USER MANUAL

MODEL NUMBER:

FI-JR

AND RELATED UNITS

Portable Twin-Line Pre-Mix Electric Foam Unit

English (Original Instructions)

READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

WARNING

Read this manual completely and understand the machine before operating or servicing it.

- Read all instructions before installing or operating unit.
- Always wear appropriate personal protective equipment (PPE) when operating or servicing unit.
- Always follow all chemical safety precautions and handling instructions provided by the chemical manufacturer and Material Safety Data Sheet (MSDS).
- If this unit is modified or serviced with parts not listed in this manual, the unit may not operate correctly.
- Never point the discharge wand at yourself, another person, or any object you do not want covered in chemical.
- Always depressurize unit after use (as described in the After Use Instructions). Always store unit depressurized, with the discharge valve in the closed position.
- Do not exceed an air pressure of 80 psi (5.5 bar).
- Do not exceed a fluid temperature of 100˚F (37.8˚C).
- Always flush the unit with fresh water thoroughly when switching from an alkaline to an acid or an acid to an alkaline.
- Never use unit with hydrocarbons or flammable products.
- Before performing any maintenance on this unit, disconnect the unit from the electrical power source and depressurize it as described in the After Use Instructions.

PROTECT THE ENVIRONMENT
Please dispose of packaging materials, old machine components, and hazardous fluids in an environmentally safe way according to local waste disposal regulations.

Always remember to recycle.

*Specifications and parts are subject to change without notice.

For information about the air compressor that powers this unit, please refer to Appendix A: Air Compressor User Guide.

READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

OPTIONS	
	Pump Seal Material
FI-JR	Santoprene (***standard***)
	Viton (**V**)
	Kalrez (**K**)

Add bold option codes to item number as shown. For standard options, no option code is needed.

Examples:

- FI-JR (standard unit with Santoprene pump seals)
- FI-JRV (unit with Viton pump seals)

REQUIREMENTS	
Operating air pressure range	40-80 psi (2.8-5.5 bar)
Liquid temperature range	40-100˚F (4.4-37.8˚C)
Electrical requirements	120 VAC at 60 Hz, 10 amps (GFCI protected outlet)
Operating voltage	120 VAC
Chemical compatibility	Chemical products used with this equipment must be formulated for this type of application and compatible with unit materials and pump seals. For more information on chemical compatibility, consult the manufacturer or MSDS for your product or contact our customer service department.

SPECIFICATIONS	
Power type	Electricity
Chemical pickup type	Draws from pre-mixed solution
Number of products unit can draw from	One product
Suction line length/diameter	6 ft. (1.8 m) hose with 1/4 in. (6.4 mm) inside diameter
Discharge hose diameter/length	25 ft. (7.6 m) coiled twin-line tubing, with 1/4 in. (6.4 mm) outside diameter
Discharge wand/tip type	Polypropylene trigger handle with 65˚ fan tip
Output distance	4-6 feet (1.2-1.8 m)
Output volume	6 gal/min (22.7 l/min) of foam
Flow rate*	1 gal/min (3.8 l/min)
Pump seals	Santoprene, Viton, or Kalrez

*Dilution rates and flow rates given are based on chemical with viscosity of water and factory air pressure settings.

READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

Operation Instructions:

1. Follow all instructions from chemical manufacturer. Place the chemical suction line into a container of pre-mixed chemical solution.
2. Plug the unit in to a GFCI protected 120 VAC power outlet.
3. Turn the power switch ON to start the air compressor.
4. With the discharge valve in the closed position, open the air inlet valve.
5. Point the discharge wand in a safe direction and open the discharge valve to begin foaming. The discharge valve should be completely open while foaming.
6. While the unit is running and discharging product, adjust the needle valve, located on the top of the control box, to regulate the wetness or dryness of the foam:
   a. Close needle valve completely in clockwise direction.
   b. Open needle valve in counter-clockwise direction 2 complete turns.
   c. Continue to open needle valve in ¼ turn increments, allowing 30 seconds between adjustments, until desired consistency of foam is achieved.
7. To stop foaming, close the discharge valve.

After Use Instructions:

1. Place the chemical suction line into a container of water.
2. With the unit running, open the discharge valve, and allow the unit to be flushed with fresh water thoroughly until all chemical has been discharged from the system.
3. Shut off the air supply to the unit by closing the air inlet valve.
4. Turn the power switch OFF to shut off the air compressor.
5. Open the discharge valve to relieve any pressure remaining in the unit.
6. Close the discharge valve after all pressure has been relieved from the unit. Store the unit with the discharge valve in the closed position.
7. Unplug the unit from the power outlet.
8. Depressurize and drain the air compressor tank. Draining the compressor tank after each use helps extend pump life. An air source with a high moisture content will accelerate pump wear.

Maintenance Instructions:

To keep the unit operating properly, periodically perform the following maintenance procedures:

Note: Before performing any maintenance, disconnect the unit from the electrical power source and depressurize it as described in the After Use Instructions.

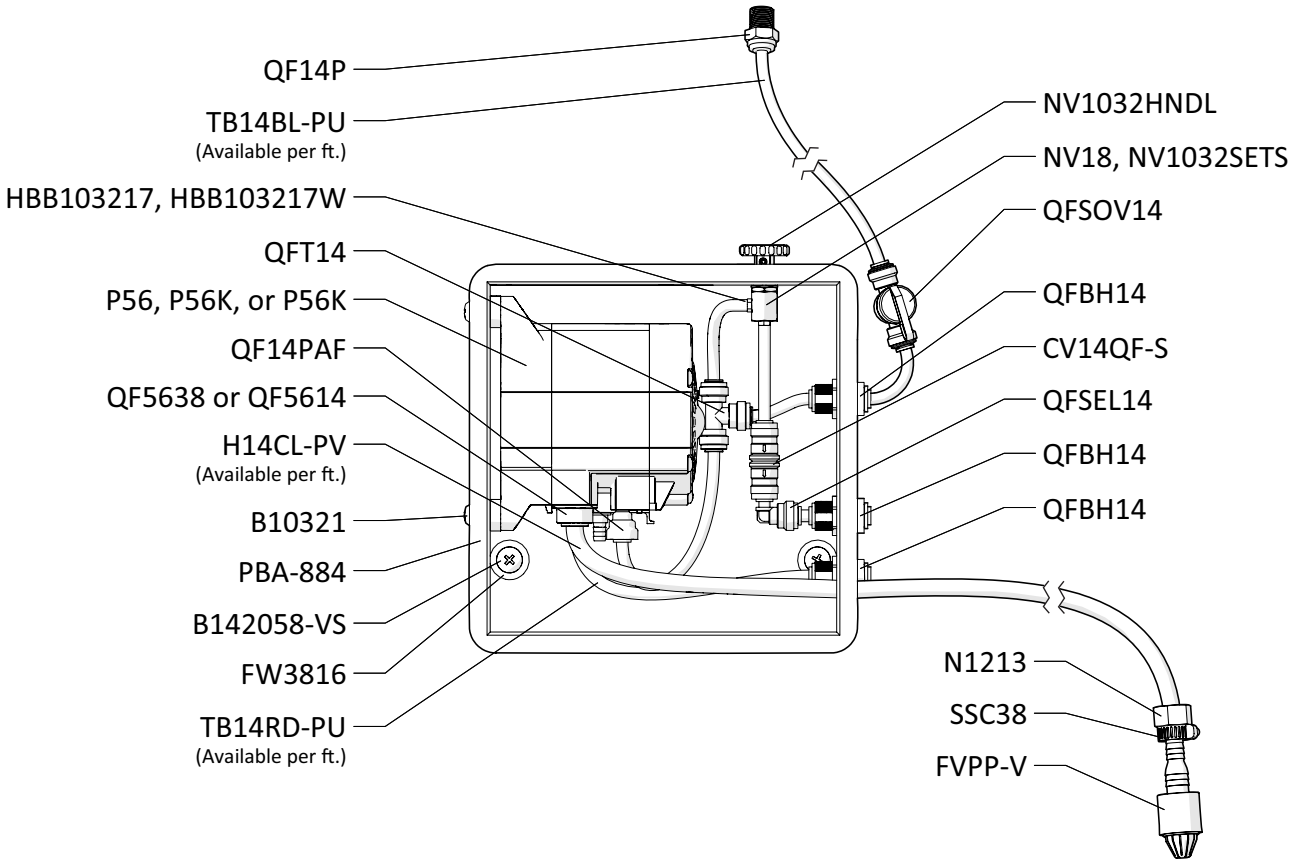
- Inspect the pump for wear and leaks.
- Inspect all hoses and tubing for leaks or excessive wear. Make sure all hose clamps and push-fittings are in good condition and properly secured.
- Check the chemical suction line and strainer for debris and clean as needed.

Troubleshooting Instructions:

- Check the discharge tubing to ensure that there are no kinks that could obstruct fluid flow.
- If the needle valve is open too far, the pump may cycle improperly due to lack of air pressure. If this occurs, close and readjust the needle valve as described in the Operation Instructions.
- Check for proper air pressure on the air gauge and adjust the air regulator if needed. The air regulator is factory set at 50 psi (3.4 bar). Operating range is 40 to 80 psi (2.8 to 5.5 bar).
- Check the chemical suction line and strainer for debris or damage. Clean or replace as needed. To prevent damage to the unit, the strainer must always be used.
- Make sure proper foaming chemical and concentration are being used.
- If air passes through the pump without cycling, the pump needs to be replaced.
- If foam comes out wet, no matter where the needle valve is positioned, the wadding inside the discharge wand may need to be replaced. To change the wadding:
  1. Unthread the wand from the trigger handle.
  2. Remove the old wadding from inside the wand.
  3. Check that the spacer tubing is positioned inside the wand. If the spacer tubing is missing or damaged, remove it and insert a new piece.
  4. Insert a new piece of wadding into the wand.
  5. Check that the gasket is positioned inside the trigger handle. If the gasket is missing or damaged, remove it and insert a new gasket.
  6. Thread the wand back into the trigger handle.
- If foam comes out wet, no matter where the needle valve is positioned, and the wadding is in good condition, the check valve may need to be replaced.
- If solution backs up into the air regulator, the check valve needs to be replaced.

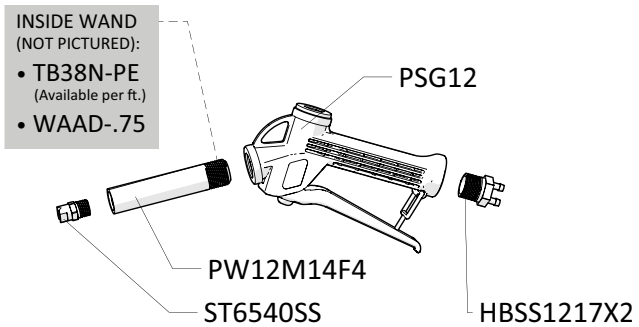
READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

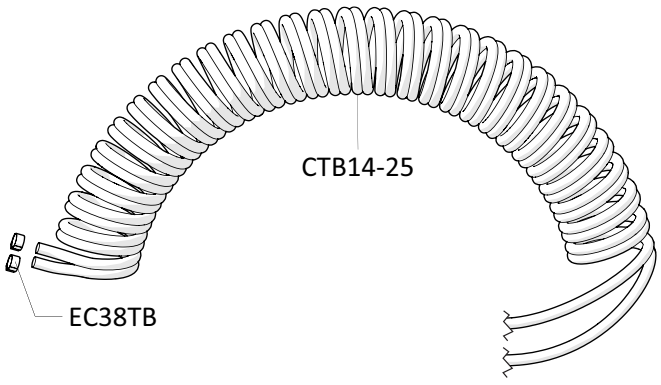
CONTROL BOX ASSEMBLY



DISCHARGE TUBING AND WAND ASSEMBLY
ITEM NUMBER: PSGATL4-ST-MX-CTB14-25

WAND ASSEMBLY
ITEM NUMBER: PSGATL4-ST-MX





READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

ITEM NUMBER	DESCRIPTION
ACLA5721	1-HP 2-GALLON TWIN STACK AIR COMPRESSOR
B10321	BOLT - 10-32 X 1IN - STAINLESS STEEL - TRUSS HEAD PHILLIPS
B142058-VS	BOLT - 1/4-20 X 5/8IN - STAINLESS STEEL - TRUSS HEAD PHILLIPS - VIBRASEAL
B103278-FH	BOLT - 10-32 X 7/8IN - STAINLESS STEEL - FLAT HEAD PHILLIPS
B1420114-PH	BOLT - 1/4-20 X 1 1/4IN - STAINLESS STEEL - PAN HEAD PHILLIPS
CTB14-25	1/4IN OD COILED TWIN LINE BONDED BLUE AND RED TUBE - POLYURETHANE - 25FT REACH
CV14QF-S	1/4 TUBE X 1/4 TUBE CHK QUICK FIT-SMALL
EC38TB	EAR CLAMP - OETIKER - STAINLESS STEEL - FOR 3/8IN OD TUBE
FVPP-V	FOOT VALVE - POLYPROPYLENE BODY - NOT CUT TO SIZE - VITON CHECK VALVE - BLACK
FW3816	FLAT WASHER FOR 3/8-16 BOLT - STAINLESS - 0.41IN ID X 0.88IN OD X 0.05IN THK
HBSS1217X2	HOSE BARB - STAINLESS STEEL - 1/2IN MPT X TWIN .170IN BARB
H14CL-PV	1/4IN ID 3/8IN OD CLEAR HOSE - PVC - AVAILABLE PER FT
HBB103217	HOSE BARB 10-32 MPT X B4 FITTING
HBB103217W	FIBER WASHER FOR HBB103217 - W/ BARB
HBSS1217X2	HOSE BARB - STAINLESS STEEL - 1/2IN MPT X TWIN .170IN BARB
LN1420	LOCKNUT - 1/4-20 - STAINLESS - NYLON INSERT
MXPES-34	MIXING MEDIA - WHITE POLYESTER - WAD - FINE POROSITY - 3/4IN DIAMETER X 7/8IN TALL
N1032	NUT - 10-32 - STAINLESS STEEL
N1213	NUT - 1/2-13 - STAINLESS STEEL
NVA-NV18	NEEDLE VALVE ASSEMBLY - 1/8IN FITTING - INCLUDES VALVE, HANDLE, SET SCREW
NV1032HNDL	BLACK HANDLE FOR NEEDLE VALVE
NV1032SETS	SET SCREW FOR HANDLE
NV18	NEEDLE VALVE-1/8 IN MPT-10-32F-VALVE ONLY-NO SETS-NO HANDLE
PBA-884	POLY BOX ASSEMBLY - 8 X 8 X 4 - PVC - JUNCTION BOX
P56	PUMP WITH SANTOPRENE SEALS - INCLUDES HOSE BARBS, AIR FITTING, AND EXHAUST BARB
P56K	PUMP WITH KALREZ SEALS - INCLUDES HOSE BARBS, AIR FITTING, AND EXHAUST BARB
P56V	PUMP WITH VITON SEALS - INCLUDES HOSE BARBS, AIR FITTING, AND EXHAUST BARB
PSG12	POLY SPRAY GUN WITH 2X 1/2IN STRAIGHT THREAD - GRAY HANDLE WITH RED CLIP - 316SS INTERNAL SPRING - INCLUDES 2X O-RING
PSGORV	O-RING FOR PSG12-VITON
PSV-SPG	STAINLESS STEEL BRACKET FOR PSV2 SPRING
PW12M14F4	1/2IN NPT AND 1/4IN FNPT WAND - BLACK UHMW - 4IN LONG
QF14P	QUICK FIT - 1/4IN MPT X 1/4IN OD TUBE - POLYPROPYLENE BODY - EPDM O-RING
QF14PAF	QUICK FIT-1/4 MPT PUMP AIR FITTING
QF5614	QF PUMP FITTING FOR 1/4IN TUBE - EPDM O-RING - FOR G57/P56 (SOLD INDIVIDUALLY)
QF5638	QF PUMP FITTING FOR 3/8IN TUBE - EPDM O-RING - FOR G57/P56 (SOLD INDIVIDUALLY)
QFBH14	BULKHEAD 1/4in TUBE POLYPROPYLENE
QFSEL14	PLUG-IN ELBOW 1/4in TUBE X 1/4in TUBE - POLYPROPYLENE
QFSOV14	SHUT OFF VALVE 1/4in TUBE - POLYPROPYLENE
QFT14	UNION TEE 1/4in TUBE - POLYPROPYLENE
ST6540SS	SPRAY TIP-65 DEGREE-4.0 GPM-STAINLESS-1/4 MPT

APPENDIX A

Air Compressor
User Guide

English

READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

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READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

1：IMPORTANT SAFETY INSTRUCTION

IMPROPER OPERATION OR MAINTENANCE OF THIS PRODUCT COULD RESULT IN SERIOUS INJURY AND PROPERTY DAMAGE.


READ AND UNDERSATND ALL INSTRUCTIONS BEFORE INSTALLING OR USING YOUR AIR COMPRESSOR. KEEP THIS BOOKLET FOR FUTURE REFERENCE.

1-1：RISK OF FIRE

- DO NOT SPRAY COMBUSTIBLE OR FLAMMABLE LIQUID IN A CONFINED AREA, SPRAY AREA MUST BE WELL VENTILATED.
- DO NOT SMOKE WHILE SPRAYING OR SPRAY WHERE SPARK OR FLAME IS PRESENT.
- KEEP COMPRESSOR AT LEAST 12 ~ 18 INCHES AWAY FROM SPRAYING AREA AND ALL EXPLOSIVE VAPORS.

1-2：RISK OF ELECTRICAL SHOCK

- DISCONNECT COMPRESSOR FROM ELECTRICAL SUPPLY CIRCUIT BEFORE MAINTENANCE.
- DO NOT EXPOSE COMPRESSOR TO RAIN OR OPERATE IN A WET AREA.
- NEVER USE THE AIR COMPRESSOR WITHOUT CONNECTION TO A PROPERLY GROUNDED OUTLET WITH THE SPECIFIED VOLTAGE AND FUSE PROTECTION.
- IMPROPER GROUNDING CAN RESULT IN ELECTRICAL SHOCK.

1-3：RISK OF EXPLOSION

- DRAIN TANK DAILY, CONDENSED WATER WILL CAUSE RUSTING AND RISK OF TANK RUPTURE OR EXPLOSION.
- DO NOT REPAIR、MODIFY OR WELD TANK, RETURN TO AUTHORIZED SERVICE CENTER IF REPLACEMENT IS REQUIRED.
- DO NOT ADJUST REGULATOR TO RESULT IN OUTPUT PRESSURE GREATER THAN MARKED MAX. PRESSURE OF ATTACHMENT.
- PRESSURE SWITCH IS SET AT THE FACTORY FOR OPTIMUM PERFORMANCE OF YOUR PARTICULAR MODEL, NEVER BYPASS OR REMOVE PRESSURE SWITCH AS SERIOUS DAMAGE TO EQUIPMENT OR PERSONAL INJURY COULD RESULT FROM IMPROPER PRESSURE SETTING.
- BEFORE STARTING COMPRESSOR, PULL PRESSURE RELIEF VALVE RING TO MAKE SURE THE VALVE MOVES FREELY. THE PRESSURE RELIEF VALVE IS FACTORY INSTALLED TO PREVENT THE AIR RECEIVER FROM DAMAGE SHOULD MALFUNCTION OCCUR IN THE PRESSURE SWITCH. IT IS FACTORY SET AT A SPECIFIC LIMIT FOR YOUR PARTICULAR MODEL. AND SHOULD NEVER BE TAMPERED WITH. ADJUSTMENT BY USER WILL AUTOMATICALLY VOID WARRANTY.

READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

1-4：RISK OF BURNS

- HOT SURFACE CAN CAUSE SERIOUS INJURY. NEVER TOUCH ANY EXPLOSED METAL PARTS ON COMPRESSOR DURING OR IMMEDIATELY AFTER OPERATION. TOUCHING THESE AREAS MAY CAUSE SEVERE BURNS.
- DO NOT REACH AROUND PROTECTIVE SHROUNDS OR ATTEMPT MAINTENANCE UNTIL UNIT HAS BEEN ALLOWED TO COOL.

1-5：RISK OF BREATHING

- USE RESPIRATORY PROTECTION IN A WELL VENTILED AREA WHEN SPRAYING.
- COMPRESSED AIR FROM THE UNIT MAY CONTAIN POISONOUS VAPOUR WHICH IS NOT SUITABLE FOR INHALEING AND COULD BE HARMFUL TO YOUR HEALTH.
- WORK IN AN AREA WITH GOOD VENTILATION.

1-6：RISK FROM MOVING PARTS

- UNIT STARTS AUTOMATICALLY, DO NOT OPERATE WITH BROKEN GUARDS OR COVERS REMOVED.
- ANY REPAIR REQUIRED ON THE PRODUCT SHOULD BE PERFORMED BY AUTHORIZED SERVICE CENTER PERSONNEL.
- DO NOT TOUCH MOVING PARTS.

1-7：RISK FROM FLYING OBJECTS

- ALWAYS WEAR ANSI Z87.1 APPROVED SAFETY GLASSES WITH SIDE SHIELDS WHEN USE THE AIR COMPRESSOR. ALWAYS WEAR PROPER SAFETY EQUIPMENT WHILE USING COMPRESSORED AIR.
- DO NOT DIRECT HIGH PRESSURE AIR STREAM TOWARD ANY PARTS OF THE BODY OR AT OTHER PEOPLE.
- UNPLUG POWER CORD AND DRAIN AIR FROM TANK BEFORE SERVICING AND WHENEVER YOU LEAVE FOR THE DAY.

1-8：RISK OF PROPERTY DAMAGE WHEN TRANSPORTING COMPRESSOR

- ALWAYS PLACED COMPRESSOR ON A PROTECTIVE MAT WHEN TRANSPORTING TO PROTECT AGAINST DAMAGE TO VEHICLE.
- ALWAYS OPERATE COMPRESSOR IN A STABLE POSITION TO PREVENT ACCIDENTAL MOVEMENT OF THE UNIT.

READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

2：GENERAL DESCRIPTION OF AIR COMPRESSOR

To compress air, the piston moves up and down in the cylinder. During the down-stroke, air is drawn in through the inlet valve, while the discharge valve remains closed. On the up-stroke of the piston, air is compressed. While the inlet valve remain closed, compressed air is forced out through the discharge valve, through the check valve, into air receiver tank. Working air is not available until the pressure in the air receiver built up. The air inlet filter openings must be kept clear of obstructions.

Your air compressor can be used for operating paint spray guns, caulking guns, grease guns, air brushes, spraying weed killer and insecticides, or inflating tires and plastic toys etc.. An air regulator is recommended for these application.

3：ON RECEIPT INSPECTION

Each PUMA air compressor outfit is carefully factory tested and inspected before shipment. Every attempt is made to ensure safe and complete shipment of our products. Please inform the dealers if any deficiency was found.

4：GENERAL REQUIREMENT

Please ensure air compressor is installed correctly. Maintain and service on a regular basis. Information included in this booklet describing the maintenance schedules and trouble shooting. It is important that you read this information and keep it for future reference.

5：INSTALLATION

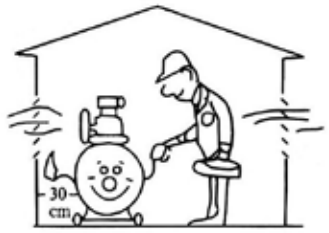
5.1：MECHANICAL

Located the compressor in a clean, dry and well ventilated area. The compressor should be located 12 ~ 18 inches from a wall or any other obstruction that would interfere with the air flow. Place the air compressor on a firm and level surface. The air compressor is designed with heat dissipation fins that allow for proper cooling. Keep the fins and other parts clean. A clean compressor runs cooler and provides longer service. Allow room for easy access to the air compressor for maintenance and service work.

DO NOT EXPOSE
TO RAIN AREA

DO NOT PLACE
ON INCLINED PLANE

READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT



PLACE IN A CLEAN, DRY AND WELL VENTILATED AREA

5.2：ELECTRICAL

Please ensure that the air compressor is electrically connected in a safe and correct manner. Any electrical work should be carried out by an electrician and installed in a way which meets all applicable codes and regulations.

Failure to connect the air compressor correctly to your buildings electrical services may result in serious personal injury or damage to the equipment.

Please note that under normal conditions, the air compressor will operate intermittently. Should it be necessary to service, ensure the power source has been shut down to prevent personal injury or damage to the unit.

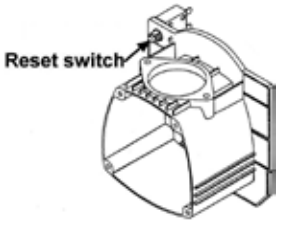
If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a qualified person in order to avoid a hazard.

5-2-1：MOTOR

Wiring must be done in a manner that full voltage nameplate ±10% is available at the motor terminals during startup. Use of an incorrect power source will result in premature motor failure and is not covered by PUMA compressor or motor manufacture's warranty.

5-2-2：THERMAL RELAY

Ensure that all guards and shrouds are in place before pressing reset switch to restart the motor. If the motor shuts down because of overload, wait 10-15 minutes so the motor can cool down, then press the reset switch to restart motor. The reset switch button is located on the motor housing.

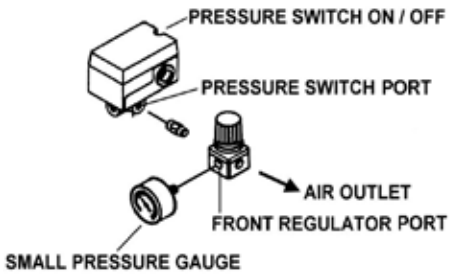


5-2-3：PRESSURE SWITCH

The pressure switch acts as a pilot device activating the motor. The pressure switch cut in/cut out has been preset at the factory, do not tamper with the settings. Never bypass or remove this switch, as serious damage to equipment or personal injury could result from improper pressure setting. Consult your local distributor or service center if the switch malfunction.

READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

5-2-3-1： This pressure switch control the on/off of the compressor, it can be turn off manually but when it is in the AUTO position, it allows the compressor to start or shut down automatically without warning upon air demand. Always set this switch to OFF when the compressor is not in use and before unplugging compressor.

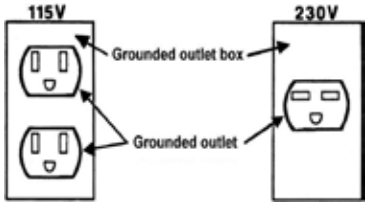


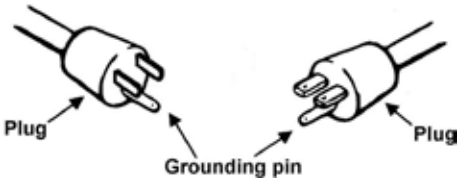
5-2-4：AIR PRESSURE REGULATOR

The air pressure regulator allows operator to adjust line pressure for the tool in use. Never exceed maximum working pressure of the tool. To adjust, pull up the knob, turn clockwise to increase pressure or turn counterclockwise to decrease pressure.

5-2-5：GROUNDING INSTRUCTIONS

Do not modify the plug that has been provided, if it does not fit the available outlet, the correct outlet should be installed by a qualified electrician. The plug must be plugged into an outlet that is properly installed and grounded in accordance with all local codes. If these grounding instructions are not completely understand or if in doubt as to whether the compressor is properly grounded, have the installation checked by a qualified electrician.





5-2-5-1： This product is for use on a nominal 115 or 230 volt circuit. A cord with a grounding plug as shown here shall be used. Make sure that the product is connected to an outlet that matches the plug. No adapter should be used with this product.

(FOR AREA OTHER THAN USA, PLEASE CHECK THE LOCAL CODE.)

5-2-6：EXTENSION CORDS

The use of any extension cord will cause some drop in voltage and loss of power. For optimum performance, plug the compressor power cord directly into a grounded wall socket. Do not use an extension cord unless absolutely necessary. It is better to use a long air hose to reach area where work is being performance. If use of an extension cord can not be avoided, refer to the following guidelines ：

Use only 3-wire extension cord. Make sure your extension cord is in good condition. Be sure gauge is sufficient to carry the current the unit will draw. Note that the smaller the gauge the heavier the cord. Example: Gauge 10 is heavier than gauge 12.

READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

6：BEARING LUBRICATION

The bearing in this unit are sealed bearings that contain sufficient lubricant to last their life. No other lubrication is required.

7：START UP PROCEDURE

7-1： Check to see that nuts and bolts are all snug, this must be done, as some fasteners may become loose in transit.

7-2： Check that compressor is on a strong, stable level base.

7-3： Check that air filter is clean.

7-4： Do not place any materials on or against the belt guard, or the compressor unit. Obstacle materials will limit the cooling effect and could lead to premature failure.

7-5： Open the air receiver outlet valve and start the unit for no load operation. Allow the unit to operate for a minimum of twenty minutes in no load condition.

7-6： After running the compressor for twenty minutes, close the valve and allow the unit to reach maximum operating pressure. Ensure that the compressor shuts down at the preset maximum pressure and the head pressure is released through the pressure switch.

7-7： Check the air compressor and piping systems for leakages and correct as required.

7-8： Shut off all power to the air compressor before attempting any repair or maintenance.

READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

8：MAINTENANCE CHECK LIST

⚠WARNING

Before doing any maintenance or adjustments to your air compressor, the following safety precautions should be taken.

A：DISCONNECT ELECTRICAL POWER.

B：MAKE SURE NO AIR PRESSURE IN AIR RECEIVER.

8-1：Daily checklist

8-1-2： Drain condensation from air receiver tank.

8-1-3： Check for any unusual noise or vibration.

8-1-4： Be sure all nuts and bolts are tight.

8-2：Weekly checklist

8-2-1： Clean air filter, replace if necessary.

8-3：Quarterly or 300 hour checklist

8-3-1： Change filter element.

8-3-2： Check pressure relief valve.

8-3-3： Check pressure switch to ensure unloads whenever motor shuts down.

8-3-4： Clean and blow dust or dirt off pump fins and motor.

8-3-5： Inspect air system for leaks by applying soapy water to all joints. Fix it if leakages are observed.

9：STORAGE：WHEN YOU HAVE FINISHED USING THE AIR COMPRESSOR：

9-1： Set the switch to OFF and unplug the cord.

9-2： Be sure to drain the water from the air tank.

9-3： Protect the electrical cord and air hose from damage.

READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

10：TROUBLE SHOOTING：

CONDITION	CAUSE	CORRECTIVE
Compressor won't start	1：Loose electrical connection 2：Motor overheated	1：Check wiring connection 2：Press reset button or wait for automatic reset
Low pressure	1：Malfunction in valves 2：Loose tube of fittings 3：Restricted air filter 4：Defective check valve	1：Check inlet and exhaust valves 2：Tighten fittings 3：Clean or replace filter 4：Replace check valve
Pressure relief valve releasing	1：Defect pressure switch or improper adjustment 2：Defective pressure relief valve	1：Check for proper adjustment and if problem persists replace pressure switch 2：Replace valve
Excessive dust formation or appearance of water	1：Restricted air intake filter 2：Worn valves 3：Worn piston rings 4：High ambient temperature and / or humidity 5：Over usage of this compressor	1：Clean or replace filter 2：Replace valve assembly 3：Replace piston ring 4：Install a moisture separator and/or dryer 5：Check for air leakage. If no leaks are found, bigger compressor is needed.
Water in air receiver tank	1：Condensation in the air receiver。	1：Drain daily or install an automatic drain。
Excessive noise	1：Loose valves 2：Loose piping 3：Unit not installed level 4：Carbon or foreign material on piston 5：Worn bearings	1：Inspect valve for damage 2 : Tighten as required 3：Ensure that unit is mounted level 4：Clean piston Check cylinder walls for scoring 5：Replace bearings

READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

Compressor over heated	1：Undersized unit for air requirements 2：Compressor location 3：Air leaks in the system 4：Restricted air filter 5：Worn, damage, or carbon build up on valve 6：Carbon build up at after - cooler tube or check valve	1：Contact PUMA compressor distributor 2：See installation section 3：Fix leaks 4：Clean or replace filter 5：Clean or replace valves 6：Clean or replace as needed
Pressure switch does not unload or leak air when unit is not operating	1：Pressure switch unloading may be dirty or faulty 2：Check valve may be dirty or faulty	1：Clean, repair or replace pressure switch 2：Clean, repair or replace check valve
Air leaks at check valve	1：Defective or dirty check valve	1：A defective check valve results in a constant air leak when there is pressure in the tank, remove and clean or replace valve.
Air leaks in air tank or at tank welds	1：Defective air tank	1：Air tank must be replaced, do not repair the leak.