

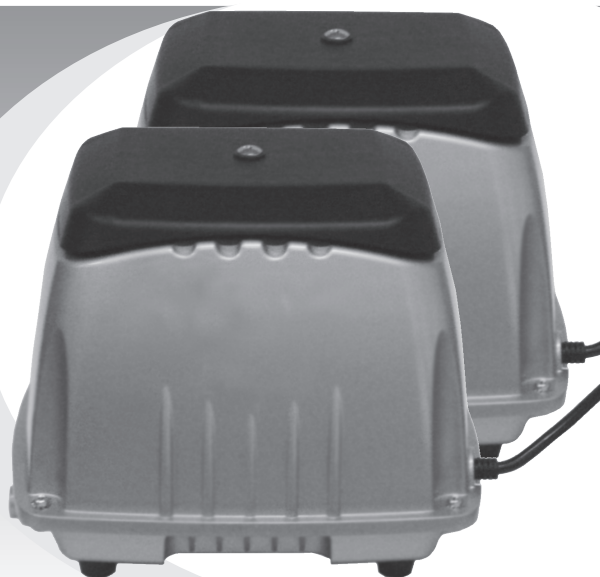


OIL – LESS COMPRESSOR

Operation and Maintenance Manual

IMPORTANT: PLEASE READ THIS MANUAL AND SAVE FOR FURTHER REFERENCE.

- HIGH EFFICIENCY
- LOW NOISE LEVEL
- SMOOTH AIR FLOW
- EASY MAINTENANCE
- COMPACT AND POWERFUL
- NO LUBRICATION REQUIRED



CE ISO 9001

Thankyou for purchasing this product, it is manufactured to the highest standards using quality materials.
Please follow all recommended maintenance, operational and safety instructions and you will receive years of trouble free service.

WARNING

- IMPORTANT SAFEGUARDS – READ AND FOLLOW ALL SAFETY INSTRUCTIONS
- TO REPLACE OR CHANGE ANY OF THE PARTS REFERRED TO IN THE SERVICE MANUAL, WE STRONGLY RECOMMEND YOU CONTACT AN AUTHORISED TECHNICIAN.

DANGER

To avoid possible equipment electric shock, special care should be taken when the pump system is used as aquarium equipment. For each of the following situations, do not attempt repairs yourself, return the air pump to an authorised service facility for servicing, or discard the pump.

- 1) If the pump falls into the water, DO NOT REACH FOR IT. First unplug the pump, and then retrieve it. If the pump's electrical components get wet, unplug the pump immediately.
- 2) Carefully examine the air pump after installation. It should NOT be plugged in if there is water on parts that are not intended to be wet.
- 3) Do not operate if the cord or plug is damaged, or if the pump is malfunctioning, dropped, or damaged in any way.
- 4) Do not use the pump near volatile liquids such as gasoline, thinners, etc, as this creates the possibility of an explosion.
- 5) The safety micro switch on top of the coil frames will automatically shut down the power when the magnet, in the center of the machine, slides over time; or when either diaphragm is broken, causing an unusual long stroke of the magnet.

CAUTIONS FOR USE

- 1) Close supervision is necessary when an appliance is used by or near children.
- 2) This pump is intended to deal with clean, dry air only. Do not, under any circumstances, attempt operation with water or other liquids, otherwise pump may be damaged.
- 3) The ambient operation temperature for this pump is between -15°C and $+38^{\circ}\text{C}$. Operation of pump in temperatures outside recommended temperature range may result in malfunction or severely shortened service life.
- 4) Do not block the air being discharged. Pump must have sufficient room to allow for heat dissipation. Under the extreme operating temperature conditions which may be caused by the failure to observe cautions 3) or 4), pump will automatically switch off until cool. DO NOT REMOVE PUMP CASING UNLESS UNIT IS DISCONNECTED FROM MAINS SUPPLY.
- 5) Always unplug prior to servicing. Grasp plug to remove cord from outlet. Do not remove by pulling on power cord.
- 6) Do not use the air pump for anything other than the intended use. The use of attachments not recommended or not sold by the air pump manufacturer may

cause an unsafe condition.

- 7) Do not install pump where it will be exposed to weather, do not store pump in temperatures below freezing.
- 8) Ensure pump is securely mounted prior to operation.
- 9) Read and observe all important markings on pump.
- 10) Ensure that extension cords (if required) have the correct or higher rating (amperes or watts). Ensure cord is properly positioned to avoid tripping.
- 11) To avoid injury, do not contact moving parts or hot parts such as heaters, reflectors, lamp bulbs, and the like.
- 12) Always unplug an appliance from an outlet when not in use, before putting on or taking off parts, and before cleaning.

SAVE THESE INSTRUCTIONS

INSTALLATION

Disconnect electrical power at the circuit breaker or fuse box before installing this product. Install this product where it will not come into contact with water or other liquids. Install this product where it will be protected. Ensure product is Earthed. Failure to follow these instructions can result in death, fire or electrical shock.

Correct Installation is your responsibility.

Make sure you have the proper installation conditions and that installation clearances do not block airflow.

Mounting

This product must be installed on a flat, horizontal surface.

Mounting the product to a stable, rigid operating surface and using shock mounts will reduce noise and vibration.

Plumbing

Remove plug from the OUT port. Connect with pipe and fittings that are the same size or larger than the product port.

Accessories

Install relief valve and gauge at outlet to monitor performance. A check valve may be required to prevent back streaming through the compressor.

Motor Control

It is your responsibility to contact a qualified electrician and ensure that the electrical installation is adequate and in accordance with all the national and local codes and ordinances.

ELECTRICAL CONNECTION

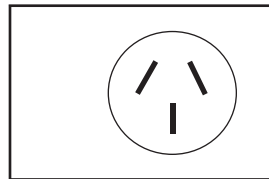
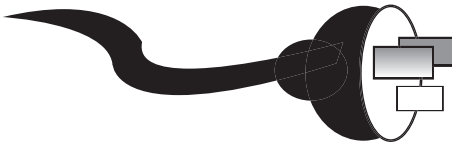
This product must be properly grounded. Do not modify the plug provided. If it will not fit the outlet, have the proper outlet installed by a qualified electrician.

If repair or replacement of the cord or plug is necessary, do not connect the grounding wire to either flat blade or terminal. The wire with insulation that is green with or without yellow stripes is the grounding wire. 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. Failure to follow these instructions can result in death, fire or electrical shock.

Model with a power supply cord:

This product must be Earthed. For 220/240 volt circuits connect power supply cord Earthing plug to a matching Earthed socket. Do not use an adapter.

In the event of an electrical short circuit, Earthing reduces the risk of electric shock by providing an escape wire for the electric current. This product may be equipped with a power supply cord having a Earth wire with an appropriate Earth plug. The plug must be plugged into an outlet that is properly installed and Earthed in accordance with all local codes and ordinances.



Check with a qualified electrician or serviceman if the Earthing instructions are not completely understood, or if you are not sure whether the product is Earthed. Do not modify the plug provided. If it will not fit the outlet, have the proper outlet installed by a qualified electrician.

Model that is permanently wired:

This product must be connected to a Earthed, metallic, permanent wiring system, or an equipment Earthed terminal or lead on the product. Power supply wiring must conform to all required safety codes and be installed by a qualified person. Check that supply voltage agrees with that listed on product nameplate.

Extension cords:

Use only a 3-wire extension cord that has a 3-pin Earthed plug. Connect extension cord plug to a matching 3-slot socket. Do not use an adapter. Make sure your extension cord is in good condition. Check that the wire gauge of the extension cord is the correct size wire to carry the current this product will draw. An undersized cord is a potential fire hazard, and will cause a drop in line voltage resulting in loss of power and will cause the product to overheat.

OPERATION

Use only recommended air handling parts acceptable for pressure not less than 10 psi. When provided, motor terminal covers must be in place for safe operation. Product surfaces may become hot during operation. Do Not direct air stream at body. Air stream from product may contain solid or liquid material that can result in eye or skin damage, wear proper eye protection. Do Not spray flammable or combustible liquid. Failure to follow these instructions can result in burns, eye injury or other serious injury or fatality.

It is your responsibility to operate this product at recommended pressure duty and room ambient temperature.

Start Up

If pump fails to start or slows down significantly under load, shut off and disconnect from power supply. Check that the voltage is correct for the pump

MAINTENANCE

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. Product surfaces may become hot during operation, allow product surfaces to cool before handling. Do Not direct air stream at body. 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 burns, eye injury or other serious injury.

It is your responsibility to:

- Replace diaphragms every twelve (12) months or less.
- When air pump is switched off, apply pest repellent surface spray around enclosure
- There must be adequate ventilation for the air pump at all times.
- Regularly inspect and make necessary repairs to product in order to maintain proper operation.
- Make sure that pressure is released from product before starting maintenance.
- Never add oil to this oil-less compressor.

Check intake filter after first 500 hours of operation. Clean filter and determine how frequently filter should be checked during future operation. This one procedure will help to ensure the product's performance and service life.

Cleaning

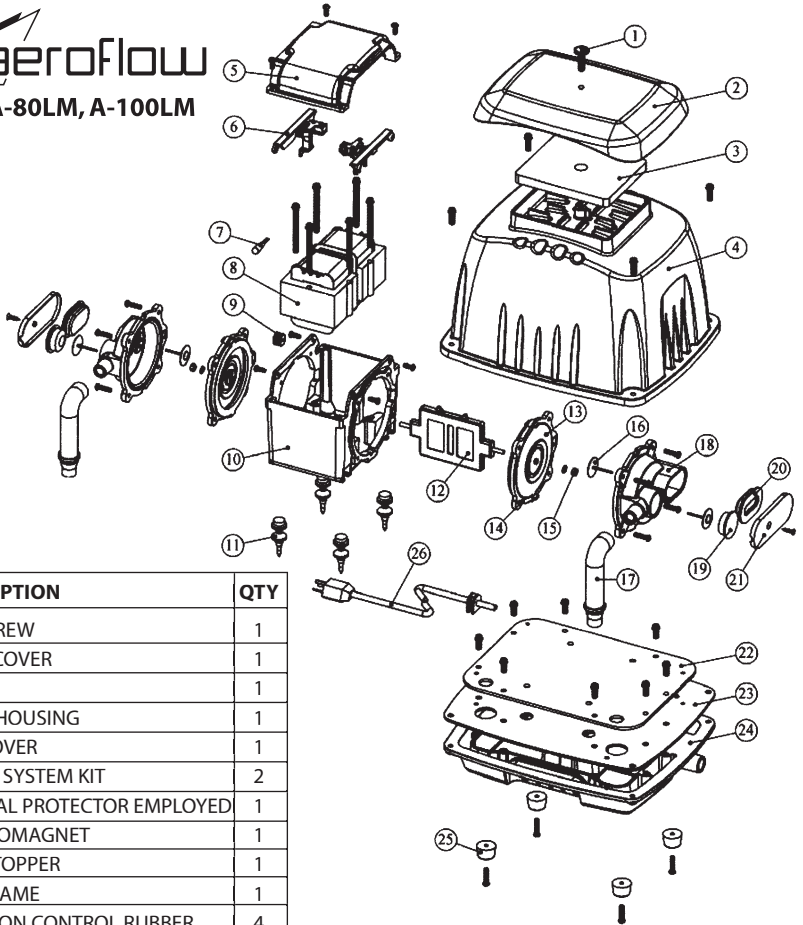
Do not use kerosene or ANY other combustible solvent to clean product.

1. Remove filter and clean using detergent and water
2. Rinse filter well and air dry.



aeroflow

A-80LM, A-100LM



NO.	DESCRIPTION	QTY
1	TOP SCREW	1
2	FILTER COVER	1
3	FILTER	1
4	UPPER HOUSING	1
5	COIL COVER	1
6	SAFETY SYSTEM KIT	2
7	THERMAL PROTECTOR EMPLOYED	1
8	ELECTROMAGNET	1
9	WIRE STOPPER	1
10	COIL FRAME	1
11	VIBRATION CONTROL RUBBER	4
12	ACTIVATING ARM	1
13	DIAPHRAGM	2
14	DIAPHRAGM FRAME	2
15	U NUT	2
16	CHECK VALVE	4
17	L - TUBE	2
18	DIAPHRAGM HOUSING	2
19	CHAMBER SEAL (ROUND)	2
20	CHAMBER SEAL (OVAL)	2
21	SIDE COVER (STEEL)	2
22	STEEL PLATE	1
23	GASKET	1
24	LOWER HOUSING	1
25	RUBBER FEET	4
26	POWER CORD	1

DIY MAINTENANCE MANUAL

A-80LM, A-100LM

1. To clean the air filter (Recommended once every six months)

- A. Loosen the screw on top. (As show in Figure1)
- B. Remove filter cover.
- C. Take the filter out and clean it with clean water and dry it.
- D. Put it back and secure the fixing plate with the screw in.

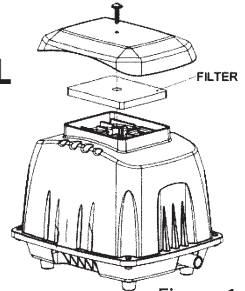


Figure 1

2. To change the diaphragms

IMPORTANT: To open the upper enclosure, please make sure you have unplugged the power cord before opening.

- A. Loosen the four screws around the aluminium upper cover, and take the cover off. (As shown in figure 2)
- B. Loosen the four screws around the coil cover, and take the cover off. (As shown in figure 3)
- C. Loosen the four screws on two sides of the safety switch first, and remove the bars vertically.
- D. Loosen the four screws and disassemble the diaphragm.
- E. Loosen the u-nut in the centre of diaphragm.
- F. Take the diaphragm off its place.
- G. Replace a new one by mounting the rubber studs into their position.
- H. Press the rim of the diaphragm into the ring.
- I. Secure the magnet with a new u-nut screw and put the diaphragm housing back with the four screws on.
- J. Place the two plastic safety switch bars back to their position and secure the four screws on both sides. Put on the aluminium cover and secure the four screws firmly.

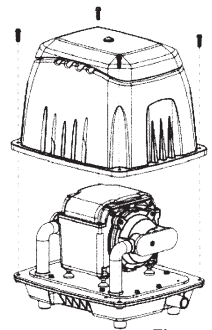


Figure 2

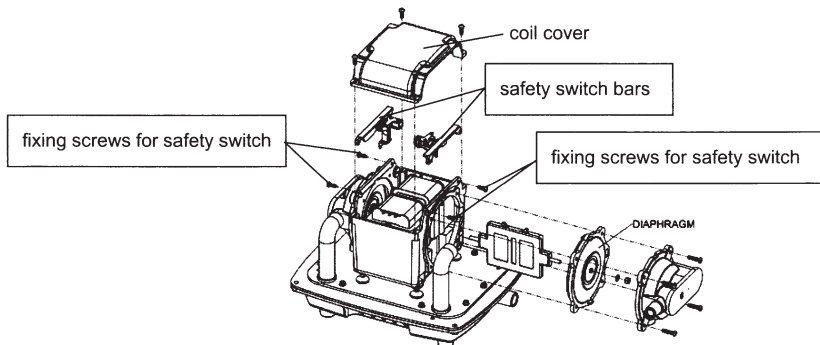


Figure 3

GUARANTEE PROVISIONS

Warranty policy covers the structure of the air pump for two years to the original purchaser.

A change of diaphragm once a year is absolutely necessary & written documentation must be kept.

Warranty policy guaranteed under the condition that:

- (A) It is operated in accordance with the instruction manual.
- (B) All receipts must be kept for any repairs to this air pump.

Though the guarantee period may not have expired, repair fees must be made in the following cases:

- (A) When the fault is due to improper usage, or repairs have been attempted by persons other than an authorised dealer.
- (B) When the fault is due to fire, natural disaster, incorrect voltage or operation of unit outside recommended operating temperature.
- (C) If the guarantee has been lost, incorrectly completed or details fraudulently changed.

Please read this Manual and save for future reference.

This pump is a Oil-less compressor requiring NO lubrication.

Consult your supplier before using at high altitudes.

WARRANTY CONDITIONS

GENERAL PUMP COMPANY/AEROFLOW warrants to the original user that its products are free from defects in materials and workmanship at the time of shipment and will make good, by repair or at its option by replacement, faults and/or defects which appear during the warranty period of (24) months after the purchase date, provided that:

1. There is proof of purchase and proof of services to pump/s
2. The equipment was correctly installed and under proper use in accordance with the "Installation and Operating Instructions" issued by GENERAL PUMP COMPANY/AEROFLOW and also accepted codes of good practice, relevant Australian Standards and Government regulations.
3. The claim for goods under warranty arises solely from alleged faulty and/or defective materials and/or workmanship.
4. The company is notified in writing within twenty four (24) hours, after the discovery of any alleged faults and/or defects stating the date, place of purchase and invoice number.
5. The repair is carried out by GENERAL PUMP COMPANY/AEROFLOW or its agent who has been specifically authorised in writing to carry out the repair under warranty.

6. The faulty and/or defective goods are returned freight paid and at the purchaser's risk to the company or its authorised agent as required.
7. Pumps returned for service/warranty which have been used for other than clean water must be clearly marked with details of the pumped liquid or application involved.
8. It is the customer's responsibility to advise the company when any product returned for service/warranty has been in contact or used with hazardous liquids.
9. Goods are maintained and serviced according to instructions set by **GENERAL PUMP COMPANY/AEROFLOW**.

THE GENERAL PUMP COMPANY/AEROFLOW warranty does not cover the failure or defect of any product, process, system, part or component:-

- Due to advice, directions or instructions provided by **GENERAL PUMP COMPANY/AEROFLOW**, its Staff and/ contractors
- That is determined by **GENERAL PUMP COMPANY/AEROFLOW** to be fair, normal wear and tear, misuse and abuse
- The Supplier shall not be under any liability for any injury, including loss of life, damage, loss including consequential damage or loss including physical, financial, mental damage or loss, disease resulting from the use of its products or resulting from any faults and/or defects therein. This includes the cost of taking up and reinstalling the equipment and the tradesperson's time and material costs.
- Damage caused by abnormal operating conditions, tampering, war, violence, storm, cataclysm or an other force majeure.
- Air pump is operated in a situation where ambient temperatures exceed 38°C or falls below -15°C.
- Damage caused by sand or abrasive materials, corrosion due to gases, saline water, hazardous liquids, electrolytic action, temperatures beyond the recommended range, cavitation, improper supply voltage, or insufficient air to enable the pump to perform to specification.
- Unless an appropriate consulting engineer and Occupational Health and Safety Officer has agreed to and given written consent to the installation and operating instructions, guidelines, operations, maintenance, service and repairs.
- If the alleged fault or defect would have been detectable prior to installation.

This warranty does not exclude any condition or warranty implied by the Trade Practices Act 1974 or separate state laws and is in addition to any right that the original purchaser or any subsequent purchase may have at law.

In the case of equipment or components which are not manufactured, repaired or installed by **GENERAL PUMP COMPANY/AEROFLOW** but are supplied by the company, the warranty is limited to that extended by the manufacturer, supplier, repairer or installer of such equipment or components.

GENERAL PUMP COMPANY/AEROFLOW has made a diligent effort to accurately illustrate and describe its products in all its literature and quotations. However, such illustrations and descriptions are not a warranty.

The above express warranty is in lieu of and excludes all other warranties, express or implied including without limitation, merchantability or fitness for a particular purpose.

