

SIDE DELIVERY SYSTEM

Installation Instructions

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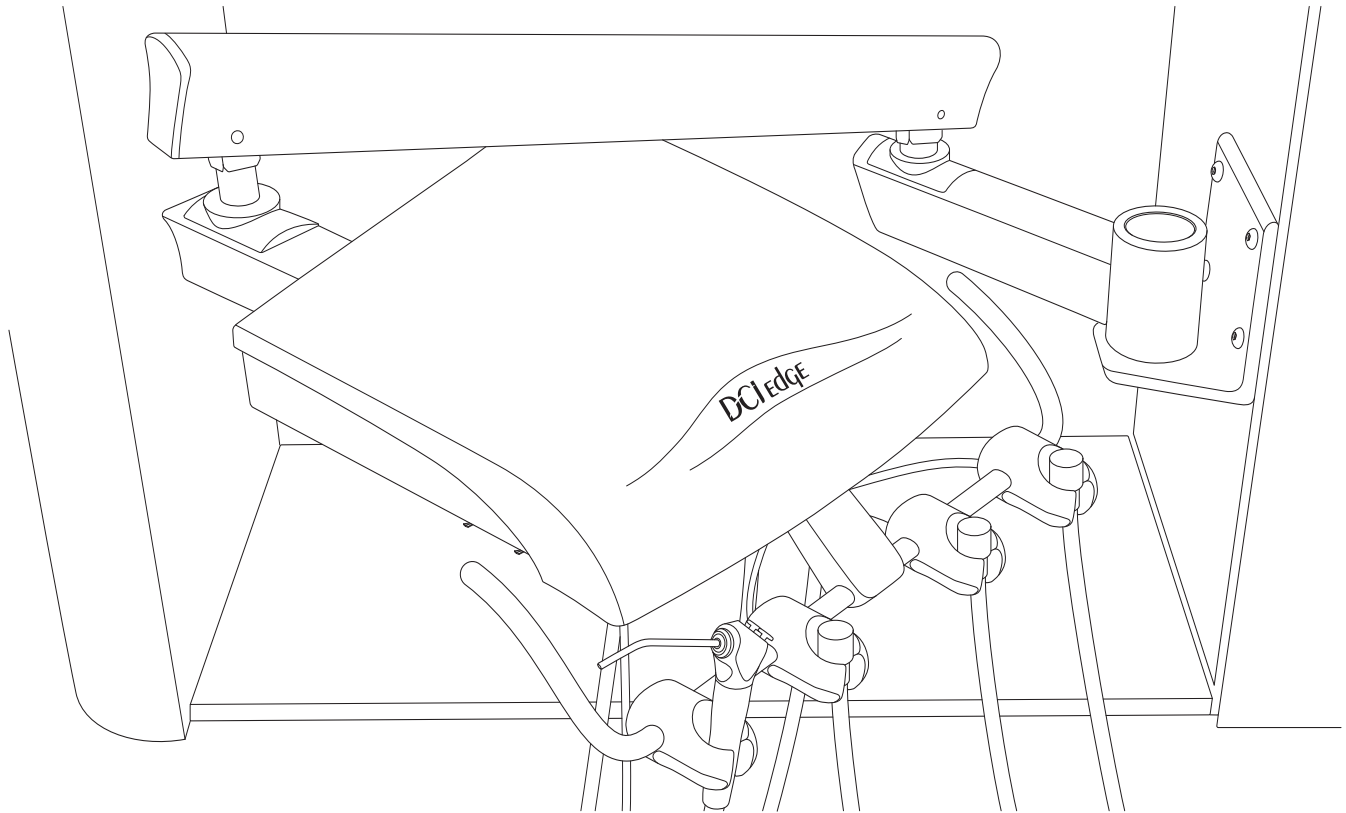


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UNIT INSTALLATION NOTES

BEFORE YOU BEGIN

- Review the unit over view in this manual and layout dimensions. Ensure that the planned location will have the necessary space available for installation, including the travel of the chair base and the backrest.
- Open all containers and review the contents. It may be helpful to locate all kits containing components and accessories for installation.
- Locate all documentation supplied with the equipment. Manuals and installation information may be found in one or more boxes with their respective components. Set aside the documentation for the end user to review.
- If a complete equipment ensemble will be installed, complete the chair setup first. Refer to the installation manual supplied with the chair for instructions.
- In all configurations, the unit flex arm and the unit control head are shipped as a complete assembly. In some of the following instructions, only the flex arm or the control head may be shown for clarity.

SYMBOLS USED IN THIS MANUAL

The following symbols may be used throughout this product manual:



CAUTION: Failure to carefully follow the described procedure may result in damage to the equipment.



WARNING: Failure to carefully follow the described procedure may result in damage to the equipment or the operator.

SPECIAL TEXT FORMATTING

To simplify installation, this manual is formatted to highlight references to necessary parts or tools:

- Parts that need to be located during assembly are shown in **bold**.
- Tools that are required for each step are shown underlined.

SUGGESTED TOOLS

- 7/16 combination wrench
- 9/16 combination wrench or deep wall socket
- SAE hex key set (some hex keys will be included with equipment)
- Scissors or utility knife
- Wire Strippers (as needed for accessories)
- Flathead screwdriver, small
- Phillips screwdriver

POST WALL/CABINET MOUNT ADAPTER INSTALLATION

1. With a $\frac{7}{32}$ " hex key and a $\frac{9}{16}$ " wrench, install the **Post Wall/Cabinet Mount Adapter** to the cabinet with the supplied mounting hardware. **Figure 1**

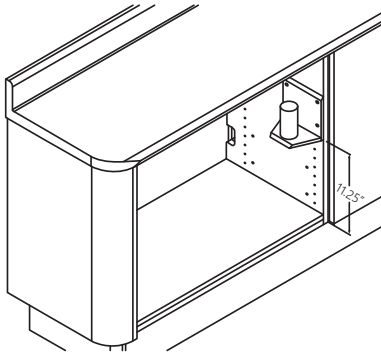


FIGURE 1

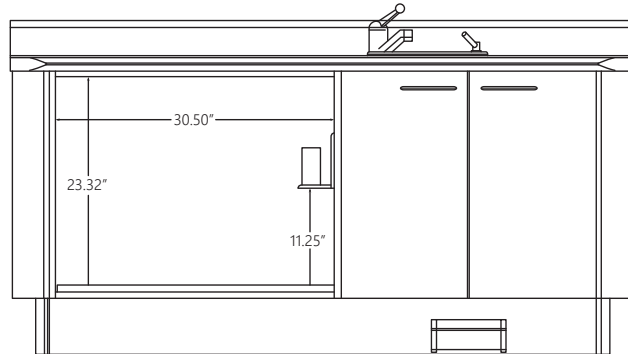


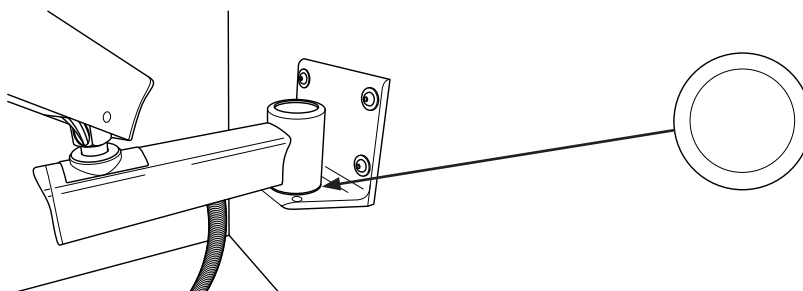
FIGURE 2

NOTE: When installing the adapter, ensure that there is 11.25 inches of clearance between the adapter and the cabinet shelf as shown in **Figure 2**.

NOTE: Delivery System comes with white bearing strips factory installed for use with the supplied adapter. The included gray and black bearing strips are for use with posts and adapters smaller than 2 inches in diameter.

DELIVERY SYSTEM INSTALLATION

1. Remove Delrin washer from flex arm kit and place over post adapter.
2. Locate and remove the delivery system from the packaging, then install the delivery system onto the post wall/cabinet adapter.



WARNING: Use extreme caution when removing the packaging from the delivery system when not mounted to a fixture. Flex Arm is under spring tension and may spring apart with force causing injury.

3. Route the umbilical and foot control tubing through the cabinet for utility center installation.

SELF-CONTAINED WATER SYSTEM INSTALLATION

1. Remove the Self-Contained Water System from the packaging.
2. Select a location for installation that will be easily accessible for bottle replacement and servicing.
3. Install the water system to the cabinet with a Phillips driver and the mounting hardware provided.

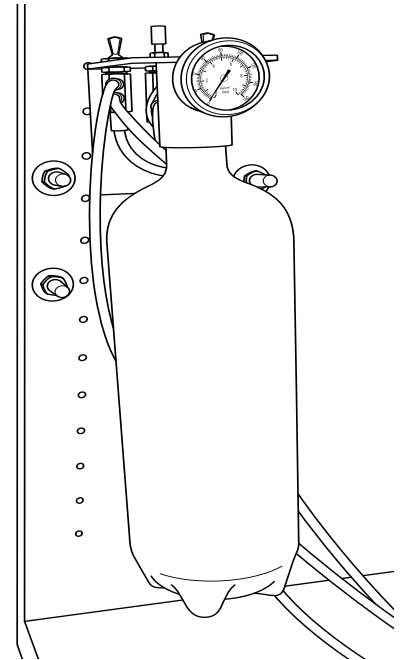
Refer to Delivery System to Utility Center Installation for hookups.

SELF-CONTAINED WATER SYSTEM OPERATION

1. Install the bottle with water or solution of your choice.
2. Place the Master Toggle, located on the top of the bracket, in the “On” position.
3. Check the pressure gauge on the front to ensure that the pressure reads 40psi (factory set at 40psi). If pressure needs to be adjusted, use the regulator located in the top of the bracket. Clockwise to increase pressure, counterclockwise to decrease pressure.

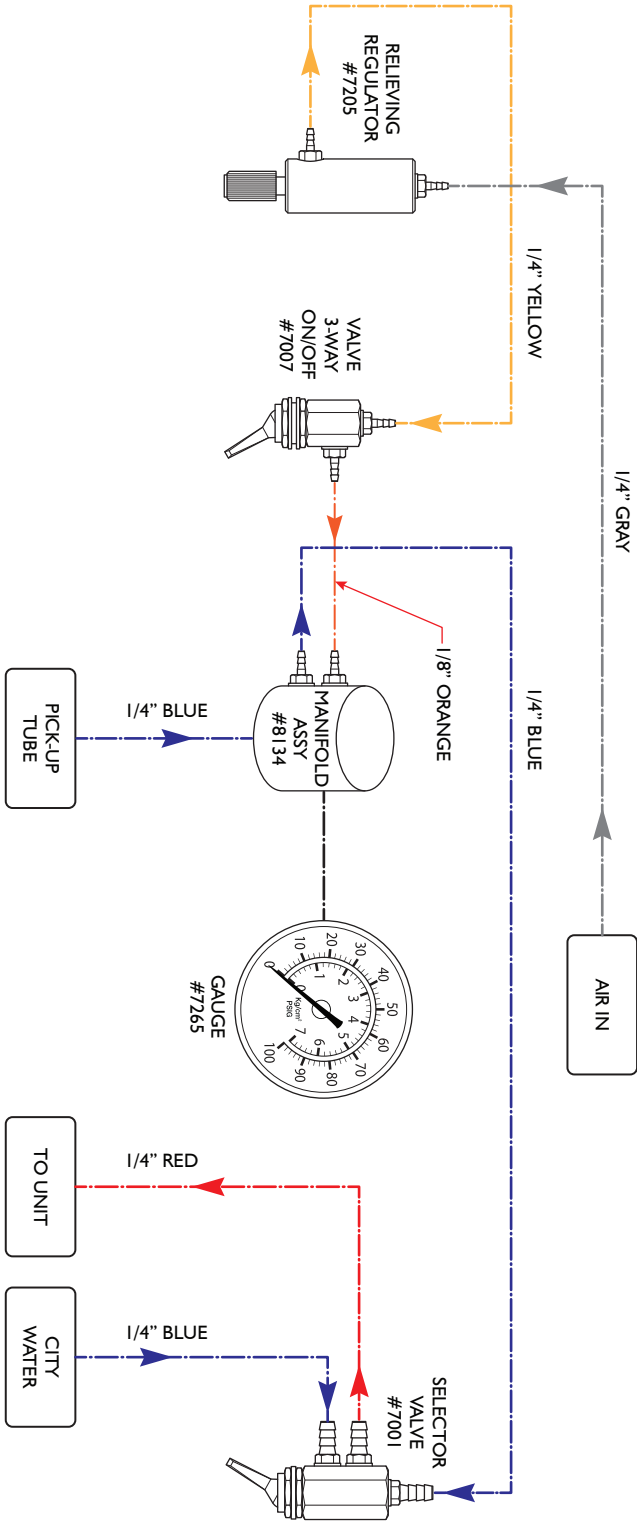


WARNING: Do not attempt to adjust the water bottle pressure. Bottle pressure is factory pre-set 40psi. Pressurizing the water bottle over 40psi may cause the bottle to rupture.

**CHANGING THE BOTTLE**

1. Place the Master Toggle in the “Off” position.
2. Remove the empty bottle.
3. Replace with a filled bottle.
4. Place the Master Toggle in the “On” position.

SELF-CONTAINED WATER SYSTEM SCHEMATIC



JUNCTION BOX UTILITY CONNECTIONS - NOTES

- Local regulations may require that licensed plumbers and electricians install utilities.
- Make sure all plumbing conforms to prevailing local codes.
- Use the junction box template to determine floor locations for connections.

AIR:

- 1/2" pipe N.P.T. protruding 1" from floor or wall. Supplied by contractor.
- Manual air shut off valve to be installed by contractor.
- Air pressure 80 - 100 psi.
- Air plumbing should be flushed clean before making final connections to dental equipment.

WATER:

- 1/2" pipe N.P.T. protruding 1" from floor or wall. Supplied by contractor.
- Manual water shut off valve to be installed by contractor.
- Water pressure 40 - 80 psi.
- Water plumbing should be flushed clean before making final connections to dental equipment.

ELECTRICAL:

- 1/2" conduit and box with quad or equal receptacle supplied by contractor.
- Wire box as per code with the top of the box no higher than 4-1/2" above the finished floor.
- Voltage: 115 Volts AC 3 wire or
 230 Volts AC 3 wire

CENTRAL VACUUM:

- Plumbing up to the utility center should be specified by center vacuum supplier and terminated in the utility center with 5/8" OD tubing perpendicular to the floor, similar to the drain connection.

GRAVITY DRAIN:

- 5/8" OD tubing protruding 1" from the finished floor.

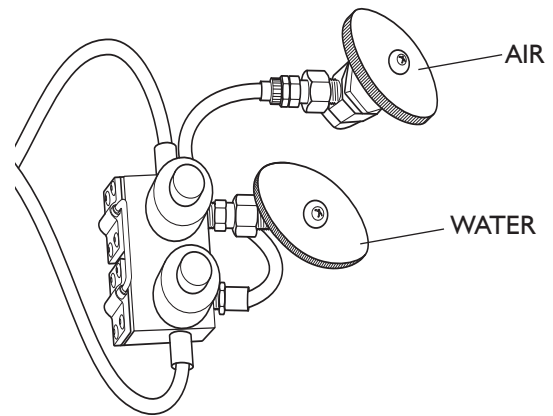
NOTE: Place trap in line and use a vented fitting to conform with local codes. Supplied by contractor. Floor mounting only.

DELIVERY SYSTEM TO UTILITY CENTER INSTALLATION

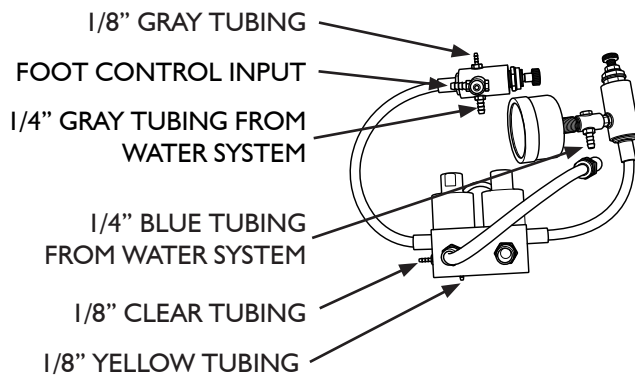
1. Place the junction box frame over the floor stub ups (electrical, vac, air, water, etc.).
2. Connect the shut-offs to the compressed air and water supply valves.

NOTE 1: The Yellow side is for air.

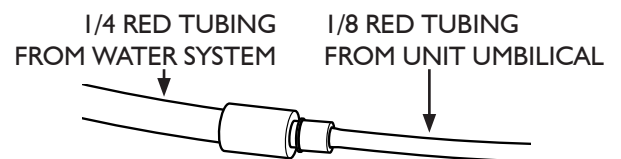
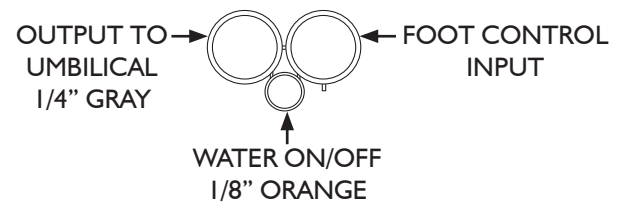
NOTE 2: The air and water lines must be flushed prior to connection to the shut-offs.



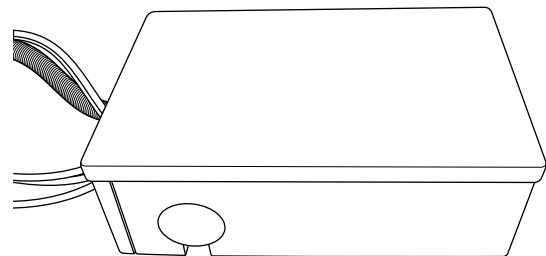
3. Connect the umbilical tubings to the appropriate connection points, including foot control rheostat, with supplied In-Lines and Sleeves. **NOTE:** Air Regulator Gauge Removed for Clarity.



FOOT CONTROL TUBING

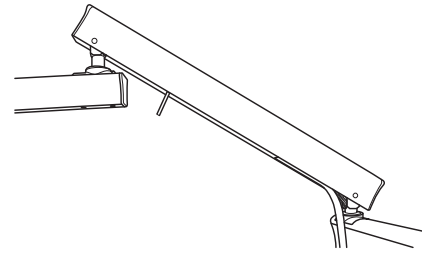


4. Once all connections have been made and the water bottle is installed, open the air and water valves then turn on the dental unit via "Master On/Off" on the control head. Check all connection points for leaks.
5. Place the junction box cover over the frame so the two parts "snap" together. Ensure that there isn't any tubing protruding from the sides of the junction box.

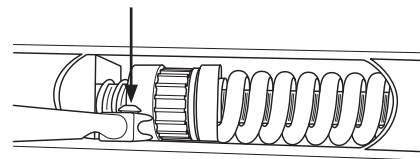


FLEX ARM ADJUSTMENTS

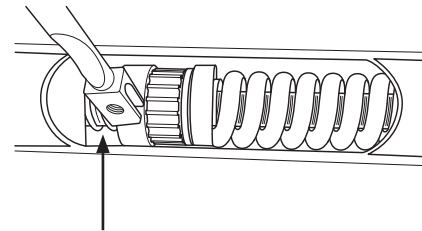
1. The Flex arm is preset at the factory however you may need to adjust to the user's needs.
2. Raise the chair and the flex arm as high as possible for ease of access.
3. Slide the "belly strip" out from under the arm exposing the umbilical tubing and locate the Tension Adjustment Handle towards the upper section of the flex arm.
4. Hold the tubing out and to the side.
5. Use the handle to turn the Star Nut by sliding it into the nut and turning, then slide out and reposition each turn.
NOTE: Turning the Star Nut clockwise tightens the spring thus making the arm able to hold more load.
6. Replace the belly strip and reposition flex arm once complete.



CLOCKWISE INCREASES LOAD



COUNTERCLOCKWISE DECREASES LOAD



UTILITY CENTER ADJUSTMENTS/ SYRINGE AND HANDPIECE FLOW

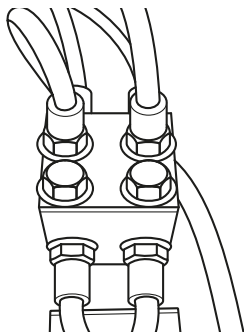
UTILITY CENTER ADJUSTMENTS

1. The air and water floor regulators with shut-offs are factory preset at 40psi for city water and 80psi for air.
2. The air and water floor regulators are controlled by the master switch on the unit to activate and shut off. Be sure the switch is “ON” when adjusting regulators.
3. Locate the adjustment screw on the end of the regulator. Tightening will increase pressure and loosening will decrease. If loosening you will need to “bleed” off the line pressure via the syringe.
4. Replace cover.

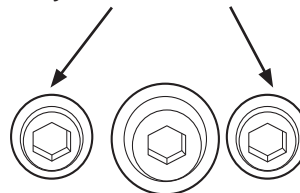
SYRINGE AND HANDPIECE FLOW

1. Open the unit head cover by removing the retaining screw under the center snout of the holder bar.
2. Locate the syringe block and adjust the flow with the two adjustment screws (accessed under the unit head) to the desired rate.

SYRINGE CONTROL BLOCK



ADJUSTMENT SCREWS



3. Locate the handpiece block and adjust each corresponding handpiece limit with the adjustment screw on top based on handpiece manufacturer recommendations.
4. Replace unit cover and secure with retaining screw.

