

The Leader In Advanced Systems Integration
Advanced Dental Systems® & Advanced Endodontic Systems® www.asimedical.net | (303) 766-3646

### **Technical Guideline**

## Removing/Replacing the Vacuum Pump

TG-95-0167

Rev B | 05/17/17 | Page 1 of 4

### **CONTENTS**

PARTS INCLUDED	1
TOOLS REQUIRED	1
INSTRUCTIONS FOR STANDARD DESIGN	1
INSTRUCTIONS FOR SYSTEMS WITH GRAY SLIDE DESIGN	3

#### **WARNINGS**



**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 – 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 – 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.

#### **PARTS INCLUDED**

Vacuum Pump

### **TOOLS REQUIRED**

- 7/16" Allen wrench
- Two 9/16" open-ended wrenches
- Small flat head screwdriver
- Flat head screwdriver
- Crescent wrench
- Hex head screwdriver

#### INSTRUCTIONS FOR STANDARD DESIGN

Steps for Systems with Gray Slide Design begin with Step 11.

- 1. Turn off main power and unplug unit from power outlet.
- 2. Open door located on the back of the unit using a flat head screwdriver.



The Leader In Advanced Systems Integration
Advanced Dental Systems® & Advanced Endodontic Systems® www.asimedical.net | (303) 766-3646

## **Technical Guideline**

## Removing/Replacing the Vacuum Pump

TG-95-0167

Rev B | 05/17/17 | Page 2 of 4

3. Locate the steel reinforced tubing connected to the brass barb connection of the vacuum pump. Untighten the clamp using a flat head screwdriver. Pull up, moving the tubing back and forth to remove tubing from the brass barb. (Fig. 1; Fig. 2)





Fig. 1

Fig. 2

4. Locate and disconnect the two wires to the capacitor. (Fig. 3)



Fig. 3

5. Locate the white wires coming from the vacuum and follow to the terminal strip. Using a small flat head screwdriver, loosen the screw in location "6" for removing the white wire. Locate the green wire coming from the vacuum and unthread nut using a crescent wrench. (Fig. 4)

**NOTE:** The wire that will be disconnected is on the left side of the terminal block.

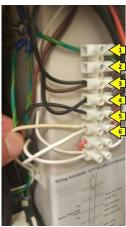


Fig. 4



## **Technical Guideline**

# Removing/Replacing the Vacuum Pump

TG-95-0167

Rev B | 05/17/17 | Page 3 of 4

6. Locate the three locking hex head bolts on the bottom of the metal plate holding the compressor. There are two in the front and one in the center on the right side. Remove them using a 7/16" wrench or socket. Set aside. (Fig. 5)



7. Once the bolts have been removed, carefully lift and slide the vacuum with the plate towards you and remove from the chassis.

**NOTE:** It may be necessary to rock the vacuum back and forth to remove.

8. Install replacement vacuum by sliding the vacuum with plate in towards the chassis. It may be necessary to rock it back and forth to get it into position.

**NOTE:** There are two screws with washers on the bottom of the cart chassis towards the back. Make sure that the vacuum notches slide under these.

- 9. Repeat Steps 2 through 5 in reverse order.
- 10. Restore power to the unit and test for correct installation by checking for suction and proper function.

### INSTRUCTIONS FOR SYSTEMS WITH GRAY SLIDE DESIGN

11. Follow Steps 1 through 4.



www.asimedical.net | (303) 766-3646

## **Technical Guideline**

## Removing/Replacing the Vacuum Pump

TG-95-0167

Rev B | 05/17/17 | Page 4 of 4

12. Locate locking bolts attaching the vacuum to the bottom of the cart. Remove screws using a 7/16" socket or wrench. (Fig. 6)



Fig. 6

13. Locate the six 10/32" socket screws on both sides of the vacuum and remove using a hex head screwdriver. (Fig. 7)

**NOTE:** The second and third screws will be difficult to reach; lean the vacuum to access.



Fig. 7

14. Remove the vacuum from the unit with the gray slides attached.

**NOTE:** Foam located underneath the vacuum used to deafen sounds may become damaged when removing the vacuum. Replace foam if the damage is significant.

- 15. Install replacement vacuum by sliding into place.
- 16. Repeat Steps 12 through 13 in reverse order. Then, repeat Steps 2 through 4 in reverse order.
- 17. Restore power to the unit and test for correct installation by checking for proper suction.