

# ARM MOUNTED AUTOMATIC CONTROL UNIT, 4378

## Installation and Operating Instructions



### Package contains:

- Control Unit to fit A-dec Cascade Arm with handpiece tubing and umbilical tubing
- Precision Comfort syringe
- Syringe repair kit

### Tools needed:

- 1/4" and 1/8" sleeve tool
- Screwdriver or other appropriate hand tool for wall fastener

### INSTALLATION INSTRUCTIONS

1. **Prep:** Disconnect the necessary tubing (leave as much tubing as possible) from the control block of the unit to be replaced and remove the unit to be replaced from its mount. Retain original mounting hardware for replacement unit.
2. **Cover:** Remove the screw retaining the cover to the chassis-located on the underside front using a 1/8" hex key. Lift cover up.
3. **Mount and Arm:** Install Unit to the Existing Cascade Arm, using the appropriate fasteners to properly mount the Unit. See Figure 1
4. **Umbilical Tubing:** Run original unit umbilical into the replacement unit. Connect proper tubing of the replacement unit umbilical into the original unit tubing umbilical. (See Tubing Diagram)
  - 1/4" Gray – Foot Control Drive Air (Output)
  - 1/8" Brown – Foot Control Signal Water (Output)
  - 1/8" Green – Foot Control Signal Air (Output)
  - 1/8" Gray – Foot Control Chip Blower (Output)
  - 1/8" Orange – Master (Output)
  - 1/8" Clear – Pilot Air (Input)
  - 1/8" Yellow – Regulated Air (Output)
  - 1/8" Red – Oral Cavity Water (Output)
  - 1/8" Black – Brake (Input)
5. **Water and Air Supply:** Open the manual shut-off valves in the utility center. Adjust regulated air to 80 psi and regulated water to 40 psi. When adjusting for a lower pressure, make the adjustment, and then press the syringe button to relieve the pressure to get an accurate pressure reading.

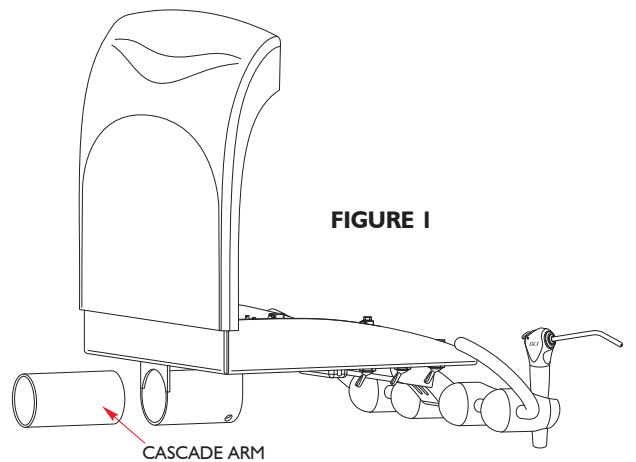
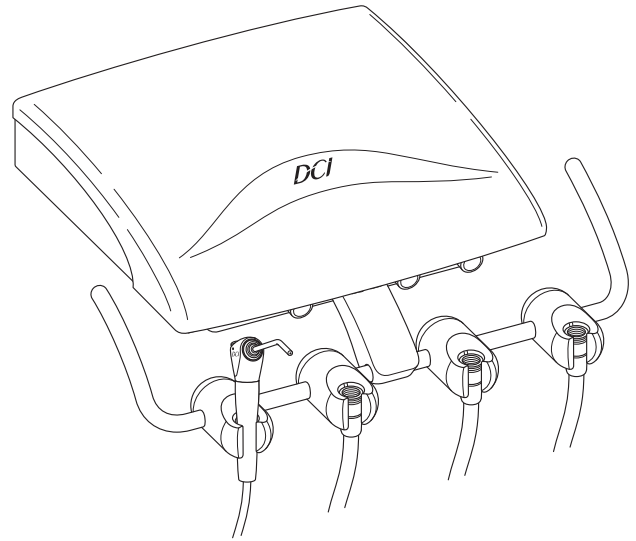
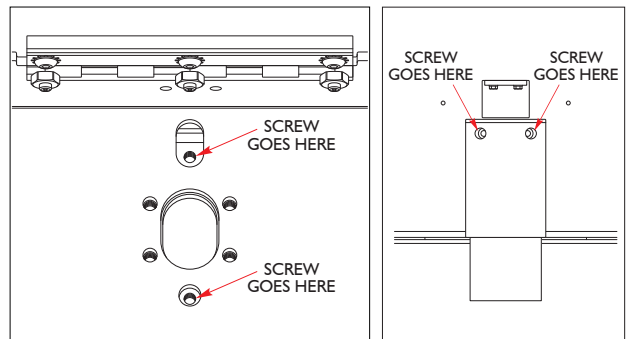


FIGURE 1



### OPERATING INSTRUCTIONS AND UNIT FEATURES

#### HANDPIECE HOLDERS

The asepsis handpiece holders are designed to resist chemical discoloration and be easy to clean. The handpiece is activated when removed from the holder and stepping on the foot control disc. The positions of the individual handpiece holders are adjustable; loosen the set screws, move the handpiece holder to the desired location, and retighten the screws. You will need a 1/8" hex key. See Figure 2.

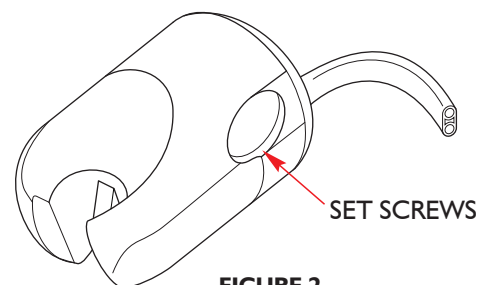


FIGURE 2

## CONTROLS

The master on-off toggle controls air and water to the entire system. It is located on the underside of the control unit, on the left. The water coolant flow control knobs control water to a specific handpiece and are located on the underside of the control unit, near the front. The handpiece flush toggle is located on the underside of the control unit on the left of the unit - used to flush handpieces. The drive air pressure gauge indicates the operating pressure of the selected handpiece. It is located on the right side of the control unit chassis. The drive air adjustment screws are located on the inside of the control unit. Handpiece drive air pressure should be adjusted to the handpiece manufacturer's recommendation.

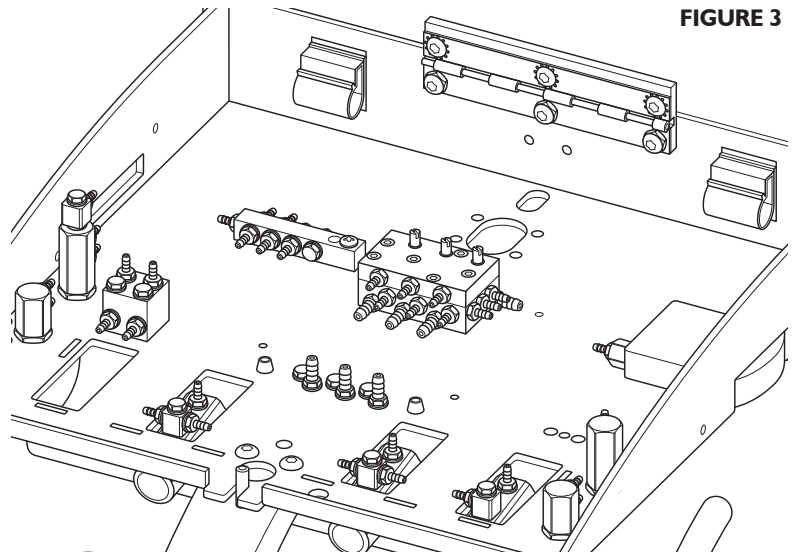
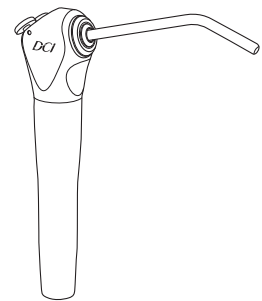


FIGURE 3

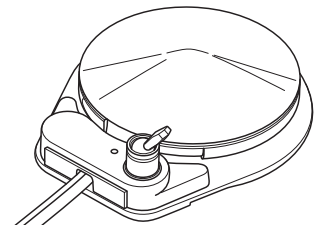
## SYRINGE

The #4378 comes with a Precision Comfort syringe. The syringe is packaged in a shipping envelope, with operating instructions and a repair kit attached. The syringe goes in the holder on the far left side of the instrument holder bar. Adjustment screws for the air and water flow to the syringe are located on the underside of the control unit, in the rear left area. Use the 3/32" hex driver provided with the unit to turn the hex screws counter-clockwise to increase the flow of air or water, clockwise to decrease the flow.



## FOOT CONTROL

The foot control is equipped with a wet/dry toggle. When the toggle is positioned toward the blue dot, water will be provided to the active handpiece. With the toggle positioned away from the blue dot, water is turned off. Handpiece speed is controlled with the foot control disc. Varying pressure on the foot control disc controls speed. Air coolant is also provided when you step on the foot control disc.



## CONTROL HEAD

The control head can be cleaned with most commonly available surface disinfectants. Do not use any Sodium Hypochloride solutions, or any cleansers containing alcohol. These may cause paint and finish discoloration.

## DENTAL UNIT WATER LINE MAINTENANCE

Distilled water is not recommended for use in dental units. The Center for Disease Control and the American Dental Association can provide recommendations on when to flush your system, for how long, and what products to use.

## CLEANING AND MAINTENANCE

Do not use powdered cleansers, scouring pads, or abrasive scrubbers on any of the finished metal surfaces in this unit, i.e. the syringe or the foot control disc. Sodium Hypochloride will also damage these surfaces.

The handpiece oil collector is located on underside of unit in center, unscrew base to reveal gauze, replace weekly if necessary with 2" x 2" gauze pad.