

# Replace Sorter Bowl Limit Switch P/N 109799



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Procedure P/N 111233 REV 0



Step 1: Tools needed: Needle nose pliers, wire cutters, 11/32" socket wrench, a small (in diameter) phillips screwdriver and a normal phillips screwdriver.



Step 2: Shown is the limit switch and a black cable tie. Part number: 109799



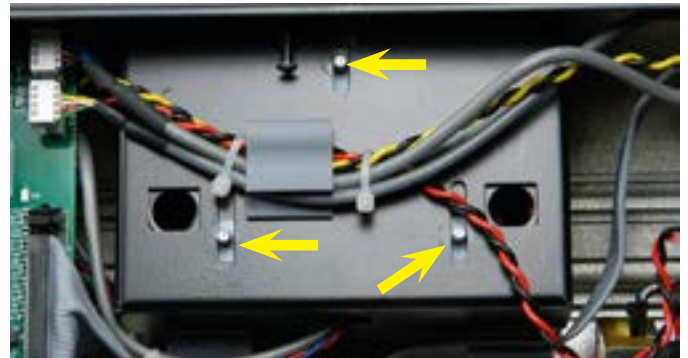
Step 3: Turn off the CPII and unplug both the power cable and the communication cable.



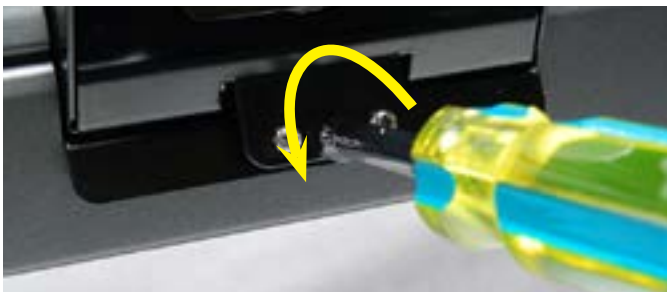
Step 4: Turn the CPII on its back and remove all 7 screws. Place the bottom cover to the side.



Step 5: With the sorter bowl bracket exposed, remove the 3 nylon locking nuts (counter clockwise) with the 11/32" socket wrench.



Step 6: Shown, all 3 locking nylon nuts have been removed. You can now turn the CPII back on its feet.



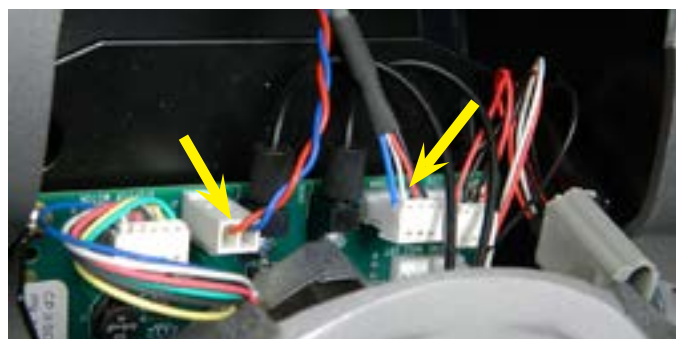
Step 7: With the 11/32" socket wrench, remove the center nylon locking nut counter clockwise (appr. 6 1/2 full turns). **NOTE: Do not remove the 2 threaded silver screws. IMPORTANT: When replacing this screw, you will tighten it appr. 6 1/2 full turns.**



Step 8: Shown, the center nylon locking nut removed. **NOTE: The 2 silver screws have not been removed or loosened.**



Step 9: Once all 4 locking nuts are removed, you can remove the bowl from the bracket by pulling out about 1 inch, then lift up about 1 inch. You can now pull the bowl out until the 2 wires that connect the bowl to the main board prevent you from pulling further (about 3 inches). **See step 10.**



Step 10: **NOTE: The 2 wires that need to be un-clipped from the bowl board are shown before removing the bowl entirely (arrows). NOTE: Pull the clips straight up to remove from prongs.**



Step 12: With the normal phillips screwdriver, remove the 2 black screws from the cover (arrows).



Step 11: This shows the 2 wires un-clipped. You can now move the bowl out to replace the limit switch.



Step 13: Once both screws are removed, lift the cover off and place to the side. You will be placing the cover back on.



Step 14: With the small phillips screwdriver, unscrew both of the screws that hold the limit switch to the jaw. The screws may remain in the old switch. Just pull them out the rest of the way with a tweezers. **NOTE: You will re-use the screws for the new limit switch.**



Step 15: With the wires cutters, cut the black tie wrap. **IMPORTANT: BE CAREFUL NOT TO CUT THE BLACK WIRES.**



Step 16: The limit switch is now free from the arm. You now need to turn the bowl towards you to view the bowl board. Steps 17, 18 and 19.



Step 17: You need to unhook (open) the grey plastic cable channel (arrow).



Step 19: Shows the limit switch (arrow) already removed from the board. This is the 'Arm sensor'. It has 3 wires Red, Black and White. Discard the old limit switch.



Step 21: With the new limit switch in hand, it will be easier to place the 2 small silver screws in the black plastic portion of the limit switch before screwing onto the jaw, they will slide in.



Step 23: **IMPORTANT: THE LIMIT SWITCH MUST GO IN THE WAY AS SHOWN. NOTE: THE ARROW POINTS TO THE LEVER.**



Step 18: Grab the old limit switch and pull it out from the cable channel as shown. **NOTE: The other 2 wires remain in the cable channel.**



Step 20: With the needle nose pliers. You need to remove the tie wrap that you cut. This is slipped through 2 holes in the arm. This needs to be removed for the new cable tie wrap.



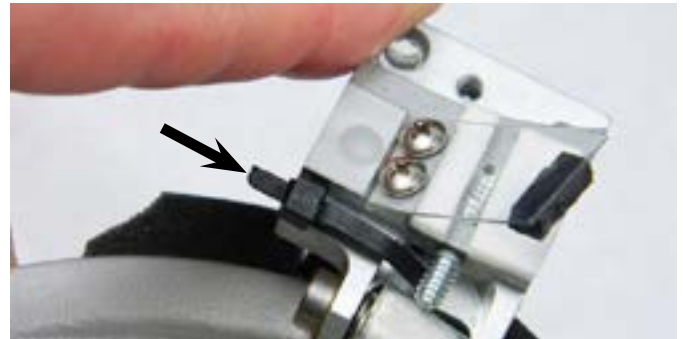
Step 22: With the screws in place, align the screws up with the holes. The holes are threaded and will screw in the metal arm.



Step 24: You now need to insert the black tie wrap. You start it on the bottom (side as shown, red arrow).



Step 25: The tie wrap, after inserting in the 1st hole, wraps over all 3 wires (red arrow), and enters the 2nd hole (yellow arrow).



Step 26: The tie wrap now is slipped into the locking end of the tie wrap. The needle nose pliers will assist in pulling it tight. When complete, cut off the excess.



Step 27: The tie wrap should appear as above. Tight over the 3 wires. Place back on, the black metal cover that you see back in step 12.



Step 28: With the arm closed and locked (step 27), place the 3 wires back in the grey plastic clip as shown.



Step 29: Snap close the grey plastic clip to keep the wires in place.



Step 30: Re-insert the limit switch (white clip) into the sorter bowl board. 3 prongs, reads "Arm Sens". Shown on how it should appear (arrow).



Step 31: (left photo) Re-insert the 2 white clips, (Comm) and the (power). You can now place the bowl back in. The bowl MUST be inserted all the way in. You can view step 7 & 8, or look at the bowl that you did not pull out.



Step 32: Once the bowl is inserted correctly, you should be able to see the threaded stub as in the left photo. Tighten the nylon locking nut until the bowl will not move in or out. Turn the CPII on its back and screw on the 3 nuts and fully tighten, then back off 1/4 turn.

**... FINISHED**