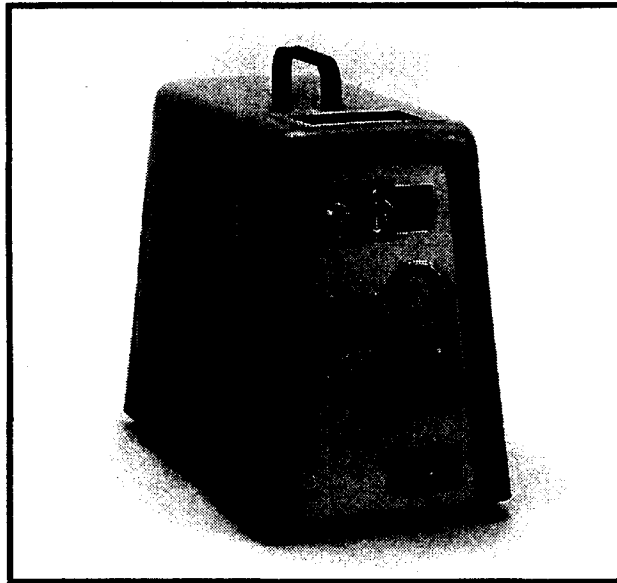


OPERATION & SERVICE MANUAL

CAL

"Soft Air" Compressor

Model No.: PM14 and PM14E



CAUTION: Federal (USA) law restricts this device to sale by, or on the order of a physician.

PRECISION MEDICAL

300 Held Drive
Northampton, PA 18067 USA
Phone: 610-262-6090
FAX: 610-262-6080

CONTENTS

	Page No.
Receiving/Inspection	1
Warranty	1
Unpacking/Packing Instructions	2
Specifications	3
Precautions	3
Wiring Diagram	4
Operating Instructions	5
• Component Identification	
• Initial Set-Up	
• Operation	
Maintenance	7
• Routine service	
• Troubleshooting	
Replacement Parts List	9
Service Records	10

RECEIVING/INSPECTION

Remove unit from packaging and inspect for damage in transit. Any sign of damage should be reported to your dealer/home care company immediately.

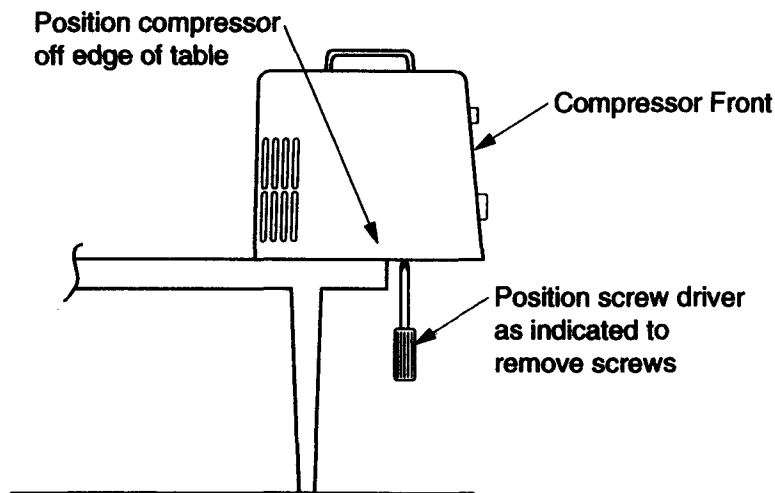
WARRANTY

Precision Medical, Inc. warrants that each new product or parts thereof will be free of **defects in workmanship or materials**. Should any failure to conform to this warranty appear within a one year period from the date of purchase by the user, and **substantiation that the product has been stored, installed, maintained and operated** in accordance with Precision Medical, Inc.'s instructions and **standard industry practice**, and that no modifications, substitutions or alterations have been made to the product, Precision Medical, Inc. shall correct such defects by suitable repair or replacement at its own expense.

STOP!

DO NOT PROCEED ANY FURTHER UNTIL YOU READ THESE IMPORTANT UNPACKING INSTRUCTIONS.

To prevent the compressor mounts from being damaged during shipment, there are four (4) Phillips head screws on the bottom of the unit. These 4 screws hold the compressor in place during shipment.



TO REMOVE SCREWS: Position compressor on edge of table & remove screws from underneath unit. Remove only the screws with "➔" Label pointing at them. (**DO NOT** lay compressor on its side or turn upside down. Damage to mounts can occur when shipping screws are released.) Retain screws and packaging materials for future shipments.

Precision Medical, Inc. will not be responsible for damage that occurs during shipment if the compressor mounting screws are not installed and if not returned in the original packaging.

SPECIFICATIONS

Dimensions: Length 12⁷/₈" (32.7 cm), Width 7³/₄" (19.7 cm),
Height 15¹/₄" (38.7 cm)

Weight: 20 lbs. (9.1 kg.) - Shipping Wt. 23 lbs. (10.4 kg.)

Electrical: 120 VAC, 60 Hz, 5 Amps, Single Phase
230 VAC, 50 Hz, 2.6 Amps, Single Phase (Export)

Electrical Leakage: Less than .5 milliampere

Outlet: Grounded Oxygen D.I.S.S. Male Fitting

Gauge Accuracy: 0-25 PSI ± 3 PSI
25-75 PSI ± 2 PSI
75-100 PSI ± 3 PSI

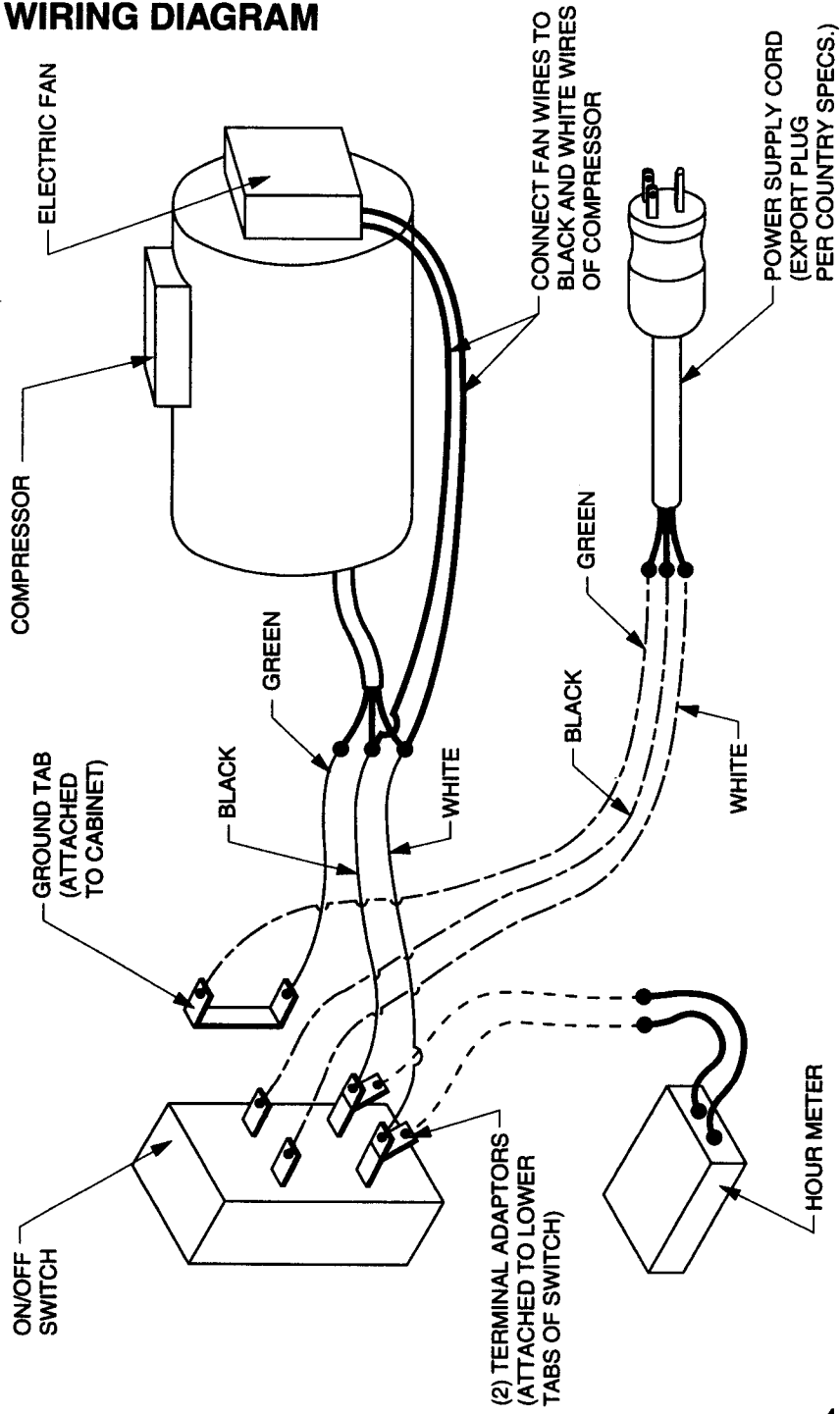
Output:	Domestic	Export
0 PSI	34.5 LPM	28.6 LPM
10 PSI	31.2 LPM	26.8 LPM
20 PSI	27.5 LPM	22.7 LPM
30 PSI	24.0 LPM	19.5 LPM
40 PSI	20.9 LPM	16.7 LPM
50 PSI	18.7 LPM	
60 PSI	15.8 LPM	

This compressor incorporates an internal time delay circuit breaker to protect against overheating.

PRECAUTIONS

- DO NOT use this compressor in the presence of flammable anesthetics.
- Connect power cord to a properly grounded wall outlet or adaptor.
- Disconnect power cord when servicing unit.
- The PM14 is not designed to power ventilators.
- DO NOT use the PM14 with respirators, blenders or other respiratory equipment that requires "dry" air.
- Attach items to the outlet fitting only with finger force.
- Service unit only with approved Precision Medical parts.
- The Air Inlet Filter on top of the compressor does not filter out saline. Treatments using saline nebulizers will draw the saline back into the unit. Therefore, care should be taken to position the compressor far enough away to minimize residual saline mist from being pulled back into the compressor inlet. The saline causes rapid deterioration of the compressor seals and voids warranty.

WIRING DIAGRAM



OPERATING INSTRUCTIONS

Component Identification

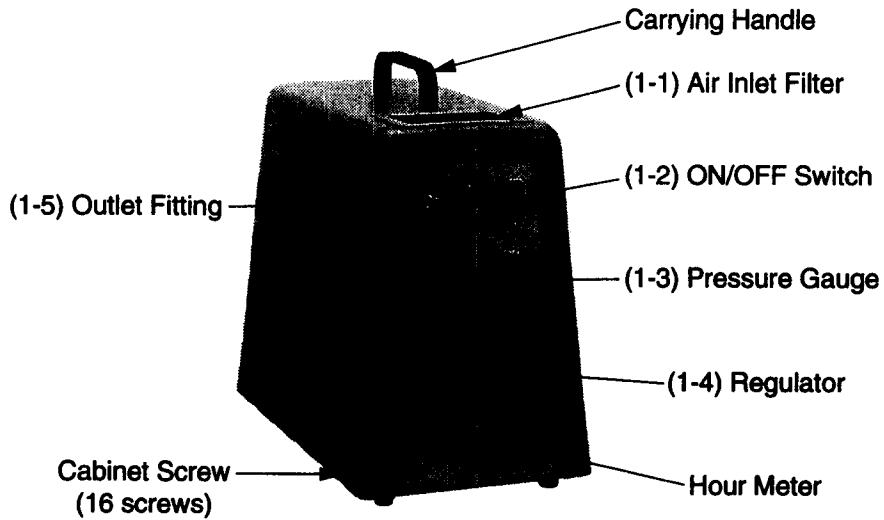


Figure 1
(Front View)

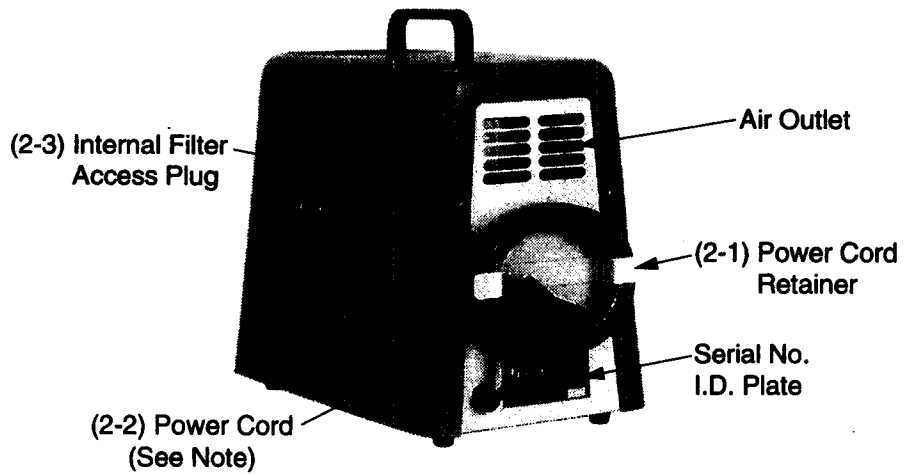


Figure 2
(Rear View)

Note: Power cord may be changed per country specifications.

INITIAL SET UP

1. Position compressor near access to a 120 (230 VAC for Export model) grounded electrical receptacle. (Allow a minimum of 4" (10 cm) clearance on all sides to insure adequate air flow for cooling of unit.)
2. Assure that the ON/OFF switch (Fig. 1-2) is in the "OFF" position.
3. Unwind power cord (Fig. 2-2) from the retainer (Fig. 2-1) and plug into grounded receptacle.

OPERATION

1. Press power switch (Fig. 1-2) to "ON" position.
2. Block off the flow from the outlet fitting (Fig. 1-5) with your finger and adjust the pressure on the gauge (Fig. 1-3) by turning the knob on the regulator (Fig. 1-4) clockwise to increase pressure and counterclockwise to decrease pressure.
3. Desired flow setting can be locked into position by pushing in the knob (Fig. 1-4).
4. Press power switch (Fig. 1-2) to the "OFF" position. Connect desired equipment to be used to the outlet fitting (Fig. 1-5) with finger force only. (Use ferrule nipple adaptor supplied if required.)
5. Press power switch (Fig. 1-2) to "ON" position to use equipment.

MAINTENANCE:

Routine Service

Weekly: Check the Air Inlet Filter (Fig. 1-1) on top of cabinet for dust build-up. If dust build-up occurs, pull filter from its recessed area and wash in warm soapy water and rinse. Absorb excess water from filter with dry towel. Replace filter back in recessed area.

As Needed: If external filter indicates rapid dust build-up, it may be necessary to periodically check the internal filter leading into the compressor head. Remove screws holding outer case to cabinet and lift off cabinet to gain access to Compressor Inlet Filter #1077. Replace with a new filter. Excessive dust build-up on this filter will reduce performance of unit.

Clean exterior with damp cloth or mild cleaning solution. **DO NOT** clean with caustics, acid or chlorinated solutions.

8500 hrs.: Service motor with Rebuild Kit. (Call Customer Service with compressor serial number for proper Rebuild Kit.)

Remove cover, visually examine all internal connections to insure tight fits. Replace Compressor Inlet Filter (Part #1077) at motor inlet.

TROUBLESHOOTING

If the **PM14 Soft Air Compressor** fails to function, consult the troubleshooting guide below. If the problem cannot be corrected, consult your authorized dealer or contact Precision Medical Customer Service for consultation or arrangements for factory service.

Problem	Probable Cause	Remedy
A. Unit does not operate.	<ol style="list-style-type: none"> 1. Plug not firmly in wall outlet. 2. No power to unit. 3. Thermal load protector stopped motor. 	<ol style="list-style-type: none"> 1. Check plug at outlet. 2. Check hospital/home circuit breaker or fuse. 3. Allow 10-15 min. for internal circuit breaker to reset.
B. Limited outlet flow.	<ol style="list-style-type: none"> 1. Delivery line obstruction. 2. Leak 3. Blocked compressor Inlet Filter 4. Leaking interior fittings 	<ol style="list-style-type: none"> 1. Check delivery tubing to outlet for obstructions or kinks. Replace if necessary. 2. Check outlet fitting and connections. 3. Replace comp. inlet filter part #1077. Consult your dealer for assistance. 4. Remove cabinet housing and check fittings and tubing.
C. Overheating.	<ol style="list-style-type: none"> 1. Poor ventilation. 2. Dirty air inlet filter. 3. Inoperative cooling fan. 	<ol style="list-style-type: none"> 1. Move compressor to a cooler, better ventilated area. 2. Clean air inlet filter as detailed in daily routine service. 3. Replace fan-consult your dealer for service.

REPLACEMENT PARTS LIST

For Service Information, or to order Parts call
Precision Medical Customer Service at 1-800-272-7285

Part #	Description
1074	Air Inlet Filter
1077	Compressor Inlet Filter
1079	Regulator Relief Filter
1032	Compressor Unit (115 VAC)
1500	Compressor Unit (230 VAC)
1036	Regulator
1044	Rubber Bumper (Bottom of Cabinet)
1037	Electrical Cooling Fan (115 VAC)
1501	Electrical Cooling Fan (230 VAC)
1033	Pressure Gauge
*1055	Nylon Tubing (Supplied in 1 ft. length)
*1791	Tygon Tubing (Supplied in 1 ft. length)
1038	Power Cord
1070	Cabinet Screws
1156	Compressor Rebuild Kit

*Nylon Tubing #1055 is used for Lot numbers up to 4170.
Tygon Tubing #1791 is used for Lot numbers 4171 and above.

Your Local Distributor & Service Contact Is:

PRECISION MEDICAL
300 Held Drive • Northampton, PA 18067 USA

Toll Free Phone: 800-272-7285 (USA)
Phone: 610-262-6090 (International or USA)
Toll Free Fax: 800-352-1240 (USA)
Fax: 610-262-6080 (International or USA)

PM14 Manual 1067 2.5M 2.12/96 PRINTED IN USA