PURPOSE

The purpose of this technical guideline is to provide the end-user with instructions to remove and replace a pressure switch into an ASI delivery system. This technical guide applies to the following service products:

- 95-0197, Air Compressor, 120V, 100psi Standard Pressure [pre 10/2006 models]
- 95-0416, Air Compressor Manifold, 115V

CONTENTS

PARTS INCLUDED

- Pressure Switch

TOOLS REQUIRED

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

IMPORTANT!
Before commencing on the following instructions, please read and follow all applicable warnings/cautions listed at the end of this technical guideline.

REPLACING PRESSURE SWITCH

1. Turn off the compressor pump and the main power switch.

2. Depressurize the unit by opening the air tank purge valve, or by pressure the air button on the Air/Water Syringe.

3. Locate the three locking hex bolts on the bottom of the metal plate holding the compressor in place. There are two in the front and one in the center on the left side of the plate. Use a 7/16” wrench or socket and set aside. Slide the compressor out of chassis to access the pressure switch more easily. (Fig. 1)

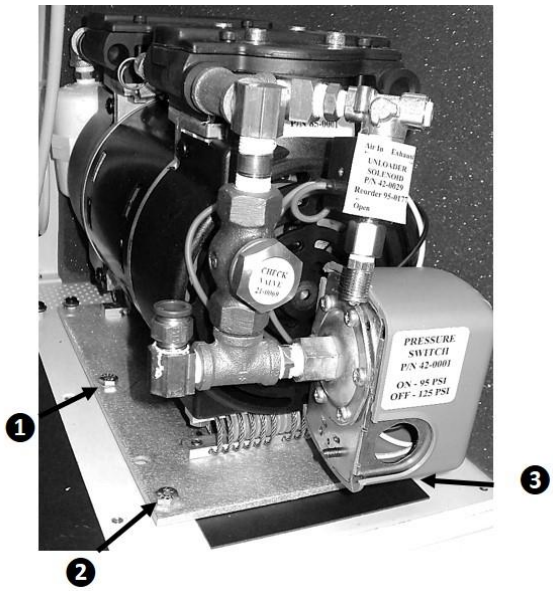

Fig. 1

4. Remove the grey cap from the old pressure switch to access the wiring. Unscrew the wires from the terminals to remove, then spin the old pressure switch off of the manifold.

   All wires that will be disconnected are on the left side of the terminal block.

5. Wrap new Teflon tape around the brass nipple threading on the compressor manifold to avoid air leaking after installation.

6. Spin the new pressure switch onto the nipple so the writing on the face of the pressure switch is right side up. Make sure the pressure switch is tight to avoid air leaks.

7. Feed the wires through the hole on the bottom right of the pressure switch. (Fig. 2)

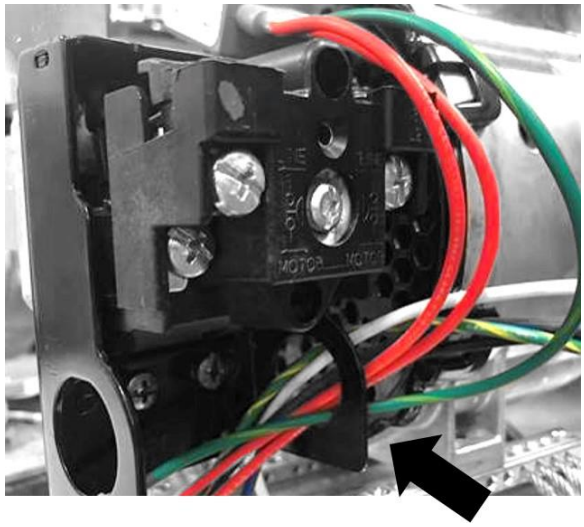

Fig. 2

8. Attach the red wires coming from the solenoid to terminals 2 and 4 on the pressure switch (center two screws).
9. Attach the blue and black wires coming from the compressor pump to terminal 4 on the pressure switch
10. Attach the white wire coming from the compressor to terminal 2 on the pressure switch.
11. Adjust the Spring on the Pressure Adjustment to 5/8” from the top of the screw to the top of the nut.

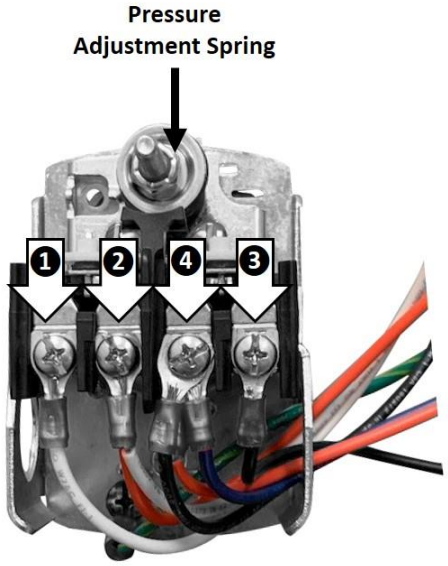

Fig. 3

12. Attach the black wire coming from Position 3 on the terminal strip to terminal 3 on the pressure switch (far right screw).
13. Attach the white wire coming from Position 4 on the terminal strip to terminal 1 on the pressure switch (far left screw).
14. Attach the green ground wires to the green ground screws located below the terminals on the pressure switch.

Fig. 4

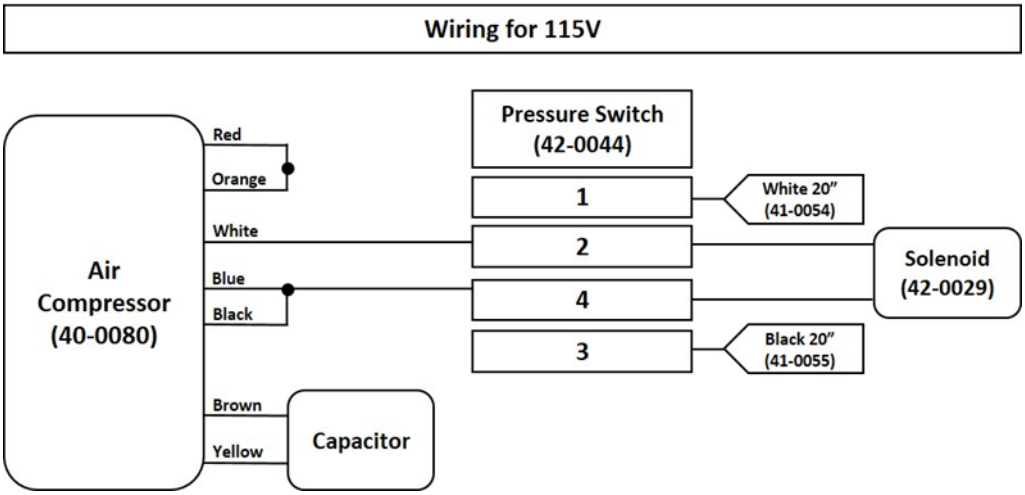

Fig. 5

15. Re-attach and tighten the black protective cap to the pressure switch. Slide the compressor back into the chassis and tighten down the hex bolts.
16. Restore power to the unit and flip on the compressor switch. Test that the compressor is turning on, building up pressure, and then shutting off. The pressure switch is preset to turn on at 80psi and off at 100psi. The regulator gauge inside the unit should read 80psi when the compressor reaches pressure and exhausts.
17. While the compressor is fully pressurized, spray some simple cleaning solution around the area where the pressure switch connects to the manifold. If any bubbles form, there is an air leak and the pressure switch is not tight enough around the brass nipple. Any air leaks on the compressor manifold will cause the compressor to cycle frequently, which can cause mechanical failure in the future.

WARNINGS/CAUTIONS

In addition to observing the normal precautions associated with standard dental practices and procedures, the following additional precautions should be strictly noted and observed during the set-up, operation, and maintenance of this system.

⚠ WARNING

QUALIFIED PERSONNEL ONLY

The product should only be operated by qualified personnel only. The operator bears responsibility for the correct settings and proper use of the system. ASI Dental (ASI) cannot be held liable for any malfunction of this product, or performance failure and/or its designed or desired utility, nor can ASI be held liable for injuries to persons or animals, in any case when the device is misused or not operated, applied or maintained in strict accordance with user/owner instructions set out in the operation manual. In the event of any doubt or question, the user is to contact ASI for clarification or assistance.

Improperly maintained or operated systems or instruments may void the associated warranties.

⚠ 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.