



STREAMLINE | INSTRUCTION MANUAL

STREAMFLO 120

Barrow System Instructions

Kit includes

FP-TR1200-02

S06W-KIT015-0113

OVA8* Waterfed Pole

V-SBF26-MD06-001 / V-SBF36-MD06-001

HRM400-SS-8-AS-PRO-HIVIZ

FJ2-02 / NJ3-02

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2 Responsibilities

Responsibilities

General Responsibilities

These operating instructions allows you to use the Streamflo®120ltr barrow system safely and efficiently. The instructional booklet must be read before setting up, starting or using your Streamflo® equipment. It is an integral part of the product itself.



Please read the warning and instructions contained in this booklet carefully. They provide important information on the safe use and maintenance of the equipment. Pay particular attention to general safety instructions.

Please keep this booklet in a safe place near your Streamflo®120ltr barrow system for future consultation.

Your Streamflo® barrow system is constructed according to current safety standard and regulations. The latest and current edition is illustrated in this manual.

The contents of this booklet should be bought to the attention of all users.

Manufactures Responsibilities

Varitech Systems Ltd, the manufacture of Streamflo®, holds 12-months warranty on all machines and equipment from the date of purchased (see Warranty section 2)

Varitech Systems Ltd, the manufacture of Streamflo®, is in no case responsible for failures or errors caused by modifications to the unit by customer or other persons.

Personnel Responsibilities

The Streamflo®120ltr barrow equipment is designed and manufactured to be operated in industrial applications. It is important that the operator(s) of the Streamflo®120ltr barrow have read through these operating instructions thoroughly, and understand all safety instructions and regulations.

The Streamflo®120ltr barrow is not intended for use by children, adolescents, persons under the influence of alcohol / drugs or simply lacking experience and knowledge.

These operating instructions are designed to educate the user, informing the operator how to carry out the task at hand successfully, whilst avoiding potential dangers that might occur.

3 Technical Specifications

Technical Specifications

Specification Data

| Description | Streamflo®120 |
|--------------------------------------------------|----------------------|
| Country of Origin | United Kingdom |
| Maximum Height | 80cm |
| Maximum Length | 152cm |
| Maximum Width | 70cm |
| Dry Weight | 90kg |
| Wet Weight | 210kg |
| Inlet Pressure Requirement | n/a |
| Optimum Operating Pressure | 6.9bar / 100psi |
| Standard Water Inlet Connection (Male hose lock) | n/a |
| Pure Water Outlet Connection (Female hose lock) | 3/4 inch |
| Electrical Power Supply | 12V Battery |
| Optimum Water Quality | 000ppm |
| Water Quality Range | 000ppm - 100ppm |
| Pure Water Flow (optimum output) | 3.8Lpm |
| Waste Water Flow | 0Lpm |
| Operating Time | 12hours battery life |

Parts and Accessories

The Streamflo® barrow system will include the following parts:

- 1x Handheld TDS Meter for accurate water readings
- 1x 230V mains powered battery charger
- 1x Instruction manual
- 1x Outlet water connections
- 1x Digital flow controller



4 Safety Regulations

Safety Regulations


The Streamflo®120ltr barrow is intended solely for the production of pure water used for cleaning windows, vehicles, solar panels and other hard washable surfaces typically through standard and optional accessories provided by Streamline®.

The water cannot be used for human consumption.


Personal Safety

Stay alert, watch what you are doing and use common sense when operating the Streamflo®120ltr barrow system. Do not use the trolley system while you are tired or under the influence of alcohol, drugs or medication. A moment of inattention while operating the filtration trolley may result in serious personal injury.


Use personal protective equipment to avoid personal injury:



Protective Gloves



Safety Goggles



Protective Footwear

Additional protective equipment such as a dust mask, non-skid safety shoes, hard hat or hearing protection may be required depending on the safety regulations in the operator surroundings.

System Safety

The Streamflo®120ltr barrow is manufactured with the safety of the operator in mind, including some key features such as;



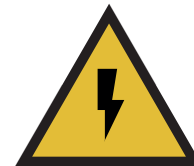
Over Pressure

- If the water pressure in the Streamflo® barrow system is above the standard 100psi / 6.8bar pressure, the pressure switch will automatically be activated and stop the pump from over pressurizing.
- It is important to never open the filter vessels during operation or whilst under pressure.



Over Heating

- If the pump overheats on the Streamflo® barrow system, an activation switch is triggered and the system will automatically switch off.



Electrical Hazards

- As the Streamflo® barrow system is powered by an electrical source, never use the equipment in the rain, snow or strong winds.
- Never use the filtration system to clean people and/or animals.
- Before each use, undertake a visual check on all electrical cables for damage. Never use the filtration system with a damaged cable.



Mechanical Hazards

- To avoid all mechanical hazards, place the Streamflo® barrow system on an even surface only, and ensure sufficient stability.

Use only original accessories that come with the Streamflo® barrow system, offering maximum quality and security. Failure to use original accessories absolves Varitech Systems Ltd, the manufacturer from all liability.

Electrical specifications & safety

Electrical connections must be carried out in respect of current legislation (in compliance with the provisions of the IEC 60364-1 standard) and in accordance with the manufacturer’s instructions.

Please check that the installation and sockets are adequate for the maximum power of the appliance indicated on the rating plate. If in doubt, consult a qualified electrician. The correct plug should be fitted by a qualified electrician.

- Varitech Systems Ltd, the manufacture of Streamline® declines all liability for damage to persons, animals or things caused by faulty or incorrect connection.
- Before connecting the equipment, check that the specification given on the rating plate corresponds to that of the mains electrical supply.
- If the equipment is connected via an extension, use cables with an adequate cross section, never less than 1,5 mmq. The plug and socket must be watertight.
- The electrical safety of the equipment is guaranteed only when correctly and efficiently earthed as specified in current electrical safety legislation (in compliance with the provisions of the IEC 60364-1 standard). This fundamental safety requisite should be verified. If in doubt, ask a professionally qualified electrician to check the system thoroughly. It is recommended that the electric supply to this machine should include a residual current device that will interrupt the supply if the leakage current to earth exceeds 30 mA for 30ms or a device that will prove the earth circuit.

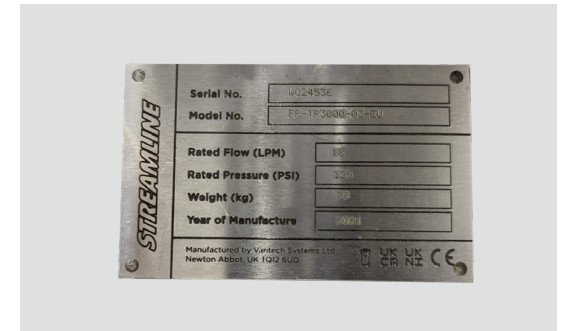
Varitech Systems Ltd, the manufactures of Streamline®, declines all liability for damage caused by faulty earthing of the appliance.

- The equipment can be disconnected from the mains only by unplugging the plug from the mains socket.
- When using any electrical appliance, certain fundamental rules should be respected:
 - Do not touch the appliance with wet hands or feet.
 - Do not touch the appliance with bare feet or unsuitable clothing.
 - Do not pull the power cable or appliance itself to unplug the plug from the mains.

Operating The Streamflo® Barrow System

When purchasing the product, make sure it has an identification plate. If this is missing, notify the distributor / manufacturer where you purchased the unit from.

Use of an appliance without an identification plate absolves the manufacturer from all liability. Products without an identification plate should be considered as anonymous and potentially dangerous.



Unpacking of the Streamflo®120ltr barrow system

Your Streamflo®120ltr barrow system has been carefully manufactured, checked through QC and packaged as a kit.

Carefully unpack your new Streamflo® barrow system and carry out a thorough visual check on all parts. If in doubt, do not use the system. Contact your dealer and/or manufacturer.

Packaging (bags, boxes, nails, tape etc.) should be kept out of reach of children as they may represent a potential hazard. Packaging can be recycled according to your local legislation.

Storage of the Streamflo®120ltr barrow system

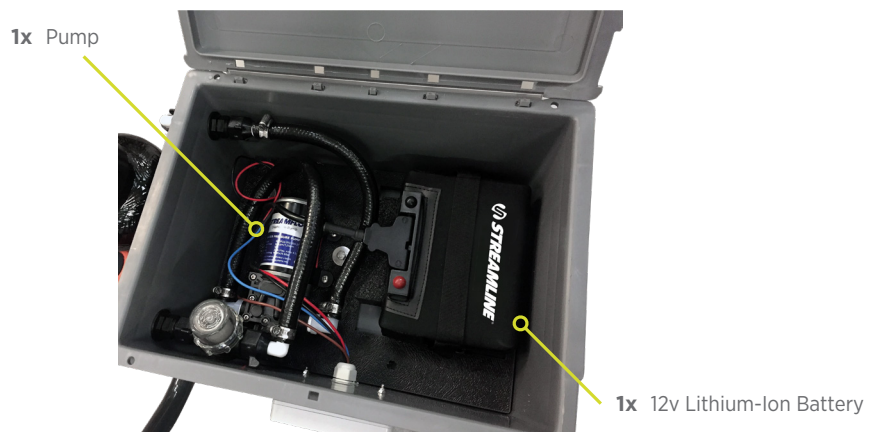
Short term and long term storage is an important issue. The Streamflo® barrow system must be protected from algae and bacteria growth in the pressure vessels caused by stagnant water. The de-ionising (DI) resin must not dry out wither.

Important

The unit must be protected from freezing.

You can transport or store the trolley system with the handles folded down. Loosed the locking fixings, lift the handle and fold forwards.

About your system



To operate the Streamflo®120Ltr barrow system, the operator needs to fill the storage tank with standard mains tap water.

The water is then drawn from the storage tank by the 100psi pump, and pushed through the DI resin vessel, reaching a 000ppm result before coming out to the telescopic pole.



Charging your Battery

The lithium-ion 12v battery is ready to be charged when received.

- i. Plug charger into an electrical socket.



- ii. Insert the charger socket into the lithium battery terminal, and switch battery charger on.



- iii. **RED** and **GREEN** lights will indicate the battery charging completion.



Important

Only use the Streamline® charger supplied with your Streamflo® barrow system. If misplaced, contact your dealer of manufacture immediately.

The charger will never over heat. This has a safety function to prevent the battery from over charging.

You can operate the system and keep the battery on charge. Pay special attention to the mains electrical supply when operating with water.

Assembling the System

- i. Ensure the trolley system is safely secure and stable on a level surface.





- ii. Remove the container lids and riser tube and fill the container with pre-filtered water. If the trolley is fitted with a resin filter fill the container with tap water.



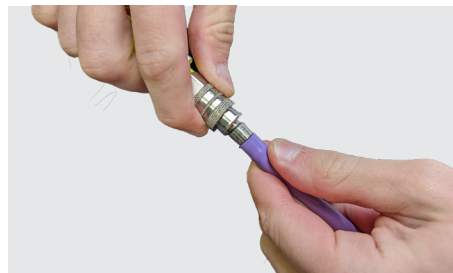
iii. Screw the lid on securely.



ii. Now you can adjust the speed of the water flow through the 100psi pump by using the  and  arrows on the flow controller




iv. Insert your AHA-H6 telescopic pole hose directly to the water outlet connection on the end of your hose reel



iii. Please ensure you regularly check the water quality with the handheld TDS meter provided.



Turning your Streamflo® barrow System ON

i. When in position, press the power  button on the flow controller and hold for 2 seconds.




Operating your Streamflo® barrow system

The Streamflo® barrow system is designed for a single operator use.

The water supply can sometimes be interrupted for short lengths of time i.e. when the operator moves from window to window, however if the Streamflo® barrow system is interrupted for long periods of time, it is best to switch off the pump to save overheating and/or over pressurising, and potentially damaging the system.

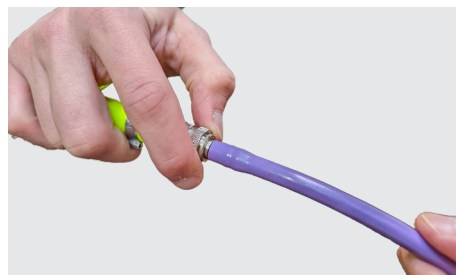
Turning your Streamflo® barrow system OFF

To switch off the Streamflo® barrow system after completing the cleaning task, simply:

- i. Press and hold the  button on the Streamline® flow controller, switching off the 100psi pump



- ii. Disconnect the telescopic pole hose connected to the trolley system



Malfunctions & Troubleshooting

To switch off the Streamflo® barrow after completing the cleaning task, simply:

- i. Low water pressure or water supply at waterfed brush
 - a. Check for any blockages or kinks in hose
 - b. Disconnect all extension hose reels and connect the Streamflo® barrow system directly to the telescopic pole
 - c. Increase water flow rate on flow controller
 - d. Contact service centre
- ii. High pure water TDS
 - a. Check DI resin quality – replace DI resin beads
 - b. Contact service centre
- iii. Pump will not start
 - a. Check battery charge – see '12.1 How to charge your battery'
 - b. Check fuse on battery charger
 - c. Check fuse on mains power
 - d. Contact service centre
- iv. Controller stating 'DE' or 'PS' constantly
 - a. Check for any blockages in hose or telescopic pole tubing
 - b. Check for any blockages in membrane
 - c. Raise the calibration on the controller
 - d. Contact service centre
- v. Controller flashing 'BAT' constantly
 - a. Plug in battery charger immediately before the battery is flat
 - b. Contact service centre

7 Maintenance & Replacing Filters

Maintenance & Replacing Filters

Care and maintenance of your Streamflo® barrow system will ensure it is well looked after and running smoothly every time.

It is recommended to run a weekly examination on the Streamflo® barrow system to ensure the filters and connections are adequate and effective for producing pure 000ppm water quality.

Weekly inspection

- Keep a check on the pure water TDS by using the handheld TDS meter. This measures in parts per million (ppm). If the output reads higher than 3ppm, it is recommended to change the de-ionising (DI) filter, and make a note in the back of the inspection booklet.
- Keep a check on the battery voltage by running through the controller function until you reach 'BAT'. A good healthy battery will read between 11V and 12.4V.

De-ionising (DI) Resin Beads – usage and replacing

The DI resin filter is the last polishing filter that the RO pure water will pass through.

Usage

Either monthly replacement or approx. 2,000ltrs* of pure water

* with starting TDS of 100ppm.

How do I change the DI resin cartridge?

- i. Make sure that the pump is switched off and that the system is de-pressurised.



- ii. Remove the inlet and outlet hose from the DI filter.



- iii. Unscrew the filter bracket and remove the DI filter from the trolley.



8 Disposing Of Filters & Machine

iv. Remove the DI filter head and empty the poor/spent DI resin.



v. Refill the DI filter to the filling line and reset the filter riser and head.



vi. Ensure all seals and fittings are replaced and tight.



Please pay special attention to the flow direction on the membrane housings and on the membranes themselves.

Disposing Of Filters & Machine

The Streamflo® barrow system is classified as special waste. It must be taken apart and divided into uniform sections which should be disposed of according to current legislation.

Do not use the components removed as spare parts.

All filters are disposable as unharmed general waste.

Important
 Disposing of resin beads can create a slippery surface. Care needed to dispose of resin beads effectively. Remove all over spill immediately.

9 Declaration of Conformity

Declaration Of Conformity

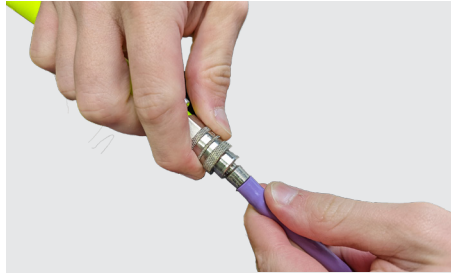
EC Declaration of Conformity according to the, RoHS Directive 2011/65/EC. The Streamflo®120ltr barrow system has been designed and produced by Steamline® in accordance with the above mentioned EC Directives. The technical documents are complete. The complete EC Declaration of Conformity with all standards applied can be requested on the Steamline® Website or directly from Steamline®.

Dean Scott
 Development Director

10 Connecting OVA8® Pole

Connecting The OVA8® Pole

i. Connect the hose lock connector on the end of the hose to the rectus connector on end of your pole tubing on the Streamline® OVA8® pole.



ii. Open up either your fan or pencil jets from the package or blister pack. In the pack there should be a tee-piece with a push fitting already attached. Using the tee-piece, make sure you push each one of the jets accessory into the John Guest tee-piece.



iii. It is important to make sure there is a firm seal around the hose to help protect leakage. To make sure the hose is attached correctly when you push the hose into the tee-piece you should hear a click sound and then push it in a second time to make sure its fully secure. You can check by trying to pull the hose out the tee-piece.



iv. With the option of a 26cm or 36cm brush 26cm having four jet placements and the 36cm having and option of six.



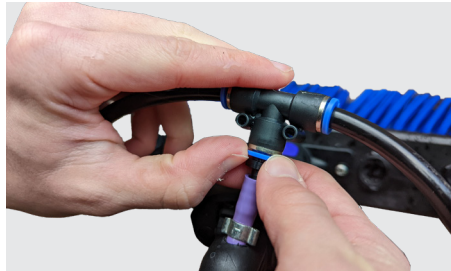
v. You can choose where you want your jets to be, which we place on the edge of the brush which you push your jet nozzles in and you simply twist and lock using the twist mechanism, turning clockwise.



vi. Disconnect the extra hose from the pole tubing.



vii. To remove your brush from your pole. Pull back on the blue collar to release the jet tubing from the John Guest fitting.



viii. Simply push in the purple button on the brush to release it from the angle adapter at the top of the pole.



Using the OVA8® Pole

Extending the pole

i. Ensure the clamp lever is fully open before extending each section, extend the pole by beginning with the thinnest section first.



ii. Secure the extended section by closing the clamp lever fully. Continue to lengthen the pole by extending each section, one at a time, until the desired height is achieved.

Although the pole sections have stopper tape fitted, be careful not to over-extend each section.



Collapsing the pole

i. Ensure the clamp lever is fully open before collapsing each section in order to avoid premature wear to the sections.

Open the clamp lever and carefully control the speed at which the sections descend, so as not to jar the clamps as the pole closes.



Collapse the sections carefully in order to avoid pinching fingers when the clamps come together.

If the pole has become wet during use, e.g. underwater used or in inclement weather conditions, dry each section prior to collapsing and storing the pole.

Important points to remember

- Always operate the pole with both feet on the ground to maintain proper balance and control of the pole (care should be taken if using the pole on an uneven surface).
- Use both hands when extending and collapsing the pole.
- To improve the pole's rigidity, and if full extent is not required, leave the thinnest section collapsed and extend the pole from the second section down. Alternatively, increase the overlap of each section, by not extending them completely.
- It is recommended that the pole is collapsed prior to moving or repositioning it.

Caution

- Never remove the base section of any carbon fibre pole as these are manufactured from glass fibre to insulate the pole – danger of electrocution, should the pole touch an overhead wire or electrical source.
- Never use the telescopic pole if damage has occurred to any of the sections.
- Be aware of overhead obstacles and electrical cables prior to extending the pole.
- It's advised that when deploying the pole, to use the height of the pole plus an additional 10% as an horizontal safe distance from any overhead electrical wires, telephone wires, people or animals.

Pole maintenance

- Make sure that the pole is dry after use and before storing it.
- A dry PTFE spray can be used on the sections to ensure a smooth operation, if required.
- Ensure the clamp tensions are maintained sufficiently in order to prevent premature wear to the pole sections.
- Tension the clamp screws if the sections become loose.
- If the base cap of the pole becomes worn, replace it as soon as possible to avoid sections from becoming damaged and / or splitting.



12 Why Streamline®?

Why Streamline®?

Flexibility

- Streamline® systems can be built according to customers' exact requirements
- For non-standard systems, the user's needs or specifications are listened to and turned into reality.

Quality

- Whilst price is important, quality is remembered long after price is forgotten
- We insist on sourcing brand name products from around the world, only of a reputable quality, and bring them together under the Streamline® name
- All Streamline® products carry a full one year's warranty, according to the manufacturers' standard terms and conditions of sale.

Service

- We have an in-house technical helpline able to answer most of your questions relating to the capabilities and functionalities of all Streamline® products
- If we get it wrong, we will put it right. If you are sent a wrong item, we will immediately attend to sending you the correct item and arrange a collection of the wrong item without any quibbles.
- Streamline® is backed by a comprehensive range with massive stocks providing you with a 'one stop shop' for all your requirements.



Manufactured In
The United Kingdom



Checked & Tested
By Quality Control

13 Streamline® Warranty

Streamline® Warranty

The warranty on all Machines and Equipment is for 1 year (12-months) from RECORDED DATE OF PURCHASE.

THIS WARRANTY EXCLUDES NORMAL MAINTENANCE ITEMS, including but not limited to HOSES, FILTERS, O-RINGS, DIAPHRAGMS, VALVES, GASKETS, CARBON BRUSHES and damage to motors and other components as a result of failure to replace normal maintenance items. THIS LIST IS NOT EXHAUSTIVE.

If Streamline® receives notice of such defects during the warranty period, Streamline® will either, at its opinion, repair or replace components which prove to be defective.

Replacement parts will only be supplied under warranty, upon the inspection and approval of the defective parts by Streamline®.

Should it be necessary to supply replacement parts before the opportunity to inspect, these will be charged at current prices and credit will only be issued upon subsequent inspection and warranty approval by Streamline®.

The customer is responsible for the cost of return of the defective part. If warranty is approved, Streamline® will pay for the cost of the repaired or replacement part.

This warranty excludes the following conditions and circumstances which are at the discretion of Streamline®.

Wear and tear, misuse, abuse improper maintenance, frost damage, the use of chemicals other than those supplied or approved by Streamline®, improper installation or repair, unauthorised modification, incidental or consequential costs, loss or damage, service, labour or third party charges, the cost of returning defective parts to Streamline®.

This warranty constitutes the exclusive remedy of any purchaser of a Streamline® unit and is in lieu of all other warranties, express or implied, including without limitation any implied warranty of merchantability or fitness for use, to the fullest extent permitted by law. In no event shall any implied warranty of merchantability or fitness for use exceed the term of the applicable warranty stated above and Streamline® shall have no other obligation or liability.

Important

Unfortunately these rights cannot be transferred to a third party.



 **STREAMLINE**[®]

STREAMFLO[®] 120

Barrow System Instructions

INSTR-STREAMFLO120-KIT