Installation of OWS Spider and CAC Module

HT28 Lock

Regulatory Information

Federal Communications Commission (FCC) Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Regulatory Information

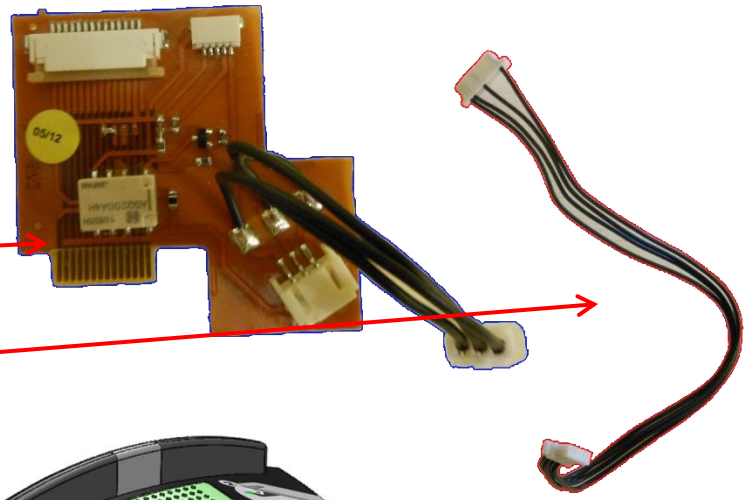
NFC TYPES		MODULATION	FREQUENCY
TYPE A	UPLINK	ASK 100%	13.56 MHz
	DOWNLINK	LOAD MODULATION(ASK)	13.56 Mhz + 848 kHz subcarrier
TYPE B	UPLINK	ASK 10%	13.56 MHz
	DOWNLINK	LOAD MODULATION(BPSK)	13.56 Mhz + 848 kHz subcarrier
TYPE F	UPLINK	ASK 10%	13.56 MHz
	DOWNLINK	LOAD MODULATION(ASK)	13.56 MHz

Items Needed

- T-10 Screw driver
- Phillips Screwdriver
- Flat head screwdriver
- Complete CAC All-In-One Kit
- Complete HT Spider Kit
- HT CAC Mounting Plate

Tools and Parts Required

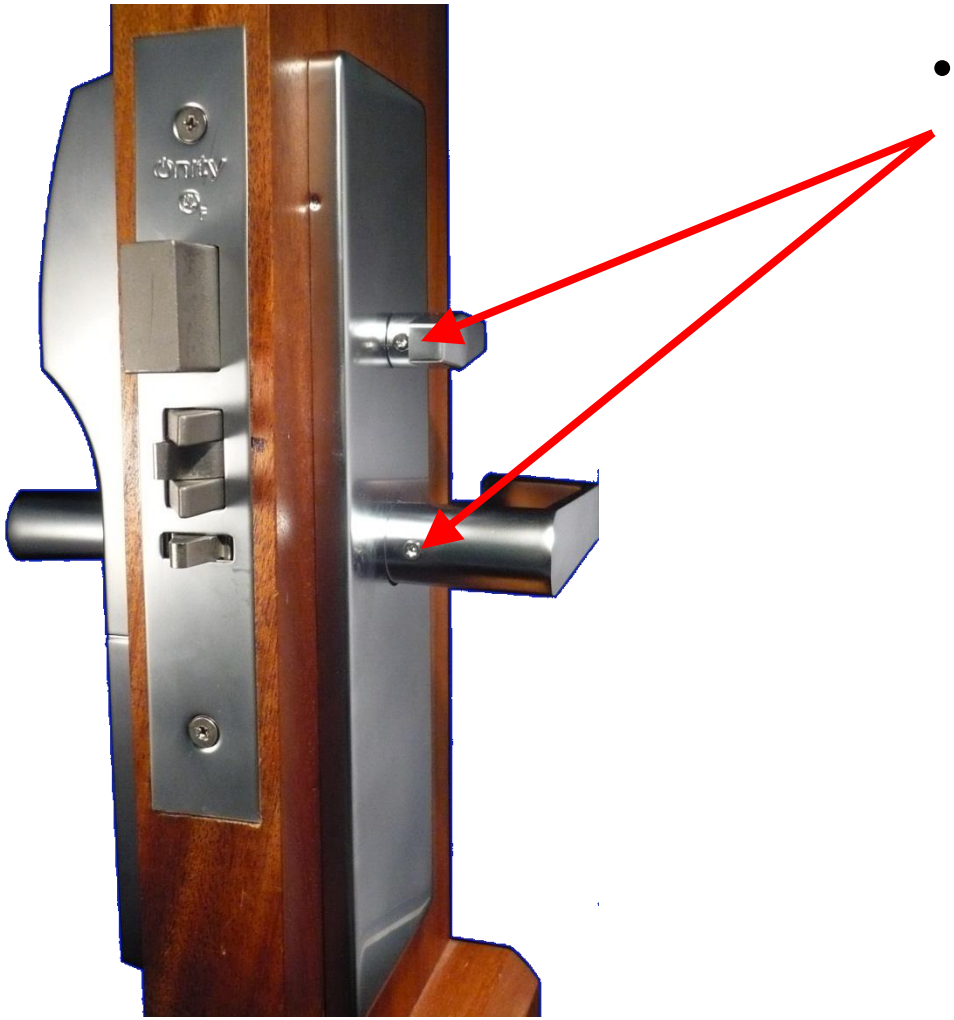
- T-10 (Torx) Screwdriver
- HT Spider
- HT Harness
- CAC AIO Module
- HT CAC Wedge



Remove HT Lock from Door

- Starting with the Inside trim remove the thumb-turn and handle

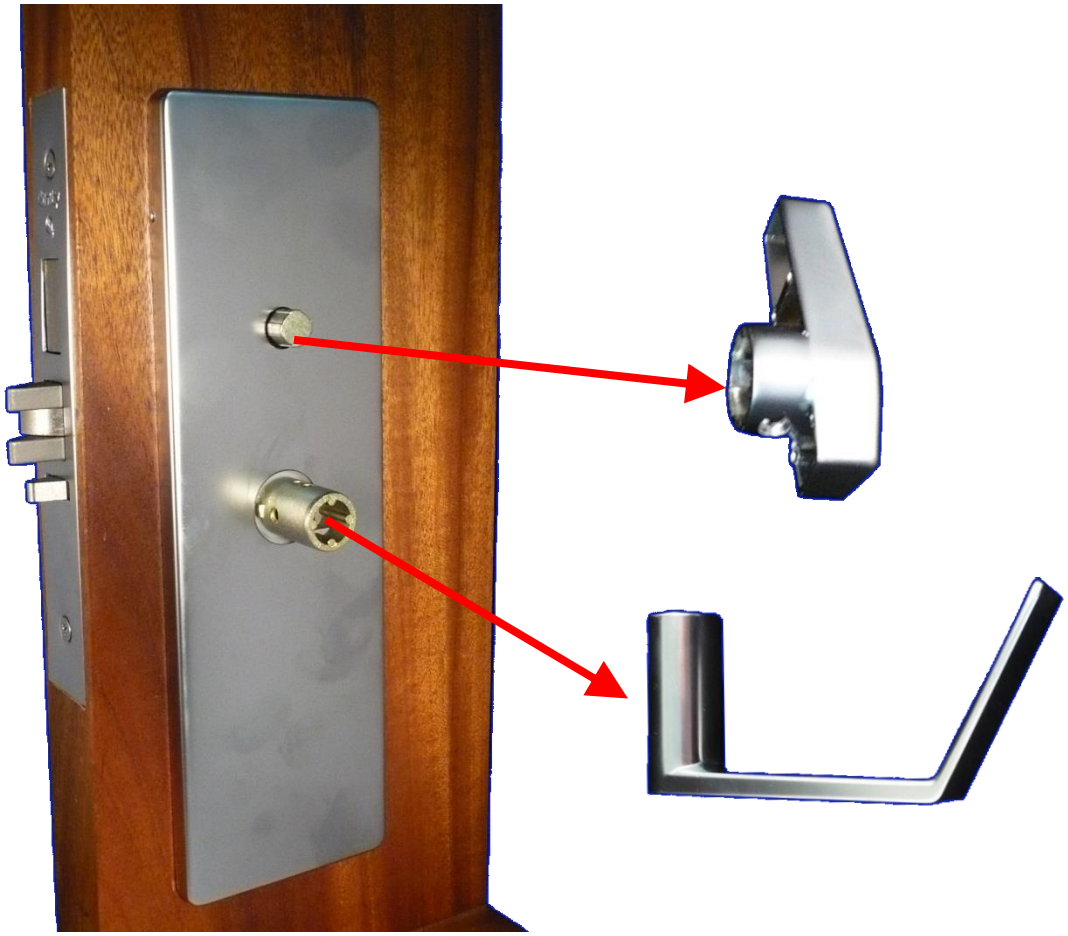
Remove HT Lock from Door



- Using a T-10 screwdriver and turning the thumb turn to project the dead-bolt remove the screws

Remove HT Lock from Door

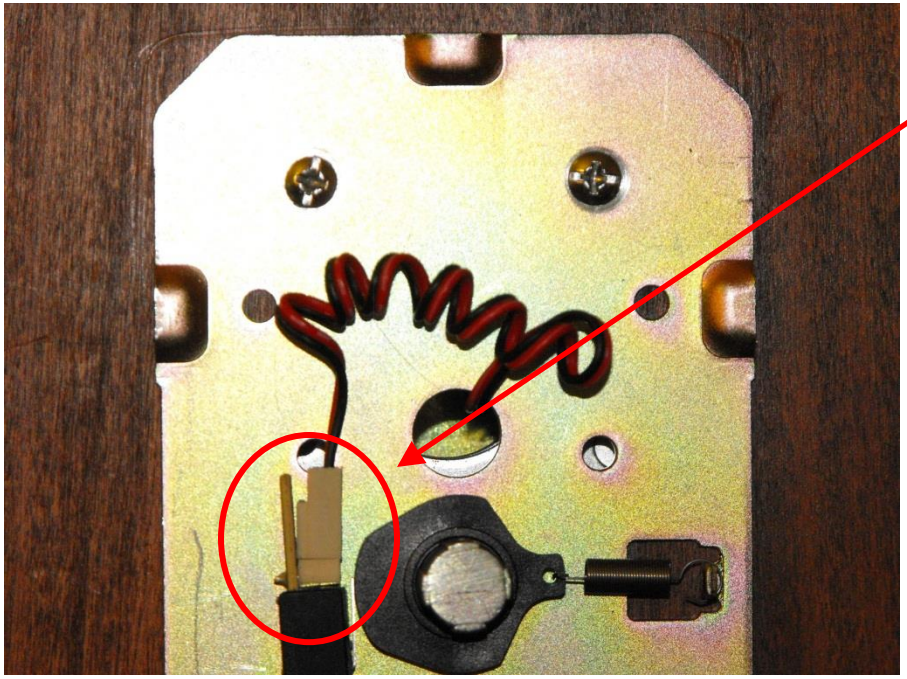
- Before removing the thumb-turn return it to the original position (dead-bolt retracted into lock case)



Remove HT Lock from Door

- With a flat head screw driver use the notch at the bottom to pry the escutcheon off the inside trim.
- Be careful not to scratch the escutcheon or the door.

Remove HT Lock from Door



- Unplug the privacy wire

Remove HT Lock from Door

- Remove the 4 screws
- Be careful, as these screws are removed the outside trim will be free come off the door
- Also, if there are no screws holding this plate on the door, it will fall off
- If these screws are present there is no need to remove them

Remove HT Lock from Door

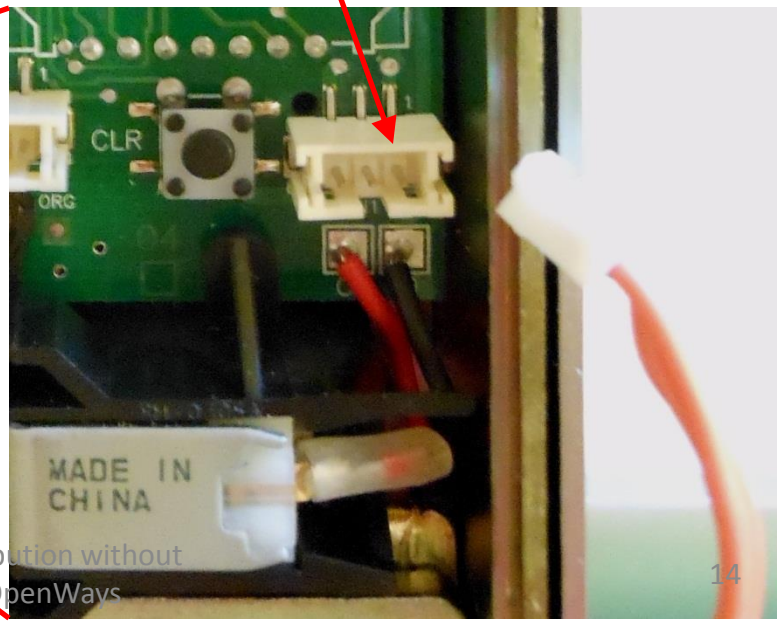
- Pull the Outside trim off the door

Install Spider Board

- Remove the six screws holding on the back plate of the lock

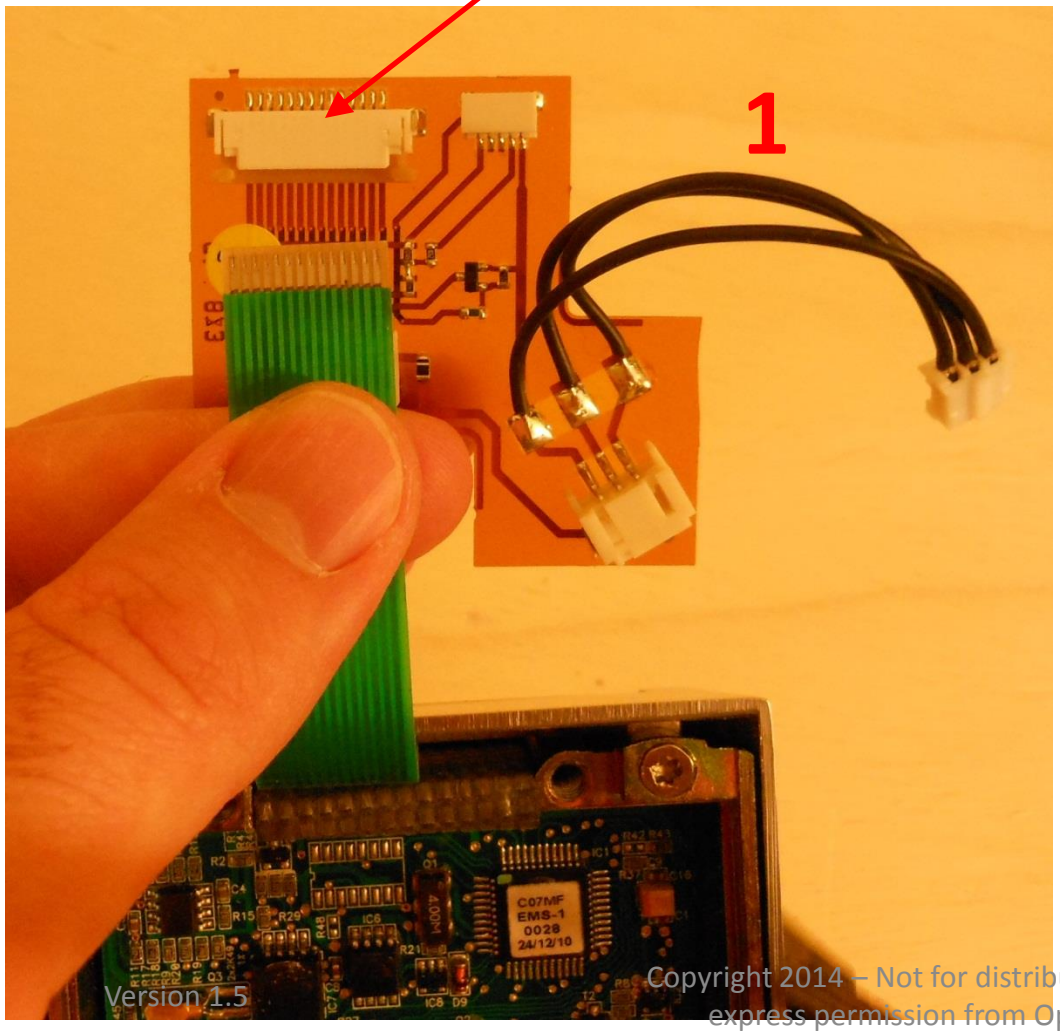
Install Spider Board

- Lift black clip and remove reader cable
- Unplug the Power cable

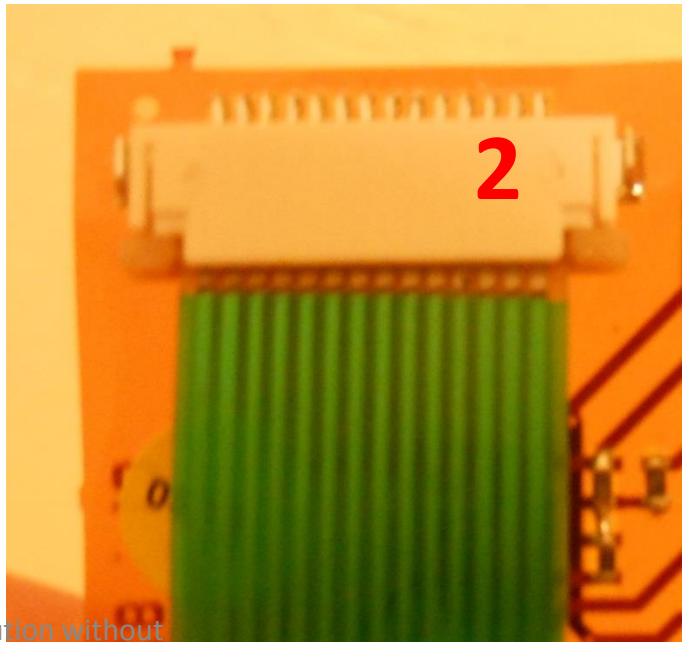


Install Spider Board

Spider reader port



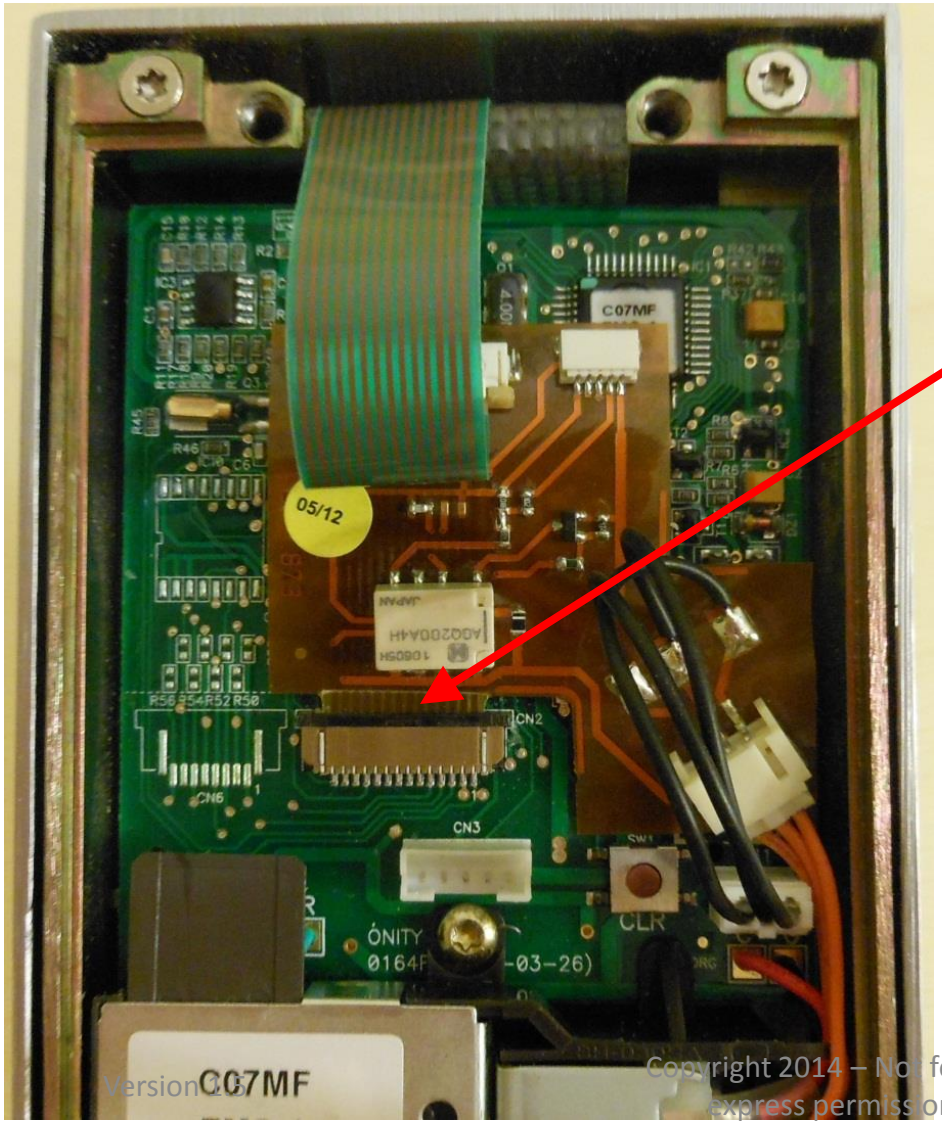
- Flip the HT Reader cable up and insert it into the spider reader port



Install Spider Board

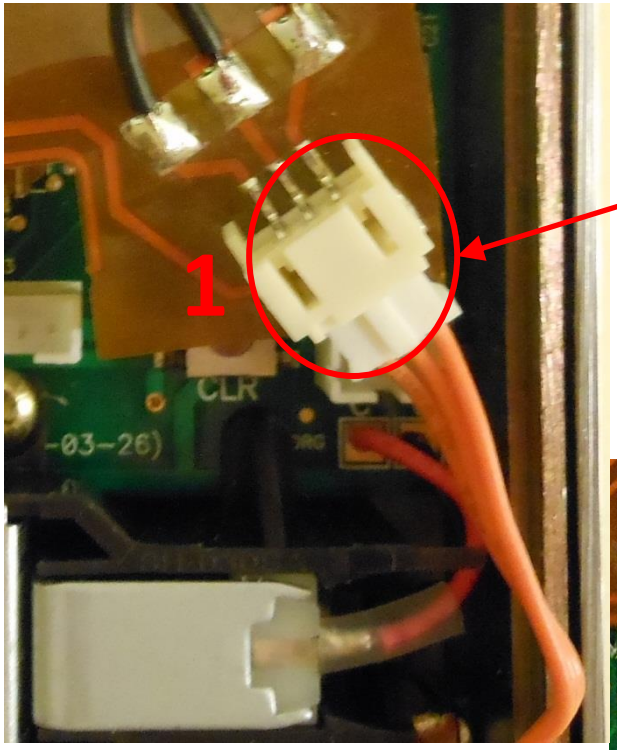
- Flip the spider down until it is lays over the HT28 Main PCB as shown

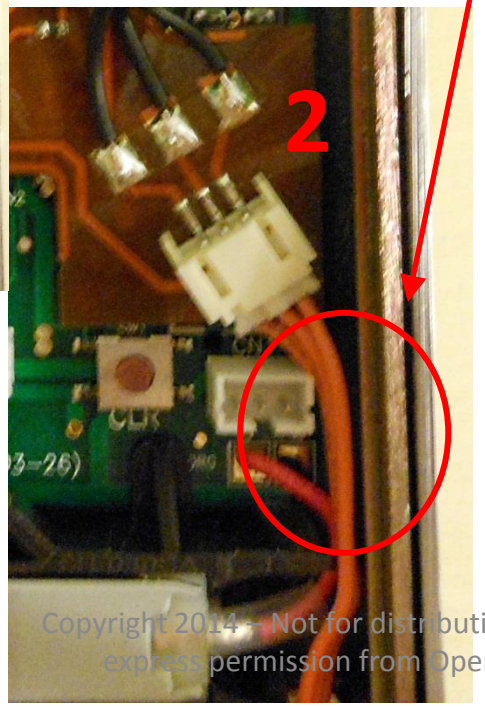
Install Spider Board



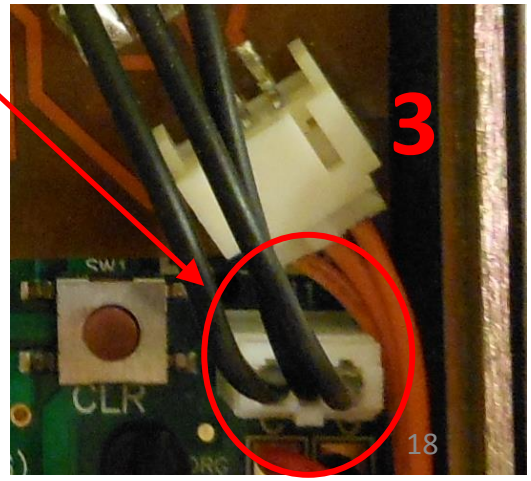
- Insert the Spider into the reader port and close the clip as shown

Install Spider Board



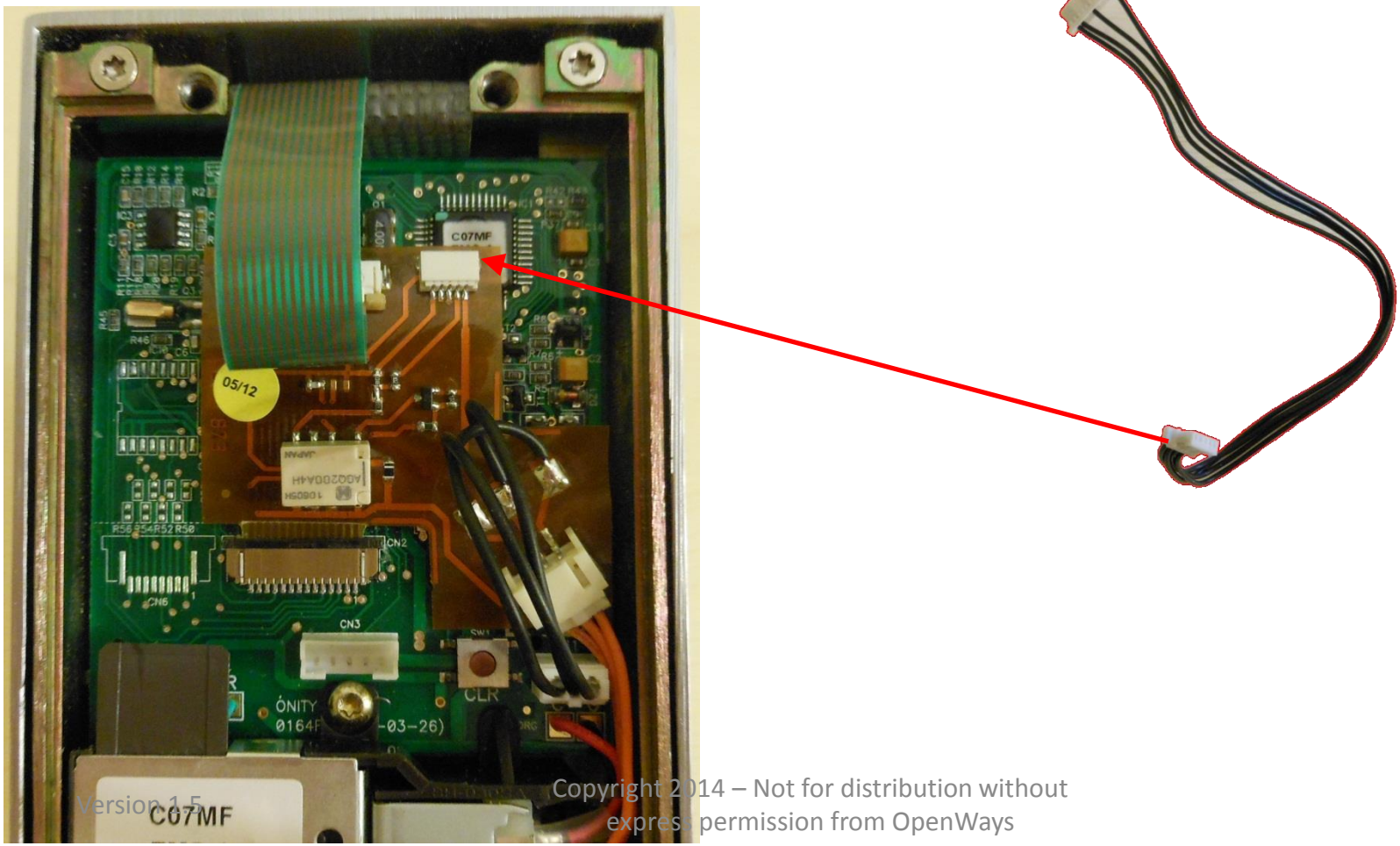


- Plug the lock Power into the Spider power port
- Tuck the power cable to the side of PCB power port
- Plug Spider power to main PCB



Install Spider Board

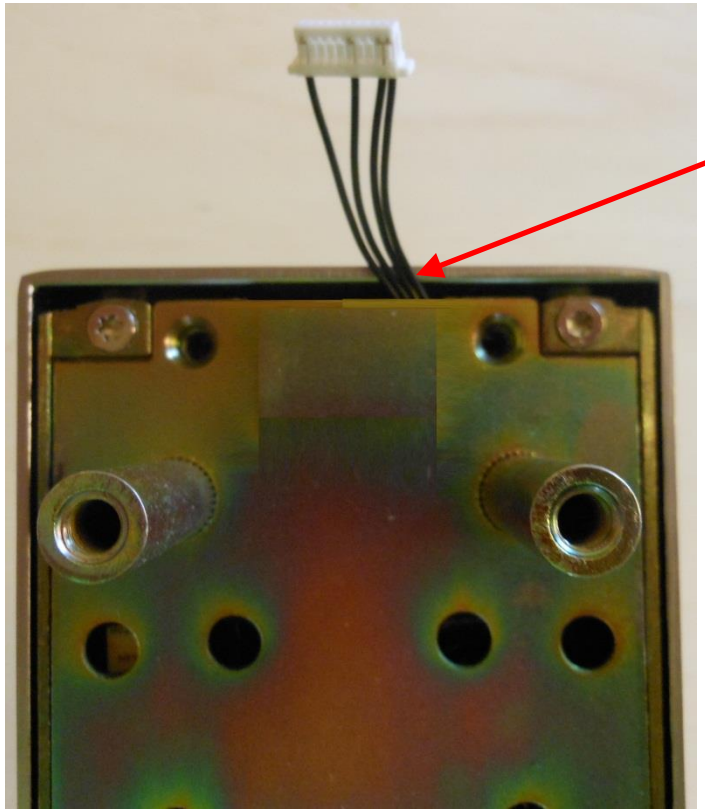
- Connect Harness



Re-Assemble Lock

- Plug the privacy wire back into lock PCB
- The plug has 3 pins, the port on the PCB may have 5 pins. It this is the case insert the plug in the center. Leaving 1 pin on each side

Re-Assemble Lock



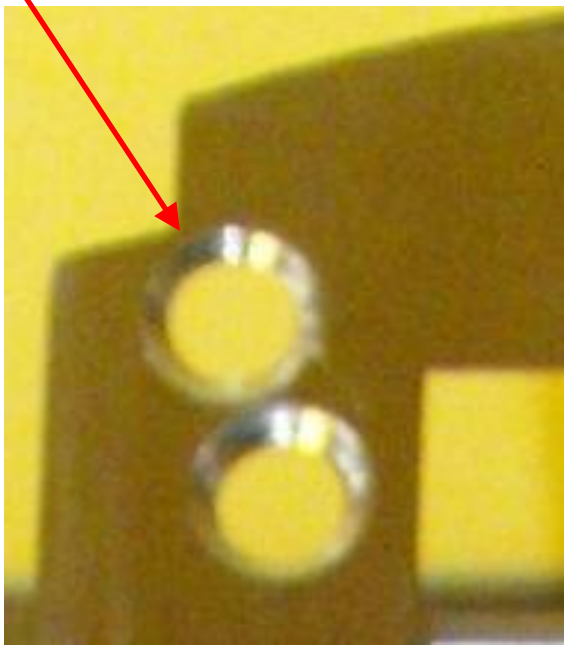
- Make sure CAC wires have not overlapped
- Place the back plate on the lock pulling the excess privacy wire through the grommet
- Leave about 2 inches (5 centimeters) of the harness outside the lock

Re-Assemble Lock

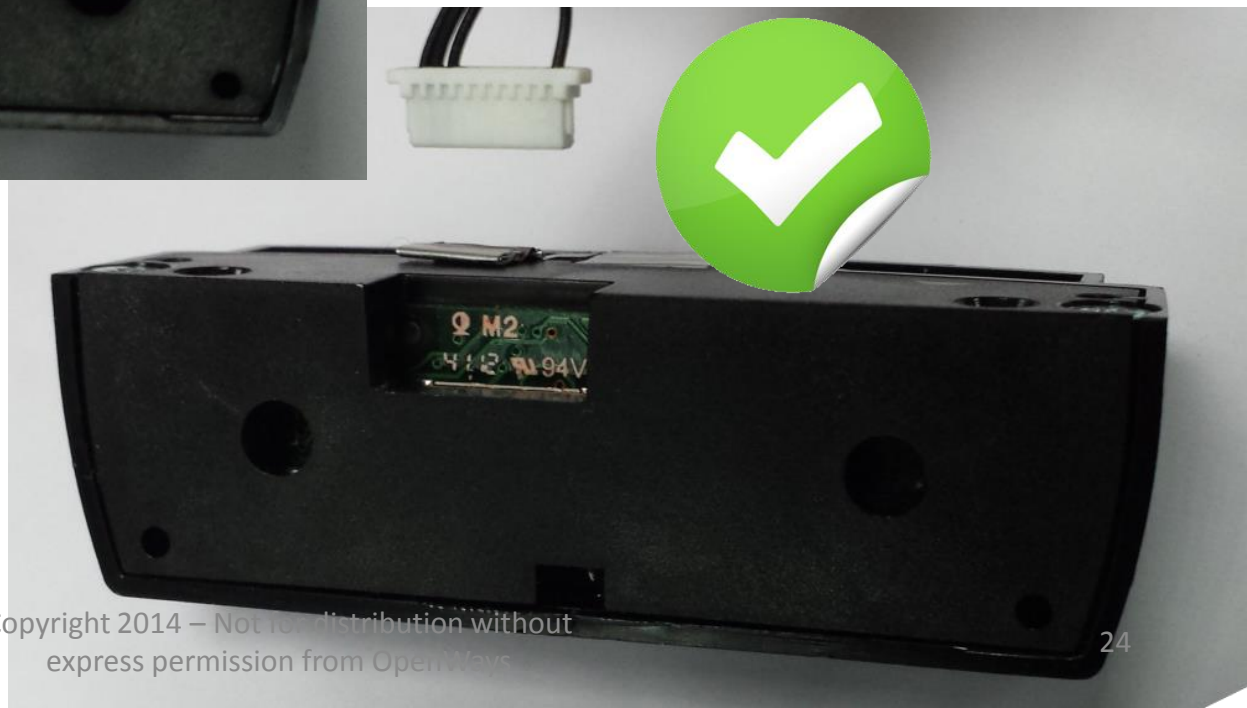
- Replace 6 T-10 screws

Install the CAC and Housing

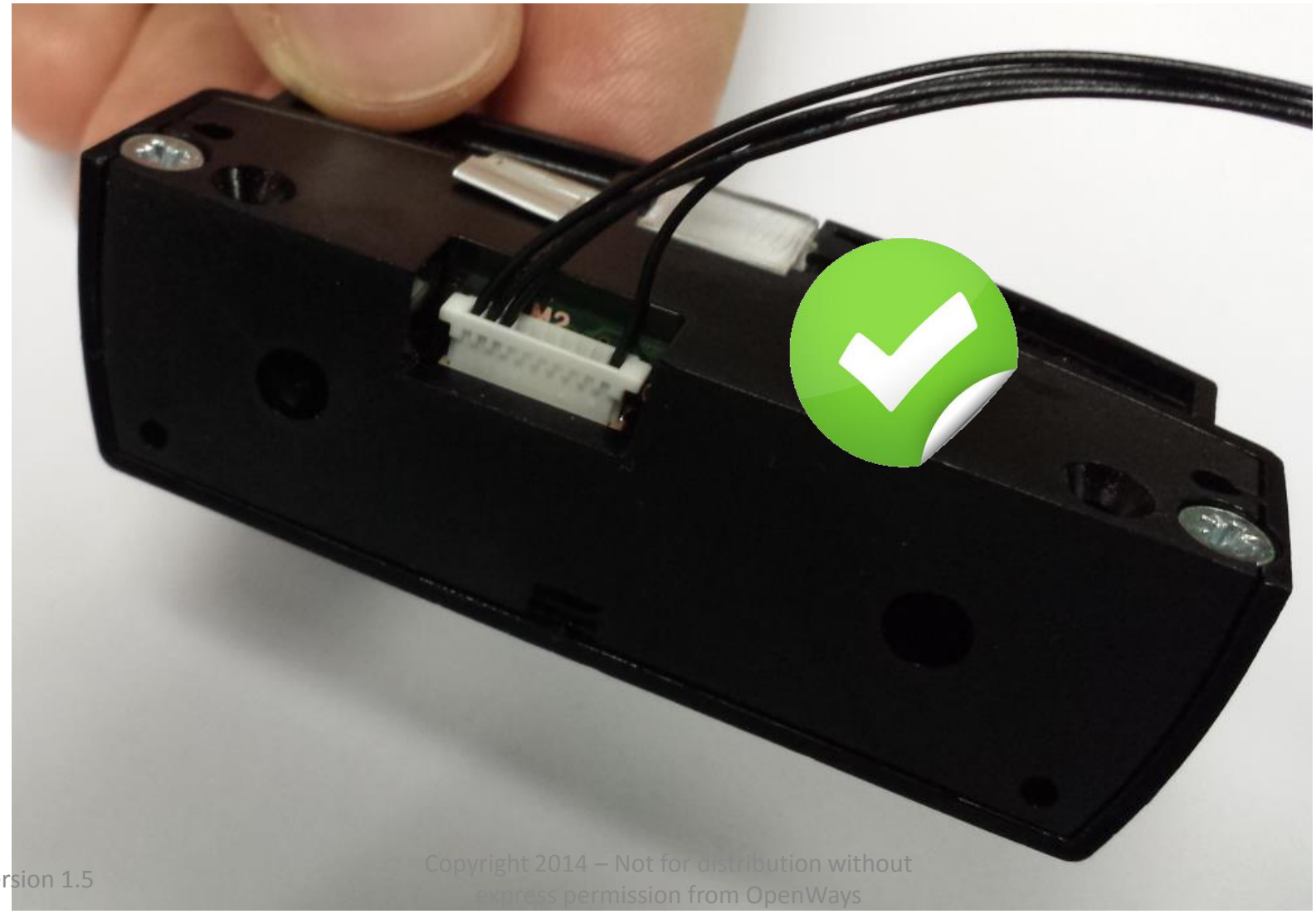
- Install CAC mounting plate on the back of the lock



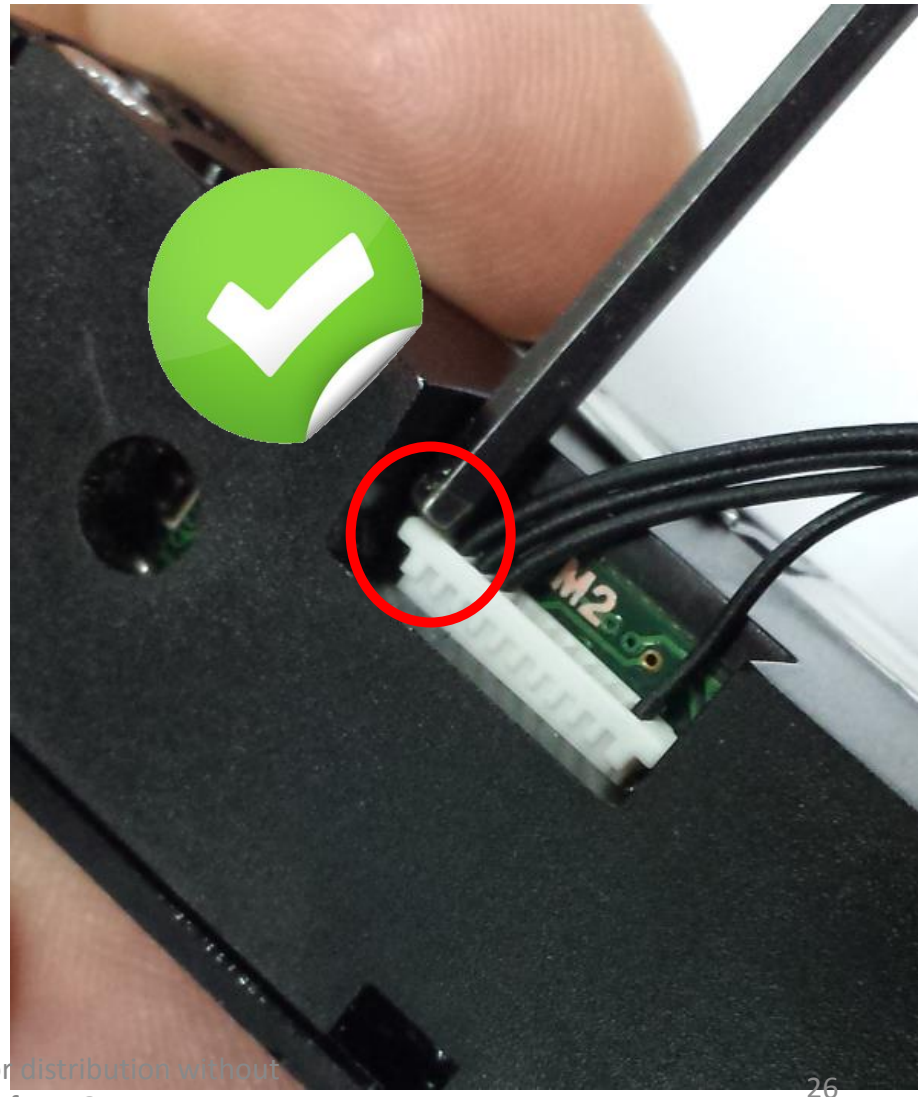
Plug the Wire into the CAC



Plug the Wire into the CAC



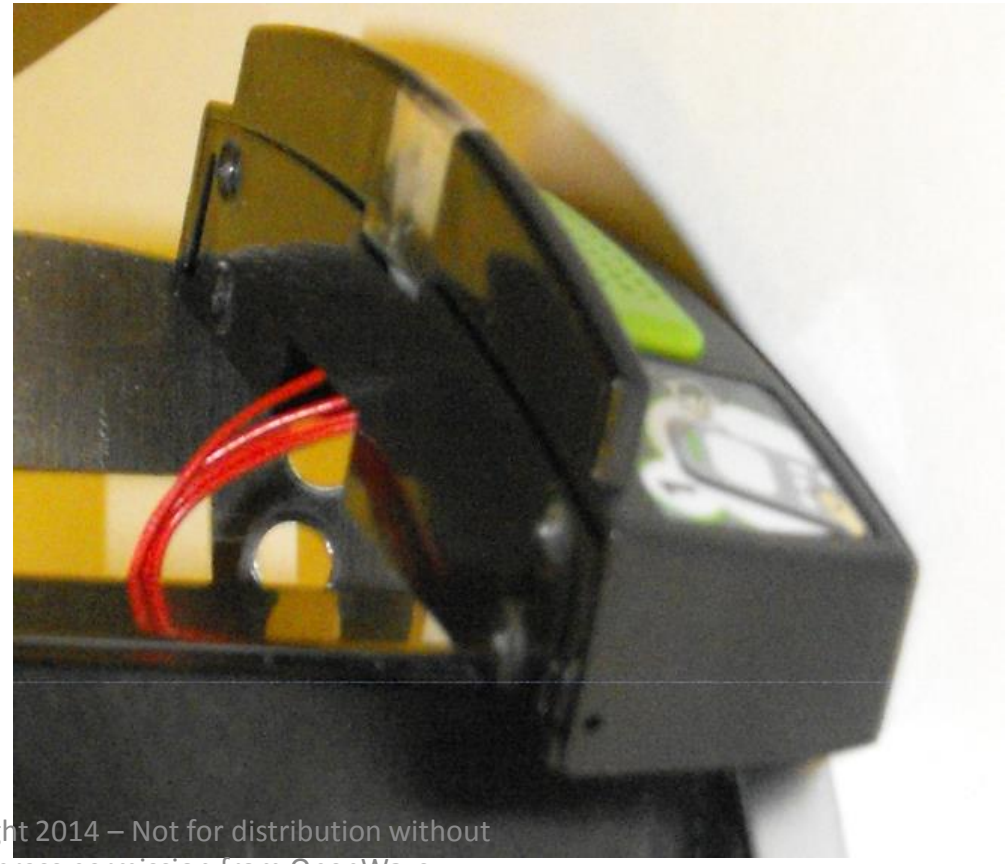
Push Plug in Gently



Install the CAC and Housing

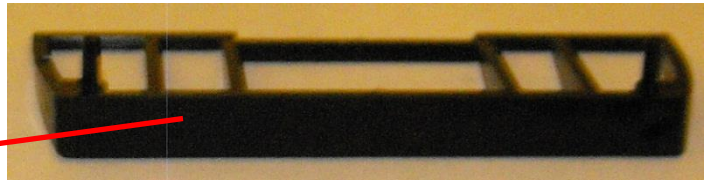
- Plug the cable into the port on the CAC board

- Install the cover on the CAC
- The back should be flush

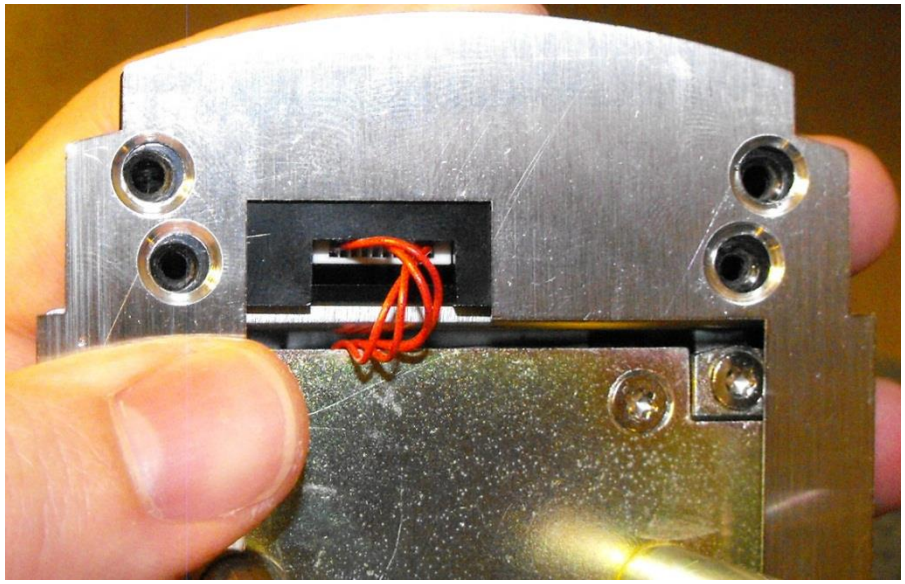


Install the CAC and Housing

- Install the HT wedge on the bottom of the CAC housing

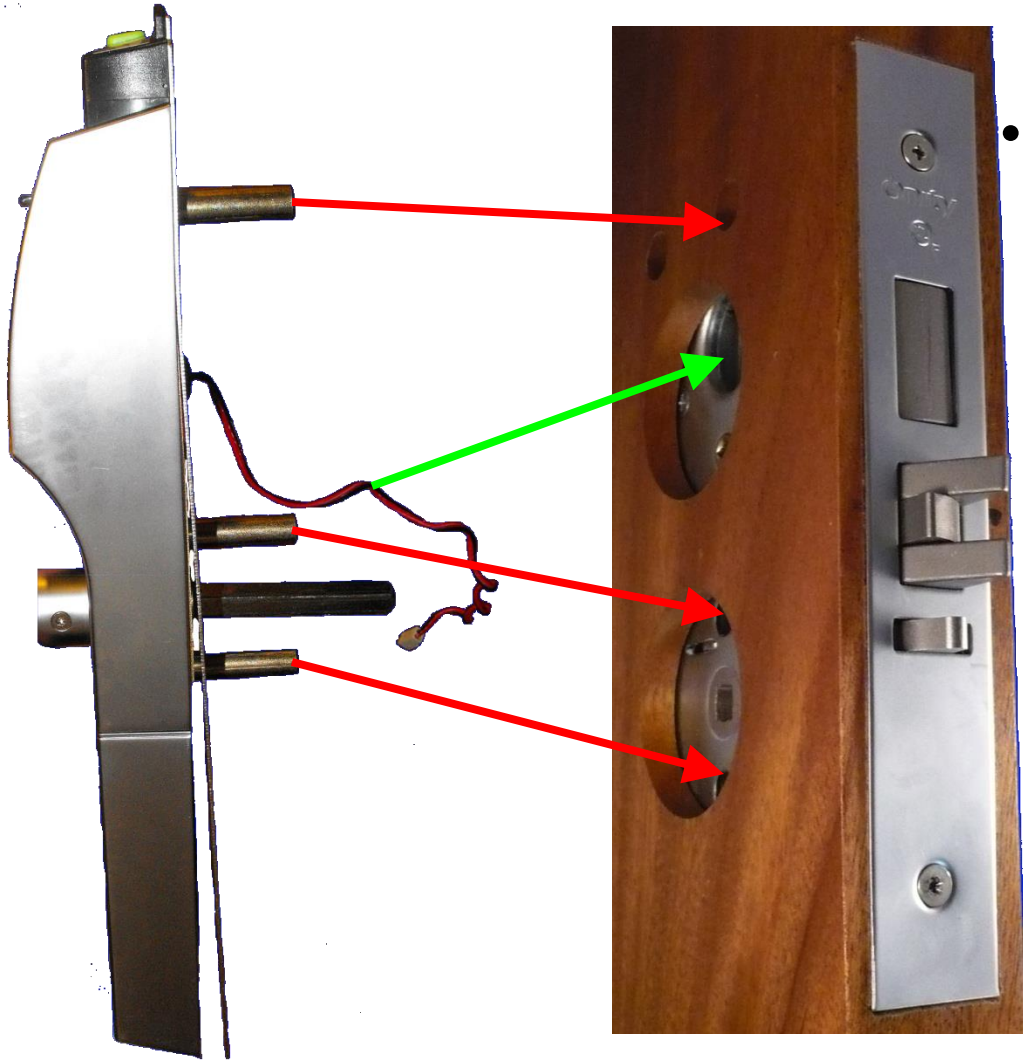


Install the CAC and Housing



- Line up holes between the plate and the CAC housing and install 4 phillips screws provided with CAC

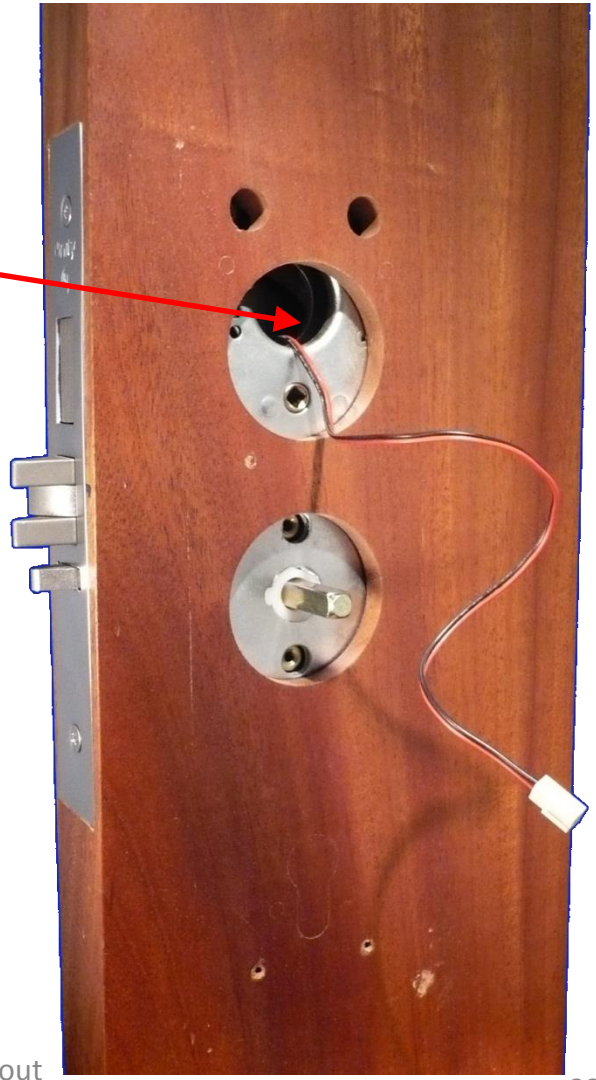
Re-Install Lock



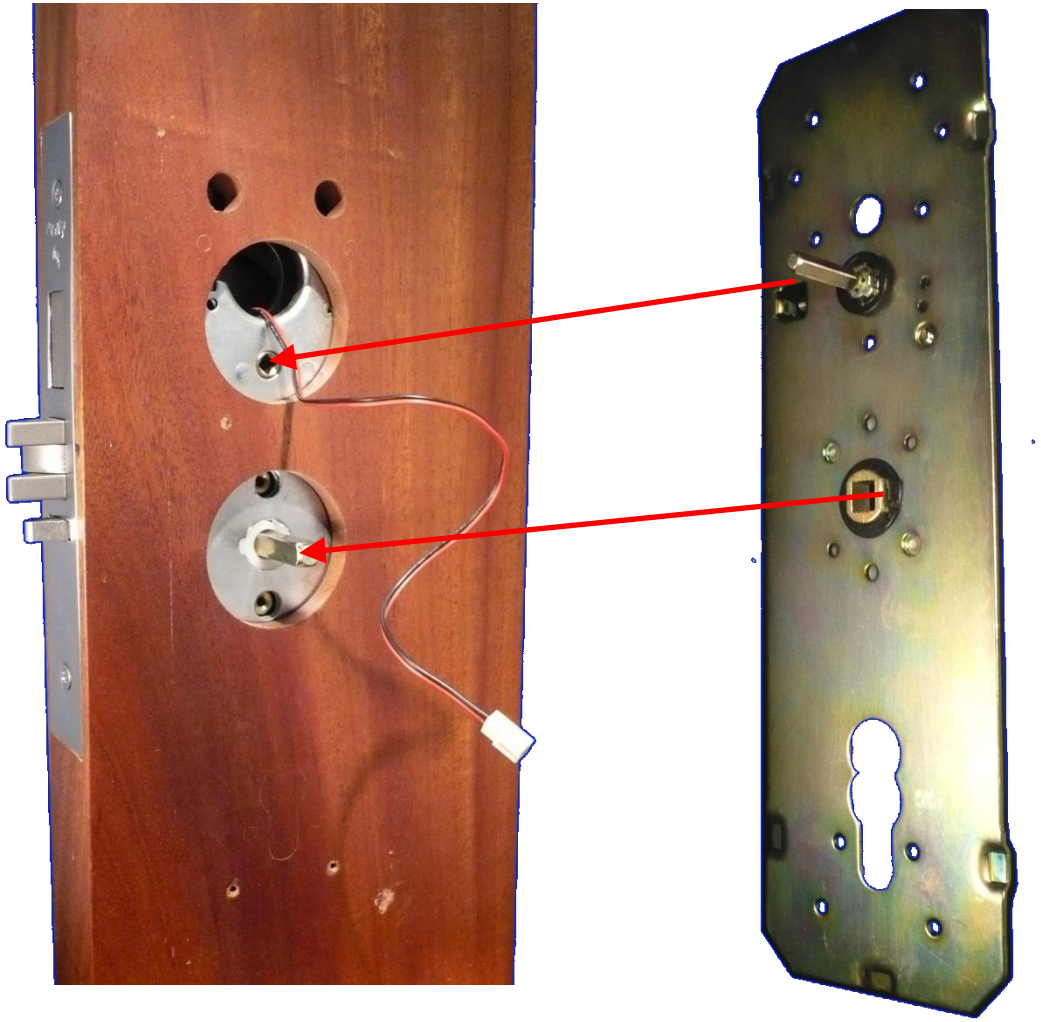
- Mount the lock back on the door lining up the posts and running the privacy wire through the hole as shown

Re-Install Lock

- Feed the privacy wire through the door



Re-Install Lock



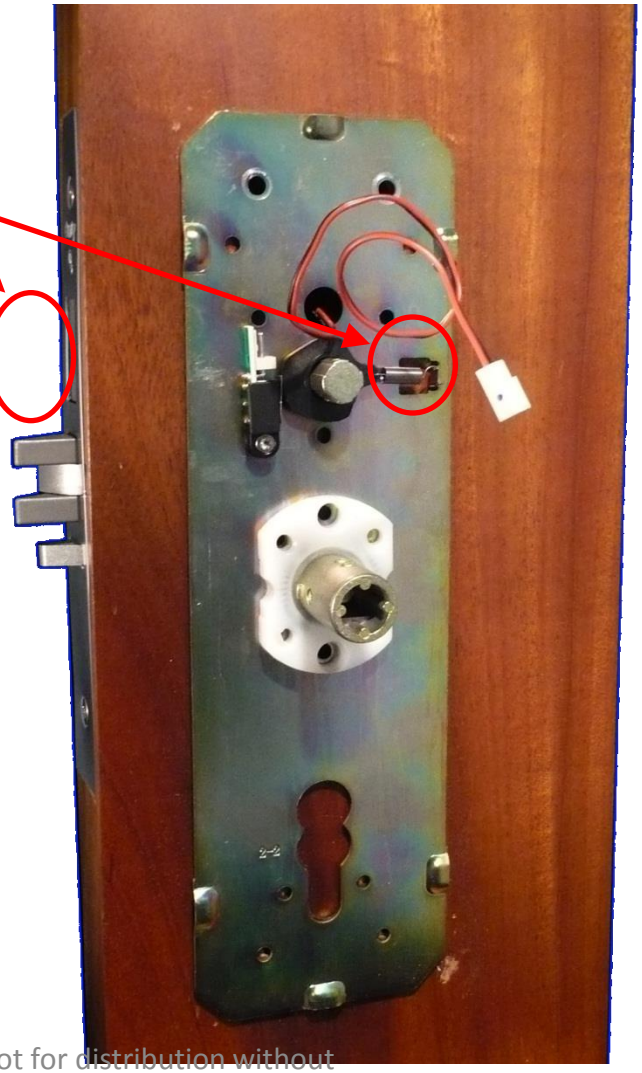
- If the inside trim plate is not still on the door, replace it now

Re-Install Lock

- Do not stuff the privacy wire in the door

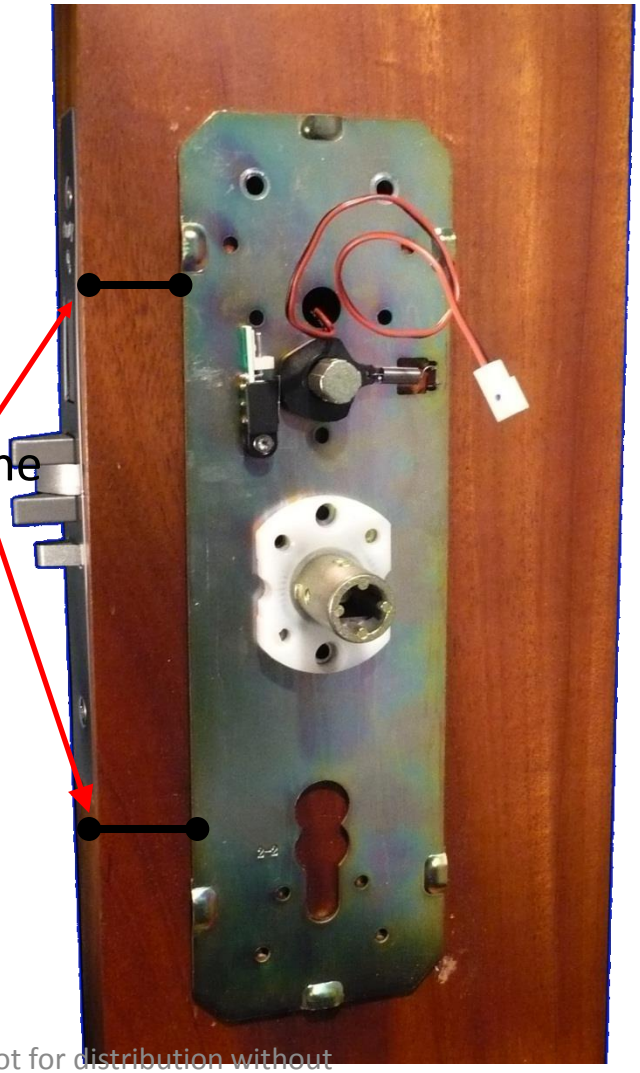
Re-Install Lock

With the dead-bolt retracted the spring should be compressed

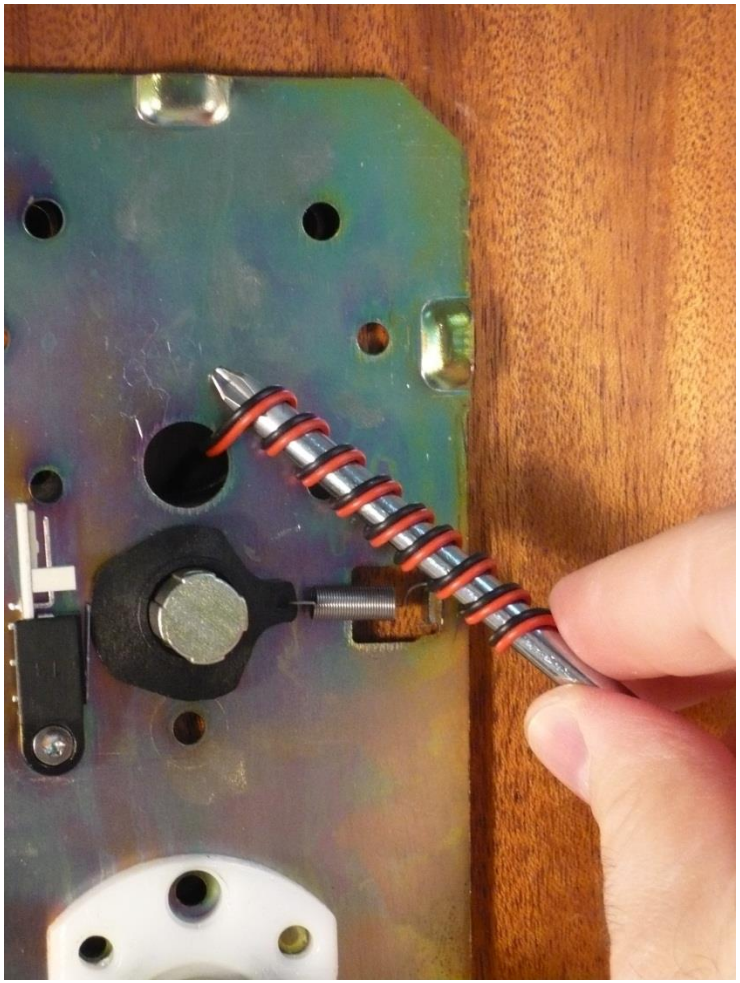


Re-Install Lock

Distance from these points of the back-plate to the edge of the door should be identical.

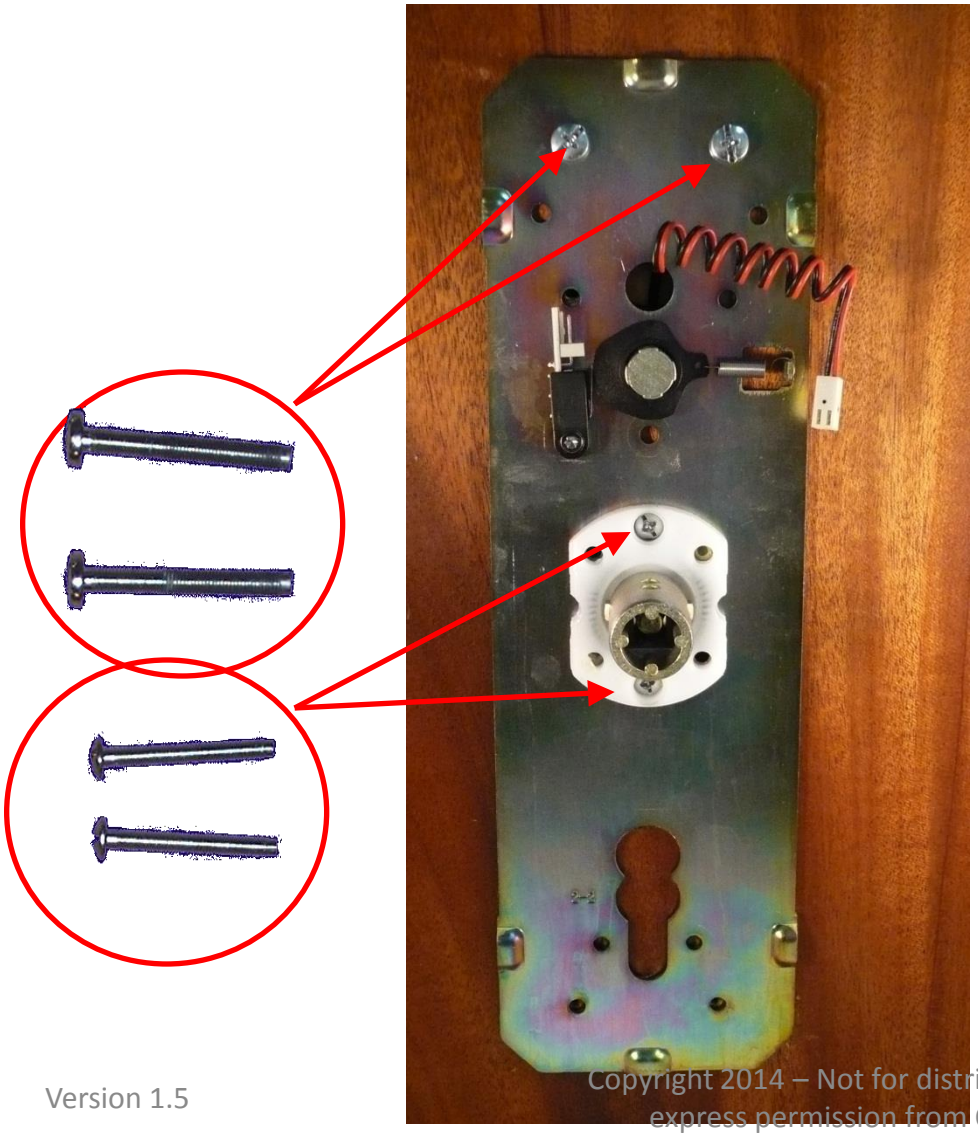


Re-Install Lock



- Coil the privacy wire

Re-Install Lock



- Install the screws as shown
- Beware, if all four screws are not the same size the larger two should be at the top

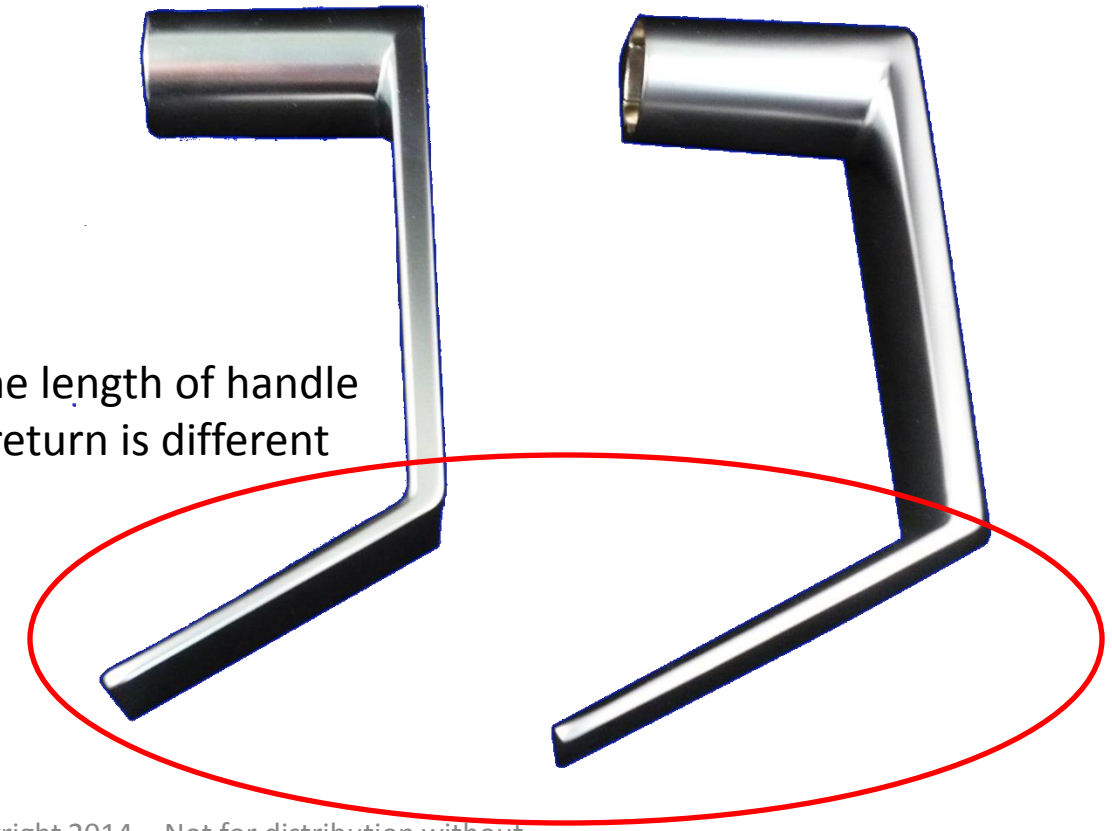
Re-Install Lock

The escutcheon snaps on. Use the palm of your hand or a rubber mallet at the corners to secure.

Re-Install Lock

Inside Handle (Short return)

Outside Handle (Long return)

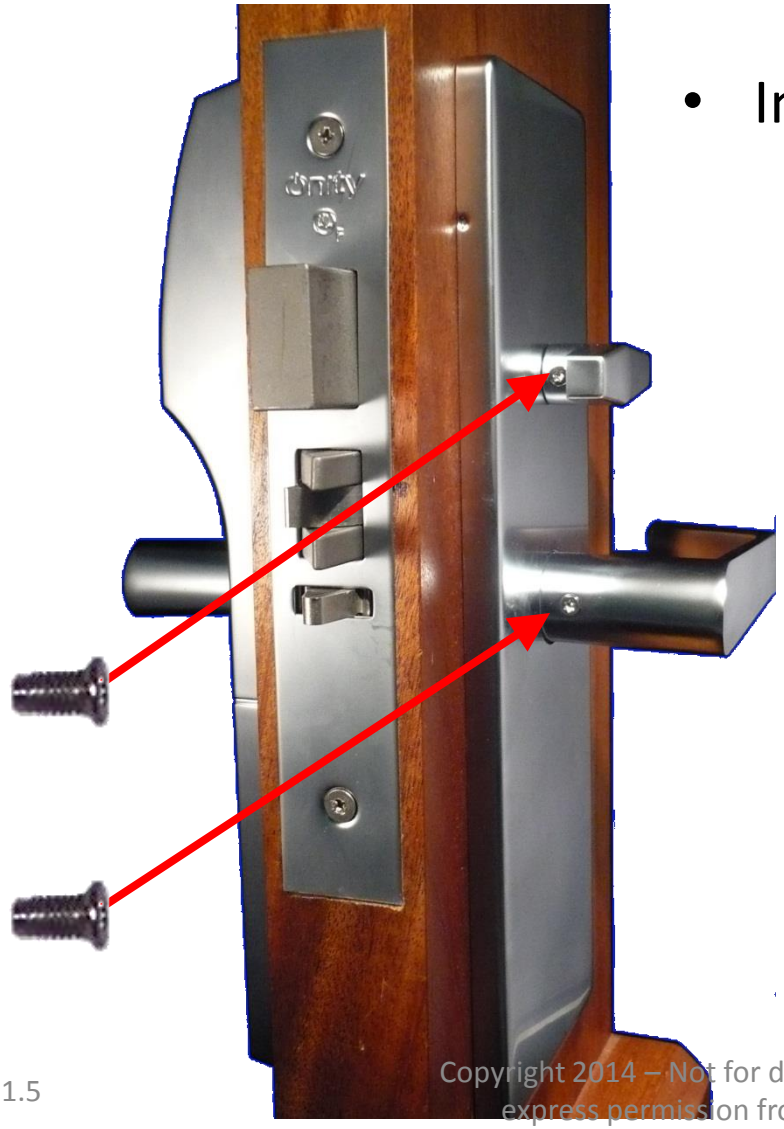


The length of handle return is different

Re-Install Lock

- Place inside handle and thumb-turn on appropriate shafts
- Turn thumb-turn clockwise

Re-Install Lock



- Install the T-10 screws

Installation Complete

Completion

- The lock must be updated with the portable programmer
- The CAC must be initialized
  - Follow the instructions in the OWS manual provided by OpenWays