

Clemas & Co Ltd

Industrial Cleaning Equipment
Sales - Hire - Service

MULTIWASH OPERATOR MANUAL



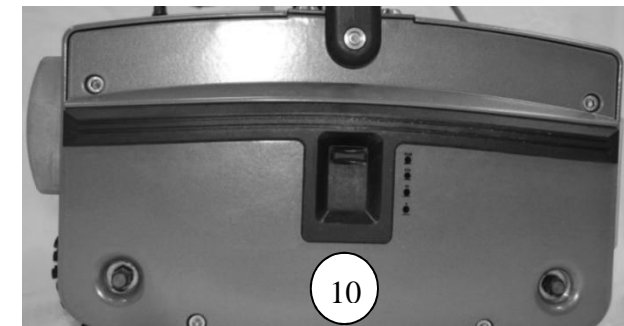
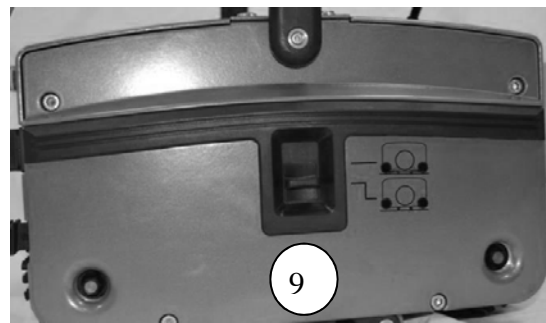
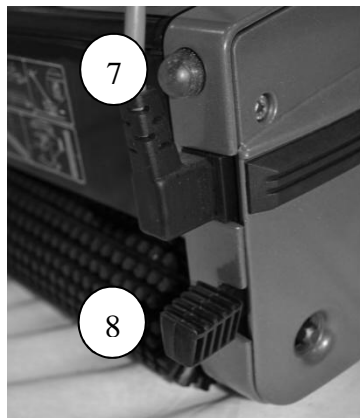
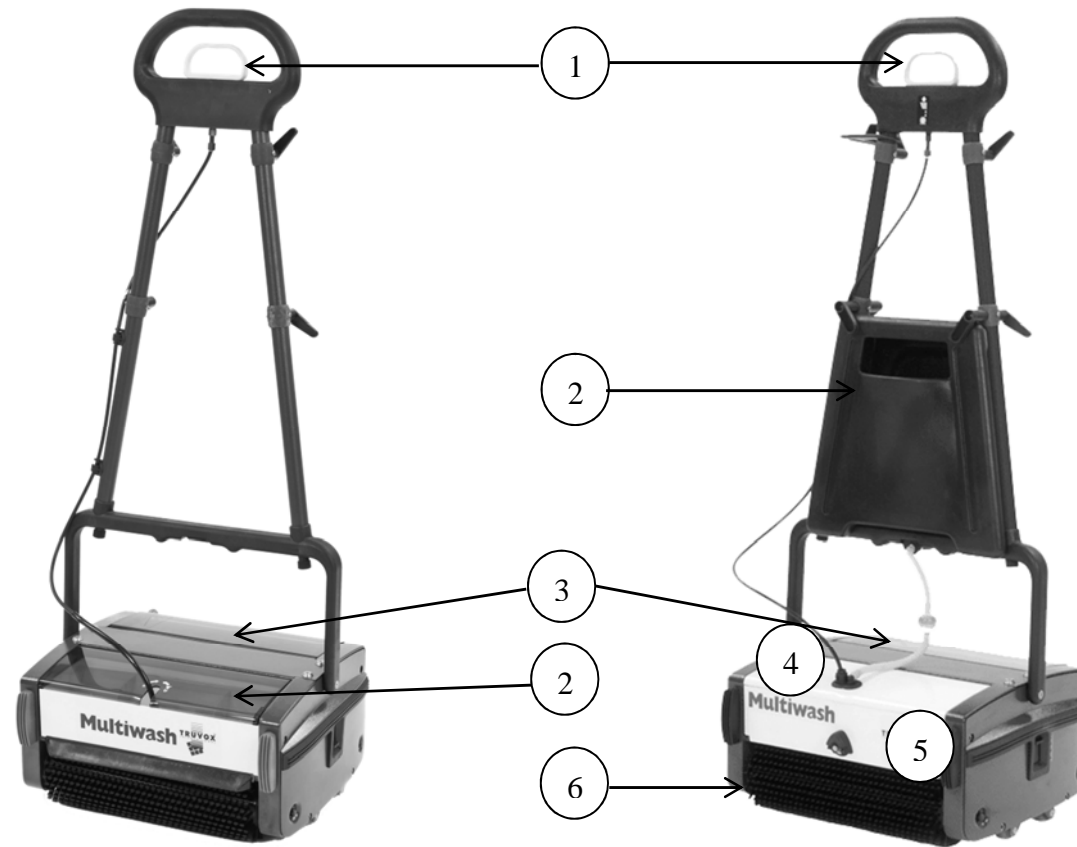
Clemas & Co. Unit 5 Ashchurch Business Centre, Alexandra Way, Tewkesbury,
Gloucestershire, GL20 8NB.

Tel: 01684 850777

Fax: 01684 850707

Email: info@clemas.co.uk

Web: www.clemas.co.uk



IMPORTANT BEFORE USE READ THESE INSTRUCTIONS AND RETAIN FOR FUTURE REFERENCE

Introduction

The following instructions contain important information about the machine and safety advice for the operator. Equipment must be operated, serviced and maintained in accordance with the manufacturer's instructions. If in doubt contact the supplier of your machine.



Read all instructions before using the machine

Product information

The Multiwash floor cleaning machines are designed for use on smooth, even floors in indoor areas. They can be used on most floor surfaces including short-pile carpet, wood, PVC, rubber and stone. They should not be used on rough uneven surfaces. This machine is for indoor use only. The machine is intended for commercial use, for example in hotels, schools, hospitals, factories, shops, offices, rental businesses and other than normal housekeeping purposes.

EC DECLARATION OF CONFORMITY

Machine Type: Floor Cleaning Machine
Model: MW240..., MW340..., MW340/PUMP..., MW440/PUMP...

This machine is in conformity with the following EU directives:

- Machinery Directive: 2006/42/EC
- The EMC Directive: 2004/108/EC

Applied harmonised standards:

EN60335-1, EN60335-2-72, EN55014-1, EN55014-2,
EN61000-3-2, EN61000-3-3, EN62233

Truvox International Limited
Unit C (East), Hamilton Business Park,
Manaton Way, Botley Road,
Hedge End, Southampton,
SO30 2JR, UK

M. Eneas.
Malcolm Eneas
Operations Manager
Southampton, 22/01/2015

Technical Specifications

Model		Multiwash 240	Multiwash 340	Multiwash 340 (Pump)	Multiwash 440 (Pump)
Product Code		MW240	MW340	MW340/PUMP	MW440/PUMP
Voltage AC (~)/ Frequency	V/ Hz	230/ 50	230/ 50	230/ 50	230/ 50
Motor power (+ pump)	W	400	600	600 + 26	1000 + 26
Productivity rate	m²/h	650	930	930	1150
Solution tank capacity	l	1.2	1.7	4	4
Brush width	cm	24	34	34	44
Brush speed	rpm	650	650	650	650
Brush pressure	g/cm²	250	250	250	250
Sound pressure level	dB(A)	68	69	69	71
Dimensions (L x W x H)	cm	37.8 x 34 x 111.8	37.8 x 44 x 111.8	37.8 x 44 x 111.8	37.8 x 54 x 111.8
Weight	kg	20	23	25	28
Cable length	m	12	12	12	12
Warranty	1 year				
<ul style="list-style-type: none">• Noise levels measured at a distance of 1 meter from machine and 1.6 metres above floor, when washing a hard floor. Measurements recorded using a hand held meter.• Handle vibration does not exceed 2.5 m/s², when operating on a smooth hard surface.• Above dimensions are approx. Since the company's policy is to continuously improve the product, there could be changes without prior notice.					

Waste Electrical & Electronic Equipment (WEEE)



Do not dispose of this device with unsorted waste. Improper disposal may be harmful to the environment and human health. Please refer to your local waste authority for information on return and collection systems in your area.

IMPORTANT SAFETY ADVICE

The safety information described in this manual provides basic precautions and supplements standards in force in the country where the machine is used.



This symbol warns the operator of hazards and unsafe practices which could result in severe personal injury or death.



WARNING – to reduce the risk of injury, electric shock or fire.

1. This machine must only be used for the manufacturer's approved application as described in this manual.
2. The machine must be unpacked and assembled in accordance with these instructions before connecting to the electrical supply.

3. Operators must be fully trained in the use of the machine in accordance with these instructions, able to perform regular user maintenance and the correct selection of accessories.
4. Operators should be physically capable to manoeuvre, transport and operate the machines.
5. Operators should be able to recognise unusual operation of the machine and report any problems.
6. Only genuine accessories and spare parts provided with the machine or those approved by the manufacturer should be used. All repairs must be performed by a qualified service agent.
7. Do not use without filters in place.
8. Do not modify the machine from its original design.
9. Only use the machine on firm level surfaces. **DO NOT** use on a gradient of more than 2% slopes.
10. **DO NOT** use on rough uneven surfaces e.g. industrial or coarse concrete surfaces.
11. **DO NOT** use outdoors e.g. on patios, decks or rough surface.
12. **WARNING** Do not fill machines with water hotter than 40°C
13. **DO NOT** use diesel/petrol or corrosive detergents to wash floors, even if diluted.
14. This machine is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the machine by a person responsible for their safety.
15. Keep children and unauthorised persons away from the machine when in use. Do not use as a toy.
16. The machine must be kept clean and in good condition with regular inspections of the battery charging lead and plug for signs of any damage. If any parts are damaged they shall only be replaced by an approved part by the manufacturer, its service agent or a similar qualified person in order to avoid a hazard.



ELECTRICAL HAZARD

17. **CAUTION** - This machine is for dry indoor use only and should not be used or stored outdoors in wet conditions.
18. **DO NOT** use where hazardous dust is present.
19. **DO NOT** use in an explosive atmosphere.
20. **DO NOT** pick up or use near flammable or combustible fluids, hazardous dusts or vapours.
21. **CAUTION** - If it is suspected that there is hazardous dust or flammable materials stop cleaning the area immediately and consult your superior.
22. **DO NOT** use to clean up any burning or lighted materials such as cigarettes, matches, ashes or other combustible objects.
23. Take care when using a machine near the top of stairs to avoid overbalancing.
24. **DO NOT** put any object into openings. **DO NOT** use with any opening blocked; keep free of dust, debris and anything that may reduce airflow.
25. **DO NOT** cover the machine when in use.
26. Keep hair, loose clothing, hands, feet and all other parts of the body away from openings and moving parts.
27. **DO NOT** use if it has been damaged, left outdoors or dropped in water.
28. **DO NOT** run the machine dry, as this could damage the floor surface or the machine itself.
29. Never use excessive foaming or highly corrosive cleaning solutions.
30. Do not operate the machine with a damaged supply lead or plug, or after the machine malfunctions or is damaged in any way. Contact an authorised Service Agent for repair or adjustment.
31. Only replace the supply cord with the type specified in the instruction manual.

32. This machine should always be connected to a fully earthed power supply of the right voltage and frequency.
33. **DO NOT** leave machine running unattended.
34. Do not leave the machine connected to the electricity supply when not in use, always remove the plug from the socket-outlet.
35. Switch off the machine before removing the plug.
36. When unplugging, pull the plug, not the supply cord.
37. The machine shall be disconnected from its power source when not in use and before commencing cleaning of the machine or maintenance and when replacing parts or accessories, by removing the plug from the socket-outlet.
38. **DO NOT** pull or carry by the supply cord. **DO NOT** use cord as a handle, close door on cord or pull cord around sharp edges or corners.
39. **WARNING:** Keep the supply cord clear of moving parts.
40. **DO NOT** kink or twist the supply cord and keep cord away from heated surfaces.
41. **DO NOT** operate switches or touch the mains plug with wet hands as this may cause electric shock.
42. The power supply cord plus any extension leads should not exceed 30 metres in total. The cross section of an extension cable wiring must be at least 2.5mm².

CONTROLS ON THE MACHINE

The operating controls are located on the handle and on the side of the machine. Please refer to page 1.

1. Solution discharge handle	6. Main brush
2. Solution tank	7. Motor overload button
3. Recovery tank	8. Pedal
4. Lid cap	9. Transport/working mode
5. Nozzle	10. Brush pressure

Transporting the machine

Incorrect lifting techniques may result in personal injury. We advise that the manual handling regulations are followed. Do not expose the machine to rain or moisture.

When transporting the machine ensure that all components, tanks and removable parts are securely fastened, and that the supply cord and plug are not trailing.

When transporting the machine the handle should be locked in the upright position.

Take extreme care when moving the machine up or down steps or stairs.

Brush Identification

Red, Blue, White and Yellow brush buttons are packed with the machine. Simply plug the buttons into the hole in the brush as shown. Clear identification, by colour coding, helps prevent cross contamination.

Storage

- Always switch off, empty, wipe down and dry the machine after use.
- Both the solution and recovery tanks should be emptied and flushed out with clean water to ensure the seals and pumps are free from any cleaning detergents.
- Wrap the supply cord around the cable winder ensuring that the plug is not trailing on the floor.
- Store the machine in a dry indoor area only.

Maintenance



WARNING - Before undertaking maintenance operations or adjustments switch off machine and unplug from the electricity supply.

IMPORTANT – All other servicing and repairs should only be performed by a Truvox engineer or Authorised Service Agent. **IMPORTANT** – Should the machine fail to operate please refer to the fault diagnosis section in the back of this instruction manual. If the problem / remedy is not listed

please contact Truvox Customer Service Department for rapid attention.

The machine requires minimum maintenance apart from the following checks by the operator prior to use:

- **DO NOT** use aggressive detergents, acid, lye etc. during cleaning and washing and take particular care with electrical parts.
- **Supply cord** - Regularly inspect sheath, plug and cord anchorage for damage or loose connection. Only replace the supply cord with the type specified in these instructions.
- **Brushes** - For maximum life, wash the brushes regularly. Ensure machine is in Transport mode when not in use. Store additional brushes in a vertical position to avoid bending of bristles. Check for permanent bending of bristles in a particular direction. This may occur if the machine is operated for several days without removing the brushes, which is not recommended. If this occurs, reverse the brush so that the bent bristles are automatically straightened.
- **Wiper Blade** - After years of use the wiper blade may wear. If this occurs the water collection performance will decrease. It should be replaced by an authorised service agent.
- **Solution tank filter (Standard)** - The filter prevents clogging of the drip holes in the tank. Periodically clean the filter to ensure uniform discharge of liquid. In case of non-uniform discharge from the drip holes, back flush the tank in running water. Clean the drip holes using wire or a blunt pin.
- **Solution feed filter (Pump)** - The filter prevents clogging of the spray nozzle and should be periodically cleaned. Use pressurised air/water for cleaning.
- **Nozzle maintenance (Pump)** - If the spray of the nozzle becomes blocked, slide the nozzle cover off and remove nozzle wash in clean water and clean using a pin and refit.

After sales service

Truvox machines are high quality machines that have been tested for safety by authorised technicians. It is always apparent that after longer working periods, electrical and mechanical components will show signs of wear and tear or ageing. To maintain operational safety and reliability the following service interval has been defined: Every year or after 250 hours. Under extreme or specialised conditions and/or insufficient maintenance, shorter maintenance

intervals are necessary. Use only original Truvox spare parts. Use of other spare parts will invalidate all warranty and liability claims. Should you require after sales service please contact the supplier from whom you purchased the machine, who will arrange service. Repairs and servicing of Truvox products should only be performed by trained staff. Improper repairs can cause considerable danger to the user.

Guarantee

Your product is guaranteed for one year from the date of original purchase, or hire purchase, against defects in materials or workmanship during manufacture. Within the guarantee period we undertake at our discretion, to repair or replace free of charge to the purchaser, any part found to be defective, subject to the following conditions:

CONDITIONS

1. Claims made under the terms of the guarantee must be supported by the original invoice/bill of sale issued at the time of sale, or the machine Serial No.
2. For claims under this guarantee contact the supplier from whom you purchased the product who will arrange the appropriate action. Do not initially return the product as this could result in transit damage.
3. Neither Truvox nor its distributor shall be liable for any incidental or consequential loss.
4. This guarantee is governed by the laws of England.
5. This guarantee does not cover any of the following:
 - Periodic maintenance, and repair or replacement of parts due to normal wear and tear.
 - Damage caused by accident, misuse or neglect, or the fitting of other than genuine Truvox parts.
 - Defects in other than genuine Truvox parts, or repairs, modifications or adjustments performed by other than a Truvox service engineer or authorised service agent.
 - Costs and risks of transport relating directly or indirectly to the guarantee of this product.
 - Consumable items such as, brushes, drive discs, filters and vacuum skirts.

This guarantee does not affect your statutory rights, or your rights against the supplier arising from their sales or purchase contract. Truvox International Limited policy is one of continual product development and we reserve the right to alter specifications without prior notice.

Recommended Spares & Accessories

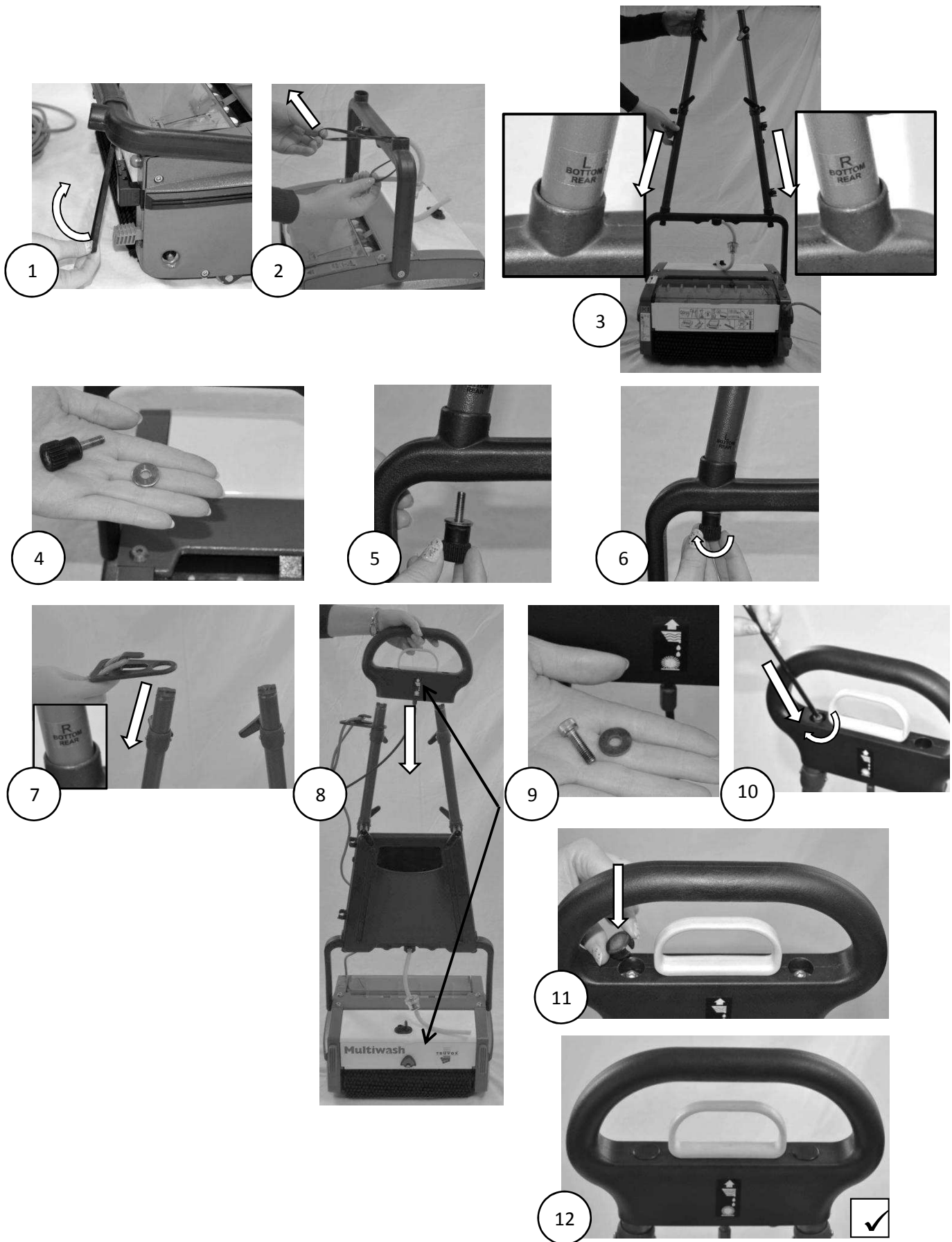
Item	MW240	MW340	MW340/Pump	MW440/Pump	Usage
Standard brush – black (2 required)	90-0127-0000	90-0130-0000	90-0130-0000	90-0387-0000	All natural stone floors, ceramic, mosaic, wood, profiled rubber, vinyl, PVC (First time cleaning); smooth concrete
Soft brush – grey (2 required)	90-0133-0000	90-0131-0000	90-0131-0000	90-0388-0000	All natural stone floors, ceramic, mosaic, wood, profiled rubber, vinyl, PVC (Maintenance cleaning); short pile carpet, marble granite
Side brush – black (1 required)	90-0134-0000	90-0132-0000	90-0132-0000	90-0385-0000	For up-to-the-edge cleaning
Hard brush – blue (2 required)	-	90-0089-0000	90-0089-0000	-	To suit individual floor conditions, smooth concrete
Escalator brush – blue (2 required)	-	90-0090-0000	90-0090-0000	90-0469-0000	For use on escalators
4 litre tank	-	-	90-0307-0000	90-0103-0000	
Trolley (for all models)	05-3395-0500				For easier transport

Fault diagnosis

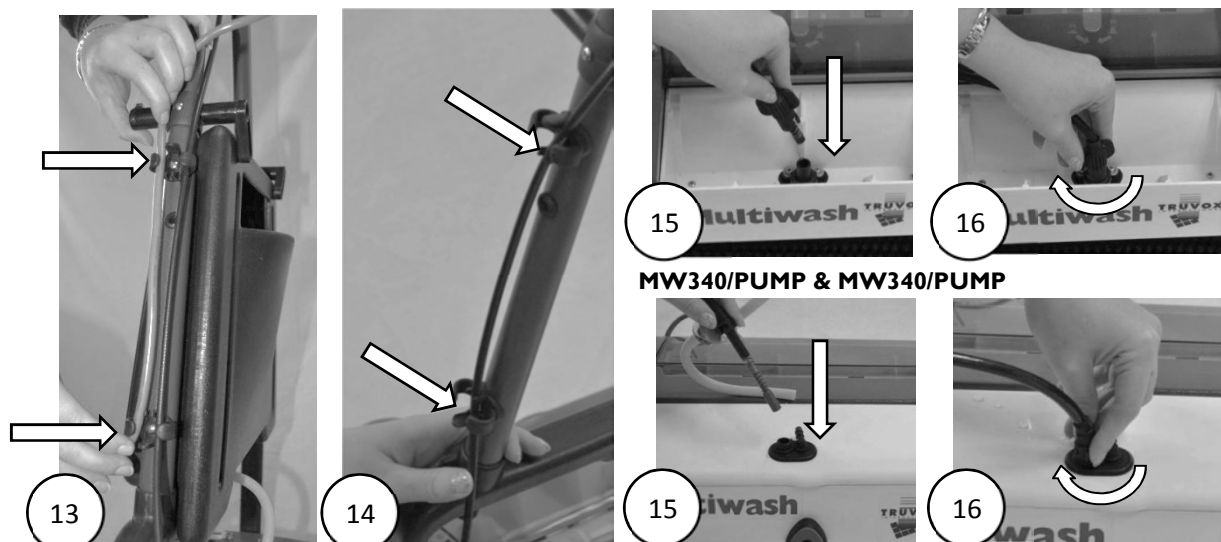
The following simple checks may be performed by the operator:

Trouble	Reason	Remedy
Machine fails to start – no power	<ul style="list-style-type: none"> • Transport working knob is in bottom position • Motor overload protector has tripped • Micro switches are faulty open circuit 	<ul style="list-style-type: none"> • Change to operating position (Fig 3) • Reset the protector button after a minimum of 30 seconds from tripping by pressing the over load protector manually and continue working (7 on page 2) • Check mains cable • Check plug top fuse
Machine fails to pick up water from the floor	<ul style="list-style-type: none"> • Worn brushes • Damaged lip on recovery tank • Broken lugs on recovery tank • Drum not revolving • Bridge fitted wrong way on machine or springs broken 	<ul style="list-style-type: none"> • Replace brush, lip, lugs or springs • Fit bridge the correct way
Machine fails to spray solution onto the floor (MW340/Pump & MW440/Pump only)	<ul style="list-style-type: none"> • Blocked jet • Blocked inline filter • Faulty pump • Blocked filter or faulty valve in solution tank • Faulty pump micro switches • Damaged or broken pull cable 	<ul style="list-style-type: none"> • Clean jet or inline filter
Machine only sprays when handle in upright position	<ul style="list-style-type: none"> • Loose lower handle bolts 	<ul style="list-style-type: none"> • Tighten lower handle bolts
Drum is turning, but brushes are not	<ul style="list-style-type: none"> • If one or both brushes are not turning, stripped gears in gear box 	
Machine fails to let solution onto the floor (MW240 & MW340 only)	<ul style="list-style-type: none"> • Damaged or broken pull cable • Adjustment on pull cable • Dirty filter in clean water tank • Blocked holes in outlet channel 	<ul style="list-style-type: none"> • Empty clean water tank and fill up with clean water • Clean holes
Drum not turning	<ul style="list-style-type: none"> • Plastic gear inside rim of drum sheared • Drum sprocket bearing seized • Build up of dirty hair etc. around bridge springs • Plastic gears in gear box stripped • Drum rubber sleeve loose on drum 	<ul style="list-style-type: none"> • Clean drum and bearings and remove dirt and build up
Motor makes a humming noise but does not turn	<ul style="list-style-type: none"> • Motor capacitor faulty • Motor seized up • Faulty motor windings 	<ul style="list-style-type: none"> • Contact service agent

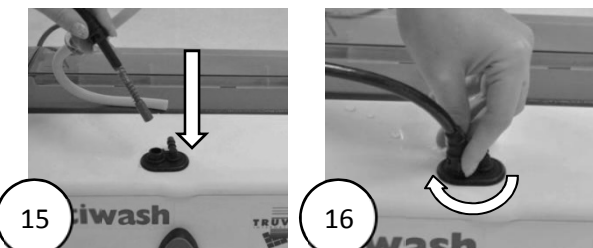
* If the fuse blows several times, the machine should be checked by an authorised Service Agent



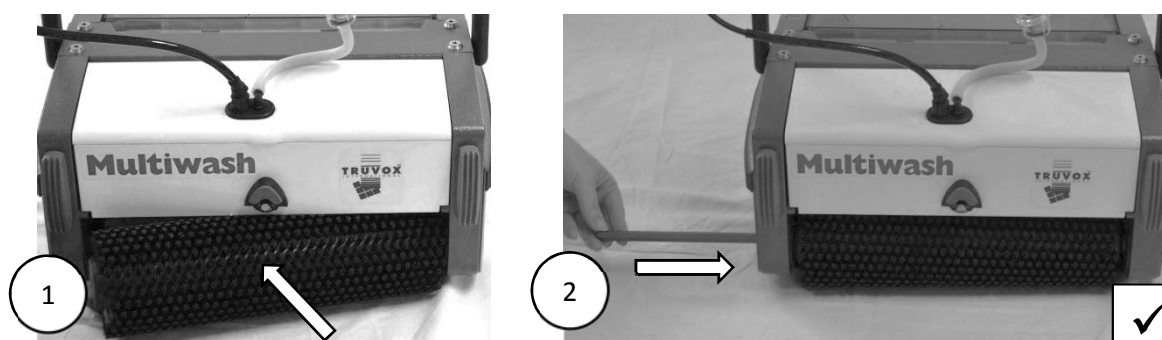
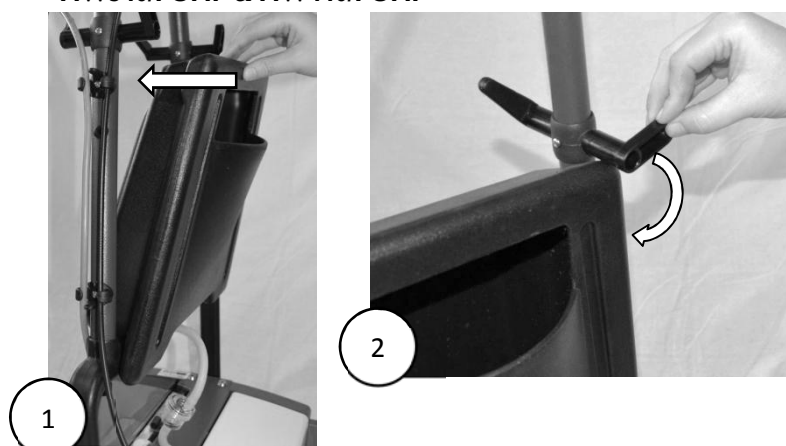
MW240 & MW340



MW340/PUMP & MW340/PUMP

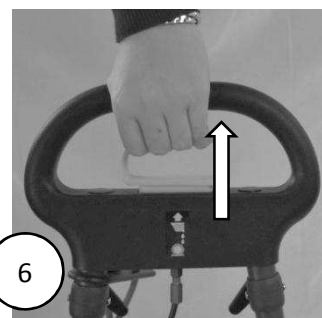
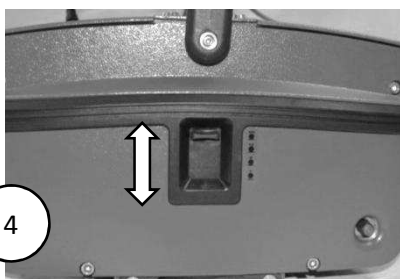
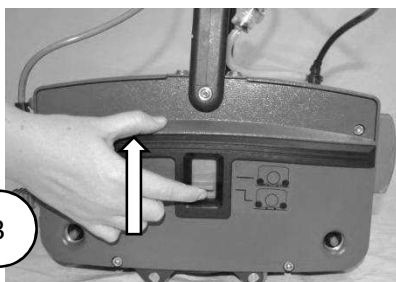
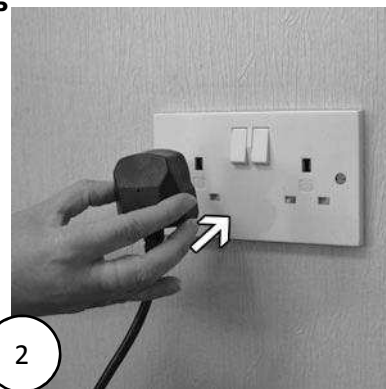
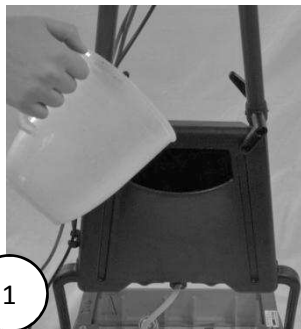


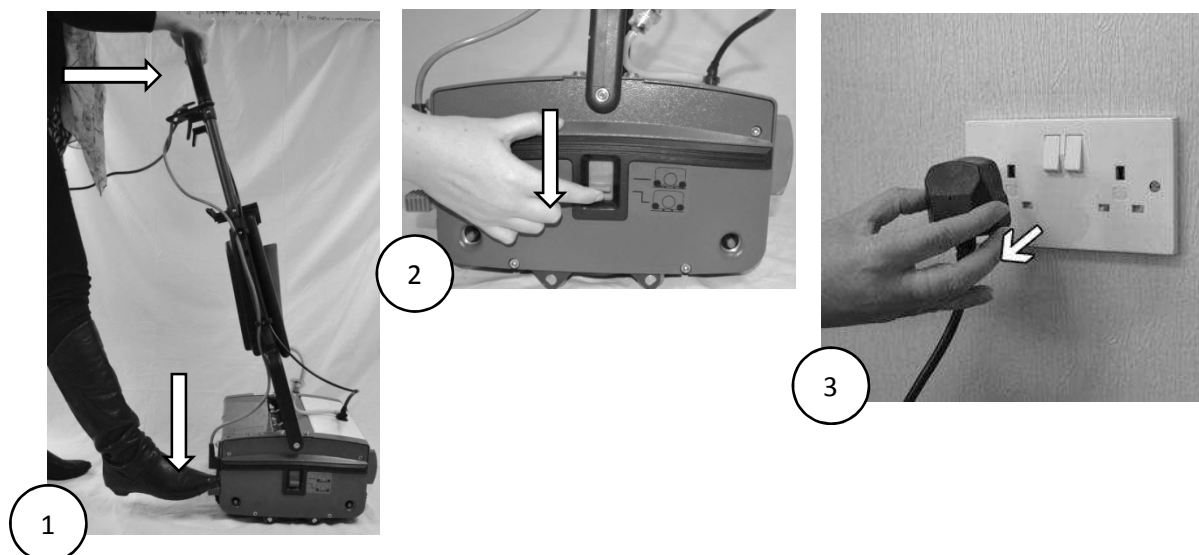
MW340/PUMP & MW440/PUMP



MW240 & MW340

MW340/PUMP & MW340/PUMP





MW240 & MW340

MW340/PUMP & MW440/PUMP

