PURPOSE

The purpose of this Technical Guideline is to aid in the installation of the Master Air Regulator with Purge Valve Upgrade Kit.

This upgrade kit is required for carts made before January 2017.

PARTS INCLUDED

- Master Air Regulator with Purge (95-0178A)
- Purge Valve
- Purge Tubing
- Purge Label
- O-Ring Grease

TOOLS REQUIRED

- Drill
- .475” - .500” Drill Bit
- Adjustable wrench
- Pliers
- Phillips head screwdriver, short, stubby
- Flat head screwdriver, medium

INSTRUCTIONS

1. Unplug the unit. This will turn off air supply to unit. Run air/water syringe to relieve all pressure from unit.
2. Drill a 0.475”- 0.5” hole in the Back Panel 11-1/8” from the top of the Caster Base and 3-1/4” from the right edge of the door as shown in Fig. 1 and Fig. 2. Open the rear door to ensure nothing inside the unit is damaged.

   NOTE: The hole will end up just below the water housing on the inside of the cabinet.

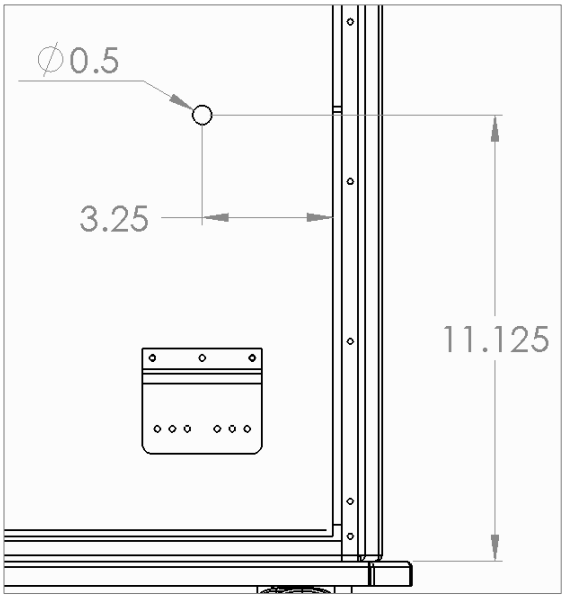

Fig. 1
Purge Valve Hole

3. Install the Valve in the door by inserting the Valve from the outside and tightening the nut on the inside.

   Then, apply the Air Tank Purge Valve Label as shown in Fig. 2.

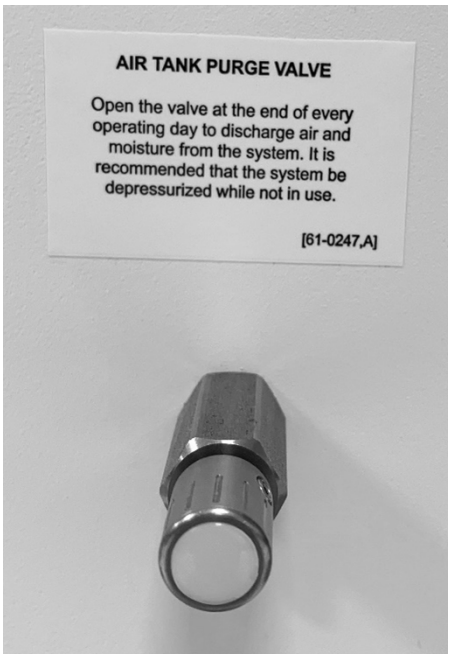

Fig. 2
Purge Valve

4. Follow removal instructions described in TG-95-0343 to remove the suction canister.

   To gain access to the screws holding the air tank, remove the bowl and filter from the master regulator, Fig. 3.

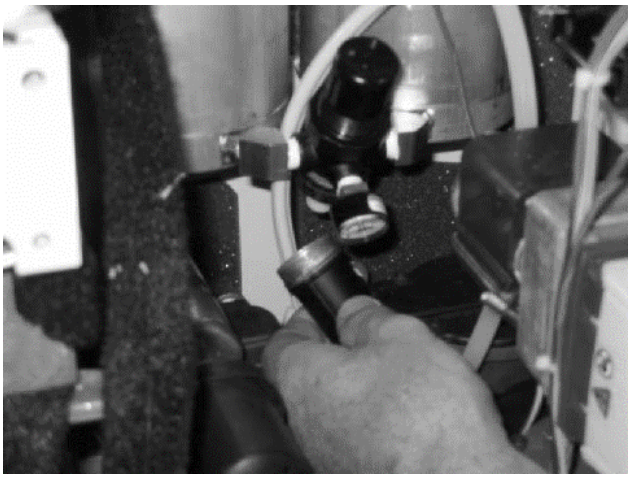

Fig. 3
Removing bowl and filter from master regulator

5. Using a short, stubby Phillips screwdriver, remove the three (3) screws from underneath the left air tank.

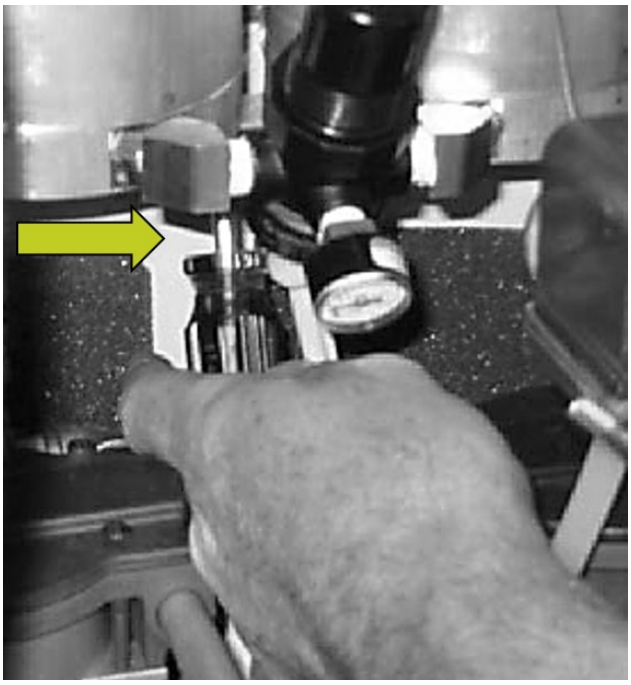

Fig. 4
Using Phillips screwdriver, remove screws

6. Once screws have been removed, firmly grasp the regulator and pull to the left until it slides out of the air tanks.

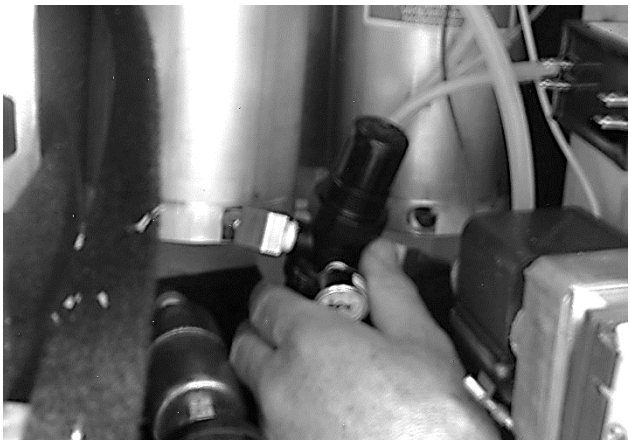

Fig. 5
Grasp regulator and pull out of air tanks

7. Apply provided silicon grease to each side of regulator the new master air regulator with purge.

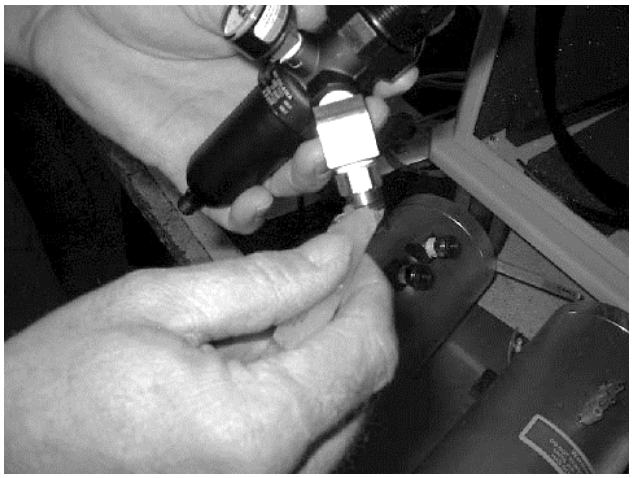

Fig. 6
Apply silicon grease to each side of the regulator

8. Slide the brass fitting into the left air tank until it completely seats.

   Repeat on the right side until it completely seats.

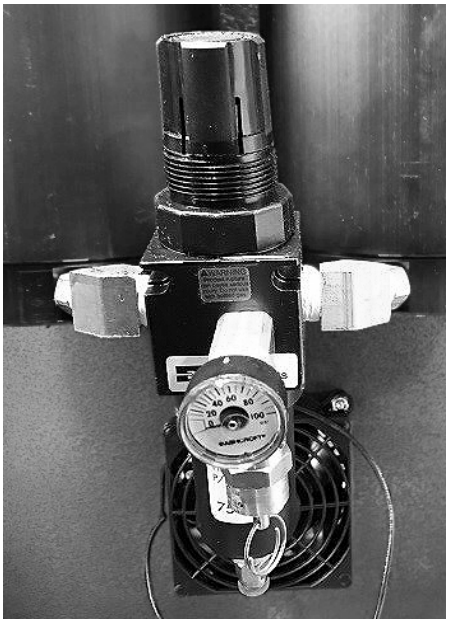

Fig. 7
Inserting new master air regulator

9. Hand start all three (3) screws that go into the bottom of the left air tank. Then, firmly tighten with Phillips screwdriver.

10. Install the tubing into the new regulator bowl with compression fitting as shown.

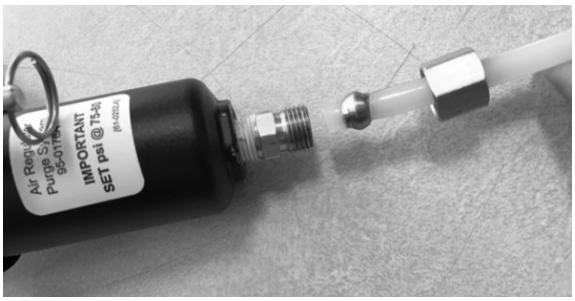

Fig. 8
Installing purge tubing onto bowl

11. Reinstall the bowl into the regulator.

    Then re-install the suction canister, reference TG-95-0343.

Fig. 9
Bow with purge tube installed

12. Install tubing by inserting it into the push-to-connect fitting on the purge valve.

Fig. 10
Connecting to purge valve

13. To ensure the absence of all air leaks, turn on system and power up the air compressor.

14. If necessary, adjust to 75-80 psi by lifting the cap on the regulator and turning clockwise to increase or turning counterclockwise to decrease.

CAUTIONS

WARNING! Only qualified personnel should service or repair this device. This device should only be serviced/repaired 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.

WARNING – Presence of Heavy Metals/Amalgam. This cart may be equipped with optional suction instruments. As part of dental procedures, particles of amalgam may be suctioned into the dental suction handpieces and collected within the system and trap filter.

WARNING – Infectious Materials. Infectious disease workplace safety protocols to safeguard against cross contamination of infectious disease should always observed. When maintaining the suction system or emptying the contents of the suction waste container, safe precautions and practices including the wearing of face mask, eye protection and gloves are to be followed.