



ENGINE DRIVEN PUMP INSTALLATION INSTRUCTIONS

These instructions act as a guide only and do not cover every contingency. People not familiar with pumping equipment should seek advice from someone experienced with Onga equipment and pump installation.

Pump Protection: Warranty of these pumps is void unless they are housed correctly and protected from weather, floods, chemicals, dust, vermin, insects etc. Housing used should be weather proof and well vented so that engine heat can escape. To obtain best performance pumps should be installed as close to water as possible. Depending on application they do not have to be bolted down.

Suction and discharge pipes: Suction pipe should be laid so that it rises evenly from water source to pump. This makes priming easy and avoids airlocks.

Pipes should be the same size or larger than the pump inlet and discharge threads. All pipe joints must be sealed to ensure they are airtight.

Priming: To prime pump, remove priming plug and fill pump and suction pipe with water. Pump is equipped with suction flap valve and should be capable of drawing air out of normal size suction pipes or hoses. Replace plug and start pump. If pump pumps a little and stops, then turn pump off, check suction pipe for possible leaks and repeat priming procedure until pump operates satisfactorily.

Self priming pumps, when filled with water, will gradually draw air out of the suction line depending on model to a maximum vertical lift of 7m (25 ft.). If priming a long or large diameter pipe, additional water may have to be added to the pump at 3 minute intervals.

If air has stopped bubbling out of the pump discharge, then the self priming action has ceased. Installation should be checked, pump refilled with water and priming attempted again.

How the pump operates: Pump is equipped with a suction flap valve. Before starting pump, make sure it is free to turn. If pump fails to prime, it could be due to leak in suction pipe, a worn impeller or too great a suction lift. Self priming pumps do not self prime when subject to a high discharge head. Under these conditions suction flap valve should be removed and pump installed with a suction foot valve.

Suction strainer: For portable pump use, a suction hose strainer must be used. This removes the risk of gravel or large foreign matter entering and damaging pump.

Engine: Engine instructions are enclosed. Low speed extends engine life dramatically. We recommend for continuous pumping that the pump is operated at about 3000 R.P.M. High speed increases pump performance and for such applications as firefighting or high lift, may be necessary but pump life will suffer if continuous pumping is contemplated we recommend a larger engine is used.

Type of water: Pumps are capable of pumping septic tank effluent, sink wastes, some dirt or sand, drainage or polluted water and industrial wastes. They are not designed to pump large quantities of foreign matter. If fluid contains large or stringy material, then an adequate suction strainer should be used.

If chemicals are to be pumped, compatibility of pump material should be checked with your local Onga office. Special materials are available to handle most applications.

Suction limit: No pump can suck water theoretically more than 30 feet (9 metres) vertical, and the practical limit is about 20 feet (6 metres) depending on installation.

Fixed Installations: If the pump is used for long distances up hill it will be performing under very reduced capacity. Under these conditions and only in some installations the pump may fail to pump reliably on start up.

To fix this check valve should be installed between the pump and the delivery pipe also a gate valve on the pump discharge. If the pump fails to pump on start up the valve should be opened to allow a full flow of water and closed again. The pump should now pump correctly. Under some conditions this procedure may have to be repeated each time the pump is started.

SERVICE

Pump runs but fails to pump water:

Check for an air leak in suction pipe.

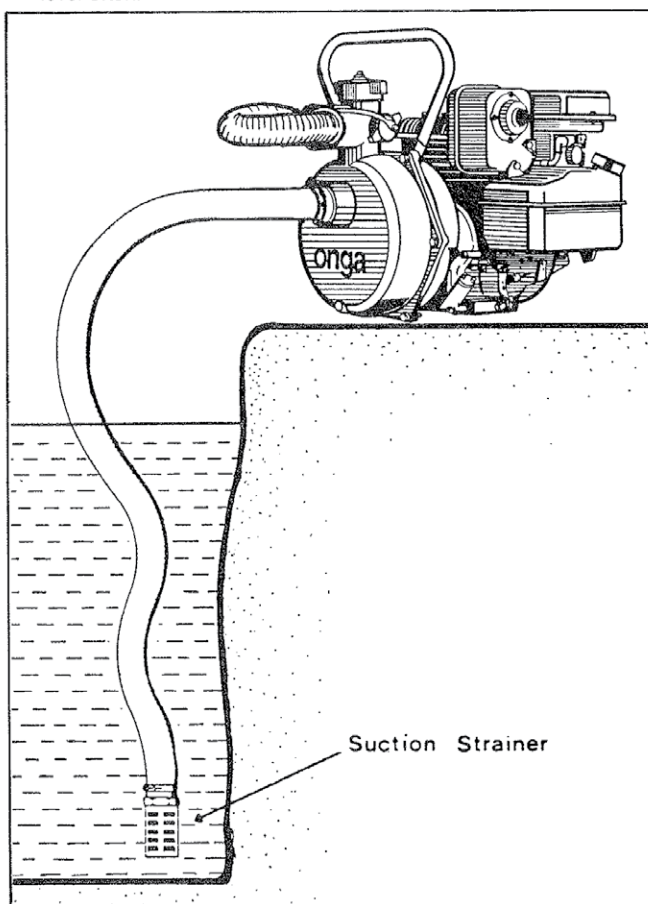
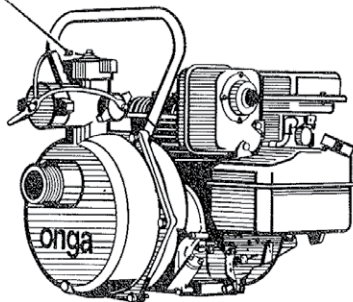
The pump has not been filled with water.

Water has evaporated leaving pump dry.

Foreign matter has clogged the impeller or pipe.

Engine instructions: See instructions supplied by engine manufacturer. Be careful to initially put oil in engine and check level often.

Priming Plug



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Onga Product Warranty

Onga warrants that, when this product is used for the purpose it was designed, is correctly housed and vented against weather, vermin, dust etc., that it will be free of material and manufacturing defects at the time of the original purchase. This warranty is limited to the cost of the product and does not cover third party costs including the costs of electricians, plumbers, etc. unless authorised by Onga pumps.

TERMS AND CONDITIONS APPLICABLE IN AUSTRALIA AND NEW ZEALAND

1) YOU SHOULD CAREFULLY READ THE INSTRUCTIONS SUPPLIED PRIOR TO USING THIS ONGA PRODUCT.

This product is to be installed and operated in accordance with the instructions provided. This warranty will not apply if it is used in a manner otherwise than in accordance with the instructions.

What the warranty covers:

Onga warrants its products to be free of defects in material and workmanship during the warranty period. If a product proves to be defective in material or workmanship during the warranty period, then Onga will, at its sole option **repair or replace the product with a like product. Replacement product or parts may include re-manufactured or refurbished parts or components.**

(International: Should any parts fail as a result of such defects within the specified period, the part will be replaced free of charge. This does not include travel charges, removal and reinstallation charges.)

How long the warranty is effective: (International 12 months)

- 1) This Onga product is warranted for (specified period) for all parts from the date of the first consumer purchase.
- 2) Where this Onga product is sold for commercial application as defined in the relevant Trade Practices and Consumer Protection legislation the warranty shall be for a period of three months from the date of purchase by the end user.
- 3) Ancillary equipment including but not limited to plastics and metal fittings, electrical controls (including touch pads), bladders, pressure switches, filter cartridges, pressure gauges, etc. shall be warranted for a period of twelve months only in relation to consumer applications and three months in relation to commercial applications.

Who the warranty protects:

This warranty is valid only for the consumer purchaser.

What the warranty does not cover:

- 1) Damage, deterioration or malfunction resulting from:
 - a) accident, misuse, negligence, fire, water, lightning, or other acts of nature, unauthorised product modification or failure to follow instructions supplied with the product;
 - b) repair or attempted repair by anyone not authorised by Onga;
 - c) any damage to the product due to shipment;
 - d) removal or installation of the product;
 - e) causes external to the product such as electric power fluctuations or failure;
 - f) use of supplies or parts not meeting Onga specifications;
 - g) normal wear and tear;
 - h) water ingress or exposure to abnormal corrosive conditions or run in dry conditions;
 - i) any other cause which does not relate to a product defect.
- 2) Damage caused to the product as a consequence of use of another manufacturer's product used in conjunction with Onga and affiliate companies.
- 3) This warranty does not cover such products as combustion engines, mechanical seals or other component parts of units not manufactured by Onga, but where possible Onga will make available to purchaser the benefit of any warranty of that manufacturer.
- 4) This guarantee does not cover underwater light bulbs, underwater lights will only be warranted if wiring is to approved standards, and an approved transformer incorporating thermistors has been used, running the light not submerged in water will void warranty.
- 5) Hydrostatic relief valve supplied separately or incorporated in products are sold with the express understanding that such products offer limited hydrostatic relief and no offer is made or implied as to the suitability of such products for a specific application as their condition at the time of sale are unknown and beyond Onga's control. It is the responsibility of the installer to ensure that the performance of the valve meets the required application.
- 6) Swimming pools or spa equipment will not be warranted where the Langelier saturation index PH⁺ range is outside 7.2 to 7.6 and they have not been regularly treated with chlorine or bromine based sanitising systems, or other recognised sanitising systems.

Spare Parts:

Spare parts are usually stocked for a reasonable period of time following last production.

Onga does not warrant that spare parts will be made available for the whole of the reasonable period and reserves its right to cease supplying spare parts or providing facilities for repair of spare parts in circumstances which are beyond its control including the requirement to remove spare parts from sale as a consequence of changes in the law or otherwise as it deems fit.

How to get service: In Australia please contact 1800 664 266 In New Zealand please contact 0800 664 269

Claims under this warranty must give evidence of date of purchase, model and serial number of the product and the claimants name, address and telephone number.

- 1) To obtain warranted service, you will be required to provide to either Onga state office or recommended service agent:-
 - a) the product;
 - b) confirmation in writing specifying the nature of your claim;
 - c) proof providing date of original purchase;
 - d) full contact details including name and address;
 - e) the serial number of the product if any.
- 2) Any travel and removal-reinstalling charges for products repaired by Onga in field will be at the owners own expense.
- 3) Warranty service work will be denied or suspended, on equipment not readily accessible to service personnel, that is products that are behind barriers, tiled or bricked in, installed in roofs or second storey external walls including inaccessible power points.
- 4) Any service of any product which is found to be faulty due to abuse, misuse or improper installation will be charged to the owner at the service agents current servicing hourly rate.

Limitation of implied warranties:

THERE ARE NO WARRANTIES, EXPRESSED OR IMPLIED, WHICH EXTEND BEYOND THE DESCRIPTION CONTAINED HEREIN INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Exclusion of damages:

ONGA'S LIABILITY IS LIMITED TO THE COST OF REPAIR OR REPLACEMENT OF THE PRODUCT. ONGA SHALL NOT BE LIABLE FOR:

- 1) DAMAGE TO OTHER PROPERTY CAUSED BY ANY DEFECTS IN THE PRODUCT, DAMAGES BASED UPON INCONVENIENCE, LOSS OF USE OF THE PRODUCT, LOSS OF TIME, LOSS OF PROFITS, LOSS OF BUSINESS OPPORTUNITY, LOSS OF GOODWILL, INTERFERENCE OF BUSINESS RELATIONSHIPS, OR OTHER COMMERCIAL LOSS, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
- 2) ANY OTHER DAMAGES, WHETHER INCIDENTAL, CONSEQUENTIAL OR OTHERWISE.
- 3) ANY CLAIM AGAINST THE CUSTOMER BY ANY OTHER PARTY.

Effective law:

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Nothing in this warranty limits or restricts, or is intended to derogate from, any right or remedy which the purchaser or ultimate user of the product may have pursuant to Australian state and/or Australian federal consumer protection legislation, New Zealand Sale of Goods Act, Consumer Guarantees Act, Fair Trading Act or any other relevant and applicable New Zealand legislation or authority and where necessary shall so be read and construed.