

PURPOSE

This guideline demonstrates the steps used to replace diaphragm pucks in Control Blocks. The kit contains enough pucks to rebuild up to six positions.

IMPORTANT!

It is necessary to replace pucks in any add-on blocks in addition to the Main Control Block.

Please verify if there are any add-on Control Blocks in addition to the main Control Block and ensure that the gasket diaphragms in those are replaced when performing this maintenance.

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PARTS INCLUDED

- Small pucks (12)
- Large pucks (6)
- If additional pucks are needed for more positions, a single set can be ordered (PN 95-0215-1).

TOOLS REQUIRED

- 7/64" Allen wrench

GETTING STARTED

- Turn off main power and air supply to unit.
- Run air syringe to relieve compressed air in system.

HOW TO OPEN THE DENTAL UNIT

Refer to and follow the instructions listed in the ASI Technical Guideline, *TG-NP-0002 – Opening the Cover of the Unit Removing Cover Plate to Create More Access*. Note that these instructions vary by model.

LOCATE ALL CONTROL BLOCKS WITHIN THE DELIVERY SYSTEM

The number of blocks varies depending on the configuration of the delivery system. As it is important to replace all of the diaphragms during this maintenance, use the steps below to identify the Control Block(s) used in delivery system. These may be 1-position, 2-position, 3-position, or 5-position.

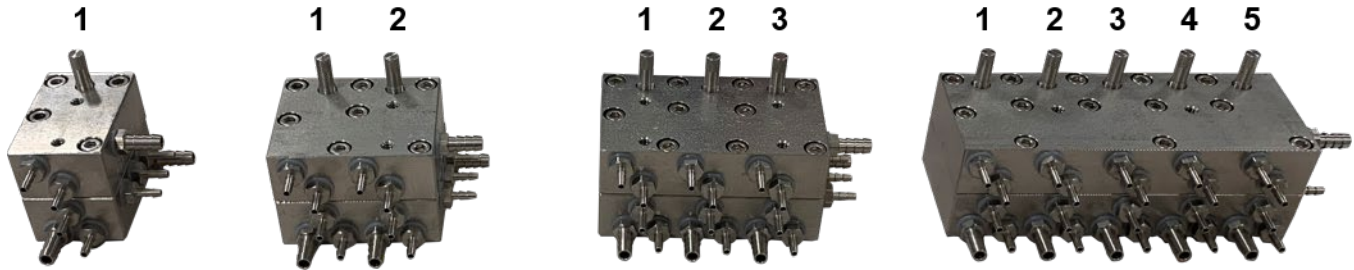


Fig. 1 – Control Blocks

The Control Blocks may be located in plain view or may be located just under the shelf. **(Fig. 2)**

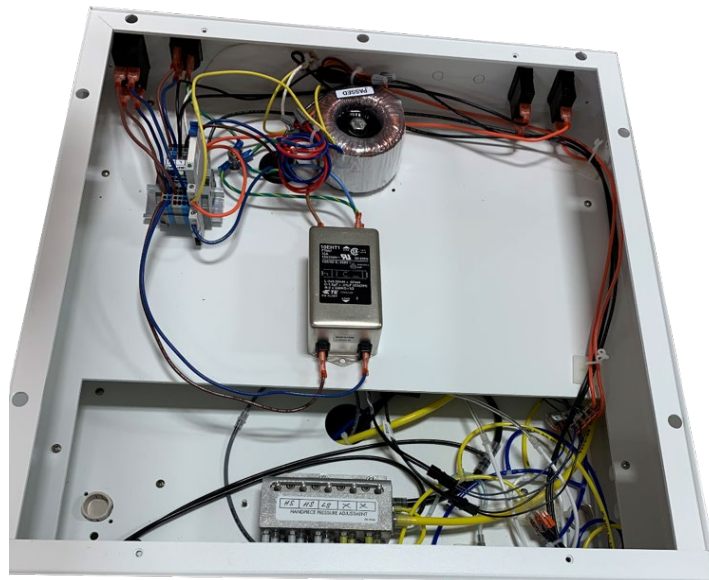


Fig. 2 – Baseplate

NOTE: Since Control Blocks are used for High Speed, Low Speed, Rotary, Ultrasonic handpieces, the number of these should correspond to the number of positions.

ACCESS THE CONTROL BLOCK(S)

Depending on the model of the system, the Control Block may be held in place with a bracket or screwed in from underneath the baseplate. Remove the screws or the hold-down bracket to release the Control Block. The screws may be located underneath the label. The Control Block can be opened up without removal of tubings.

NOTE: Refer to ASI Technical Guideline, *TG-95-0295 – Control Block Diaphragm*, for proper tubing connections, if needed.

CHANGING THE DIAPHRAGMS

The steps below show how to change the diaphragms on a 5-position Control Block. These steps are the same for the 1-position, 2-position, and 3-position Control Blocks.

1. Using a 7/64" Allen wrench, remove all thirteen (13) screws from a 5-position Control Block, then set aside. **(Fig. 3)**
2. Carefully separate the Control Block in the center, open slowly so as not to lose any pucks. **(Fig. 3)**

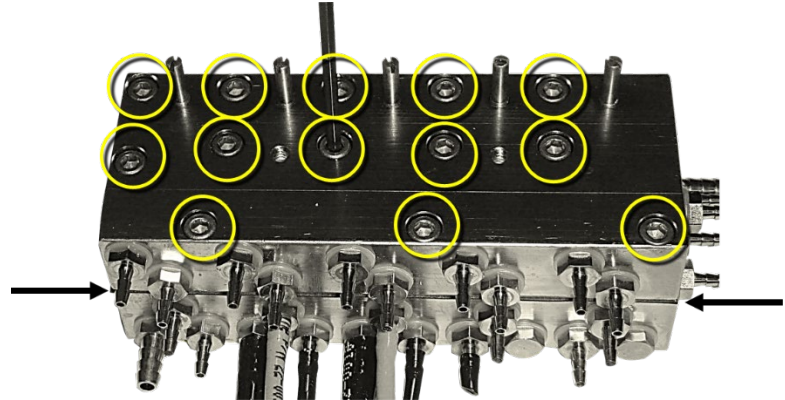


Fig. 3. Five-position Control Block
Screw locations circled; arrow show where block opens

3. Remove existing diaphragm or pucks and replace with new. **(Fig.4)**
Make sure pucks are placed into the counter bores. Ensure the one-piece diaphragm is smooth and flat with no wrinkles.

Hold one side of the Block and then carefully place the other side of the Block on top and align. Be careful not to misalign the diaphragm or dislodge any of pucks. **(Fig. 4)**

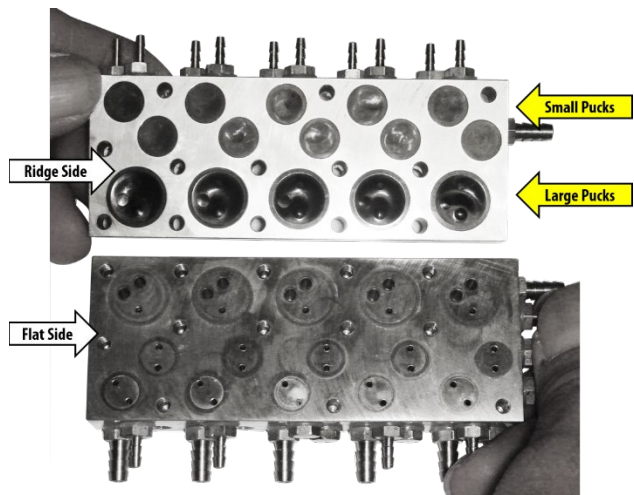


Fig. 4. Five-position Control Block (inside view)

NOTE: The puck gaskets have two distinct sides. One side is smooth and the other side has a small ridge around the perimeter. When placing the puck gasket, make sure the ridge side face into the counter bore block side (which is the same side that has the air adjustment screws in it). The smooth side will be facing out.

4. While carefully holding the Block together, insert screws and lightly tighten all at first; then go back and tighten firmly.
5. Place Control Block back, ensuring no tubing gets pinched or kinked. Turn ON the main power and the air supply to the unit; test all functions.

IMPORTANT!

Ensure main air supply to delivery unit is regulated to **80psi**.
High pressure will damage the diaphragms.

WARNINGS



WARNING! Only qualified personnel should service or repair this device. This device should only be serviced/repared by a qualified service technician who is proficient in the repair of electromechanical dental equipment and who understands the complexities and risks of working within the device and observes proper safety precautions.



WARNING – Compressed Air. The compressed air system that operates this unit is under pressure. Compressed air can propel dust or loose particles and can cause bodily injury or damage. Always turn the system off and bleed off air pressure before attaching or removing air lines or accessories or servicing this unit. All air lines should be periodically inspected and replaced if worn or damaged. If an outside compressed air supply is used to power this unit, the air supply must be regulated to 80 psi or below. Excessive air pressure could cause certain components to rupture.



WARNING – Electrical Voltage. This system is powered by high voltage electricity. Like any other electrically powered device, if it is not used properly, it can cause electrical shock. Always plug the power cord into an electrical outlet with adequate fuse protection and proper grounding. In the event of a short circuit, grounding reduces the risk of shock by providing an escape wire for the electric current. Improper grounding of the unit can result in a risk of electric shock. Always unplug the unit before doing any service or repair to the unit.