DCI

Operating Instructions for the Alternative #4125 Arm Mounted Manual Control for Two Handpieces

Operation and Features

Arm

The *pneumatic arm brake toggle* is located on the underside of the control unit, in the front right corner, behind the water coolant flow control knob. The brake keeps the vertical position of the arm assembly constant until the operator chooses to change it. To change the vertical position of the arm, pull the toggle forward to release the brake, reposition the arm to the desired position and release the toggle.

It may be necessary to adjust the spring tension on the flex arm section of the pneumatic arm, depending on the extra weight added to the instrument tray. If the control unit drifts out of the vertical position when the brake is released, *see the section on adjustments*.

Controls

The *handpiece selector toggle* controls which handpiece is active. The toggle position (left or right) indicates the active handpiece. It is located on the underside of the control unit, in the right front center.

The *water coolant on/off toggle* turns the air signal on or off to the water coolant flow control/relay valve for handpiece #2. It is located on the underside of the control unit, in the left front.

The *water coolant flow control/relay knob* controls water to handpiece #2. It is located on the underside of the control unit, in the right front.

The *drive air pressure gauge* indicates the operating pressure of the selected handpiece. It is located on the front left center of the control unit cover.

The *drive air adjustment screws* are located on the underside of the control unit, in the right rear behind the handpiece selector toggle. Handpiece drive air pressures should be adjusted to the handpiece manufacturer's recommendation. *See the section on adjustments*.

The *syringe adjusting screws* are located in the left front and to the right of the coolant on/off toggle.



Syringe

The #4125 comes with a standard 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.

Foot Control

The foot control is the standard style. Handpiece speed is controlled with the foot control disc. Varying pressure on the foot control disc controls speed. Air coolant is also provide when you step on the foot control disc.

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.

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

The Center for Disease Control and the American Dental Association can provide recommendations on when to flush your system, for how long, and what to use.

Adjustments

Syringe Block

Adjustment screws for the air and water flow to the syringe are located on the underside of the control unit, in the front left, to the right of the water coolant on/off toggle. Use the 3/32" ball driver provided with the unit to turn the hex screws counterclockwise to increase the flow of air or water, clockwise to decrease the flow. As you face the control unit the adjusting screw for air is on the right, and the adjusting screw for water is on the left.

Handpiece Holders

Each handpiece holder is attached to the front of the cover.

Flex Arm Spring Tension

To adjust the tension in the flex arm spring, extend the arm assembly fully and position it at its highest vertical height. Using a 5/64" hex key, remove the access plate from the underside of the flex arm section of the arm (see Figure 2). Slide the long plastic strip out to expose the supply tubing running inside the arm. The opening under the tubing provides access to the spring and the tension adjustment brass collar.

Spring tension is adjusted by turning the brass collar. To turn the collar, insert a flat blade screwdriver into one of the vertical slots on the collar. Gentle pry against the edge of the opening in the arm until the collar turns.

If the control unit drifts up, turn the collar counter-clockwise to reduce tension (as viewed from front of control unit). If the control unit drifts down, turn the collar clockwise to increase tension. Turn the brass collar two or three complete turns, then release the brake toggle to see if the control unit moves. Continue adjusting in increments of two or three turns as needed.

All of the following adjustments should be made with a bur in the handpiece. Running a handpiece without a bur can damage the handpiece.

Handpiece Drive Air Pressure

Refer to the manufacturer's literature to determine the recommended drive air operating pressure for your handpieces.

You will need a 3/32" ball driver to make these adjustments. Install a bur in the handpiece to be tested.

With the handpiece selector toggle select the handpiece you want to adjust. Place the water coolant on/off toggle in the off position. Step on the foot control disc until the handpiece is running at maximum speed.

Handpiece pressure adjustment screws are located in the rear right, behind the handpiece selector valve. Using the 3/32" ball driver adjust handpiece pressures. The front adjusting screw is for handpiece #2 and the rear adjusting screw is for handpiece #1. Turn the adjustment screw counter-clockwise until the pressure gauge reads a little more than the recommended operating pressure. Then turn the screw until the pressure gauge indicates the recommended operating pressure. Repeat this step for the remaining handpiece.

Water Coolant Flow Control

Place the water coolant on/off toggle in the on position. Install a bur in the handpiece to be tested. Press on the foot control disc until the handpiece is running at half operating speed. Adjust the water coolant flow control knob for handpiece #2 until a fine spray is present around the bur. Very little water coolant is required to attain the appropriate spray pattern.



Note