

ADK276, ADK277, ADK278 & ADK284 CONTROL BLOCK (VERSION 2) INSTALLATION INSTRUCTIONS

Important Note: The OEM has placed a color-coded plumbing chart on the underside of the delivery unit lid or side covers that are removed to gain access to the control block. But, before you remove the control block from your units, it is wise to make notes or take pictures of how your tubing is connected to the control block that you are removing.

Tech Tip 1: For each handpiece tubing position, wrap each bundle (blue, green and clear tubing) coming from each handpiece umbilical positions (1, 2, 3 or 4), with tape or a toe tag and label them per the position you removed them from. Once the individual handpiece tubing has been labeled, then slide the barb retainer to unlock the handpiece tubing quick disconnect barb from the old control block.

Getting Started:

1. Turn off the water to the control block and purge water from the system.
2. Turn off the master toggle valve on the system.
3. Unsecure the old control block by removing the 5/32" hex mounting screw(s) using a 5/32" hex key and detach it from the frame.

OEM Version 1 to Version 2 Control Block (HCG/RPI Part #'s ADK276 & ADK284) - Conversion for the Pilot Air Manifold Installation:

Tech Tip 2: For the tubing that is installed onto the barb fittings on either end of the control block and cap, working on one position at a time, cut the tubing away from the old block assembly at the barb fitting. Slide a new uni-clamp on to the cut tubing and then reinstall onto the new control block barb in the same position. This will allow you to maintain the correct tubing color order. Repeat for each position. Set all uni-clamps and barb sleeves with the proper Sleeve Tool (HCG/RPI Part #RPT296).

4. Cut the Drive Air Bleed (1/8" OD) tubing and use the included Barb tubing plug at the tee end if present (**see Figure 1**).

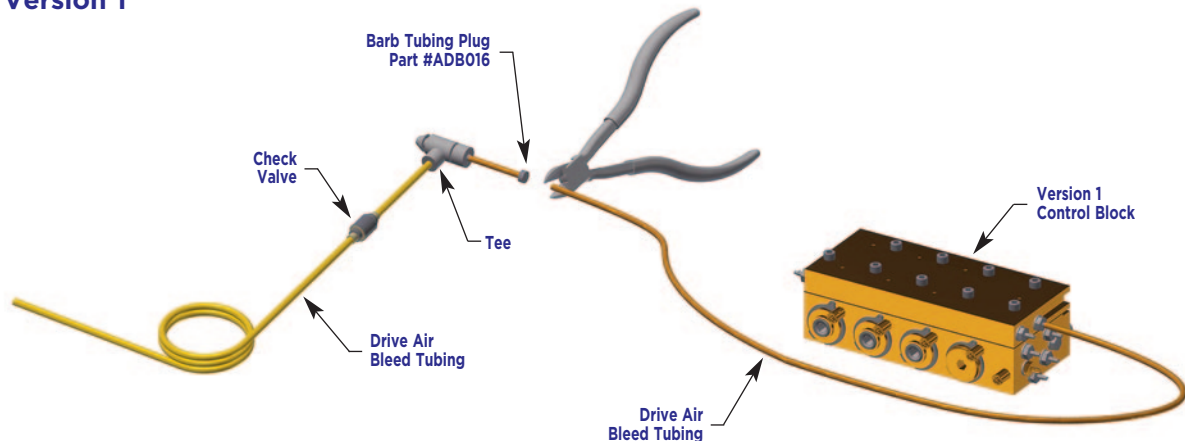
5. For the **500 Series:** (4 Position) Models: (532A/533A, 541 A/B, & 542) delivery systems only: Install the supplied yellow tubing onto the six barbs on the pilot air brass manifold (trim to desired length). Install in-line barbs into the ends of the yellow tubing.

Remove the unregulated pilot air tubing (1/8" yellow with red dash) from the version 1 control block cap (**see Figure 2**). Reconnect this tubing to the pilot air brass manifold in-line barbs in the end ports (**see Figure 3**).

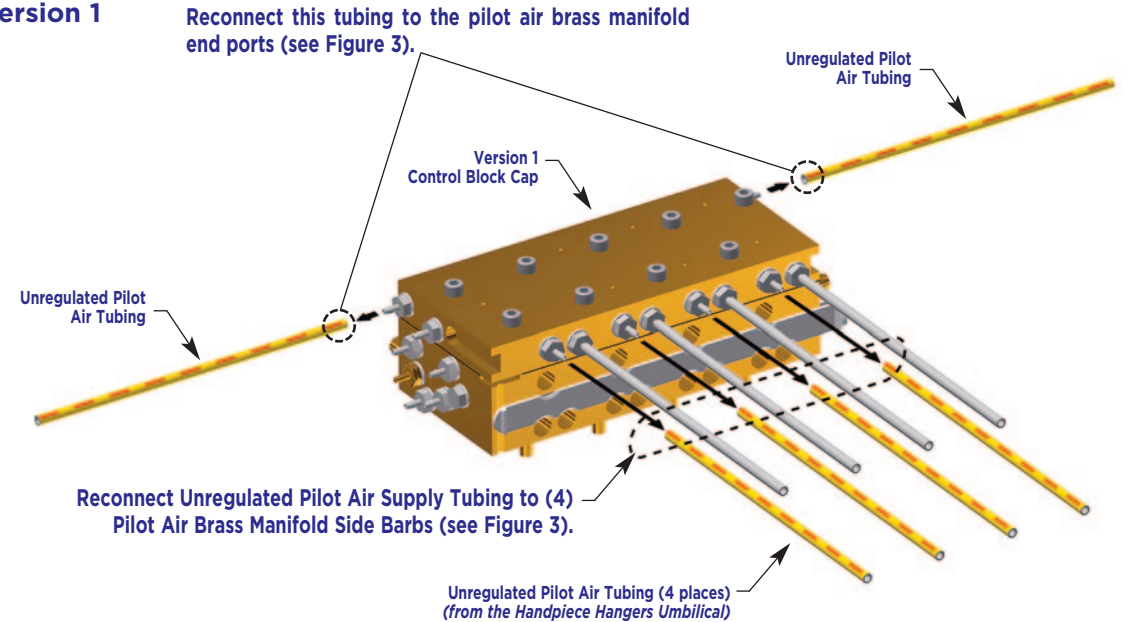
Connect 4 remaining yellow tubing with in-line barbs to the 4 yellow with red dash tubing removed from the version 1 control block cap (pilot feed tubing) (**see Figure 2**).

6. Connect all remaining tubing from the pilot air manifold and Version 1 control block tubing to the new Version 2 control block. **See Tech Tip 1 and 2.**
7. **Completing the installation and set up:** Complete steps 10, 11, and **Test the System Section.**

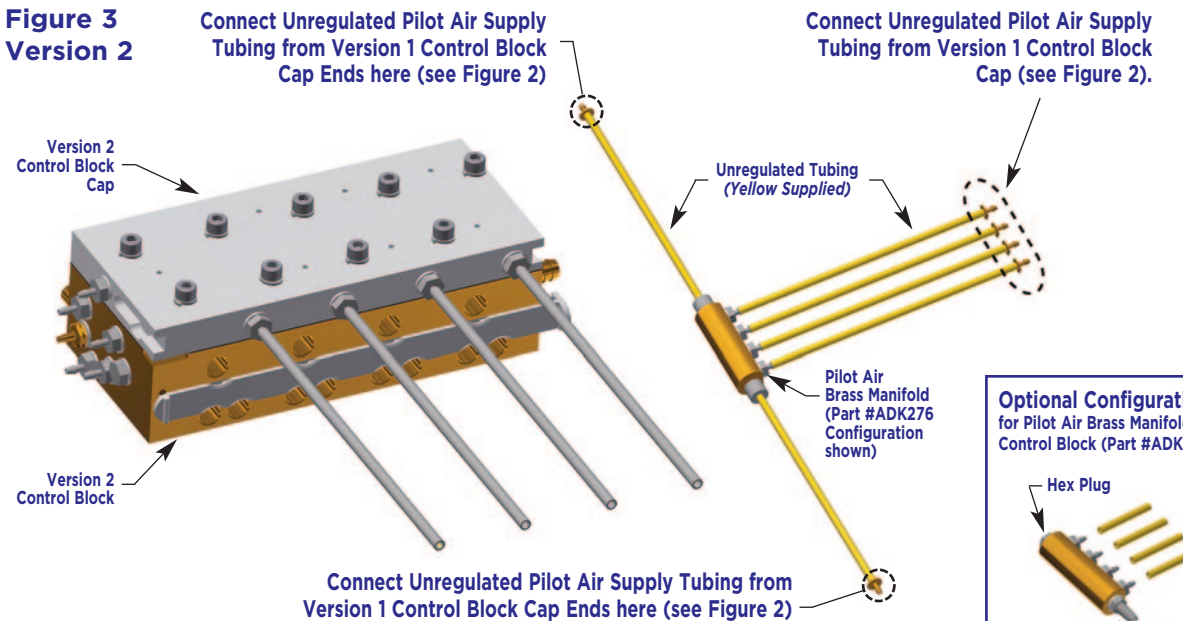
**Figure 1
Version 1**



**Figure 2
Version 1**



**Figure 3
Version 2**



Note: Add supplied uni-clamps to all in-line barb tubing connections.

For other Version 2 Control Blocks (HCG/RPI Part #'s ADK277 & ADK278) without the Pilot Air Manifold Installation: Complete steps 8 through 11 and **Test the System Section.**

- For the **200/300/500 Performer** delivery systems and simulators: (3 & 4 Position) Models: 200 (After 06/2017 - 3 Position Only), 332, 333, 334, 335, 336 & 500 delivery systems. **Note:** The number and type of tubing may vary depending on the configuration.
- Remove and reconnect each tubing, one tube at a time, from the old control block version 2 to the new version 2 control block to the same positions (**see Tech Tip 1 and 2**).

Completing the installation and set up: Steps 10, 11, and **Test the System Section.**

- You may need to move the water/dry cartridge assemblies to match the water/dry positions from the old control block using a 3/16" hex key. Be sure that you secure the water stem by turning the cartridge retaining washer fully clockwise until the tab rides up and over the water stem cartridge when tightening it. Install the new included knobs (**see Figure 4**).
- Secure the new control block with the 5/32" hex mounting screw(s) using a 5/32" hex key to the frame and be sure the tubing does not become pinched or kinked.

Test the System Section:

- Turn on the master toggle valve only. Check the control block and tubing for air leaks. Fill the water bottle and turn on the water and test for water leaks.

Check the handpieces for proper function: follow the steps below to adjust the Air Coolant, Water Coolant, and the Drive Air (**see Figure 5**).

To adjust the Air Coolant mist:

Note: Adjusting the air coolant for one handpiece position sets the adjustment for all the positions.

- Flip the wet/dry toggle on the foot control to the "On" position.
- Install a bur into a handpiece and activate that position by removing the handpiece from the handpiece holder.
- Fully depress the foot control disk.
- Adjust the handpiece air coolant adjustment to create a cooling mist at the bur.

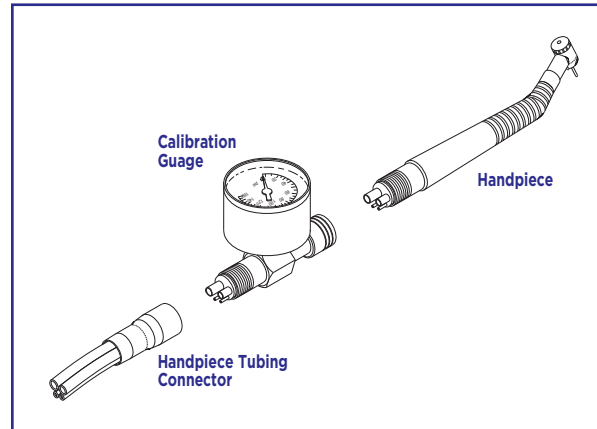
To adjust the Water Coolant:

- Flip the wet/dry toggle on the foot control to the "On" position.
- Install a bur into a handpiece and activate that position by removing the handpiece from the handpiece holder.
- Fully depress the foot control disk.

- Turn the water coolant adjustment knob to the desired flow to fit the operator's needs.
- Repeat these steps for each handpiece position.

To adjust the Drive Air:

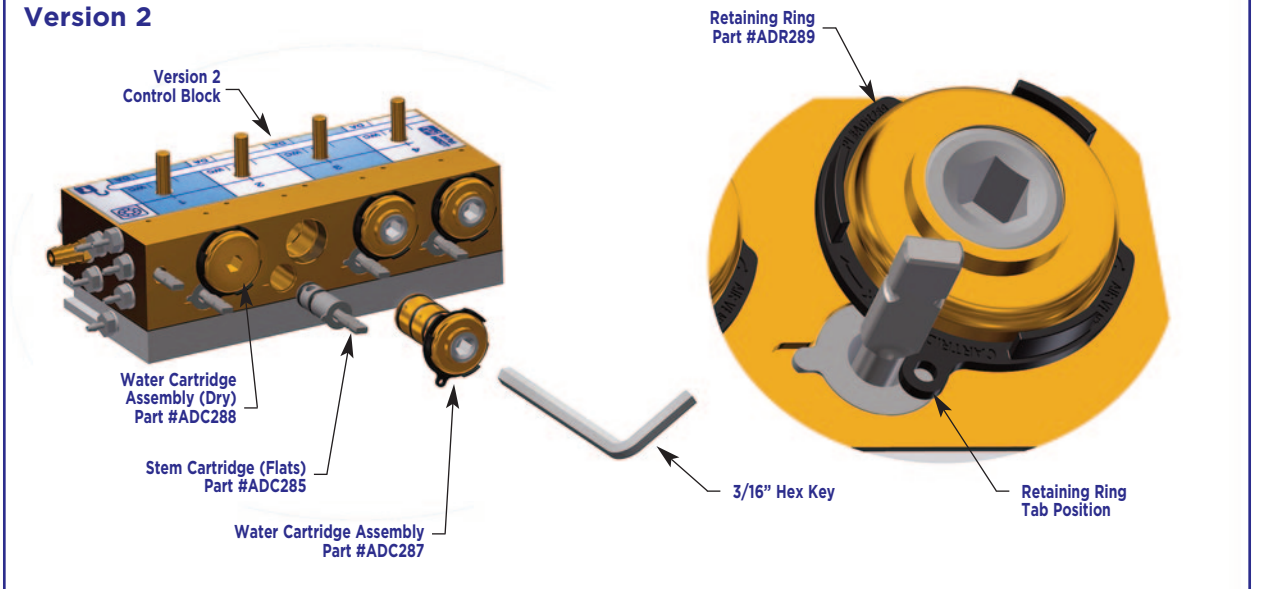
Note 1: The digital gauge inside the delivery system reads the drive air pressure only at the control block. For accurate handpiece pressure setting, use a pressure gauge at the end of the handpiece tubing.



Note 2: Air turbine handpieces should be set to ~40 PSI Electric Micromotor Controller (EA-50LT) should be set to a minimum of ~60 PSI.

- Use a handpiece pressure gauge (**see Note 1 above**) to adjust the drive air for each handpiece position.
- Install a bur into a handpiece and activate that position by removing the handpiece from the handpiece holder.
- Fully depress the foot control disk.
- Adjust the stem (drive air) (**see Note 2 above**) which is located on the top of the control block (**see Figure 5**).
- Repeat these steps for each handpiece position.
- Install covers and return to service.

**Figure 4
Version 2**



**Figure 5
Version 2**

