



Operation and Maintenance Manual

87R-4P Compressed Air System

1770008, 1771008, 1770009, 1770010, 1770013, 1771010,
1770018, 1771018, 1770015, 1770019, 1770011, 1770021,
1770008A, 1770009A

Jun-Air®
powered by **gast**



Additional Languages.



Declaration of Conformity.

gastmfg.com

Dear Customer,

Congratulations on the purchase of your new Jun-Air® Industrial Compressed Air System.

This system's intended purpose is for industrial and laboratory compression applications. It is to be used in accordance with UL1450/CSA 22.2 standards along with all applicable codes.

The system utilizes an oil-less rocking piston compressor that produces clean, dry, oil-free pressurized air flow when connected to an industrial or laboratory device.



WARNING



PLEASE READ THIS MANUAL COMPLETELY BEFORE INSTALLING AND USING THIS PRODUCT. SAVE THIS MANUAL FOR FUTURE REFERENCE AND KEEP IN THE VICINITY OF THE PRODUCT.

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SAFETY

Please note that pictures and figures referenced in the text can be found throughout the manual.

Important - read this first!

Please read the following information and operating instructions included with this product before use. This information is for your safety and it is important that you follow these instructions. It will also help prevent damage to the product. Failure to operate the unit in accordance with the instructions or using Jun-Air® unauthorized spare parts can cause damage to the unit and could cause serious injury.

! CAUTION: To reduce the risk of electric shock

- Only authorized service agents should carry out service. Removing parts or attempting repairs can create an electric shock. Refer all servicing to qualified agents.
- Routinely inspect any and all power cords for cuts and abrasions. Discontinue use and have an authorized representative replace cord if damaged.
- Do not plug into an ungrounded outlet or adapter. Reliable earth ground can only be achieved when system is connected to a grounded receptacle.

! WARNING: To reduce risk of electrocution

- Always unplug this unit immediately after use and store in a dry place.
- Do not use this product in or near liquid or where it can fall or be pulled into water or other liquids.
- Do not reach for this product if it has fallen into liquid. Unplug immediately.
- Use of an extension cord is not advisable. An undersized extension cord will cause a drop in line voltage and loss of power. Overheating may result. Death or fire from electrical shock could occur.
- Always switch system off and remove power when servicing or removing the electrical cover. Lock out power at the breaker prior to servicing.

! DANGER: To reduce risk of explosion or fire

- During spraying with combustible liquids, risk of explosion may arise, particularly in closed rooms.
- Do not use this product in or near explosive atmospheres or where aerosol products are being used.
- Do not pump any other gases other than atmospheric air.
- Do not pump combustible liquids or vapors with this product; do not use it in or near areas with combustible or explosive liquids or vapors.
- Do not use this unit near open flames.
- Do not operate the system in an area containing combustible gases or anesthetic mixtures.

! CAUTION: To prevent injury

- Compressed air can be dangerous; do not direct airflow at a person's head or body.
- Keep the electrical cable away from hot surfaces.
- Never leave the product unattended when plugged in.
- Never insert fingers or any other objects into fans.
- This unit is thermally protected and can automatically restart when the overload resets.
- Wear safety glasses when servicing this product.
- Use only in well-ventilated areas.
- This product may only be connected to units or tools with a maximum pressure rating higher or equal to that of the compressor.

! WARNING: To avoid serious burns

- Do not touch surface during operation and allow it to cool prior to servicing.

! IMPORTANT: General directions for use

- Protect the system against rain, moisture, frost and dust.
- The compressor is constructed and approved for a maximum pressure. Only connect equipment suitable for the listed maximum pressure of the system as stated in the Technical Data and Specifications section.
- If the supply power lead on the compressor is defective, an authorized Jun-Air® distributor or other qualified personnel must carry out the repair.
- Never leave children unattended near the system when in use.
- Property damage and/or personal injury may result if directions are not followed or if manufacturer's replacement parts/accessories are not used.

Failure to observe these safety precautions could result in serious injury or, in extreme cases, death.

SAFETY

Protection Against Electrical Shock

Provide proper grounding per NFPA 70 (NEC 2008) and all local codes. Do not create a current path from the equipment to ground through your body. Electrical shock could occur as a result of improper grounding.

Electrical Safety

- Verify that the voltage and frequency specified on the system are the same as that of the supply power.
- Never operate unit outside the specified voltage range (see below Site Requirements table for range).
- See Technical Data and Specifications section for more electrical information.
- Indicator light on the system cover displays when system power is supplied and power switch is on.

Site Requirements

	100 V 50-60 Hz	115 V 50-60 Hz	230 V 50-60 Hz
Voltage min./max.	90/110	103/127	207/253
Full load amps (50 Hz)	5.0	4.8	2.6
Full load amps (60 Hz)	5.8	5.3	2.9

Electromagnetic Interference (EMI)

The Jun-Air® 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 the Model Electrical Requirements table in the Operation section of 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 Jun-Air®.


WARNING



ELECTRIC SHOCK HAZARD.

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


WARNING



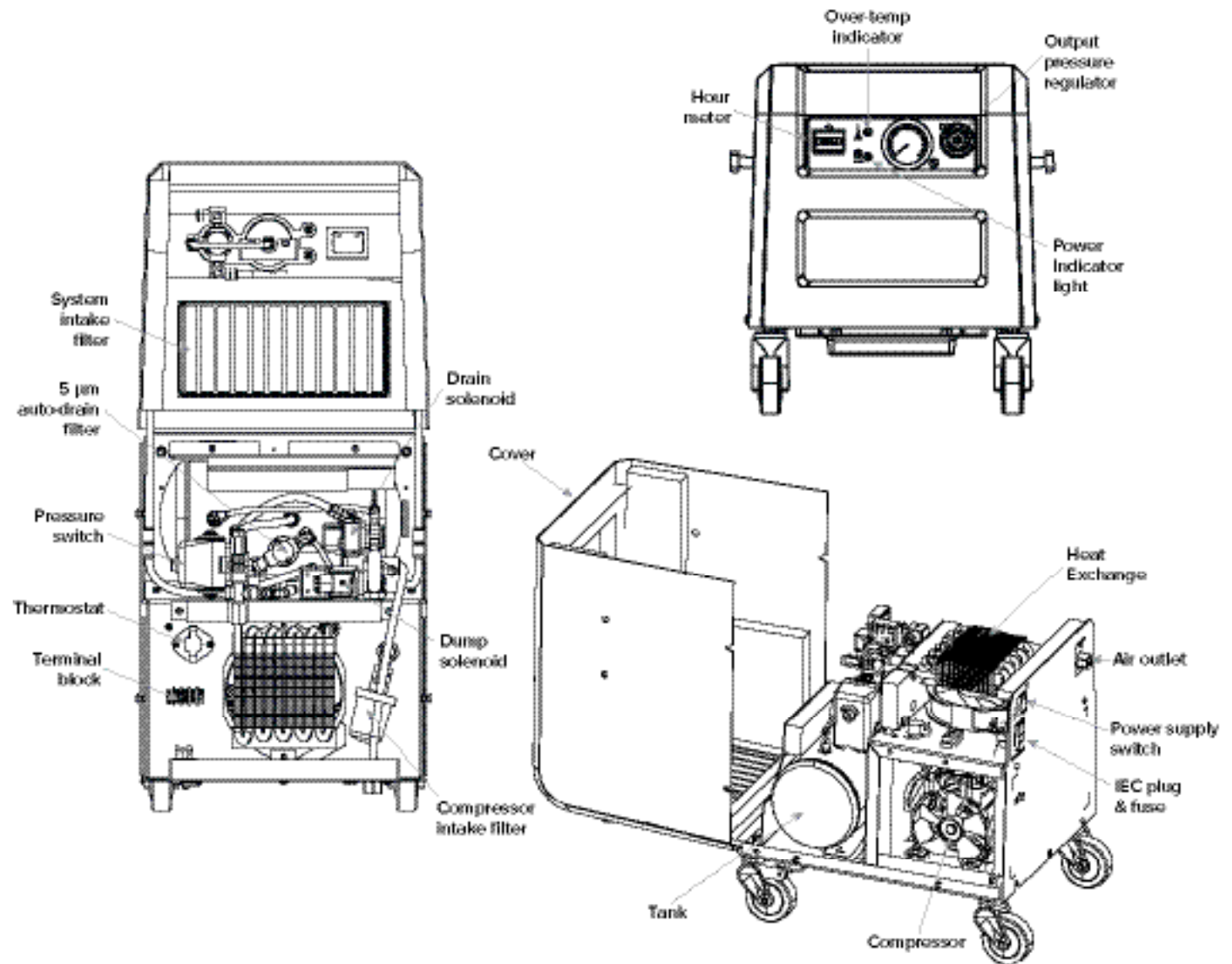

ELECTRIC SHOCK HAZARD.

The grounding wire is indicated by green insulation or green insulation with yellow stripes.
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.

SYSTEM FEATURES

Standard 87R-4P shown.

*Optional membrane dryer configuration available; consult factory.



INSTALLATION

Intended Use

To provide compressed air for use with industrial or laboratory devices as a primary or back-up air source.

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

Unpacking

1. Cut the banding strap from the carton and remove the lid and cardboard inserts.
2. Visually inspect the entire system for shipping damage and verify that the following accessories have been included: two (2) locking casters, two (2) non-locking casters, four (4) vibration-isolation feet, four (4) studs, four (4) washers, and one (1) power cable.
 - a. If the contents were damaged during shipping, contact the freight carrier to file a claim.
 - b. If parts are missing, contact the supplier.
3. Use caution when removing the system from the remaining packaging. Retain the packaging material for future use, if necessary.
4. Install the casters or rubber mounting feet.

EQUIPMENT ALERT: Before you install

- Compressors are oil-less and require NO lubrication.
- The system must be installed in a temperature-controlled and/or ventilated room to ensure operational ambient temperature of 50°F to 104°F [10°C to 40°C]. A 12-inch 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.
- Refer servicing to an authorized service representative.
- If unit is operating at high altitude, adjustments to the duty cycle (on time) or operating pressure may be required. Consult a service technician prior to making any adjustments.

Placing

- The system is intended only for indoor use in a climate controlled and dust-free environment.
- Do NOT install/operate the system in an enclosed area where the ambient temperature could fall below 10°C (50°F) or rise above 40°C (104°F).
- Maintain a minimum clearance of 30 cm (12 in) on the top and sides of the system for service access and cooling.
- Ensure that the system is placed on a surface with an incline that does not exceed 10°.
- Ensure all openings are kept free of restriction, and never place the motor on a soft surface where the openings may be blocked. Keep all openings free from dust, dirt, and other particles.
- Unit must be on a level surface to ensure stability during use, transport, assembly, and servicing.



WARNING

THE EQUIPMENT IS NOT SUITABLE FOR USE IN THE PRESENCE OF A FLAMMABLE ANESTHETIC MIXTURE OR WITH OXYGEN OR NITROUS OXIDE.

Do not operate the equipment if these conditions exist.

Transportation and Storage Conditions

- Temperature: -28°C (-18°F) to 65°C (149°F)
- Relative humidity: 10% to 95%
- Minimum barometric pressure: 372 mm•Hg (14.7 in•Hg)
- Keep the system dry at all times.
- Do not stack units during shipment, installation, or usage.



WARNING



ELECTRIC SHOCK
HAZARD.

The grounding wire is indicated by green insulation or green insulation with yellow stripes.

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 Checklist

- Check system for shipping damage.
- Remove packaging cardboard.
- Verify installation kit components.
- Relocate unit to operating location and place per the Site Requirements table in the Safety section.
- Attach pneumatic fittings and connections per Site Requirements table in Safety section and the Operation section.
- Attach electrical connections per Site Requirements table in the Safety section and Model Electrical Requirements table in the Operation section.
- Verify incoming line voltage meets minimum and maximum values.
- Turn on power to dedicated circuit and ensure unit starts.
- If not, refer to Fault Finding and Repair section.
- Perform system checks found in the Maintenance section.

OPERATION

! WARNING:
Always switch the system off and disconnect power when removing the system cover.

- 1. Switch the system power on and verify that the compressor runs and the storage tank begins to pressurize.
- 2. Check the incoming line voltage to verify that it remains within the range specified in the Site Requirements table while the system is running. If the voltage does not remain within the specified range, contact Jun-Air®.

Notes

- The safety relief valve is set to 135 psi or 145 psi, depending on the model.
- The pressure switch is set to either a cut-in of 87 psi and cut-out of 116 psi or a cut-in of 105 psi and a cut-out of 125 psi, depending on the model. See the specifications table for details.
- Monitor the line-pressure gauge when testing for leaks.
- The tank pressure can be measured using the line pressure gauge by closing the system outlet and adjusting the regulator knob clockwise until it no longer turns.
- If the tank pressure drops more than 0.5 bar (7.5 psi) in three minutes, air leaks are present. Locate and repair the leak(s).
- Soapy water can be used to check for pressure leaks.
- A leaking pressure relief valve may indicate a need for adjustment or repair. Consult a service technician prior to making any adjustments.

Operation

- 1. When the system is completely installed and ready for operation, it can be switched on using the power switch on the back panel. A light on the front panel will turn on to indicate that power is supplied to the system and it is operational.
- 2. The system will provide clean, dry air and has preset cut-in and cut-out pressures. Check the internal tank gauge reading to verify the pressure-switch settings. Contact your authorized dealer before adjusting the cut-in/cut-out pressures to values outside the preset range.
- 3. The pressure of the output air can be adjusted using the regulator knob.
- 4. When the system is not in use, it should be turned off using the power switch on the back panel. The indicator light on the system cover will turn off when the system is powered down.

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

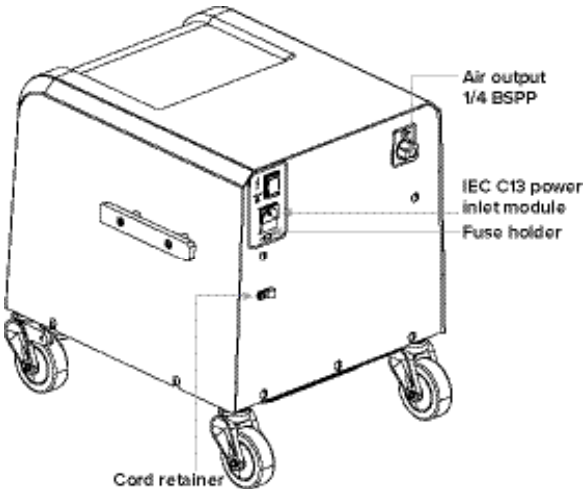
! WARNING:
Discharge pressure in the tank prior to transporting the system or removing connections.

! CAUTION:
If a replacement fuse is required, then a 12.5A, 250 VAC resistance time-delay fuse should be used.

Electrical Connections

Refer to the Model Electrical Requirements table below for the electrical specifications of your model.

- 1. Remove the screw retaining the cord anchor from the back panel of the system. Place the cord anchor around the cord and secure it to the back panel using the screw provided, ensuring enough slack in the cord to connect it to the system.
- 2. Plug the male IEC connector on the power cord into the female connector on the back panel of the system, ensuring it is seated securely.
- 3. Plug the opposite end of the cord into an outlet providing the voltage and frequency required by the system, per the Model Electrical Requirements table.



OPERATION

Model Electrical Requirements

System	Voltage	Frequency	Charge Time	Recover Time	Cut-In Pressure	Cut-Out Pressure
1770008	115 V	50 Hz/60 Hz	≤55 s @ 50 Hz ≤45 s @ 60 Hz	≤30 s @ 50 Hz ≤25 s @ 60 Hz	6 bar (87 psi)	8 bar (116 psi)
1770009	230 V					
1770010	230 V					
1770018	100 V					
1770019	115 V					
1770011	230V					
1770021	115V				7.24 bar (105 psi)	8.62 bar (125 psi)

MAINTENANCE

! WARNING:

Exceeding the maximum pressure may result in a reduced system life. Exceeding the maximum pressure rating negates any UL or CE ratings.

Pressure-Switch Adjustment

1. Turn the system off and disconnect it from electrical power.
2. Remove the handle bolts (4) and loosen the cover screws (4) to tip the cover forward.
3. Remove the screw retaining the pressure-switch cover and remove the cover.
4. To increase the cut-in pressure, use a 7 mm wrench or socket to turn each of the two nuts on the large springs (A) clockwise; both springs should be adjusted equally. Each half-turn raises the cut-out pressure approximately 0.25 bar (3.5 psi). The cut-in pressure can be reduced by turning the springs in the opposite direction.
5. Set the cut-out pressure by adjusting the pressure differential (the difference between the cut-in and cut-out pressures). To increase the pressure differential turn the nut on the small spring (B) clockwise. Decrease the pressure differential by turning the nut counter-clockwise. Ensure that the cut-out pressure does not exceed the maximum rated pressure of the system.
6. Replace and secure the pressure-switch cover to protect against electric shock.
7. Reconnect the system power and charge the tank and verify that the compressor switches off at the desired cut-out pressure. Should the pressure reach the safety valve rating $\pm 3\%$, the safety relief valve will open and purge the tank.
8. Drain air from the system through the regulator to verify that the compressor switches on at the desired cut-in pressure.
9. Disconnect power and repeat steps 3-8, if necessary.
10. Replace the cover and reinstall the handle bolts and cover screws.
11. Reconnect the system to electrical power.

! WARNING:

Discharge pressure in the tank prior to transporting the system or removing connections.

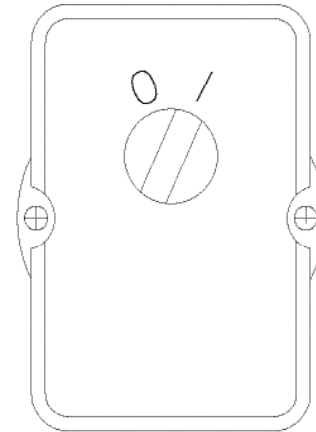
! EQUIPMENT ALERT:

The factory set cut-in and cut-out pressures are approximately 6 bar (87 psi) and 8 bar (116 psi), or 7.24 bar (105 psi) to 8.62 bar (125 psi), respectively.

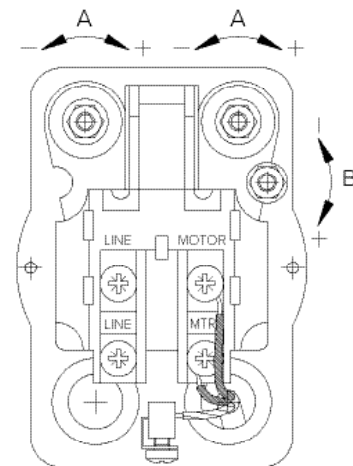
! EQUIPMENT ALERT:

The system should operate at 50% duty cycle or less.

Pressure Switch '1' on or '0' off



Adjustment of Pressure Switch Section



Pneumatic Connections

Connect the plumbing from the device air-inlet to the 1/4 in BSPF air-output fitting on the back panel of the system.

! WARNING:

The system should only be installed by qualified personnel in a clean, dry, well-ventilated area on a firm surface with an incline of less than 10°.

! EQUIPMENT ALERT:

Verify that all leaks are sealed. Air leaks are the primary cause of premature system failures.

MAINTENANCE

Performing regularly scheduled maintenance will ensure your system provides you with years of superior service. To extend your system's life, please do the following:

- Keep the system and surrounding area clean and free of debris.
- Maintain the recommended ambient temperature; high temperatures will shorten the life of the system.
- Verify that all leaks are sealed.

⚠ EQUIPMENT ALERT:

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


WARNING



ELECTRIC SHOCK HAZARD.

Disconnect electrical power supply cord before performing maintenance on this product.

If product is hard wired into system, disconnect electrical power at the circuit breaker or fuse box before performing maintenance on this product.

Failure to follow these instructions can result in death, fire, or electrical shock.


WARNING



INJURY HAZARD.

Product surfaces become very hot during operation, allow product surfaces to cool before handling.

Air stream from product may contain solid or liquid material that can result in eye or skin damage, wear proper eye protection.

Clean this product in a well-ventilated area.

Failure to follow these instructions can result in death, fire, or electrical shock.

⚠ WARNING:

Always disconnect power before servicing. Surface(s) can be extremely hot depending on system usage. Do not touch hot parts during or immediately after operation.

Cleaning or Replacing the System-Intake Filter Element

1. Turn the system off and disconnect it from electrical power.
2. Remove the intake filter element from the system cover and inspect for damage.
3. If cleaning the filter, use warm, soapy water and ensure that it is dry before reinstalling. If replacing the filter, discard the used element.
4. Install the new or cleaned filter element into the system cover, ensuring that it is fully seated in the cover.
5. Reconnect electrical power to the system.

NOTE: Filter kits are available for the system (see Parts and Accessories section).

Replacing the Auto-Drain Filter Element

1. Turn the system off and disconnect it from electrical power.
2. Bleed all of the air from the system.
3. Remove the handle bolts (4) and loosen the cover screws (4) to tilt the cover forward.
4. Rotate the filter bowl and drop it down slightly to remove it, using caution to avoid damaging or kinking the drain tube.
5. Remove the filter element by turning it completely out, using caution to avoid damaging the plastic element holder. Discard the used filter.
6. Install a new 5 µm filter element after verifying that it is the correct part.
7. Position the filter bowl by pushing up slightly and rotating it into place. Verify that the drain tube is not kinked or damaged.
8. Ensure that the drain tube passes through the base plate and into the evaporator tray.
9. Replace the cover and reinstall the handle bolts and cover screws.
10. Reconnect the electrical power to the system.

Replacing the Evaporator-Tray Element

1. Turn the system off and disconnect it from electrical power.
2. Remove the handle bolts (4) and loosen the cover screws (4) to tip the cover forward.
3. Locate the evaporator tray and remove the foam.
4. Discard the used foam, clean the tray, and install new foam.
5. Replace the cover and reinstall the handle bolts and cover screws.
6. Reconnect the system to electrical power.

MAINTENANCE

Replacing the Compressor-Intake Filter Element

- 1. Turn the system off and disconnect it from electrical power.
- 2. Remove the handle bolts (4) and loosen the cover screws (4) to tip the cover forward.
- 3. Remove the intake filter cap by depressing and rotating it while holding the base of the filter.
- 4. Remove and discard the used intake filter element.
- 5. Install a replacement filter element and reinstall the filter cap.
- 6. Replace the cover and reinstall the handle bolts and cover screws.
- 7. Reconnect the system to electrical power.

! WARNING:

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

! WARNING:

Do not exceed the OSHA requirements of 2 bar [29 psig] air for cleaning purposes.

Testing the System for Leaks

It is recommended that leak testing be performed after any maintenance or service.

- 1. Close the valve to the facility plumbing.
- 2. Run the system until it reaches the maximum operating pressure—approximately 8 bar (116 psi) or 8.62 bar (125 psi), depending on the model.
- 3. Turn the system off.
- 4. Let the system rest for five minutes.
- 5. If the pressure drops more than 0.5 bar (7.5 psi) within five minutes, then leaks must be repaired.
- 6. Use soapy water to locate leaks and repair them as necessary.
- 7. Open the valve to the facility plumbing.

Preventative Maintenance Schedule

Part No.	Action	Monthly	Annually
-	Remove and clean system-intake filter	•	
AS562	Replace system-intake filter		•
4071009	Replace auto-drain filter element		•
Consult factory	Replace coalescing filter element in membrane dryer assembly		•
B300A	Replace compressor-intake filter element		•
AS561A	Replace evaporator-tray foam element		•
-	Test for air leaks		•
-	Inspect system for functionality using system checks and tests		•
K964	Rebuild compressor	8,000 hours	

FAULT FINDING AND REPAIR

Problem	Possible Cause(s)	Possible Solution(s)
Compressor does not start	No electrical power	Check the circuit breaker at the main power source.
	Power not connected	Check the power cord at both ends.
	Power not switched on	Verify that the system power switch is in the on position.
	Defective power switch	The power switch needs to be replaced. Contact your authorized dealer for service.
	Fuse is blown or damaged	Check the fuse(s) in the electrical inlet.
Circuit breaker trips when the compressor attempts to start	Voltage is too low	The compressor requires a minimum of 103 V/207 V. If the voltage is below the minimum required, a buck-boost transformer must be installed.
	Solenoid valve does not open when the compression cycle ends	Contact an authorized dealer for service.
	Power supply cable is too small	See Site Requirements table in Safety section of this manual for the current draw for the applicable system, and select the appropriate wire gauge size.
	Loose electrical connections	Contact an authorized dealer for service.
Unusual or excessive noise	Intake filter is not seated correctly	Remove and replace the filter if it is clogged or dirty. Ensure that the filter chamber is clean and the filter is seated properly during installation.
	Intake filter(s) is clogged or dirty	Replace the filter.
	Noisy compressor	Contact an authorized dealer for service.
	Air leaks	Close the storage-tank outlet valve and check all fittings for leaks. If a leak is found, contact an authorized dealer for service.
	Cooling fan	Check for a loose or broken fan. Contact an authorized dealer for service.
Compressor cycles, but tank pressure does not reach cut-out pressure	Solenoid valve does not close or leaks when compressor runs	Check the solenoid valve and contact an authorized dealer for service.
	Intake filter is clogged or dirty	Replace the intake filter(s).
	Leak in the system	Close the storage-tank outlet valve and check all fittings for leaks. If a leak is detected, contact an authorized dealer for service.
	Leak in the device air system	With the compressor system connected to the device-air system and the regulator valve open, run the compressor until the cut-out pressure is reached and the compressor is switched off, and then close the regulator valve. After five minutes, open the regulator valve and observe the system pressure drop. If the pressure drop exceeds 0.5 bar (7.5 psi), there is a leak in the device air system. If a leak is detected, contact an authorized dealer for service.
	Cut-in and/or cut-out pressures are out of adjustment	Adjust the pressure switch (see Maintenance section).

NOTE: Prior to all servicing, unit should be turned off and unplugged from the power source.

TECHNICAL DATA AND SPECIFICATIONS

Motor Size	100V		(No Dryer) 115V		230V	
	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz
Model Numbers	1770018		1770008		1770009 (NA) 1770010 (EU/UK)	
Continuous System Output Flow @ 4 bar (58 psi)	46 SLPM	51 SLPM	46 SLPM	51 SLPM	46 SLPM	51 SLPM
	[1.6 SCFM]	[1.8 SCFM]	[1.6 SCFM]	[1.8 SCFM]	[1.6 SCFM]	[1.8 SCFM]
Continuous System Output Flow @ 8 bar (116 psi)	27 SLPM	31 SLPM	27 SLPM	31 SLPM	27 SLPM	31 SLPM
	[1.0 SCFM]	[1.1 SCFM]	[1.0 SCFM]	[1.1 SCFM]	[1.0 SCFM]	[1.1 SCFM]
Cut-in Pressure ¹	6 bar [87 psi]					
Cut-out Pressure ¹	8 bar [116 psi]					
Maximum Operational Pressure	8 bar [116 psi]					
Dew Point Suppression ²	(>10°C with optional membrane dryer)					
Air Filtration	5 µm					
Safety Relief Valve Pressure	9.3 bar (135 psi)					
High Temperature Indication	≥ 60°C [140°F] in compressor chamber					
Air Connections	1/4 in BSPP					
Current, A	5.0	5.8	4.8	5.3	2.6	2.9
Power Consumption, W	450	550	500	600	550	650
Fuse Specifications	12.5 A, 250 Vac, time delay					
Sound Level, dB(A)	46	48	46	48	46	48
Operating Ambient Conditions	10°C to 40°C [50°F to 104°F] 10 - 95% RH*					
Storage Ambient Conditions	-28°C to 65°C [-18°F to 149°F] 10 - 95% RH* Barometric pressure ≥ 372 mm-Hg [14.7 in-Hg]					
System Dimensions (W x H x D)	406 mm x 495 mm x 439 mm [16 in W x 19.5 in D x 17.3 in H]					
System Weight	29.5 kg [65 lb]					
Shipping Weight	35.0 kg [77 lb]					
Regulatory Certifications	UL 1450 / CSA 22.2 / CE					

¹ The compressor switches on and off at the cut-in and cut-out pressures, respectively. The cut-in and cut-out pressures are adjustable.

² Membrane dryer configuration available, consult factory.

* Avoid conditions that promote condensation on the equipment.

TECHNICAL DATA AND SPECIFICATIONS

Motor Size	(With Dryer)			
	115V		230V	
	50Hz	60Hz	50Hz	60Hz
Model Numbers	1770021		1770011	
Continuous System Output Flow @ 4 bar (58 psi)	40 SLPM	45 SLPM	40 SLPM	45 SLPM
	[1.41 SCFM]	[1.59 SCFM]	[1.41 SCFM]	[1.59 SCFM]
Continuous System Output Flow @ 8 bar (116 psi)	18 SLPM	20 SLPM	18 SLPM	20 SLPM
	[.64 SCFM]	[.71 SCFM]	[.64 SCFM]	[.71 SCFM]
Cut-in Pressure ¹	7.24 bar [105 psi]			
Cut-out Pressure ¹	8.62 bar [125 psi]			
Maximum Operational Pressure	8.62 bar [125 psi]			
Dew Point Suppression ²	(>10°C)			
Air Filtration	5 µm			
Safety Relief Valve Pressure	10 bar (145 psi)			
High Temperature Indication	≥ 60°C [140°F] in compressor chamber			
Air Connections	1/4 in BSPP			
Current, A	4.8	5.3	2.6	2.9
Power Consumption, W	500	600	550	650
Fuse Specifications	12.5 A, 250 Vac, time delay			
Sound Level, dB(A)	50			
Operating Ambient Conditions	10°C to 40°C [50°F to 104°F] 10 - 95% RH*			
Storage Ambient Conditions	-28°C to 65°C [-18°F to 149°F] 10 - 95% RH* Barometric pressure ≥372 mm-Hg [14.7 in-Hg]			
System Dimensions (W x H x D)	406 mm x 495 mm x 439 mm [16 in W x 19.5 in D x 17.3 in H]			
System Weight	32.2 kg [71 lb]			
Shipping Weight	37.6 kg [83 lb]			
Regulatory Certifications	UL 1450 / CSA 22.2 / CE			

¹ The compressor switches on and off at the cut-in and cut-out pressures, respectively. The cut-in and cut-out pressures are adjustable.

² Membrane dryer configuration available, consult factory.

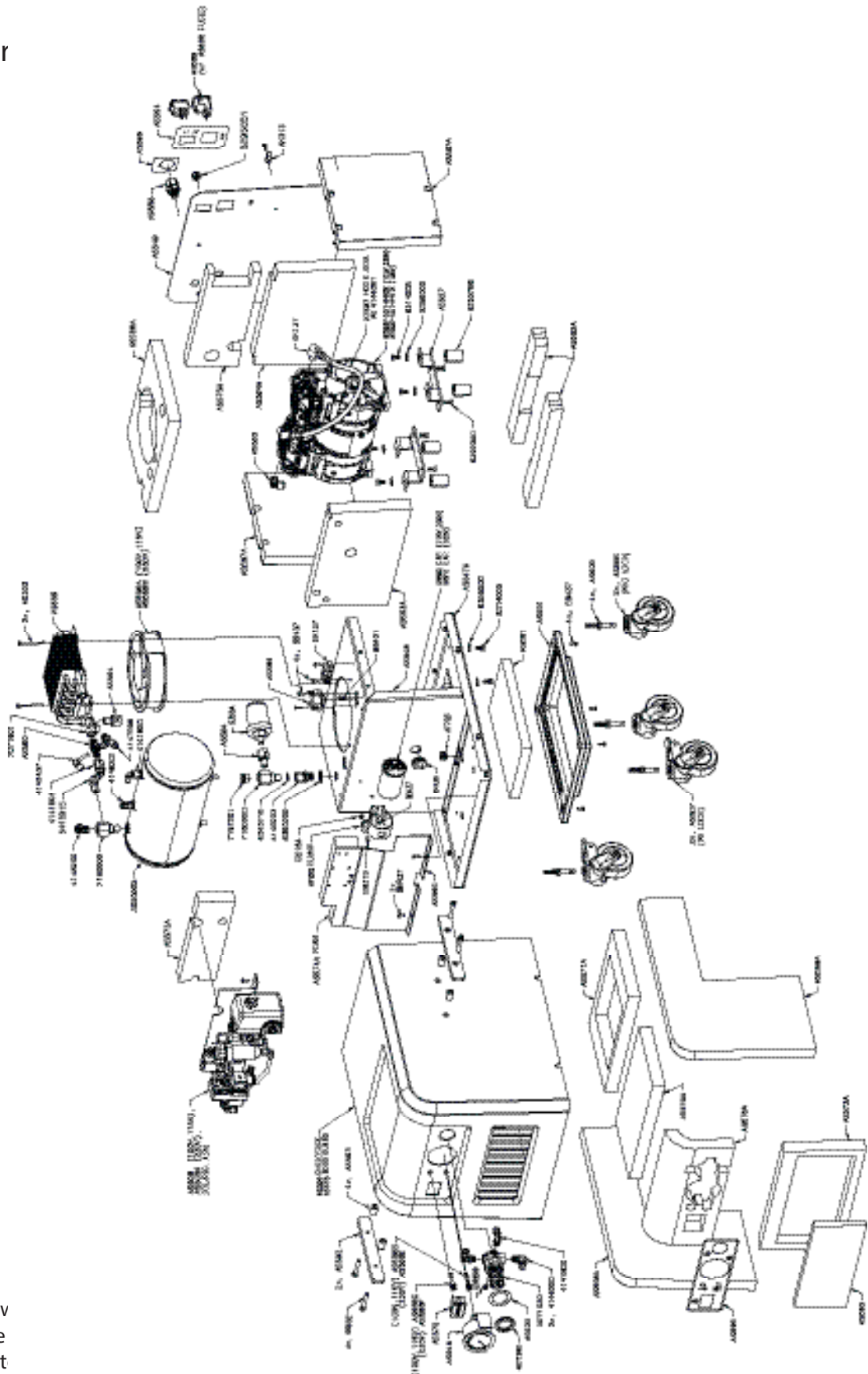
* Avoid conditions that promote condensation on the equipment.

PARTS AND ACCESSORIES

Part no.	Description	Kit contents
4736609	European power cord	
4736621	UK / GBR power cord	
4736620	Asian / Australian power cord	
4736915	IEC C13/C14 power cord	
4736882	US 115 V power cord	
4736931	US 230 V power cord	
AS560	Check valve	
AS620A	Filter kit (annual)	Intake filters and evaporator filter
K964	Compressor rebuild kit	O-rings, seals, cups, cylinders
AS623	Rubber-mounting-feet kit	Four (4) rubber isolation feet and washers

EXPLODED VIEW

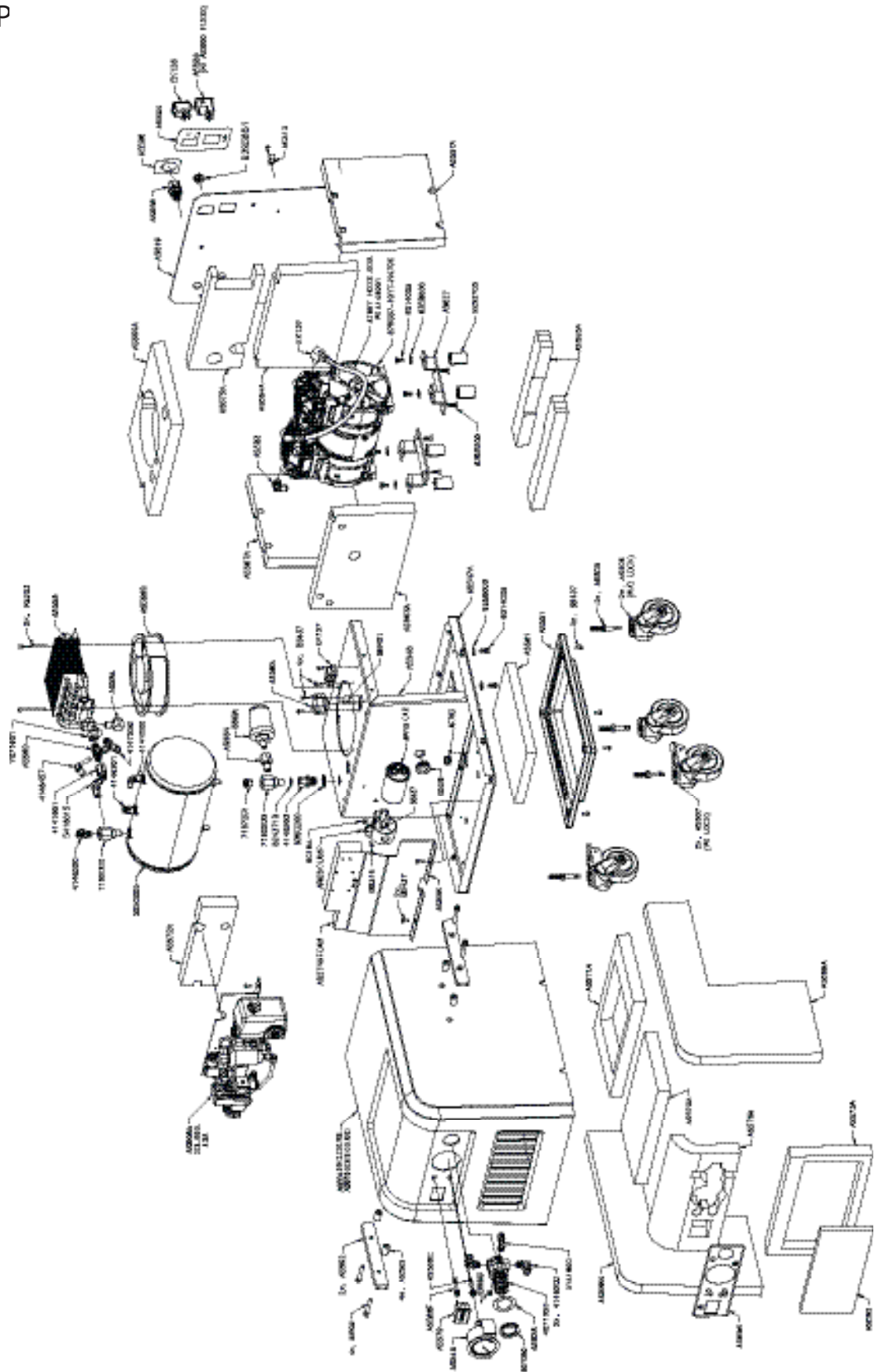
Model
87R-4P 115V or



Standard 87R-4P show
*Optional membrane
available; consult fact

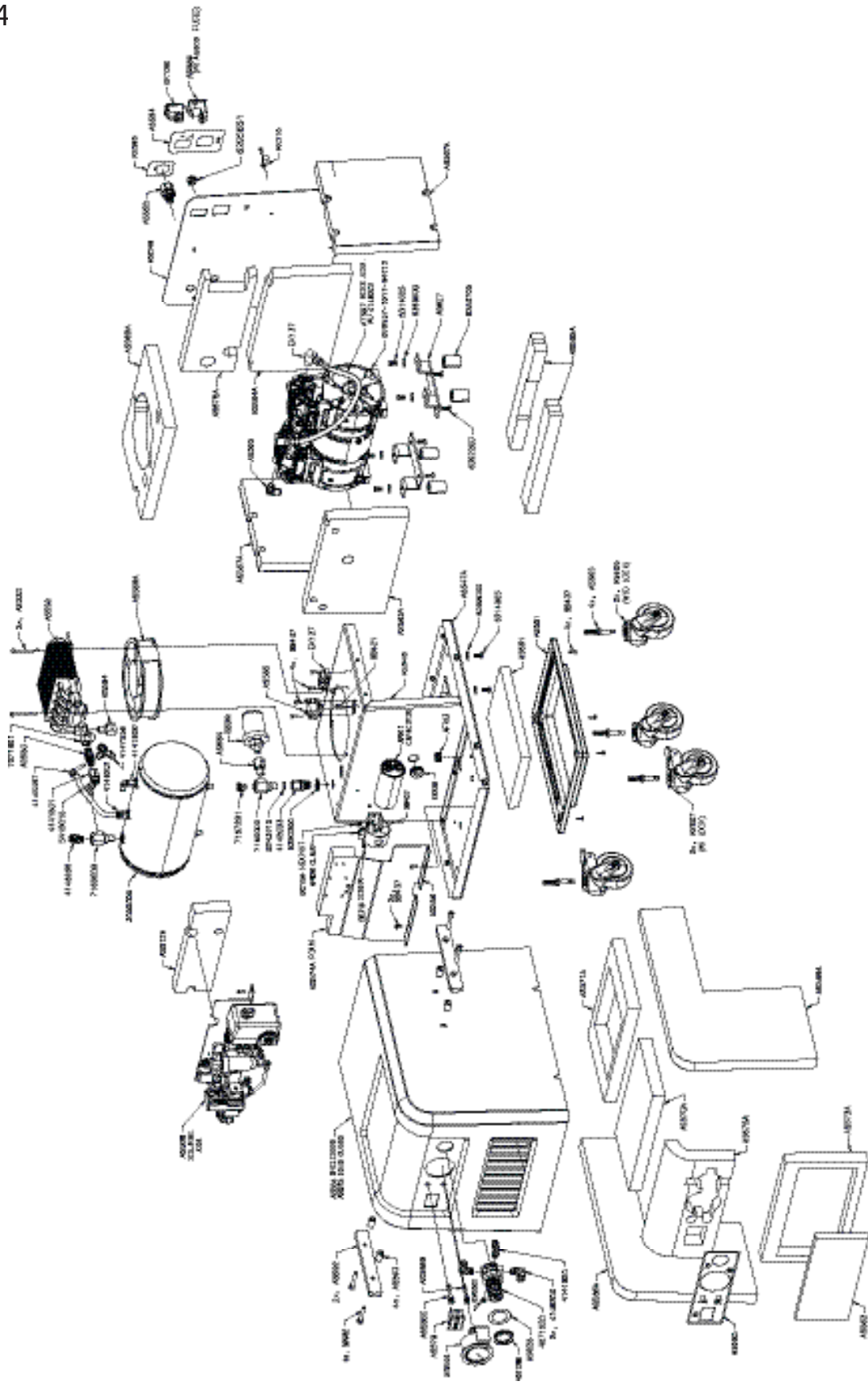
EXPLODED VIEW

Model 87R-4P



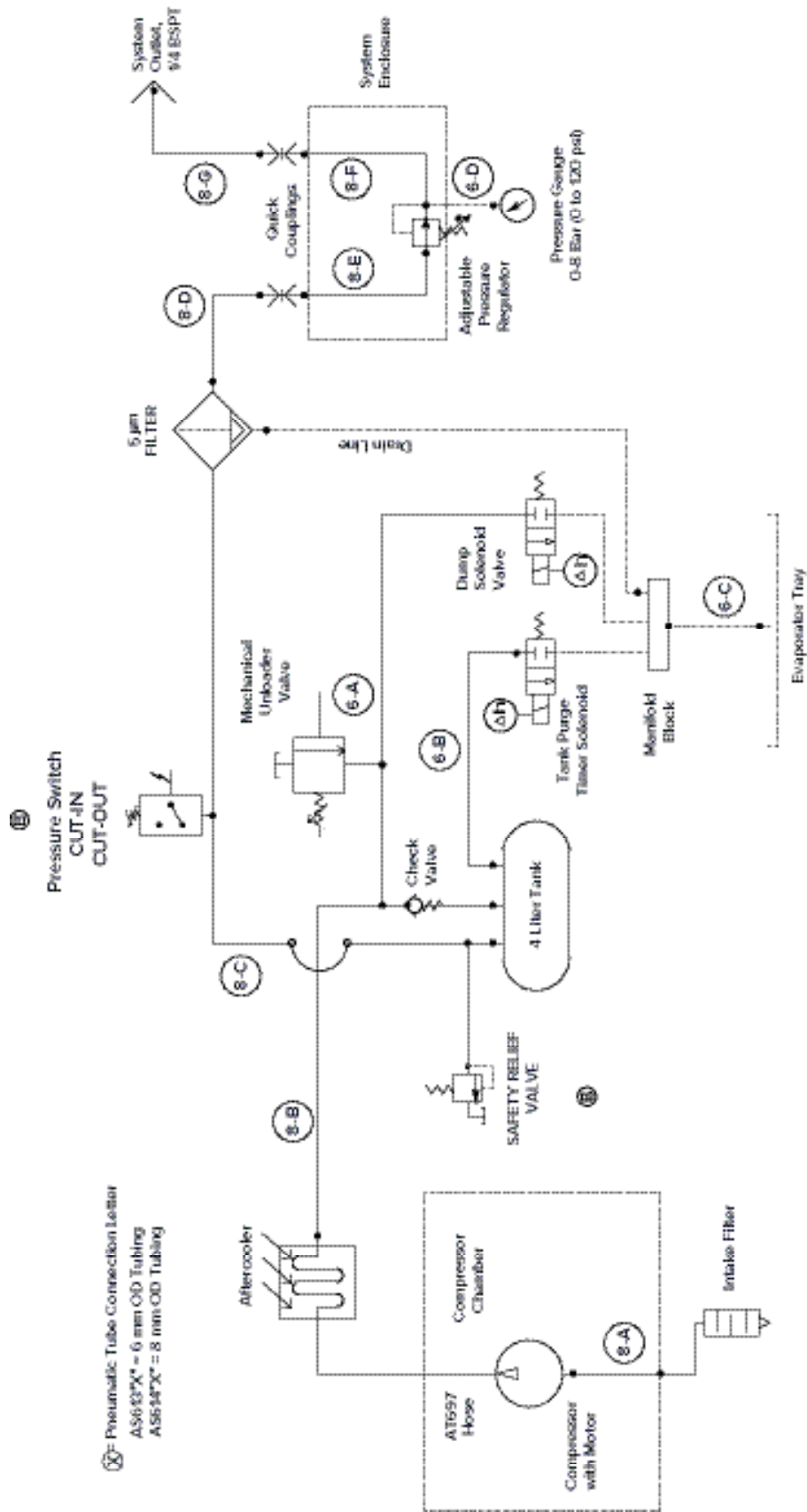
EXPLODED VIEW

Model 87R-4



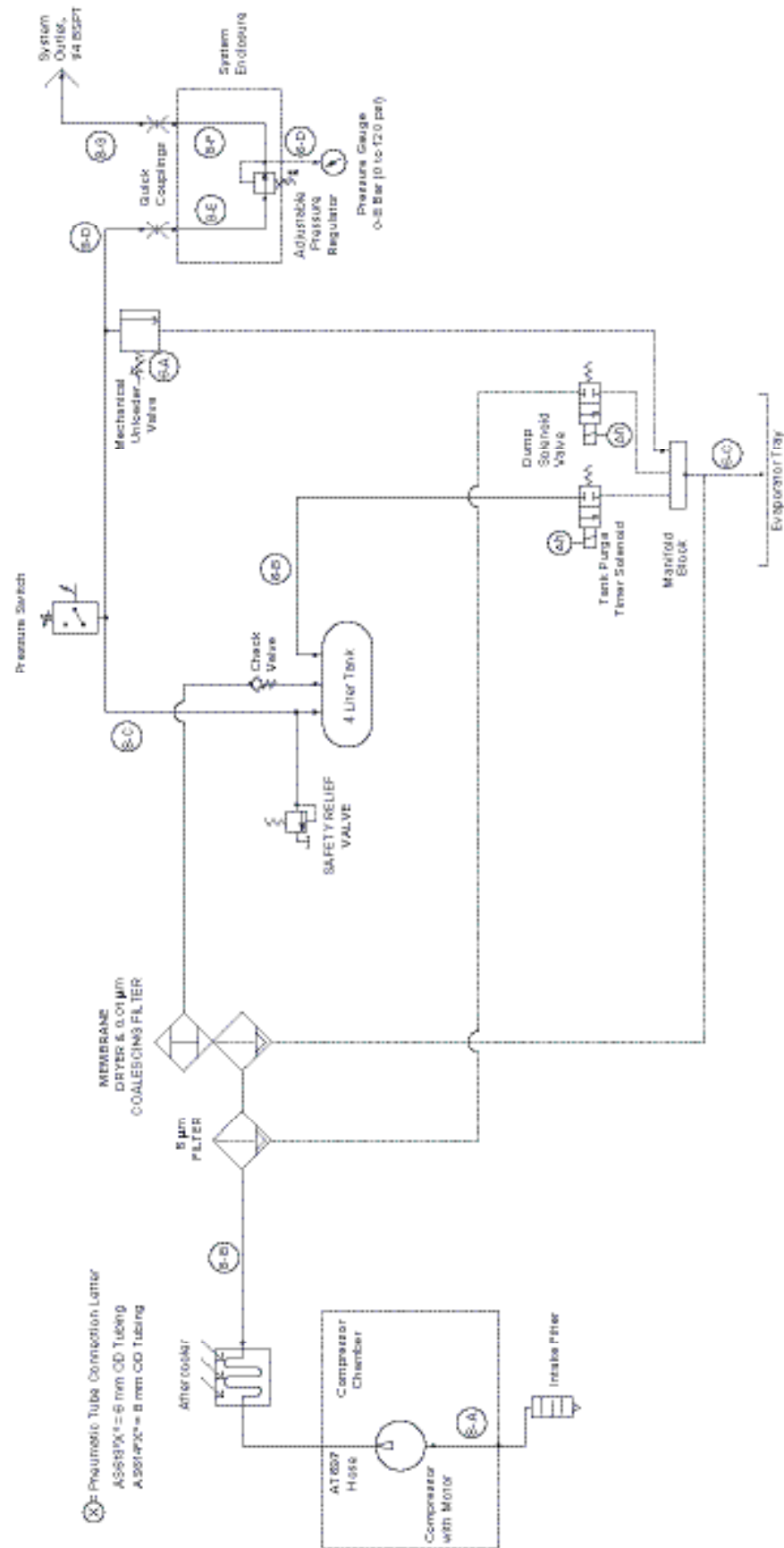
PNEUMATIC SCHEMATICS

Model 87R-4P

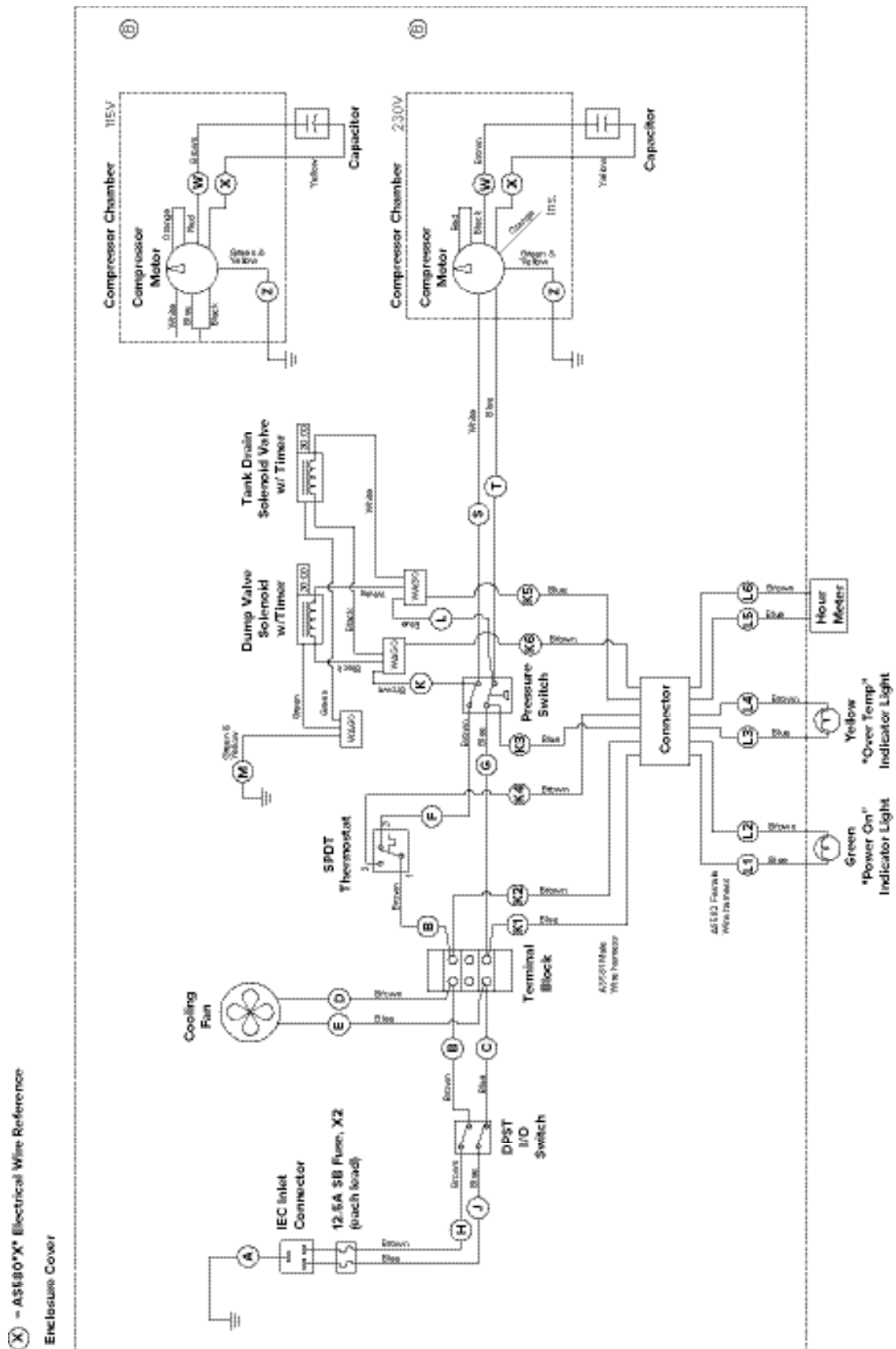


PNEUMATIC SCHEMATICS

Model 87R-4PA



All Models



SYMBOLS

The symbols found on the product and packing are explained below.

Symbol	Description
	DANGER: Hazardous situation or extreme condition. Will result in serious or fatal injury if not avoided. WARNING: Hazardous situation. May result in serious injury if not avoided. CAUTION: Potentially hazardous situation/avoid unsafe practices. Could result in minor or moderate injury if not avoided.
	EQUIPMENT ALERT: Hazardous situation that could result in equipment damage if not avoided.
	WARNING: Hot surfaces. Risk of burns. Do not touch surface during operation. Do not touch the compressor head.
	CAUTION: Risk of bursting. Do not adjust regulator to result in output pressure greater than marked maximum pressure of attachment.
	WARNING: Risk of injury. Do not direct air stream at body.
	Keep dry. Do not expose to rain.
	Indicates the acceptable shipping temperature range.
	Transport and storage relative humidity: Maximum 95%
	This side up. Package should be handled with these symbols pointing up.
	Fragile. Handle with care.
	Disposal in accordance with existing regulations for electric and electronic equipment.
	Read operation and maintenance manual before operating.
	A/C power
	Ground
	ELECTRICAL SHOCK HAZARD: Risk of electric shock present. Make sure power is disconnected before attempting this procedure.
	Indicates the acceptable lowest barometric pressure conditions in which this unit can be shipped.

SYMBOLS

The symbols found on the product and packing are explained below.

Symbol	Description
	Indicates the ON and OFF position for the equipment power switch.
	Air outlet port
	Fuse location
	Hour meter
	Over-temp indicator light
	Power on indicator light
	Pressure gauge
	Pressure regulator valve

POTENTIAL WARNING LABELS ON PRODUCT

WARNING

THIS MOTOR IS THERMALLY PROTECTED AND WILL AUTOMATICALLY RESTART WHEN PROTECTOR RESETS. ALWAYS DISCONNECT POWER SUPPLY BEFORE SERVICING.

CAUTION



RISK OF INJURY - DO NOT DIRECT AIR/NITROGEN STREAM AT BODY.

WARNING



ELECTRIC SHOCK RISK. DISCONNECT BEFORE SERVICING.

WARNING



MOVING PARTS PRESENT - CAN RESULT IN SERIOUS INJURY TO HANDS OR FINGERS. KEEP HANDS AWAY FROM MOVING PARTS. DISCONNECT AND LOCKOUT POWER BEFORE SERVICING.

WARNING



INDUSTRIAL ELECTRICAL EQUIPMENT - WITH RESPECT TO ELECTRICAL SHOCK, FIRE, MECHANICAL, AND OTHER SPECIFIED HAZARDS, ONLY IN ACCORDANCE WITH UL1450.

WARNING



PLEASE READ THIS MANUAL COMPLETELY BEFORE INSTALLING AND USING THIS PRODUCT. SAVE THIS MANUAL FOR FUTURE REFERENCE AND KEEP IN THE VICINITY OF THE PRODUCT.

CAUTION



TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT EXPOSE TO RAIN. STORE INDOORS.

WARNING



IMPROPER INSTALLATION OF THE GROUNDING CABLE PLUG RESULTS IN A RISK OF ELECTRICAL SHOCK.

CAUTION



RISK OF BURSTING - DO NOT ADJUST REGULATOR TO RESULT IN OUTPUT PRESSURE GREATER THAN MARKED MAXIMUM PRESSURE OF ATTACHMENT.

CAUTION



DISCONNECT POWER BEFORE OPENING.

POTENTIAL WARNING LABELS ON PRODUCT



WARNING



TO AVOID SERIOUS BURNS,
DO NOT TOUCH SURFACE DURING
OPERATION.



WARNING

CONNECT DRAIN BOTTLE BEFORE OPERATION.
CONNECT AUTO DRAIN TO DRAIN BOTTLE WITH
6MM HOSE SUPPLIED UNATTACHED.



powered by 

SERVICE KIT	PART NUMBER	SERVICE INTERVAL



Scan this code or visit gastmfg.com for more
information on where to purchase genuine
Jun-Air® maintenance kits.

WARRANTY

Warranty Policy

If, within the warranty time limits described below, the 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 discretion, rebuild or replace. This warranty does not cover damages caused by misuse, abuse, accident, or neglect. Unauthorized alterations or repairs made outside our factory will cancel this warranty and charges for them will not be allowed.

For more warranty information, visit gastmfg.com/warranty.

Jun-Air® Systems

All compressor systems sold and installed by authorized Jun-Air® dealers are warrantied to be free from defects in parts, workmanship, and materials for 8,000 hours of operation or two (2) 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-on accessories that carry their own specific manufacturer's warranty.

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Additional Languages.



Declaration of Conformity.

gastmfg.com