

Trigger/Flex Circuit Replacement

Disassembly:

IMPORTANT: Be careful not to introduce any fibers or particles into the pipette. Any such debris may cause the pipette to malfunction.

1. Make sure that the Ejector Slide is in the Forward or Ejected position.
2. Remove the screw from the Top Cover and remove the Top Cover and Hook and set parts aside.

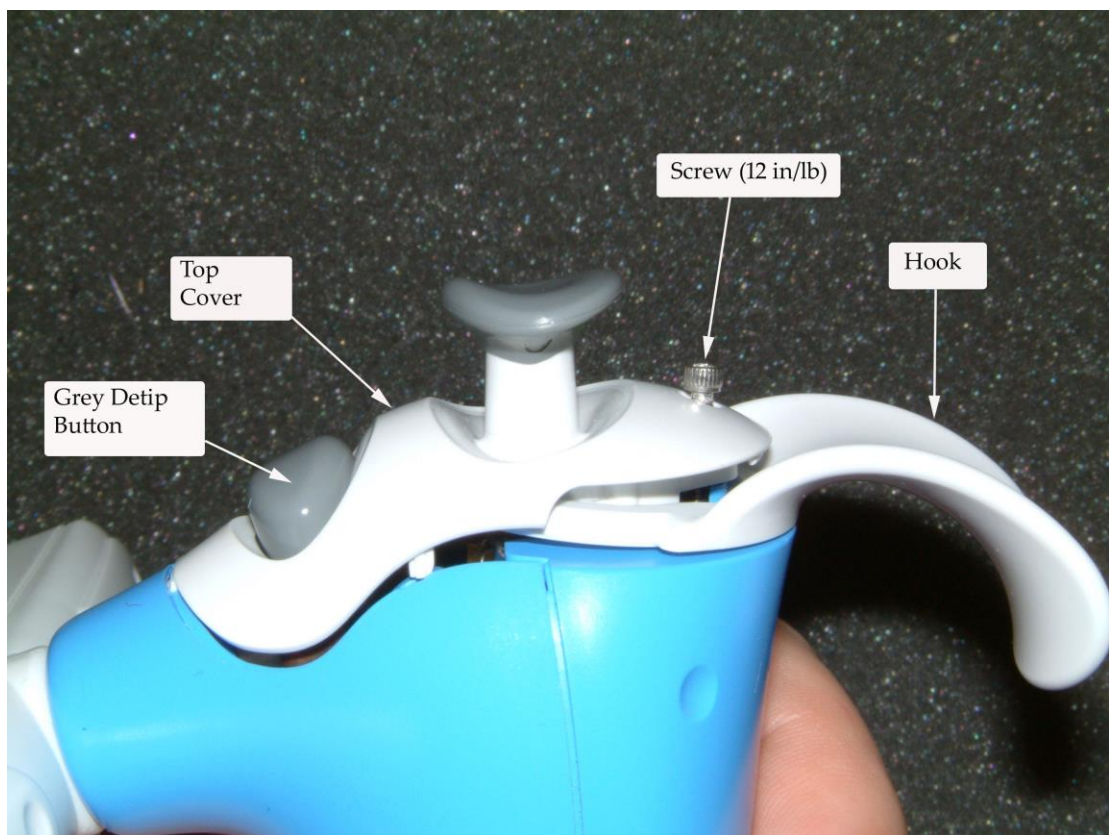


Figure 1 Top Cover and Hook Removal

3. Remove the gray Detip Button from the brown Detip Button Bottom and set aside.

NOTE:

- These instructions refer to the Standard (Right-Hand) Unit. Exceptions for the Left-Hand LCD Location are noted as required.
- Some photographs may show slightly different parts than those located on your PC Board.

IMPORTANT: The PCB is sensitive to static electricity damage. This procedure must be carried out at an Electro Static Discharge (ESD) workstation.

4. Loosen the Captive Screw and carefully remove the bottom from the top of the unit. There are two electrical cables between the parts.
5. Remove the battery.
6. Disconnect the two electrical cables from the PC board:
 - Lift the Connector Lock and then remove the Trigger/Flex Circuit Connector.
 - Pull out the Motor Connector.

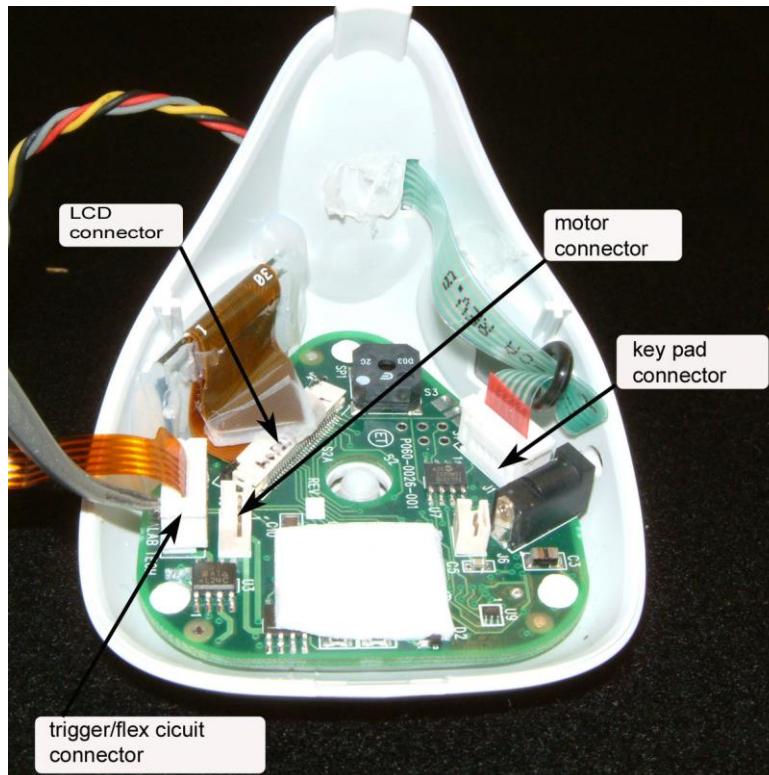


Figure 2 Flex Cable Connection and Captive Screw

7. Set the base aside.

8. Pull the Rear Cover off, breaking the glue.

IMPORTANT: Be careful not to damage the Front or Rear covers.

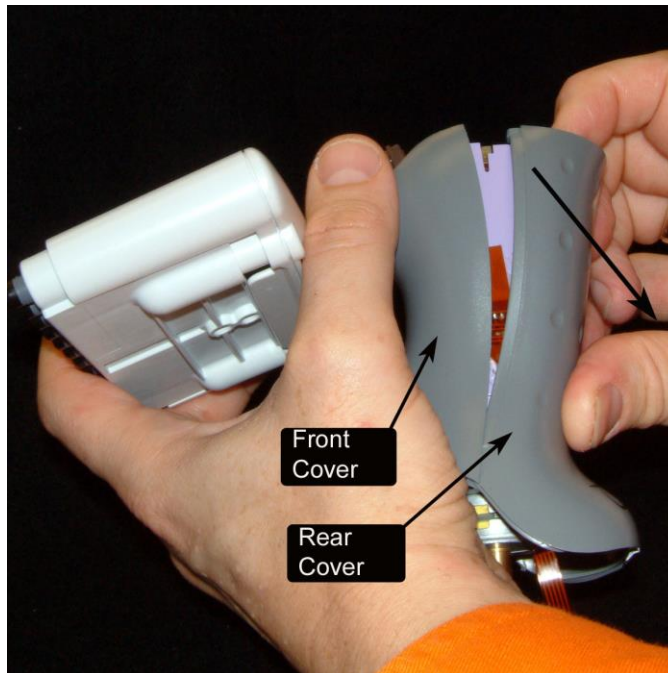


Figure 3 Removing Back Cover

9. Peel off the old glue from the front and rear covers in areas shown.

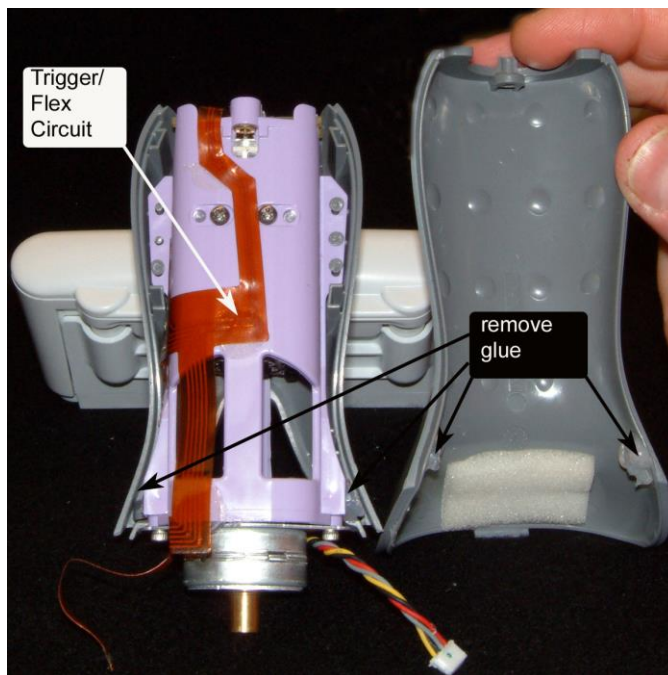


Figure 4 Pulling off old glue from Outer Body parts

Note the mounting of the old Trigger/Flex Circuit.

10. Carefully remove the Plunger Trigger Switch from Fingers on the Inner Support.

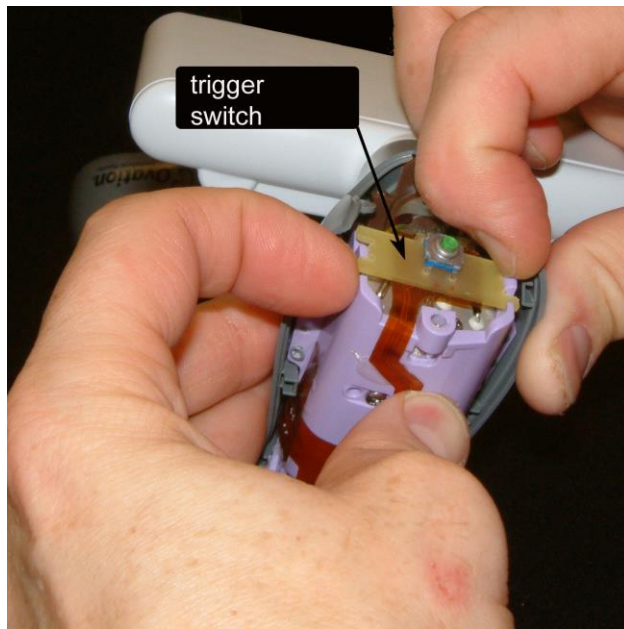


Figure 5 Removing Plunger Trigger Switch

11. Remove the old Sensor using a knife to scrape off the old glue.
12. Snap the new Trigger Switch into Fingers on the Inner Support as shown.

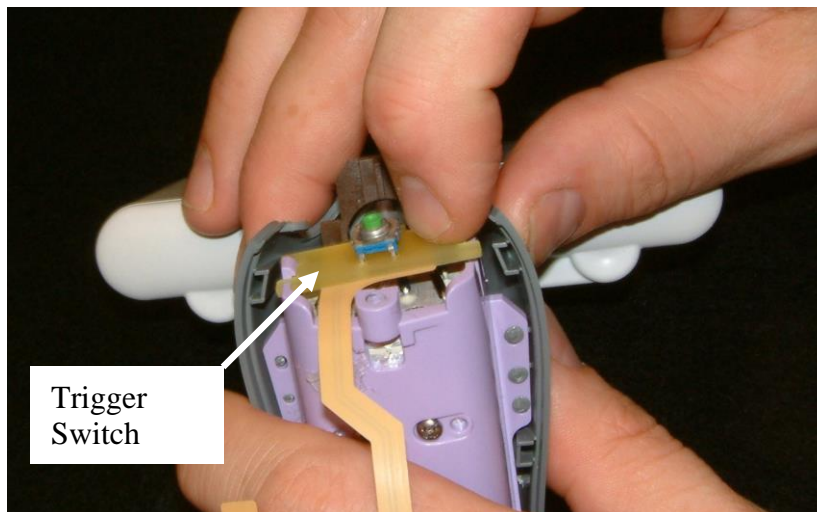


Figure 6 Snapping in new Trigger Switch

13. Use a glue gun to attach the new Sensor in the areas shown.

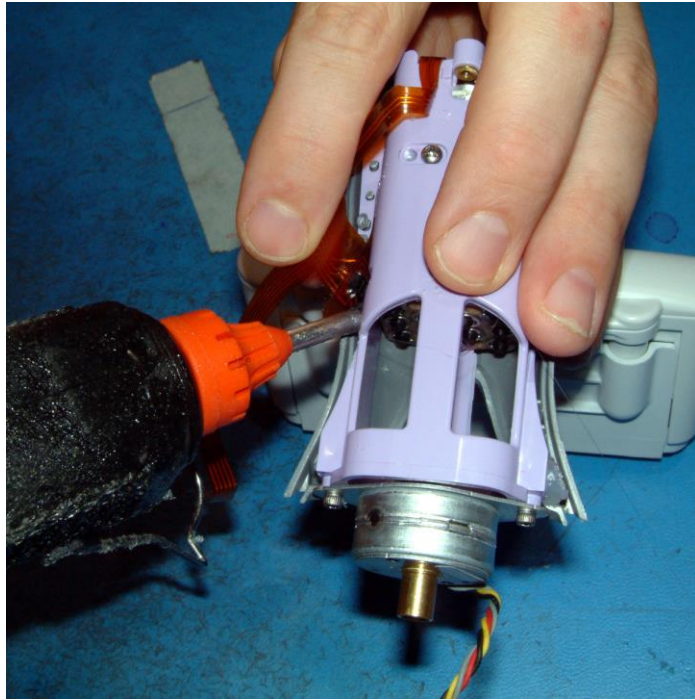


Figure 7 Hot glue Trigger/Flex Circuit with glue gun

14. While gluing positions 1 and 2, the Sensor must be held tightly toward the front of the unit as the glue hardens.

Note: Be sure to push in areas 1 and 2 as shown.

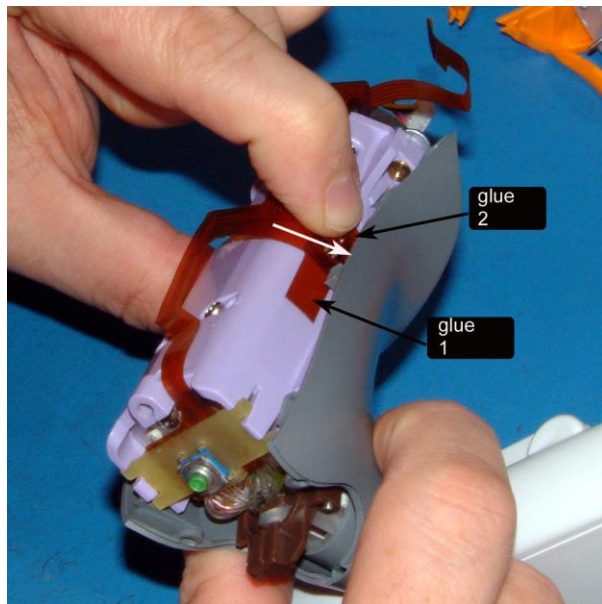


Figure 8 Pushing Sensor toward Front of unit while glue hardens

15. Hot glue the new Trigger/Flex Circuit, both underneath and on top, in five places in the order as shown.

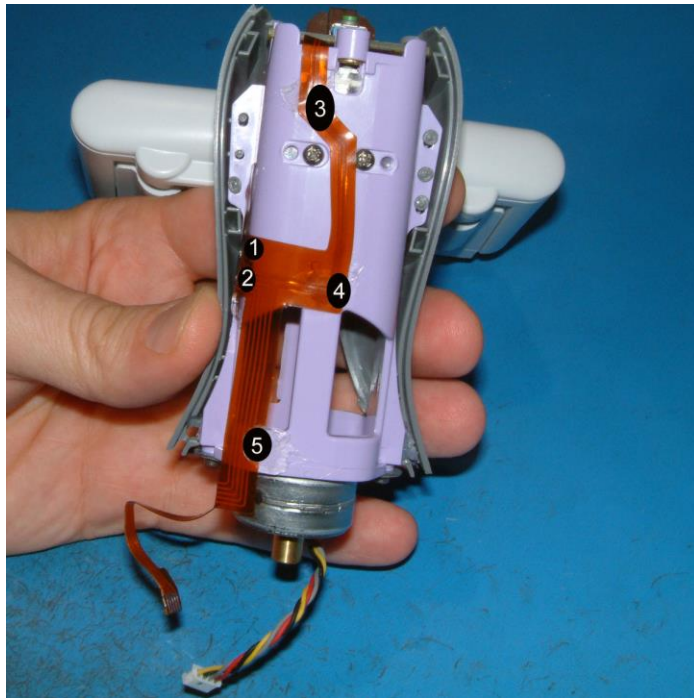


Figure 9 Hot glue Trigger/Flex Circuit in Five Spots

Reassembly:

1. Install the Hook assembly.

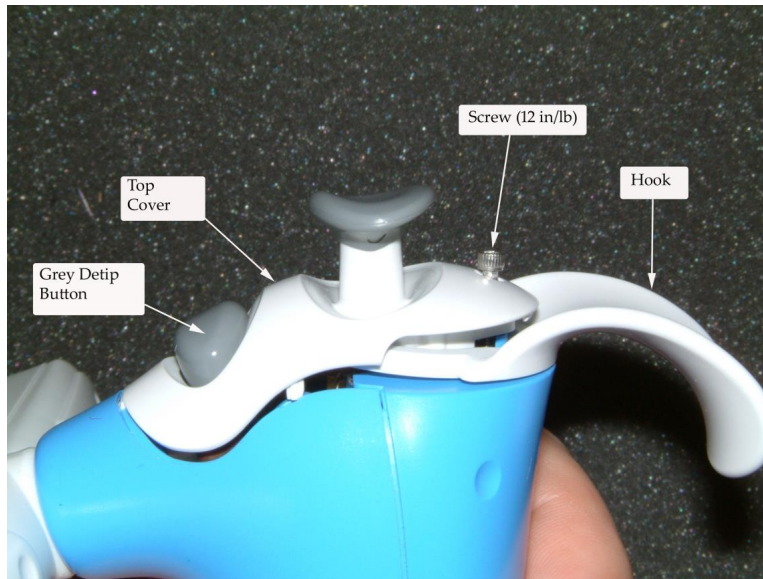


Figure 10 Top Cover & Hook Installation

2. Install Top Cover Assembly with one screw and tighten to 12 in/lbs. Make sure that the hook is tight, but still movable.
3. Temporarily, secure the front and rear covers by using rubber bands, and then apply hot melt glue to the joints as shown.

IMPORTANT: Do not get any glue in the two holes as shown.

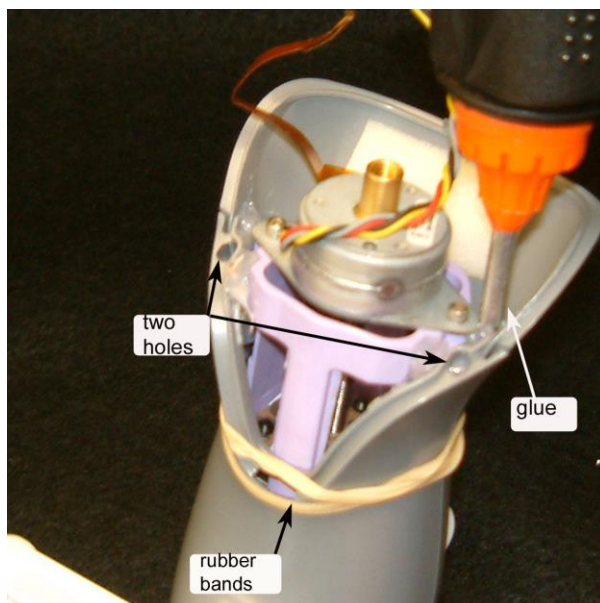


Figure 11 Securing Front and Rear Covers

4. After the glue cools, remove the rubber bands.
5. Connect the cables as shown in Figure 12 for a Standard Unit or in Figure 13 for a Left-Hand unit. Seat the connector locks as required. Install the battery and test.
 - Check the three Key Pad buttons and verify that they are responding.
 - If the display does not respond to the keypad, then the Key Pad Flex Cable may be installed backwards.
 - Check the pipetting trigger to verify that the pipette aspirates normally.

If the unit does not respond to pressing of the pipetting trigger or displays an error, then check for correct installation of the Trigger Flex Circuit.

The following are Right-Hand and Left-Hand Ovation models.

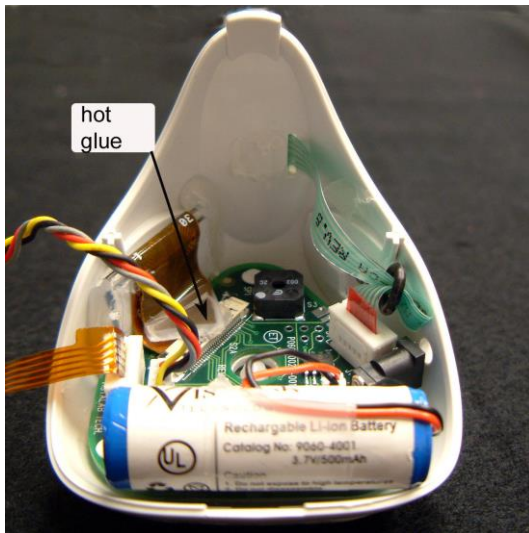


Figure 12 Final Wire Routing for Standard (Right-Hand) LCD Location

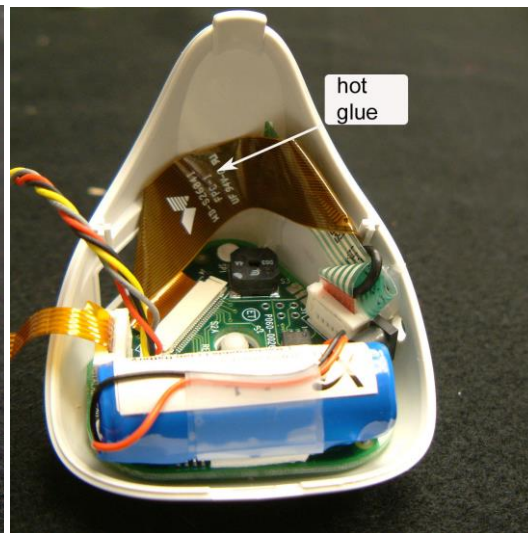


Figure 13 Final Wire Routing for Left-Hand LCD Location

6. Reassemble the Base Assembly to the Upper Body.

Important: Be sure that the Flex and Motor Cables are routed correctly and are not pinched or protruding.



Figure 14 Reassembling the Base to the Upper Body

7. Tighten the Captive Screw with a coin or screwdriver

