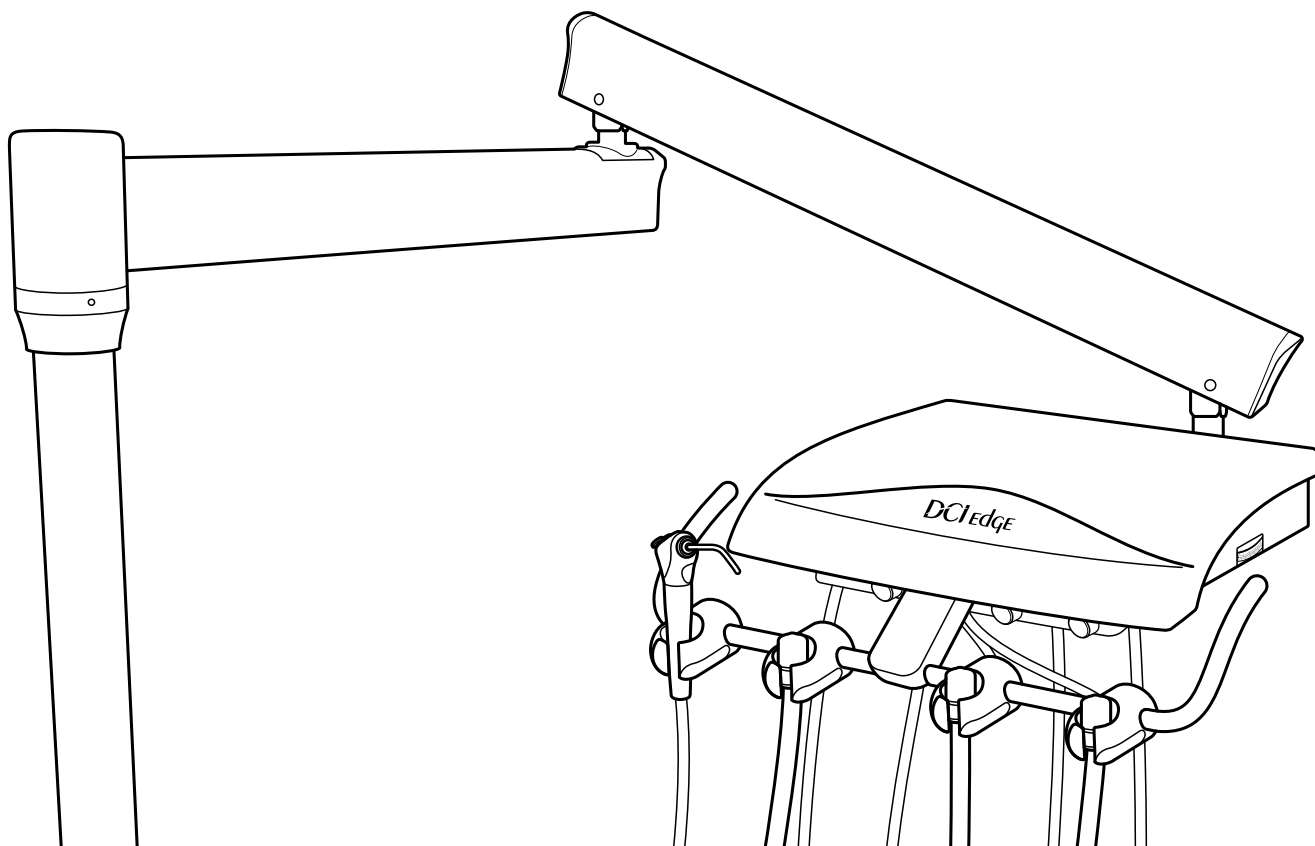


# OVER THE PATIENT DELIVERY SYSTEM

## Installation Instructions

*DCI*EDGE



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## UNIT INSTALLATION NOTES

### BEFORE YOU BEGIN

- Review the unit overview 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

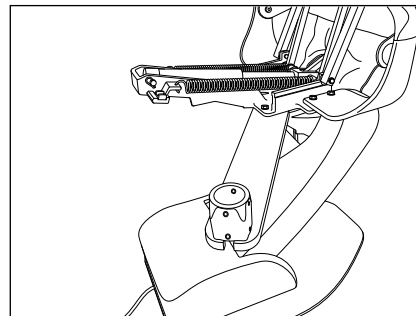
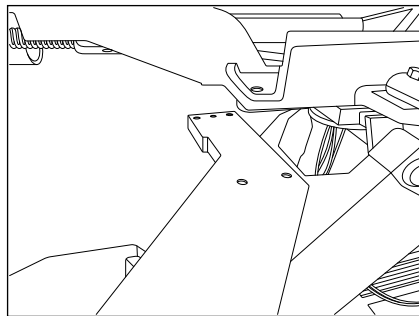
## UNIT POST INSTALLATION

1. Ensure that the dental chair has been completely set up and in its final location.

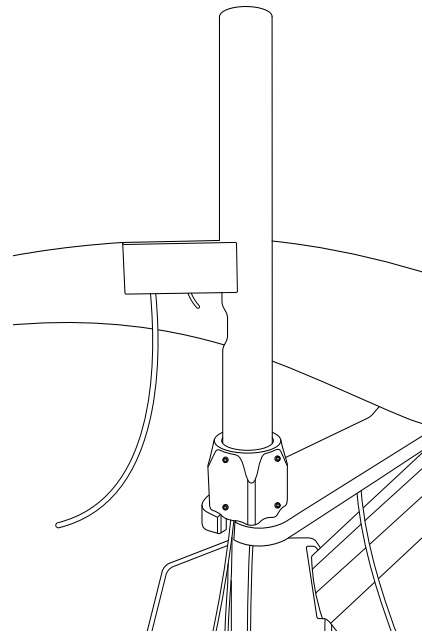


**WARNING:** To avoid injury have an assistant hold up the seat rail and roller assembly during adapter installation.

2. Locate the **Chair Adapter** and supplied mounting hardware. Install adapter to the bottom of the chair casting. Tighten all four bolts with a 9/16" deep wall socket. (Shown with Marus/DCI Equipment Adapter).



3. Loosen the eight set screws in the adapter collar with a 5/32" hex key.
4. Locate and remove the **Unit Post** from the packaging.
5. With the water system parallel to the chair, insert the unit post into the adapter collar. Run the water system umbilical through the bottom of the chair adapter. Tighten the bottom set screws to secure the unit post.

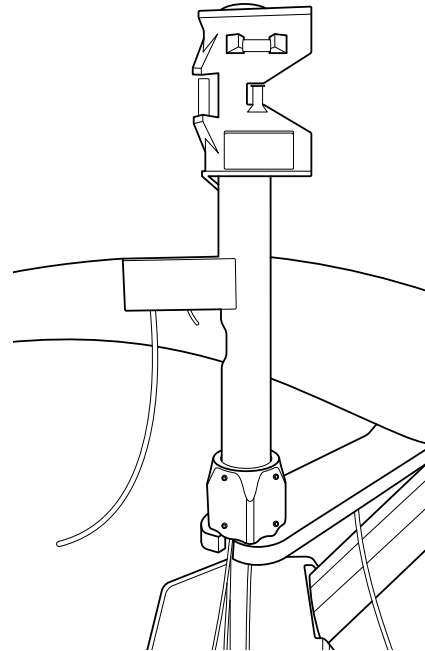


**WARNING:** With the bottom set screws loose the unit post may slip through the adapter causing damage to the product and/or user. Have an assistant help with unit post installation.

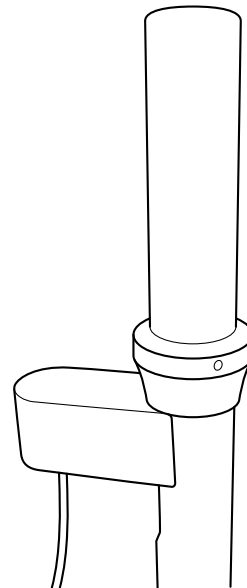
## UNIT POST INSTALLATION CONTINUED

6. Attach a post level to the unit post. Adjust the top set screws until the unit post is level. After leveling, ensure that all set screws are tight.

**NOTE:** It may be necessary to loosen the bottom set screws to level the unit post.

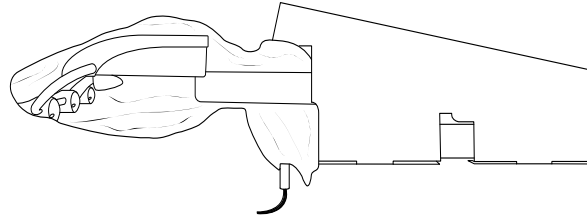


7. Locate the **Post Collar** and **Delrin Washer**. Slide the collar onto the unit post, narrow side down, followed by the delrin washer.



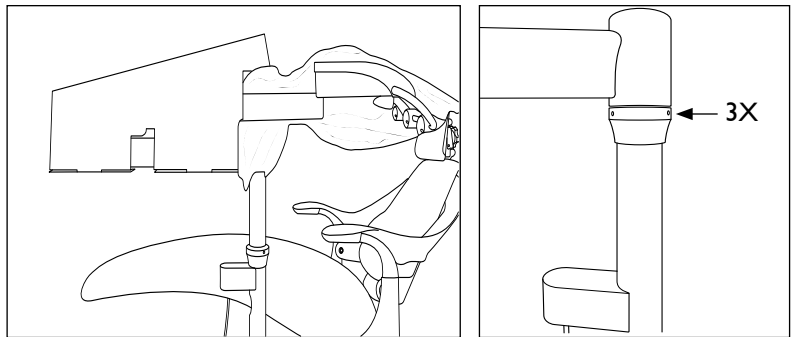
## DELIVERY SYSTEM INSTALLATION

1. Locate the **Delivery System**. Do not remove the packaging at this time.

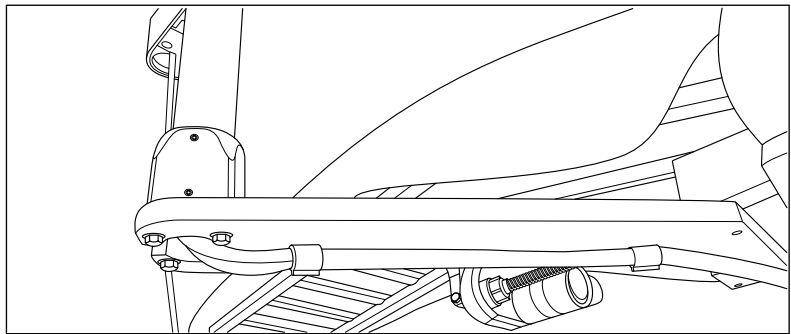


**WARNING:** Do Not Remove the Cardboard Sleeve From the Delivery System Arm Until Properly Mounted to the Unit Post. Arm Assembly Is Under Spring Tension and Will Open Rapidly With Force That Can Cause Injury.

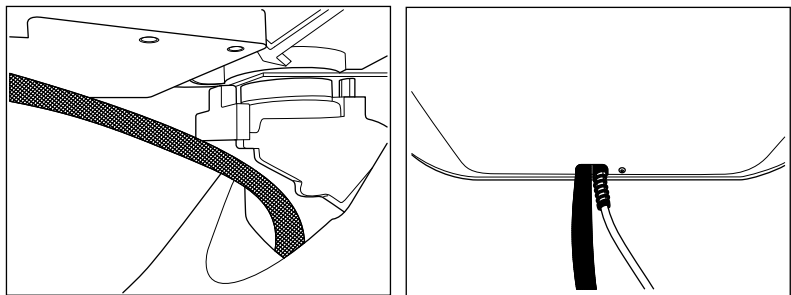
2. Route the unit umbilical through the unit post and out of the bottom of the chair adapter. Fully insert delivery system post mount into the unit post. Remove the packaging from the delivery system. Raise the post collar up to the bottom of the delivery system rigid arm and tighten the three set screws with a  $\frac{3}{32}$ " Hex Key to secure the collar in place.



3. Slide the supplied **Poly Knit Sleeve** (snakeskin) over the umbilical. Attach the umbilical to the bottom of the chair adapter with the supplied **Adhesive Clamps**.



4. Route the umbilical through the chair to the floor utilities.



## 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.

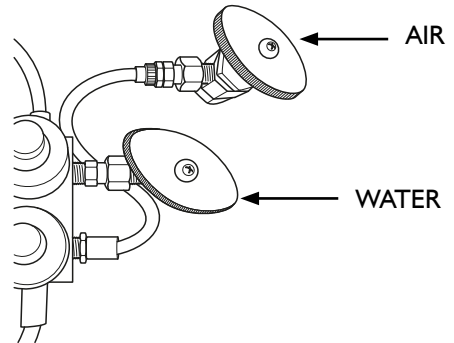
**NOTE:** Place trap in line and use a vented fitting to conform with local codes. Supplied by contractor.  
Floor mounting only.

## JUNCTION BOX UTILITY CENTER INSTALLATION

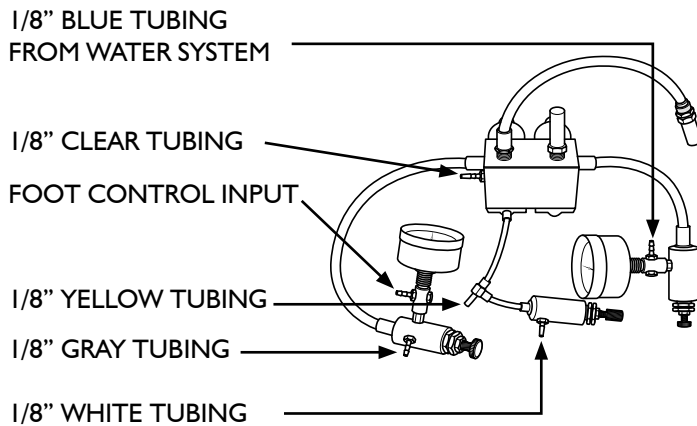
1. Place the junction box frame over the floor stub ups (electrical, vac, air, water, etc.)
2. Connect the shut-off block to the compressed air and water supply manual shut off valves.

**NOTE 1:** The Yellow side is for air.

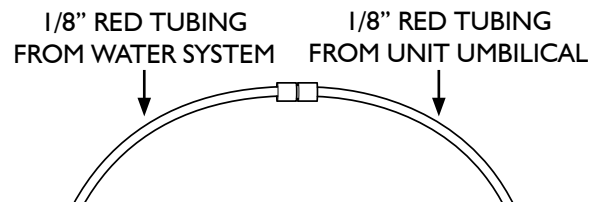
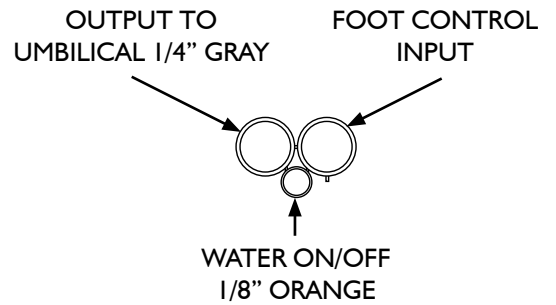
**NOTE 2:** The air and water supply lines must be flushed prior to connection to the shut-off block.



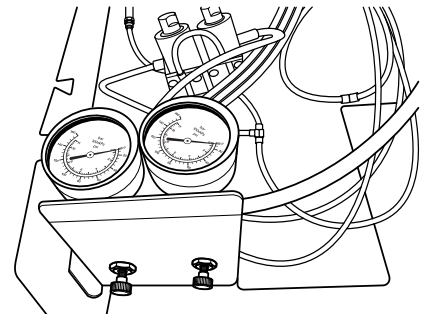
3. Connect the umbilical tubings to the appropriate connection points, including foot control rheostat, with supplied In-Lines and Sleeves.



### FOOT CONTROL TUBING

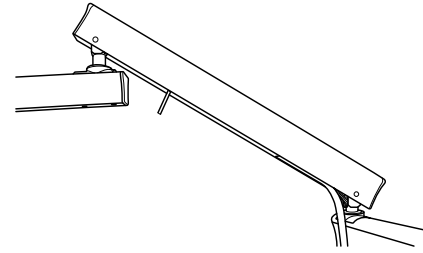


4. Install the Air and Water Regulators to the J-Box frame with a 9/16" wrench.

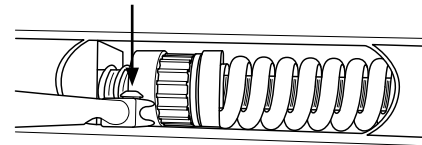


## FLEX ARM ADJUSTMENTS

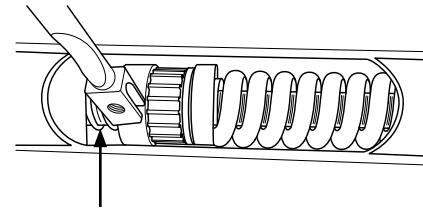
1. The Flex arm is preset at the factory however you may need to adjust to the user's needs.
2. Raise the chair and the flex arm as high as possible for ease of access.
3. Slide the "belly strip" out from under the arm exposing the umbilical tubing and locate the Tension Adjustment Handle towards the 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

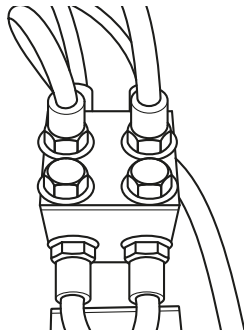
## UTILITY CENTER ADJUSTMENTS

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.

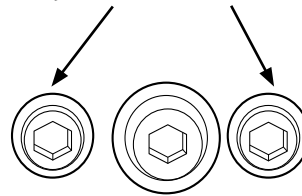
## SYRINGE AND HANDPIECE FLOW

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 with a  $\frac{3}{32}$ ” Hex Key.

**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.

