

D3000



Reference Guide



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Safety

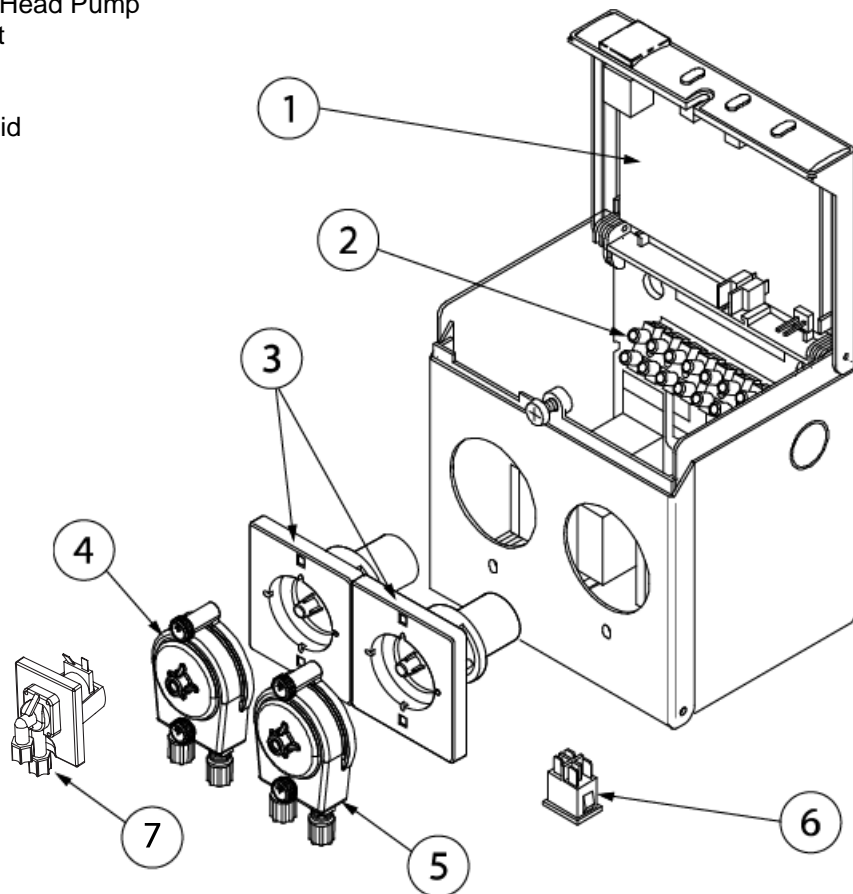
Always wear the required Personal Protective Equipment (including gloves and goggles that must be worn when potentially exposed to any hazardous materials and when carrying out hazardous work tasks). Turn the dispenser off during cleaning and note that parts may be contaminated with product. If possible, flush tubing out with water prior to carrying out any maintenance. For information on products that are used in this dispenser, please carefully read the product label and Material Safety Data Sheet (MSDS).

Electrical installation of this dispenser should only be performed by trained personnel in accordance with local electrical wiring regulations. Before working on this dispenser, isolate it from any electrical source and lock out/tag out.

General

The exploded view of the D3000 indicates the key equipment components and will aid in assembly/disassembly of the unit.

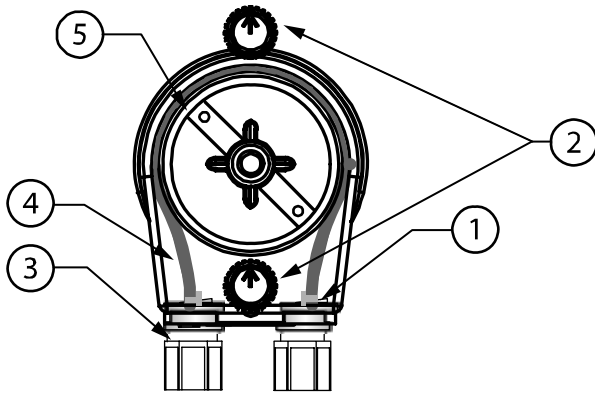
1. Circuit Board
2. Terminal Connections for Power/Trigger Signal
3. Motor Gearbox 5 oz Snap Head Pump
4. Pump Cartridge, Detergent
5. Pump Cartridge, Rinse
6. Switch ON-OFF
7. Optional Detergent Solenoid



Pump Cartridge Replacement

Only the cartridge replacement should be performed in the field.

Tube replacement can be carried out later. Note that each product has different delivery line configurations and tubes.



Parts Identification

1. Tie wrap
2. Snap pins
3. Tube insert
4. Pump tube
5. Roller assembly

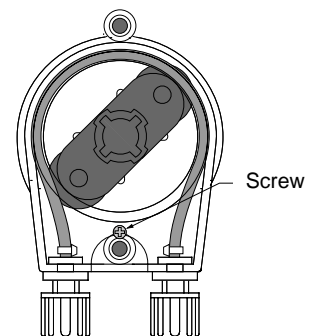
1. Turn off power to the unit to ensure that the pump does not run during maintenance.
2. Remove the cartridge from the motor housing by twisting the snap pins at top and bottom 90° to the left or right.
3. Remove the supply and feed lines from the old pump squeeze tubing and connect them to the new pump squeeze tubing. Note that the product is likely to leak from the tubes and fitting.
4. Align and engage the pump drive spline with the motor gear by rotating the roller assembly.
Turn the snap pins so that the arrow is pointed up. Then push in until you hear a distinct click.



CAUTION: It is very important that the tabs are in a vertical position and that you press them firmly enough to hear them click. Incorrect installation could damage the pump.

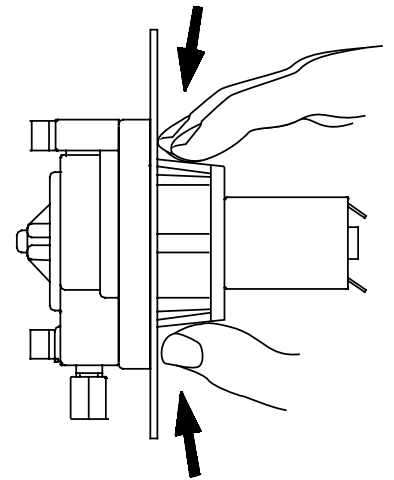
Pump Tube Replacement

1. Remove the cartridge as described above.
2. Loosen but do not remove the small screw at the bottom of the rear cover and lift the cover from the cartridge.
3. Pull the roller assembly out of the pump cartridge to release the pump squeeze tubing.
4. Pull the tube inserts out of the pump cartridge.
5. Remove the old tube.
6. When using D-Flex, coat the inside of the cartridge with a liberal amount of Silicone lubricant. When using Noprene, no lubricant is necessary.
7. Replace it with a new tube with fittings attached
8. Press the two tube inserts into the cartridge so that the tie wrap "buckles" face toward the center of the pump. Remember, the tube must not be twisted during the assembly.
9. Replace the roller assembly.
10. Replace the rear cover.
11. Re-tighten the screw.
12. Rotate the roller by hand to ensure it rotates freely and the tube and fittings are in the correct locations.



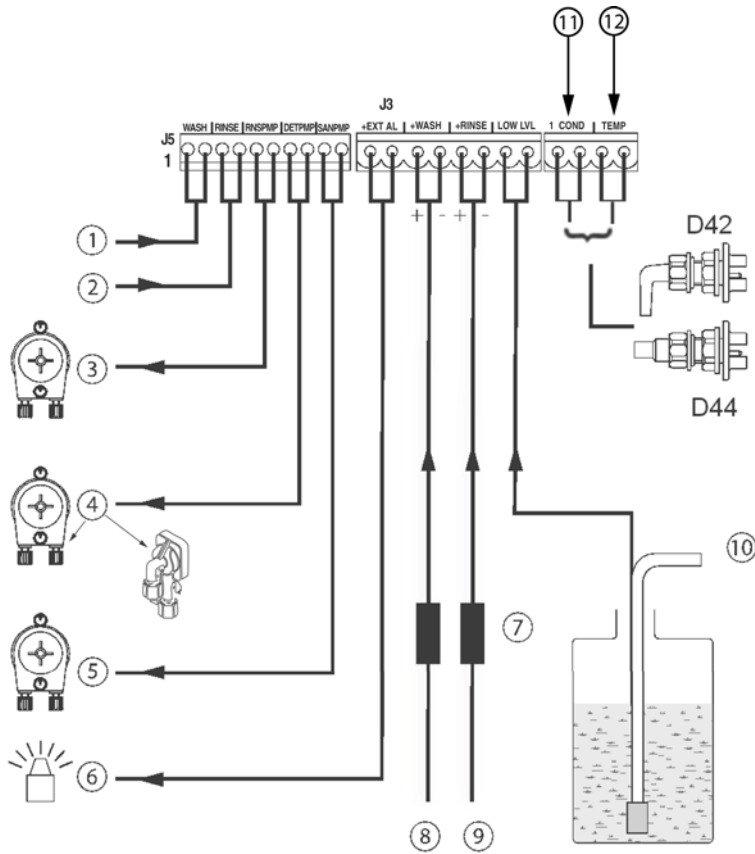
Motor Gearbox Replacement

1. Ensure that the power is turned off at the unit
2. Remove the pump cartridge from the motor assembly, leaving the chemical lines attached.
3. Open up the enclosure by loosening the single screw on the front of the box and lift the lid up and the front down.
4. Remove the electrical connections at the back of the motor and note which coloured wire it is connected to the motor tab next to the red dot on the motor body. Also slide off any cable tie wrap from around the motor body.
5. Compress the two flex ears on the back of the motor until the motor slides out through the hole in the cabinet.
6. Take the new motor gearbox and locate the alignment tip of the motor housing so it is in the down position.
7. Slide the pump motor into the enclosure hole. The flex ears will expand to hold the pump motor in place. Verify that both ears have expanded and are locked in place.
8. Reinstall the electrical connections at the back of the motor checking upon polarity.
9. Install the pump cartridge.
10. Prime the pump to verify proper pump rotation (clockwise). If the direction is wrong, switch the motor wires.



Circuit Board Replacement

1. Ensure that the power is turned off to the unit.
2. Loosen the single screw on the front that holds the top fastened.
3. Flip up the top to expose the circuit board and disconnect all connectors.
4. Locate the circuit board retaining tab on the lower edge of the board and pull the tab forwards. Lift out the circuit board.
5. Insert the new board and check that it is retained by the retaining clip. Reconnect the connections, making sure that they are not misaligned by a pin. If using opto's ensure they have the right polarity.
6. Close the lid and apply power. Reconfigure to the previous settings. Run the dishwasher for a cycle and confirm that the new board functions correctly.



Part Identification

1. Wash 24V Power
2. Rinse 24V Power
3. Rinse Pump
4. Detergent Pump or Solenoid
5. Third Pump
6. Remote Alarm
7. Optocouplers
8. Wash Trigger
9. Rinse Trigger
10. Depletion Lance
11. Connection for Conductivity Probe
12. Connection Temperature Probe

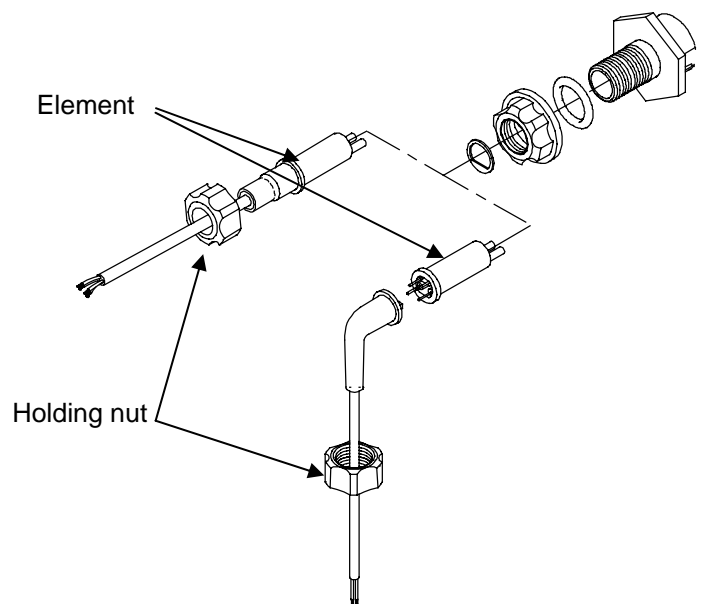
Conductivity Probe Cleaning D42/D44 Probes

- Remove the element from the probe body.
- The steel probe elements should be cleaned with a non-metallic cleaning/scouring pad. Clean all the surface of the elements.



NOTE: The steel elements may not look contaminated as there could be a very thin film on them.

- Replace the probe and refill the dishwasher. After the set point has been reached check concentration by titration.





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