

TITAN®

Declaration of conformity

We, Importer

TITAN Power Tools (UK) Ltd
Trade House, Mead Avenue, BA22 8RT

Declare that the product

Designation: 550W Dirty/Clean Water Pump

Model: TTB499PMP

Complies with the following directives:

2004/108/EC - Electromagnetic compatibility directive.

2006/95/EC - Low voltage directive

2011/65/EU - RoHS directive

Standards and technical specifications referred to:

EN 60335-1:2012

EN 60335-2-41:2003+A1+A2

EN 62233:2008

EN 55014-1/A2:2011

EN 55014-2/A2:2008

EN 61000-3-2/A2:2009

EN 61000-3-3:2008

Authorised Signatory and Technical File Holder

Date: 03/07/2014

Signature:



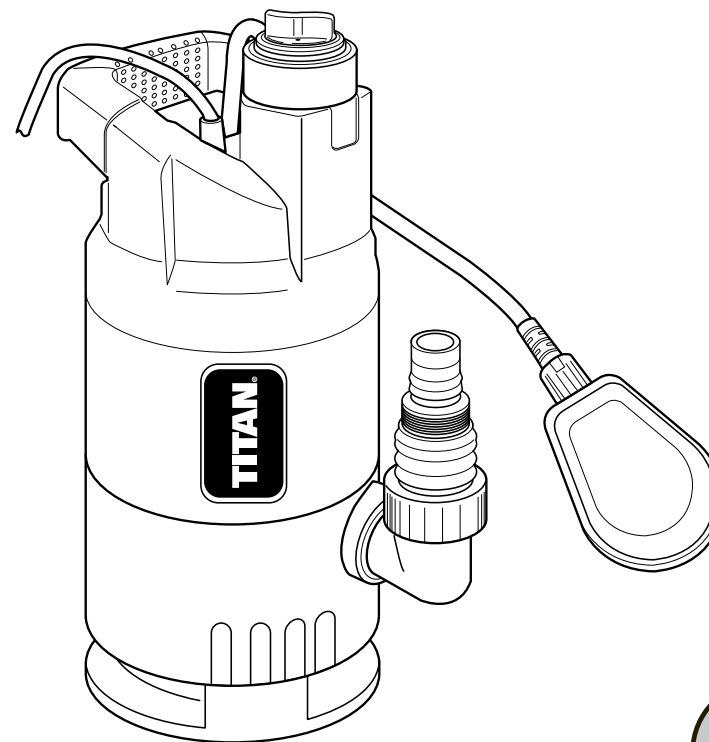
Name / title: Peter Harries / Quality Manager

TITAN Power Tools (UK)Ltd. Trade House, Mead Avenue, BA22 8RT



MNL_TTB499PMP_V1-03072014

TITAN®



SAFETY AND OPERATING MANUAL

WARNING: Read the instructions before using the product.

Original Instructions

550W DIRTY/CLEAN WATER PUMP

TTB499PMP

TITAN®

Congratulations on your purchase of a **TITAN®** power tool from Titan Power Tools (UK) Ltd. We want you to continue getting the best performance from it so this handbook includes information on safety, handling and care. Please retain this handbook in case you need to refer to any of the information in the future.

Your **TITAN®** power tool comes with a 2 years guarantee, so should it develop a fault within this period contact your retailer.

GUARANTEE

This **TITAN®** product carries a guarantee of 2 years. If your product develops a fault within this period, you should, in the first instance contact the retailer where the item was purchased.

This guarantee specifically excludes losses caused due to:

- Fair wear and tear
- Misuse or abuse
- Lack of routine maintenance
- Failure of consumable items (such as batteries)
- Accidental damage
- Cosmetic damage
- Failure to follow manufacturer's guidelines
- Loss of use of the goods

This guarantee does not affect your statutory rights. This guarantee is only valid in the UK. For any enquiries relating to the guarantee please refer to your retailer.

IMPORTANT!

Do not install this product where it is required to run continuously. e.g. ponds fountain water filter systems etc. Installations that require the pump to run continuously will invalidate the guarantee as this pump is intended to run for short periods e.g. typically up to an average of 3hours per day.

GENERAL SAFETY INSTRUCTIONS



WARNING! Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

General safety

- >This product can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the product in a safe way and understand the hazards involved.
- >Children should be supervised to ensure that they do not play with the product. Cleaning and user maintenance shall not be made by children without supervision.
- >If the power cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a safety hazard.

Pump safety warnings

- >This product is to be supplied through a residual current device (RCD) having a rated residual operating current not exceeding 30 mA.

- >Prevent access of children with appropriate measures.
- >Do not use when people are in the water.
- >Do not operate the pump without water.
- >Make sure that no marine animals (e.g. fish) are extracted by the product.
- >Have in mind that pollution of the liquid could occur due to leakage of lubricants.
- >Protect the electrical connections and cords from heat, oil, sharp edges and moisture.
- >Protect the product from frost and running dry.
- >Avoid circulation of aggressive fluids of abrasive materials.
- >Do not use the power cord or the float switch cable to transport or secure the product. Fix a rope to the handle for submerging, lifting or securing
- >Check and clean the outlet and the inlet of the pump when needed.
- >Do not pump liquids with sand or other abrasive substances. It causes increased wear and reduces the pumps output.
- >The product is designed for clear water with a diameter of suspended impurities not exceeded 5mm for clean water mode and 30mm for dirty water mode.

- >The product should be used for pumping water temperature below 35°C, do not use the product for other liquids (hydrocarbons, oils, corrosive liquids, flammable liquids...).
- >Never use the product in case of danger of frost.
- >The product is not designed for continuous use. Please rest it for 10 min after each 1 hour running.

General safety warnings

- >Familiarise yourself with the operation, adjustments and functions. Internalise and follow the safety and operation instructions in order to avoid possible risks and hazards.
- >Contact a qualified person or your dealer if you have questions after reading the instruction manual.
- >Store the instruction manual so that it is accessible for all users. Also relay it when giving the product to others.
- >Do not attempt to modify the product in any way. Only use attachments and accessories recommended by the manufacturer.
- >Use the product only in accordance with this instruction manual. Misuse and incorrect

handling will lead to hazards for people and property.

- >Do not use the product if damage is visible. Check the power cord, plug, attached hoses and casing before each use. Faulty products must be repaired or properly disposed of.
- >Disconnect the product from the power supply immediately if the cord or the product is damaged or if a breakdown occurs.
- >Have the product repaired only by a qualified specialist. Improper repairs can lead to electric shocks or other accidents.
- >Pull the plug rather than the power cord to disconnect the product from the power supply.
- >Do not let the power cord hang over edges, do not squeeze or bend it.
- >Use extension cords that correspond with the technical requirements of this product if using an extension cord is unavoidable. When operating products outdoors, use an extension cord suitable for outdoor use.

SYMBOLS



Caution / Warning.



Read the instruction manual.



The product complies with the applicable European directives and an evaluation method of conformity for these directives was done.



Take a power tool in the domestic waste! In accordance with European Directive 2002/96/EC on waste electrical and electronic equipment and its implementation in national law, Electric tools collected separately and environmentally friendly recycling are fed. Take advantage of the collection facilities. Ask your local government for the collection systems. If electrical appliances are disposed of, can be poisoned for years while the cause hazardous substances into the groundwater and entering the food chain, or flora and fauna.



Max. delivery flow rate



Max. delivery height



Max. submersion depth



Max. particle size



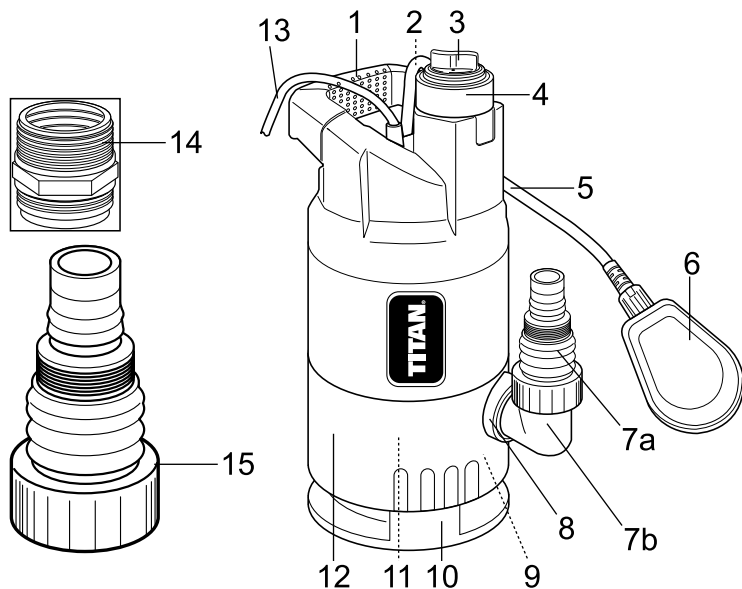
Switch off! Remove plug from mains before cleaning or maintenance



Switch off! Remove plug from the mains immediately if the cable is damaged or cut.

yyWxx

Manufacturing date code
year of manufacturing (20yy) and week of manufacturing (Wxx).



1. Handle	8. Lower outlet nozzle
2. Bracket for float switch cable	9. Base plate
3. Plastic plug	10. Base Extension (Closed on purchase)
4. Upper outlet nozzle	11. Impeller (Internal)
5. Float switch cable	12. Housing
6. Float switch	13. Power cord with RCD plug
7. a. Connector (universal fitting)	14. Additional adaptor
b. Adapter	15. Additional hose connector (universal fitting)

ACCESSORIES

Additional adaptor	1pc
Additional hose connector (universal fitting)	1pc

TECHNICAL DATA

Rated voltage	220-240V~, 50Hz
Rated input power	550w
Max. delivery flow rate	12000l/h
Rated delivery flow rate	5900 l/h
Max. delivery height	7m
Max. submersion depth	7m
Water temperature	max. 35°C
Max. particle size	5mm (for clean water pump) 30mm (for dirty water pump)
Protection class	IPX8
Outlet nozzle	25.4mm(1") and 38mm(1½")
Length of power cord	10m
Net weight	5.3kg

INTENDED USE

This submersible pump is designated with a rated input power of 550W and is intended for the circulation of water with a maximum temperature of 35°C. With the supplied accessories the product can be used for draining when flooding occurs in rooms and also for pumping over or pumping out of water containers. For removal of water from a well and shafts, for draining boats and yachts. The product can be fully submerged (watertight encapsulation) and lowered to a water depth of 7m.

The product is not suitable for long term circulatory use (e.g. in a pond, swimming pool, aquarium). The product is used for water with PH between 6.5 and 8.5, and may not be used for other fluids, especially corrosive, flammable or explosive substances and other chemical products. It must be installed and used in accordance with National installation rules.

For safety reasons it is essential to read the entire instruction manual before first operation and to observe all the instructions therein.

This product is intended for private use only, not for any commercial trade use. It must not be used for any purposes other than those described.

UNPACKING

1. Unpack all parts and lay them on a flat, stable surface.
2. Remove all packing materials and shipping devices if applicable.
3. Make sure the delivery contents are complete and free of any damage. If you find that parts are missing or show damage do not use the product but contact your dealer. Using an incomplete or damaged product represents a hazard to people and property.
4. Ensure that you have all the accessories and tools needed for assembly and operation. This also includes suitable personal protective equipment.

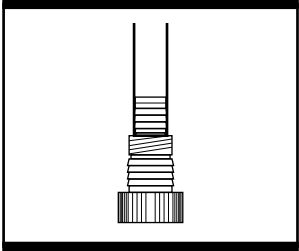


Fig. 1a

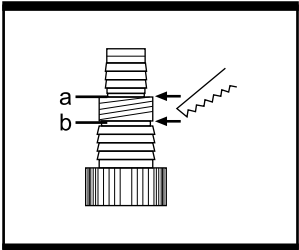


Fig. 1b

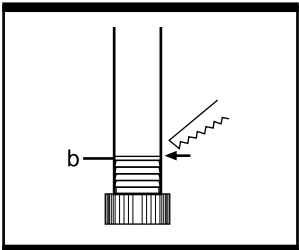


Fig. 1c

BEFORE USE

1. Connect appropriate discharge pipe to hose connector.

- (1). The submersible water pump is supplied with a hose connector (7a) and additional hose connector (15). Hose connector (7a) and adaptor (7b) need be connected to lower outlet nozzle (8). Additional hose connector (15) and additional adaptor (14) need be connected only to upper outlet nozzle (4).
- (2). Connect one appropriate discharge pipe (not supplied) to hose connector. Supplied hose connector can be connected discharge pipe with 38mm (1½") or 25.4mm (1"). Ensure the diameter of the discharge pipe is same as or greater than the outlet diameter of universal hose connector, a smaller discharge pipe will adversely effect the pump flow rate.
 - a. When using a 25.4mm (1") hose, do not cut off any ridges of the connector, connect discharge pipe with 25.4mm (1") to hose connector and it is recommended to secure the discharge pipe with one hose clamp (no supplied). (See Fig. 1a)
 - b. When using a 38mm (1½") hose, cut off top of top section at position (b), connect discharge pipe with 38mm (1½") to hose connector and it is recommended to secure the discharge pipe with one hose clamp (no supplied). (See Fig. 1b, 1c)

2. Outlet nozzle.

This product is supplied with two outlet nozzles. You may choose either outlet nozzle for water flow while retaining the other outlet nozzle with the plastic plug (3).



NOTE: The product is installed with the plastic plug (3) fixed in the upper outlet nozzle (4) due to the good performance. The performance of the lower outlet nozzle (8) is better than the upper outlet nozzle (4), expressing as 2l/h more flow and 1m more head.

Choose any outlet nozzle when the max. diameter of particle in the water is smaller than 10mm otherwise use the lower one only.

- (1). Use lower outlet nozzle for clean or dirty water purposes, with a particle size less than or equal to 30mm. To extract water from lower outlet nozzle, connect the hose connector (7a) and the adaptor (7b) and discharge pipe to lower outlet nozzle (8). (See Fig. 2a)
- (2). Use upper outlet nozzle for clean or dirty water purposes, with a particle size less than or equal to 10mm. To extract water from upper outlet nozzle, you need to unscrew the plastic plug (3) from upper outlet nozzle (4) and then screw it into lower outlet nozzle (8) and tighten. Then connect the additional hose connector (15) and additional adaptor (14) and discharge pipe to upper outlet nozzle (4). (See Fig. 2b)

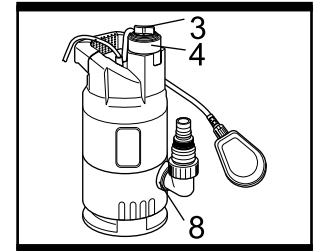


Fig. 2a

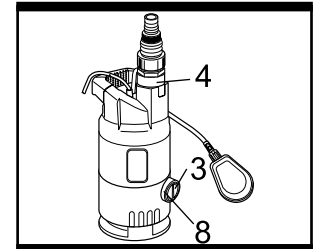


Fig. 2b

3. Fixed installation

For fixed installation install the product with rigid pipes so that it cannot move, it is recommended that a check-valve is assembled to prevent the running of liquid when switching off the product. Therefore, the product does not have to prime, build-up pressure and fill all pipes each time it starts. This minimises wear and tear and saves time as well as energy. We additionally recommend the use of quick-release fasteners on the appropriate place to quickly separate the product for cleaning and/or maintenance work (or for wintering) from the pipeline system.

4. Test RCD function.

You must test the RCD device before operate this submersible water pump as below:

- Insert the RCD plug into the socket.
- Press the “RESET” button. The working indication light will become red.
- Press the “TEST” button. The working indication light should go out.
- Press the “RESET” button to restart.



WARNING! DO NOT use submersible water pump when there is a failure in the above mentioned process test.

5. Power Connection to power supply.

- (1). Make sure the float switch (6) is in its lower position.
- (2). Always use the correct supply voltage. The power supply voltage must match the information quoted on the tool identification plate.
- (3). Connect the plug (13) with a suitable socket.
- (4). Always completely unwind cable reels.
- (5). Your product is now ready to be used.
- (6). Use only extension cables suitable for outdoor use, preferably with a high visibility cord color with the following specification:
 - For extension cables up to 25 meters, use a wire cross section of 1.5mm².
 - For extension cables over 25 meters and less than 40 meters, use a wire cross section of 2.5mm².

OPERATION INSTRUCTIONS

1. Float switch. (See Fig. 3)

- (1). This product works with automatic interval operation. The float switch (6) swims on the surface of the water or alternatively under water. The product switches on or off according to position of the float switch (6). In this way, you can automatically control the water level e.g. in wells or containers.
- (2). The product is started at a certain water level by the float switch (6) (switch on level). (See Fig. 3, a).
- (3). The product continues pumping until the water level is lowered to a particular height and then the float switch (6) turns the product off (switch off level). (See Fig. 3, b).



NOTE: The product must be fully immersed into the water. Otherwise the product cannot prime and the maximum constant flow will not be achieved. The product could be damaged!

- (4). Adjust the height of the relative switch on and off levels within certain parameters by lengthening or shortening the free cable length of the float switch cable (5). Simply fix the float switch cable (5) to the bracket (2). (See Fig. 3, c).



NOTE: Before first use you should briefly familiarise yourself with the automatic controls of the float switch. Move the float switch up and down with your hand to simulate switching on and off. Alter the free cable length, until you have found a suitable extent to your purpose. Check out how the free cable length influences the switch on and off level (and ultimately the water level).

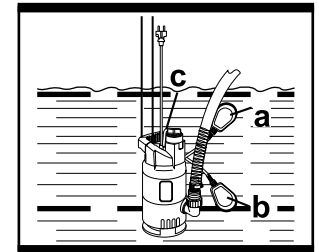


Fig. 3

- (5). Always make sure that the float switch (6) is free and unblocked when in the water to prevent the product running dry.
- (6). When using the product for the first time, test the automatic switch on and off function and be sure it functions correctly.

2. Base extension. (See Fig. 4)

Use the base extension when setting up the product in dirty water.

- (1). Remove the base extension (10) from the base plate (9) by rotating anticlockwise until the tongues (10a) are completely released from the grooves (9c).
- (2). Align the tongues (10a) of the base extension (10) to the slots (9d) of the base plate (9) . (See Fig. 4, 1).
- (3). Rotate the base extension clockwise until the tongues are firmly aligned with the slots . (See Fig. 4, 2).
- (4). After use, store the base extensions back into the compartments in reversed order.

3. Thermal protection

The product is equipped with a thermal cut-out. In the event that the motor becomes overheated due to an over-load operation such as clogged intake or low or no water, the motor switch automatically switches the product off. After a cooling period the product automatically switches on again. In the event that the motor switch operates, it is absolutely essential to disconnect the pump from the power supply and find as well as eliminate the cause prior to re-starting.

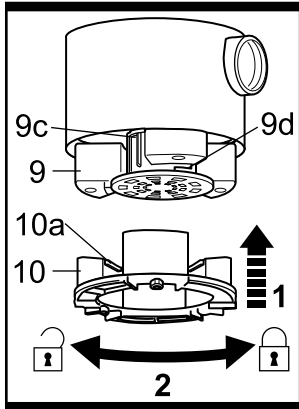


Fig. 4

4. Automatic Air bleed valve. (See Fig. 5)

- (1). The automatic air bleed valve releases any air in the pump body. During this process air escapes through the vent bore (3a) in the plastic plug (3) and air bubbles appear underwater. It may take several seconds when the product is immersed for the first time.

5. Manual operation. (See Fig. 6)

Connect the product to the power supply and lift the float switch (6) manually. The product starts running. Lower the float switch (6) to stop the product.

6. Automatic operation

Connect the product to the power supply. The product is switched on automatically at a certain water level (switch on level) and switches off as soon as the water level drops down to a definite water height (switch off level).

7. After use

- (1). Switch the product off as described above, disconnect it from the power supply and let it cool down.
- (2). Check, clean and store the product as described below.

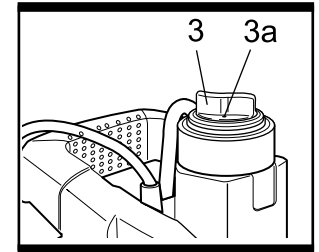


Fig. 5

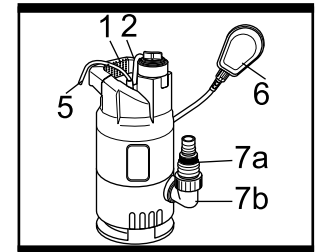


Fig. 6

MAINTENANCE AND REPAIR



WARNING! Always switch the product off, disconnect it from power supply and let the product cool down before performing inspection, maintenance and cleaning work!



WARNING! Only perform repairs and maintenance work according to these instructions! All further works must be performed by a qualified specialist!

1. General cleaning

- (1). Keep the product clean. Remove debris from it after each use and before storage.
- (2). Regular and proper cleaning will help ensure safe use and prolong the life of the product.
- (3). Inspect the product before each use for worn and damaged parts. Do not operate it if you find broken and worn parts.
- (4). Clean the product with a damp cloth and pH-neutral soap. Use a brush for areas that are hard to reach.
- (5). Remove stubborn dirt with high pressure air (max. 3 bar).
- (6). Do not use chemical, alkaline, abrasive or other aggressive detergents or disinfectants to clean this product as they might be harmful to its surfaces.
- (7). Check for worn or damaged parts. Replace worn parts as necessary or contact an authorised service centre for repair before using the product again.
- (8). Regularly check for obvious defects such as loose, dislodged or damaged pipes, loose fixings and worn or damaged components.

2. Impeller. (See Fig. 7)

If excessive deposits collect in the base you must dismantle the base (12) and base plate (9) of the product and clean the components.

- (1). Remove the base extension (10) by rotating anticlockwise.
- (2). Remove the base plate (9) by loosening the screws (9a) and washers (9b) with a proper screwdriver.
- (3). Then remove the base (12) by loosening the screws (12a) and washers (12b) with a proper screwdriver.
- (4). Clean the impeller (11) with clean water.
- (5). Clean the base (12), base plate (9), the base extension (10) and the pump body.
- (6). Assemble in reversed order.

3. Repair

This product does not contain any parts that can be repaired by the consumer. Contact a qualified specialist to have it checked and repaired.

4. Storage

- (1). Disconnect the product from the water system and power supply.
- (2). Clean the product as described above.
- (3). Store the product and its accessories in a dark, dry, frost-free, well-ventilated place.
- (4). Always store the product in a place that is inaccessible to children. The ideal storage temperature is between 10°C and 30°C.
- (5). We recommend using the original package for storage or covering the product with a suitable cloth or enclosure to protect it against dust.

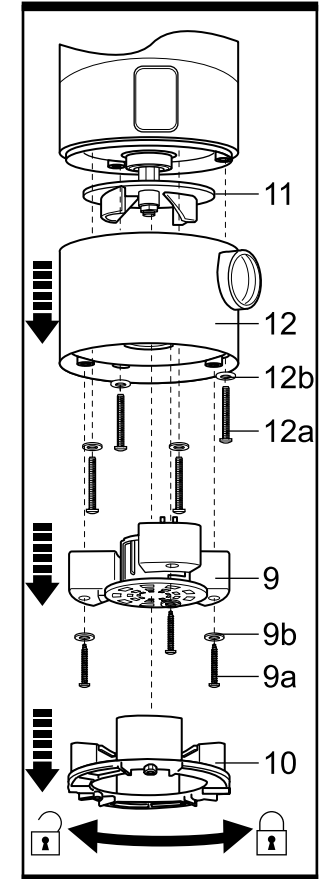


Fig. 7

5. Transportation

- (1). Disconnect the product from the water system and power supply.
- (2). Always carry the product at the handle.
- (3). Protect the product from any heavy impact or strong vibrations which may occur during transportation in vehicles.
- (4). Secure the product to prevent it from slipping or falling over.

TROUBLESHOOTING



WARNING! Only perform the steps described within these instructions! All further inspection, maintenance and repair work must be performed by an authorised service centre or a similarly qualified person if you cannot solve the problem yourself!



WARNING! Do not install use this product where it is required to run continuously. e.g. ponds fountain water filter systems etc. Installations that require the pump to run continuously will invalidate the guarantee as this pump is intended to run for short periods e.g. typically up to an average of 3hours per day.

Problem	Cause possible	Solution
Product does not start	Power supply not connected	Check power supply connection
	Floating switch does not switch on	Raise position of floating switch
	Discharge pipe clogged	Clean the discharger pipe
	Fuse faulty	Replace fuse
	RCD is actuated	Check the power circuit
Insufficient flow / no flow	Discharge pipe is clogged	Clean the discharger pipe
	Air locks in the suction base	Wait for max. one minute until air escapes through the vent bores automatically. Switch off and on repeatedly if necessary.
	Poor seal is from plastic plug	Tighten plastic plug
	Discharge pipe bent or pinched	Straighten discharge pipe
	Water level is below min. suction depth	Stop the product
	Product is jammed	Clean the product (e.g. impeller)
	Product does not switch off	Floating switch cannot sink down
Product switches off after short operating period	Thermal cut-out stops product due to blockage	Remove blockage and clean the product
	Thermal cut-out stops product due to high water temperature	Make sure that a water temperature of max. 35°C is not exceeded
	Impeller is caught by foreign substance	Remove blockage

ENVIRONMENTAL PROTECTION



Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or retailer for recycling advice. For further information visit www.recycle-more.co.uk.

UK PLUG REPLACEMENT

The fuse in the main plug of your garden power tool should always be replaced with one of identical rating. Check the voltage given on your garden power tool matches the supply voltage. The garden power tool is supplied with a fitted plug, however if you should need to fit a new plug follows the instruction below.


Important:

The wires in the mains lead are coloured in accordance with the following code:

Green & yellow --- Earth

Blue --- Neutral

Brown --- Live

- The wire which is coloured **green & yellow** must be connected to the terminal which is marked with **E** or ;
- The wire that is coloured **blue** must be connected to the terminal that is marked with the letter **N**;
- The wire that is coloured **brown** must be connected to the terminal that is marked with the letter **L**;

A 13AMP (BS1363 or BS1363/A) plug must be used and a 13AMP fuse must be fitted.

Warning: Never connect live or neutral wires to the earth terminal of the plug. Only fit an approved 13 Amp BS1363/A plug and the correct rated fuse.

If a moulded plug is fitted and has to be removed take great care in disposing of the plug and severed cable, it must be destroyed to prevent engaging into a socket. If the supply cord is damaged it must be replaced by a service agent or a similarly qualified person in order to avoid hazard.

