



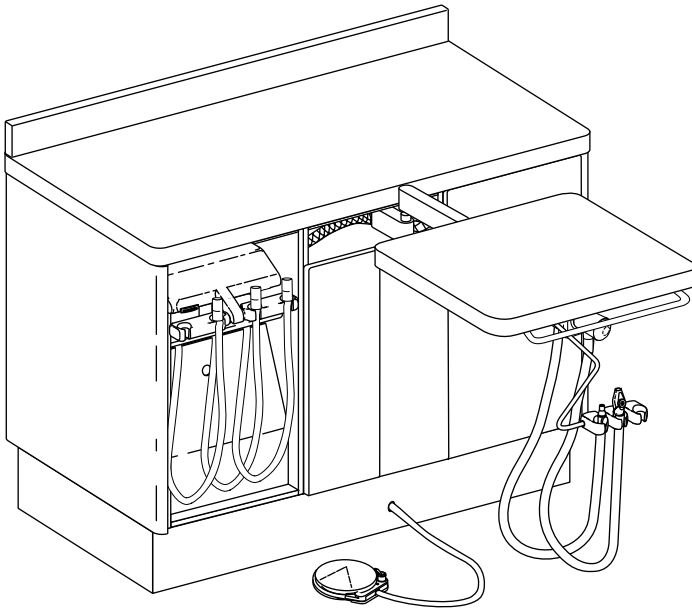
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CHECK WITH LOCAL CODE AUTHORITIES ABOUT INSTALLATION REQUIREMENTS FOR THIS PRODUCT

INSTALLATION INSTRUCTIONS CASCADE® 3181 DUO DELIVERY SYSTEM TO PREFERENCE COLLECTION™ 5580



CASCADE 3181 DUO DELIVERY SYSTEM

YOU WILL NEED:

- Diagonal cutters
- 15/16" socket
- 1/4" or adjustable wrench
- Measuring tape
- Phillips screwdriver
- Small, flat-blade screwdriver
- Hex key set
- Torque wrench
- Pliers
- Pencil
- Silicone sealant

BEFORE BEGINNING THE INSTALLATION

If the air and water manual shutoff valves have not been installed, install them now.

INSTALL THE CONTROL HEAD

1. Remove the cover from the cabinet by lifting it up and off the dowels.

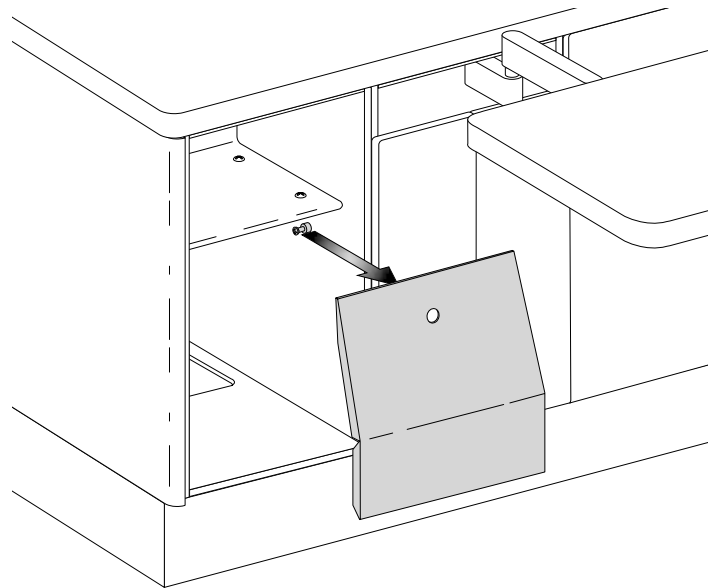
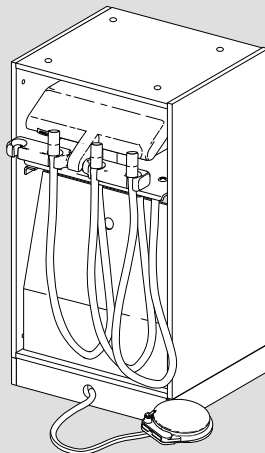


FIGURE 1

NOTE

To install the control head housing cabinet, refer to the Appendix on page 8.



2. Pull the mounting surface out from the cabinet.
3. Install the mounting bolt, races, and bearing to the mounting surface as shown in Figure 2.

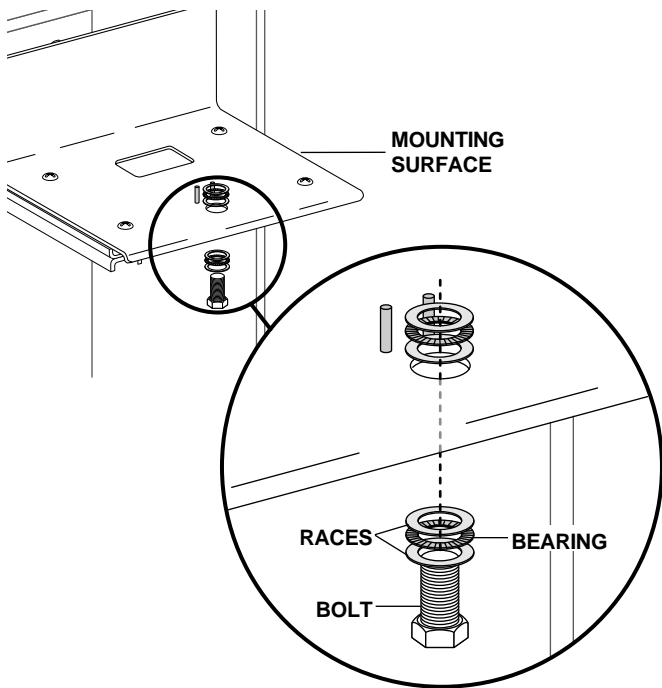


FIGURE 2

4. Tape the bolt to the underside of the mounting surface.

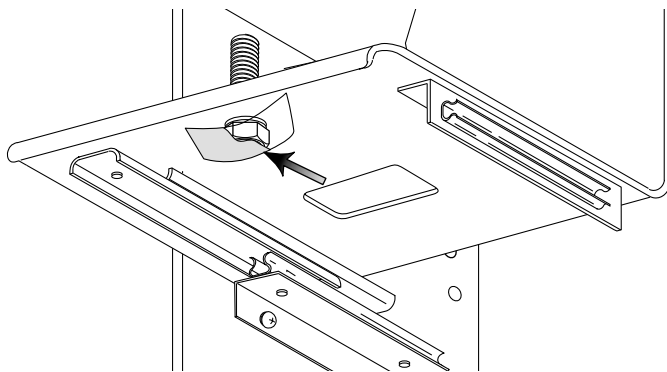


FIGURE 3

5. Place a bead of Loctite around the top threads of the mounting bolt.

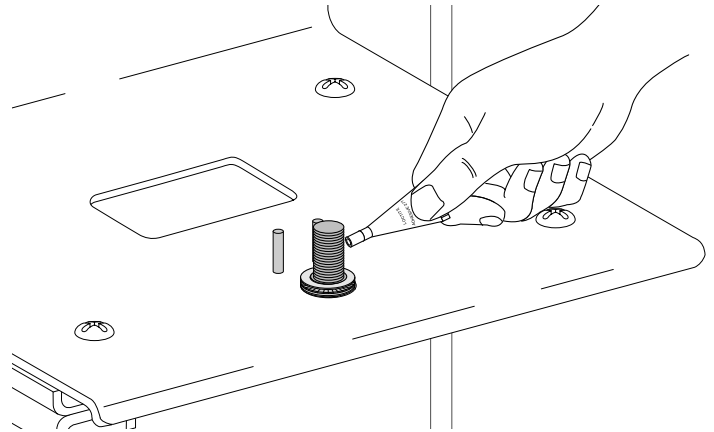


FIGURE 4

6. Place the control head over the mounting bolt, making sure the pin extending from the back of the mounting post is between the rotation stop pins. Remove the tape, then hand-tighten the mounting bolt.

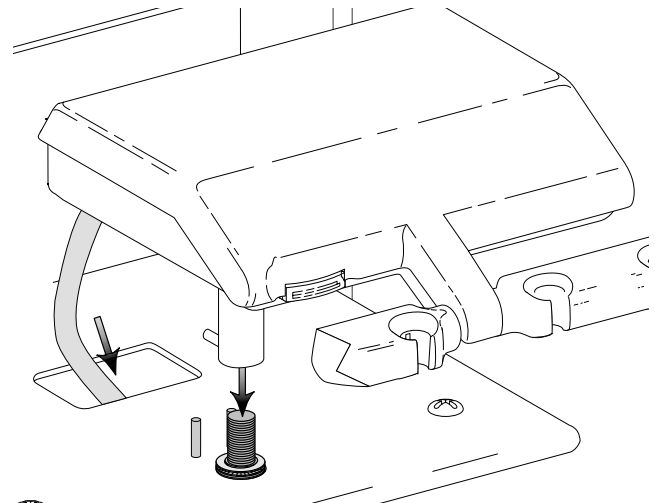


FIGURE 5

7. Using a wrench, tighten the mounting bolt so that the control head rotates at the desired resistance.
8. Route the umbilical down through the umbilical hole in the mounting platform (see Figure 5).

- Slide a cable tie from the kit through the clip on the underside of the mounting surface. Route the umbilical over the clip and secure it firmly in position with the cable tie. Trim the end off the cable tie.

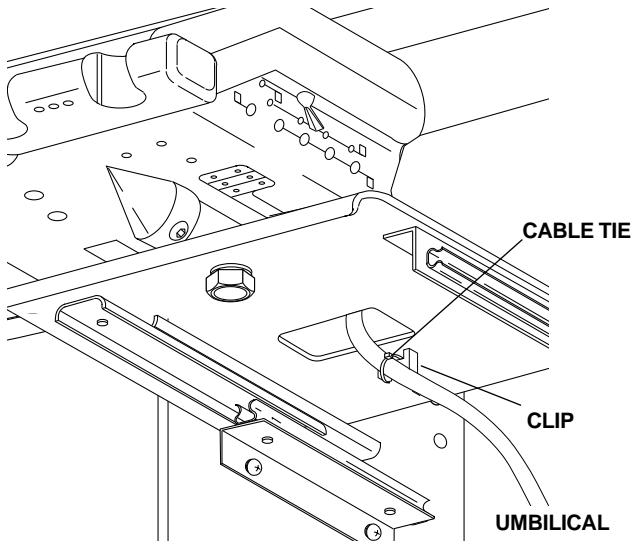
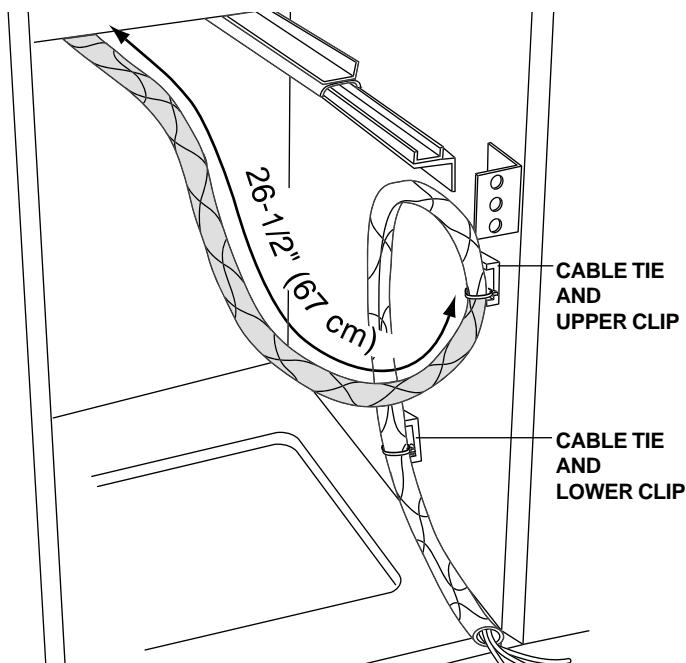


FIGURE 6

- Measure and mark the umbilical 26-1/2" (67 cm) from the underside of the mounting surface.
- Slide two cable ties from the kit through the two clips on the inside of the cabinet (see Figure 7).
- Make a loop in the umbilical as shown in Figure 7. Secure the umbilical (marked at 26-1/2" [67 cm]) to the upper clip.



VIEWED FROM THE BACK

FIGURE 7

- Secure the umbilical to the lower clip with the cable tie (see Figure 7).
- Trim the ends off the cable ties.

INSTALL THE FOOT CONTROL

- Insert the foot control tubing through the hole in the cabinet base.

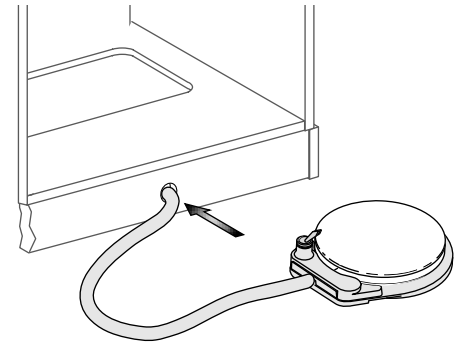


FIGURE 8

INSTALL THE ASSISTANT'S INSTRUMENTATION TO THE WORK SURFACE

- Remove the two button-head screws and washers from the underside of the work surface.

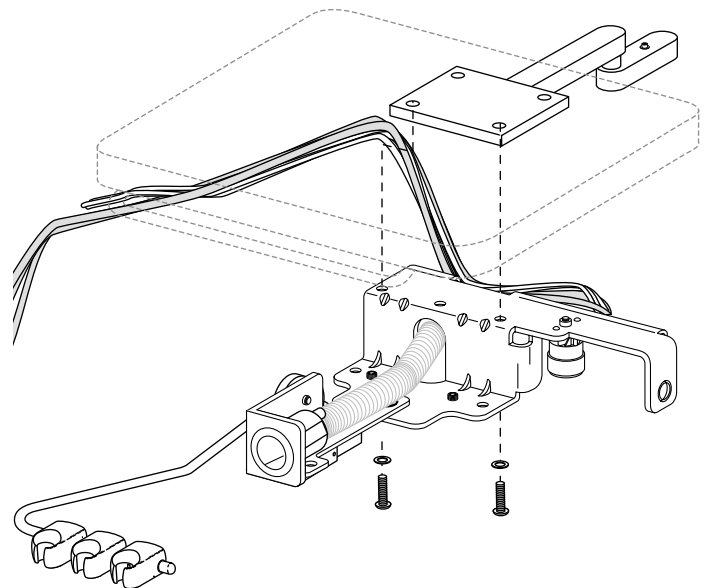


FIGURE 9

- Using the two screws and washers, install the delivery system assembly to the work surface (see Figure 9).

3. Install the umbilical clip in the upper right corner of the cabinet, then route the umbilical through the clip and to the utilities.

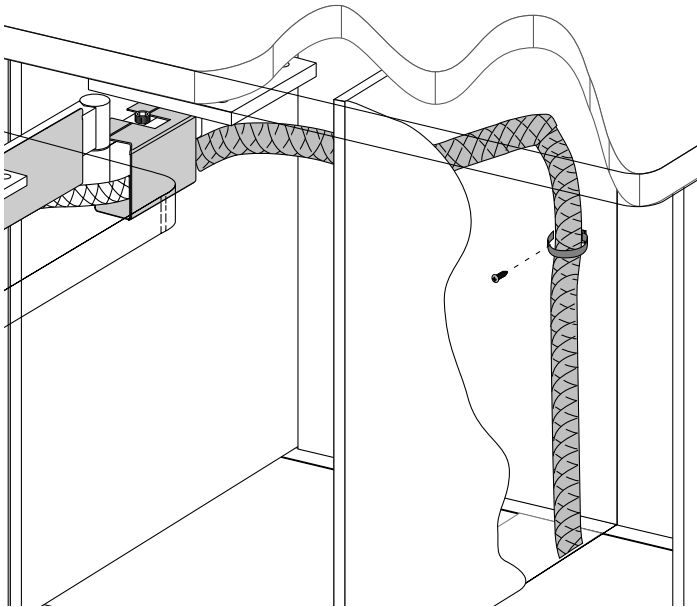


FIGURE 10

4. Slide the umbilical through the umbilical cover, then install the cover to the work surface arm using two button-head screws from the kit. Secure the umbilical by clipping the second umbilical cover over the work surface arm.

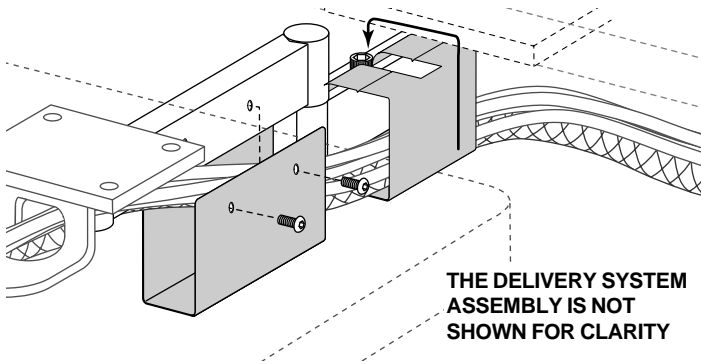


FIGURE 11

INSTALLING THE UTILITIES

1. Purge the air and water supplies of debris.
2. Loosen the hex nut on the air manual shutoff valve.

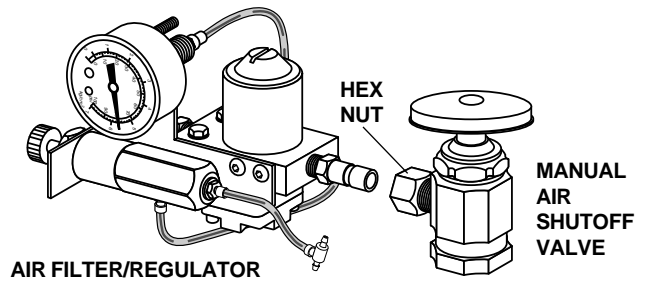


FIGURE 12

3. Connect the air filter/regulator to the manual shutoff valve (see Figure 12). Do not overtighten the fittings.

INSTALL THE OPTIONAL POWER SUPPLY

Install the power supply. Refer to the installation instruction that came with the power supply.

CHECK UNIT CONNECTIONS

1. Connect the foot control tubing to the umbilical tubing from the control head (see Figure 13).
2. Connect the tubing as necessary (see Figure 13).

NOTE

If installing the delivery system without the assistant's instrumentation module, go to **INSTALL THE SELF-CONTAINED WATER BOTTLE**.

Otherwise, go to **TEST THE UNIT** on page 6

INSTALL THE SELF-CONTAINED WATER BOTTLE

1. Install the mounting bracket for the self-contained water bottle to a convenient location near the utilities.
2. Install gray twin tubing to the upper and lower ports of the water bottle cap, using uni-clamps to secure the connections (see Figure 14).
3. Install the upper gray tubing from the water bottle to the preset-regulator, using a uniclamp to secure the connection (see Figure 14).
4. Install the lower gray tubing to the red tubing from the umbilical, using a uniclamp to secure the connection (see Figure 14).

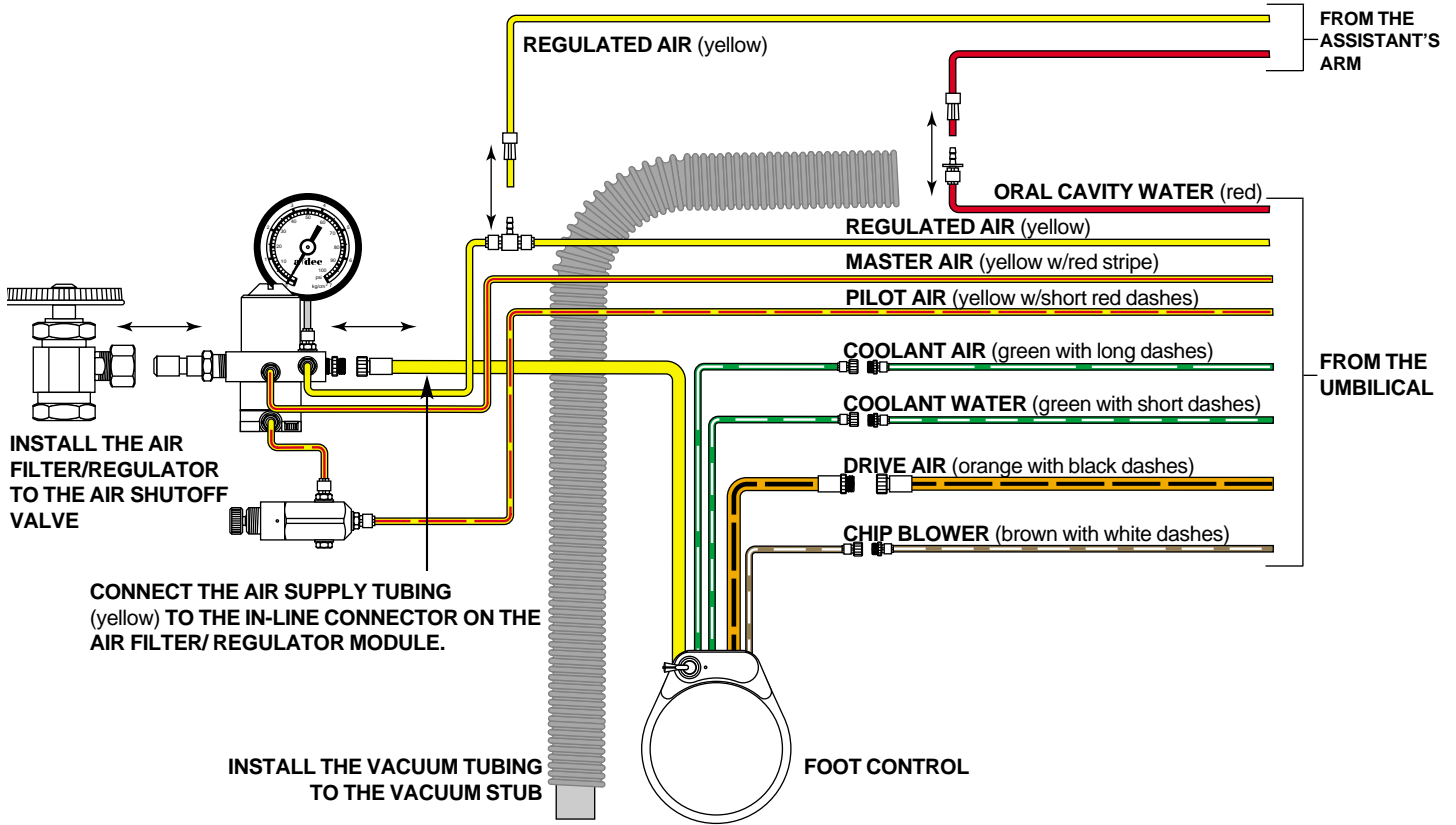


FIGURE 13
ASSISTANT'S INSTRUMENTATION MODULE INSTALLED

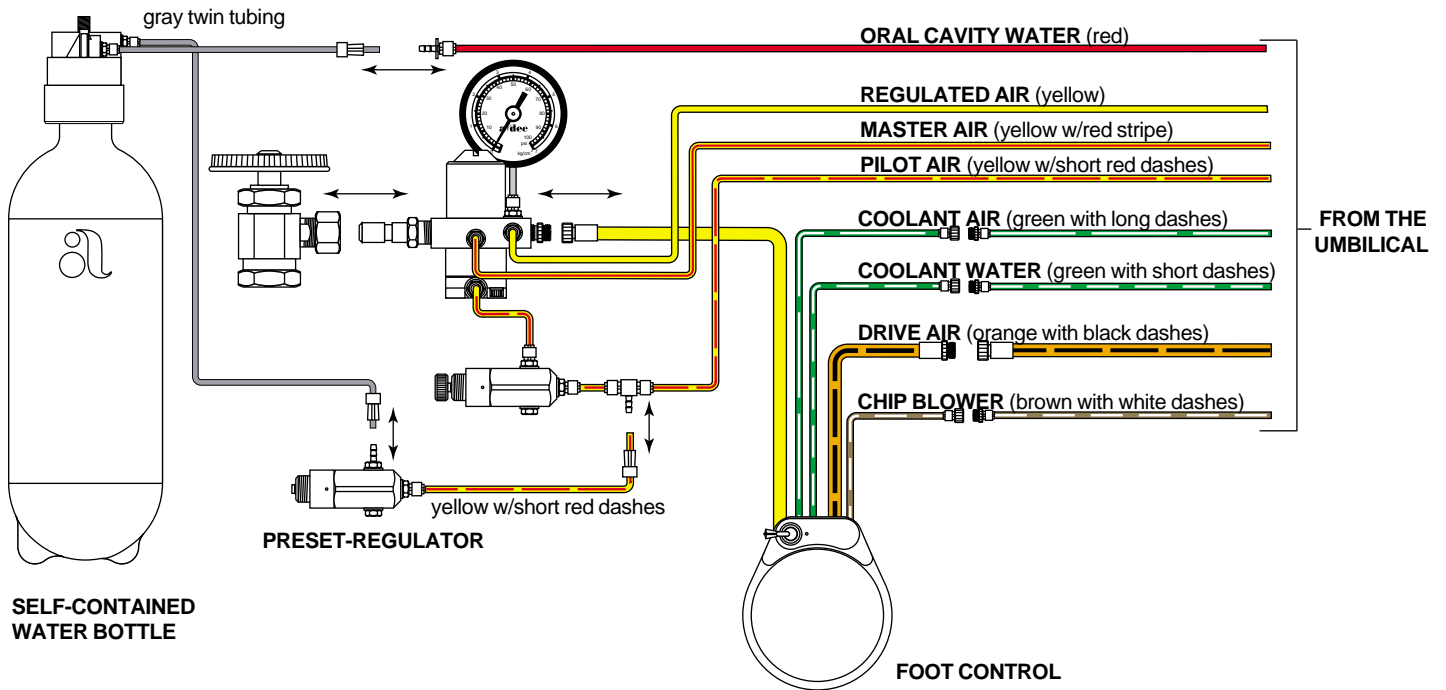


FIGURE 14
ASSISTANT'S INSTRUMENTATION MODULE NOT INSTALLED

LEVEL THE WORK SURFACE

1. Cut the slotted plastic shims from the kit in half.
2. Loosen the work surface mounting screws.
3. Insert shims between the work surface and the mounting bracket until the work surface is level.

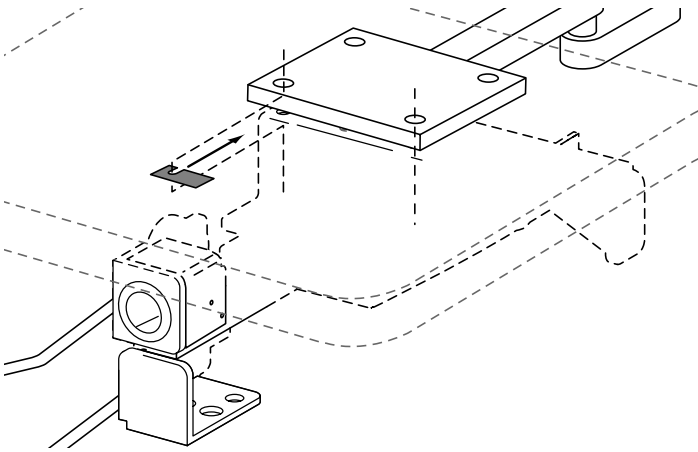


FIGURE 15

TEST THE UNIT

1. Fill the self-contained water bottle with water specified by the dental team.

NOTE

The doctor may object to putting office water through the unit. Check with the doctor before putting water in the bottle.

2. Align the bottle with the self-contained water supply cap, making sure the clear tubing (1/4" OD) extends straight down into the water bottle. Screw the water bottle onto the cap until it is snug.
3. Fully open the manual air and water shutoff valves.
4. Move the master on/off toggle (located on the control head) to the ON position.

MASTER ON/OFF TOGGLE

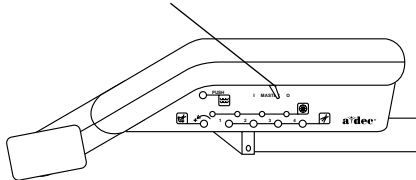


FIGURE 16

5. Check for air and water leaks while operating the syringe.
 - Air — Press the right button down.
 - Water — Press the left button down.
 - Spray — Press both buttons down.

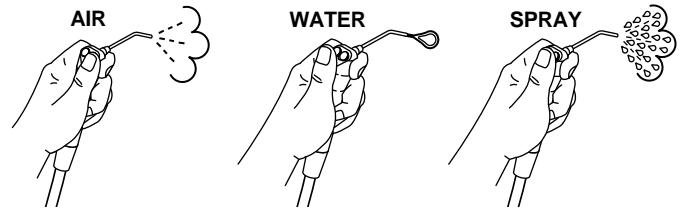


FIGURE 17

6. If the assistant's module is present, install the HVE vacuum connector from the kit into the vacuum canister.

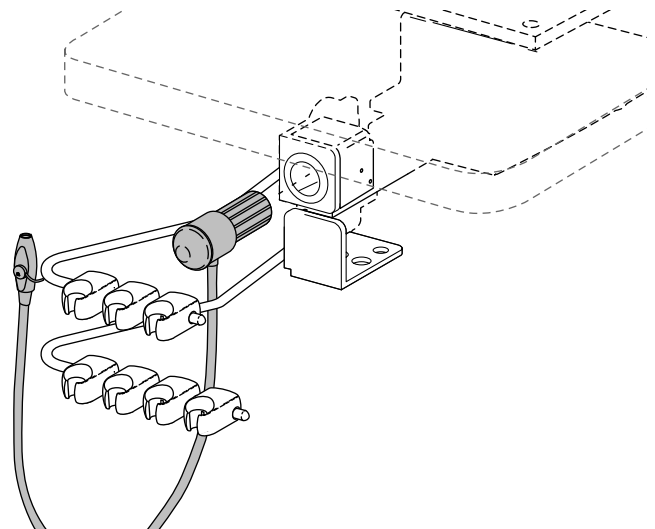


FIGURE 18

7. Check for vacuum leaks while operating the HVE.

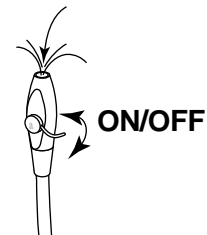


FIGURE 19

8. Check the system pressure gauges. Air pressure should be 70–80 psi (483–552 kPa) and water pressure should be 35–40 psi (241–276 kPa).

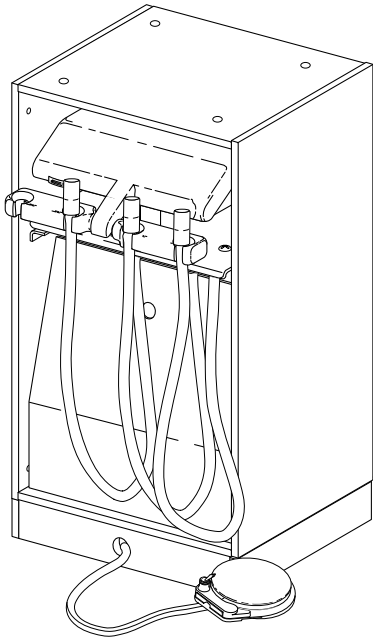
9. If an optional power supply is installed, plug it in.
10. Test all optional electrical accessories. Refer to each electrical accessory ***Owner's Guide*** for testing and adjustment procedures.

BEFORE LEAVING THE FACILITY

1. Replace all covers and doors.
2. Distribute and review the ***Owner's Guide***. Instruct the dental team in the operation and maintenance of the equipment.

APPENDIX

CONTROL HEAD CABINET INSTALLATION INSTRUCTIONS



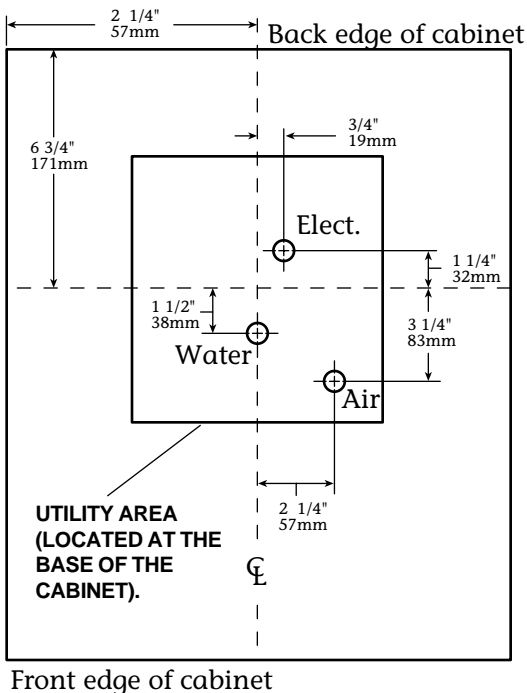
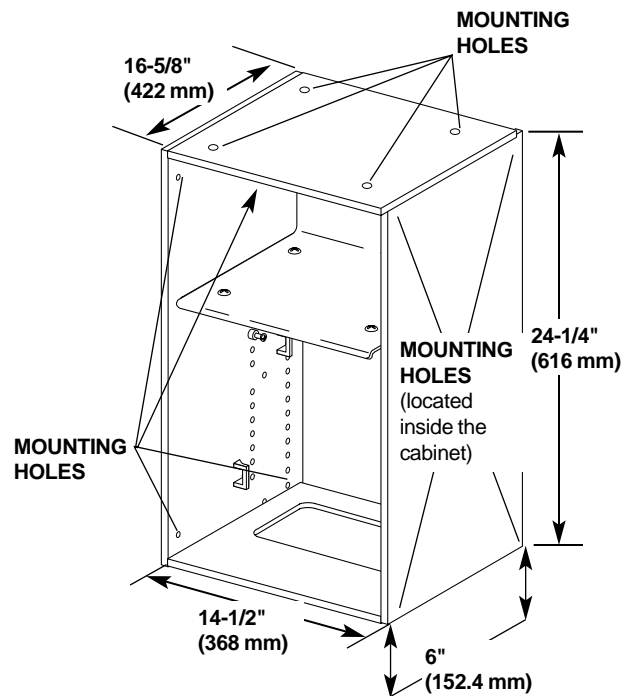
INSTALL THE CONTROL HEAD HOUSING CABINET

The control head housing cabinet is predrilled with locating holes that are drilled halfway through on the inside cabinet walls and the top.

1. Determine the mounting location of the housing cabinet. The cabinet must be 6" [152 mm] above the floor to accommodate plumbing connections.
2. Drill through the mounting holes to be used during installation.
3. Move the cabinet into its mounting location.

BEFORE BEGINNING THE INSTALLATION

If the air and water manual shutoff valves have not been installed, install them now. Purge the air and water supplies of debris.



4. Secure the cabinet in place. Level it, if necessary.

UTILITIES LOCATION