

# Refurbish Manual Medication Carts

Version 2 & 3



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# Drawer Removal – v2 & v3

**Tools Needed: None**

1. Lock front casters by pushing caster levers down with the front of your foot.



2. Fully extend the drawer to be removed.



3. Stand in front of the drawer. Locate the release tabs on the slides. Push the right tab up and the left tab down. Hold the tabs in the pushed (down/up) position pull the drawer from the cart. (R.U.L.D. – Right, Up, Left, Down)



# Drawer Installation – v2 & v3

**Tools Needed: None**

1. Extend slides out of the cart. **IMPORTANT:** Move the ball bearings to the very front of the slide.



**The above photo is incorrect!** The ball bearing section is NOT at the front.



The photo to the right – shows: Top slide ball bearing section is in the wrong position for drawer installation.

Lower slide has ball bearing section in the correct position for drawer installation.



2. Insert the drawer left and right male section of the slide into the female section of the slide. Make sure that the male section feeds into the ball bearings. If this is NOT completed before attempting to push the drawer closed, the slide may be damaged.
3. Push the drawer evenly into the cart until it is in the closed position.



**IMPORTANT:** Do not force the drawer closed. It is normal to feel resistance from the point when the drawer is half closed until the closed position. **If you feel the drawer stopping (not resistance), remove and reinsert the drawer, confirming the ball bearings are at the very front of the slide.**

# Drawer Front Removal & Installation – v3

**Tools Needed: Phillips Head Screw Driver**

1. Open the drawer.
2. Remove the handle by removing the screws on the inside front of the drawer. Save/set aside both handle and screws. If you have two (2) knob type handles, they must both be removed.
3. Remove the old drawer front, by slightly lifting the top lip, and pulling forward. When the top clears the front of the drawer, it will disengage from the bump-outs on the bottom.
4. Place the new drawer front on top edge of the drawer.
5. Slide the new drawer front under the bottom of the drawer. It will need a little pressure until the holes in the bottom of the new front engage the bump-outs on the bottom of the drawer. The last little bit, may take some firm pressure.
6. Make sure the holes for the handle are aligned in both the drawer and the new front.
7. Insert the two (2) screws through the drawer and drawer front into the threaded holes in the handle on each side.
8. Leave the screws a little loose, double check alignment of new drawer front with other drawers. The front may be shifted a tiny amount to align with other drawer fronts.
9. Finish tightening both of the screws in the handle.



# Slide Removal and Installation – v2

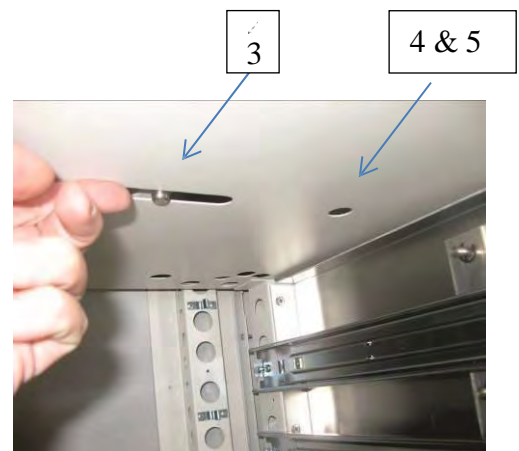
Tools Needed: Phillips Screwdriver

1. Remove drawer.
2. Move the slide out until the front screw is exposed. Remove the screw by turning counterclockwise. Let the front of the slide rest in the down position when the screw is removed.
3. Remove the back screw by turning it counterclockwise.
4. Reverse the above process to install slide.



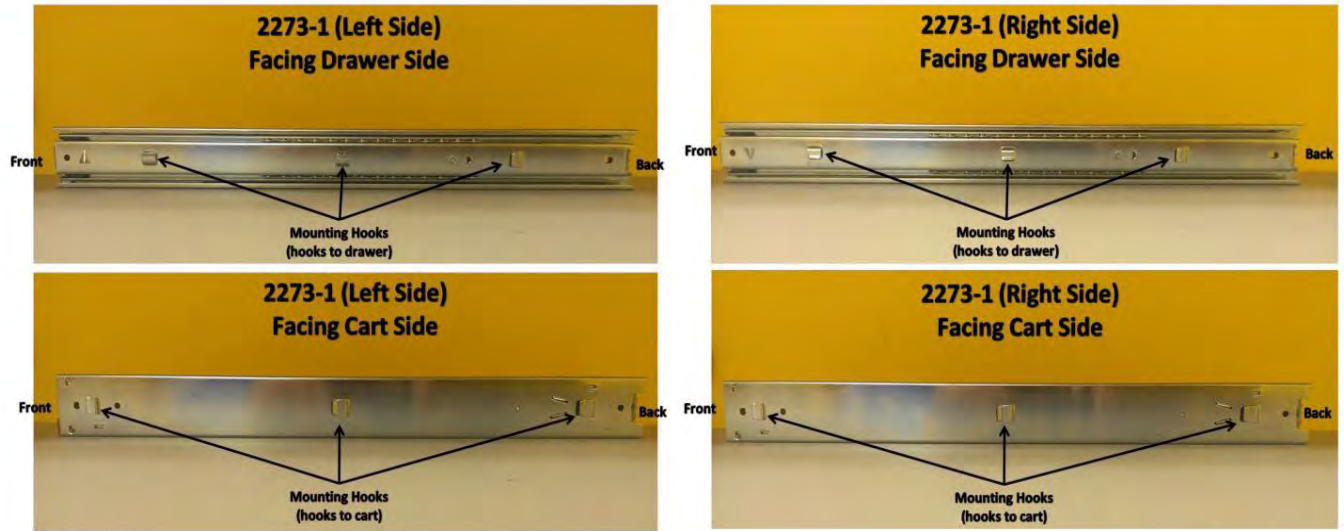
## Side Shelf Removal and Installation

1. Remove the top drawer (page 2).
2. Pull out side shelf until it stops.
3. Reach inside cart on the right-hand side and find the button (see photo).
4. Depress and hold the button in as you pull the side shelf. You will feel it slip into the safety position.
5. Again, depress and hold the button in as you pull the side shelf. **NOTE: Be careful as you pull the shelf out as it will fall free from the cart.**
6. Reverse the process to install.



# 2273

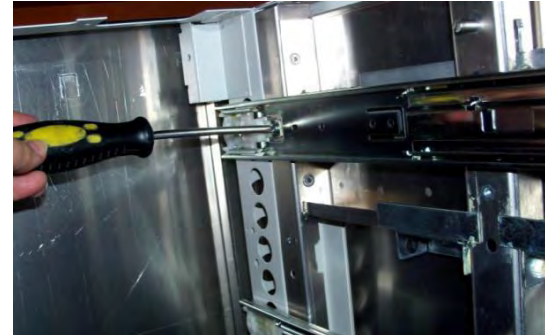
Divider Slides Q/E-P Series. Used in carts before December 2012.



# Slide Removal and Installation – v3

Tools Needed: Phillips Screwdriver

1. Remove the drawer. (see page 2)
2. Move the slide out until the back screw is exposed.
3. Remove the screw by turning counterclockwise.



4. Let the rear of the slide rest in the down position when the screw is removed.



5. Move the ball bearings section until you can see the front screw head.



6. Remove the front screw by turning it counterclockwise.
7. Reverse the above process to install new slide, using built in pre-threaded holes.



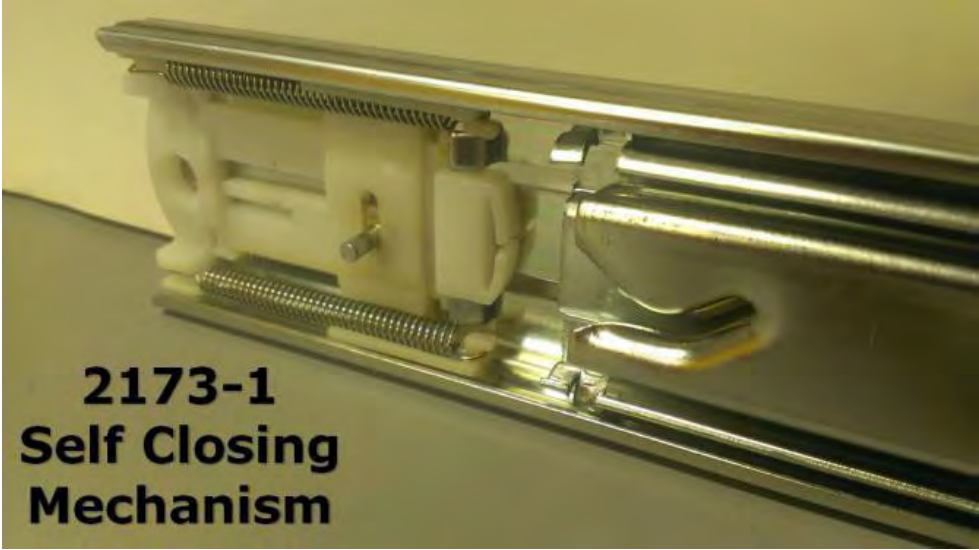


# Drawer Slides

There are two different types of drawer slides which are pictured below:

## 2173

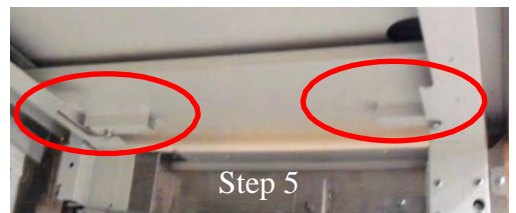
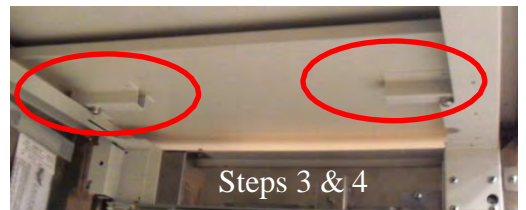
Auto Close v3 Cart Slide, Modular. It can be identified by the cream color self-closing device at the rear of the slide.



# Side Shelf Removal – v3

Tools Needed: None

1. Remove the top drawer. (see Page 2)  
(\*Note: you may need to remove the 2<sup>nd</sup> drawer if you need more space to work)
2. Pull out the side shelf until it stops.
3. Reach inside the cart on the right-hand side and find the two (2) buttons (see photo).
4. Depress and hold both the buttons in as you pull the side shelf out. You will feel it slip into the safety position.
5. Again, depress and hold the button in as you pull the side shelf out. **NOTE: Be careful as you pull the shelf out, as it will fall free of the cart.**



# Side Shelf Installation – v3

Tools Needed: None

1. Carefully insert the end of the shelf into the slot on the right hand side of the cart, until the buttons hit the edge of the opening. (see lower photo)
2. Depress and hold both the buttons in as you push the side shelf in. You will feel it slip into the safety position.
3. Reaching inside the cart, again, depress and hold the button in as you push the side shelf in.
4. Continue pushing side shelf until it is in the closed position.



# Caster Removal and Installation v2 & v3

Tools Needed: 3/8" or adjustable wrench

1. Remove all the Drawers. (see pg2)
2. With two or more people, carefully lay the cart on its back.
3. Replace the proper caster in the proper position.
  - a. Two front casters are braking. Identified by light gray levers.
  - b. Back-right caster is tracking. Identified by the dark gray lever.
  - c. Back-left caster is a swivel. It does not have a lever.
4. Using a 3/8" or adjustable wrench, turn the four bolts holding the caster plate counterclockwise until the plate can be removed.
5. To install the new caster, reverse the above process.



# Lock Core Removal & Installation – v2 & v3

Tools Needed: 2412QP Control Key

1. Insert the 2412QP Control Key into the lock.
2. Turn clockwise approximately 1/8 of a turn and pull.
3. To install a new core, reverse the above process.



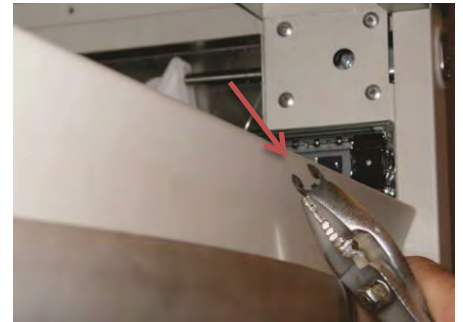
The **CONTROL** key offers quick and efficient core removal and insertion for security relock control in each BEST lock system. Every core in a system therefore, contains the control key combination. By a 15 degree turn, the CONTROL key operates the core locking lug, permitting the core to be inserted and withdrawn.



# Cabinet Lock Body Removal – v2

Tools Needed: Pliers & Screwdriver

1. Remove top 4" drawer (see Page 2).
2. Lock the cabinet by pushing the lock in until you feel it latch.
3. Using pliers, remove the small black "C" clip from the push bar on the lock.
4. Unlock the cart.
5. Pull the washer off of the push bar.
6. Pull the lock assembly from cart.

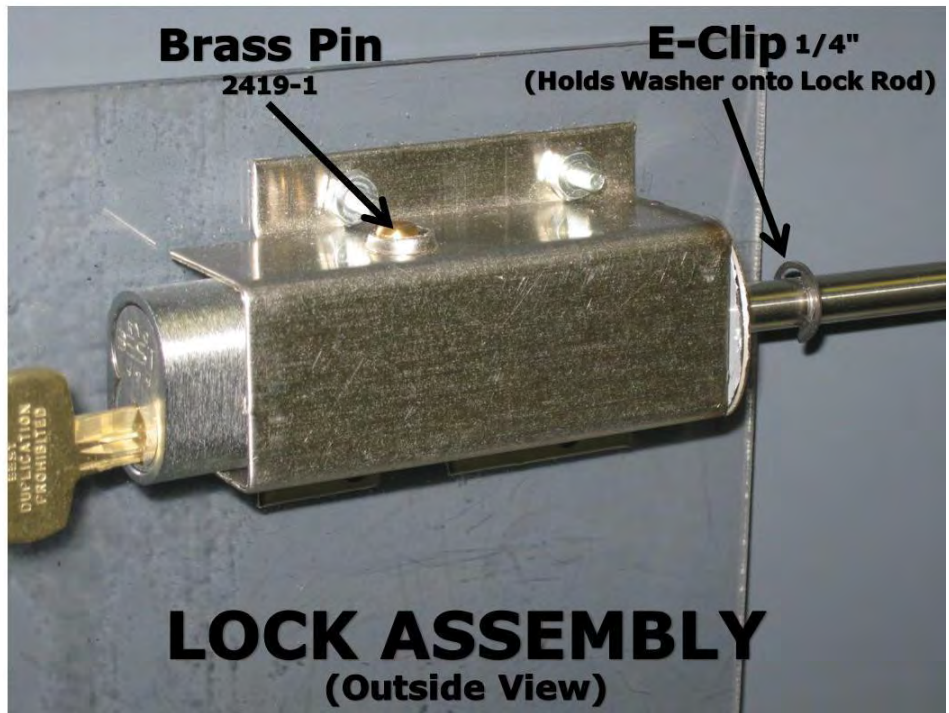
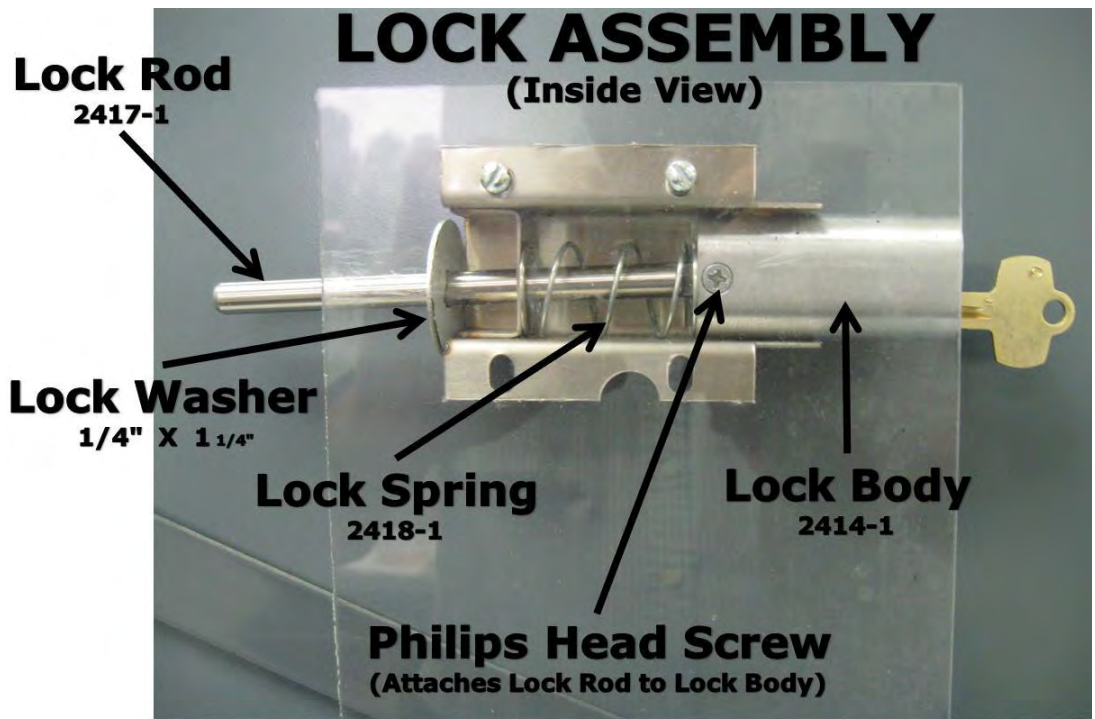


7. Gently insert the flat blade of the screwdriver in-between the cart and the plastic ring. Twist the screwdriver so it gently pops the ring loose and then remove it by hand.



8. Place finger in lock chamber and remove spring.





Version 2 Lock Assembly

# Lock Bar Removal – v2

Tools Needed: Phillips Screwdriver

1. Remove all drawers. (pg 2)
2. Remove Cabinet Lock. (pg 6-7)
3. Remove slides on the right hand side, facing the cart front. (pg 4)
4. Remove lock bar spring.
5. Lift bar up and jiggle while pulling away from the side of the cart. Bar will release from bushings.
6. To install reverse the process.





# Lock Bar Removal – v3

Tools Needed: Phillips Screwdriver

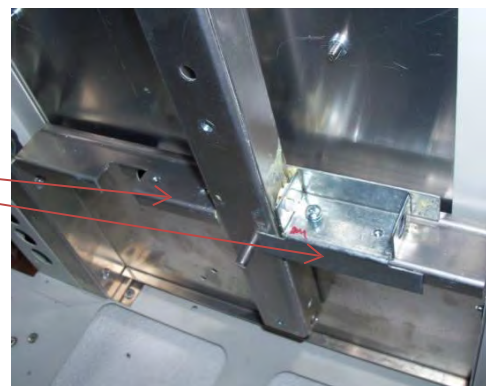
1. Remove all drawers. (pg 2)
2. Remove Cabinet Lock. (pg 9)
3. Remove slides on the right hand side, facing the cart front. (pg 5)



4. Remove both the Lock Bar Guides supporting the Lock Bar, by removing two screws in each one.
5. Remove both the upper Lock Bar Retainers, by removing two screws in each one.



6. Remove both the lower Lock Bar Retainers, by removing two screws in each one.



# Lock Bar Removal – v3 cont.

Tools Needed: Phillips Screwdriver

7. Remove the center screw in the Lock Rail and Lock Bar.



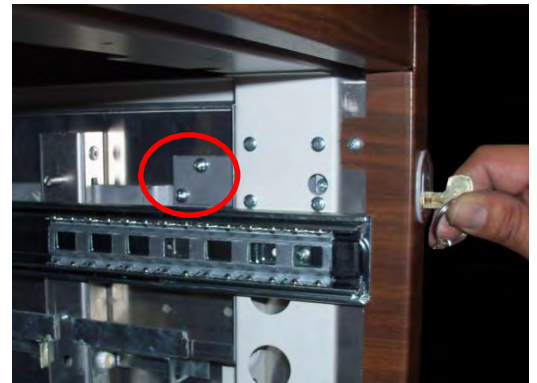
8. Remove the Lock Bar and Lock Rail Assembly, by pulling the front side of the Lock Bar out past the edge of the upper Lock Plate. This will allow the Spring in the back to decompress and make it possible to remove the back part of the Lock Bar from the slot.



# Cabinet Lock Body Removal – v3

Tools Needed: Phillips Screwdriver

1. Remove top 4" drawer (see Page 2).
2. Lock the cabinet by pushing the lock in until you feel it latch.
3. Remove the two (2) small screws in the Lock Link.
4. Unlock the cart.
5. Pull the lock assembly from the cart.



**Lock Link and Lock**

# Cabinet Lock Body Installation – v3

Tools Needed: Phillips Screwdriver

1. Snap the plastic ring onto the front of the lock chamber, or make sure the existing one is secure.



2. Insert the lock assembly into the lock chamber, with the brass button on the top. Make sure that the lock link goes through the slot in the back of the lock chamber. (pictured without plastic ring)



3. Push the brass pin down, and push the lock assembly into the lock position.



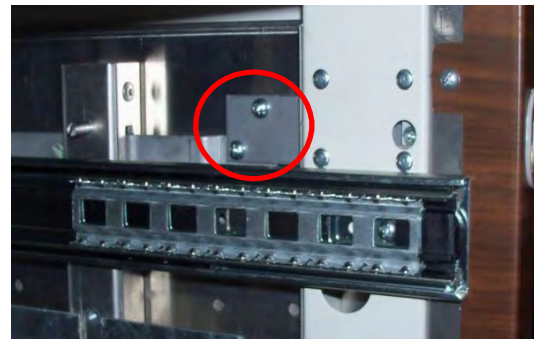
# Cabinet Lock Body Installation – v3 cont.

Tools Needed: Phillips Screwdriver

4. Line up the holes in the Lock Link with the matching holes in the Lock Bar.



5. Insert two (2) Pan Head Phillips Screws 8-32 x 3/8



# Replacing Locking Components – v3

This process should take less than 5 minutes per cart. As you will see below, this procedure is very simple and should solve most issues that may arise with your locking system on your v3 med cart.

1. Remove the top drawer of the cart, and place the drawer on the ground. In the case it is a double-wide cart, remove the top left drawer.
2. Remove the slide on the right hand side of that drawer gap using a Philips head screwdriver (two screws – one in the front, and one in the back)
3. First, replace the screw shown in the picture below with the new screw that is included in the repair kit. The new screw's head should be "flatter" than the current screw that has been used in the vertical lock ladder:



4. Now remove the two screws holding the bracket shown in the picture and replace the bracket with the one that was included in the repair kit. You DO NOT need to replace the rear identical bracket. Just replace the one closest to the front of the cart as is circled in the picture.



You can now re-install the drawer slide and reinstall the drawer into the med cart and the lock should be fully functional again.

Thank you.

## Narc Box Removal– v2 & v3

Tools Needed: Phillips Screwdriver

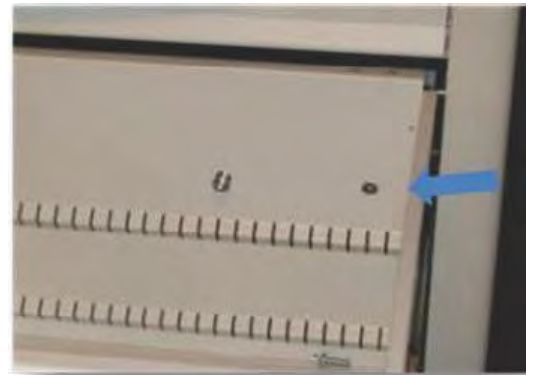
1. Open the narc box.
2. Remove the two screws in the back of the box.
3. Lift the box out of the drawer.



## Narc Box Installation– v2 & v3

Tools Needed: Phillips Screwdriver

1. Place narc box in the drawer on the right-hand side.
2. Line it up with the threaded openings.
3. Using the ¼-20 screws provided, screw the narc box into the back of the drawer to secure it to the cart.



## Narc Box Hinge Removal & Installation– v2 & v3

Tools Needed: Small Adjustable Wrench

1. Remove the eight nuts on the hinge.
2. Remove the hinge.
3. Reverse the process to install the hinge.





# Narc Box / Drawer Lock Removal & Install – v2 & v3

Tools Needed: Phillips Screwdriver

1. Remove four screws.
2. Remove the lock.
3. Reverse the process to install the lock.



# Panel Removal & Installation – v3

Tools Needed: Phillips Screwdriver

4. Remove all drawers (see pg 2)
2. Remove corner bumpers (four screws each)
3. Completely remove cabinet lock (pg 9)
4. Remove the side shelf (see pg 6)
  
5. Remove screws from panels. Go through the holes in the frame to remove screws located in the back of the panels.
6. Remove the top.

**WARNING: Be careful not to let the back fall off when the top is removed.**



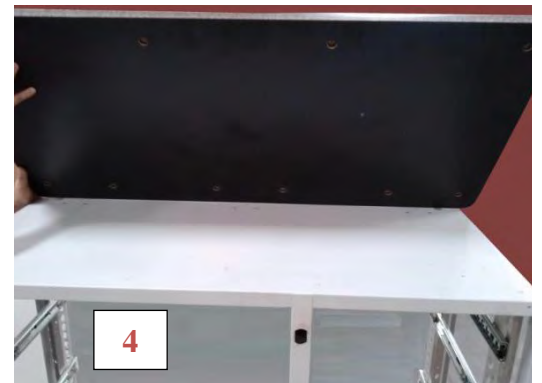
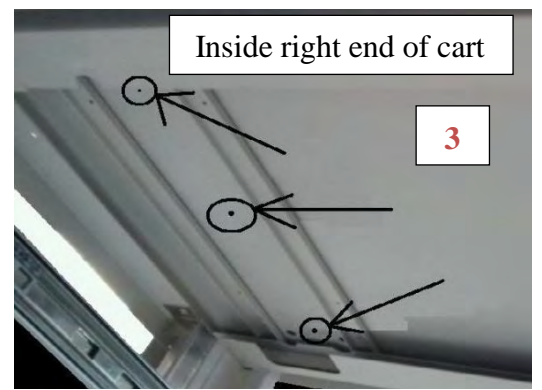
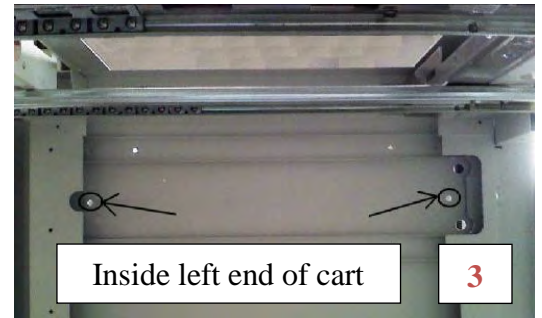
# Wood Top Replacement – v3

Tools Needed: Screwdriver

1. Remove at least top two drawers from the cart. (see pg 2)

**NOTE: you may need to remove the additional drawer(s) if you need more space to work.**

2. Remove the side shelf
3. Find the existing holes in the underside of the cart top as pictured. There are two in the left end where the shelf is, and three in the right side.
4. Line up the holes in the bottom of the top with the rivet head on the top surface of the cart.
5. Using the screws provided, attach the wooden top to the cart, through the existing holes identified in step 3.
6. Re-Install the drawers removed in step 1.



# EMAR Installation – Cart Top / Rx v3

## Square Hole = V3

(if you have a Square Hole  
Use the "V3" Guide, otherwise use the "V2" Guide)



### Wood Top

If you have a wood top with a plug in the top, remove the plug and use the v3 Guide. Otherwise use the v2 Guide.

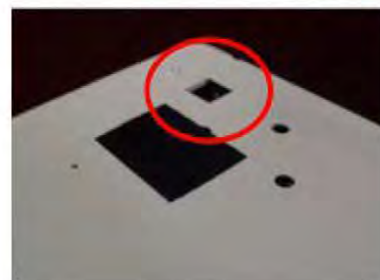
## V3

### EMAR Installation - Plastic Top

Tools Needed: Marker, Phillips Screwdriver, Power Drill,  
1-1/8" Hole Saw, 1/4-20 Tap

**NOTE: Be sure to coordinate these instructions with your EMAR installation instructions. No additional bracing is needed since the cart frame is manufactured with strength to accommodate the EMAR Arm.**

1. Remove the top drawer. (see page 2)  
(\*Note: you may need to remove the additional drawer(s) if you need more space to work)
2. Remove the Side Shelf. (see page 6)
3. Find the square tube in the rear inside corner of the cart.
4. Using a marker, carefully mark the approximate shape of the square tube on the under side of the cart top.
5. Pull the top off the cart. It will have some resistance because it is attached by Velcro.
6. Cut out the square hole marked on the underside of the top in step # 4, by drilling a pilot hole, then filing to 3/4" square, to match hole in top of cart.
7. Replace the top on the cart.



## V3

### EMAR Installation Continued

8. Knock out or Drill out the hole in the rear cart skin.  
*(if drilling, use 1/4" drill bit)*



9. Remove the Post from the base of the ERGOTRON LX Desk Mount LCD Arm: (pictured from the back)
  - a. Loosen the two(2) set screws in the back of the base with the allen wrench included.



- b. Unscrew the post from the square base. *(Note: this may be easily accomplished by fastening it to a solid surface)*



- c. Screw the post into the Arm Mount.



### V3 EMAR Installation Continued

10. Insert the square tube of the Arm Mount through the square hole in the cart top and into the cart.



13. Insert the longer Pan Head Phillips Machine Screw 1/4-20 X 1.5" through the Flat 1/4" washer and into the hole in the back of the cart to secure Arm Mount. This hole is pre-threaded.



## Laptop Stand Mounting Location – v2

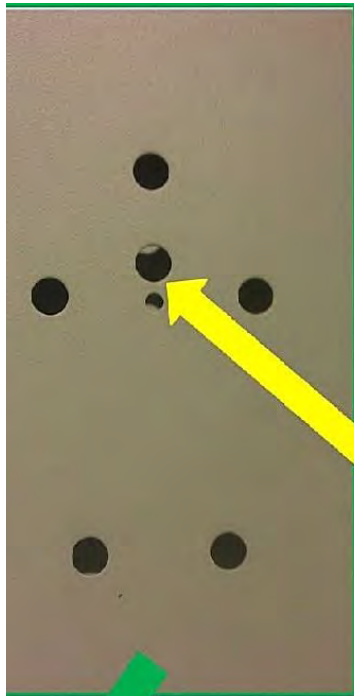


### **Remove Cart Top**

**Note: it is only held on by Velcro**







**Locate Laptop Arm mounting hole & then put Cart top back on.**



## **Remove Top 2 Drawers**

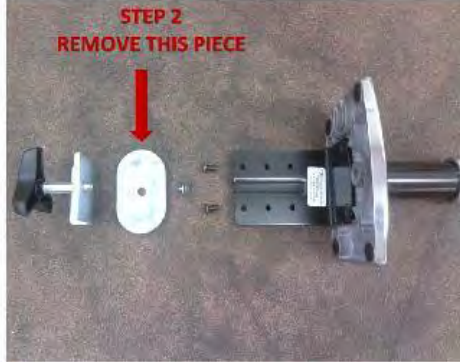




**From under side of Cart Top  
Drill (5/16" Bit) through Cart  
Top at this hole**

**Note: The mounting position is simply a suggested placement. You can mount the assembly anywhere you like.**

# EMAR Installation – Cart Top / Rx v2



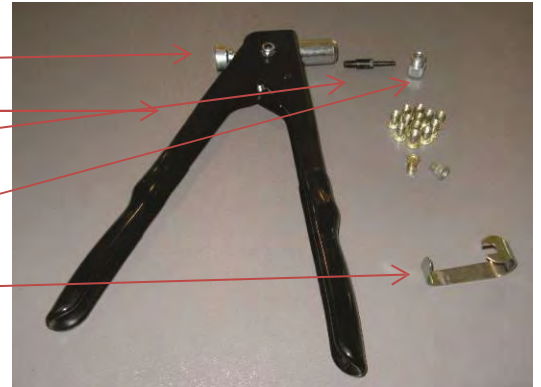


# AVK Installation – v2

Tools Needed: AVK Tool

## AVK Tool Part Names

- Thumb Screw
- AVK Tool
- Mandrel (left-handed thread – screws in counter-clockwise)
- Nose Piece (left-handed thread – screws in counter-clockwise)
- Wrench



Assemble AVK Tool:

1. Screw the Mandrel large-end first, counter-clockwise into the AVK Tool.



2. Gently secure with wrench.



3. Screw the Nose Piece over the Mandrel into the AVK Tool counter clockwise and tighten.
4. Load an AVK large end first screwing it on the mandrel clock wise.



#### Installing the AVK

On the left is an AVK that has been compressed by the AVK tool. Notice the rim it creates to compress tightly on to the frame of the cart. It works similar to a rivet.



1. Install the AVK onto the Mandrel by screwing the rim side onto the tool first (no photo).
2. Place loaded AVK into the opening so that the AVK is loaded all the way to rim.
3. Squeeze the AVK Tool until it securely attaches to the frame. (as hard as you can)
4. Release the AVK Tool and release the AVK by turning the thumbscrew clockwise.



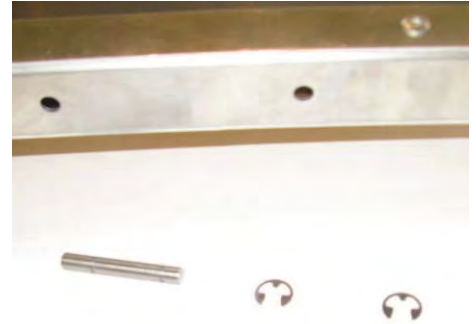
5. If the AVK is loose. Attach the AVK tool and squeeze harder until it is securely attached.  
(photo is of properly installed AVK)



# Locking Pin Installation – v2

Tools Needed: Screwdriver

1. Parts Needed:
  - a. Locking Pin
  - b. E Clips



2. Push one E Clip into the engraved slot on the short side of the locking pin.



3. Slide the longer portion of the Locking Pin into the back of the Locking Bar.



4. Carefully turn the locking bar over while holding the Locking pin (hand not shown holding the locking pin in)



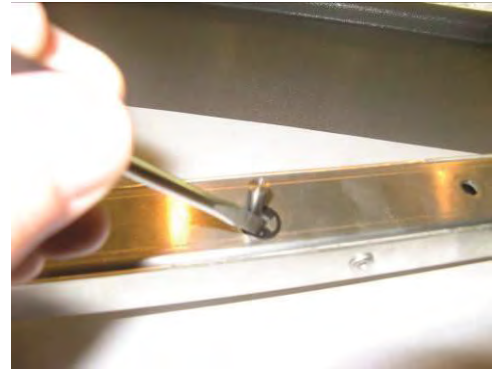
5. While holding the Locking Pin in slide the E Clip into the engraved slot on the long side of the Locking Pin until it gives resistance. Now you can let go of the back of the Locking Pin.



6. Use a screwdriver to leverage force on the side of the E Clip to push it into place.



7. To remove the Locking Pin place the corner of a screwdriver blade in the E Clip and pull it out of place.



# Locking Pin Installation – v3

Tools Needed: Screwdriver

1. Parts Needed:
  - a. Locking Pin, one  
(refer to parts list for correct part number)



2. Screw the new lock pin into the appropriate pre-threaded hole in the lock rail.



# Lock Ramp Installation – v2

Tools Needed: Philips Screwdriver

1. Parts required:
  - M14044 Drawer Lock Ramp, RX Cart (1)
  - 41-PSMS-6-50 Pan HD SMS 6 x 1/2 Type A (2)



2. Lock ramp is to be mounted on the outer surface of the drawer on LEFT side of the drawer using the two holes shown.

Installation may be performed with the drawer installed in the cabinet or removed as shown in these directions.



3. The orientation of the lock ramp is critical to its function and should be mounted as shown.

Shortest edge side of the part should be toward the front of the drawer with the longest edge of the part toward the bottom of the drawer as shown.



4. Using a Philips head screwdriver, install the 2 screws thru the inside of the drawer into the lock ramp.

