Dear Customer:

Congratulations on the purchase of your new JUN-AIR Dental Compressed Air System.
This system’s intended purpose is for dental compression applications. It is to be used in accordance with UL60601-1 and NFPA 99C standards, along with all applicable codes. The system utilizes an oilless rocking piston compressor that produces pressurized air flow when connected to dental operatory lines. The tank ensures that a constant supply of air is available to the operatory. A safety relief valve is also included to ensure safe operation of the system.

This manual provides installation, operation and preventative maintenance guidelines that should be followed to ensure correct/reliable performance of this system. Please carry out all maintenance according to relevant instructions.

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### TABLE OF SYMBOLS

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>⚠️⚠️</td>
<td><strong>DANGER:</strong> Indicates an imminently hazardous situation which <em>will</em> result in serious or fatal injury if not avoided. This symbol is used only in the most extreme conditions.</td>
</tr>
<tr>
<td>⚠️⚠️</td>
<td><strong>WARNING:</strong> Indicates a potentially hazardous situation which <em>could</em> result in serious injury if not avoided.</td>
</tr>
<tr>
<td>⚠️</td>
<td><strong>CAUTION:</strong> Indicates a potentially hazardous situation which <em>may</em> result in minor or moderate injury if not avoided. It may also be used to alert against unsafe practices.</td>
</tr>
<tr>
<td><img src="image" alt="372MM HG 49 ATM" /></td>
<td>Indicates the acceptable lowest barometric pressure conditions in which this unit can be shipped.</td>
</tr>
<tr>
<td><img src="image" alt="Indicates package should be handled with these symbols pointing up." /></td>
<td>Indicates package should be handled with these symbols pointing up.</td>
</tr>
<tr>
<td><img src="image" alt="FRAGILE:" /></td>
<td><strong>FRAGILE:</strong> Handle package with care.</td>
</tr>
<tr>
<td><img src="image" alt="Indicates this package must be kept dry." /></td>
<td>Indicates this package must be kept dry.</td>
</tr>
<tr>
<td><img src="image" alt="Electrical shock hazard. Risk of electric shock present. Make sure power is disconnected before attempting this procedure." /></td>
<td><strong>WARNING:</strong> Connect in accordance with NEC Class 2 wiring methods and call local codes.</td>
</tr>
<tr>
<td><img src="image" alt="Equipment Alert: Indicates a potentially hazardous situation which could result in equipment damage if not avoided." /></td>
<td><strong>WARNING:</strong> To Avoid Serious Burns: Do not touch surface during operation.</td>
</tr>
<tr>
<td><img src="image" alt="Indicates the ON and OFF position for the Equipment power Switch" /></td>
<td><strong>INDICATES:</strong> On and OFF position for the Equipment power Switch.</td>
</tr>
<tr>
<td><img src="image" alt="Indicates the acceptable maximum relative humidity for shipping." /></td>
<td>Indicates the acceptable maximum relative humidity for shipping.</td>
</tr>
<tr>
<td><img src="image" alt="Indicates the acceptable shipping temperature range." /></td>
<td>Indicates the acceptable shipping temperature range.</td>
</tr>
</tbody>
</table>

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We reserve the right to make any alterations which may be due to any technical improvements
Printed in the USA
INTENDED USE:
To provide compressed air during general examinations and procedures conducted by qualified dental professionals.

JUN-AIR compressor systems meet or exceed the most current and highest safety standards, which are:
- CSA C22.2 601.1-M90 (R2005)
- UL60601-1 classified revision 2006/04/26
  - Classification: Class I, permanently fixed MAINS operated equipment
- NFPA 99C level 3 gas system requirements compliance revision 2005
- NFPA 70 (National Electric Code) revision 2008
- ISO 9001:2000
- Ingress protection: IPX0

To ensure the safety potential of this equipment is achieved, please:
Make sure your equipment is installed according to the instructions provided in this manual and make sure the installation checklist is completed prior to starting the equipment.

Equipment is not suitable for use in the presence of a flammable anesthetic mixture with air/oxygen or nitrous oxide. DO NOT OPERATE THE EQUIPMENT IF THESE CONDITIONS EXIST.

Protection against electrical shock:
Provide proper grounding per NFPA 70 (NEC 2008). Do not become a current path for the equipment to ground through your body.

Transportation/Storage Conditions:
Temperature range -29 ºC / -20 ºF to 60 ºC / 140 ºF. Relative Humidity 10 to 90% (non-condensing). Barometric pressure minimum of 372 MM Hg (0.49 ATM).

Keep system dry at all times.

Do not stack units during shipment or installation.

Important: Refer servicing and installation to an authorized service representative.

WARNING: The system should only be installed by qualified personnel. The system should be installed in a clean, dry, well ventilated area on a solid, level surface.
SYSTEM FEATURES - 3-5 USERS
NOTE: 1-3 user system center compressor removed
SYSTEM FEATURES 5-7 USERS

- Compressors
- Desiccant twin tower regenerative dryer
- Moisture indicator
- Air outlet 3/8 in. NPT
- Safety relief valve
- System pressure gauge
- Shut-off valve
- 24 V remote wiring located on back electrical plate
- Check valve
- Pressure switch
- Hour meter
- Power indication light
- Main power leads located on back electrical plate
- Drain tubing hose barb
- Solenoid valve
- Coalescing filter and bowl
- (2) Dryer silencers
- Filter indicator
- Electrical cover
- Intake filters
- Air tank
- Tank drain valve
- Electrical switch
- Fuse and compressor switches (located inside cover)
- Shock mount
- Air inlet 1/4 in. NPT
- After filter and bowl
- Compressors
- Moisture indicator
UNPACKING

1. Examine contents for damage prior to removing shipping carton.
   a. If shipping damage is found, immediately contact the freight carrier to file a claim.

2. Carefully remove the shipping carton from the pallet containing the compressor.

3. Visually inspect the entire compressor system for shipping damage.
   a. If shipping damage is found, immediately contact the freight carrier and distributor.

4. Verify that the installation kit parts were shipped with the system:
   a. Installation kit parts shipped with all compressor system models include the following:
      • (1) Drain Tubing, 3/8 inch plastic, 10 foot length
      • Intake Filters: (2) JAir3, (3) JAir5, (4) JAir7
      • Intake Tubing: (2) JAir3, (3) JAir5, (4) JAir7
      • (1) O&M Manual
      • (1) Flex Hose Kit

5. Remove screws and nuts holding the compressor system to the shipping pallet. Rotate brackets out of the way keeping them secured to the pallet for future use.

6. Reattach nuts to secure tank shock mounts.

WARNING: Fasten unit to shipping pallet prior to transporting to prevent tipping or damage.

Drain Tubing

Intake Filter

Intake Tubing

Flex Hose
INSTALLATION SAFETY DATA

PERSONAL SAFETY:

DANGER: Danger of fire or explosion when using flammable substances. Do not operate the compressor in an area containing combustible gases or anesthetic mixtures.

CAUTION: Do not place compressor within 6 feet of patient.

CAUTION: Never leave children unattended near compressor when in use.

WARNING: Property damage and/or personal injury may result if directions are not followed or manufacturer’s replacement parts/accessories are not used.

WARNING: Connect only equipment suitable for listed maximum pressure level of the compressor. Equipment is not suitable for use in vital (continuation of life) operations, an alternative air source should be used in these instances.

WARNING: DO NOT install on surfaces with more than a 10° incline.

WARNING: If unit is operating in high altitude, adjustments to time, temperature or pressure may be required. Consult service technician prior to making any adjustments.

WARNING: A leaking pressure relief valve may indicate a need for adjustment or repair. Consult service technician prior to making any adjustments.

PLACEMENT:

- Indoor use only
- Dust free, climate controlled room
- DO NOT install/operate in an enclosed area where ambient temperature could exceed temperature specifications of below 0 °C / 32 °F, or above 40 °C / 104 °F
- Maintain minimum 12 inch clearance on all sides and top of all compressors for service access and cooling
- Ensure unit stands level and firmly on the floor

INDICATES THE ON AND OFF POSITION FOR THE EQUIPMENT POWER SWITCH (SYSTEM BREAKER)

I = ON
When ON, the indicator light will illuminate and voltage WILL be supplied to system.

O = OFF
When OFF, the indicator light will NOT illuminate and voltage WILL NOT be supplied to the system.

Equipment Alert: Compressor system must be installed per local plumbing and electrical codes.
INSTALLATION SAFETY DATA

ELECTRICAL SAFETY:

- Follow NEC, NFPA 99C and all local codes.
- Qualified personnel must install electrical wiring and outlets.
- Unit requires a dedicated (separate branch circuit only) 20 or 30 amp circuit. (See “SITE REQUIREMENTS”).
- Never operate unit outside the specified voltage range 208-253 VAC (see “SITE REQUIREMENTS”).
- See “SPECIFICATIONS” for more electrical information.
- Power indication light on front of electrical cover displays when system power is on.

ELECTROMAGNETIC INTERFERENCE (EMI):
The JUN-AIR compressor system is designed to avoid electromagnetic emissions/interference with surrounding electrical equipment. Due to the vast assortment of electrical equipment available, it is possible that some interference may be experienced by the end customer. If interference is experienced, the device that is creating interference should be removed from the room where the compressor system is located. If the interference persists, then it may be necessary to confirm that both devices are connected to isolated (separated) circuits per “SITE REQUIREMENTS” and “INSTALLATION - ELECTRICAL” in this manual. If the problem still occurs, then the two devices should be moved as far apart as possible. Finally, if the problem cannot be eliminated, contact an authorized distributor.

CAUTION: Routinely inspect any and all power cords for cuts and abrasions. Discontinue use and have authorized service representative replace cord if damaged.

WARNING: Use of an extension cord is not advisable. An undersized extension cord will cause a drop in line voltage and loss of power. Overheating will result.

WARNING: Electric shock could occur as a result of improper grounding. This product must be grounded according to NEC regulations and all local codes.

WARNING: Always turn off compressor and remove power from unit when servicing or removing electrical cover. Lock out power at the breaker prior to servicing.

WARNING: To Avoid Serious Burns: Do not touch compressor system during operation.

Electrical Shock Hazard
The wire with insulation that is green or green with yellow stripes is the grounding wire.
Install this product in a dry location.
Install this product where it will be weather protected.
This product must be properly grounded. Electrically ground this product per local codes.
Check the condition of the power supply wiring.
Do not permanently connect this product to wiring that is not in good condition or is inadequate for the requirements of this product.
Follow all local applied codes prior to installation.
Failure to follow these instructions can result in death, fire or electrical shock.
INSTALLATION - SITE REQUIREMENTS

<table>
<thead>
<tr>
<th>Site Requirements</th>
<th>JAir3</th>
<th>JAir5</th>
<th>JAir7</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Electrical</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voltage min./max*</td>
<td>208/253</td>
<td>208/253</td>
<td>208/253</td>
</tr>
<tr>
<td>Full-load amps</td>
<td>7.5</td>
<td>11</td>
<td>15.0</td>
</tr>
<tr>
<td>Minimum circuit breaker rating amps**</td>
<td>20</td>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td>Min. wire size (AWG)</td>
<td>12</td>
<td>12</td>
<td>10</td>
</tr>
</tbody>
</table>

* Install a buck-boost transformer if electrical service is below 208 volts or above 253 volts. Contact authorized technical service for recommended buck-boost transformers.

** Circuit breaker must isolate all poles simultaneously.

JAir3 and JAir5

Minimum of 12-inch clearance between unit and wall - all around

Minimum of 12-inch clearance between unit and ceiling

Hose barb for drain (accepts 1/4 I.D. tube)

System exhaust to operatory (3/8 female NPT) utilize 1/2-inch copper piping for operatory. Flexible connection hose available to connect system with operatory copper piping

Minimum of 12-inch clearance between unit and wall

Remote leads - 18 AWG (red, yellow, blue)

Main power leads (black, black, green/yellow)

Intake filters

JAir7

Minimum of 12-inch clearance between unit and wall - all around

Minimum of 12-inch clearance between unit and ceiling

Hose barb for drain (accepts 1/4 I.D. tube)

System exhaust to operatory (3/8 female NPT) utilize 1/2-inch copper piping for operatory. Flexible connection hose available to connect system with operatory copper piping

Minimum of 12-inch clearance between unit and wall

Remote leads - 18 AWG (red, yellow, blue)

Main power leads (black, black, green/yellow)

Intake filters
**BEFORE YOU INSTALL...**

**WARNING:** The system should only be installed by qualified personnel. The system should be installed in a clean, dry, well ventilated area on a solid, level surface.

**FRESH AIR INTAKE LINE**
Compressor Connections: 1/2 inch reinforced tubing – provided

**DRAIN**
Type: 3/8 inch Clear PVC tubing - provided

**DELIVERY LINE**
Main Trunk Line: 1/2 inch copper or as site layout dictates. Terminate in mechanical room with 3/8 inch MPT. Trunk line to slope 1/4 inch /10 feet toward source compressor.

Operatory Branch Lines: 1/2 inch copper

1. Remove compressor and accessories from shipping skid.
2. Install feet and mounting hardware.
3. Move compressor to a dry, well ventilated area on a solid, level surface.
4. Connect drain tubing to hose barb fitting on bottom of solenoid valve. Position opposite end next to floor drain or over the edge of a floor sink and secure into place. Ensure tubing is secured to floor drain or sink as a sudden rush of exhaust air can cause tubing to move.

**NOTE:** Do not place in contamination or standing water. If floor drain is not available contact distributor for assistance.

5. Connect fresh air intake hose assemblies to barbed fittings behind compressors. (See system intake routing pictures below for correct tubing routing).
6. Connect office air supply line to 3/8" NPT air outlet shut-off valve.

**WARNING:** Do not plumb intakes with exhaust of vacuum system in the same room.

---

**Equipment Alert:**
- Compressors are oil-less and require NO lubrication.
- Compressor system must be installed in a temperature controlled and or ventilated room to ensure operational ambient temperature of 32°F to 104°F Fahrenheit (0°C - 40°C Celsius). A 12” clearance is required on each side and top of unit to allow air flow. Failure to do so could cause premature loss of system performance and void warranty.

**Equipment Alert:**
- To prevent moisture from entering the compressor...
  - Incoming fresh air temperature must not exceed room temperature by more than 20°F Fahrenheit or -6°C Celsius
  - For optimum performance and compressor longevity route fresh air intake from a climate controlled area.
  - Tight bends in the air intake hoses may cause them to collapse, potentially leading to premature compressor failure.

**Equipment Alert:**
- Must meet local ventilation codes where system is installed.

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**DELIVERY LINE**
Main Trunk Line: 1/2 inch copper or as site layout dictates. Terminate in mechanical room with 3/8 inch MPT. Trunk line to slope 1/4 inch /10 feet toward source compressor.

Operatory Branch Lines: 1/2 inch copper

1. Remove compressor and accessories from shipping skid.
2. Install feet and mounting hardware.
3. Move compressor to a dry, well ventilated area on a solid, level surface.
4. Connect drain tubing to hose barb fitting on bottom of solenoid valve. Position opposite end next to floor drain or over the edge of a floor sink and secure into place. Ensure tubing is secured to floor drain or sink as a sudden rush of exhaust air can cause tubing to move.

**NOTE:** Do not place in contamination or standing water. If floor drain is not available contact distributor for assistance.

5. Connect fresh air intake hose assemblies to barbed fittings behind compressors. (See system intake routing pictures below for correct tubing routing).
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**WARNING:** Do not plumb intakes with exhaust of vacuum system in the same room.
INSTALLATION - ELECTRICAL

WARNING: Connect in accordance with NEC Class 2 wiring methods and call local codes.

*Refer to “SPECIFICATION” Sheet in this manual for Electrical Ratings.

1. Connect remote switch & light (K, L, M) wires to optional remote panel switch & light, if applicable. If remote panel is not used, connect the yellow and red wires, and insulate the blue wire.

2. Connect main conduit cable to user supplied electrical box.

3. Install to a dedicated circuit with 20 to 30 amp (see “SITE REQUIREMENTS” for sizing) circuit protection (breaker).

NOTE: If fuse replacement is required, then a 250 mA/0.320 ohm rated resistance time-delayed, 200% overload rated fuse should be used. This fuse can be purchased through Bussman (Cooper), part number MDL-1/4-R or contact your distributor for replacement parts.

NOTE: Optional compressors based on system size.

CAUTION: Blue (K) wire is for remote panel light only, do not connect to any other wire.
SYSTEM CHECKS AND TESTS

Make sure everything is connected properly.

1. Check that the intake filter(s) and tubing are fully seated into the hose barb fittings and the air outlet shut-off valve is closed.

2. Turn power on.

The compressor system should run and the storage tank will begin to pressurize.

NOTE: Access to the compressor ON/OFF switches is achieved by removing the electrical cover.

WARNING: Always turn off compressor and remove power when removing electrical cover.

3. Check the incoming line voltage. It should be a minimum of 208 volts and should not exceed 253 volts. This voltage should remain within this range while compressor system is running. If voltage does not remain within the specified range, install an appropriate buck-boost transformer and check to make sure the correct main circuit breaker and wire size gauge are being used.

4. Open the air outlet valve slowly and allow air to flow into the operatory air system.

5. Allow office line to pressurize until the system shuts off. Check system pressure gauge reading.

NOTE: When the system shuts off, the solenoid valve attached to the coalescing filter will purge the air from the system along with any moisture and foreign material in the filter bowl.

6. Check gauge reading after 20 minutes.

NOTE: If the system pressure gauge drops more than 5 psi, an air leak exists. Locate the leak(s) and repair.

### NOTES

- Compressor system will shut-off automatically when gauge registers approximately 100 PSI.
- Monitor system pressure gauge when testing for leaks.
- You may use soapy water to check for any pressure leaks.
- Contact authorized dealer technical service for recommended buck-boost transformer if voltage is outside of limits.

<table>
<thead>
<tr>
<th>System Size</th>
<th>Number of compressors</th>
<th>Pump-up time 0 psi to 100 psi (seconds)</th>
<th>Recovery time 80 psi to 100 psi (seconds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>JAir 3</td>
<td>2</td>
<td>less than 160</td>
<td>less than 50</td>
</tr>
<tr>
<td>JAir 5</td>
<td>3</td>
<td>less than 110</td>
<td>less than 30</td>
</tr>
<tr>
<td>JAir 7</td>
<td>4</td>
<td>less than 160</td>
<td>less than 50</td>
</tr>
</tbody>
</table>

NOTE: If external intake filters are used recovery and pump-up times may vary.

Equipment Alert: Verify all leaks are sealed. Air leaks are main cause of premature compressor failures.
OPERATION

STEP 1

A. The system may be turned on via the circuit breaker. A light (Power Indication Light) on the electrical cover will turn on to indicate that voltage is supplied to the system.

B. The system may also be turned “ON/OFF” from a single, convenient location within the dental office using a Remote Control Panel (if applicable). Remote switch & light wiring must be installed by a licensed electrician in accordance with all applicable codes.

STEP 2

The compressor system is factory preset to operate up to 100 psi. The system will shut off when 100 psi is reached and restart at 80 psi. Check the system pressure gauge reading to verify pressure settings. If the setting is within ±5 psi from 100 & 80 psi, continue with normal operation. If this setting needs to be adjusted, contact your authorized dealer.

STEP 3

Once the power is on and the compression preset level has been checked, the system is fully operational.

NOTE: The air tank has a working volume capable of retaining pressurized air. When the pressure in the tank achieves 100 psi, a pressure switch shuts off the power to the compressors. If the tank pressure ever falls below 80 psi, the pressure switch turns on power to the compressors, allowing the tank to fill with compressed air. When the system shuts off, the solenoid valve attached to the coalescing filter will purge the air from the system along with any moisture and foreign material in the filter bowl. During operation, the dryer system will cycle both towers, purging a small amount of air to dry the desiccant tower and maintain the extremely low moisture levels. Air is continuously supplied to the operatory while the compressors will only cycle/operate up to 30% of the time to maximize system life.

STEP 4

At the end of the day, the system should be powered down either at the remote panel or the circuit breaker (one or both of the controls should be moved to the “OFF” position).
MAINTENANCE

By performing regularly scheduled maintenance, you will ensure your compressor system provides you with years of superior performance.

<table>
<thead>
<tr>
<th>Preventive maintenance schedule in a clean, dry environment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Annually</strong></td>
</tr>
<tr>
<td><strong>Initial installation and annually</strong></td>
</tr>
<tr>
<td><strong>Annually</strong></td>
</tr>
<tr>
<td><strong>Annually or when filter indicator turns red</strong></td>
</tr>
<tr>
<td><strong>Annually or when filter indicator turns red</strong></td>
</tr>
<tr>
<td><strong>Annually</strong></td>
</tr>
<tr>
<td><strong>Annually</strong></td>
</tr>
<tr>
<td><strong>Annually</strong></td>
</tr>
<tr>
<td><strong>Every five years</strong></td>
</tr>
</tbody>
</table>

Also to extend your compressor life, please do the following:
- Keep compressor system clean and free of dirt and debris.
- Keep area surrounding compressor system clean and free of debris.
- Maintain recommended controlled ambient temperature – high temperatures will shorten life.
- Verify all leaks are sealed.

**WARNING:** Always disconnect 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.

**Replace Intake Filter Element**
1. Turn off compressor system.
2. Disconnect compressor system from electrical power.
3. Remove intake filter cap by pressing it down and rotating while holding base of filter.
4. Remove old intake filter element and discard.
5. Install replacement filter element and replace filter cap.
6. Reconnect electrical power to system.

**NOTE:** To comply with NFPA99C, filter kits are available for the JUN-AIR Compressor System (see OPTIONS AND ACCESSORIES).

**Replacing the Coalescing Filter Element:**
1. Turn off compressor system.
2. Disconnect compressor system from electrical power.
3. Bleed air from system.
4. Push up and rotate coalescing filter bowl slightly and remove.
5. Remove filter element by turning completely out and discard.
6. Install a new 0.01 micron filter element (verify correct part is installed).
7. Position filter bowl by pushing up slightly and rotating into place.
8. Reconnect electrical power to system.
MAINTENANCE, continued

Replace After Filter Element
1. Turn off compressor system.
2. Disconnect compressor system from electrical power.
3. Bleed air from system.
4. Push up and rotate after filter bowl slightly and remove.
5. Remove filter element by turning completely out and discard.
6. Install a new 1.0 micron filter element (verify correct part is installed).
7. Position filter bowl by pushing up slightly and rotating into place.
8. Reconnect electrical power to system.

Testing Safety Relief Valve
1. Run compressor until 45 psi shows on pressure gauge.
2. While compressor is still running, pull ring on safety valve. Valve will reseat.
   NOTE: A loud burst of air will be heard when the air is released from safety valve.
3. If no air comes out of the safety valve or it does not reseat, it is defective and must be replaced immediately.

CAUTION: Bleed air from system before replacing safety valve or servicing.

Replacing Desiccant Towers
1. Turn off compressor system.
2. Disconnect compressor system from electrical power.
3. Bleed air from system.
4. With both hands, grasp the tower and rotate CCW to remove.
5. Install new desiccant tower by rotating CW into dryer manifold block.
6. Repeat steps 4 and 5 for second tower, if necessary.
7. Reconnect electrical power to system.

WARNING: Disposal of system or components (once deemed non-usable by the authorized dealer and end user) should be done in accordance with all local codes. Contact your local waste management authorities to determine proper disposal methods.

Testing Compressor System for Leaks
1. Close valve to facility plumbing.
2. Run compressor until it shuts off at approximately 100 psi.
3. Turn off compressor system.
4. Let compressor system set for 5 minutes.
5. If the pressure drop is more than 5 psi within 30 minutes, leaks must be repaired.
6. Repair if needed, using soapy water to determine where leaks are occurring.
7. Open valve to facility plumbing.
<table>
<thead>
<tr>
<th>Specifications</th>
<th>JAir3</th>
<th>JAir5</th>
<th>JAir7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of users</td>
<td>1-3</td>
<td>3-5</td>
<td>5-7</td>
</tr>
<tr>
<td>System HP</td>
<td>1.5</td>
<td>2.25</td>
<td>3</td>
</tr>
<tr>
<td>Voltage</td>
<td>230 V</td>
<td>230 V</td>
<td>230 V</td>
</tr>
<tr>
<td>Tank size (gallons)</td>
<td>12</td>
<td>12</td>
<td>20</td>
</tr>
<tr>
<td>System amps</td>
<td>7.5</td>
<td>11.0</td>
<td>15.0</td>
</tr>
<tr>
<td>CFM @ 80 psi</td>
<td>3.5</td>
<td>5.3</td>
<td>7.0</td>
</tr>
<tr>
<td>CFM @ 100 psi</td>
<td>2.6</td>
<td>4.0</td>
<td>5.4</td>
</tr>
<tr>
<td>Breaker size (amps)</td>
<td>20</td>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td>Sound level (dBA)</td>
<td>71</td>
<td>74</td>
<td>77</td>
</tr>
<tr>
<td>System dimensions (W x H x D) inches</td>
<td>27.5 x 28 x 20</td>
<td>27.5 x 28 x 20</td>
<td>37.5 x 36 x 24</td>
</tr>
<tr>
<td>System shipping weight (pounds)</td>
<td>200</td>
<td>225</td>
<td>300</td>
</tr>
<tr>
<td>Dew point PDP (°C)</td>
<td>-40</td>
<td>-40</td>
<td>-40</td>
</tr>
</tbody>
</table>
## TROUBLESHOOTING CHART

<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible Cause(s)</th>
<th>Possible Solution(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Motor/compressor does not start</td>
<td>a. No electric power</td>
<td>a. Check circuit breaker at main power source</td>
</tr>
<tr>
<td></td>
<td>b. Power not connected</td>
<td>b. Check 24 volt remote connections</td>
</tr>
<tr>
<td></td>
<td>c. Defective power switch</td>
<td>c. Power switch needs to be replaced. Call your authorized dealer for service. Check compressor power switches are in the ON position</td>
</tr>
<tr>
<td></td>
<td>d. Fuse is blown/damaged</td>
<td>d. Check fuse in electrical enclosure</td>
</tr>
<tr>
<td>2. Motor tries to start, circuit breaker trips</td>
<td>a. Voltage too low. If each compressor head runs separately, but not together, the voltage is too low</td>
<td>a. Compressor requires a minimum of 208 volts. If the voltage is too below required minimum, a buck-boost transformer must be installed</td>
</tr>
<tr>
<td></td>
<td>b. Solenoid valve does not open when compression cycle ends</td>
<td>b. Check the solenoid valve. If it does not open at the end of the cycle, call authorized dealer for service</td>
</tr>
<tr>
<td></td>
<td>c. Pinched drain tubing from solenoid valve</td>
<td>c. Remove kink/pinch in drain line and verify proper operation</td>
</tr>
<tr>
<td></td>
<td>d. Power supply cable too small</td>
<td>d. See SITE REQUIREMENTS</td>
</tr>
<tr>
<td></td>
<td>e. Loose electrical connection</td>
<td>e. Call authorized dealer for service</td>
</tr>
<tr>
<td>3. Unusual or excessive noise</td>
<td>a. Intake filter(s) not seated correctly</td>
<td>a. Remove filter(s) and replace if clogged or dirty. When installing, make sure filter chamber is clean and filter is sealed properly</td>
</tr>
<tr>
<td></td>
<td>b. Intake filter(s) clogged or dirty</td>
<td>b. Replace filters</td>
</tr>
<tr>
<td></td>
<td>c. Motor or compressor noise</td>
<td>c. Call authorized dealer for service</td>
</tr>
<tr>
<td></td>
<td>d. Air leaks</td>
<td>d. Close the air outlet valve. Check all fittings for leaks. If leak is found, call authorized dealer for service</td>
</tr>
<tr>
<td></td>
<td>e. Check cooling fans</td>
<td>e. If fan is loose or broken, call authorized dealer for service</td>
</tr>
<tr>
<td>4. Compressor cycles but does not build up pressure to 100 psi</td>
<td>a. Solenoid valve does not close or leaks when compressor runs</td>
<td>a. Check the solenoid valve. Call authorized dealer for service</td>
</tr>
<tr>
<td></td>
<td>b. Clogged or dirty intake filters</td>
<td>b. Replace intake filters</td>
</tr>
<tr>
<td></td>
<td>c. Leak in compressor system</td>
<td>c. Close the air outlet valve. Check all fittings for leaks. If leak is found, call authorized dealer for service. (See “Testing Compressor for Leaks” in MAINTENANCE section.)</td>
</tr>
<tr>
<td></td>
<td>d. Pressure switch needs adjusting</td>
<td>d. Disconnect main power supply. Drain air tank slowly until you hear a “click”. Air tank should read approx. 80 PSI on the system pressure gauge. Close the air outlet valve, turn on the power switch and verify the pump-up time for your model. Call authorized dealer for service (see “System Checks and Tests” for pump up and recovery times.)</td>
</tr>
<tr>
<td></td>
<td>e. Leak in the office air system</td>
<td>e. With the power switch ON, ensure the compressors are running. Close the air outlet valve and wait for the compressor system to shut off at 100 psi. Wait 5 minutes and open the air outlet valve. If the pressure drops (by more than 5 psi or the compressors start again) then the leak is in the office air lines or delivery units. Contact your authorized dealer for service</td>
</tr>
</tbody>
</table>
## TROUBLESHOOTING CHART

<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible Cause(s)</th>
<th>Possible Solution(s)</th>
</tr>
</thead>
</table>
| 5. Compressor cycles when there is no air demand from the operator/operatories | a. Leak in the compressor system  
  b. Leak in the office air system | a. See 4C  
  b. Look at the moisture indicator (see KEY PARTS to locate.) If it is blue…With the power switch ON, (if necessary) drain the storage tank to 80 psi to start the compression cycle. When the cycle shuts off at 100 psi, close the air outlet valve. Wait 5 minutes. Open the air outlet valve. If the pressure drops, (by more than 5 psi) the air leak is in the office air system or delivery units and not in the Compressor System. Call your authorized dealer for service.  
  NOTE: If it is pink - see #6 below. |
| 6. Moisture indicator is pink* | a. Leak in the office air system  
  b. Compressor keeps cycling  
  c. The solenoid valve requires attention | a. If the moisture indicator is pink, there is too much moisture in the system.  
  CAUTION: Call your authorized dealer for service.  
  b. Check the “SPECIFICATIONS”. There may be excessive demands placed on the Compressor System. A larger capacity model may be required.  
  c. It is normal to hear air escaping from the solenoid valve when the compressor shuts off. If air does not escape, the valve could be clogged or sticking. Call your authorized dealer for service. |

* In initial installations, the moisture indicator may appear pink before operating the system, this is due to ambient air in the system and will change to blue after operation of the system.

## DIAGNOSTIC PROCEDURE FOR DEFECTIVE COMPRESSOR(S)

1. Turn compressor power switches to the OFF position.  

   **WARNING:** Always turn off compressor and remove power from unit when servicing or removing electrical cover. Lock out power at the breaker prior to servicing.

2. Reset the circuit breaker if it was previously tripped.

3. Test compressors by turning ONE on at a time using compressor switches located in electrical panel. (Start only 1 compressor at a time and disconnect power between testing compressors). If the motor fails to start, or the circuit breaker trips, the problem may be in that compressor. Leave the compressor switch for the defective compressor in the OFF position. Call your authorized dealer for service.  

   **NOTE:** One or two compressors (depending on system size) may be run temporarily while waiting for service.

4. If all compressors run independently, but will not run together, check the line voltage. If the voltage is within the min/max. voltage required in SITE REQUIREMENTS, call your authorized dealer for service.
WARRANTY POLICY

If within the warranty time limits described below, the dental compressor system or any of its components fail under normal use and service, the original user-owner must contact an authorized JUN-AIR dealer with the product sale and service records. Should the dealer not be able to complete the repair, the dealer may contact JUN-AIR for disposition. The product’s model and serial number, the installation date and the JUN-AIR invoice number must be furnished. Transportation charges both ways must be paid by the dealer. If upon receipt at the factory, an examination reveals faulty or defective original parts, materials, or workmanship, JUN-AIR will, at its sole option, rebuild or replace the system. This warranty does not cover damages caused by misuse, abuse, accident, neglect, or operation outside the recommended specifications. Unauthorized alterations or repairs made outside our factory will cancel this warranty and charges for them will not be allowed.

DENTAL COMPRESSOR SYSTEMS
All dental compressor systems sold and installed by authorized JUN-AIR dealers are warranted to be free from defects in parts, workmanship, and materials for 3,500 hours of operation or five (5) years from date of purchase, whichever occurs first.

This warranty excludes normal expected service items such as but not limited to: filters/filter kits, o-rings, and hoses. It also excludes add-ons such as remote intake systems. Add-on accessories carry their own specific manufacturer’s warranty.
OPTIONS AND ACCESSORIES

<table>
<thead>
<tr>
<th>Part no.</th>
<th>Description</th>
<th>Kit contents</th>
</tr>
</thead>
</table>
| K937C    | Compressor System Filter Kit | (1) After-Filter Element  
(1) Coalescing Filter Element  
(4) Inlet Filter Elements |
| EK300A   | Remote Air Intake Kit     | PVC, Tubing & fittings              |

*Follow all instructions supplied with each option/accessory for installation and operation.*
INSTALLATION CHECKLIST

- Check system for shipping damage
- Remove packaging materials
- Verify installation kit components
- Remove skid mounting hardware and re-attach nuts to shock mounts
- Install intake filter assemblies
- Relocate unit to operating location and place per “SITE REQUIREMENTS”
- Attach pneumatic fittings and connections per “SITE REQUIREMENTS” and “INSTALLATION-PLUMBING CONNECTIONS”
- Install drain tubing to system and secure opposite end to floor drain
- Attach electrical connections per “SITE REQUIREMENTS” and “INSTALLATION - ELECTRICAL”
- Verify incoming line voltage is minimum of 208 V and maximum of 253 V
- Turn on power to dedicated circuit and ensure unit starts. If not, refer to “TROUBLESHOOTING GUIDE”
- Check for system and operatory leaks per “SYSTEM CHECKS AND TESTS”
- Check system pump-up and recovery times per “SYSTEM CHECKS AND TESTS”