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**Date:**

**30/09/04**

**Ref:**

**159/MKT/E/48**

**SUBJECT**

**Best 2000 – Wash Bottles –  
Replacement**



**Attached to this letter you will find a technical bulletin regarding the Wash Bottles.**

**There is a new Biokit part number which includes a complete kit to allow the service engineers to replace the Rule pump instead of having to replace the whole wash bottle.**

**The part number you will require is:**

<b>3410-0633</b>	<b>Kit to replace the pump in the wash bottles</b>	<b>13002210</b>
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**We extremely recommend reading carefully the attached procedure before proceed with the pump replacement.**

**Please, do not hesitate to contact our Technical Service Department if you need further details.**

## Product Bulletin

**No:** PB0010  
**Date:** 12 July, 2004  
**To:** DSX Service Personnel  
**Re:** Wash Bottles  
**Change:** We have created a kit of parts and a procedure to enable a service engineer to replace the Rule pump instead of having to replace the whole wash bottle.  
Item number: *13002210*  
**Effective:** 12 July, 2004; ECO5385

As always, please do not hesitate to contact me with any questions or concerns you may have.

Best Regards,

**José Moran**  
Technical Service Supervisor  
Chantilly, VA, USA

**Tools Required (not provided):**

Torque Driver - 30 in-oz 2.5 mm hex nut driver  
 Torque Driver - 3 in. lb. 2.0 mm hex nut driver  
 Torque Driver- 2 in. lb. 2.0 mm hex nut driver  
 Translucent, Self Leveling RTV (GE Type RTV 118)  
 Washer Calibration Software

**Parts Required (included in kit):**

24501310	1EA	GASKET, INTERNAL, DSX
24501330	1EA	GASKET, BOTTOM, DSX
30200200	2EA	M3X10MM SOCKET HEAD CAP SCREW
30500060	4EA	SCREW, LOCKING, M3X10, BTN HD, S/S
311100100	2EA	WASHER M3 INTERNAL TOOTH
50800150	1EA	M-271 DYNEX ASSY, PUMP MOTOR, DSX
6182020066	.333FT	16025, TAPE, TEFLON, 1/4", WHITE

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# MANUFACTURING ASSEMBLY PROCEDURE

13002210a.doc

REV. A

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## PUMP REPAIR KIT ASSEMBLY, DSX

### Approval Signatures \_\_\_\_\_

Manufacturing.....Date.....

Mfg.Engineering.....Date.....

### Revision Level History \_\_\_\_\_

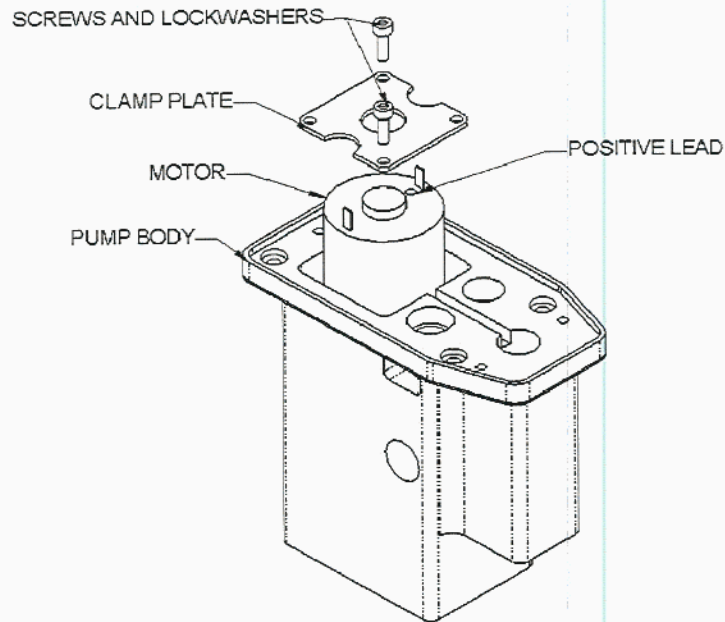
Revision A

ECO No. 5385

**DYNEX**  
TECHNOLOGIES

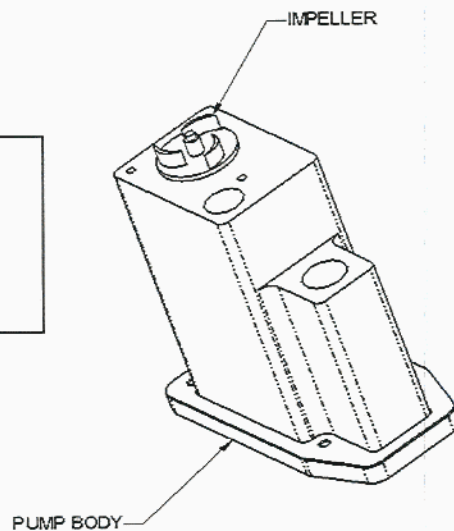
A Capital Genomix Company

Inspect pump motor and seals P/N 50800150. Make sure the seals are in good condition. Insert motor into pump body P/N 13002000. Make sure the positive lead is to the right of the pump body as shown. Clamp the motor in place with one clamp plate P/N 22001770, two M3 X 10 SHCS P/N 30200200 and two M3 lock washers P/N 311100100. Screws should be installed diagonally as shown. Alternatively tighten the screws first finger tight and then to 30 in-oz torque using a torque wrench.

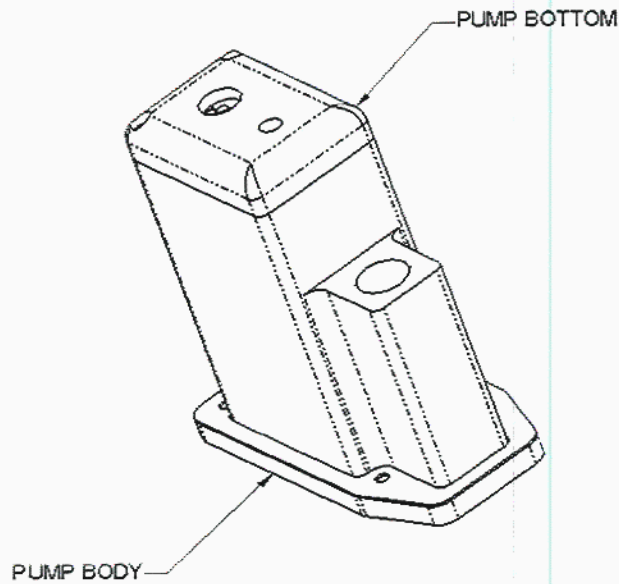


2. Press the motor impeller (part of 50800150 motor) onto the motor shaft. Press evenly until the impeller snaps in place.

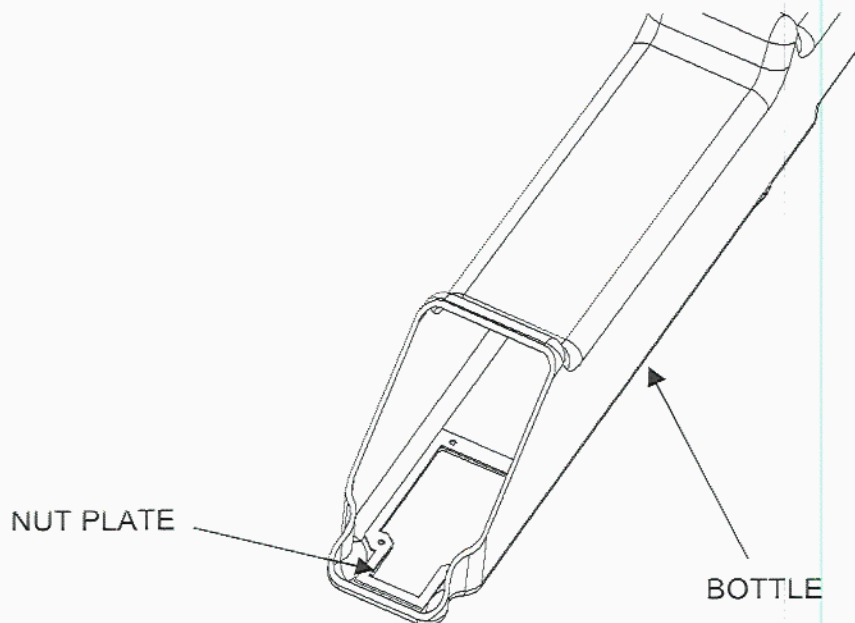
NOTE: Once you install the motor in the housing, hook the motor up the DC power and make sure it spins properly.



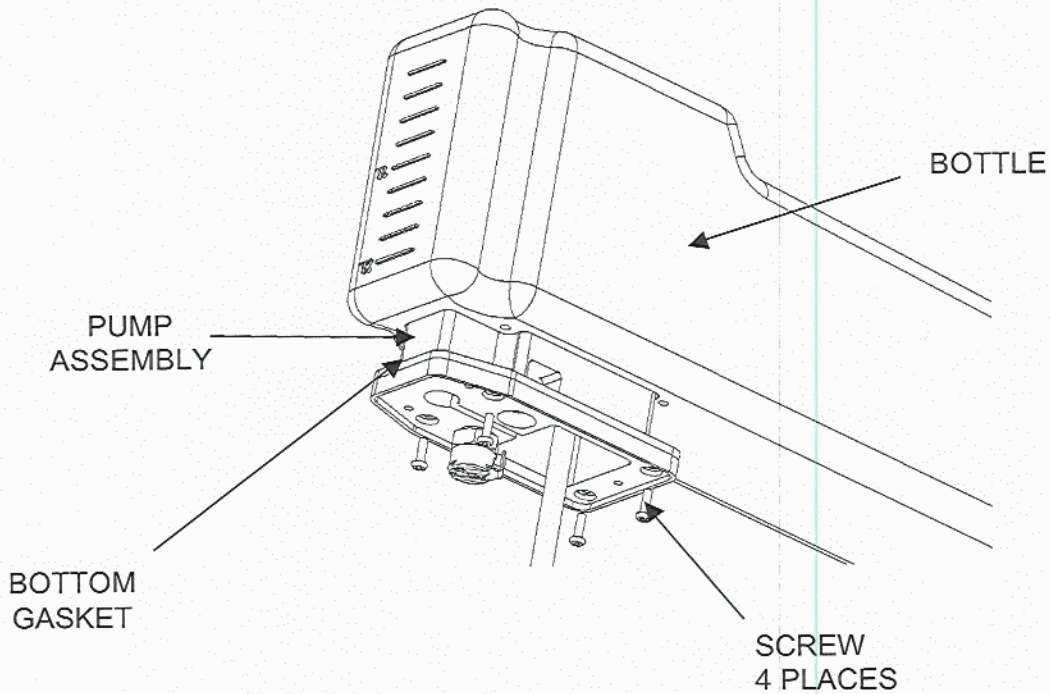
3. Install the pump bottom P/N 23001860 onto the pump body using three M3 X 16 stainless (Type 316) cap head screws P/N 65119300091.



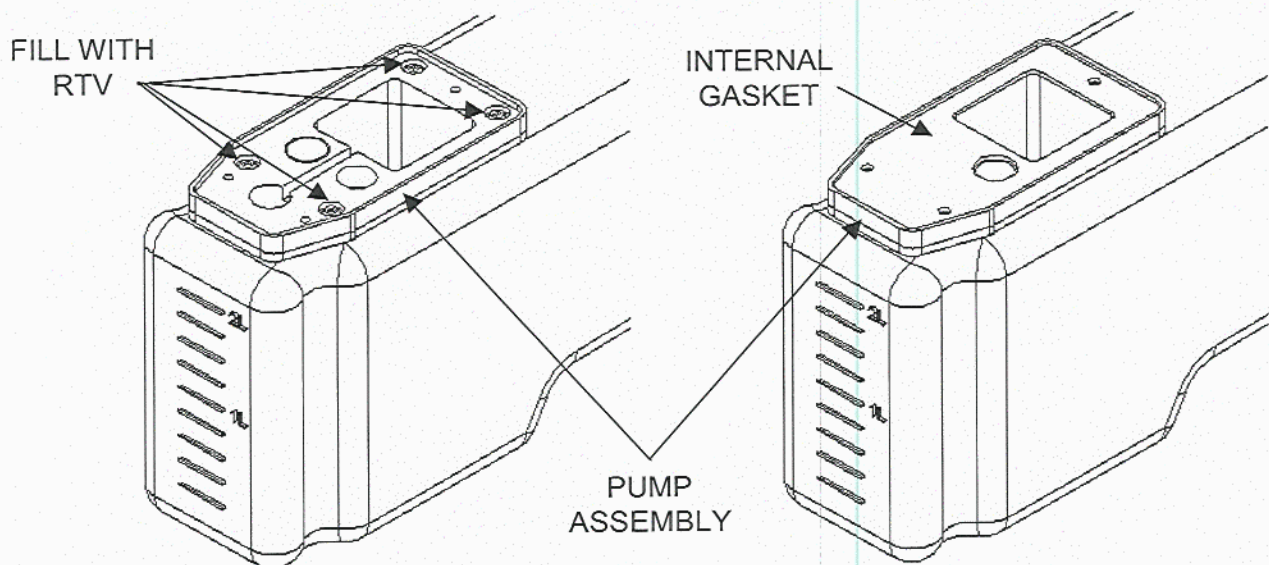
4. Locate the nut plate P/N 22001780 in the bottle P/N 24501320 by sliding it into the large cutout in the top of the bottle. The bottle must be held upside down and steady until the next step is complete so as not to disturb the nut plate location. NOTE: Below is a cutaway view to show the inside of the bottle.



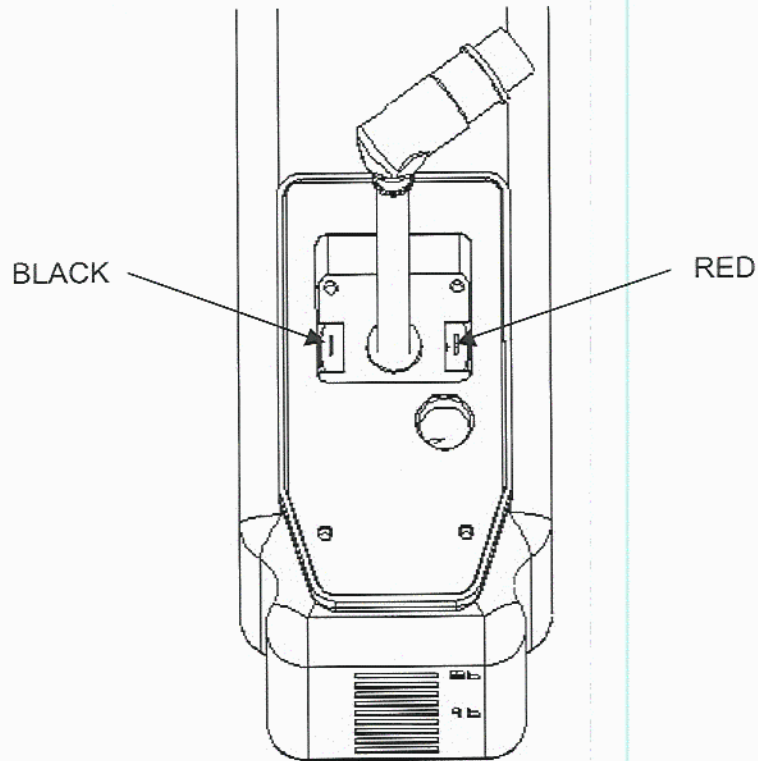
5. Clean the pump flange with alcohol. Place the bottom gasket P/N 24501330 on the pump assembly with the adhesive side against the pump flange. Install the pump assembly in the bottle with four M3 X 10 button head screws with nylon inserts P/N 30500060 using a 3 in.lb. torque driver.



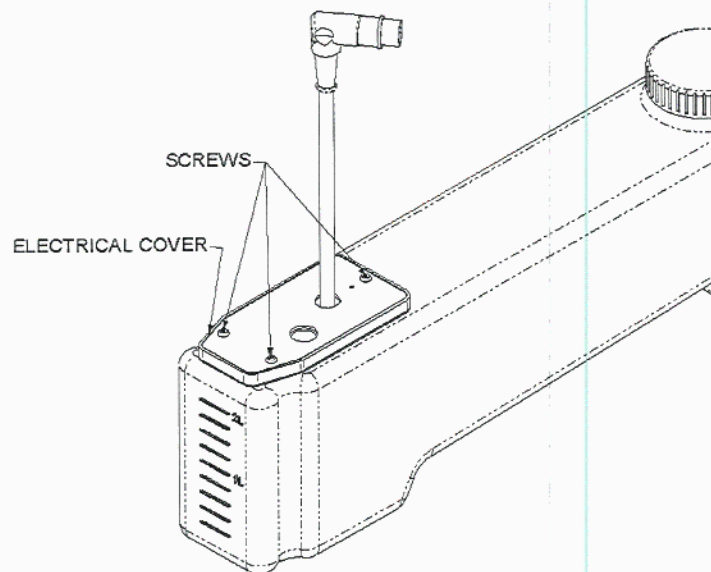
6. Clean the top of the pump with alcohol. In the locations shown, fill the four counter bores with Translucent, Self Leveling RTV (GE Type RTV 118). Remove the excess RTV from the counter bores using a spatula or similar tool. Place the internal gasket P/N 24501310 on the pump assembly as shown with the adhesive side against the pump.



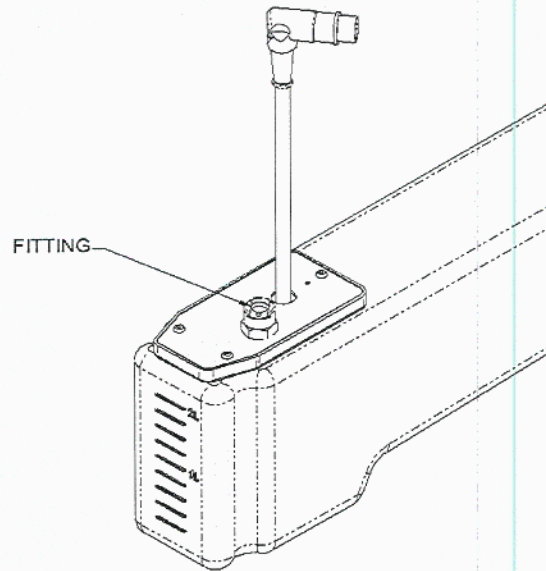
7. Thread the pump wiring harness through the square hole in the internal gasket. Plug the 2-pin connector from the harness into the 2-pin connector from the float switch. Plug the red wire into the right terminal on the motor. Plug the black wire into the left terminal on the motor.



8. Install the electrical cover to the pump body with three M3 X 8 stainless button head screws P/N 651173000851, three M3 stainless split lock washers P/N 309300304, and three M3 stainless flat washers P/N 6514130011 using a 2 in.lb. torque driver. NOTE: The split lock washer must be closest to the screw head. Ensure that none of the wires are pinched.



9. Wrap the CPC fitting P/N 354008300 with a four inch piece of teflon tape P/N 6182020066. Install the fitting into the pump body as shown.



Final Testing: Once you have replaced the pump you must use the DSX Washer Calibration software to ensure the bottle can be calibrated.