

# STANDARD UTILITY CENTER #8320, 8321, 8322

## Installation Instructions



This instruction covers installation of the DCI Standard Utility Center for dental units. The “hard” plumbing must be in place before proceeding with this installation. All plumbing must conform with prevailing code, and should be installed by a licensed contractor. Refer to the Utility Center Template (DCI drawing no. 13708) for the layout of permanently installed utilities.

### TOOLS AND SUPPLIES

You will need the following tools and supplies to complete the utility center installation.

1. Fasteners to mount the utility center housing to the floor or wall, along with the tools needed for the fasteners selected.
2. Open End Wrenches: 5/8”, 9/16”, and 15/16”.
3. Thread compound or Teflon tape.

### INSTALL THE UTILITY COMPONENTS

It is generally easier to install the valves and regulators on the plumbing before installing the utility center housing. However, if a housing is to be installed later, you should drill the mounting holes now, before the locations become obstructed.

1. Install the manual shut-off valves on the air and water pipes, using pipe compound or teflon tape. Use a 15/16” wrench to firmly tighten the valves, leaving them facing in the direction shown in (Figure 1).
2. Turn on the air and water supplies and check for any leakage around the manual shut-off valves.
3. Identify the master shut-off valves by the color of tubing connected to them: blue for water and transparent for air.
4. Insert the compression tube of each into the corresponding manual shut-off valve, with the outlet fittings facing upward. Use a 5/8” wrench to tighten the compression nut.

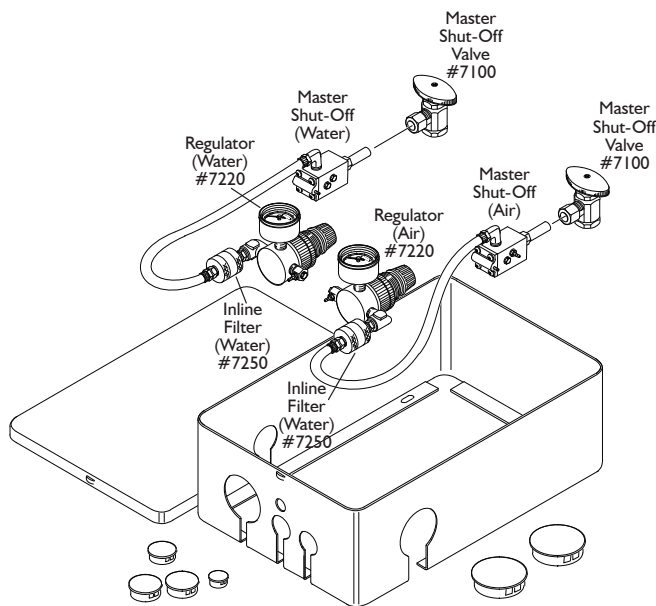


Figure 1

The utilities installed by the contractor include water (typically at 40 to 80 psi), compressed air (at 80 to 100 psi), central vacuum, and electrical outlets. Some installations also require a gravity drain connection.

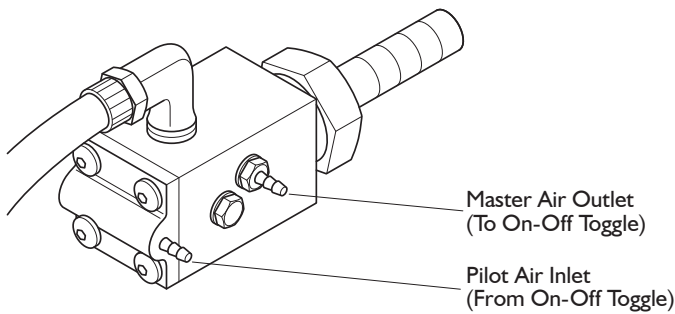
### IMPORTANT

**Prior to installing the manual shut-off valves, the pipes must be thoroughly flushed to expel pipe scale, solder, or any other debris. Such debris will clog filters and, if it enters the dental unit can significantly impair performance and necessitate major repairs.**

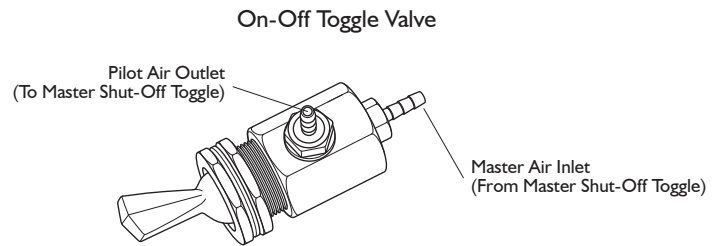
### TUBING CONNECTIONS

Although the tubing connections and corresponding color codes described here apply specifically to units manufactured by DCI, this utility center may be used with virtually any dental unit. On units other than DCI, you will need to identify the function of each tube, then attach it to the proper connection.

### Master Shut-Off Valve for Air



**Figure 2**



**Figure 3**

1. Identify the plated 1/16" barb fitting on the side of the master shut-off valve for air (*Figure 2*). This outlet provides air for the on-off toggle valve. On DCI units there is a transparent tube that goes to the inlet barb on the on-off toggle valve. Connect this tube to the barb on the master shut-off valve.
2. The 1/16" brass barb fitting on the plastic cap of the air master shut-off valve is the pilot air inlet (*Figure 2*). Connect to this barb the yellow tube that comes from the outlet side of the on-off toggle valve.
3. It is sometimes desirable to install an on-off toggle valve on the utility center. A 1/2" diameter hole is provided on the utility center housing for mounting the valve. *Figure 3* shows the tubing connections for a typical on-off valve.
4. All other connections will be made on the air and water regulator assemblies.
5. Typical DCI units have 1/4" and 1/8" yellow tubes to be connected to the air regulator. The water tubes may be either blue or red, and connect to the water regulator.

In some cases, the foot control supply tube may be connected directly to the air regulator. Look for a rib molded into the side of the foot control tubing to identify the tube that connects to the air supply.

### TEST THE UNIT

1. Turn on the manual on-off valves, then flip on the on-off toggle valve. Check all tubing connections for leakage before closing the utility center.
2. After several days of operation, check the in-line filters. If there is a heavy accumulation of debris, we recommend that you have a plumber flush-out the air and water pipes.

### IMPORTANT

**Do not operate any dental unit with the filter elements removed! Doing so will allow any debris that is present in the plumbing to enter the dental unit and may impair performance and necessitate major repairs.**