



Barrier Technique

The first choice in the protection of dental equipment should be the use of disposable barrier products. The repeated use of disinfectants on equipment surfaces without the constant removal of the solution residue will eventually cause some damage to equipment surfaces.

Chemical Disinfection

The manufacturer of the disinfectant to be used should be contacted for them to state that the disinfectant will not damage equipment surfaces including upholstery.

Unacceptable Disinfectants

The following chemicals may damage equipment and upholstery:

- * Alcohol based solutions
- * Bleach
- * Phenol/Alcohol combinations
- * Foam spray products

Use with Caution

- * Water based phenolic disinfectants following exactly the instructions for use.

The Belmont Warranty does not cover damage to equipment and upholstery caused by disinfectant solutions.

WARRANTY

Belmont Equipment is warranted by the manufacturer to be free from defective material and workmanship under normal use and service, for a period of two (2) years' from date of shipment to the Buyer, except that any part or parts that are replaced under this Warranty within ninety (90) days of the completion of the two year period shall be warranted to be free from defective material and workmanship for a period of ninety (90) days from date of shipment of said parts to Buyer. Belmont will repair or replace any defective part under this Warranty, provided the part is returned to our factory with prepaid postage, delivery or freight charges. In the event Warranty service must be performed to correct any defect, only Belmont and/or one of its authorized dealers shall provide same upon mutually agreeable arrangements made in advance.

Except as otherwise provided herein, there is NO WARRANTY, representation or condition of ANY KIND, express or implied (including NO WARRANTY OF MERCHANTABILITY OR FITNESS) and none shall be implied by law. THE EXPRESS WARRANTY AND THE REMEDIES CONTAINED HEREIN (1) ARE MADE SOLELY TO THE FIRST PURCHASER FOR BENEFICIAL USE (THE BUYER), (2) ARE THE SOLE WARRANTIES AND REMEDIES, (3) ARE IN LIEU OF ALL OTHER WARRANTIES, GUARANTEES, AGREEMENTS OR OTHER LIABILITIES, WHETHER EXPRESS OR IMPLIED, AND ALL OTHER REMEDIES FOR BREACH OF WARRANTY OR ANY OTHER LIABILITY OF BELMONT. IN NO EVENT SHALL BELMONT BE LIABLE FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES.

No person, agent, distributor or dealer is authorized to change, modify or extend the terms of the Warranty in any manner, whatsoever.

This warranty is void when failure or defect is caused by conditions beyond the manufacturer's control, such as damage resulting from mishandling, neglect, misuse, improper maintenance, accident or alteration or repair by anyone other than Belmont or an authorized Belmont dealer.

Labor required to repair, replace or retrofit is not included during the warranty period by the manufacturer.

PRODUCT DESCRIPTIO	4
UNPACKING	5
INSTALLATION AND ASSEMBLY	
Utility Center	6
Left/Right Assistant's Delivery System	7
FINAL ADJUSTMENT	8
SERVICE AND MAINTENANCE	
Syringe	9
Vacuum	10
SCHEMATICS	
Model BDS-2563 Assistant's Delivery System	
PARTS & SERVICE DRAWINGS	
Left/Right Assistant's Delivery System	
Single Water Bottle System	

PRODUCT DESCRIPTION

The Belmont Model BDS-2563 Left/Right Cabinet Mounted Assistant's Instrumentation features a master on/off, a vacuum package including HVE, SE Valves and 3-way air/water syringe.

PRE-INSTALLATION CHECK

Unpack the shipping carton and check to see that all parts are included and undamaged.

CONTENTS

BDS-2563 Left/Right Assistant's Instrumentation
Utility Center
Installation/Operation Manual

TOOLS NEEDED

Set of Hex Wrenches
Phillips Head Screwdriver

INSTALLATION AND ASSEMBLY

PRE-INSTALLATION

Location for all the incoming utilities should be in accordance with the cabinet installation instructions.

UTILITY CENTER

INSTALL UTILITY CENTER

1. Mount the utility center to the floor as shown by the Cabinet Installation Guide and Template.
2. Connect the master valves and tubings to their appropriate connections.

IMPORTANT

Before you connect the air and water lines to the unit, blow out these lines to insure that all debris is removed. This will prevent the valves and instruments from becoming clogged.

INSTALLATION AND ASSEMBLY

ASSISTANT'S INSTRUMENTATION

INSTALL ARM AND HOLDER SYSTEM

1. Locate mounting plate hole pattern under the sliding counter top and fasten the arm assembly to the underside using the 10-32 screws provided. Route the umbilical to the utility center. *See Figure 1.*
2. Install the self-contained water system and route its umbilical to the utility center. Connect the water system tubings to their appropriate connections.
3. Make all appropriate tubing connections for the delivery systems.

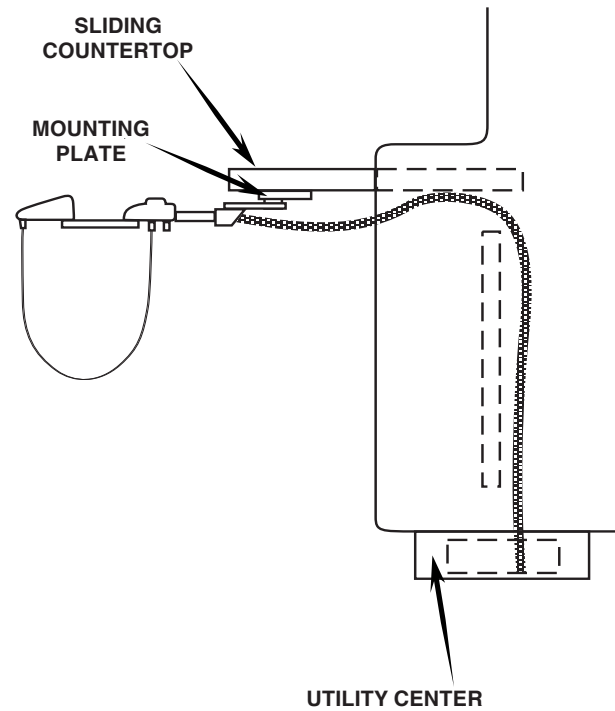


Figure 1. Left/Right Assistant's Instrumentation.

FINAL ADJUSTMENTS

FINAL ADJUSTMENTS

Adjust the air and water regulated pressure.

Check for any leaks.

SYRINGE

TIP STERILIZATION

1. To remove Syringe Tip, firmly grasp tip and pull away from Syringe head.
2. Replace the tip by inserting a new one into the tip socket, and firmly pushing into place until you feel it softly "pop" into place. To ensure it has been fully inserted, the uppermost small groove on the tip shank must be just visible over the end of the socket. *See Figure 2*

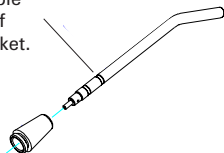
NOTE

Be sure to rinse all cleaning agents from the tip prior to sterilization. You may sterilize Syringe Tips by any of the following methods; Chemical Vapor, Ethylene Oxide or Steam Autoclave. Temperatures should never exceed 280 degrees Fahrenheit, (138 degrees Celsius).

INSTALLATION

1. Turn off Air and Water supplies.
2. Unscrew Syringe handle and determine which fitting leads to the air button.
3. Slide the Syringe handle down over the syringe tubing. Select the air side of the syringe tubing and connect to the air fitting on the syringe.
4. Repeat with the water tubing to the water fitting. Ensure that the unit end of the Syringe tubing is properly connected to the air and water supply fittings on the dental unit. Recommended operating pressures : Air 80 psi, Water 40 psi.

This groove must be just visible above tip of conical socket.



TROUBLE SHOOTING

Problem: *Water leakage around buttons.*
Solution: Replace the button assembly # C-1701 (See figure 2). Turn water and air supply off. Depress air and water buttons on Syringe to relieve residual pressure. Hold both buttons down and use a paperclip to push cross pin out of syringe head. Gently remove button from head, being careful not to lose conical spring beneath. To install new button, ensure that conical spring is seated with the small end pointing up. Gently push into place and hold both buttons down firmly while re-inserting cross-pin.

Problem: *Water spray when air button is pressed.*
Solution: Ensure tip is properly and fully inserted. If so, replace O-ring #R-C16004 (See Figure 2). Twist conical tip socket assembly (R-C21600-3) off of syringe head to access this O-ring. When re-installing tip socket assembly, hand tighten only. If tip cannot be fully inserted, then socket is too tight.

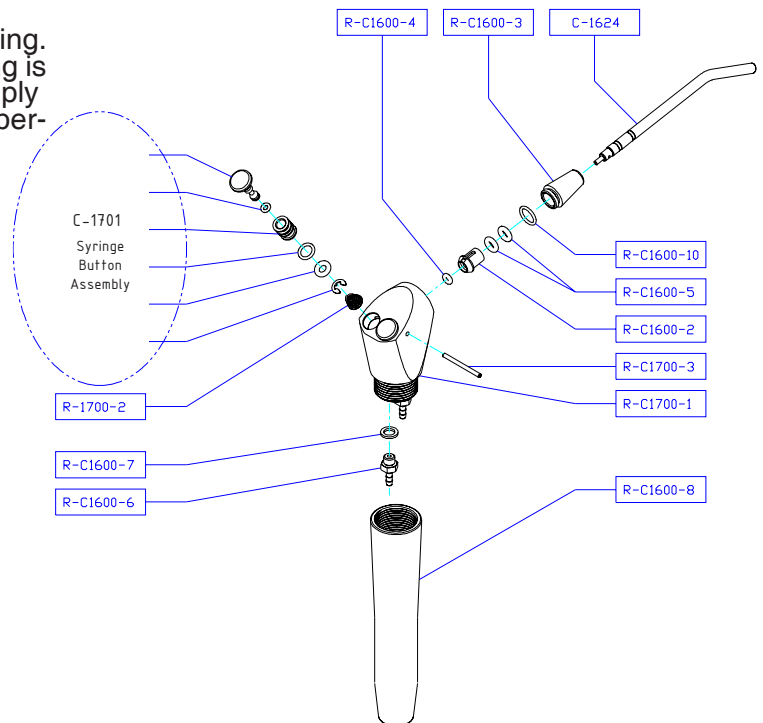


Figure 2. Syringe.

SERVICE AND MAINTENANCE

VACUUM VALVE

PRIOR TO STERILIZATION

Minimize the potential accumulation of debris that could interfere with the operation of the instrument by flushing clean water through it while working the valve lever open and closed several times.

1. Using mild cleaner and water, wipe all surfaces of the valve and dry with a clean, soft cloth.
2. Use a stiff HVE or SE cleaning brush of an appropriate size to dislodge internal buildup.

NOTE

Do not Ultrasonically clean, as instrument surface finishes may be damaged.

PERIODIC MAINTENANCE

If the operation of the valve becomes sticky or stiff, it may be necessary to remove the valve spool for a thorough cleaning and lubrication. Refer to the appropriate exploded view shown in Figure 3.

1. Gently lift one end of the plastic on/off lever (V-1103/V-1203) out from the indentation on the end of the spool.
2. Push the spool out of the valve toward that side and completely disengage the lever from the other end.
3. Clean the spool and inspect O-rings and replace those that have nicks, cuts, flat spots or show signs of wear. Lubricate O-rings with O-ring lube then reassemble the valve.

SURFACE DISINFECTION

Bleach or Sodium Hypochlorite solutions may permanently damage the valve. Some surface disinfectants that will not harm the valve are Birex SE, Sporidicin, Coldspor, Procide Spray, Sterall Spray, Asepti-IDC, Biocide, Promedyne, Iodo-Five, Wescodyne, and Cavicide.

METHODS OF STERILIZATION

You may sterilize Belmont Autoclavable Valves by any of the following methods: Chemical Vapor Method, Ethylene Oxide, Steam Autoclave or Dry Heat.

NOTE

Temperature should never exceed 280 degrees Fahrenheit, or 138 degrees Celsius. Do not place the instrument in close proximity to the sterilizer heating element. Avoid contact with the sterilizer walls.

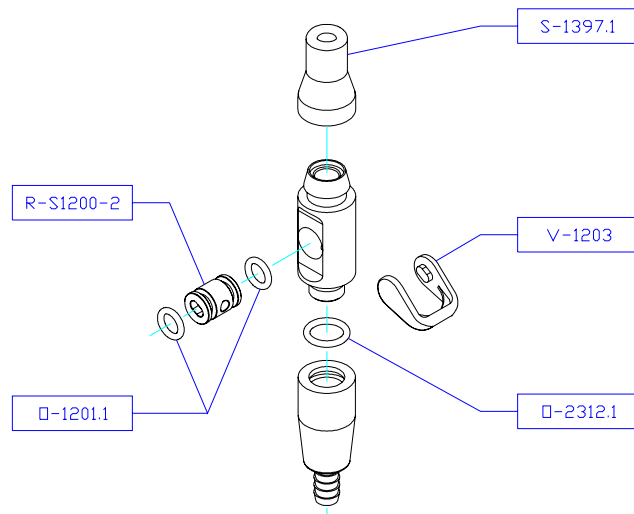
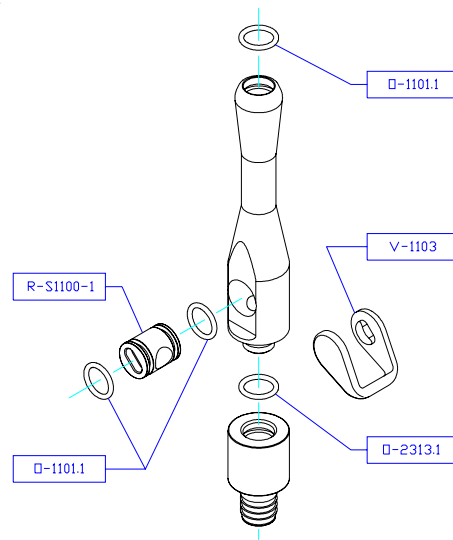
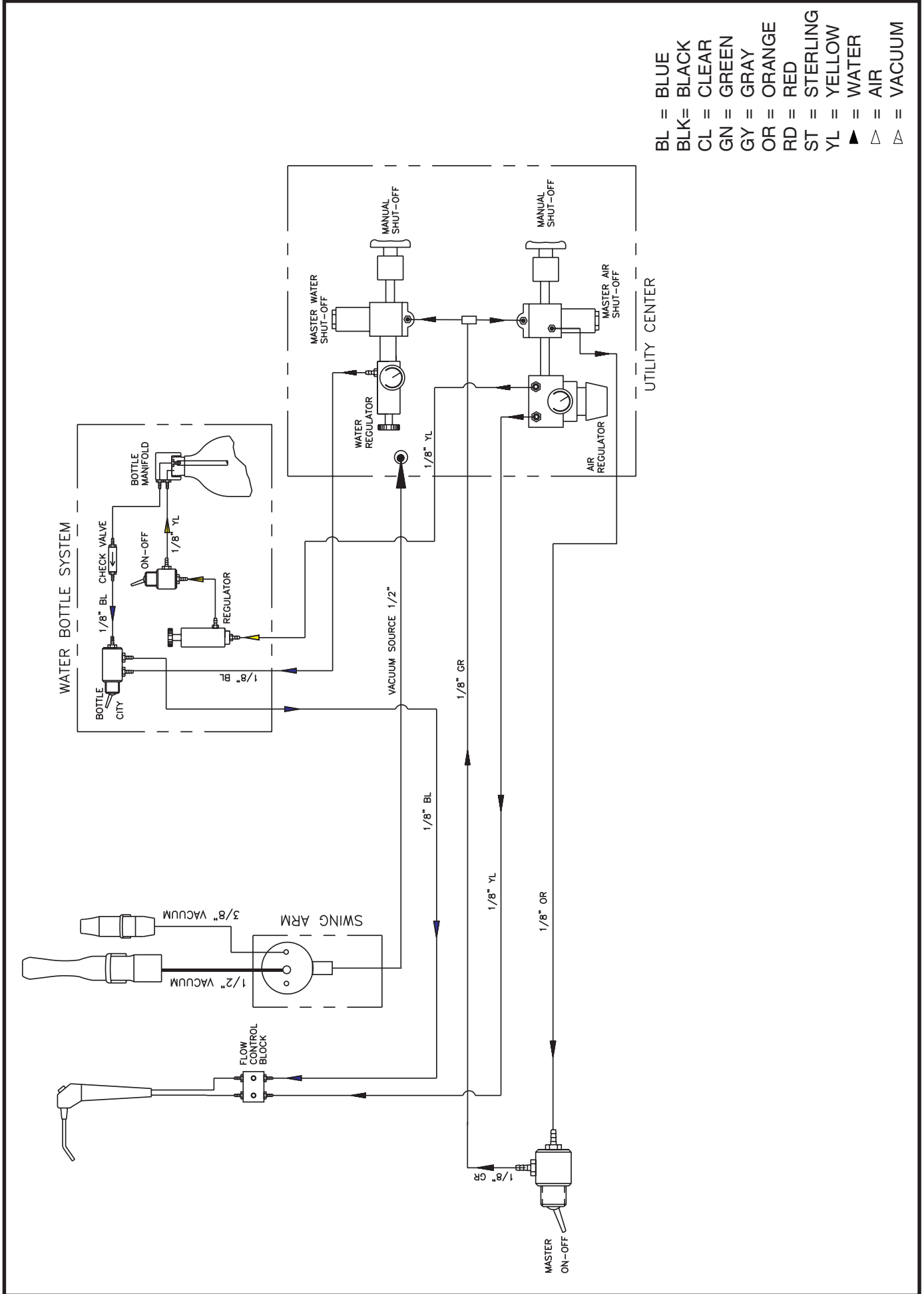
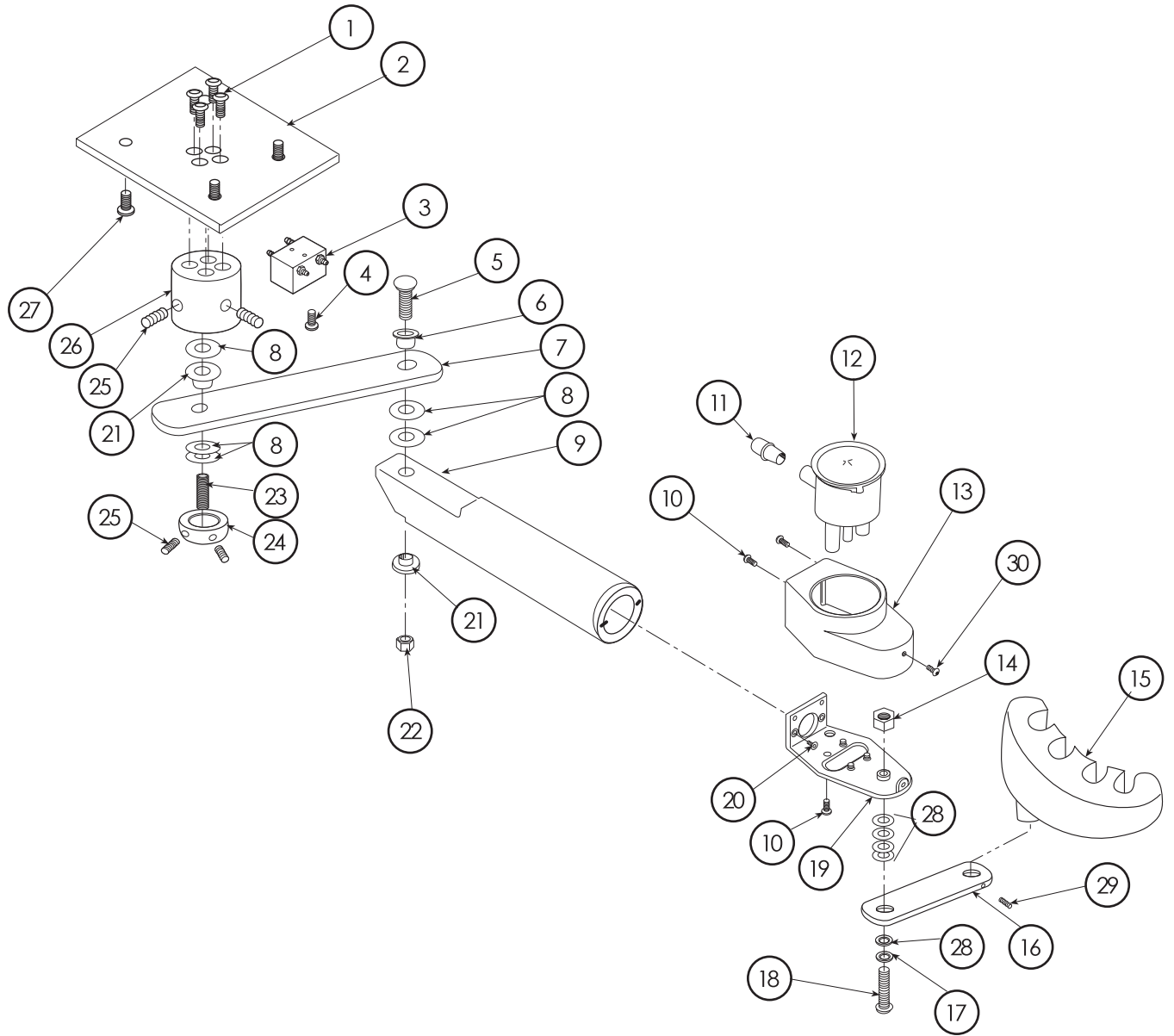


Figure 3. Vacuum Valves.

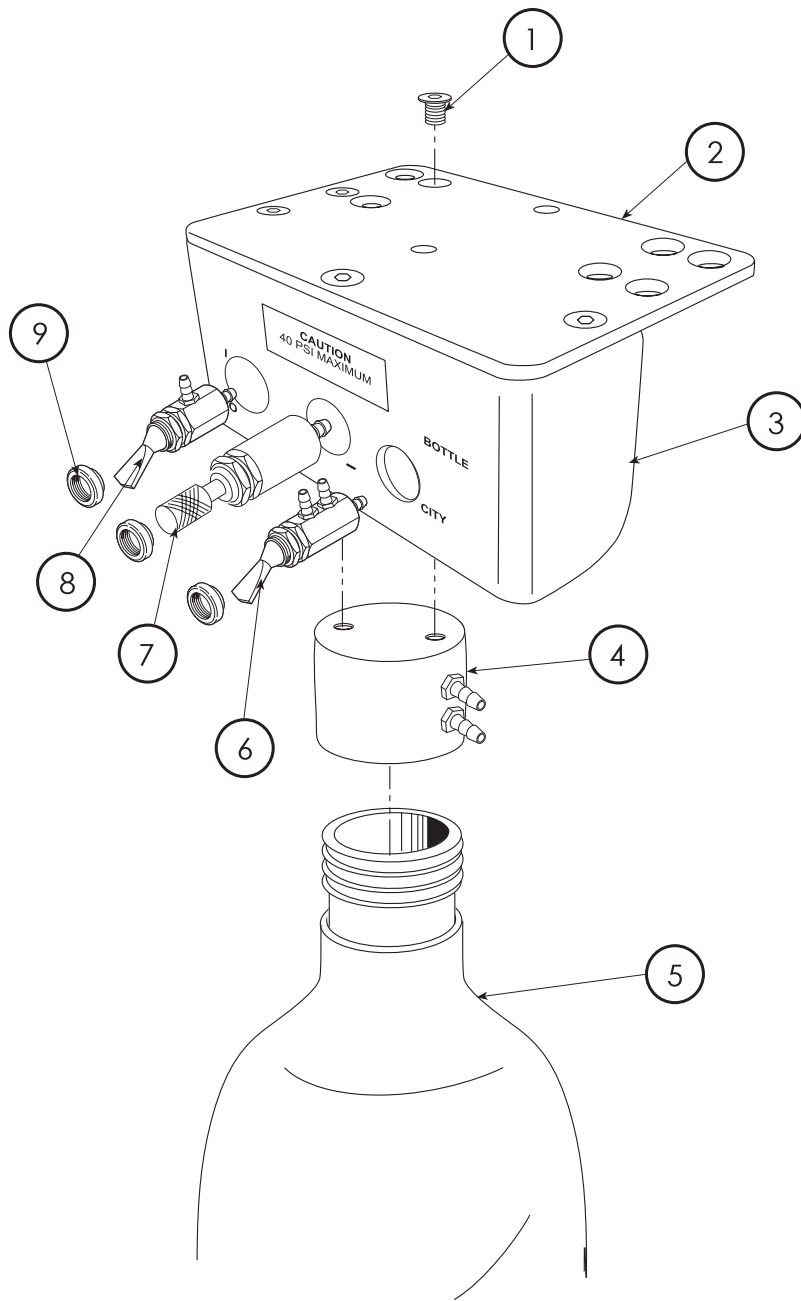


ASSISTANT'S DELIVERY SYSTEM SCHEMATIC
MODEL BDS-2563



REF. NO.	DESCRIPTION	PART NO.	QTY.
1	SCREW, 10-32 x 1/2	0012-107	4
2	SWING PLATE	0023-271	1
3	FLOW ADJUSTMENT BLOCK	0016-092	1
4	SCREW, 6-32 x 3/4	0012-612	1
5	SCREW, 3/8-16 x 1.5 BTTN HD	0012-357	1
6	PIVOT BUSHING	0006-037	1
7	LINK PIVOT	0023-606	1
8	PLASTIC WASHER	0011-013	5
9	VACUUM ARM PIVOT	0023-666	1
10	SCREW, 6-32 x 3/8	0012-615	4
11	CONNECTOR	0016-253	1
12	LOCKING CV CANISTER	1400-133	1
13	VACUUM ARM COVER	0023-255	1
14	NYLOCK NUT	6013-010	1
15	ASSISTANCE HOLDER, BELMONT	FASA85A0	1
16	ARM	1110-793	1
17	PLASTIC WASHER	0011-027	1
18	SCREW, 1/4-20 x 1-1/2	0012-263	1

REF. NO.	DESCRIPTION	PART NO.	QTY.
19	VACUUM PLATE	0023-256	1
20	SCREW, 6-32 x 3/8	0012-013	2
21	PIVOT BUSHING	0006-020	2
22	NYLON NUT, 3/8-16	6013-012	1
23	SET SCREW 3/8-16 X 2	0012-362	1
24	PIVOT CAP	0023-605	1
25	SET SCREW, 10-32 x 1/2	0012-151	4
26	HUB	0023-669	1
27	SCREW, 10-32 x 3/4	0012-101	4
28	WASHER, PLASTIC 1" DIA.	0011-016	5
29	SET SCREW, 6-32 x 1/4	0012-605	1
30	SCREW, 6-32 x 3/8	0012-615	1



REF. NO.	DESCRIPTION	PART NO.	QTY.
1	SCREW, 10-32 x 3/8 FLAT HEAD	0012-137	5
2	BRACKET	0023-244	1
3	ADAPTER PLATE	0023-247	1
4	PRESSURE HEAD ASSEMBLY	1100-281	1
5	BOTTLE, 1 LITER	0010-364	1
6	ROUTING VALVE	1100-404-F	1
7	REGULATOR	0020-029	1
8	ON/OFF TOGGLE SWITCH	1100-403-F	1
9	TRIM NUT	0013-016	3

SINGLE WATER BOTTLE SYSTEM
1700-116

11/15/05