

USERGUIDE
IMB-027A-95

Peripheral Pump



WARNING - Reliance on this Manual Could Result in Severe Bodily Injury or Death!

This manual is out-of-date and is provided only for its technical information, data and capacities. Portions of this manual detailing procedures or precautions in the operation, inspection, maintenance and repair of the product forming the subject matter of this manual may be inadequate, inaccurate, and/or incomplete and cannot be used, followed, or relied upon. Contact Conair at info@conairgroup.com or 1-800-654-6661 for more current information, warnings, and materials about more recent product manuals containing warnings, information, precautions, and procedures that may be more adequate than those contained in this out-of-date manual.

Peripheral Pump

Conair Peripheral Conveying Pumps are designed to be used as a vacuum source in conjunction with Conair Vacuum Loaders.

Each Peripheral pump model is designed to operate with several line, loader and dust collector sizes. Also, each model has its own particular limitations with respect to conveying distance and material to be conveyed.

INSTALLATION:

Location:

Place the peripheral pump assembly in a convenient location. In general, the pump should be located as near as possible to the loader, thereby optimizing performance. In any case, the maximum combined vacuum line and conveying line distance should not be exceeded.

The mounting surface should be level and provide support for the pump. Be certain to allow clearance for connecting vacuum line to pump inlet and for maintenance access. Also, provide for unrestricted air flow from blower discharge.

Ambient Conditions:

The area surrounding the pump should be dust free. Provide adequate ventilation in pump area to avoid heat build-up. Pump is to be housed indoors. Maximum ambient temperature is 100°F.

Line Connections:

The clean air vacuum line from the dust collector is to be connected to the pump inlet (vacuum) line adapter. Flex hose tubing is recommended. Match the I.D. of the flex hose to the O.D. of the pump inlet adapter.

Do not make any connections to the blower discharge outlet in **normal open-loop systems**. In **closed-loop dry air systems**, connect the blower exhaust outlet tube to dryer return air manifold system.

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ELECTRICAL CONTROLS

Control Enclosure:

Peripheral Pumps may be equipped with Conair Selectronic Power Supply Enclosure. (115 VAC Power Supply for Selectronic 4+, and 24 VAC Power Supply for Selectronic 5). Either unit must be plugged into a 115 VAC Power Source. Also see Selectronic 4+ or 5 Wiring Diagrams. Sentral Loader Control Systems, do not require power supply units. The Starter Only is used. Refer to SLC wiring diagrams. Refer to Conair Selectronic 4+, 5, or Sentral Loader Control Instructions for further information concerning controls.

Motor Starter:

The pump is furnished with a full voltage type motor starter which is wired to the pump motor. Three phase-50/60 Hz. Power must be supplied to the starter. (Refer to the Conair nameplate for model number and use the chart below to properly size wire to the starter).

Pumps can be supplied for 208, 240, 380-50/60 Hz, or 480 or 575 volt operation and voltage must be specified with order. Since units are wired at the factory for a specific voltage, with appropriately sized starters and thermal overloads, be certain to check intended voltage before connecting to plant power source.

All pumps are equipped with a factory preset, vacuum relief valve to avoid motor ampage overload - See chart below.

IMPORTANT: Adjust pickup/feed tube to maintain a lower conveying vacuum than maximum rating. See loader instructions for feed tube adjustment procedures.

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Pump Model	Max. Vacuum (In. Hg.) Hg H ₂ O		Max. Amps.				
			208	240	380-50/60 Hz	480	575
P-3	5.2	71	6.7	6.1	3.5	3.1	2.3
P-4	6.0	81	9.1	8.2	6.5	4.8	3.3
P-6	9.6	130	18.5	15.8	8.3	7.9	4.6

Refer to motor name plate for max. amp ratings for other voltages.

NOTE: A separate fused disconnect switch must be provided for 3-phase power.

OPERATION

Start-Up Before starting the pump, refer to the appropriate loader and control system instructions.

With the vacuum line temporarily disconnected from the pump, turn the main control switch on to check for proper motor rotation. Air should be drawing into the pump through the inlet adapter, and outward through the blower discharge.

If the airflow is backwards, then the pump is running in reverse. With the disconnect switch in the OFF position, reverse the connections of two of the 3-phase leads. Once the direction of rotation is correct, reconnect the vacuum line to the pump inlet; the unit is ready to operate.

For proper system orientation, refer to appropriate loader and control instructions. Do not exceed maximum pump vacuum rating as noted in chart.

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MAINTENANCE

Air Filters Periodically check all filters in the system to prevent carryover of dust to the pump. Some pump models have a dust collector/filter mounted on the pump, others use a stand-alone dust collector/filter. DO NOT allow dust to accumulate up into the cartridge filter compartment. Check and empty collector periodically.

Bearings Models P-3, P-4, P-6 pumps are equipped with sealed ball bearings and require no greasing. It is advisable, however, to check the bearings periodically for wear. If the bearings need to be replaced, refer to the separate blower instructions for details.

Models P-3, P-4, and P-6 pumps have a bearing grease life of 1000 hours of operation. Refer to the blower instruction manual for details.

TROUBLESHOOTING

Erratic Control Performance

Refer to the troubleshooting section of Selectronic System or Sentral Loader Control Instructions.

Pump/Motor Problems

For problems relating directly to the pump/motor (i.e. abnormal noise, excessive temperature rises, etc..) refer to the separate blower instruction manual.

Material Conveying Problems

When problems relating to poor conveying performance are encountered, first refer to the loader system instructions and check the operation of all loaders, and their controls. If all equipment is in proper working order, refer to the following chart:

PROBLEM	PROBABLE CAUSE	CORRECTIVE ACTION
Sluggish loading, excessive load times	1. Clogged filters	Check all loader and dust collector filters and clean.
	2. Plugged material line	Shut off material supply, clear line and re-start. Refer to distribution box instructions for proper setting.
	3. Vacuum leaks	Check all seals in system, such as loader lids, line couplings, valves, etc... and tighten or replace as necessary
	4. Material over-feeding	Re-adjust feed tube or distribution box setting.
	5. Excessive conveying distance	If total distance of conveying and vacuum line exceeds pump maximum limit, pump will not be able to generate sufficient vacuum to convey material. Overall length of system must be shortened.
Dust discharged from pump exhaust	1. Damaged filters	Check all loader and dust collector filters for proper seating and/or holes. Replace as necessary.

Conair has made the largest investment in customer support in the plastics industry. Our service experts are available to help with any problem you might have installing and operating your equipment. Your Conair sales representative also can help analyze the nature of your problem, assuring that it did not result from misapplication or improper use.

WE'RE HERE TO HELP

To contact Customer Service personnel, call:



HOW TO CONTACT CUSTOMER SERVICE

From outside the United States, call: 814-437-6861

You can commission Conair service personnel to provide on-site service by contacting the Customer Service Department. Standard rates include an on-site hourly rate, with a one-day minimum plus expenses.

If you do have a problem, please complete the following checklist before calling Conair:

- Make sure you have all model, serial and parts list numbers for your particular equipment. Service personnel will need this information to assist you.
- Make sure power is supplied to the equipment.
- Make sure that all connectors and wires within and between loading control and related components have been installed correctly.
- Check the troubleshooting guide of this manual for a solution.
- Thoroughly examine the instruction manual(s) for associated equipment, especially controls. Each manual may have its own troubleshooting guide to help you.
- Check that the equipment has been operated as described in this manual.
- Check accompanying schematic drawings for information on special considerations.

BEFORE YOU CALL ...

Additional manuals and prints for your Conair equipment may be ordered through the Customer Service or Parts Departments for a nominal fee.

EQUIPMENT GUARANTEE

Conair guarantees the machinery and equipment on this order, for a period as defined in the quotation from date of shipment, against defects in material and workmanship under the normal use and service for which it was recommended (except for parts that are typically replaced after normal usage, such as filters, liner plates, etc.). Conair's guarantee is limited to replacing, at our option, the part or parts determined by us to be defective after examination. The customer assumes the cost of transportation of the part or parts to and from the factory.

PERFORMANCE WARRANTY

Conair warrants that this equipment will perform at or above the ratings stated in specific quotations covering the equipment or as detailed in engineering specifications, provided the equipment is applied, installed, operated and maintained in the recommended manner as outlined in our quotation or specifications.

Should performance not meet warranted levels, Conair at its discretion will exercise one of the following options:

- Inspect the equipment and perform alterations or adjustments to satisfy performance claims. (Charges for such inspections and corrections will be waived unless failure to meet warranty is due to misapplication, improper installation, poor maintenance practices or improper operation.)
- Replace the original equipment with other Conair equipment that will meet original performance claims at no extra cost to the customer.
- Refund the invoiced cost to the customer. Credit is subject to prior notice by the customer at which time a Return Goods Authorization Number (RGA) will be issued by Conair's Service Department. Returned equipment must be well crated and in proper operating condition, including all parts. Returns must be prepaid.

Purchaser must notify Conair in writing of any claim and provide a customer receipt and other evidence that a claim is being made.

WARRANTY LIMITATIONS

Except for the Equipment Guarantee and Performance Warranty stated above, Conair disclaims all other warranties with respect to the equipment, express or implied, arising by operation of law, course of dealing, usage of trade or otherwise, including but not limited to the implied warranties of merchantability and fitness for a particular purpose.