

Locking Piston-Cable Assembly with Loctite and Spring Tensioning Washers ECO Units

Applicability:

ECO Units with serial number below 12160000, where a #5 Counterweight is to be installed / re-installed.

Purpose:

To prevent possible loosening of the handle adjustment cable within the locking piston, after the counterweight is installed. Also to remedy any issues of the handle locking piston exhibiting any symptoms of insufficient locking piston spring tension (such as the handle falling out of set position, while unit is running).

Video:

Watch a video on “How to Install Spacing Washers to an ECO-17 Locking Handle Assembly.”

Use this video only as a supplement to these instructions.

Do not rely on the video alone for complete instructions.

<https://www.youtube.com/watch?v=4zV2y-4p2ww>

1. CONTROL PANEL ASSEMBLY

Tools Needed:

- 5/16” Allen Wrench
- Needle-nose Vise-grips
- Needle-nose pliers
(the Vise-grips above will suffice)
- 7/16” Open-end wrench
- #2 Philips screwdriver
- Sharpie Pen (or equivalent fine tip pen, capable of writing on metal)

Parts:

- Four H148 flat washers
(5/16” narrow flat washer)

Supplies:

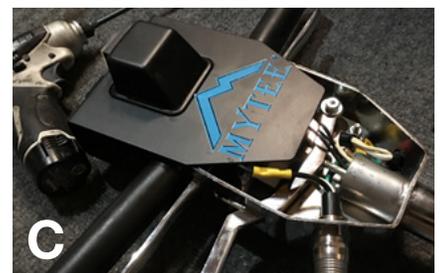
- Blue Loctite
(Hand-tool removable type)
- Grease

Procedure:

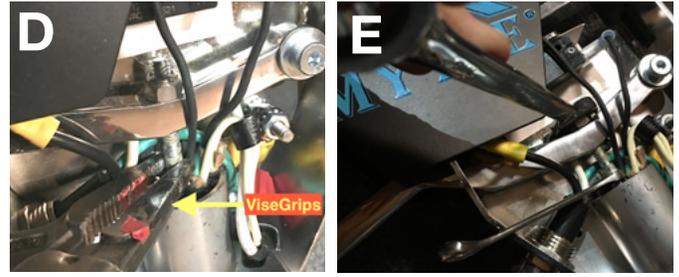
Labor hours allowed: 1

- Step 1:** Remove the wheels. Remove both C-clips from the axle using needle nose pliers. Slide the wheels from the axle.
- Step 2:** Removing the handle assembly from the ECO unit. It is not necessary to remove the sprayer assembly or the tank from the handle. Use a 5/16” Allen wrench to remove the two shoulder bolts fastening the yoke to the chassis arms.
- Step 3:** Place on bench, face down and remove the two Phillips screws the attach the Switch Box Cover to the handle assembly. **(Figure A)**
- Step 4:** Carefully slide the Switch Box Cover upward and to one side just barely enough to expose the Adjustment Lever Handle workings.

Do not slide cover upward more than shown here (Figure B), as the rocker switch wiring may accidentally be pulled free, and be extremely difficult to re-attach. (Figure C)

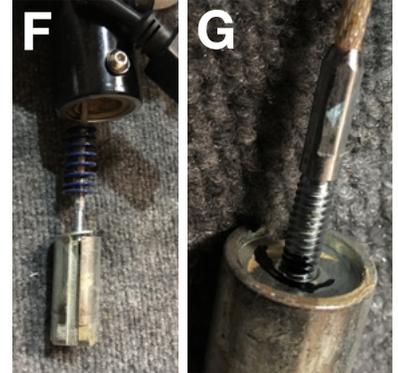


Step 5: Using Needle-Nose Vise Grips, take a clamped firm hold of the crimp section of the Adjustment Cable end. This will prevent the cable from turning, as you remove the nut above the lever (on the threaded end feeding through the Handle Lever.) (Figure D)



Step 6: Remove the 1/4-20 Nylon Locknut at the end of the cable, using a 7/16 open-end wrench. (Figure E)

Step 7: Grasp the Locking Piston and remove from the handle assembly, along with the cable. Take care not to lose or remove the spring and washer from the cable. (Figure F)



Step 8: Mark the extent that the threaded end of the cable screws into the Locking Piston, using a Sharpie. (You will use this mark later to gauge the re-insertion depth.) (Figure G)

Step 9: Remove the locking piston from the threaded end of the cable (use tools if necessary, taking care not to mar the piston or threads on the cable.) (Figure H)

Step 10: Clean the Locking Piston of debris or old grease.

Step 11: Apply blue Loctite to the threaded end of the cable marked in step #8. Apply to the threads below the mark previously made, as shown. (Figure I)



Step 12: Screw in this cable end to the locking piston, up to the mark on the threads previously made with the Sharpie. (Figure J)



Step 13: Thread over the cable, and place a total of 4 (four) H148 washers atop the locking piston, then thread and replace the spring atop the washers. (Figure K)



Step 14: Re-insert the cable into the handle assembly, but leave the locking piston exposed for the application of grease. (Figure L & M)



Step 14: Insert the Locking Piston into the handle assembly, taking care to line up the slot in the piston with the guide bolt, as shown. **(Figure N & O)** While doing so, guide the other cable end to go through the hole in the Handle Adjustment Lever. **(Figure P)**

Step 15: Start to thread the ¼-20" Nylon-insert Locknut to the cable end using fingers.

Step 16: Re-attach the ViseGrips to the crimp portion, to again hold the cable from turning. **(Refer back to Figure D)**

Step 17: Using the 7/16" open-end wrench, tighten the Locknut, just enough to take all slack out of the cable, plus ¼ turn. **(Refer back to Figure E + Figure Q)** This should expose no more than two threads above the locknut. If more than two threads are exposed, you will need to remove the cable assembly, and adjust the amount the cable threads into the Locking Piston. Consult Sales Engineering at Mytee for help or details, if needed.

Step 18: After the cable is adjusted, per the previous step, replace the Switch Box Cover. Note that there is a "hook" on the inside of the front face of the cover. This hook is supposed to ride inside the handle tube, to lock in the front face, once the rear screws are re-inserted.

Step 19: Replace the Switch Box Cover Phillips screws. **(Figure R)**

Step 20: Re-attach handle assembly to the ECO chassis, and remount the wheels, reversing the procedure of the first two steps.

