### ALTERNATIVE MANUAL CONTROL FOR TWO HANDPIECES

# DCI

Instructions for Use

4120/4121/4128/4129

#### **GENERAL INFORMATION**

#### APPLICABLE MODEL

4XXX

#### INTENDED APPLICATION AND USE

The dental delivery system is a device intended to support the instruments used by the dental practitioner, delivering those instruments to an accessible position during a dental procedure. This device may control and be the means of delivering compressed air, water, vacuum and low voltage electricity to a variety of instruments commonly used in dental practice.

## OPERATING INSTRUCTIONS AND DENTAL DELIVERY SYSTEM FEATURES

#### ARM

The *pneumatic arm brake toggle* is located on the underside of the control dental delivery system, in the front right corner. 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 dental delivery system drifts out of the vertical position when the brake is released, see the section on *adjustments*.

#### CONTROL

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 dental delivery system, 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 dental delivery system, 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 dental delivery system, 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 dental delivery system cover.

The drive air adjustment screws are located on the underside of the control dental delivery system, 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 #4120 & 4121 & 4128 & 4129 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.



#### 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.

#### **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 DENTAL DELIVERY SYSTEM WATER LINE MAINTENANCE

The Centers 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 dental delivery system, in the front left, to the right of the water coolant on/off toggle.

Use the 3/32" hex driver provided with the dental delivery system to turn the hex screws counterclockwise to increase the flow of air or water, clockwise to decrease the flow. As you face the control dental delivery system the adjusting screw for air is on the left, and the adjusting screw for water is on the right.

#### HANDPIECE HOLDERS

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

#### FLEX ARM SPRING TENSION

The pneumatic arm brake toggle is located on the underside of the control dental delivery system, in the front right corner or front left corner- if dental delivery system is left handed. 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 dental delivery system drifts out of the vertical position when the brake is released extend the arm assembly fully and position it at its highest vertical height. Slide the long plastic strip out to expose the supply tubing running inside the arm (See Figure 2). The opening under the tubing provides access to the handle for the tension adjustment. The handle is located underneath the supply tubing and will present itself if the tubing is moved to one side. Spring tension is adjusted by moving the handle either to the left or the right. If the control dental delivery system drifts up, move the handle counterclockwise (as viewed from front of control dental delivery system) to reduce tension - disengage collar by moving handle toward the dental delivery system head - advance the handle and reengage - repeat until desired tension is achieved. If the control dental delivery system drifts down, move the handle clockwise (as viewed from front of control dental delivery system) to increase tension - disengage collar by moving handle toward the dental delivery system head - advance the handle and reengage - repeat until desired tension is achieved. Replace tubing back to original position and slide the long plastic strip back into place - the tension adjustment handle will fold out of the way automatically.



#### HANDPIECE DRIVE AIR PRESSURE

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

Refer to the manufacturer's literature to determine the recommended drive air operating pressure for your handpieces. You will need a 3/32" hex 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" hex 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 counterclockwise 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.

#### **CLEANING AND MAINTENANCE**

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

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