BDS-2571
Belmont Assistant's
Instrumentation Installation

The following items are contained in this package:

- Vacuum canister/arm assembly.
- Instrument holder bar.
- One Air/Water Syringe
- One Autoclavable HVE assembly.
- One Autoclavable SE assembly.
- Mounting block and plate.
- One air/water accessory panel.
- Template for air/water accessory panel.
- Hardware package.

You will need the following tools and materials to install the BDS-2571.

Phillips head screwdriver
1/8" sleeve tool
1/8" Allen wrench

1. The BDS-2571 is designed to fit ECO-6 cabinets.

   The upper portion of the cabinet should be pre-drilled to accept the air/water accessory panel. If the cabinet is not pre-drilled, use the template provided to cut holes for the panel and mounting screws. Mount the panel with the washers and hex nuts pro vided.

NOTE

Belmont ECO-6 cabinets come with two sets of pre-drilled holes for the instrument package. One set is used if the instrument package is being used alone. The other is used when the instrument package is used in conjunction with the under the counter control unit and doctor's instrument bar. refer to Figure 1 for proper location of your set-up.

2. The underside of the cabinet counter-top has factory installed tee nuts for installation of the instrument package. Orient the mounting plate and block as shown in Figure 1. Use the 10-24 x 1/2" screws to mount the package to the underside of the counter-top.

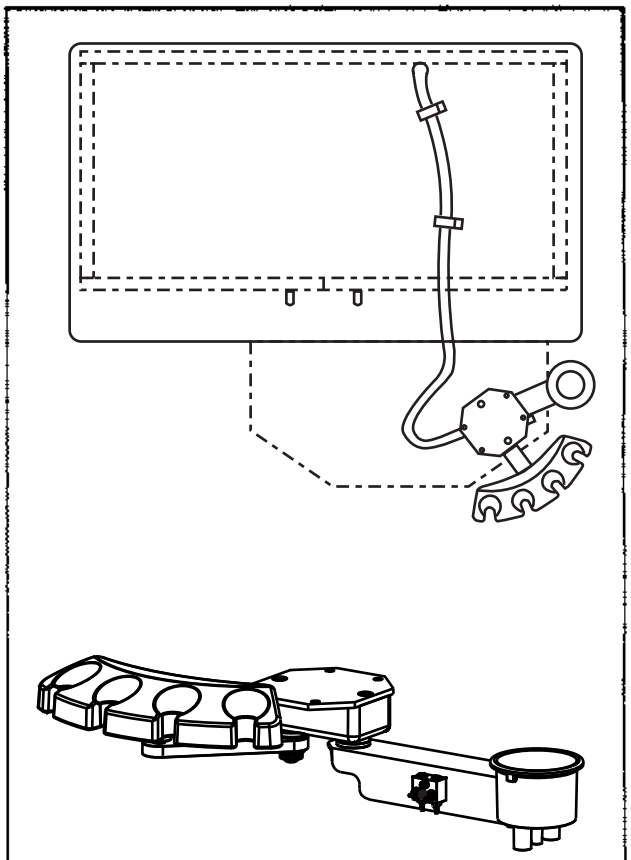


Figure 1

NOTE

It is important to position the cable clamps and route the umbilical as shown in figure 1, in order to ensure proper foldback of the umbilical when the counter-top is pushed in.

3. Install cable clamps for the umbilical using #10 woodscrews provided in the hardware kit. Holes are pre-drilled. refer to figure 1 for proper orientation of clamps. Position the clamps and umbilical as shown with the counter-top in the fully extanded position.

4. Route the syringe tubing and 5/8" umbilical into the hole provided in the back of the cabinet (Figure 1), and down to the utility center.Connect the ribbed syringe line to reguated air. Connect the remaining syringe line to regulated water. Connect the 5/8" umbilical to vacuum. (Figure 2, 3)

5. Route the Blue and Purple tubing from the accessory panel along the back of the cabinet and down to the utility center through the hole. Connect Purple line to regulated air. Connect Blue line to regulated water. (Figure 3)

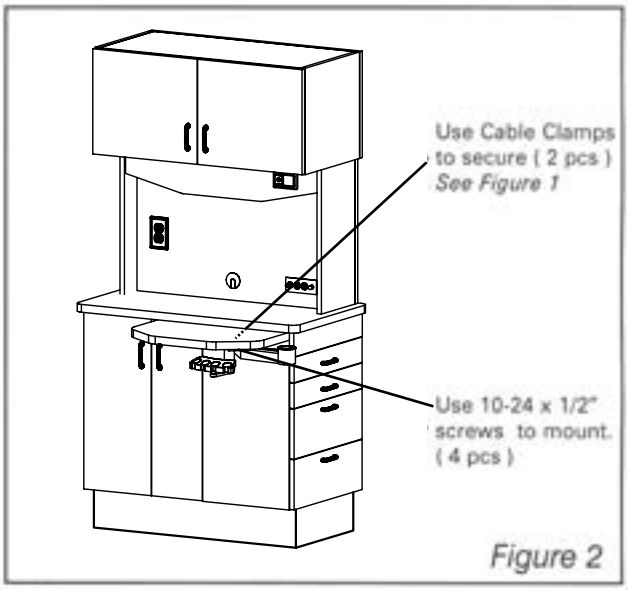
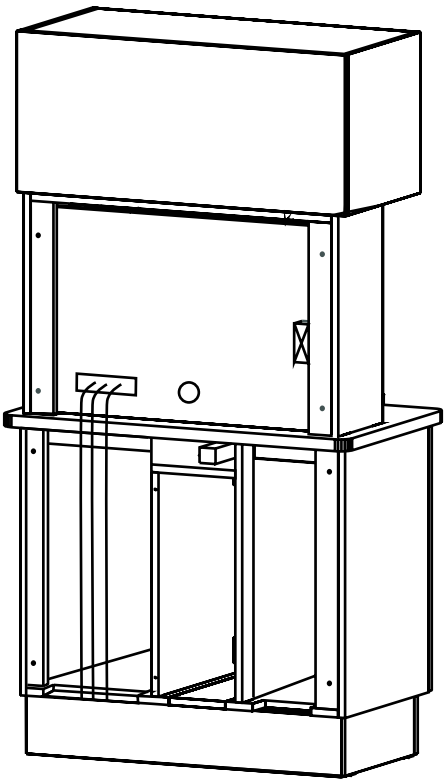


Figure 2

6. Open the manual shut-off valves in the utility center. Adjust regulated air to 80 p.s.i., and regulated water to 40 p.s.i. The regulators are non-relieving. When adjust ing for a lower pressure, make the knob adjustment and then press the syringe button to relieve pressure and give an accurate gauge reading.



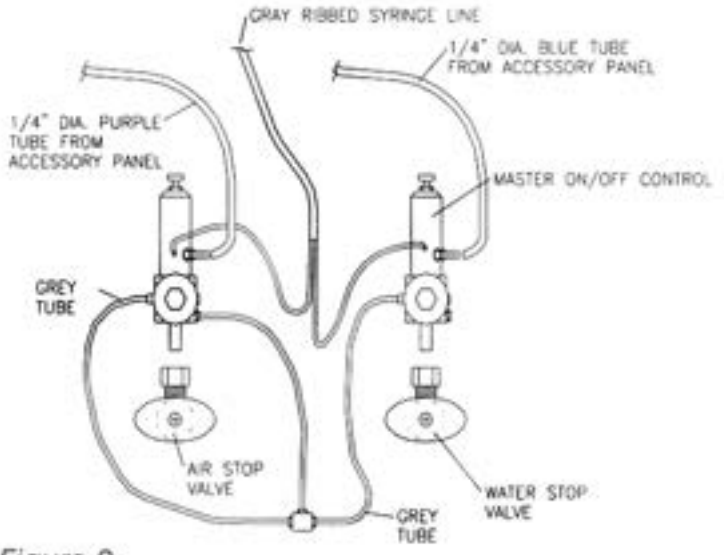
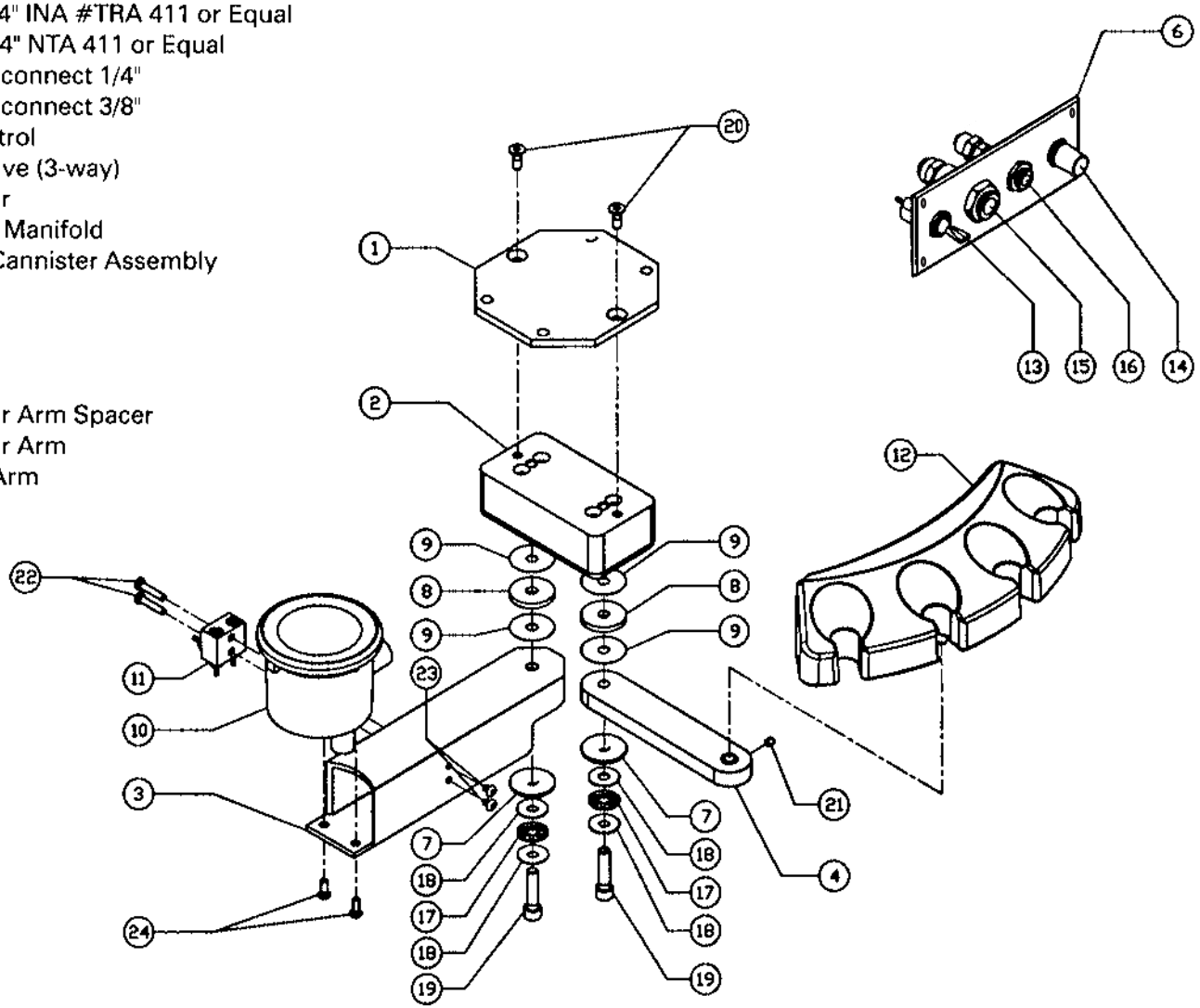


Figure 3

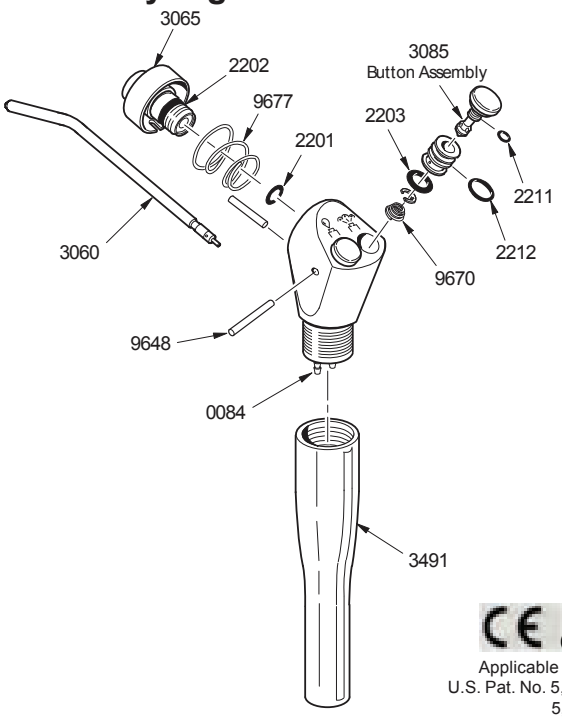
BDS-2571 PARTS LIST

ITEM	QTY	PART #	DESCRIPTION
24	2	RF-1031	Button Head Cap Screw, SS, #6-32 x 3/8" Lg
23	2	RF-1087	Button Head Cap Screw, SS, #6-32 x 3/16" Lg
22	2	RF-1088	Socket Head Cap Screw, SS, #6-32 x 3/4" Lg
21	1	RF-1089	Socket Set Screw, #6-32 x 3/16" Lg
20	2	RF-1029	Flat Head Socket Screw, #10-32 x 1/2" Lg
19	2	RF-1095	Socket Hd Cap Screw, #1/4-20 x 1" Lg
18	4	RF-1085	Thrust Washer 1/4" INA #TRA 411 or Equal
17	2	RF-1086	Thrust Bearing 1/4" NTA 411 or Equal
16	1	P-1068	Female Quick Disconnect 1/4"
15	1	P-1691	Female Quick Disconnect 3/8"
14	1	V-1511G	Needle Flow Control
13	1	V-1506-3	On/Off Toggle Valve (3-way)
12	1	FASA85B0	Instrument Holder
11	1	V-1521	Flow Adjustment Manifold
10	1	R-S1386	Solids Collector Cannister Assembly
9	2	RF-1084	Mylar Washer
8	2	RF-1083	Plastic washer
7	2	RF-1174	Steel Washer
6	1	R-S1840-6	Q.D. Plate
5	1	R-S1840-5	Instrument Holder Arm Spacer
4	1	R-S1840-4	Instrument Holder Arm
3	1	R-S1840-3	Solids Collector Arm
2	1	R-S1840-2	Mounting Block
1	1	R-S1840-1	Mounting Plate



DCI International
PO Box 228
305 N. Springbrook Rd.
Newberg, OR 97132 USA
503-538-8343
800-624-2793

Quick Clean Standard Syringe



Syringe Parts

#0084	Barb, 8-32 & Washer	(Pkg. 10)
#2202	O-Ring	(Pkg. 12)
#2203	O-Ring	(Pkg. 12)
#2211	O-Ring	(Pkg. 12)
#2212	O-Ring	(Pkg. 12)
#2201	O-Ring	(PKg. 12)
#3060	Syringe Tip	(1 ea.)
#3061	Syringe Tip	(Pkg. 5)
#3059	Syringe Tip	(Pkg. 50)
#3065	Tip Adapter Assembly	
#3085	Button Valve Assembly	
#3491	Handle, Quick-Clean Syringe	
#9648	Pin, Quick Clean Syringe Button	
#9670	Spring, Syringe Button	
#9677	Spring, Tip Adapter	

CE 0413

Applicable Patents:
U.S. Pat. No. 5,125,835
5,199,871

INSTALLATION

Turn off the air and water supplies. Determine which of the syringe tubes leads to the air button, and connect that tube to the air outlet on the dental unit or syringe manifold. Connect the other tube to the water outlet. For circulating syringes, the third tube is the return water, and is routed to the drain. Recommended operating pressures: Air 80 psi, Water 40 psi.

TIP STERILIZATION

Because there are many types of Autoclaves in use around the world, it is difficult to provide guidance on specific instructions of operating each. Follow the manufacturer's instructions whenever possible.

Be sure to thoroughly rinse and clean tips prior to sterilization, any debris may reduce the effectiveness of the sterilization.

Recommended sterilization process is steam autoclave. Recommended parameters are 125°C (250°F) and 106 kPa (15lb/in²) for 40 minutes at temperature and pressure.

The units of pressure marked on an autoclave's pressure gauge many vary from one autoclave to another.

15lb/in² (15 pounds per square inch)

106 kpa (106 kilopascals)

1 atm (1 atmospher)

1 kgf/cm² (kilogram of force per square centimeter

776 torr

776 mm Hg (776 milimeters of mercury)

TROUBLESHOOTING & REPAIR

Leakage around the button

Replace the button assembly #3085. To remove the button, hold buttons down, remove the retaining pin & gently lift under the button. When re-installing the button, be sure the spring is properly seated, with the smaller end facing upward. While holding both buttons down, insert the retaining pin through the syringe head.

Alternatively, you may replace the O-rings on the button assembly, using Syringe Repair Kit #3066. After removing the button, slide the E-ring from the stem, and pull the button from the spool.

Momentary spurt of water when the air button is pressed

Check first to ensure that the syringe tip is undamaged and fully seated in the tip adapter assembly. If it is the O-ring (#2201) under the tip adapter assembly it should be replaced. Remove the tip, and use a 5/32-inch hex key to unscrew the assembly from the syringe head.

Use a dental pick or a bent paper clip to remove the small O-ring from the bottom of the bore in the syringe body. Be careful not to nick or scratch the sealing surfaces. The best way to install the replacement O-ring is to slip it onto the end of a syringe tip, apply silicone lubricant, then insert it into the bore.

Before reinstalling the tip adapter assembly, look down into the bore in the syringe body and assure that the alignment pin is in place. With the spring in place in the collar, align the slot in the collar with the pin, then push the collar into the syringe body. Tighten the assembly firmly, holding the hex key by the short end, with the long end inserted into the tip adapter assembly. By holding the hex key this way, you will have approximately the right torque.

Cleaning Syringe Head

Follow ADA recommended Dental office procedures and protocol.

Instrumentaton Maintenance and Care
Autoclavable Vacuum Valves

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.

Using mild cleaner and water, wipe all surfaces of the valve and dry with a clean, soft cloth.

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 below.

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.

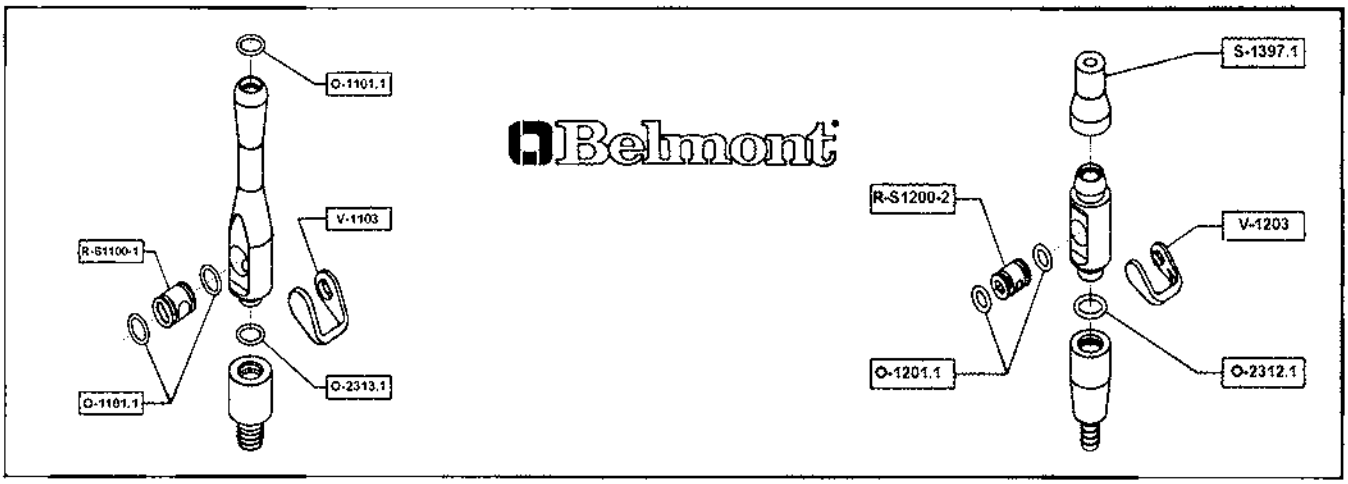
Surface Disinfection

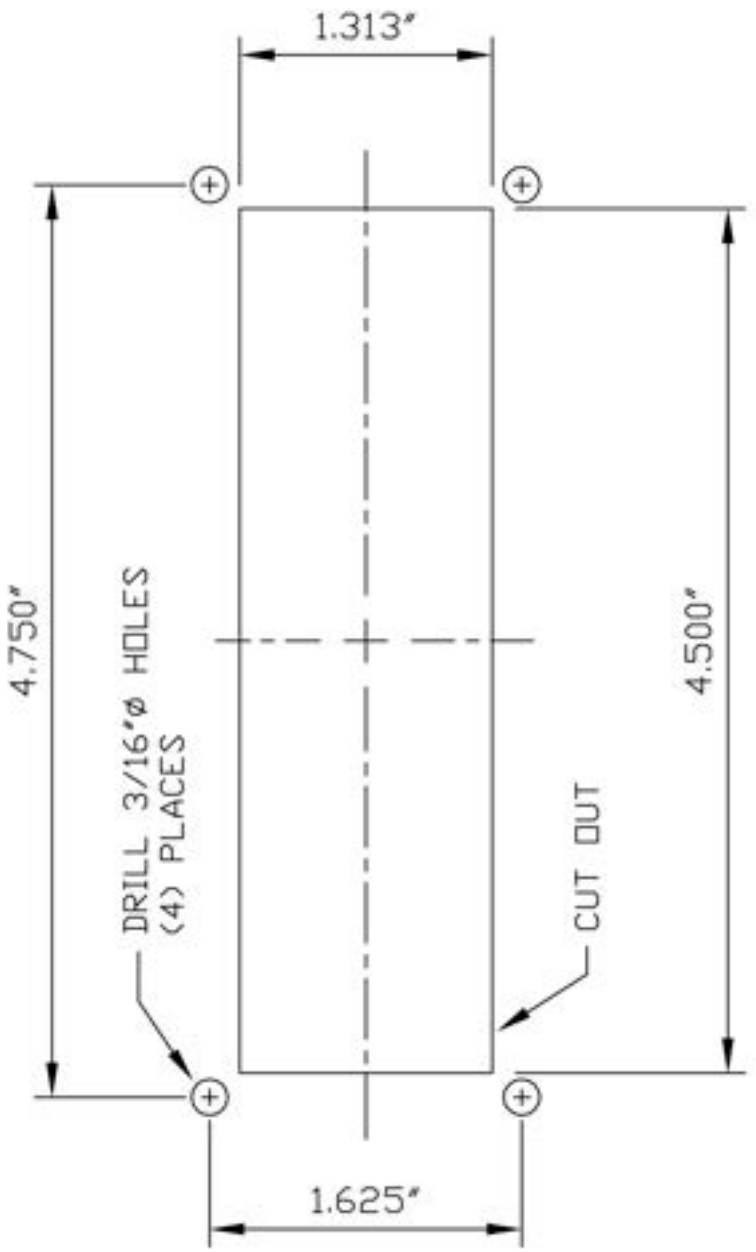
Bleach or Sodium Hypochlorite solutions may permanently damage the valve. Some surface disinfectants that will not harm the valve are Birex SE, Sporicidin, Coldspor, Procide Spray, Sterall Spray, Asepti-IDC, Biocide, Promedyne, Iodo-Five, Wescodyne, and Cavicide.

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. Temperatures should never exceed 280 degrees Farenheit, or 138 degrees Celsius.

Do not place the instrument in close proximity to the sterilizer heating element. Avoid contact with the sterilizer walls.





BDS-2571 AIR/WATER ACCESSORY PANEL MOUNTING/DRILLING TEMPLATE