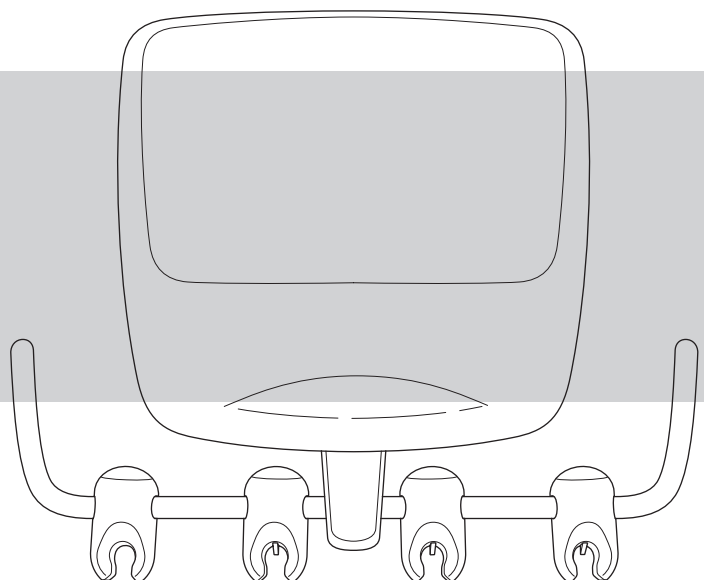


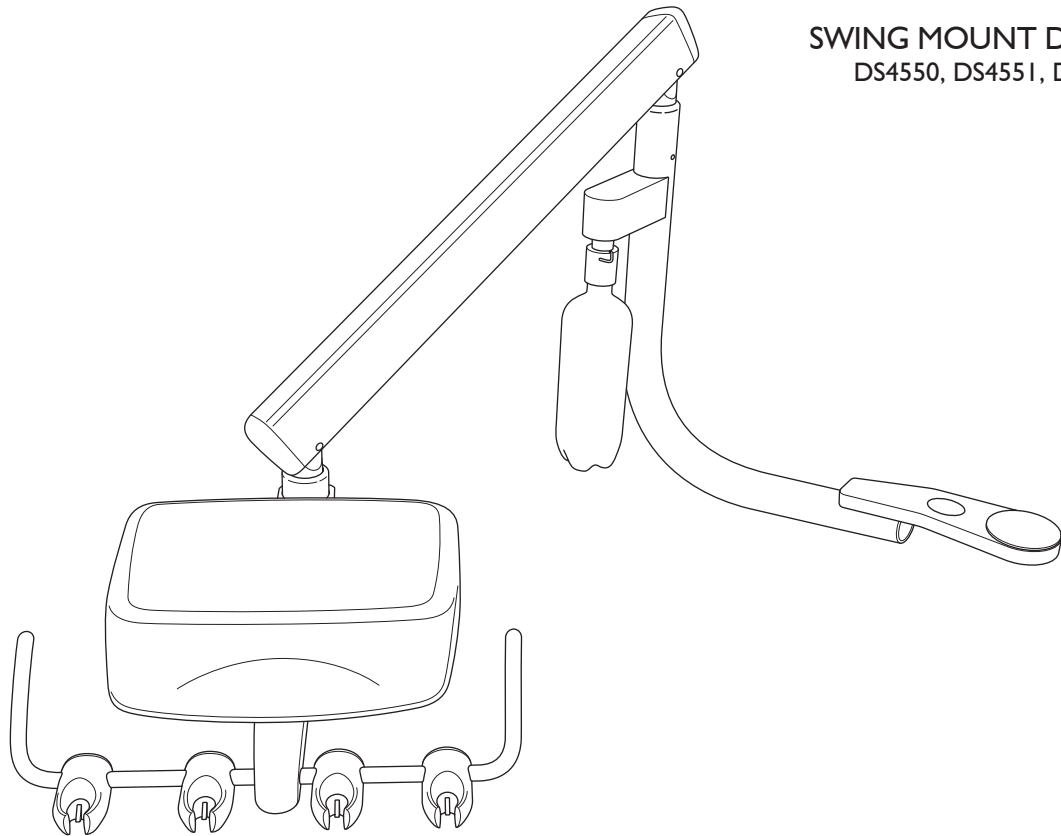
SERIES 4 DELIVERY SYSTEM

ON A DCI EDGE SERIES 5 CHAIR

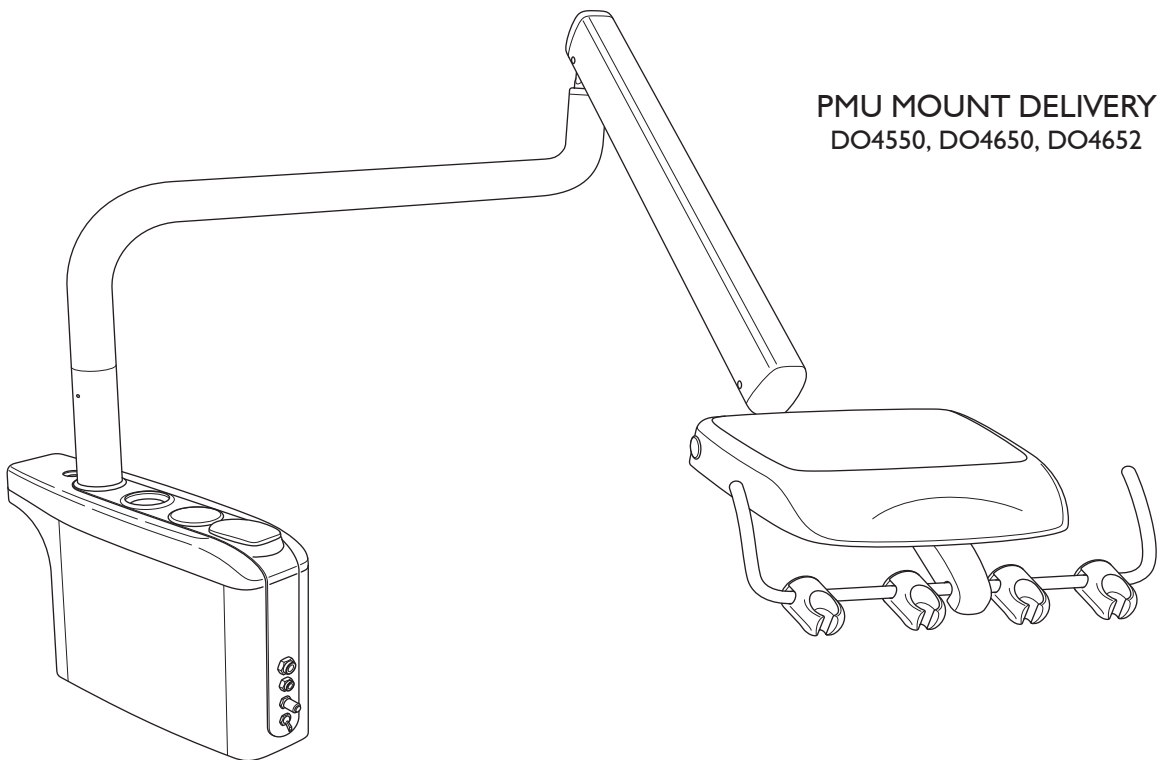
Installation Instructions



OVERVIEW



SWING MOUNT DELIVERY
DS4550, DS4551, DS4552



PMU MOUNT DELIVERY
DO4550, DO4650, DO4652

INTRODUCTION

BEFORE YOU BEGIN

Study the unit overview in this booklet and layout dimensions from the owner’s manual. Make sure the planned location will have the necessary space available for installation, including room for travel of the chair’s base and backrest.

Open all containers and review the contents. It may be helpful to locate all kits containing accessories. (Smaller parts are often packaged together to avoid being lost.)


Locate all documentation supplied with the package. Manuals and installation sheets may be found in one or more boxes accompanying their respective components. Set aside the owner’s manual for the end user to review.


If a complete ensemble is to be installed, set up the chair first. Refer to the installation manual supplied with the chair for instructions.


In all configurations, the unit pole, unit flex arm, and unit control head come shipped as a complete assembly. In some of the following illustrations, only the unit pole may be shown for clarity.


SYMBOLS USED IN THIS MANUAL

The following symbols may be used throughout this product manual:

- 

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

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

NOTE: Take note of additional important information. Not a warning or caution.
- 

ELECTRICAL HAZARD: Risk of electrical shock present. Ensure that power is disconnected before attempting procedure.

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Make Connections and Adjustments	15

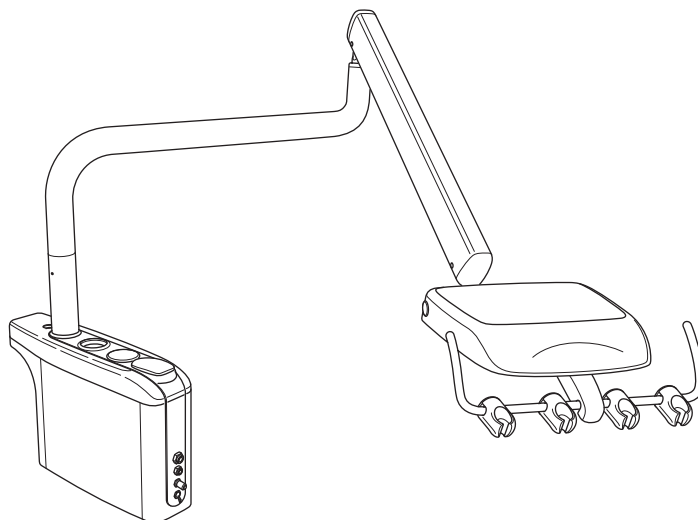
REGULATORY INFORMATION

Regulatory information is delivered with DCI Edge dental equipment as mandated by agency requirements and can be found in the accompanying Instructions for Use for this device.

PMU MOUNT UNIT INSTALLATION

TOOLS NEEDED FOR INSTALLATION

Socket wrench
Socket wrench extension (3")
9/16" and 3/4" Sockets
Magnetic Level
Allen wrench set
Utility knife

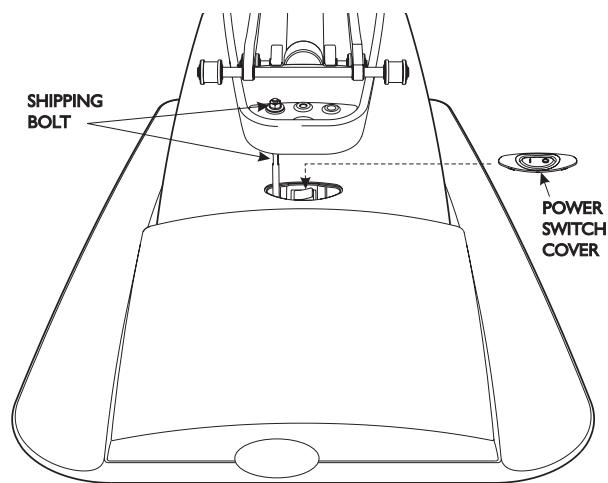


INCLUDED HARDWARE

4 Hex bolts 3/8"-16 x 1 1/4"
4 Lock washers 3/8"

PREPARATION

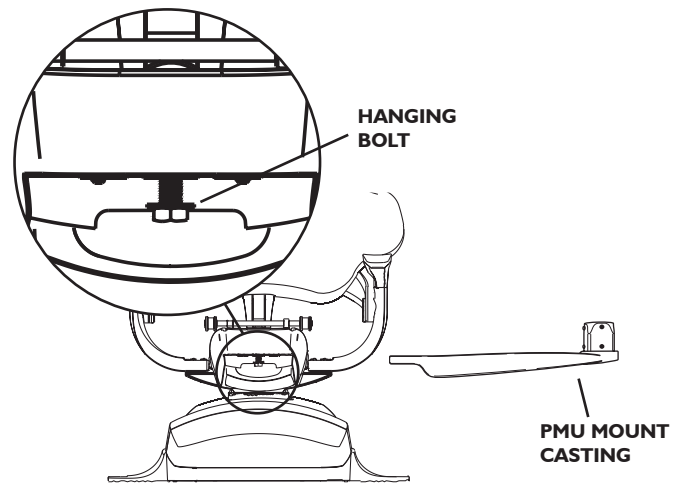
- 1 Ensure that the dental chair has been completely set up and in its final location.
- 2 Remove seat upholstery to allow for proper access to the mount location.
- 3 Ensure that the shipping bolt is removed from the chair.



PMU MOUNT UNIT INSTALLATION

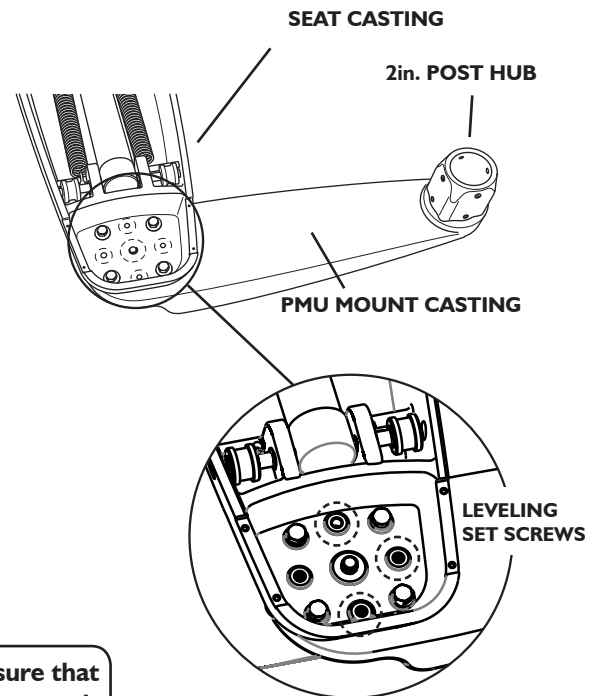
MOUNTING TO THE CHAIR

- 1** Assemble the hanging bolt and washer to the underside of the seat casting, ensuring that at least 1/2" of the screw thread is exposed.
- 2** Slide the PMU Mount Casting Assembly on the hanging bolt and position it so that it is perpendicular to the seat casting.



WARNING: To prevent injury, have an assistant support the weight of the unit and mount casting during installation.

- 3** Align the holes on the PMU Mount Casting to the 4 holes of the Seat Casting. Assemble the 4 3/8" hex bolts from above, by dropping them through the four holes in the seat casting as shown and turn them in part way by hand.
- 4** Tighten using a 9/16" socket wrench with a socket extension.
- 5** Measure the level of the assembly by laying a level across the top of the 2" post hub.
- 6** Adjust the level by loosening the 4 3/8" hex bolts by at least 2 full turns and then tightening the 3 set screws circled in the illustration (right) as needed. Retighten the 4 hex bolts and recheck the level.
- 7** Complete the process by tightening the bottom Hanging Bolt with a 3/4" socket and wrench to secure the leveling.

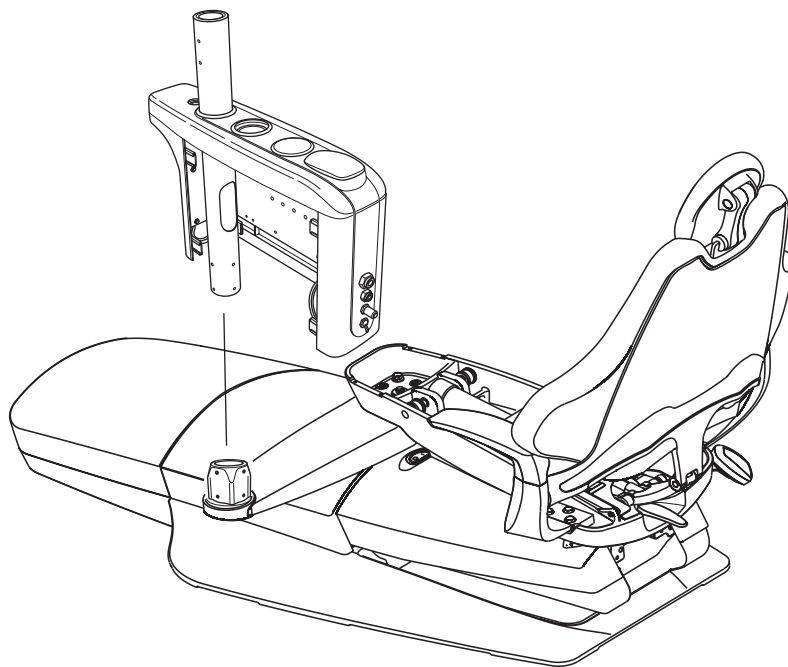


WARNING: Before using of the equipment, ensure that the assembly is level and all mounting bolts are securely fastened.

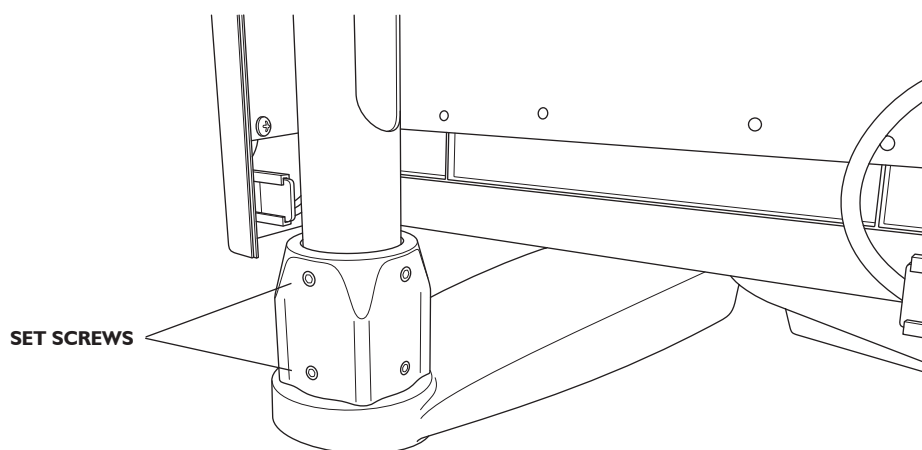
PMU MOUNT UNIT INSTALLATION

ATTACHING THE PMU

- I** Insert the bottom of the PMU post into the 2" hub.



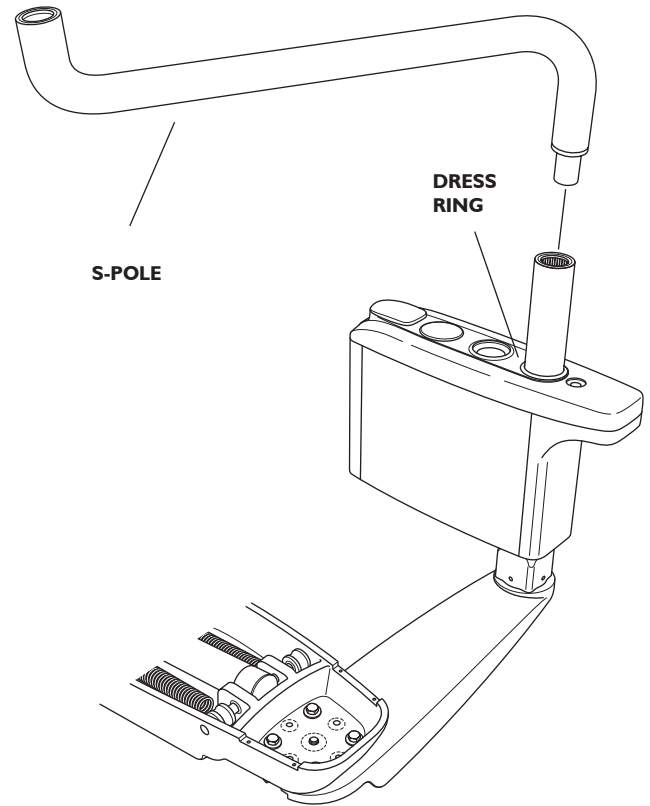
- 2** Keep the PMU parallel to the chair and secure the PMU in the 2" hub by tightening the eight set screws located in the hub. Use a post level or two magnetic levels to keep the PMU Post level while tightening the set screws.



PMU MOUNT UNIT INSTALLATION

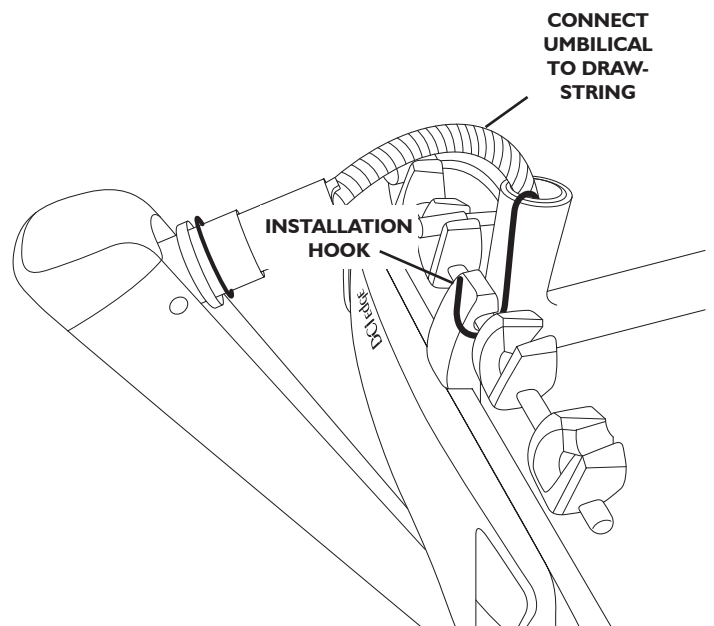
ATTACH THE S-POLE

- 1** Assemble the S-pole to the socket of the PMU Post.
- 2** Ensure that the dress ring is seated securely.



ASSEMBLE THE UNIT AND FLEX ARM

- 3** Attach the included Installation Hook to the top of the unit swing pole (inside pole), and hang the flex arm and head assembly from the holder bar as shown.
- 4** Connect the draw string to the end of the umbilical. Then pull the other end of the draw-string until the remaining length of umbilical is pulled through and is resting on the floor.
- 5** Recheck level at the post and adjust if needed.
- 6** Slide the rubber o-ring down which is retaining the dress ring on the rear pin of the flex arm and drop the dress ring into place.

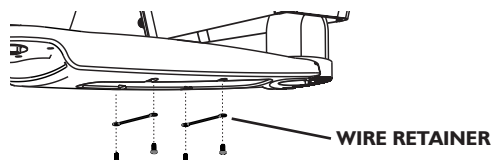


PMU MOUNT UMBILICAL ROUTING

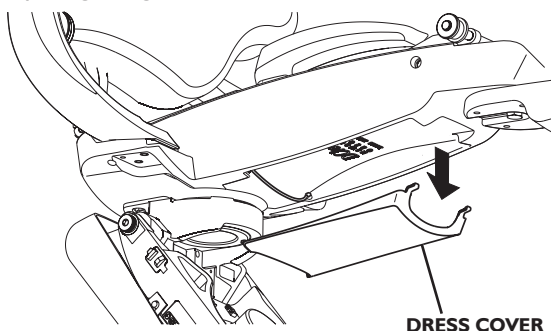
PREPARATION

1 Slide the supplied poly knit “Snake Skin” sleeve over the wires and tubings as they exit the bottom of the PMU, and allow the sleeve to cover the remainder of the length of the umbilical extending all of the way down to the Junction Box.

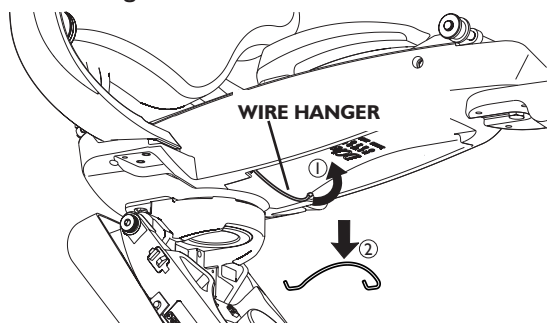
2 Remove the metal Wire Retainers that span the bottom opening of the PMU Mount Casting by unscrewing the four Phillips head screws.



3 Unsnap the plastic Dress Cover on the bottom of the Seat Casting by grasping the front opening and pulling straight down.



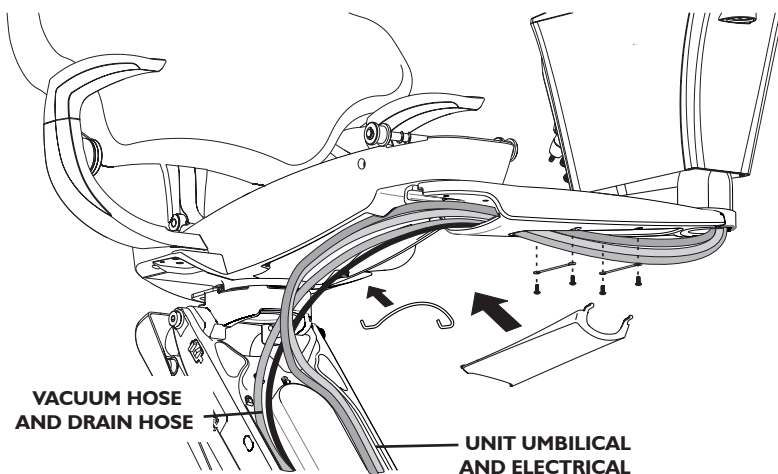
4 Remove the Wire Hanger by rotating it upward until the hooks disengage, and then pull the hanger down and out of the holes in the Seat Casting.



ROUTE TUBING

4 Route vacuum and drain hoses together and locate in them in the left-hand channel of the truss casting.

5 Route the tubing umbilical and any other electrical cables in the right-hand channel of the truss casting. For best results, orient the umbilical and hoses so that they cross over each other as shown.



6 Reattach the PMU mount wires with the four screws as shown. Reattach the wire hanger by pointing the hooks upward, pushing them into the holes nearest the swivel of the chair, and then rotating the hanger forward.

7 Reattach the Dress Cover by engaging the tabs into the holes in the bottom of the Seat Casting.

Proceed to the section: **MANAGING THE UMBILICAL**, page 13

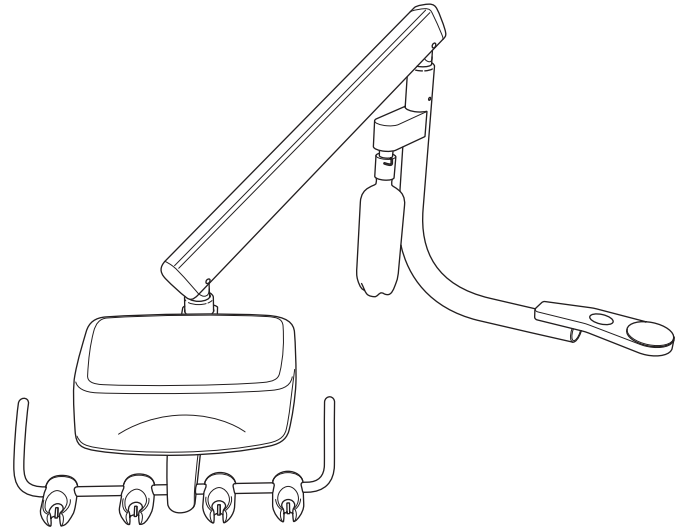
SWING MOUNT UNIT INSTALLATION

TOOLS NEEDED FOR INSTALLATION

Socket wrench
Socket wrench extension (3")
9/16" and 3/4" Sockets
Level
Allen wrench set

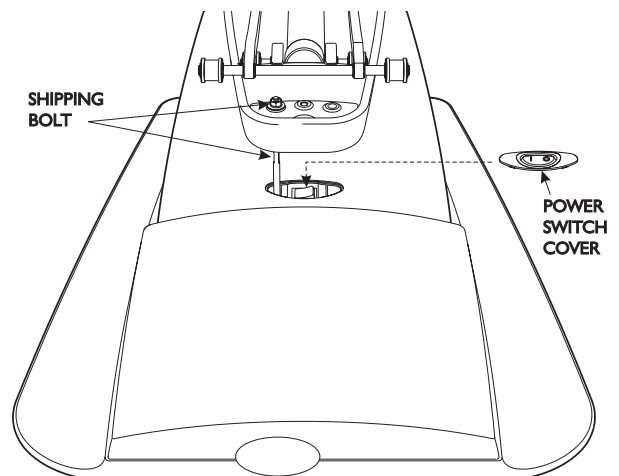
INCLUDED HARDWARE

4 Hex bolts 3/8"-16 x 1 1/4"
4 Lock washers 3/8"



PREPARATION

- 1 Ensure that the dental chair has been completely set up and in its final location.
- 2 Remove seat upholstery to allow for proper access to the mount location.
- 3 Ensure that the shipping bolt is removed from the chair.



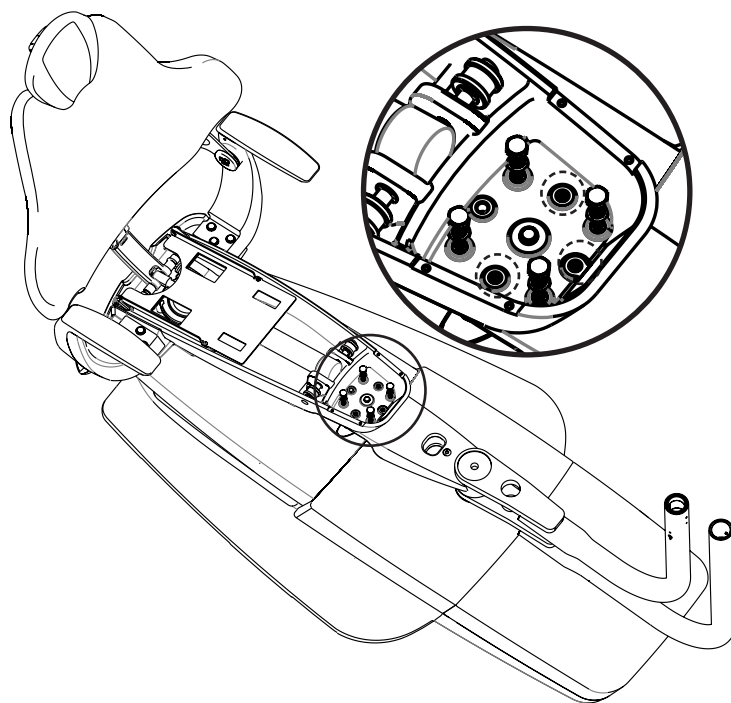
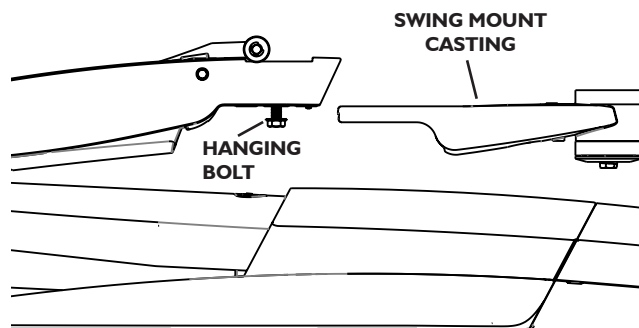
SWING MOUNT UNIT INSTALLATION

MOUNTING TO THE CHAIR

- 1** Assemble the hanging bolt and washer to the underside of the seat casting, ensuring that at least 1/2" of the screw thread is exposed as shown.
- 2** Slide the Swing Mount Casting and Pole Assembly onto the hanging bolt and position it so that it is in line with the seat casting, pointing toward the foot of the chair.
- 3** Align the holes of the Swing Mount casting to the 4 holes of the seat casting. Assemble the 4 bolts from above by dropping them through the four holes in the seat casting as shown (right) and turn them in part way by hand.
- 4** Tighten using a 9/16" socket wrench with a socket extension.
- 5** Measure the level by attaching a magnetic level to the back of the vertical portion of the inner bent pole and then again at the side of the same pole.
- 6** Adjust the level by loosening the 4 bolts by 2 full turns or more and then tightening the 3 set screws circled in the illustration (right) as needed. Retighten the 4 bolts and recheck the level.
- 7** Complete the process by tightening the bottom Hanging Bolt with a 3/4" socket to secure the leveling.



WARNING: To prevent injury, have an assistant support the weight of the unit and mount casting during installation.

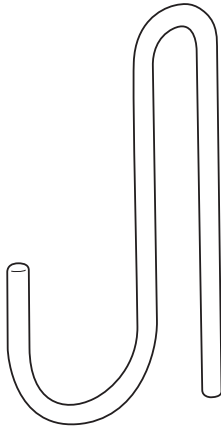


WARNING: Before using of the equipment, ensure that the assembly is level and all mounting bolts are securely fastened.

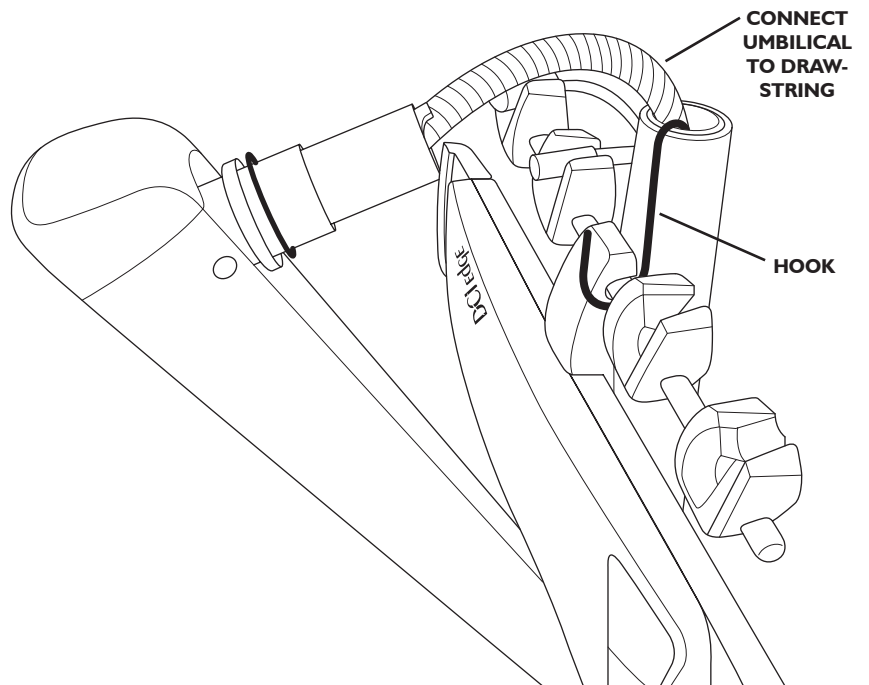
SWING MOUNT UNIT INSTALLATION

ASSEMBLE THE UNIT AND FLEX ARM

1 Attach the included hook to the top of the unit swing pole (inside pole), and hang the flex arm and head assembly from the holder bar as shown below.



2 Connect the draw string to the end of the umbilical as shown below. Then pull the other end of the drawstring until the remaining length of umbilical is pulled through and is resting on the floor.

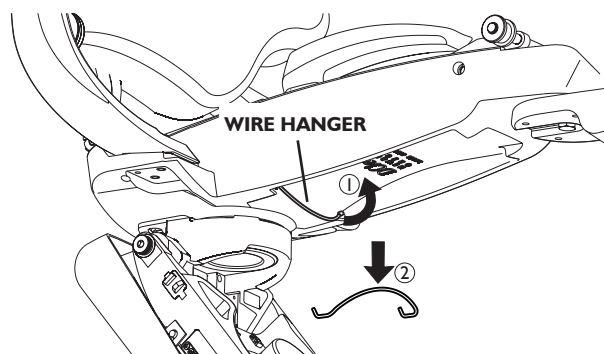
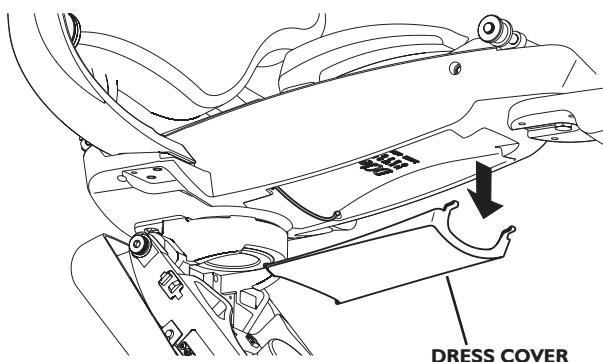


3 Recheck level at the post and adjust if needed.

SWING MOUNT UMBILICAL ROUTING

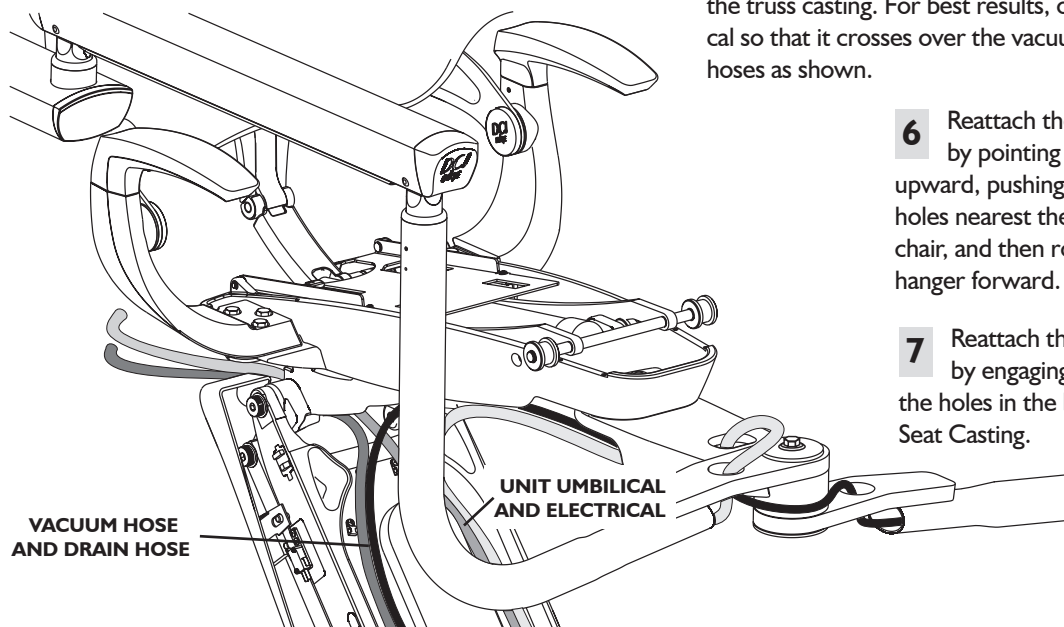
PREPARATION

- 1 Slide the supplied poly knit “Snake Skin” sleeve over the wires and tubings as they exit the Swing Pole and allow the sleeve to cover the remainder of the length of the umbilical extending all of the way down to the Junction Box.
- 2 Unsnap the plastic Dress Cover on the bottom of the Seat Casting by grasping the front opening and pulling straight down.
- 3 Remove the Wire Hanger by rotating it upward until the hooks disengage, and then pull the hanger down and out of the holes in the Seat Casting.



ROUTE TUBING

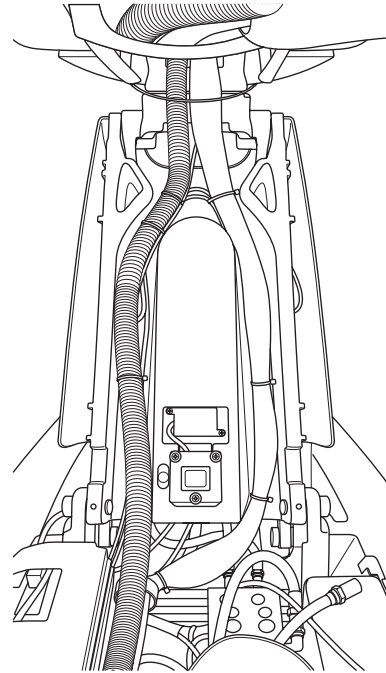
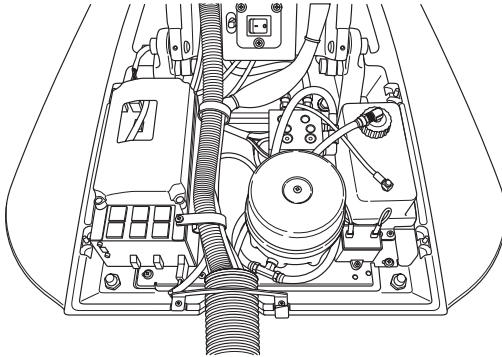
- 4 Route vacuum and drain hoses together and locate in them in the left-hand channel of the truss casting.
- 5 Route the tubing umbilical and any other electrical cables in the right-hand channel of the truss casting. For best results, orient the umbilical so that it crosses over the vacuum and drain hoses as shown.
- 6 Reattach the Wire Hanger by pointing the hooks upward, pushing them into the holes nearest the swivel of the chair, and then rotating the hanger forward.
- 7 Reattach the Dress Cover by engaging the tabs into the holes in the bottom of the Seat Casting.



MANAGING THE UMBILICAL

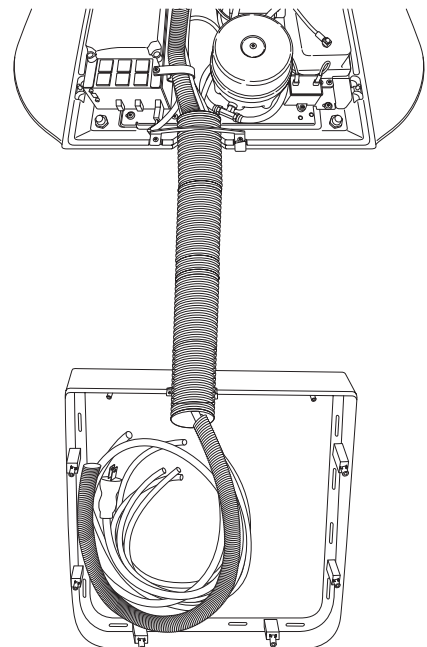
TRUSS AND PUMP AREA

- 1** Manage tubing using the preinstalled managing loops in the truss, making sure to leave tubings loose enough for the chair to raise and lower as well as swivel freely without being stretched or pinched.
- 2** Against the side of the transformer box, manage the unit umbilical and all wires using the preinstalled loops as shown below.



JUNCTION BOX POSITION

- 3** Determine the position of the Junction Box in front of the chair (see next page for details). Cut the large corrugated tubing to the appropriate length so that it can extend from the exit hole in the front of the chair to the entrance hole of the Junction Box, allowing 3 inches extra at each end for clamping.
- 4** Pass the remainder of the umbilical through the large corrugated tubing and use the included clamp to secure it as it exits the chair.
- 5** Insert the corrugated tubing into the lower half of the junction box frame and secure with the included tie wrap as shown.



JUNCTION BOX LAYOUT

LOCATE JUNCTION BOX

New: Locate utilities in the operatory according to the dimensions shown for new installations. The junction box should be aligned to the front of the chair where possible.

Existing: For preexisting locations, the junction box can be positioned where necessary. Cut umbilical tubing after determining proper position of the junction box.

Position utilities according to recommended layout as shown where possible.

AIR

Pipe: 1/2" N.P.T. Protruding 1" from the floor.
Supplied by contractor.

Air supply: Pressure 80-100psi. Air should be free from contaminants.

WATER

Pipe: 1/2" N.P.T. Protruding 1" from the floor.
Supplied by contractor.

Water supply: Pressure 40-80psi. Water should be flushed clean before connecting to this equipment.

ELECTRICAL

Pipe: 1/2" conduit with dual receptacle box or greater. Supplied by contractor. Wire box according to code. Top of box should be no higher than shown.

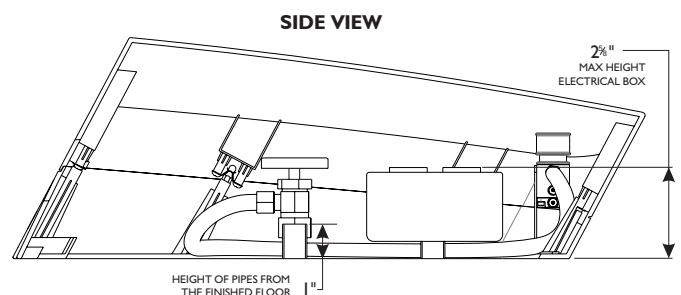
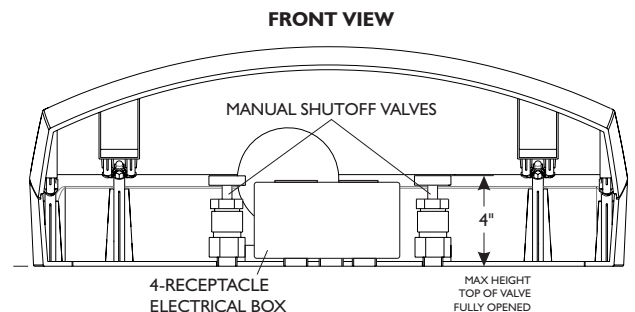
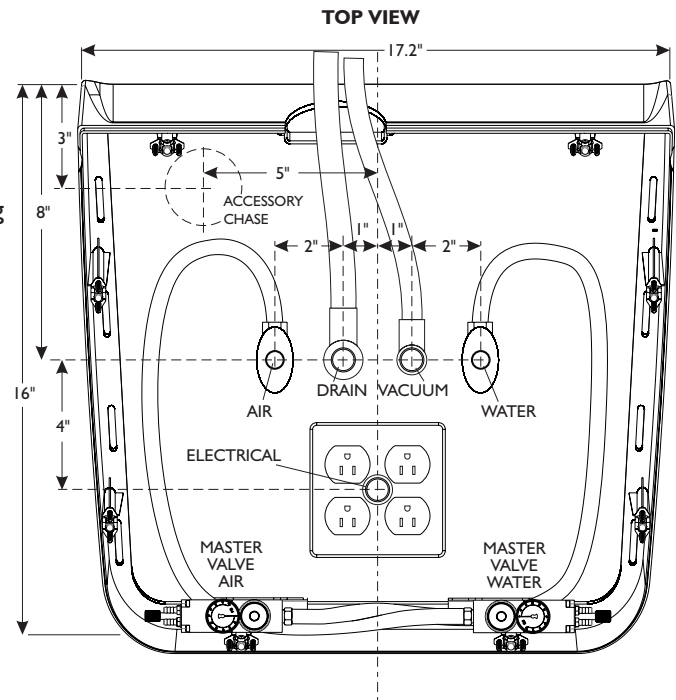
Supply: 115V AC 3-wire, 8 AMP or 230V AC 3-wire, 4 AMP

CENTRAL VACUUM

Pipe: Supplied by contractor. Terminated with 5/8" OD tube protruding 1" from the finished floor.

GRAVITY DRAIN

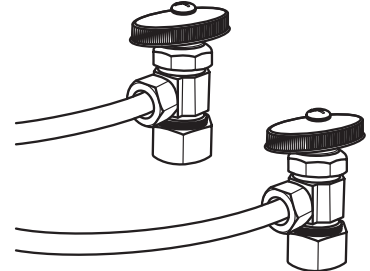
Pipe: 5/8" OD tube protruding 1" from the floor. Place trap in-line and use vented fitting to conform to local codes. Supplied by contractor.



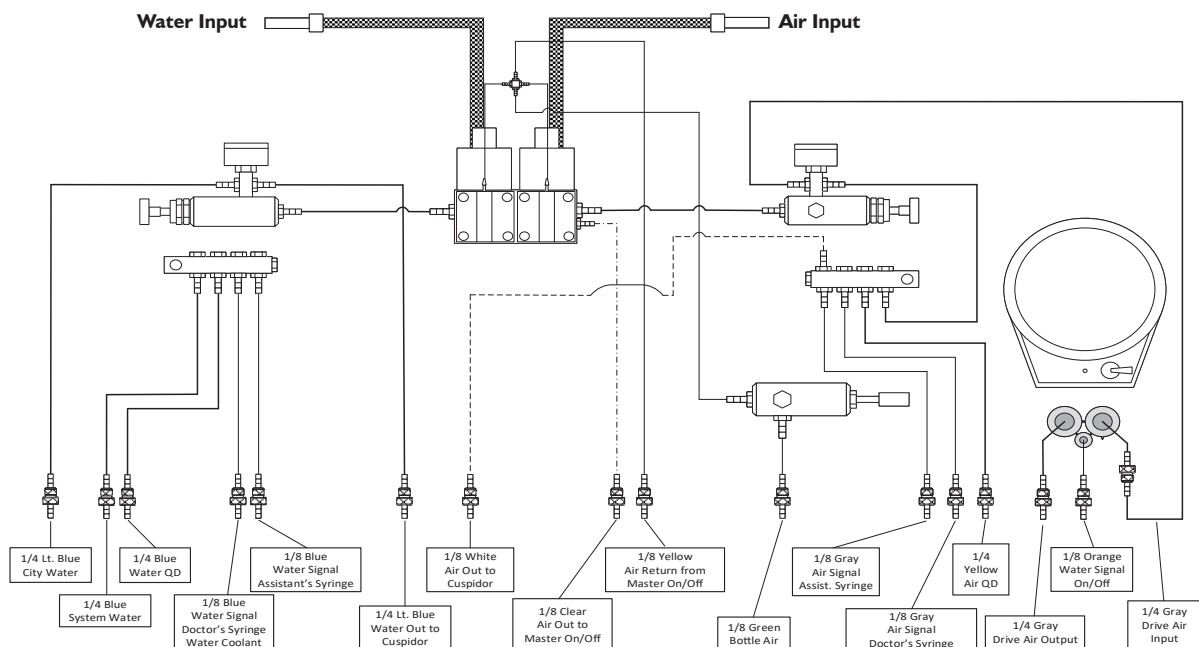
MAKE CONNECTIONS AND ADJUSTMENTS

CONNECT UTILITIES

- 1** 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.



- 2** Connect the umbilical tubings to the appropriate connection points, including foot control rheostat, with supplied Q.D. Swivel Fittings.



MAKE ADJUSTMENTS

See the ADJUSTMENTS section near the end of the *Instructions for Use Manual* for the **SERIES 4 Delivery System** to complete the installation. Be sure to check and make any needed adjustments to items in that section.

