



MADE IN USA



# EGL-T12 Triple Oil-less Air Compressor (1-6 Users)

2022 USER MANUAL/Installation Instructions



1953 W. Gulf To Lake Hwy, Lecanto, FL 34461

Phone: 352-527-1975 FAX: 352-513-4801

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## ***Congratulations!***

On the Purchase of your Eagle-T12 oil-less dental compressor. Our Eagle-T12 oil-less dental compressors provide clean dry air to each chair flawlessly, requiring less maintenance than traditional compressors. Now that's peace of mind you can stand behind! We are certain you will love your new product!

If you are not satisfied 100% with this products please reach out and let us know,

*we are successful because of your FEEDBACK!*

**352-527-1975**

**Email: [sierradentalequipment@outlook.com](mailto:sierradentalequipment@outlook.com)**

# CUSTOMER SUPPORT

“We are happy to help you with any questions or concerns you may have about your equipment”



Contact Us at 352-527-1975

We're here to help!

[sierradentalequipment@outlook.com](mailto:sierradentalequipment@outlook.com)

[DentalVacuums.com](http://DentalVacuums.com)



Look for us...



on social media!

Sierra Dental Equipment Inc.

1953 W. Gulf to Lake Hwy

Lecanto, FL 34461

# WARRANTY POLICY



## Sierra Dental Equipment Limited Warranty

Warranty for the EAGLE-T12 oil-less compressor is limited to the original purchaser of the unit. Sierra Dental Equipment is only obligated under this warranty to the repair or replacement of defective parts or materials. The defect(s) must be reported to Sierra Dental Equipment within the valid warranty period.

Sierra Dental Equipment will examine the product to determine if the parts are defective. Equipment that has been abused, neglected, or damaged by being improperly installed/maintained are not covered by this warranty. We are not responsible for work performed on the unit.

### Warranty Period

Warranty is valid only with the return of the warranty card within 30 days of purchase for a period of **3 years or 2100 hours** whichever comes first. **YOU MUST INCLUDE** a copy of the start-up procedure which came with your new compressor. This is to confirm little to no leaks in the air system.

**YOU MUST DO A PRESSURE TEST AFTER THE COMPRESSOR IS INSTALLED TO VALIDATE WARRANTY! (See pg. 12)**

### Warranty Service and Return Policy

To obtain warranty service, product must be returned to Sierra Dental Equipment for examination at the purchaser's expense. All returns must be authorized, and a return material authorization (RMA#) number must be obtained from Sierra Dental Equipment. Returned units must be properly packaged for shipping. We are not responsible for shipping damages or shipping charges. Sierra Dental Equipment will, at their discretion, repair or replace defective parts. **\*\*PLEASE NOTE\*\*** there is a **25% re-stocking fee** on all returns.

# SAFETY

Use of the Eagle-T12 air compressor not in compliance with the instructions specified in this manual may result in permanent failure and voided warranty of the unit.

## WARNING

To prevent fire or electrical shock, do not expose this unit to rain or moisture, excessive heat or improper ventilation.

## ATTENTION USERS



Alerts users of important operating and maintenance instructions. Read carefully to avoid any problems



Warns users of a potentially hot surface and a danger of burns

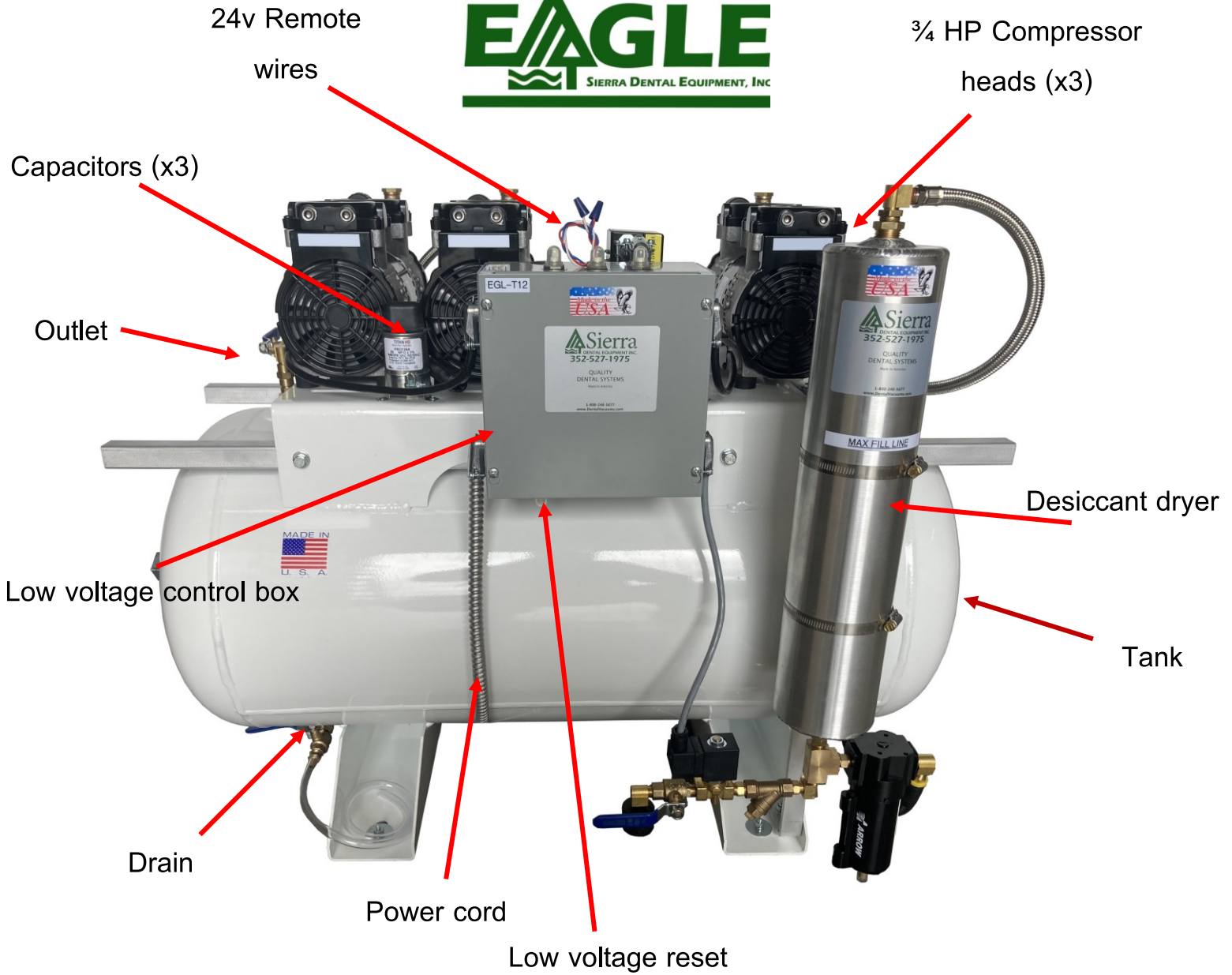


Warns users that uninsulated voltage is present and can cause electric shock

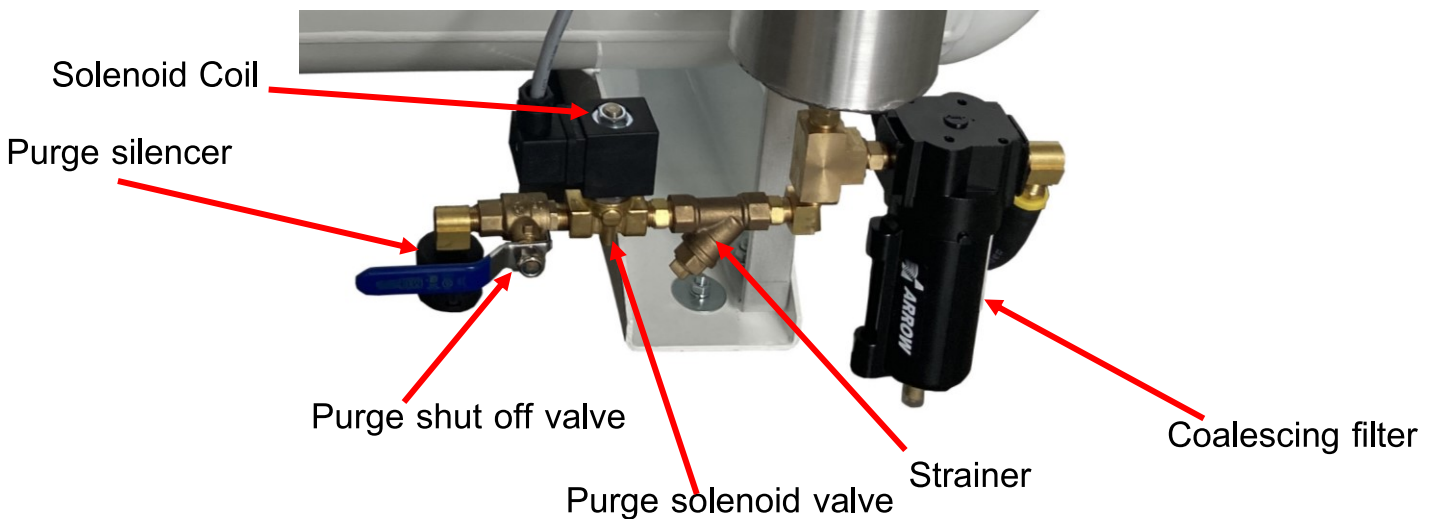
# SAFETY CONTINUED

1. **IMPORTANT** - This equipment:
  - a) Has hot, electrical, and moving parts;
  - b) May start or stop automatically, depending on the tank's pressure or the tripping of electrical protection elements;
  - c) May cause mechanical or electrical interferences in nearby equipment;
  - d) Must not be operated in places where non-authorized people, children, or animals may have access;
  - e) Requires an authorized person to supervise its use and ensure proper maintenance;
  - f) **Must be installed and operated in areas well ventilated and protected against humidity and water;**
  - g) **Must be installed and operated in areas that do not exceed 100 degrees Fahrenheit.**
2. Never exceed the maximum pressure of 100 psi.
3. Before any maintenance, be sure the equipment is unplugged and not energized.
4. Never change the adjustment of the safety valve or pressure switch. They are factory regulated and any adjustments made once in the field could void your warranty. If any adjustments to the pressure switch is needed, call your authorized dealer for Sierra Dental Equipment Inc.
5. Never perform welding jobs or repairs on the air pressure tank because this can affect its resistance or disguise more serious problems. If there is any leakage, crack, or corrosion, immediately stop operating the equipment and contact your authorized dealer for Sierra Dental Equipment.
6. Air compression is a heat generating process. The pump unit and tubes are subject to high temperatures. Therefore, one must be careful when handling them in order to avoid burns.
7. Before connecting the compressor to a power supply, verify that all electrical fittings are tight.
8. Never use solvents to clean your compressor.
  1. The use of solvents or paint accumulation may cause explosion risks and irreversible damage to the product in general. Cleaning products and the environment may not contain solvents.
9. Do not remove the attached accessories when the compressor is pressurized. Do not clean or touch the electric components without unplugging the compressor from the electrical power supply. Not following the orientations may cause physical and material damage.
10. In case of any irregularities with the equipment, stop operating it immediately and contact your authorized dealer for Sierra Dental Equipment Inc.

# SYSTEM LAYOUT



## Air muffler & Auto purge





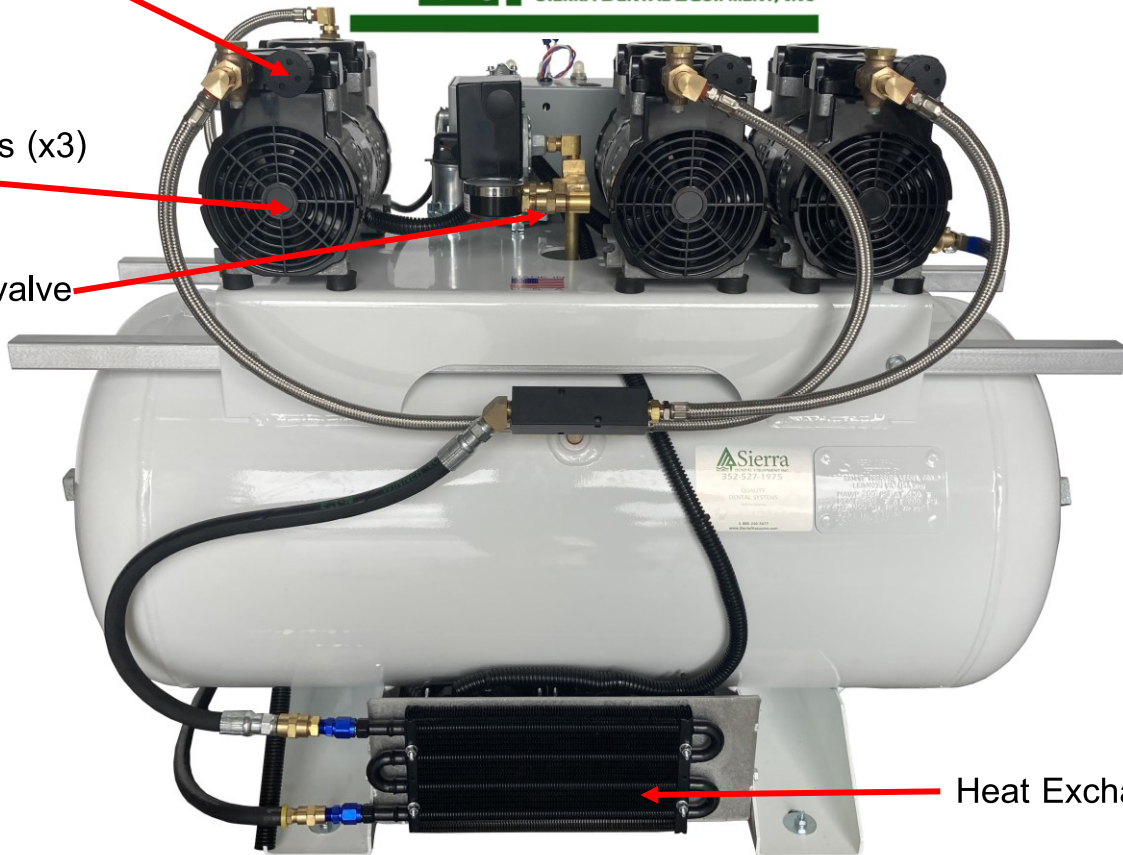
# SYSTEM LAYOUT



Inlet Filters (x3)

Fan shrouds (x3)

ASME Safety valve

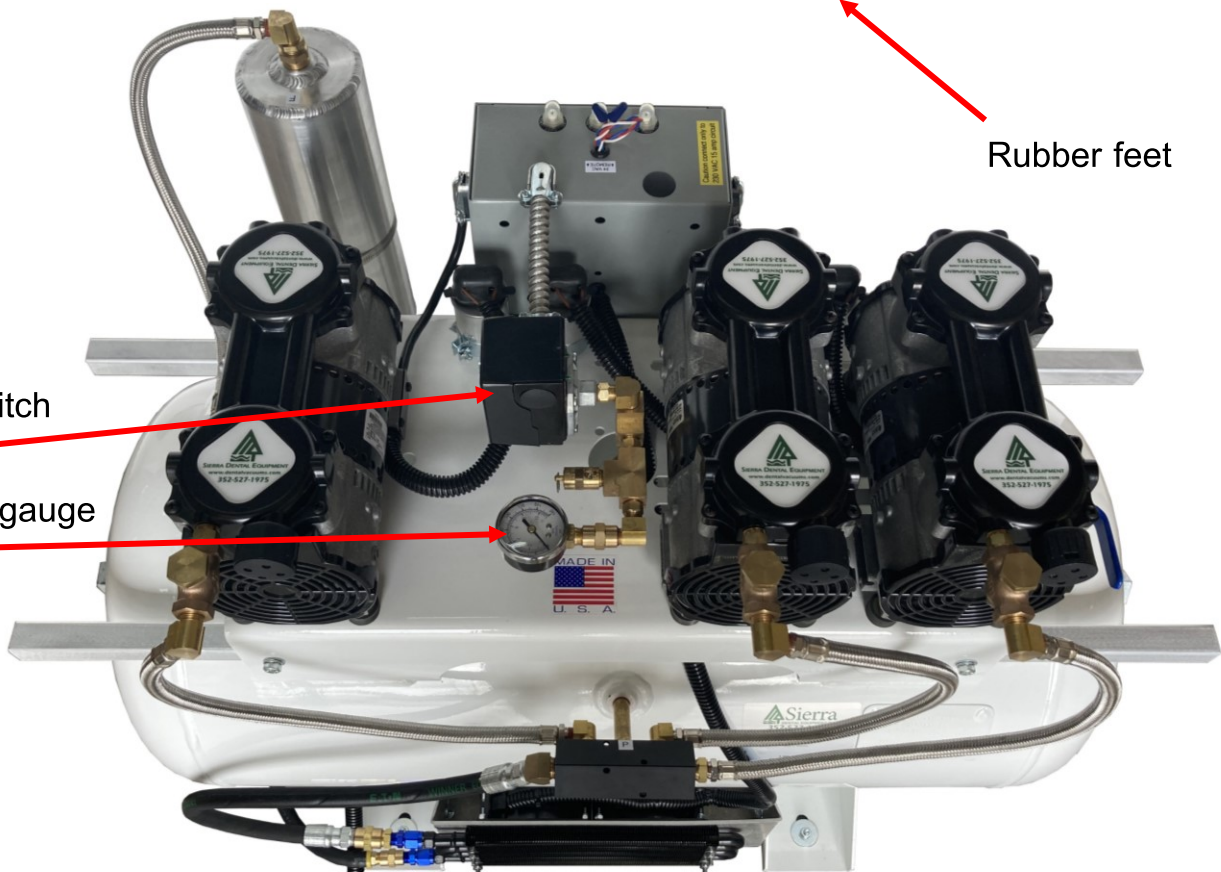


Heat Exchanger

Rubber feet

Pressure switch

Pressure gauge







# SPECIFICATIONS



## SITE REQUIREMENTS

<b>Voltage</b>	<b>230 Volts</b>
Circuit breaker rating	15 Amp
Minimum wire size	14 Gauge
Minimum trunk line size	½"
Max ambient temp.	100° F
Minimum ambient temp.	50° F

This equipment must be installed in a well ventilated mechanical room to prevent overheating and failure not covered by the warranty.

Description	Specification
Model #	EGL-T12
Max users	6
Air dryer	Yes/Dessicant/Auto purge
Number of heads	3
Total horsepower	2.25
CFM	7.58
Tank gallons	30 g
Voltage	230 V AC
Amps	12
Decibels	67
Weight	205 lbs.
Height	32"
Width	39"
Depth	22"

# INSTALLATION



**YOU MUST DO A PRESSURE TEST AFTER THE COMPRESSOR IS INSTALLED TO VALIDATE WARRANTY! (See pg. 12)**

1. **Location:** Install the compressor in a covered, well ventilated area, free of dust, gases, toxic gases, humidity, or any other kind of pollutant. The maximum ambient temperature recommended during operation should be no greater than **95 degrees**
  - a. **IMPORTANT:** Avoid installation in small places such as a storeroom or closet.
2. **Position:** Mount at least 32 inches (800mm) from any obstacle, to allow good ventilation during operation and to make maintenance easier.
  - a. Compressor Installation: When connected to the air network, **the discharge connection must be joined by means of a hose or expansible gaskets** so that the charges, thermal expansion, piping's weight, mechanical and thermal shocks or obstructions are not transmitted to the air tank. Physical damage to the compressed air tank may occur if the above warnings are not followed.
3. **Foundation/Floor:** The compressor must be placed on a concrete base, which must be able to bear the equipment's weight. The equipment must be level. The compressor is equipped with rubber feet (Assembled by installer)
4. **Electric Connection:**
  - a. Consult a specialized electrician to evaluate the electrical power supply and to select the adequate protections and input devices, and to perform the installation service. **USE A MULTI-METER** to check the **actual** line voltage.  
**(MUST BE 220-240 Volts AC)**
  - b. 208 V will require the controller to be rewired for 230.

*Transformer Orange wire needs to be swapped with transformer Red wire for 208v operation.*



# INSTALLATION



5. The electrical input wires must be in accordance to the motor power, voltage and distance from electrical energy source.
6. Before installing the product, verify that the product voltage is compatible to the local electrical power supply (220-240) – (208) require the 24v transformer to be rewired.  
See page 10.
7. In order to avoid electrical shock, a grounding installation must be utilized.
8. For your safety, a circuit breaker/fuse must be installed.
9. **Grounding Instructions:** This product must be grounded in the event of an electrical short circuit or insulation failure; the grounding reduces the risk of electric shock by providing an escape wire for the electric current. This product is equipped with a cord having a grounding wire. Ensure that the product is properly installed and grounded in accordance with all local codes and regulations.
10. **WARNING:** The incorrect installation of the grounding wire connector may result in an electric shock. If it is necessary to replace or repair both the cable and the connector, do not connect or join the grounding wire to the neutral wire or any other. The green wire, with or without yellow stripes, is only to the grounding function. In case of doubts regarding the grounding information or whether the product is properly grounded, make sure you contact a qualified electrician to verify the connections.
11. The thermal protector is located inside the electrical motor. This will shut the electric motor off automatically.

-INSTALLATION EXPENSES ARE PURCHASER'S RESPONSIBILITY

# START-UP PROCEDURE



**You MUST INCLUDE a signed copy of this with your WARRANTY card to validate warranty.**

After installation is complete, perform the following start up procedure:

1. Confirm the voltage is between 220-240 Volts AC.
2. Completely open discharge ball valve (Top of tank, next the pressure switch)
3. Turn the compressor on using the main power switch. (Located on the pressure switch) The compressor will automatically turn off when tank reaches 100 psi.
4. Once the compressor & trunk line has been filled to 100 psi. Close the discharge ball valve, **wait 10 minutes.**
5. Open discharge valve while monitoring the pressure gauge for any loss greater than 3psi.
6. If there is a pressure drop, address where the air is leaking from in your air lines and at each operatory. Once all the leaks are addressed. Repeat steps 1-4. **DO NOT INSTALL** this compressor on a leaking air system, **THIS WILL VOID YOUR WARRANTY.**

Your EAGLE-T12 Compressor is ready to operate.

This compressor is preset from the factory to automatically *start at 80 psi and shut off at 100 psi.*

## **Sign Here to Verify STEPS 1-5 for WARRANTY VALIDATION**

VOLTAGE: \_\_\_\_\_

Installer

Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_/\_\_/\_\_

Dentist

Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_/\_\_/\_\_

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# PREVENTATIVE MAINTENANCE



In order to guarantee the compressor's perfect operation and good warranty status which will ultimately extend the service life, please follow these recommendations below:

## 1. Monthly

- a. Check the operation of the pressure switch (80-100psi)
- b. Check the tank for condensation using the drain petcock (The tank's pressure must not be greater than 10 psi) If moisture is present you need to replace the filter & desiccant in your drying system. Further maintenance may be required if the filter has not been changed recently or regularly. Moisture in your air lines is the first sign of a leak. Air leakage causes premature failure not covered by warranty.
- c. Check for abnormal noise or vibration. If the problem persists after the following corrective actions are taken, contact your local authorized dealer for Sierra Dental Equipment Inc.
- d. Check the intake filters. When an intake filters are clogged it is necessary that they be replaced. Contact your local authorized dealer for Sierra Dental Equipment Inc. for replacement filters – **Do Not Wash the Filter Element**

## 2. Quarterly

- Change the intake filter elements & **coalescing** filter every (175) hours or quarterly (whichever occurs first)
- a. Clean the compressor's external surface with neutral detergent and a wet cloth

2,500 HOURS/ TOP END SERVICE KIT/ Call (352-527-1975)



# TROUBLESHOOTING

## **Motor(s) will not start**

-Check supply voltage with a multimeter. (220- 240 is acceptable) Buck-boost transformer will be necessary if your voltage is above or below the acceptable voltage.

-Damaged motor or start capacitor.

-*Automatic* Thermal protector tripped. (Motor will re-start as soon as temperature decreases) If this happens, contact technical support.

-*Manual* Thermal protector tripped. If this happens, you can reset the breaker manually. If the problem persists, call technical support.

## **Purge valve is leaking air from the tank.**

-In Tank Check valve is not sealing because of impurities on seal. Remove and inspect/clean Or Replace.

-Check voltage at the solenoid coil plug. (220-240V)

-Clean or replace purge solenoid.

## **Low pressure or no pressure**

-The demand is above the compressor's capacity (1-6 User)

-Filter(s) may clogged. Inspect/Replace filter element(s)

-Air leaks (See page 12)

Notes:

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# TROUBLESHOOTING

## **The compressor unit overheats**

- High ambient temperature (MAX 100 degrees Fahrenheit)  
Improve installation conditions (climate control, ventilation,)
- Inadequate electric power supply. -Check supply voltage with a multimeter. (220-240 is acceptable) Buck-boost transformer will be necessary if your voltage is above or below the acceptable voltage.
- Demand is above compressor's capacity (1-6 Users)
- Filter(s) may be clogged. Inspect/Replace filter element(s)
- Operating in a non-adequate environment. Improve local conditions.

## **Abnormal noise or vibrations**

- Loose connections. Find and re-fasten them
- Loose fan cover
- Damaged motor mount
- Compressor installed incorrectly
- Contact your local authorized dealer for Sierra Dental Equipment Inc.
- Damaged connecting rod(s) bearings. See Preventative Maintenance Section

## **Moisture in the air lines/operatorories**

- Drain the tank. Make sure there is less than 10 psi before opening the drain.  
If water is present perform dryer maintenance.
- Air leaks. See page 12.

Notes:

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# MAINTENANCE LOG



Date of Service	Working Hours	Ambient Temp.	Services Provided	Additional Remarks	Technician Signature

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Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_/\_\_/\_\_

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