

# SERVICE PROCEDURES

## BOTTLE CAP REPLACEMENT

The MAGO<sup>®</sup> Plus/APTUS<sup>®</sup> contains four glass bottles located in the Wash/Waste Drawer at the right hand side of the instrument. These bottles (Waste, Probe Clean, Wash 1 and Wash 2) provide fluidic functions using vacuum and pressure. In the event that a bottle cap needs to be replaced, the procedure is very simple.

### I TOOLS NEEDED

1. Needle-nose pliers.

### II PROCEDURE – PLEASE READ ALL STEPS BEFORE PROCEEDING

1. Ensure the instrument is powered OFF.
2. Open the Wash/Waste Bottle Drawer and locate the bottle cap to be replaced.
3. Unscrew the cap from the bottle.
4. Using needle-nose pliers, remove the silver-colored locking pins (if present) from both Quick Disconnects (indicated in Figure 1).
5. Remove both Quick Disconnects (QDs) from the top of the cap.
6. Remove the black sensor jack from its socket.
7. Plug the Quick Disconnects into the new bottle cap, ensuring correct orientation of each to the correct port.

**IMPORTANT:** Each tube fitted to both Quick Disconnects is marked with a colored band (indicated in Figure 1). Correct replacement is critical for proper operation of the instrument. Use the following color guide to ensure correct QD orientation:



Figure 1

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## BOTTLE CAP REPLACEMENT(continued)

<b>White Probe Clean Bottle</b>	<b>Black</b> banded QD to short port. <b>White</b> banded QD to long tube that extends inside length of bottle.
<b>Blue Wash Bottle</b>	<b>Black</b> banded QD to short port. <b>Blue</b> banded QD to long tube that extends inside length of bottle.
<b>Green Wash Bottle</b>	<b>Black</b> banded QD to short port. <b>Green</b> banded QD to long tube that extends inside length of bottle.
<b>Yellow Waste Bottle</b>	<b>Black</b> banded QD to short port. <b>Yellow</b> banded QD to long tube that extends approximately two inches inside bottle.

8. Screw the cap back into the correct bottle.
9. Replace the QD locking pins removed in Step 4.

### III VERIFICATION

1. Power instrument ON.
2. Ensure there is wash buffer/distilled water in Wash 1 (blue cap) and Wash 2 (green cap).
3. Ensure caps are tight on all **four** bottles.
4. If the Probe Clean (white) cap is replaced, select Prime Probe test function from Main Menu → Manual Mode.
5. Press Enter – the instrument will prime the probe.
6. If Probe priming completes, the cap replacement was successful.
7. If the Wash 1 (blue cap), Wash 2 (green cap) or Waste (yellow cap) is replaced, follow steps 8 thru 14.
8. Place a full tray of blank wells in the Plate A holder.
9. Access the Wash Plate test function from Main Menu → Manual Mode.
10. If the Wash 1 (blue cap) is replaced, ensure Wash 1 and strips 1 to 12 are selected.
11. If the Wash 2 (green cap) is replaced, ensure Wash 2 and strips 1 to 12 are selected.
12. If the Waste (yellow) cap is replaced, ensure Wash 1 and strips 1 to 12 are selected.
13. Press Enter – The instrument will wash and dry each of the twelve strips in the Plate A holder.
14. If the manual wash completes, the cap replacement was successful.
15. If the cap replacement was not successful, please call Instrument Technical Service at (800) 327-4565.