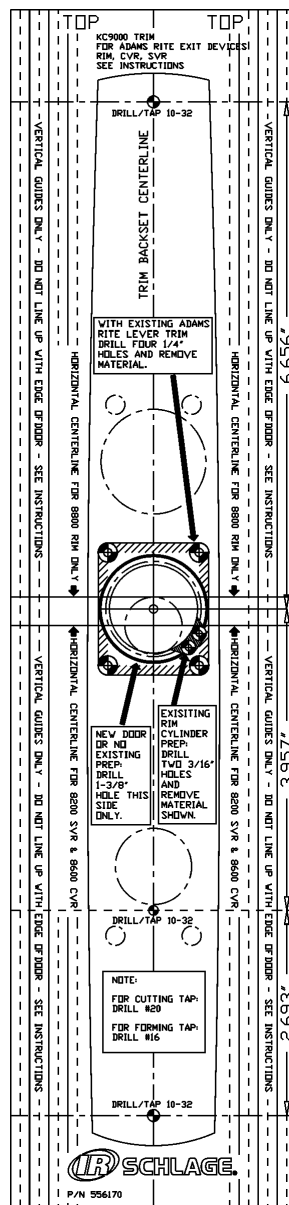
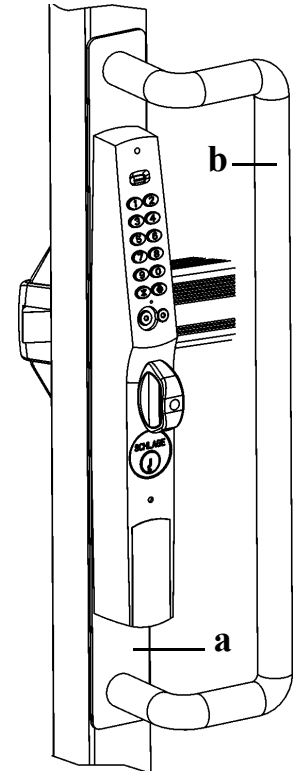
Door Preparation

Door Conditions:

Installation may require the use of a cover plate (a) to cover the holes left in the door. If the KC9326/KC9326-2 (trim w/turnpiece) is used and 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)

Refer to existing Von Duprin prep. Use template or dimensions below to remove required material from the outside of the door. Do not remove material from the exit device side.



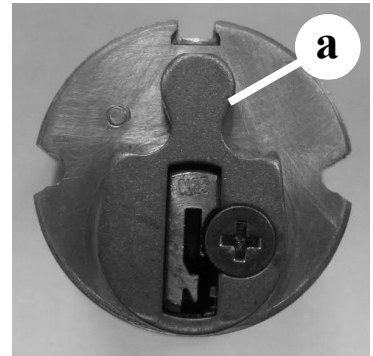
KC9116/KC9116-2 & KC9326/KC9326-2 INSTALLATION

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 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 without the use of a blocking ring. For cylinders longer 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>



KC9116/KC9116-2 & KC9326/KC9326-2 INSTALLATION

Installing the KC9116/KC9116-2 or KC9326/KC9326-2

Installing the KC9116/KC9116-2 or KC9326/KC9326-2

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.

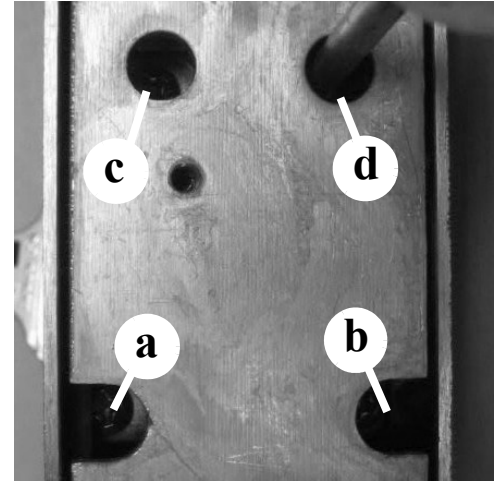
1) Loosen the Baseplate Screws:

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

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

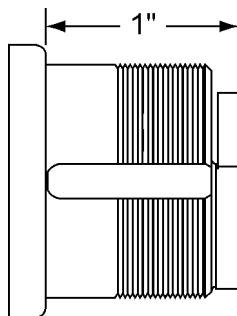
NOTE: Screws **a**, **b**, **c** & **d** are set at the factory.

Screws **a** & **b** are tightened and screws **c** & **d** are left loose.



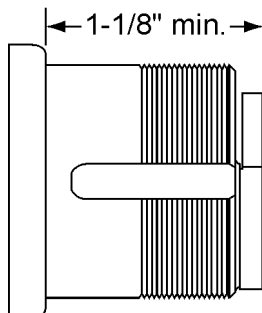
2) A Key Cylinder That Is At Least 1-1/8" Long Must Be Installed:

- > 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 photos below illustrate 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.

KC9116/KC9116-2 & KC9326/KC9326-2 INSTALLATION

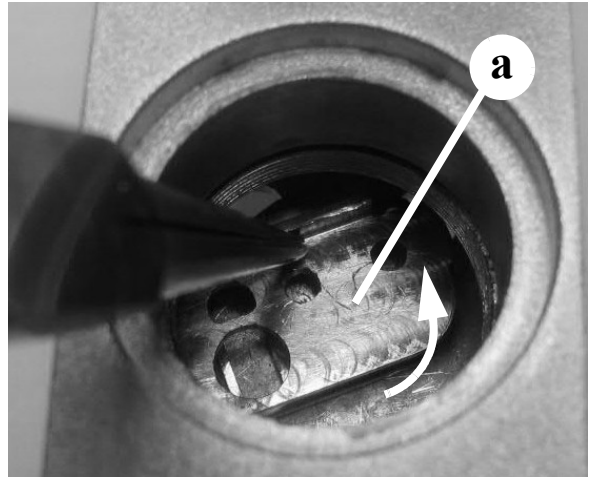
Installing the KC9116/KC9116-2 or KC9326/KC9326-2

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:

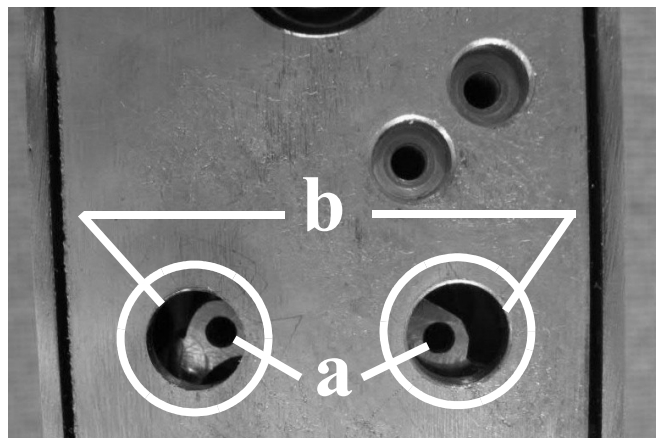
To insure that dead latch is placed far enough out of the way to allow key cylinder to be threaded in properly:

- 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.



KC9116/KC9116-2 & KC9326/KC9326-2 INSTALLATION

Installing the KC9116/KC9116-2 or KC9326/KC9326-2

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 longer 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

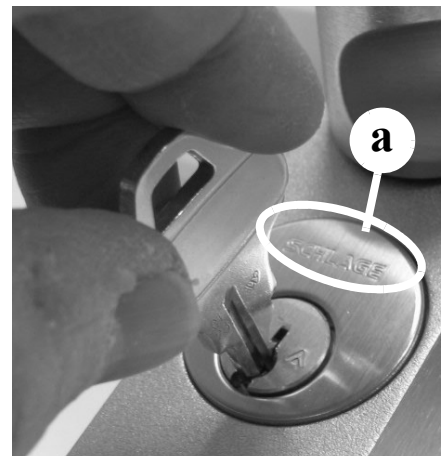
Key Cylinder Length	Blocking Ring (Schlage P/N; XXX = finish)
• 1-1/4"	1/8" (36-079-012-XXX)
• 1-3/8"	1/4" (36-079-025-XXX)
• 1-1/2"	3/8" (36-079-037-XXX)
• 1-5/8"	1/2" (36-079-050-XXX)

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.



KC9116/KC9116-2 & KC9326/KC9326-2 INSTALLATION

Installing the KC9116/KC9116-2 or KC9326/KC9326-2

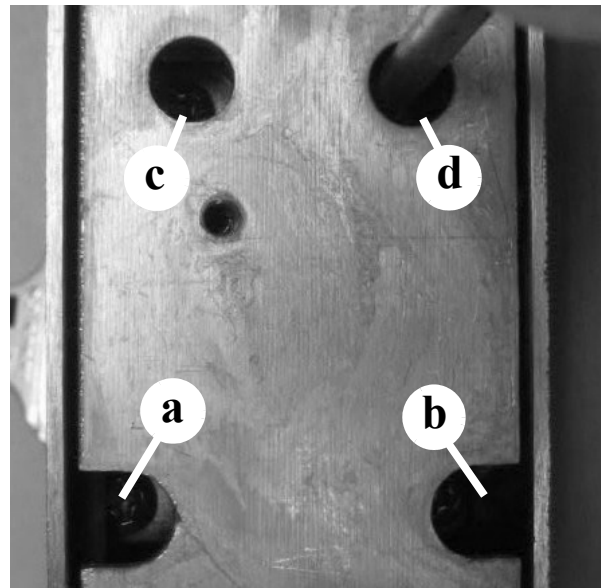
8) Alignment of Interchangeable Cores:

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



9) Tighten the Four Screws in the Baseplate:

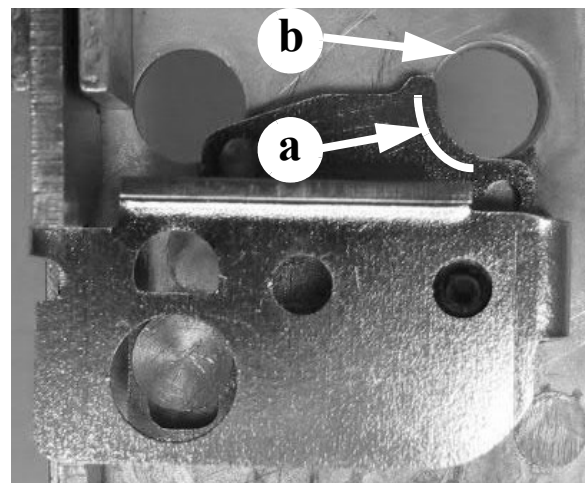
- Tighten the four baseplate screws in the following order:
 - > Tighten **a** and **b** until snug.
 - > Tighten **c** and **d** until snug.
 - > Fully tighten **a** and **b**.
 - > Fully tighten **c** and **d**.
 - > Check all four screws to make sure that all four are completely tight.



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



KC9116/KC9116-2 & KC9326/KC9326-2 INSTALLATION

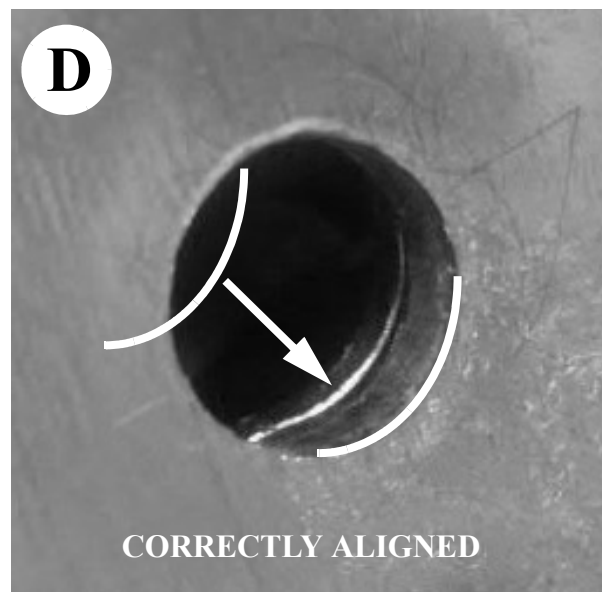
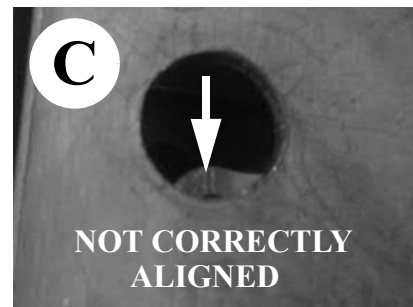
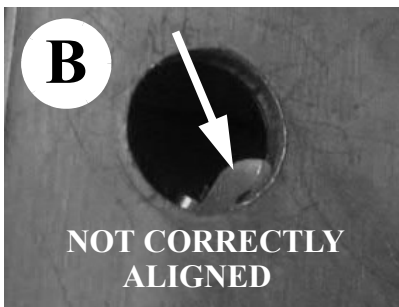
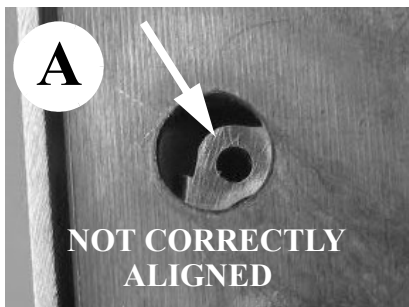
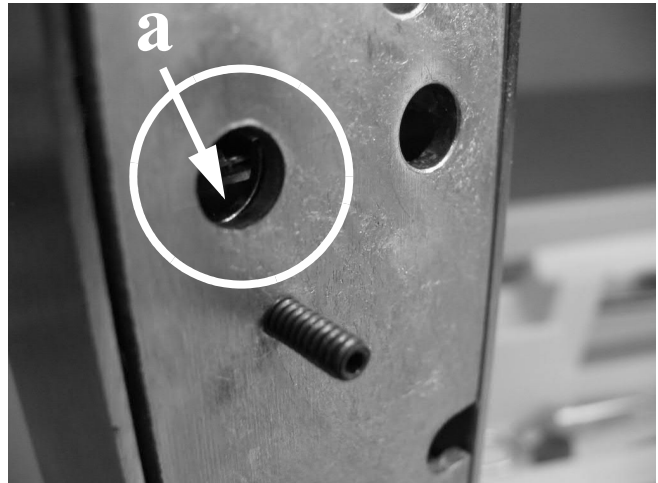
Installing the KC9116/KC9116-2 or KC9326/KC9326-2

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.



KC9116/KC9116-2 & KC9326/KC9326-2 INSTALLATION

Installing the KC9116/KC9116-2 or KC9326/KC9326-2

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.



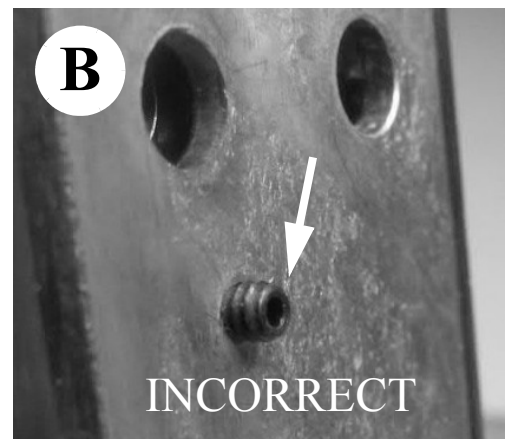
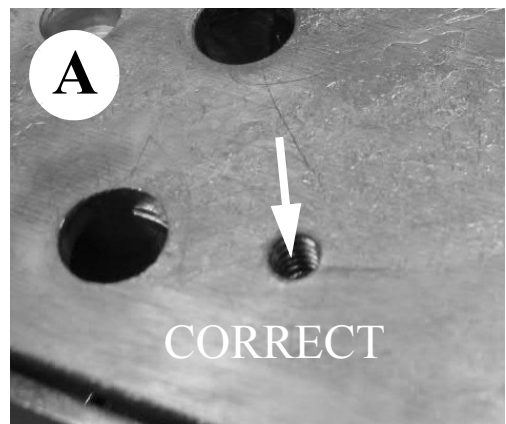
13) Fully Tighten the Set Screw:

- 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.



KC9116/KC9116-2 & KC9326/KC9326-2 INSTALLATION

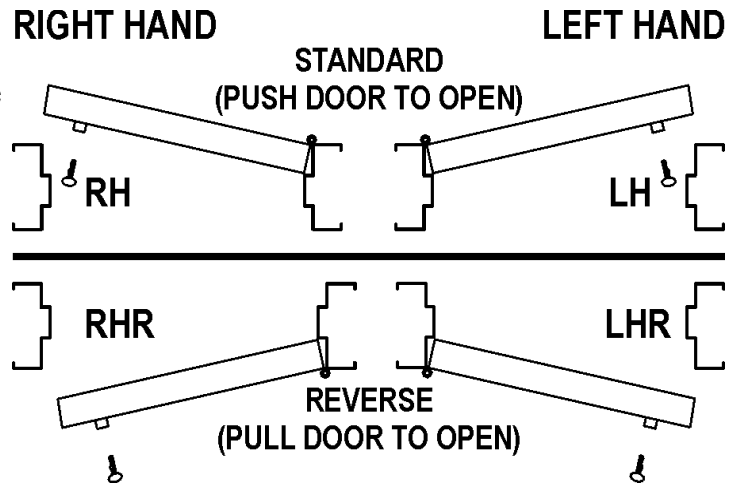
Installing the KC9116/KC9116-2 or KC9326/KC9326-2

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."

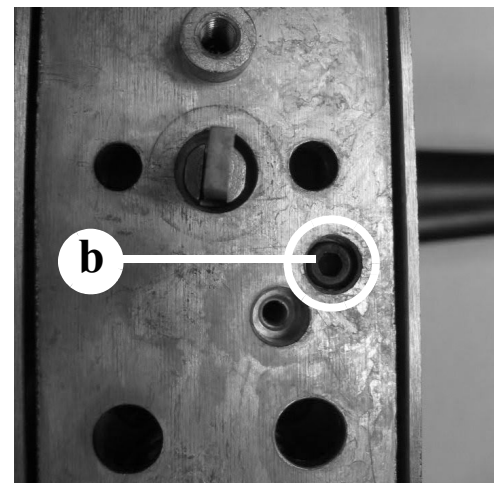
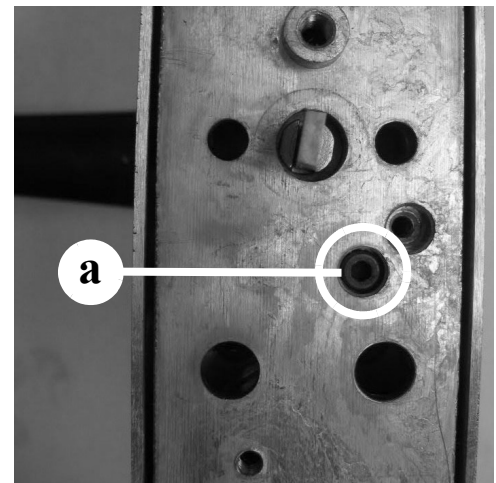


15) Change Stop Screw Location if Necessary:

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.

KC9116/KC9116-2 & KC9326/KC9326-2 INSTALLATION

Installing the KC9116/KC9116-2 or KC9326/KC9326-2

If you are installing a KC9160, continue with, **Install the Lever:** on page 13. Otherwise, skip to, **Remove Centercase Covers:** on page 14.

16) 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.



17) Install the Lever Cover:

- Place lever cover onto inside of lever.



18) Secure the Lever Cover:

- Secure lever cover with two Phillips head screws.



KC9116/KC9116-2 & KC9326/KC9326-2 INSTALLATION

Installing the KC9116/KC9116-2 or KC9326/KC9326-2

19) Remove Centercase Covers:

- Using a Philips head screwdriver, remove and retain the screws that secure the centercase covers (a).
- Remove and retain the centercase covers.
- Remove existing trim if present.



20) Mark Horizontal Centerline:

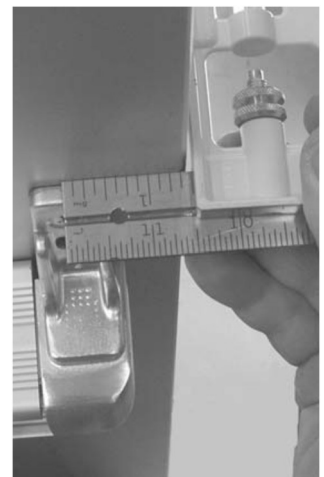
- Locate horizontal centerline of device.
- Transfer horizontal centerline to side of door.



21) Measure Backset:

- Measure backset on exit device-side using square.
- Transfer backset measurement to the trim-side.

NOTE: Take door bevel into account if there is one.



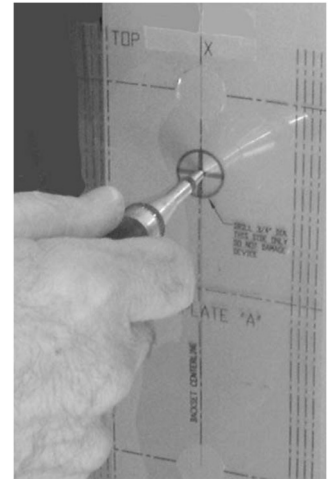
KC9116/KC9116-2 & KC9326/KC9326-2 INSTALLATION

Installing the KC9116/KC9116-2 or KC9326/KC9326-2

22) Apply Template “A”:

- Remove paper backing from template “A”.
- Line up markings on template with the horizontal and backset markings you made on stile.
- Press template against door.
- Mark drill point for 3/4” hole.

NOTE: *If existing Von Duprin trim prep is present, proceed to: Place Vertical Rod in Latched Position: on page 15*

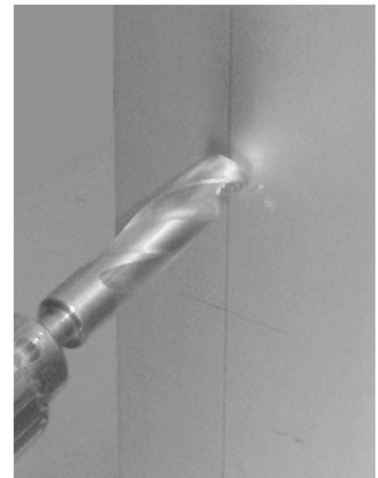


23) Drill 3/4” Hole:

- Remove template “A.”
- Drill 3/4” hole.

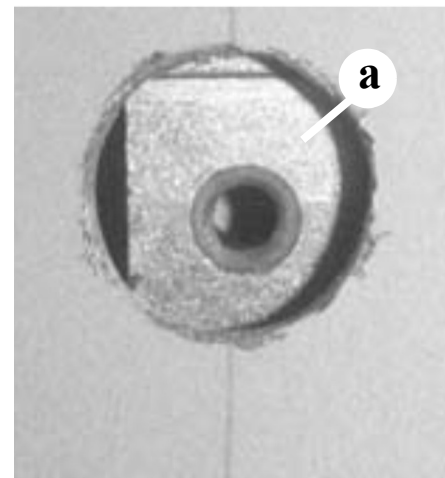
IMPORTANT: *Use care not to damage the device as there are parts inside door in this area.*

NOTE: *If drilling a pilot hole first, do not use a drill smaller than 1/4”. This will prevent accidental damage to the threads on the device.*



24) Place Vertical Rod in Latched Position:

- If vertical rod’s lift mechanism (a) is not visible in hole, activate the rod trip by closing and latching the door.

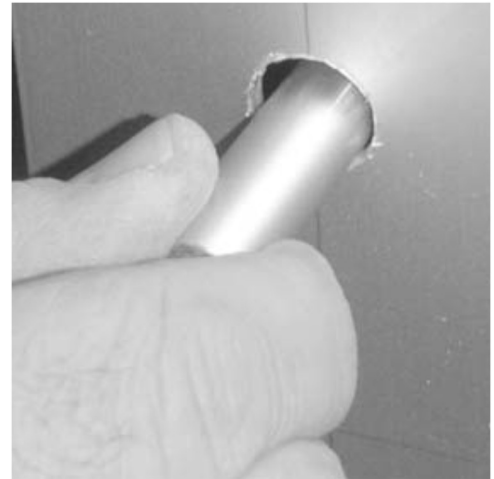


KC9116/KC9116-2 & KC9326/KC9326-2 INSTALLATION

Installing the KC9116/KC9116-2 or KC9326/KC9326-2

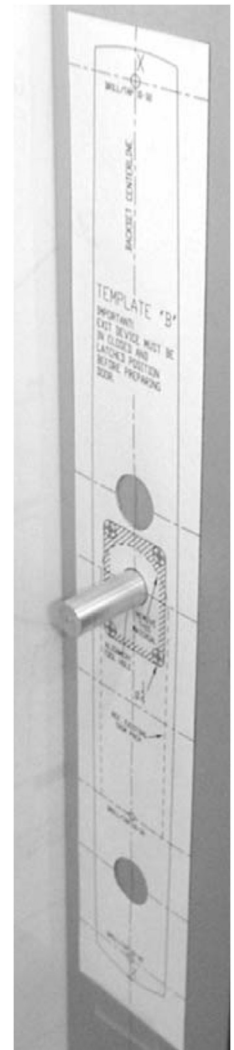
25) Install Alignment Tool:

- Screw in the provided alignment tool into threaded hole as far as it will go.



26) Apply Template "B":

- Place template "B" over alignment tool.
- Verify that template is lined up vertically and horizontally.
- If present, leave existing sex bolts in place.
- Tape template "B" to door.



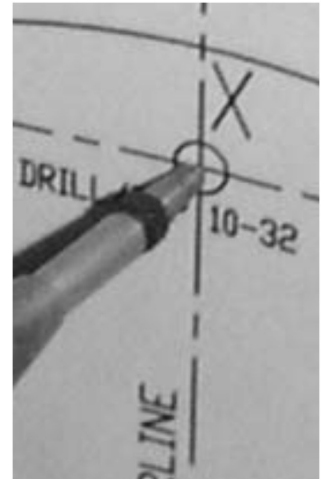
KC9116/KC9116-2 & KC9326/KC9326-2 INSTALLATION

Installing the KC9116/KC9116-2 or KC9326/KC9326-2

27) Mark Drill Points For the 10-32 Holes:

- Mark the drill points for the three, 10-32 holes.

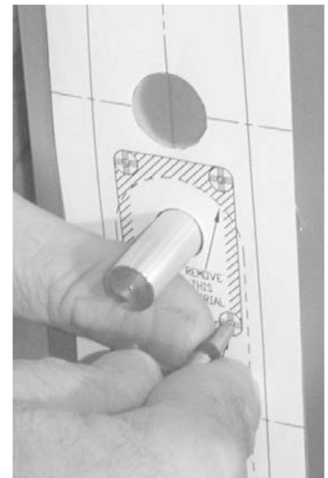
NOTE: *Omit center hole if Von Duprin trim prep is present.*



28) Mark the Holes For the Center Area:

- Mark the four, 1/4" holes for the center area.

NOTE: *Only mark the two top holes if Von Duprin prep is present.*



29) Remove Material in Center Area:

- Drill the holes that you marked for the center area.
- Remove all material inside rectangle.

IMPORTANT: *Use care not to damage exit device.*



KC9116/KC9116-2 & KC9326/KC9326-2 INSTALLATION

Installing the KC9116/KC9116-2 or KC9326/KC9326-2

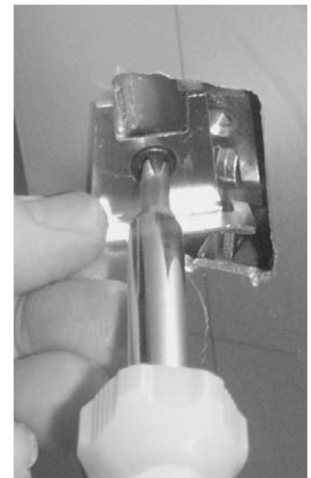
30) Drill & Tap the Holes:

- Drill and tap the holes in step: **Mark Drill Points For the 10-32 Holes: on page 17.**



31) Insert & Position Actuator Plate:

- With 10-24 screw inserted in actuator plate, hold screw in place with screwdriver.
- Carefully insert actuator plate into prep.
- Position rod actuator.



32) Tighten Actuator Screw:

- Fully tighten the screw in the actuator plate.

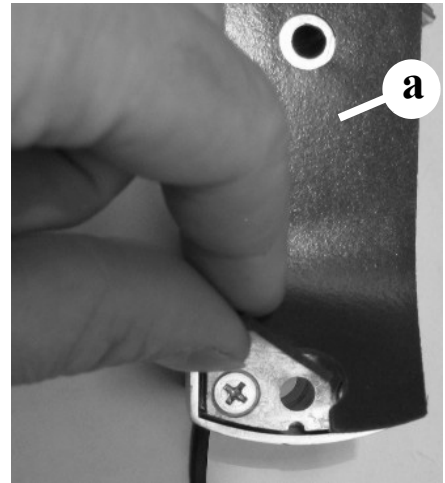


KC9116/KC9116-2 & KC9326/KC9326-2 INSTALLATION

Installing the KC9116/KC9116-2 or KC9326/KC9326-2

33) Apply Gasket:

- Peel backing from gasket.
- Apply gasket (a) to trim.



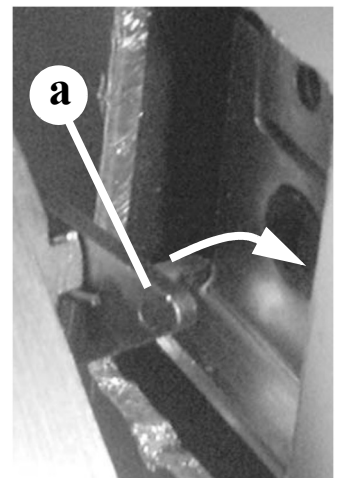
34) Place Spacer Plate Onto Trim:

- Place spacer plate (a) onto trim.



35) Position the Trim:

- Hold trim at an angle.
- Slide trim's actuator tip (a) under rectangular hole.
- Swing trim into position.



KC9116/KC9116-2 & KC9326/KC9326-2 INSTALLATION

Installing the KC9116/KC9116-2 or KC9326/KC9326-2

36) Reinstall Exit Device:

- Hold trim as you place exit device back onto door.
- Verify that exit device engages with trim.

NOTE: It may be necessary to turn the lever or turnpiece a little to properly engage the exit device with the trim.



37) Secure Exit Device:

- Hold trim in place.
- Using two, 1/4-20 flat head screws and a Philips head screwdriver, secure trim to exit device.



38) Reinstall Centercase Covers:

- Place centercase covers back onto centercase.
- Using a Philips head screwdriver, secure covers with the screws that were removed.

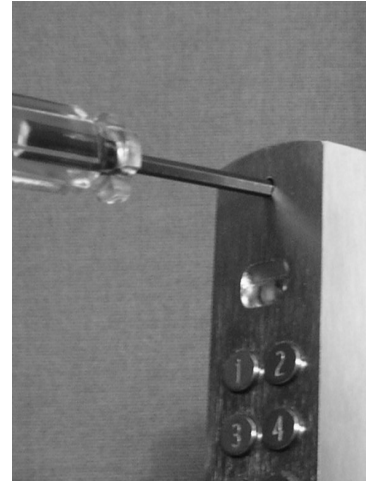


KC9116/KC9116-2 & KC9326/KC9326-2 INSTALLATION

Installing the KC9116/KC9116-2 or KC9326/KC9326-2

39) Tighten Trim's Top Mounting Screw:

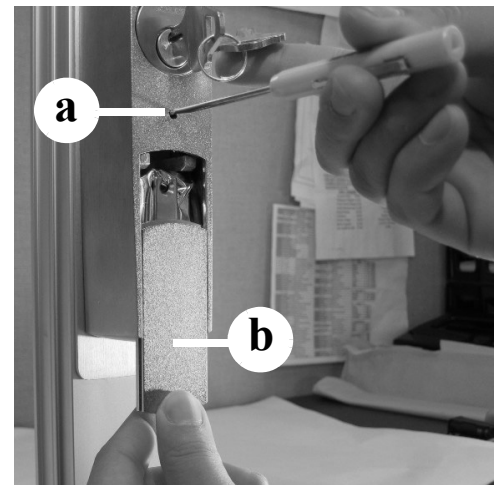
- Using a ball-end, 1/8" hex wrench, partially tighten trim's top mounting screw.



40) Remove Battery Cover:

- With key turned counterclockwise in cylinder, use a small, flat blade screwdriver (straight, 1/8" wide blade), turn the battery cover screw (a) **ONLY TWO TURNS COUNTERCLOCKWISE.***
- Slide off battery cover (b).
- Pull out battery pack from battery compartment.

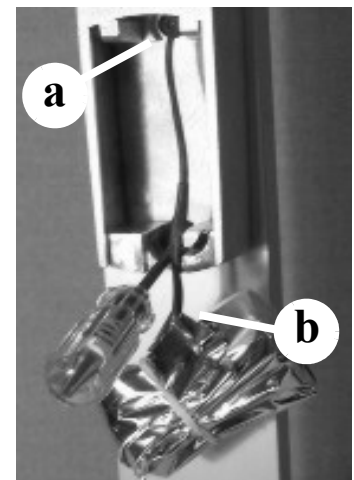
IMPORTANT: Do not cut or remove wire.



*.If battery cover screw is loosened too much, the key override mechanism will jamb and remain that way until the screw is tightened.

41) Finish Securing Trim to Door:

- Install the two lower mounting screws in battery compartment.
- Finish tightening the top mounting screw.



KC9116/KC9116-2 & KC9326/KC9326-2 INSTALLATION

Installing the KC9116/KC9116-2 or KC9326/KC9326-2

42) 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.



43) Fold Battery Bag:

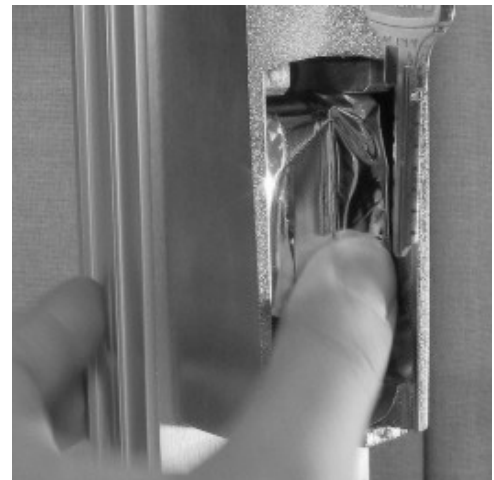
- Fold battery bag* over.



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

44) Install Battery Pack:

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



KC9116/KC9116-2 & KC9326/KC9326-2 INSTALLATION

Installing the KC9116/KC9116-2 or KC9326/KC9326-2

45) Install Battery Compartment Cover:

- Slide battery compartment cover on from the bottom.

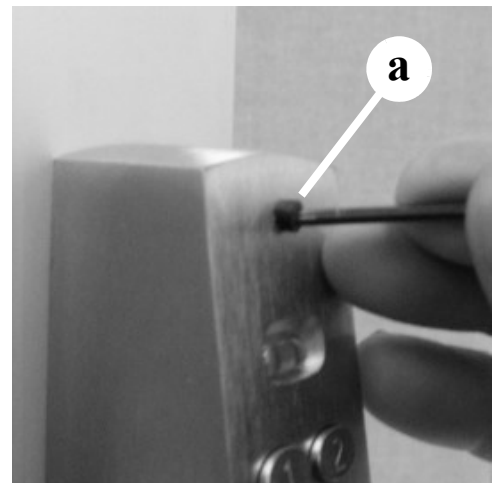
IMPORTANT: Use caution not to pinch the battery wire.

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



46) Install Water Plug.

- Verify that top mounting screw is fully tightened.
- 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.



INSTALLATION COMPLETE

KC9116/KC9116-2 & KC9326/KC9326-2 INSTALLATION

Test Operation / Dimensions

Test Operation

1. Lever should be able to be pushed up, but NOT down.
2. Turnpiece should rotate clockwise for RHR and counterclockwise for LHR.
 - > If you find that this is not correct, see, **Change Stop Screw Location if Necessary: on page 12.**
3. Insert key into cylinder and rotate it counterclockwise.
 - > Lever/turnpiece should retract latch.
 - > The key should only rotate counterclockwise, not clockwise.
 - > 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 exit device to make sure it is operating properly.

SEE PROGRAMMING GUIDE FOR PROGRAMMING INFORMATION.

Dimensions

