

Established in 1986

S&D Series

User Manual (V.1)

Oil-Free Compressors

BaseVac S0.75-S2.0 Basevac D1.5-D2.5

You've grown to love the power, efficiency & dependability of our dry vacuum systems. Now it's time to see how we have brought that engineering to our oil-free compressors. Our engineers have designed our compressors for years of reliable service with performance you can trust.



Important Information

Intended Use

To provide oil-free compressed air during general examinations and procedures conducted by qualified dental professionals

Disposal of Equipment

At the end of product life, the unit(s), accessories, and other consumable goods may become contaminated from normal use. Consult local codes and ordinances for proper disposal of equipment, accessories, and other consumable goods.

Transportation / Storage Conditions

Ambient Temperature Range 0°F to 160°F *(-17°C to +71°C)

Relative Humidity 10% to 90% (non-condensing)

Atmospheric Pressure 500hPa to 1060hPa (0.49atm to 1.05atm)

SAFETY SYMBOLS



Danger

Indicates an imminently hazardous situation that will result in serious or fatal injury if not avoided. This symbol is used only in the most extreme conditions.



WARNING

Indicates a potentially hazardous situation that could result in serious injury if not avoided.



CAUTION

Indicates a potentially hazardous situation that may result in minor or moderate injury if not avoided. It may also be used to alert against unsafe practices.



EQUIPMENT ALERT

Indicates a potentially hazardous situation that could result in equipment damage if not avoided.

BaseVac™ Systems Are Manufactured By:

Note:

Amplifies a procedure, practice, or condition



REM Equipment Inc. T 1.800.668.8736
3615 Laird Road T 905.828.3674
Mississauga, ON L5L 5Z8 info@remequip.com
Canada www.remequip.com

Lifting & Handling

All compressors have to be handled and positioned using appropriate devices to avoid damage or injury.

Storage

The compressor packed has to be kept in a dry, covered, and sheltered place at a temperature between -10°C and + 40°C. The superimposition of two packages is allowed.

Packaging

The compressor is shipped in a single pack made up of a pallet and a cardboard box. Gross weights and packaging dimensions of each type of compressor are available under specifications.

Safety

Do not use the compressor for purposes other than those for which it has been designed. Do not repair the compressor while it is connected to the electric circuit or the tank under pressure.

The safety valve is calibrated and sealed by the manufacturer. *DO NOT ATTEMPT TO TAMPER WITH IT AND CHANGE THE SETTINGS.* Failure to observe these recommendations may cause serious damage to the compressor and/or to the persons.

Unpacking & Inspection



Each BaseVac Systems Air Compressor is carefully tested and inspected before shipment. Though every attempt is made to ensure the safe and complete shipment of our product, freight damage or misplacement of goods may occur. Shipments of BaseVac Systems products are the property of the consignee when the products leave our facility. R.E. Morrison Equipment Inc. is not responsible for any damages or shortages caused to the product after it has left our shipping dock.

It is the responsibility of the receiver of the goods, either the distributor or customer, to ensure that the product has been shipped in full and has arrived in a suitable condition. Damage to the product may not be visible at the time of off-loading but may only become apparent upon unpacking or start-up.

Some areas to initially check are as follows:

- Check for damage to the crating and/or packaging.
- Check the exterior of the cabinet for damage, either cosmetic or mechanical.
- If there is mechanical damage, open the cabinet to determine whether there is any internal damage to the unit.

Should there be damage to the product or shortages in shipment:

- Stop any further unpacking or operation of the product.
- Make note of the problem on the freight bill, should it concern a shortage or visible damage to the product.
- Should the damage be noticed only after the product has been received, contact the transport company immediately to file a claim.
- Depending on the problem, it may be wise to photograph the damage. Also, it may be wise to discuss with the carrier representative the time allotted to give notice of loss or damage to the product; there may be guidelines that limit timeframes of same.
- Do not attempt further unpacking or operation of the product. Also, do not discard any packing material used.
- A Loss or Damage Claim must be submitted to the carrier and supported by the following documents:
 - Copy of Freight Bill of Lading
 - Copy of the Invoice and Estimate to repair, in case of damage
 - Damage Report
 - Copy of photos, if applicable

The Seller (R. E. Morrison Equipment, BaseVac) warrants to Buyer (Original Consumer, Purchaser, or End User) that its products will be free from defects in materials and workmanship for the periods listed below:

HD Series Vacuum: 5 years, unlimited hours
MVAC Series Vacuum: 5 years, unlimited hours
D & S Series Compressor: 2 years, unlimited hours
SUR Series Vacuum: 2 years, unlimited hours
BVC / BaseVac Custom Solutions: 1 year, unlimited hours
HD Series Upgrade Kits: 2 years, unlimited hours
Replacement Motors: 1 year, unlimited hours
BaseVac Add-On Accessories: 1 year, unlimited hours
BaseVac Replacement Parts: 90 days, unlimited hours

This date of purchase shall be the actual date the product(s) was shipped from an authorized Distributor of the Seller or the Seller's own facilities to the Buyer. Formal proof of receipt may be required. It is the responsibility of the Buyer to inform the Seller's "Customer Service Department" of any problems with the operation of the products within the applicable warranty period and to obtain authorization prior to returning such product for warranty consideration should it be deemed necessary.

WARRANTY SERVICE CAN ONLY BE PROVIDED BY SERVICE PERSONNEL AUTHORIZED BY R.E. MORRISON EQUIPMENT INC., DBA BASEVAC.

All products authorized for return shall be sent with shipping charges "PREPAID" to the Seller at 3615 Laird Road, Unit 21, Mississauga Ontario, L5L 5Z8 or an approved Warranty Service Center. A Return Authorization Number shall be provided to the Buyer to be placed on the outside of the package as well as any enclosed packing list. All shipments received "Freight Collect" by Seller will be refused. After the product is received, a detailed analysis will be made as to the nature of the problem. Should it be found that there is a defect of materials or workmanship, corrective steps will be immediately taken either to repair or replace in whole or in part the defective item(s) at no charge to the Buyer. Should the seller determine it best to replace the whole product with a new identical product, the warranty on the new product shall be in force only to the extent of completing the warranty period of the originally purchased product. The repaired or replaced product will then be returned to the Buyer freight prepaid via standard motor freight, and a credit in the same amount of the return standard motor freight charges will be issued to the Buyer as reimbursement for the incoming freight.

Exceptions:

The warranty excludes damages resulting from one of the following causes. If it is determined by the Manufacturer that the damage was the result of one of these causes, the Buyer will have the option to pay to repair or replace their equipment at the Manufacturer's standard market price or to have their equipment returned to them at the Buyer's cost.

1. Damage resulting from improper installation.
2. Damages during shipping on standard FOB shipping terms.
3. Damage occurring during unloading, unpackaging or moving the equipment at the customer site.
4. Operation outside of specified electrical and environmental conditions.
5. Damage from improper maintenance.
6. Damage from misuse, abuse, accident or alteration.
7. Damage from improper electrical supply and/or wiring.
8. Damage from excessive foreign materials (dirt, dust, metal, plastic, etc.) ingested by the unit.

Exclusions:

This warranty excludes normal expected wear and service items including but not limited to: Filters, O-rings, Hoses, Water valves, Drying substrate and Carbon vanes. This warranty excludes third-party accessories including amalgam separators and specialty parts used in conjunction with the BaseVac products. These accessories are covered by the original manufacturer's warranty.

General:

This warranty is not a performance guarantee. BaseVac's liability is limited only to the replacement cost of BaseVac equipment and mechanical services conducted at the BaseVac facility. BaseVac is not responsible for dealer or service company or other third-party charges or shipping costs. Claims for shipping damage must be filed with the carrier. The total value of the warranty coverage is limited to the original purchase price of the equipment.

This is the sole expressed Warranty of the Seller. No affirmations or promises of the Seller shall be deemed to create an expressed Warranty regarding a sale of Seller's products.

S- SERIES

1-4 USERS

Our S-Series compressors are designed as compact space savers for the most unique of applications while still living up to the premium performance standards set for all BaseVac products. Providing you with years of reliable service with performance you can trust.



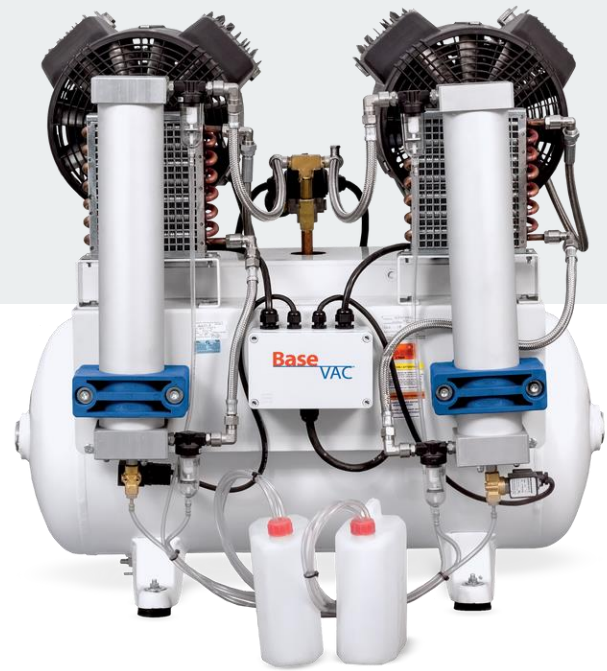
Site Requirements

Model	S0.75	S1.5	S2.0
Voltage Min/Max	110 / 115V 1 60Hz	208 / 240V 1 60Hz	208 / 240V 1 60Hz
Full Load Amps	7.8	8.5	9
Breaker Rating	15 Amps	20 Amps	20 Amps
Wire Size	14	12	12
Watts / Hour	330	640	825
BTU / Hour	1,125	2,250	3,000
Dimensions (LxWxH)	26" x 20" x 25"	26" x 24" x 30"	26" x 25" x 30"
Shipping Weight (lbs)	110 lbs	197 lbs	219 lbs
Low Voltage Controls	115 V	220 V	220 V

D- SERIES

6-10 USERS

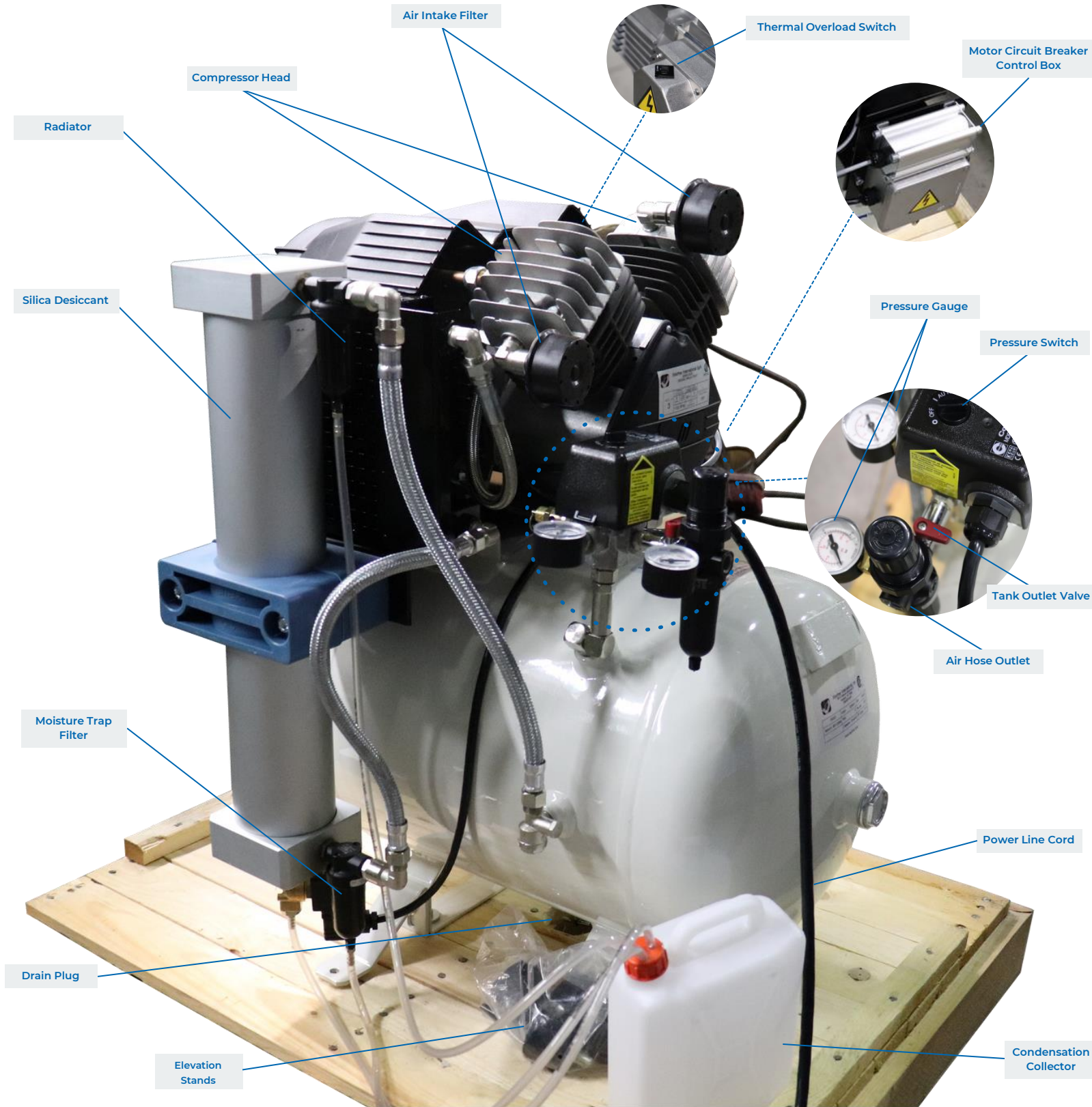
D-Series compressors are known for giving dentists the extra capacity they require to run their practice. And with a 100% oil-free design and our patented Perma Dry self-purging desiccant dryer you'll get the high-quality air you need.



Site Requirements

Model	D1.5	D2.0	D2.5
Voltage Min/Max	208 / 240V 1 60Hz	208 / 240V 1 60Hz	208 / 240V 1 60Hz
Full Load Amps	17	18	22
Breaker Rating	30 Amps	30 Amps	40 Amps
Wire Size	10	10	8
Watts / Hour	1286	1485	1815
BTU / Hour	4,500	6,000	7,500
Dimensions (LxWxH)	35" x 24" x 36"	35" x 24" x 36"	35" x 24" x 36"
Shipping Weight (lbs)	286 lbs	297 lbs	302 lbs
Low Voltage Controls	220 V	220 V	220 V

Key Parts Identification



Mechanical Installation

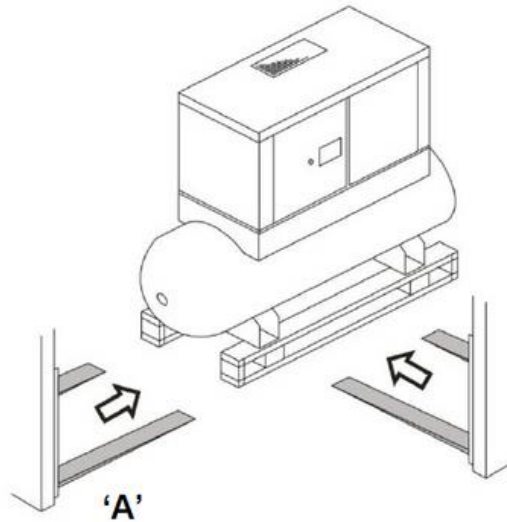
Moving of the Unit

When moving the air compressor, the forklift or hand lift forks go under the unit from the directions as indicated.

When lifting from position 'A', use extended forks.

Please be advised that, though care must be taken when moving all units, extra care must be taken when positioning a vertical compressor as they are top-heavy.

The small series compressors are designed to be moved by hand truck or dolly.



Location of the Unit

Items to consider when installing the unit are as follows:

- The unit should be located in a dry, clean, cool, dust-free, and well-ventilated area. When located in a utility room or closet, regional provincial guidelines must be followed to provide a fresh air inlet to the room for compressed air use. Fresh air inlet kits are available.
- Compressors can be installed on elevated bases when structurally designed for weight and vibration.
- Allow approximately a minimum of 18" (458mm) around and 3 feet (915mm) above the unit for easy access to the various sides, this being for both the proper ventilation of the unit and ease of servicing.
- Ensure that the floor under the unit is smooth, level, and capable of bearing the weight of the compressor. The compressor must sit squarely on the floor.
- If installed in a compressor room, ensure that the room is adequately ventilated. (one horsepower produces approximately 2500 BTU/HR.)
- The ambient temperature should be between 10°C and 40°C (50°F to 104°F).

- If installing the unit on a mezzanine, ensure that the structure can safely support the weight of the unit. As well, the sound level of the unit may increase due to the harmonics created by the structure; use vibration pads to lessen this.

Many common compressor problems can be attributed to the location or installation of the unit. Make sure the unit is in a suitable location and installed correctly. The unit should be located in a dry, clean, cool, dust-free, and well-ventilated area. If possible, the compressor should be located in a separate room or area, away from the general operations of the shop.

Note 

The compressor must not be operated in a confined area where the heat from the unit cannot readily escape.

Electrical Installation

General Information

It is your responsibility to ensure that the compressor unit is electrically connected in a safe and correct manner. **Any electrical work should be carried out by a competent electrician, and be done in such a way that it meets all applicable codes and regulations.**

Ensure that a fused disconnect (by others than BaseVac Dental Systems) is installed in the electrical supply before the compressor unit.

The sales drawing found at the back of this booklet indicates the amp rating for the unit. This information is required in sizing a disconnect, fuses, and/or a suitable breaker. As well, the enclosed electrical schematic indicates the correct wiring and fuse types and sizes. Electrical wiring and conduit from the building supply, through the compressor cabinet, and to the switch in the compressor control panel, must be rated for 110°C (230°F) or higher.

Warning

- Failure to correctly connect the compressor to your building's electrical services may result in serious personal injury or damage to the equipment.
- Disconnect all power before servicing the drive.
- Install all covers and panels before applying power to the unit.
- Before servicing the unit, ensure the power source has been shut down and locked off.
- Read and understand the information contained in this manual before installing or operating the unit.

Failure to observe any of the above precautions could result in severe personal injury or death, and/or damage to the unit.

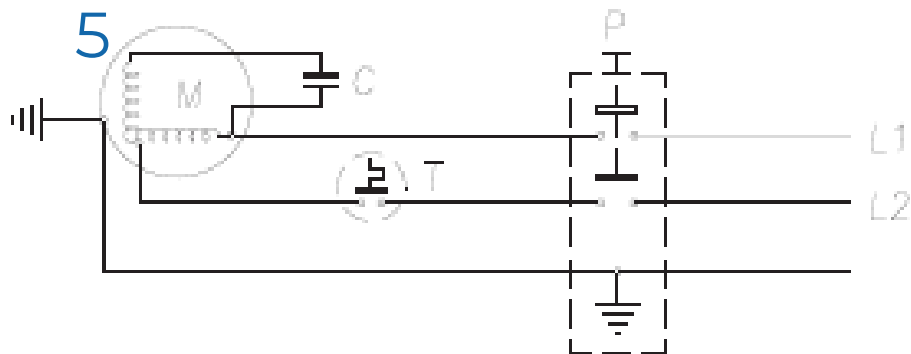
Wiring Practices

When making power and control wiring connections, please observe the following precautions:

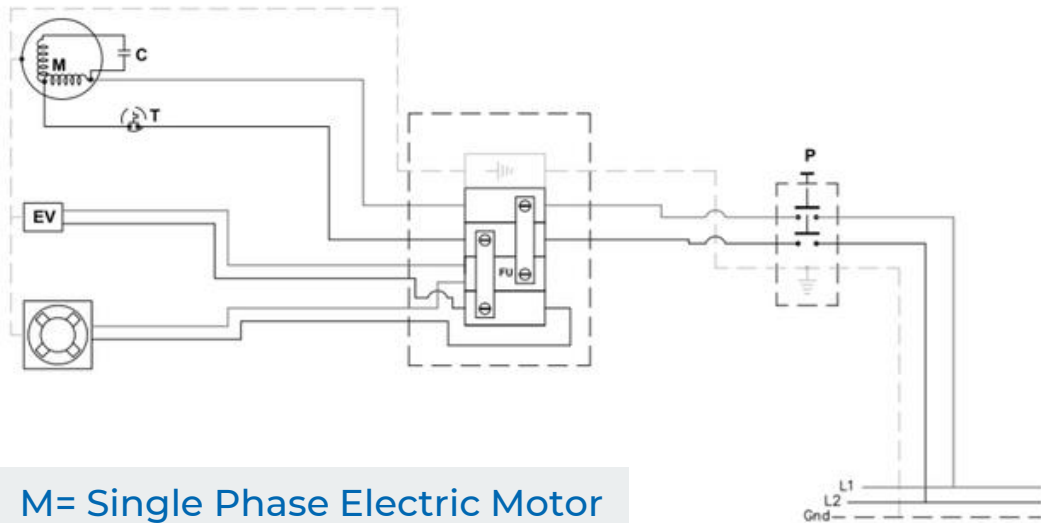
- Ensure that all wiring, fusing, etc is done in a manner that meets with the appropriate codes and regulations.
- See the sales drawing and electrical schematic contained in this booklet for unit amp draw, as well as unit fuse sizes and overload settings.
- A licensed electrician is to determine the appropriate disconnect/breaker and wiring sizes based on the unit amp draw and the appropriate electrical code.

Compressor Wiring (S0.75 - S1.5 - S2.0)

S0.7

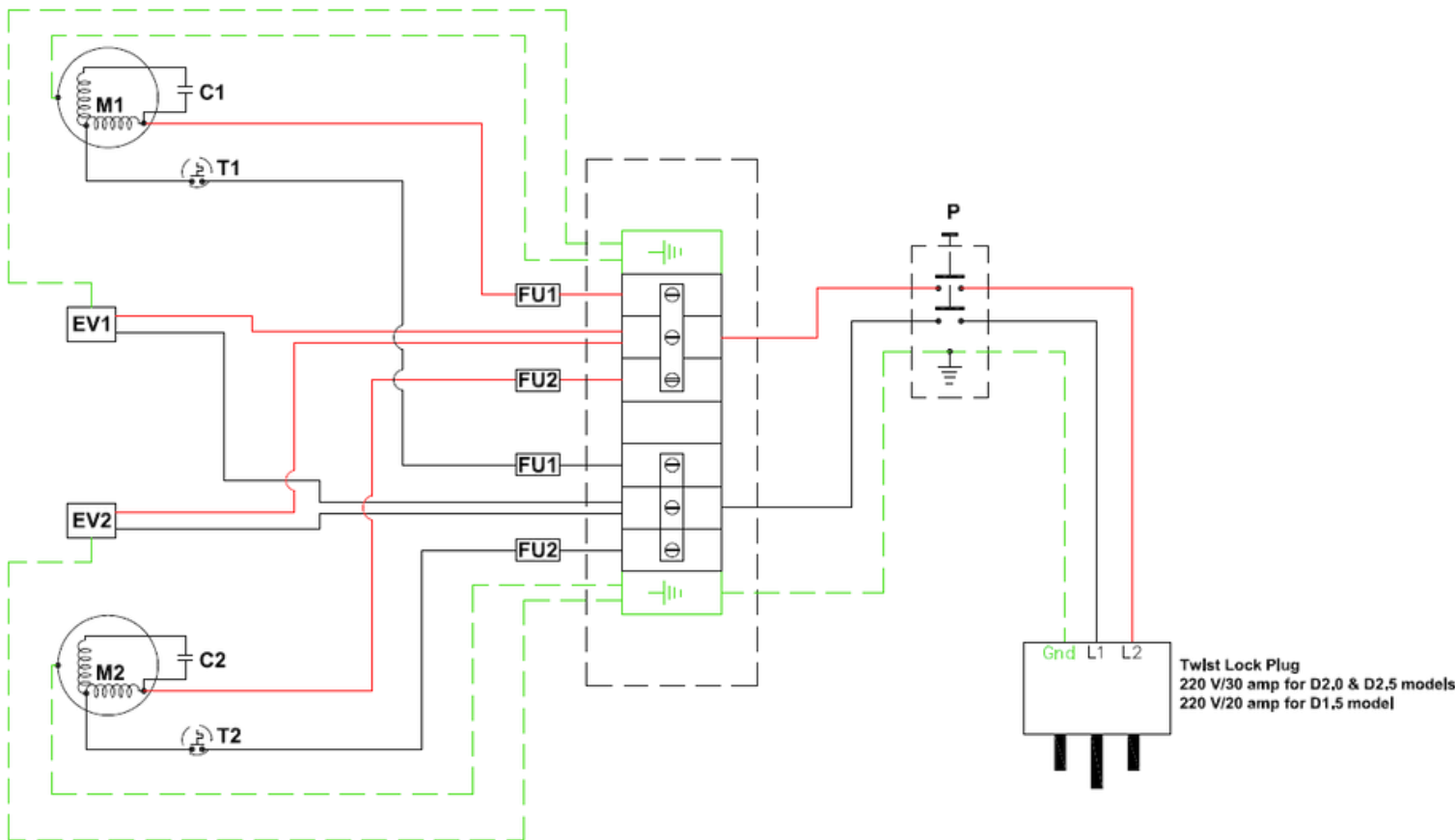


S1.5 & S2.0

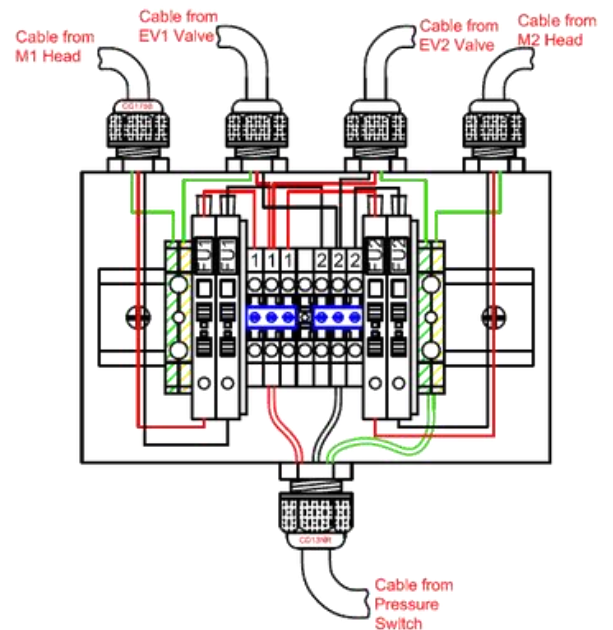


- M= Single Phase Electric Motor
- C= Capacitor
- T= Thermal Protector
- S= Terminal Box
- P= Pressure Switch
- EV= Dryer Valve
- V= Radial Fan
- S= Derivation Box

Compressor Wiring (D1.5 - D2.0 - D2.5)



M= Motor
 C= Capacitor
 T= Thermal Protector
 S= Terminal Box
 EV= Dryer Valve
 FU1= Fuse Block 15 amp fuse
 FU2= Fuse Block 15 amp fuse



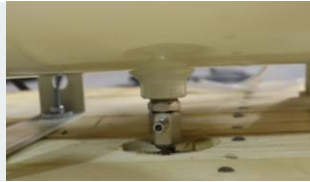
Compressor Initial Startup

1



1) Turn the power switch to the off position

2



2) Close tank drain valve located under the compressor

3



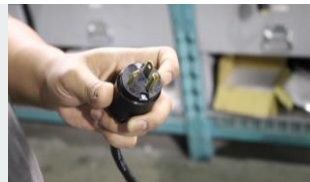
3) Close air outlet

4



4) Confirm air tank is emptied of pressure

5



5) Plug the power cord into the power outlet.
See Low Voltage Control Electrical Panel for Remote Control setup. Ensure voltage is set to 220 V (+/- 5 Volts).

6



6) Turn the power switch to On position

7

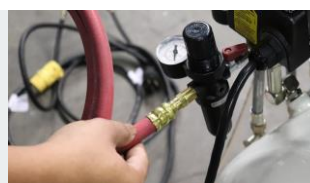


7) Use a stop-watch, to time for:

- 2 min 40 sec (S0.75)
- 3 min 45 sec (D.15)
- 2 min 25 sec (S1.5)
- 2 min 30 sec (D 2.0)
- 1 min 45 sec (S2.0)
- 2 min 05 sec (D 2.5)

At this point, the air tank will have reached the maximum pressure of 100 PSI.

8



8) Attach airline to the compressor air outlet and slowly turn air valve to allow air to connected equipment (Note: initial pressure drop as air fills equipment). If tank pressure does not continue to decrease, no leaks are present and the equipment is ready to use!

Care & Maintenance

Ensure power is off and the compressor is disconnected for all care and maintenance

Weekly

by Dental Team

1



1) Drain through the drain plug the dew contained in the tank and empty the tank.

2



2) Empty condensation collector.

Monthly

by Dental Team

1



1) Disassemble the air intake filter and clean it by blowing in compressed air.

2



2) Check the compressor efficiency: possible connector slackening, pressure hoses wear, screw tightening, electric circuit efficiency, etc. Ensure all motor heads are operating.

Yearly

by Dealer Technician

1



1) Replace the air intake filter. Contact us at 1.800.668.8736 or by emailing sales at sales@basevacdental.com to order replacement filters.

2



2) Check and clean out the purge valve on each desiccant tower. Replace silica desiccant pellets every 5-6 years. Contact us at 1.800.668.8736 or by emailing sales at sales@basevacdental.com to order replacement silica membrane dryers.

3



3) Replace Moisture Trap Filter. Contact us at 1.800.668.8736 or by emailing sales at sales@basevacdental.com to order replacement moisture trap filters.

Troubleshooting

1



1) Check voltage to ensure operating between 220V (+/-5 Volts). Check motor breaker circuit control box. Replace any blown fuses. Attempt the initial startup process over again.

2



2) If no fuses are blown. Check the thermal overload switch. If the switch has been triggered let the compressor cool for 5-10 minutes before resetting the switch and attempting the process over again.

3



3) In the case of the thermal overload switch continually tripping repeat Step 2. Once the compressor has reached 100 PSI check if the motorheads are releasing the pressure or not.

4



4) If the compressor is not building enough pressure (<60psi). Check for any leak/open drain plug/leak in the head. Check for any broken gasket or worn piston rings, replace the piston ring and gaskets of each piston ring. **DO NOT OPEN THE COMPRESSOR HEAD UNLESS TRAINED AND QUALIFIED TO DO SO.**

Contact Us At
1.800.668.8736 or
info@basevacdental.com
We're Here To Help.