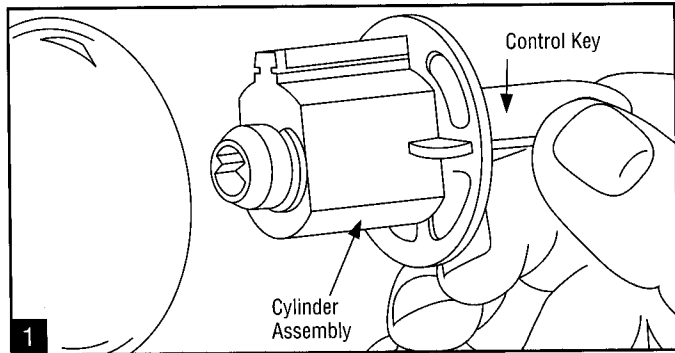


# Rekeying Knobs with a control key

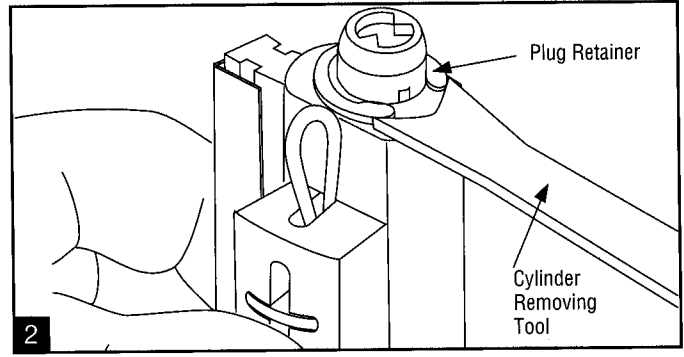
Step-by-step instructions for:

**Kwikset**  
**UltraMax**  
SECURITY

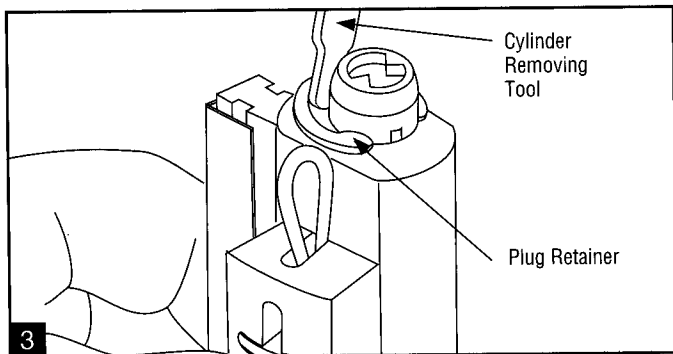
If no control key exists, use the customer's existing key to cut one. When making the new key, also make a new control key with the same bitting (combination) as the new key.



1 Insert control key, turn 90° (1/4 turn) counterclockwise and pull out core. Remove control key from core. Failure to do this could allow plug to come out of the cylinder shell dropping pins and springs.

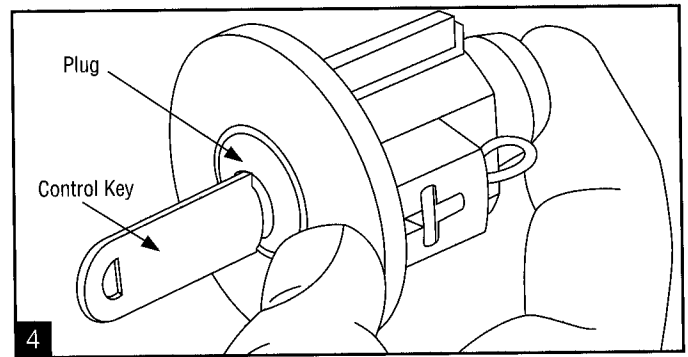


2 Fit forked end of Cylinder Removing Tool into open end of plug retainer and push it out (use screwdriver if tool is not available).

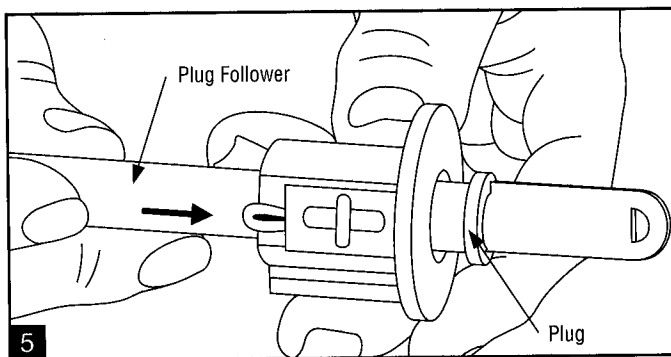


3 Move the plug retainer out the rest of the way with the other end of the Cylinder Removing Tool (or small screwdriver).

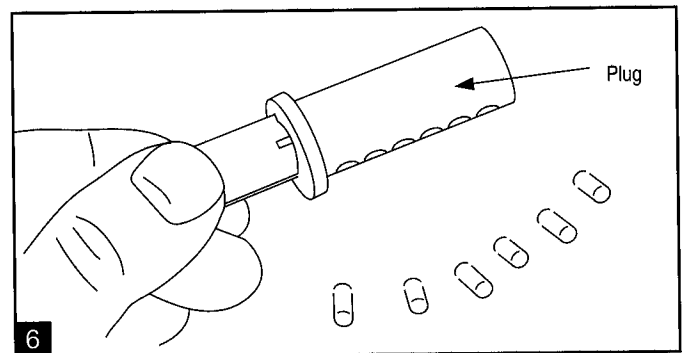
**Use care not to deform retainer.**



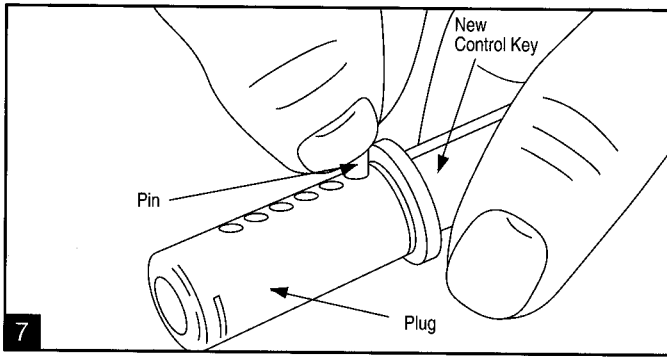
4 Reinsert old control key. Use thumb to hold key or plug in place. (With the plug retainer off, the plug could slide out, dropping pins and springs.)



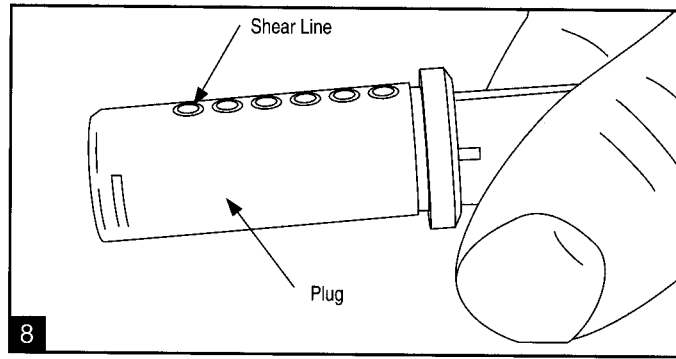
5 Rotate plug slightly clockwise or counter-clockwise. Using the follower, push the plug out from the back. Make sure the follower stays tight against the plug or the top pins and springs will fall out. (See page 19 if this happens.) Make sure the plug follower sticks out at least one inch. **Leave it in place until you reassemble.**



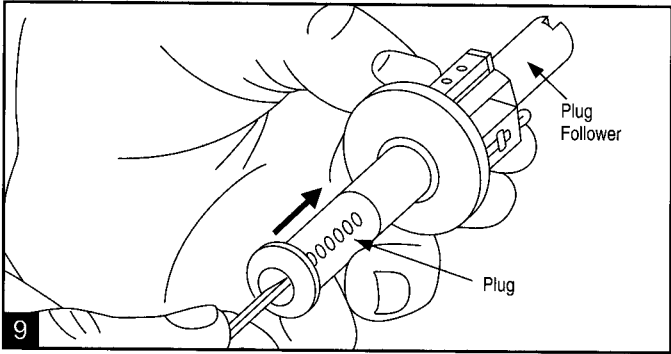
6 Drop out the old pins, remove the old control key and insert the new control key. (We will assume you have already gauged the new control key.)



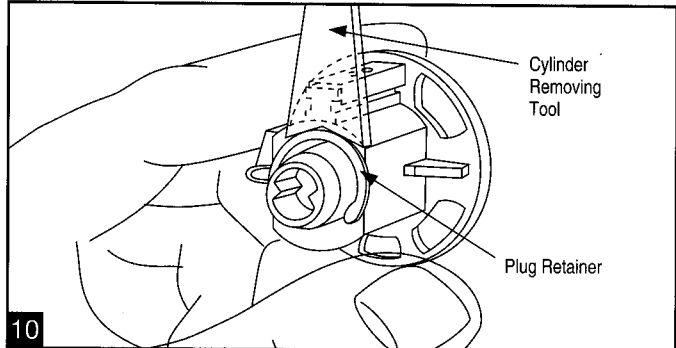
7  
Begin inserting the new bottom pins from the appropriate compartments in the rekeying kit according to the bitting of the new key. You may handle the bottom pins with tweezers or your fingertips.



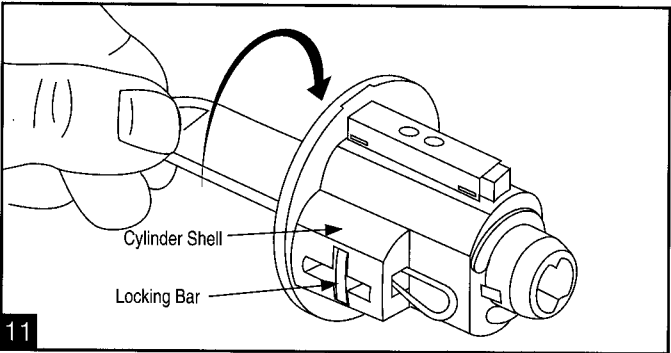
8  
If all the bottom pins are the proper size for the key, they will create the shear line. **Check this carefully.** A pin which is too long will prevent insertion of the plug while the key is inserted. A pin which is too short will allow the cylinder to lock up with no key operation.



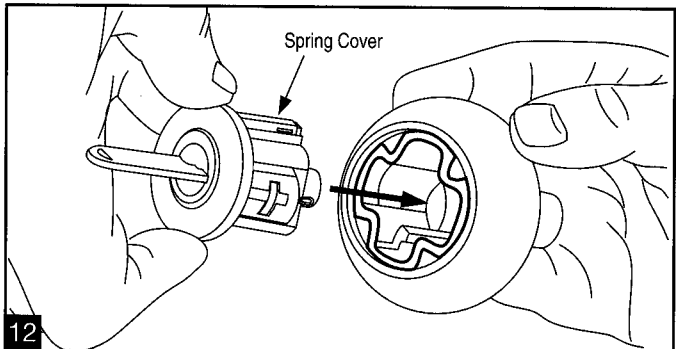
9  
Start reassembly in the same manner you began. Use the plug to push the follower back through the cylinder. Hold the plug firmly into the cylinder with your thumb and turn the control key straight up and remove it.



10  
Use the cylinder removal tool to reseat the plug retainer. Test cylinder with key to make sure it turns properly.

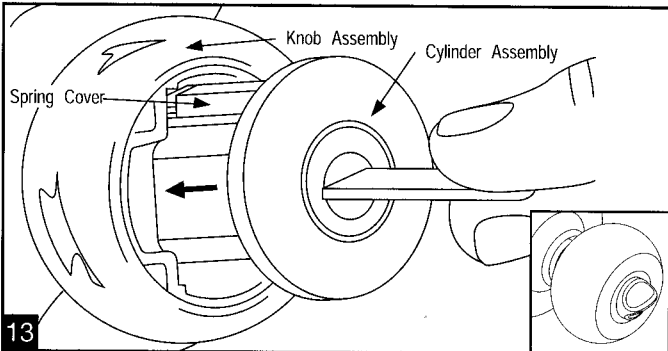


11  
Insert and rotate control key 90° (1/4 turn) counterclockwise. Locking bar must be flush with the surface of the shell for insertion into knob.



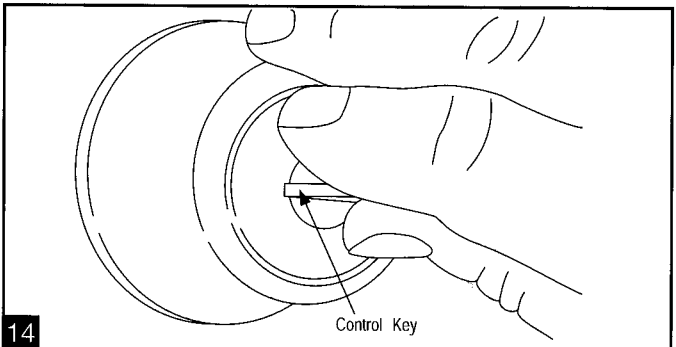
12  
Insert core into knob with spring cover up (do not install upside down) if lockset is not on door.

**NOTE: Correct orientation depends on the hand of the door where the lock is to be installed.**



13  
Insert core into knob. Make sure that the spring cover is in the up position.

**Note: Interior turnbutton must be in the unlocked position.**



14  
Rotate control key 90° (1/4 turn) clockwise to vertical position and remove. Check with standard operating key for proper operation.

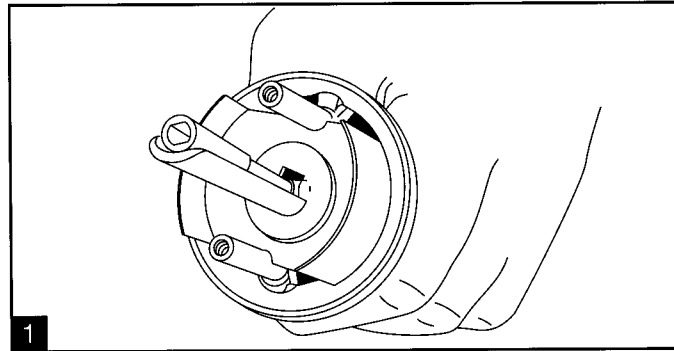
# Rekeying Knobs

with a standard operating key  
but without a control key

Step-by-step instructions for:

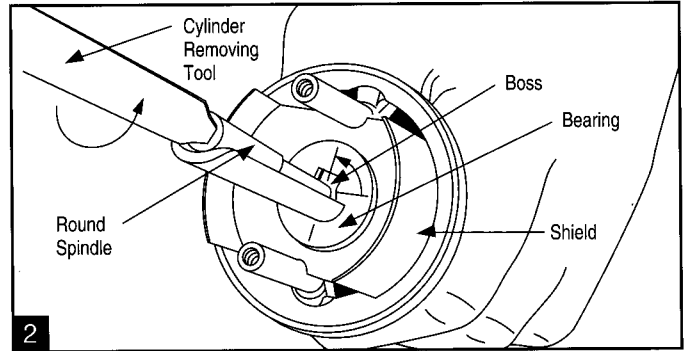
**Kwikset**  
**UltraMax**  
SECURITY

If you can cut a control key to match the existing key, the process is much easier.



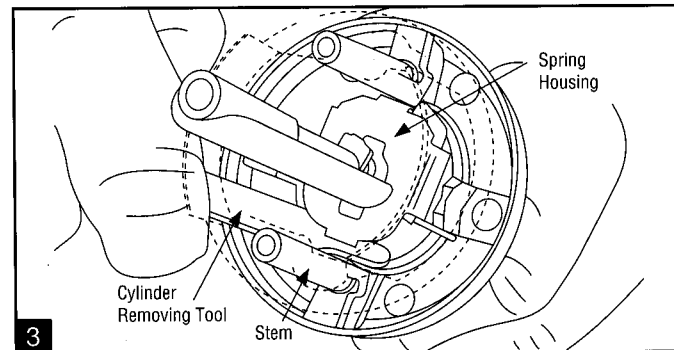
1

Remove lockset from door.



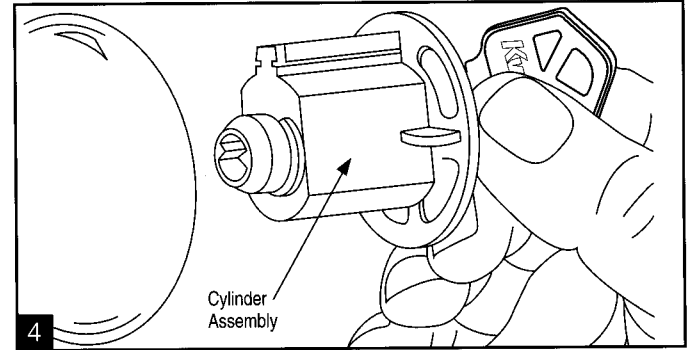
2

Pull the shield off far enough to allow access to the mechanism at the base of the spindle. Rotate the round spindle with the Cylinder Removing Tool (or small screwdriver) to line up the boss of the spindle with the slot of the plastic bearing.



3

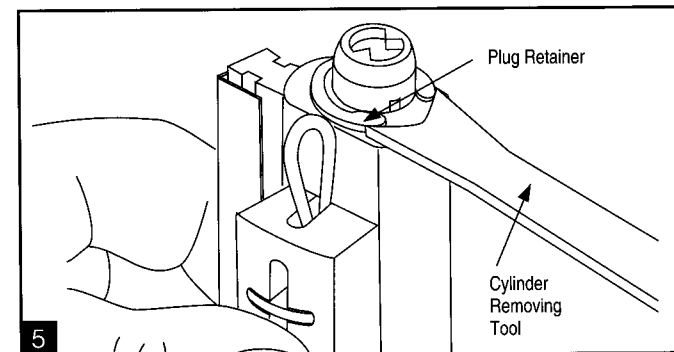
Insert the same end of the cylinder removal tool between the screw stem and the detent slide. Apply slight force by pressing against detent slide to remove spring tension while holding spindle downward allowing spindle to drop out. If necessary, use free finger to assist spindle removal. If spindle rotates, repeat step (2).



4

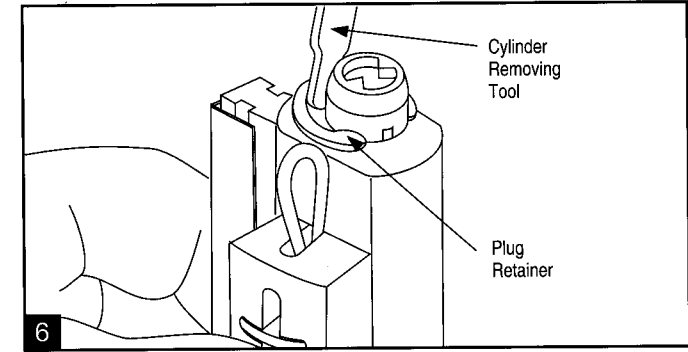
Turn key 180° (1/2 turn) counterclockwise and pull out cylinder.

**CAUTION: Turn the key back and remove it. Failure to do this may allow the plug to come out, dropping pins and springs if plug retainer is removed first.**



5

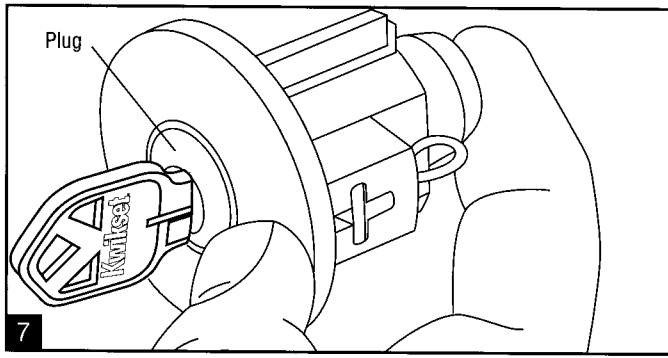
Fit forked end of Cylinder Removing Tool into open end of plug retainer and push it out (use screwdriver if tool is not available).



6

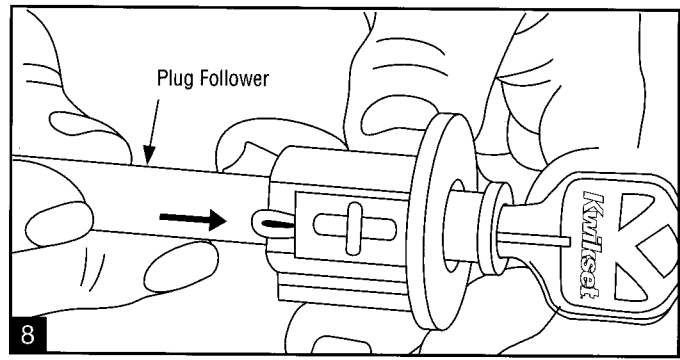
Remove the retainer completely using the other end of the tool (or small screwdriver).

**NOTE: Use care not to deform plug retainer.**

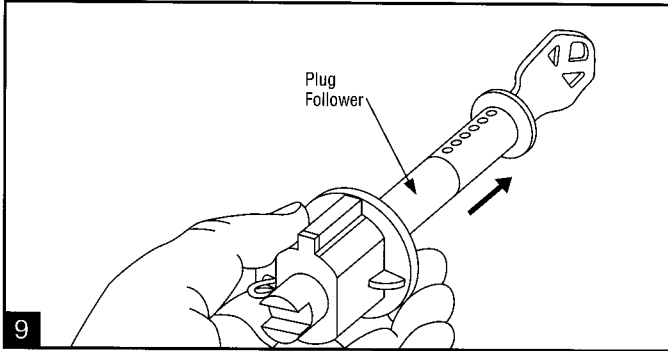


Reinsert old key. Use thumb to hold key or plug in place.

**CAUTION: With the plug retainer off, the plug could slide out, dropping the pins and springs.**

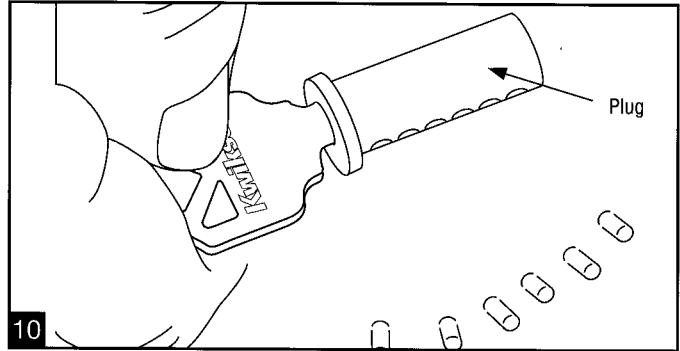


Use the plug follower to push the plug out from the back. Make sure it stays tight against the back of the plug or the top pins and springs will fall out. (See page 19 if this happens.)

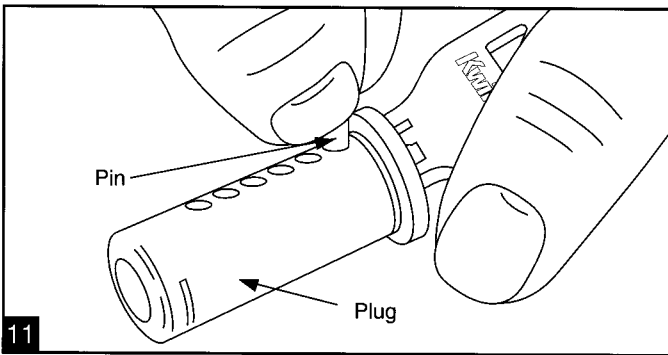


Make sure the follower sticks out at least one inch.

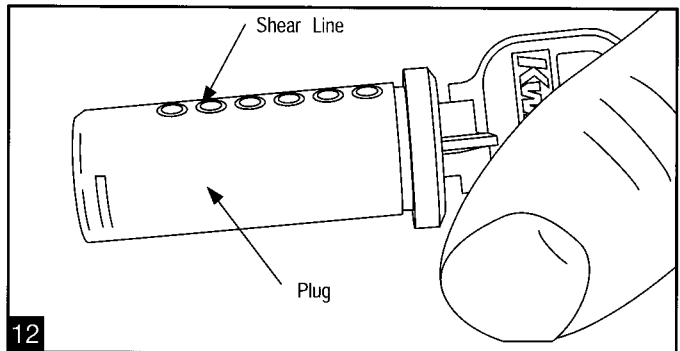
**Leave it in place until you reassemble.**



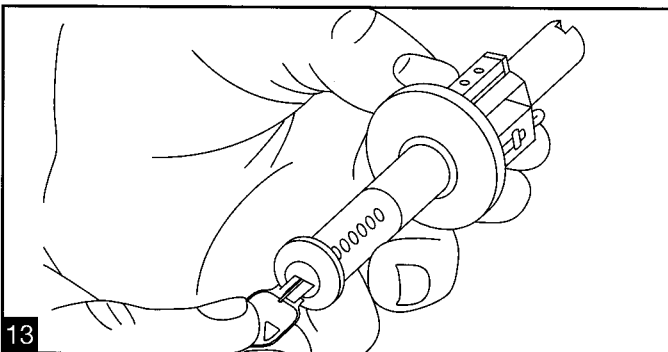
Drop out the old pins, remove the old key and insert the new key. (We will assume you have already gauged the new key.)



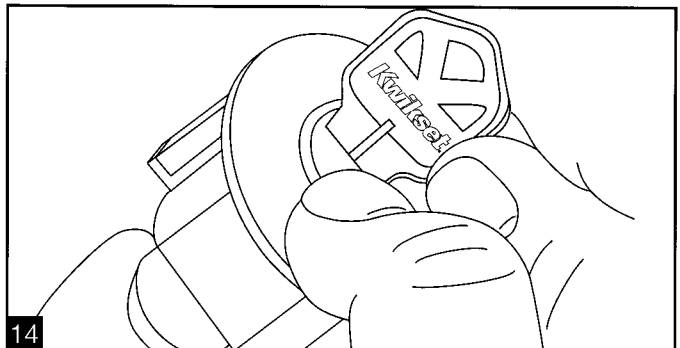
Begin inserting the new pins from the appropriate compartments in the rekeying kit according to the bitting (combination) of the new key. You may handle the bottom pins with tweezers or your fingertips.



If all the bottom pins are the proper size for the key, they will create the shear line. **Check this carefully.** A pin which is too long will prevent insertion of the plug while the key is inserted. A pin which is too short will allow the cylinder to lock up with no key operation!

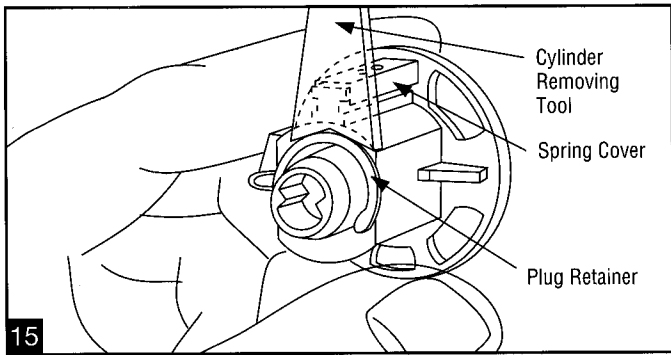


Start reassembly in the same manner you began. Use the plug to push the follower back through the cylinder.

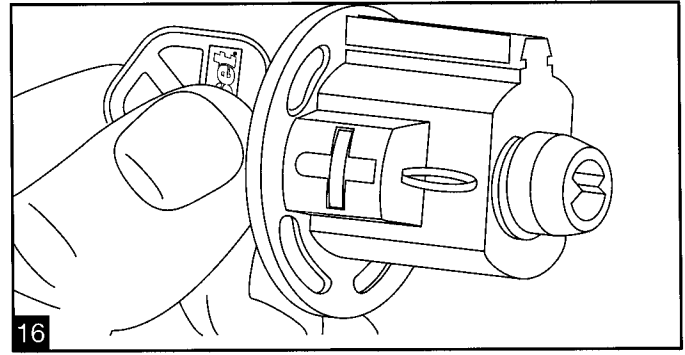


Holding the plug firmly in the cylinder with your thumb, turn the key straight up and remove it.

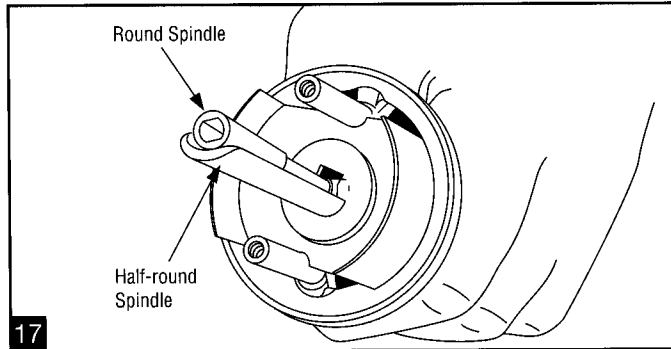
**CAUTION: Do not allow the plug to come out as you remove the key!**



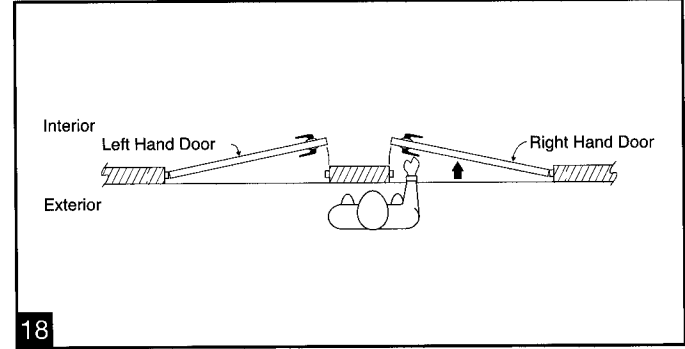
15 Use the cylinder removing tool to reseal the plug retainer. Test cylinder with key to make sure it turns properly.



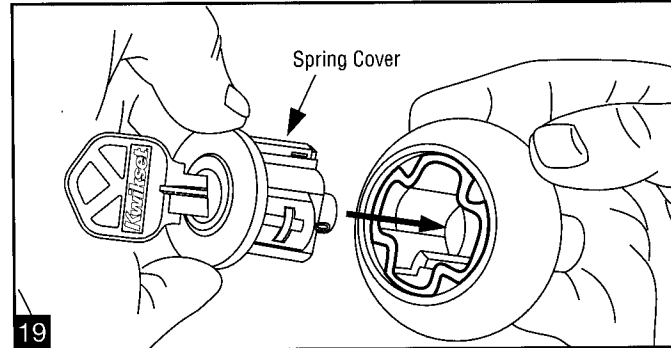
16 Insert key and turn 180° (1/2 turn). The cylinder can be installed into the knob two ways. To be sure it will be right side up when the lockset is installed, you must determine the hand of the door before installing the cylinder.



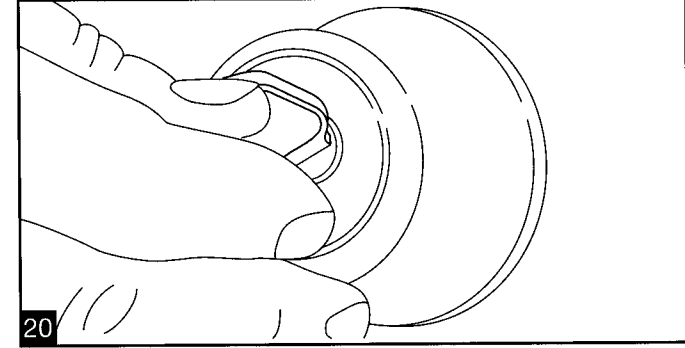
17 Notice C-shaped outer spindle protruding behind knob. Orientation of the lockset on the door is determined by this piece.



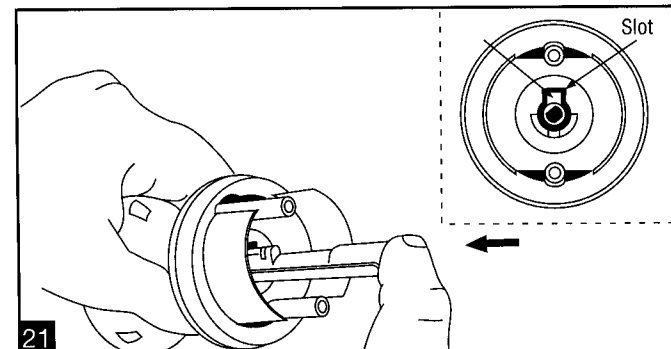
18 Picture the door from the keyed side (normally the outside) and determine whether the hinges are on the right or left. The knob assembly will be right side up when the open side of the C-shaped spindle faces the hinges and the smooth curved side faces the free edge of the door.



19 Hold the knob assembly right side up for its eventual installation. Align the cylinder spring cover with the top of the knob and install the cylinder.



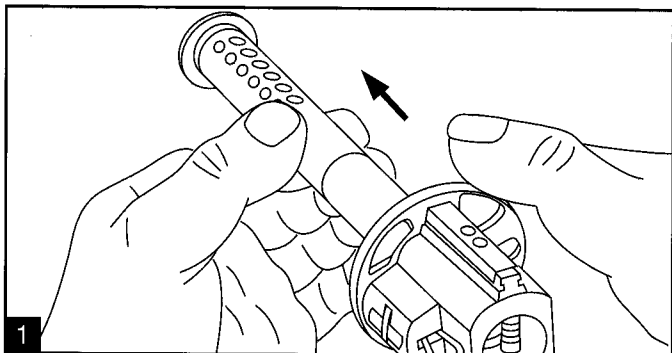
20 Turn the key 180° (1/2 turn) and remove key.



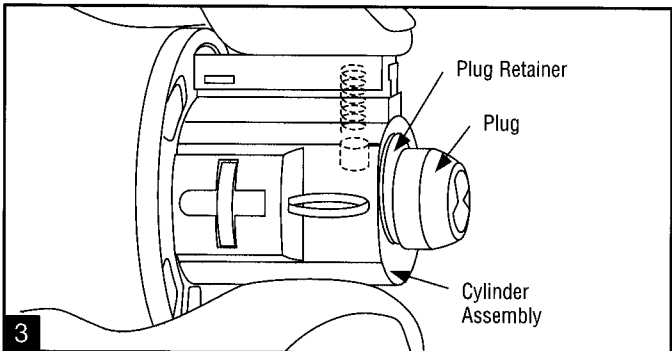
21 Replace the round inner spindle by lining up boss with slot. Push spindle until it snaps into place. Reseat shield and plastic bearing.

Step-by-step instructions for:

**Kwikset**  
**UltraMax**  
SECURITY



Pull out the plug and plug follower allowing all pins and springs to fall out of the cylinder.

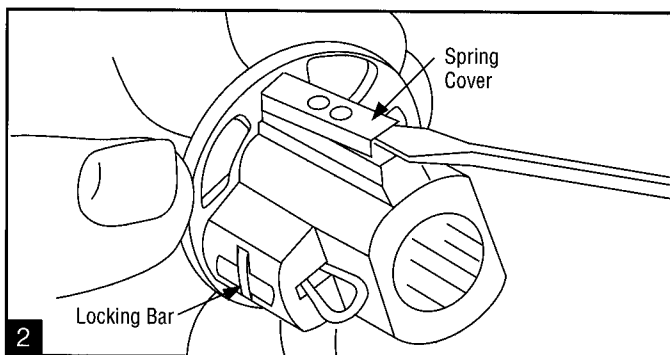


After plug is rekeyed per the instructions, insert into cylinder shell. Install plug retainer. Replace all top pins and springs (they are all the same). Carefully push spring cover on. If you have removed the locking bar and spring, replace them at this time. Place locking bar in slot. Rotate key until locking bar is flush with cylinder shell. Secure with locking bar spring. Insert the key and test for proper operation.

**Note: The plug follower is not required while reassembling.**

# Rekeying Knobs

## What to do if the top pins and springs drop out during rekeying



Carefully pry off spring cover with small screwdriver. Removal of the locking bar is not necessary. When you reach the point to reinsert the plug into the cylinder housing, depress the locking bar from the inside of the cylinder housing with a small screwdriver while inserting the plug.