



Installation Instructions Economy Utility Center 8323, 8324, 8326

This instruction covers installation of the DCI Economy 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.

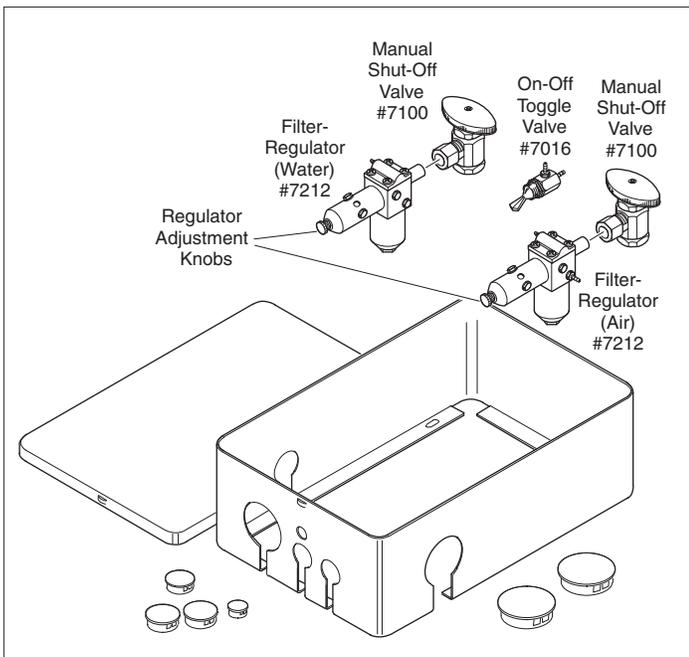


Figure 1

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.

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. Unwrap the filter-regulators. Note that some of the tubing attached to the barbs do not have white sleeve clamps on them. These tubes are there only to protect the barbs during shipping, and should be removed prior to installation.
4. Identify the filter-regulator for air. It is the one with an outlet barb on the side of the square block (Figure 2). On the water filter-regulator, there will be a hex plug at this location.

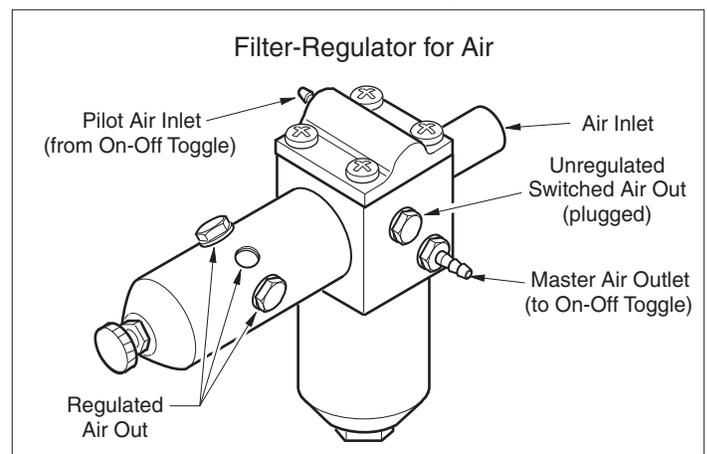


Figure 2

5. Insert the compression tube of each filter-regulator into the corresponding manual shut-off valve. Use a 5/8" wrench to tighten the compression nut.

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.

1. Identify the plated 1/16" barb fitting on the side of the filter-regulator 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 each filter-regulator is the pilot air inlet (*Figure 2*). The inlets on the two filter-regulators are joined by a yellow tube with a T-fitting in the middle. Connect the yellow tube that comes from the outlet side of the on-off toggle valve to the center barb on the T-fitting.
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 at the outlet ports on the cylindrical part filter-regulator assemblies.

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.

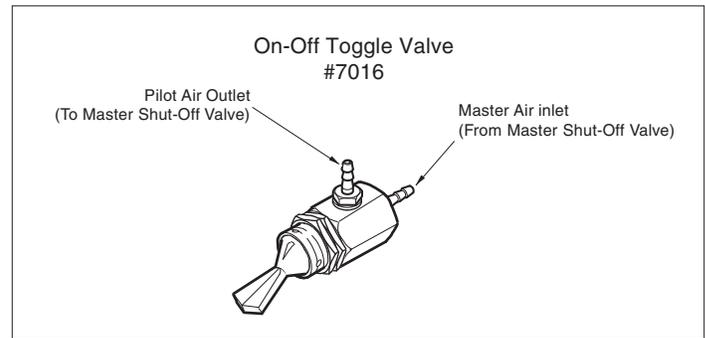


Figure 3

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.