

DRAPER®

INSTRUCTIONS FOR 750W Submersible Water Pump with Float Switch

Stock No.76333 Part No.SWP220A

IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY TO ENSURE THE SAFE AND EFFECTIVE USE OF THIS TOOL.



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GENERAL INFORMATION

Read all these instructions before operating this product and save these instructions.

This manual has been compiled by Draper Tools and is an integrated part of the product with which it is enclosed and should be kept with it for future references.

This manual describes the purpose for which the product has been designed and contains all the necessary information to ensure its correct and safe use. We recommend that this manual is read before any operation or, before performing any kind of adjustment to the product and prior to any maintenance tasks. By following all the general safety instructions contained in this manual, it will ensure both product and operator safety, together with longer life of the product itself.

All photographs and drawings in this manual are supplied by Draper Tools to help illustrate the operation of the product. Whilst every effort has been made to ensure accuracy of information contained in this manual, the Draper Tools policy of continuous improvement determines the right to make modifications without prior warning.

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Draper tools have been carefully tested and inspected before shipment and are guaranteed to be free from defective materials and workmanship for a period of 12 months from the date of purchase except where tools are hired out when the guarantee period is ninety days from the date of purchase.

A proof of purchase must be provided with the tool.

Should the machine develop any fault, please return the complete tool to your nearest authorized warranty repair agent or contact Draper Tools Limited, Chandler's Ford, Eastleigh, Hampshire, SO53 1YF, England. Telephone Sales Desk: (023) 8049 4333 or Product Helpline (023) 8049 4344.

If upon inspection it is found that the fault occurring is due to defective materials or workmanship, repairs will be carried out free of charge. This guarantee does not apply to normal wear and tear, nor does it cover any damage caused by misuse, careless or unsafe handling, alterations, accident, or repairs attempted or made by any personnel other than the authorised Draper warranty repair agent.

NOTE: If the tool is found not to be within the terms of warranty, repairs and carriage charges will be quoted and made accordingly.

This guarantee applies in lieu of any other guarantee expressed or implied and variations of its terms are not authorised.

Your Draper guarantee is not effective unless you can produce upon request a dated receipt or invoice to verify your proof of purchase within the 12 month period.

Please note that this guarantee is an additional benefit and does not affect your statutory rights.

Draper Tools Limited



SPECIFICATION

The Draper Tools policy of continuous improvement determines the right to change specification without notice.








Stock no.	76333
Part no.	SWP220A
Rated voltage	230V~50Hz
Rated input	750W
Max. output	220L/min
Max. head height	10M
Max. particle size \emptyset	5mm
Max. water temp.	35°C
Output aperture \emptyset	32mm
Degree of protection against moisture.....	IP68

THIS PRODUCT MUST BE USED IN-CONJUNCTION WITH A RESIDUAL CURRENT DEVICE (RCD).



POWER SUPPLY

- Connecting the product to the Power Supply:

To eliminate the possibility of an electric shock your machine has been fitted with a BS approved, non rewirable moulded plug and cable which incorporates a fuse, the value of which is indicated on the pin face of the plug. If the plug is marked with the  symbol and the fuse needs replacing, an  approved BS1362 fuse must be used of the same amp rating. If the plug is not  marked, a fuse with the  symbol,  BS Kitemark, or both  and  BS Kitemark, of the same amp rating should be used.

- The fuse cover is detachable, never use the plug with the cover omitted. If a replacement fuse cover is required, ensure it is the same colour as that visible on the pin face of the plug (i.e. red). Fuse covers are available from your Draper Tools stockist.

If the fitted plug is not suitable, it should be cut off and destroyed. *The end of the cable should now be suitably prepared and the correct type of plug fitted. See below.


- *WARNING:

- A plug with bare flexible wires exposed is hazardous if engaged in a live power socket outlet.

- WARNING: THIS APPLIANCE MUST BE EARTHED.

- The mains lead is coloured Green and Yellow - Earth, Blue – Neutral and Brown – Live.

As these colours may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured green and yellow must be connected to the terminal in your plug marked with the letter 'E' or by the earth symbol  or coloured green or green and yellow.

The wire which is coloured blue must be connected to the terminal which is marked with the letter 'N' or coloured black or blue.

The wire which is coloured brown must be connected to the terminal which is marked with the letter 'L' or coloured red or brown.

- EXTENSION LEAD CHART:

Extension lead sizes shown assure a voltage drop of not more than 5% at rated load of tool.

Ampere rating (on Name plate)	3	6	10	13
Extension cable length (Metres)	Wire Size mm ²			
7.5	0.75	0.75	1.0	1.25
15	0.75	0.75	1.0	1.5
22.5	0.75	0.75	1.0	1.5
30	0.75	0.75	1.25	1.5
45	0.75	0.75	1.5	2.5

IMPORTANT: A residual current circuit breaker (RCD) must be used when pumping from ponds or swimming pools and is recommended for all applications.

Draper Stock No.69307 or 89301.

WARNING:

Please read the following instructions carefully, failure to do so could lead to serious personal injury. When using electric tools, basic safety precautions, including the following, should always be followed to reduce the risk of fire, electric shock and personal injury. Read all these instructions before operating this product and save these instructions.

IMPORTANT:

Draper Tools Limited recommends that this machine should not be modified or used for any application other than that for which it was designed. If you are unsure of its relative applications do not hesitate to contact us in writing and we will advise you.

1. KNOW YOUR POWER TOOL:

Read and understand the owner's manual and labels affixed to the tool. Learn its application and limitations as well as the specific potential hazards peculiar to this tool.

2. KEEP WORK AREA CLEAN:

Cluttered areas and benches invite accidents. Floors must not be slippery due to oil or sawdust.

3. AVOID DANGEROUS ENVIRONMENTS:

Do not use power tools in damp or wet locations, or expose them to rain. Keep work area well lit. Provide adequate space surrounding the work area. Do not use in environments with a potentially explosive atmosphere.

4. KEEP CHILDREN AWAY:

All visitors should be kept a safe distance from work area.

5. STORED TOOLS:

When not being used, all tools should be stored in a dry, locked cupboard and out of the reach of children.

6. WEAR PROPER CLOTHING:

Do not wear loose clothing, neckties or jewellery (rings, wristwatches) to catch in moving parts. NONSLIP footwear is recommended. Wear protective hair covering to contain long hair. Roll long sleeves above the elbow.

7. USE SAFETY GOGGLES (Head Protection):

Wear CE approved safety goggles at all times. Normal spectacles only have impact resistant lenses, they are NOT safety glasses. Also, use face or dust mask if application is dusty and ear protectors (plugs or muffs) during extended periods of operation.

8. NOISE LEVELS:

Some types of machines may have high noise levels when working. In such cases ear protection must be worn.

9. VIBRATION LEVELS:

Hand held power tools produce different vibration levels. You should always refer to the specifications and relevant Health and Safety guide.

10. DUST EXTRACTION:

If your tool is fitted with a dust extraction fitting, always ensure that it is connected and being used with a dust extractor. Vacuum cleaners can be used if suitable for the material being extracted.

11. PROTECT YOURSELF FROM ELECTRIC SHOCK:

When working with power tools, avoid contact with any earthed items (e.g. pipes, radiators, hobs and refrigerators, etc.). If you are using a power tool in extreme conditions (e.g. high humidity or generating metal dust), always use an RCD (residual current device) at the power socket.

12. STAY ALERT:

Always watch what you are doing and use common sense. Do not operate a power tool when you are tired or under the influence of alcohol or drugs.

13. WHEN WORKING OUT OF DOORS:

Only use extension leads designed for that purpose.

14. ACCESS TO MAINS SOCKET:

If a stationary machine is fitted with a moulded plug and cable, the machine should not be positioned so that access to the mains socket is restricted.

15. DISCONNECT POWER TO THE TOOL:

When not in use, before servicing and when changing accessories such as cutters, etc.

16. AVOID ACCIDENTAL STARTING:

Make sure the switch is in the OFF position before plugging the machine into the power supply.

17. NEVER LEAVE MACHINE RUNNING UNATTENDED:

Turn power off. Do not leave machine until it comes to a complete stop.

18. DO NOT ABUSE THE CORD:

Never carry the tool by the power cable or pull it from the socket. Keep the power cable away from heat, oil and sharp edges. If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid hazard.

19. NEVER STAND ON TOOL:

Serious injury could occur if the tool is tipped or if the cutting tool is accidentally contacted. Do not store materials above or near the tool, so that it is necessary to stand on the tool to reach them.

20. CHECK DAMAGED PARTS:

Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, free running of moving parts, breakage of parts, mounting and any other conditions that may affect its operation. A guard or other part that is damaged should be repaired properly or replaced by an authorized service centre unless otherwise indicated in this instruction manual. Have defective switches replaced by an authorized service facility. Do not use the tool if the switch does not turn it on and off.

21. KEEP GUARDS IN PLACE:

And in working order.

22. MAINTAIN TOOLS WITH CARE:

Keep tools sharp and clean for the best and safest performance. Follow instructions for lubricating and changing accessories. All extension cables must be checked at regular intervals and replaced if damaged. Always keep the hand grips on the tool clean, dry and free of oil and grease.

23. USE RECOMMENDED ACCESSORIES:

Consult the owners manual for recommended accessories. Follow the instructions that accompany the accessories. The use of improper accessories may cause hazards.

24. REMOVE ADJUSTING KEYS AND WRENCHES:

Form a habit of checking to see that keys and adjusting wrenches are removed from the tool before turning it on.

25. SECURE WORK:

Use clamps or a vice to hold work. This frees both hands to operate the tool.

26. DO NOT OVERREACH:

Keep proper footing and balance at all times.

27. USE RIGHT TOOL:

Do not force the tool or attachment to do a job for which it was not designed.

28. DO NOT FORCE TOOL:

It will do the job better and safer at the rate for which it was designed.

29. DIRECTION OF FEED:

Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.

30. WHEN DRILLING OR SCREWING INTO WALLS:

Always make sure there is no danger of hitting any hidden power cables, water or gas pipes in the wall.

31. HAVE YOUR TOOL REPAIRED BY A QUALIFIED PERSON:

This electric tool is in accordance with the relevant safety requirements. Repairs should only be carried out by qualified persons using original spare parts, otherwise this may result in considerable danger to the user.

IMPORTANT NOTE:

Residual Risk. Although the safety instructions and operating manuals for our tools contain extensive instructions on safe working with power tools, every power tool involves a certain residual risk which can not be completely excluded by safety mechanisms. Power tools must therefore always be operated with caution!

ADDITIONAL SAFETY INSTRUCTIONS FOR SUBMERSIBLE WATER PUMPS

- When carrying or lifting the submersible pump always use the transport handle, **DO NOT** carry or lift using the power cable or float switch cable.
- Before connecting to the power supply:
 1. A residual current circuit breaker (RCD) must be used for all applications (Draper Stock No.69307 or 89301).
 2. The electrical supply should be the same as that stated on the rating plate.
- Submersible water pumps should always be transported, stored, and submersed vertically.
- **Always** ensure that your hands are dry when connecting and disconnecting the power supply.
- **Never** operate the pump below the top of the water inlet.
- The area being pumped should be kept clear, and nobody should enter the area while pump is operating.
- Do not pump explosive or flammable liquids.

IMPORTANT: PLEASE READ BEFORE USE

The following additional instructions must be followed at all times. Failure to do so could invalidate the guarantee of this submersible water pump.

- The float switch must be clamped in position using the cable clamp recess.
- Clean water pumps are **NOT** suitable for use in dirty water.
- **NOTE:** The pump, should be suspended using a rope, chain or stood on a brick to prevent any gravel etc. being sucked into the pump.
- If the pump fails to operate, disconnect from mains supply. Remove the base (see page 9) and gently turn the impeller using a screwdriver. Check for obstruction in the impeller, i.e. stones/gravel etc.
- The float switch fitted to the pump is **NOT** suitable for continuous use as an ON/OFF switch.
- If the power cable becomes damaged it must be changed by the manufacturer or it's service agents.

IMPORTANT: Any pump returned to Draper Tools Limited under warranty must be clean. If a pump is received that has **NOT** been cleaned, it will be returned to you at your cost.

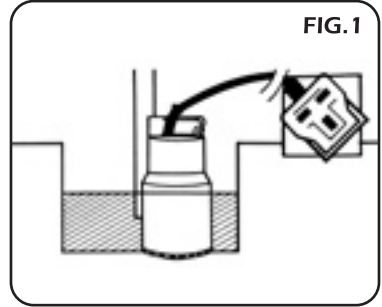


- ① Automatic cut off float switch.
- ② BS approved moulded plug and cable.
- ③ Transport handle.
- ④ Outlet.
- ⑤ Filter inlet.
- ⑥ Hose adaptor.
- ⑦ Cable clamp recess.

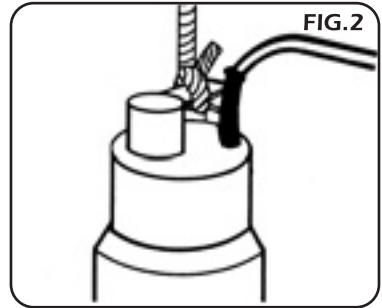
- **UNPACKING:** After removing the packing material, make sure the product is in perfect condition and that there are no visible damaged parts. If in doubt, do not use the product and contact the dealer from whom it was purchased.

The packaging materials (plastic bags, polystyrene, etc.,) must be disposed of in an appropriate refuse collection container. These materials must not be left within the reach of children as they are potential sources of danger.

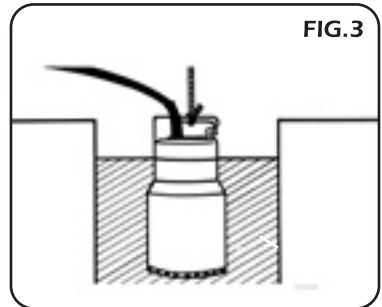
- The pump inlet must be fully submersed before the power is switched on. **DO NOT** turn on when dry (FIG.1).



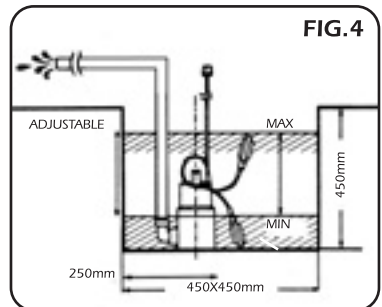
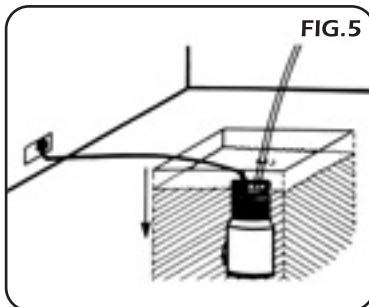
- When submersing or lifting the pump it will be necessary to use a rope or chain (not supplied), this must be attached to the transport handle (FIG.2).



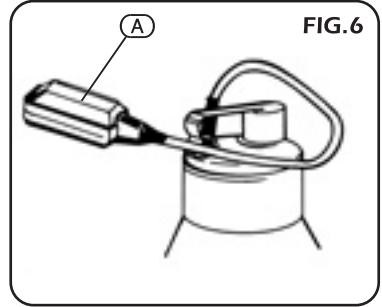
- If pumping water from a sandy or muddy floor bed, the pump can be suspended using a rope or chain (not supplied) fixed to the handle. **DO NOT** use any of the electrical cables for this purpose (FIG.3).



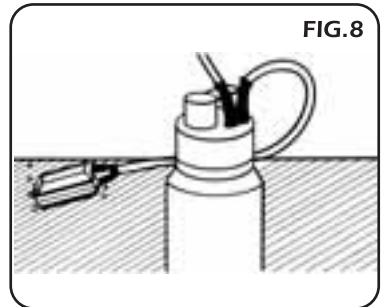
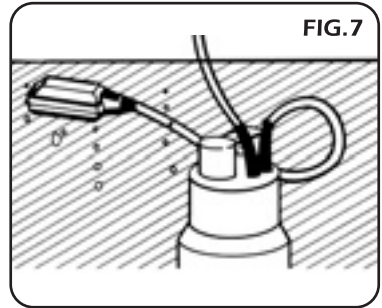
- When pumping flood water from a room or cellar, installation of the pump should be in a drain well (if possible). The dimensions should allow easy movement of the float switch (FIG.4). This will allow the pump to remove the water down to below the floor level (FIG.5).



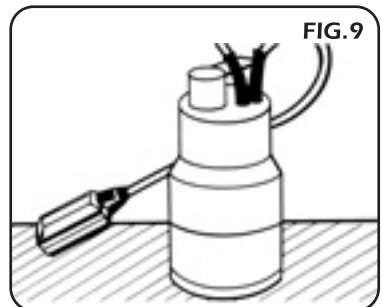
- An automatic float switch (A) is fitted to the pump. This enables the pump to switch off automatically when the water has reached the minimum level.



- As the water level drops the float switch will fall with the water level (FIG. 7 & 8).

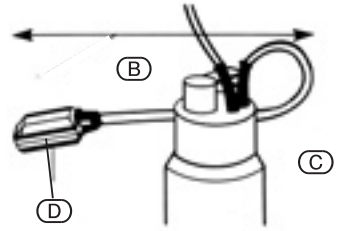


- When the float switch reaches the minimum level it will automatically switch the pump off (FIG. 9).



- The float switch can be set to a specific cut off level by increasing or decreasing the length of cable (B) between the cable clamp recess (C) and float switch (D) (FIG.10).

FIG.10



WARNING: For your own safety, remove the plug from power supply before maintaining your submersible water pump.

- If the impeller becomes blocked or obstructed, remove base plate (E).
- **DO NOT** lever the impeller out as this will cause damage.
- Remove any items which have caused the blockage.
- Rinse the contents with clean water to flush out any remaining particles (FIG.12).
- Replace the base plate, ensuring the correct orientation and that the screws (E) are tight.

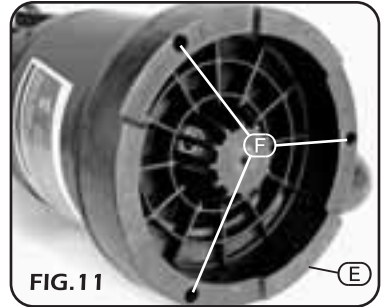


FIG.11

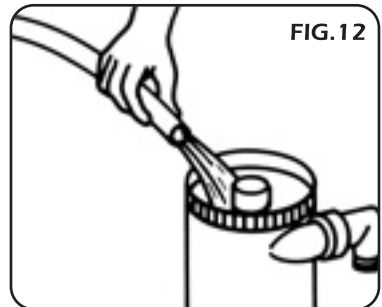


FIG.12

- At the end of the machine's working life, or when it can no longer be repaired, ensure that it is disposed of according to national regulations.
- Contact your local authority for details of collection schemes in your area.

In all circumstances:

- Do not dispose of power tools with domestic waste.
- Do not incinerate.
- Do not abandon in the environment.
- Do not dispose of WEEE* as unsorted municipal waste.



Do not dispose of WEEE* as unsorted municipal waste.



* Waste Electrical & Electronic Equipment.



OPTIONAL ACCESSORIES

Layflat Hoses:

- **Hobby/DIY Hose**

- Stock No.36919
- Part No.ASWP1
- Size. 25mm. I.D.
- Length. 5m.

- **Heavy Duty Hose**

- Stock No.36946
- Part No.ASWP3
- Size. 25mm. I.D.
- Length 10m.

- Stock No.36947

- Part No.ASWP4
- Size. 32mm. I.D.
- Length 10m.

WARNING:

For your own safety, always turn the main switch on the machine "Off" and remove the plug from the power supply before carrying out any servicing or maintenance.

TROUBLE	PROBABLE CAUSE	REMEDY
No power.	<ol style="list-style-type: none"> 1. Faulty power supply. 2. Power supply fuse blown. 3. Residual current circuit breaker tripped. 	<ol style="list-style-type: none"> 1. This should be replaced immediately by a qualified person. 2. Replace the fuse. 3. Check and reset.
Pump running but not delivering water.	<ol style="list-style-type: none"> 1. Water level under the minimum pumping level 2. Filter inlet clogged. 3. Outlet tube clogged. 4. Hose flat. 	<ol style="list-style-type: none"> 1. Raise the water level (where possible). 2. Clean inlet. 3. Remove the tube and clear obstruction. 4. Reinstall the pump but at an angle, when submerged, gently shake while outlet tube is open. <p style="text-align: center;">switch on/off repeatedly.</p>
Pump stops running, due to thermal overload coming into operation.	<ol style="list-style-type: none"> 1. Voltage supply different to rating plate. 2. A solid has jammed in pump. 3. The pump is operating in hot water. 4. The pump ran dry. 	<ol style="list-style-type: none"> 1. Remove plug from power supply. 2. Remove obstruction. 3. Wait for pump to cool and then restart. 4. Wait for pump to cool then float switch.

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- **Service/Warranty Repair Agent**
For aftersales servicing or warranty repairs, please contact the Draper Tools Helpline for details of an agent in your local area.

YOUR DRAPER STOCKIST

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