

Compressor Manual

Signature Series / DCI Compressor Installation.

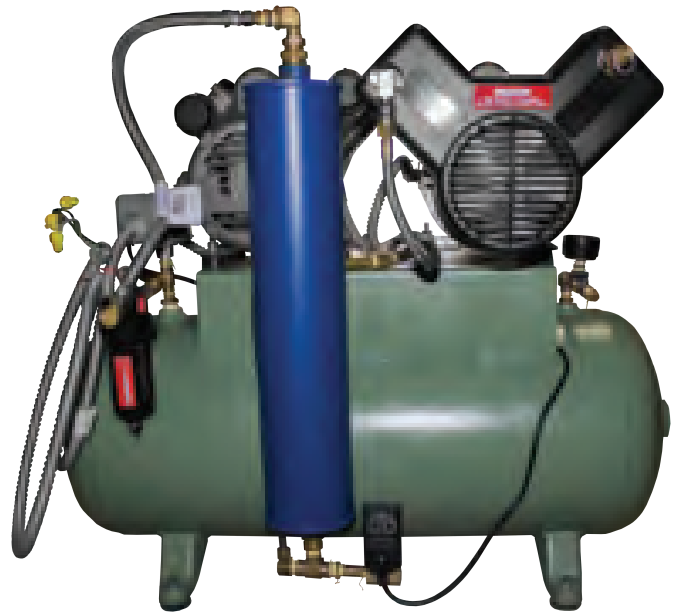


Equipment Alert

Compressor system must be installed per local plumbing and electrical codes



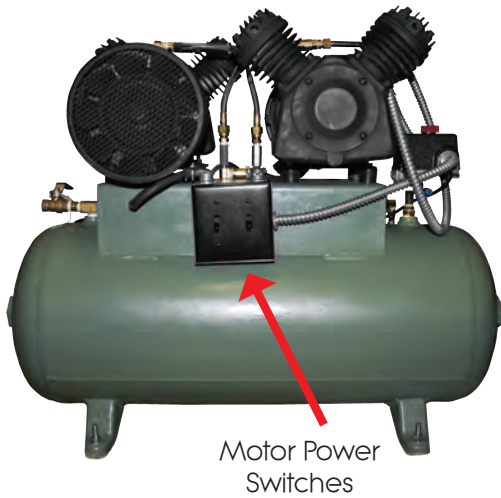
SSV12G Rocking Head Triple (230 Volt)



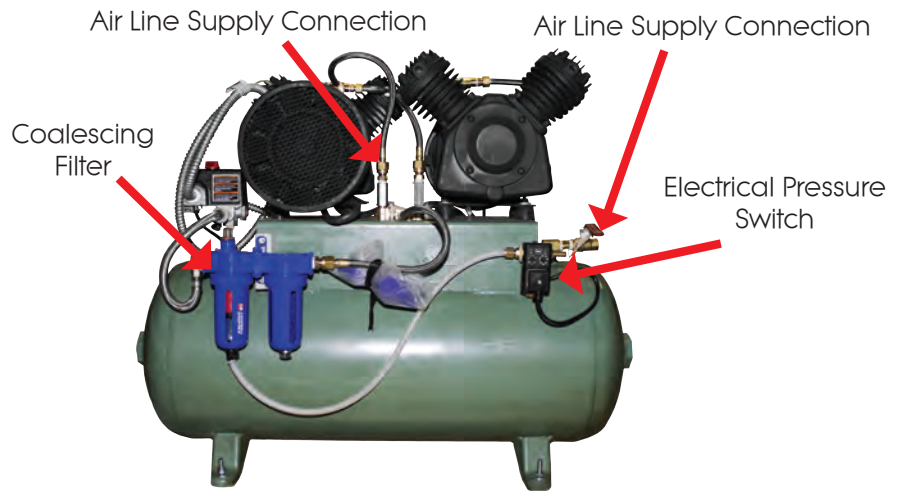
SSV12 Direct Drive Dual (230 Volt)

Compressor Installation.

Compressor Main Component Locations



Motor Power Switches

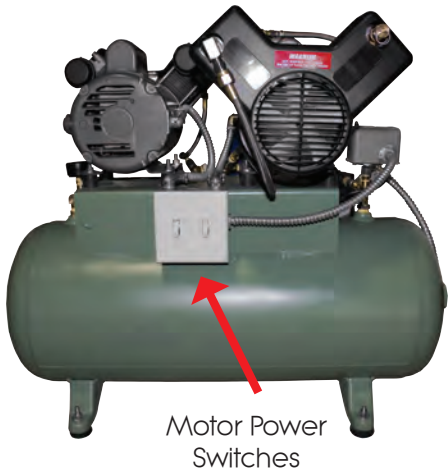


Air Line Supply Connection

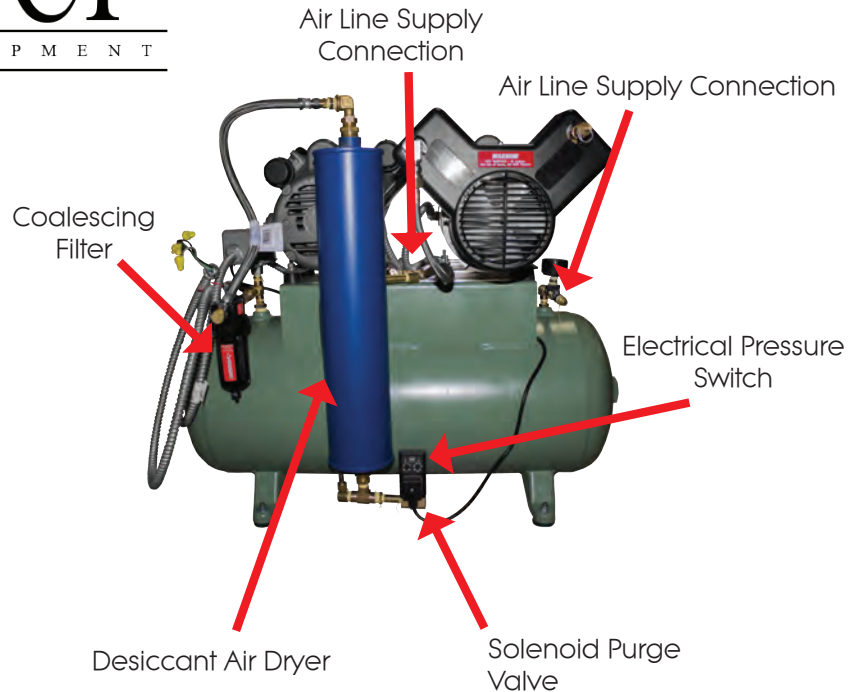
Air Line Supply Connection

Coalescing Filter

Electrical Pressure Switch



Motor Power Switches



Air Line Supply Connection

Air Line Supply Connection

Coalescing Filter

Electrical Pressure Switch

Desiccant Air Dryer

Solenoid Purge Valve

Compressor Installation.

Compressor Site Requirements



Electrical

Supply	SSV6	SSV6G	SSV12/12G	SSV18/18G
Voltage	115/230	230	230	230
Single Phase				
Disconnect Switch Box - Fused - User Supplied - Box(es) must be located within 3ft. of compressor.	20 Amps	30 Amps	30 Amps	30 Amps

Plumbing

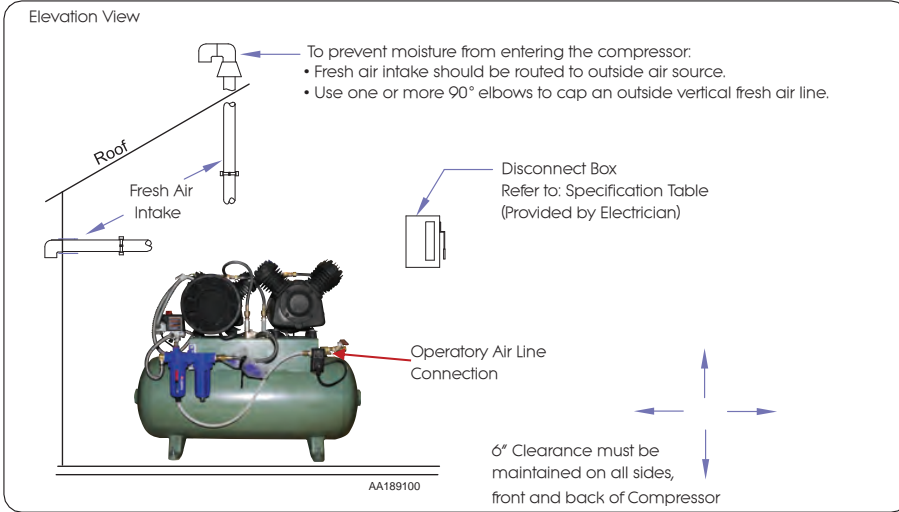
Fresh Air Intake Line	
Type	PVC
Line Sizing	1" Minimum (Provided by Contractor)
Compressor Connections	1" MPT or 1" PVC Slip Connectors
Drain	
Type	Poly Tube (Provided)
Delivery Line	
Main Trunk Line	3/8" to 3/4" Copper, as site layout dictates. Terminate in mechanical room with 1/2" FPT. Flex hose provided for service connection.
Operatory Branch Lines	40° - 104° Fahrenheit/ 4° - 40° Celsius

Environmental

Equipment Room Ambient Temperature Operational	40° - 104° Fahrenheit/ 4° - 40° Celsius
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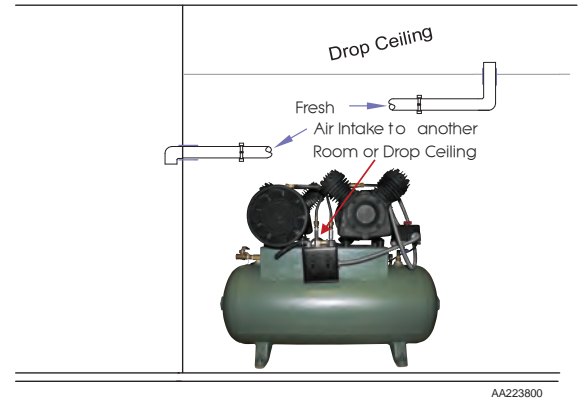
Compressor Installation.

Compressor Site Layout



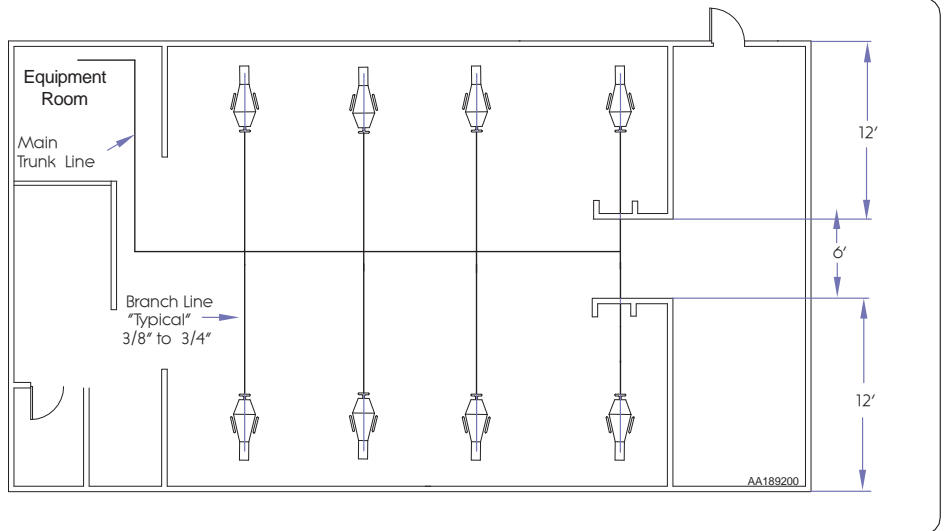
OR

- Fresh air intake can be set -up to pull air from a drop ceiling or another room.



Sample Plumbing Layout

AIR LINE SIZING CHART	
Compressor CFM @ 80 psig	Main Header Line Size
5 - 10	3/8" ODT
10 - 20	1/2" ODT
20 - 30	5/8" ODT
30 - 40	3/4" ODT



Compressor Installation.

Important Information

Intended Use

To provide compressed air during general examinations and procedures conducted by qualified dental professionals.

Disposal of Equipment

At the end of product life, the unit(s), accessory, 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: 40°F to 104°F (4°C to 37°C)

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

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



Keep dry



Consult User Guide for important information.



DANGER

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



2 Maximum stacking height (palletted units)



Proper shipping orientation



WARNING

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



Fuse rating specification



Fragile



Caution hot surface



Protective earth ground



CAUTION

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

IPX0

Ordinary Equipment



Equipment Alert

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

Note

Amplifies a procedure, practice, or condition.

This product has been evaluated with respect to Electrical shock, fire & mechanical hazards only, in Accordance with UL60601-1 and CAN/CSA C33.3 NO. 60601-1

Compressor Installation.

Before you Install...

Step 1: Remove compressor and accessories from shipping skid.



Step 2: Install feet.

Step 3 : Move compressor to a dry, well-ventilated area on a solid, level surface.

Note: Temperature of room 40° (4°C) min. - 100° (38°) max.



Equipment Alert

Compressor system must be installed in an air conditioned and or ventilated room to ensure operational ambient temperature of 40° to 104° Fahrenheit (4° - 40° Celsius). A 6" clearance is required on the rear and one side to allow air flow around the unit. Failure to do so could cause premature loss of system performance and void warranty.

Signature Series Compressor Installation.

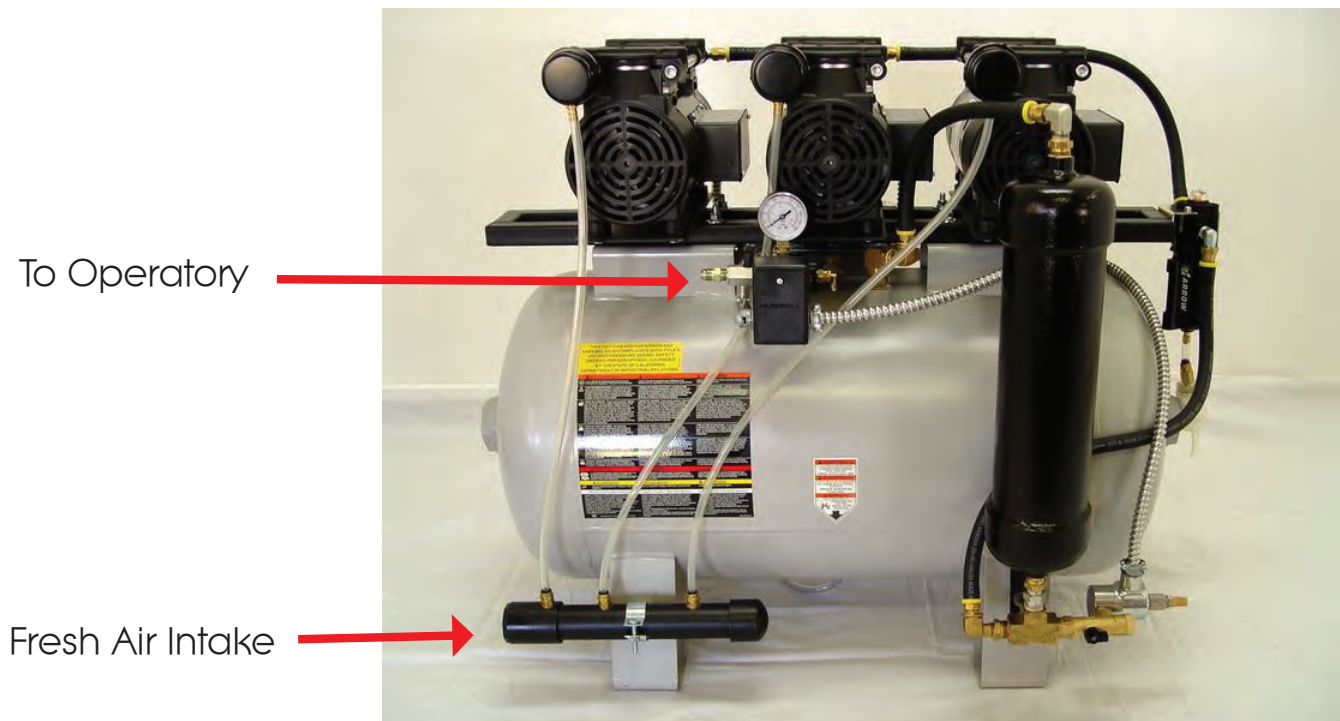
Installation - Plumbing Connections

Equipment Alert

To prevent moisture from entering the compressor...

- Incoming fresh air temperature must not exceed room temperature by more than 20° Fahrenheit or -6 Celsius.
- Fresh air intake should be routed to an air source outside the equipment room.
- Refer to "Site Layout" in this manual for routing recommendations.
- Tight bends in the fresh air intake hoses may cause them to collapse, potentially leading to premature compressor failure.

Step 4: Connect fresh air intake hose to fitting behind compressor to fresh air intake pipe.

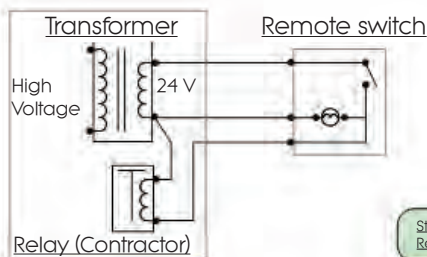


Signature Series Compressor Installation. Installation - Electrical Connections

*Refer to Specification Sheet for Electrical Ratings in this manual.

Remote Panel (Sold Separately)

WARNING
Connect in accordance with NEC Class 2, wiring methods.
Step 5: Connect remote panel wires to Low Voltage Control wires if applicable.



Disconnect Box (Electrician Supplied)

208-230 Volt Source Single Phase, 60 Hz
20 Amp Fuse
Circuit Breaker Box

Conduit Cable

Green = Ground
White and Black connect to 208-230 Volt electrical supply*

Step 6: Connect conduit cable to Relay (Contractor) user supplied electrical box.

RELAY CONTROL (Sold Separately)

Control Panel Cross Wiring			
Brand	Wire		
	A	B	C
Signature	Blue	White	Red
Air Techniques	Yellow	Brown	Orange
DentalEZ	Black	Brown	Yellow
Midmark	Blue	White	Red



Signature Series Compressor Installation.

Installation - Check and Test

Disconnect Box (Electrician Supplied)

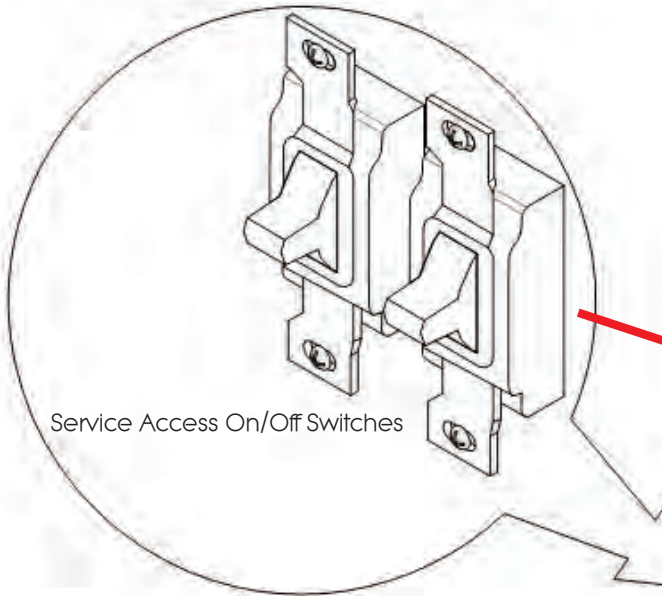


WARNING

The On/Off switch controls only the secondary circuit power. The main power source must be turned off to remove all power in the control box. The circuit breaker panel is the main power disconnect.

Step 7: Turn power on.

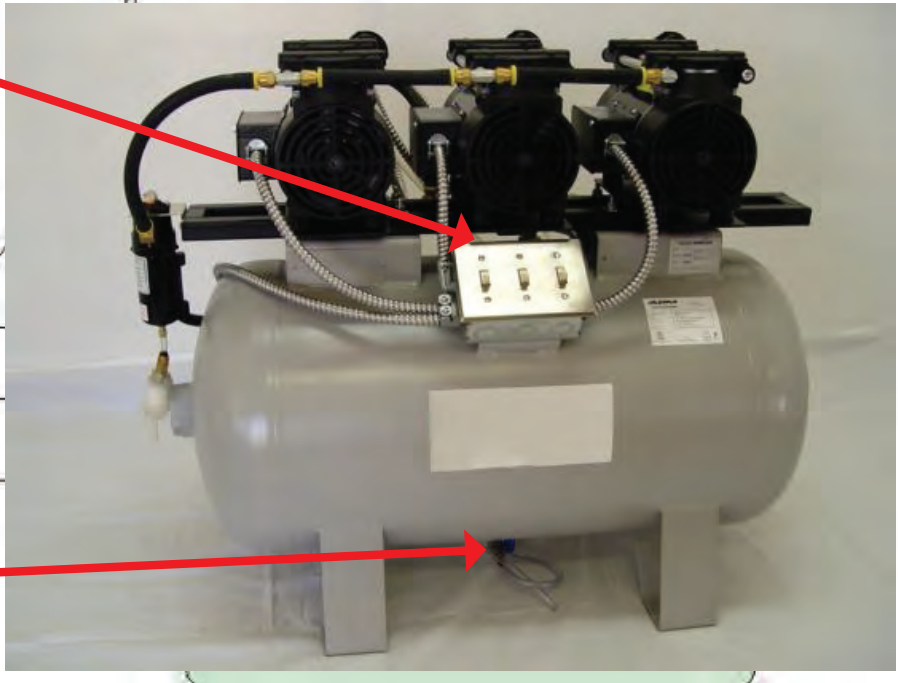
Note: Compressor should run quietly and storage tank will begin to pressurize



Service Access On/Off Switches

Note:

Compressor will shut-off automatically when gauge registers 112 PSI.



Step 7: Verify tank valve is closed

Signature Series Compressor Installation.

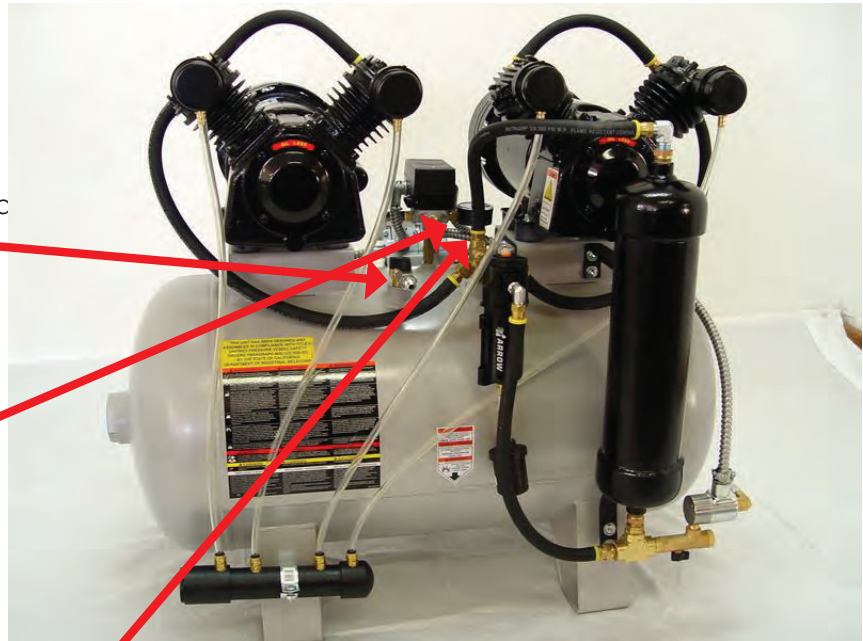
Installation - Check and Test Cont.

Note:

Monitor line pressure gauge when testing for leaks

Step 10: Open the shut-off valve slowly and allow air to flow into the office air system.

Step 11: Allow office line to pressurize for 20-30 seconds. Check storage pressure gauge reading.



Step 12: Check gauge reading after 10 minutes.

Note: If the storage pressure gauge registers a Lower reading, an air leak exists. Locate the leak(s) and repair.



Equipment Alert
verify all leaks are sealed. Air leaks are the main cause of Premature compressor failures!

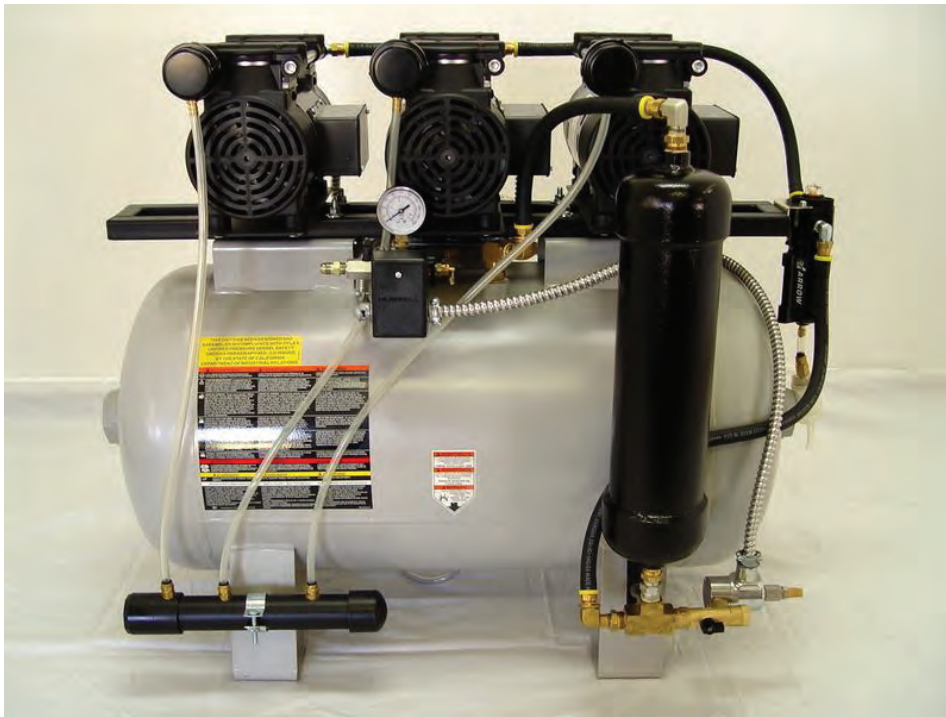


WARNING

Always disconnect the power before servicing. The head(s) surface(s) can be very hot depending on compressor usage. Do not touch these parts during or directly after operation.

Signature Series Compressor Installation.

Specification Sheet



Compressor Specifications:

Model	Users	Heads	CFM @ 80psi	Noise Level	Voltage	Amps	Size H" x W" x D"	HP	Tank Size	Weight
SSV6*	1-3	1	6	61	115/230*	6.95	30" x 23" x 18"	1	8 gal.	195 lbs.
SSV12	4-6	2	12	62	230	13.90	33" x 34" x 24"	2	25 gal.	300 lbs.
SSV18	6-12	3	18	63	230	20.85	33" x 52" x 24"	3	30 gal.	320 lbs.
SSV6G	1-3	2	6.4	57	230	6.95	30" x 23" x 18"	1.5	8 gal.	195 lbs.
SSV12G	4-6	3	9.6	57	230	13.90	33" x 34" x 24"	2.25	25 gal.	300 lbs.
SSV18G	6-12	4	12.8	59	230	20.85	33" x 52" x 24"	3	30 gal.	360 lbs.

* SSV6 Voltage request must be listed on purchase order can not be changed in the field.