

CAUTION – READ THESE INSTRUCTIONS BEFORE USING THE MACHINE

User instructions

**Orbis – OB38200, OB38400, OB45200,
OB45400, OB50200, OB50400,
OBLP452/400**

Rotary floor cleaning machines



Contents

Diagrams	4
1 Product Information.....	5
1.1 Important Safety Advice	5
1.2 Guidelines for the operator.....	5
1.3 Transporting the machine	6
1.4 Symbols & Markings	6
2 Preparing for use	6
2.1 Electrical connection	6
3 Preparing for use	7
3.1 Fitting the handle	7
4 Controls.....	7
5 Fitting a brush or drive disc and pads.....	7
6 Adjusting the handle height.....	7
7 Operation.....	7
7.1 Starting the machine.....	7
7.2 Polishing.....	8
7.3 Scrubbing and Shampooing.....	8
7.4 Fitting the solution tank.....	8
7.5 Removing the solution tank.....	8
7.6 The vacuum unit	8
7.7 Fitting the vacuum skirt	8
7.8 Fitting the vacuum unit.....	9
7.9 Using the vacuum unit	9
8 Storage.....	9
9 Maintenance.....	9
10 After Sales Service	9
11 Guarantee	10
12 Waste Electrical & Electronic Equipment (WEEE)	10
13 Technical specification.....	11
14 Accessories	12
15 Fault diagnosis.....	12
16 Declaration of Conformity.....	14

Diagrams

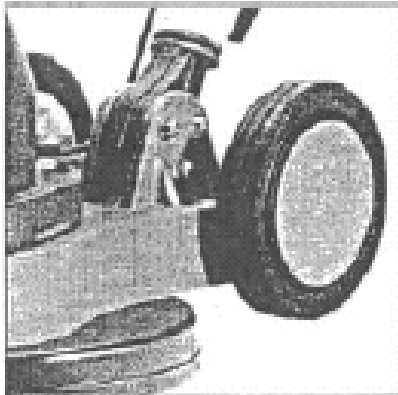


Fig. 1

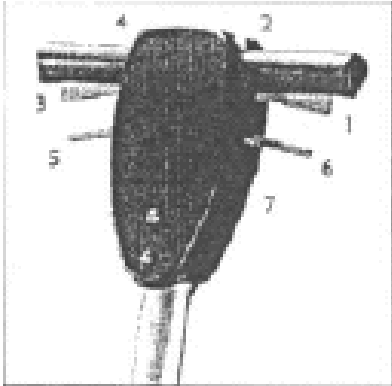


Fig. 2

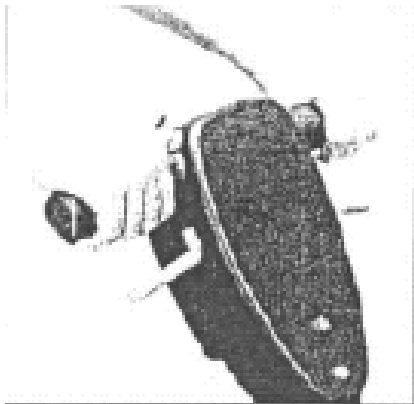


Fig. 3



Fig. 4



Fig. 5

IMPORTANT
BEFORE USE READ THESE INSTRUCTIONS AND RETAIN FOR FUTURE REFERENCE

1 Product Information

These commercial floor treatment machines are designed for the scrubbing and polishing or hard floors and/or shampooing of carpets in indoor areas.

This machine must only be used for the manufacturer's approved application. **Do not use** the machine where it is suspected that the carpet, floor or upholstery contains health endangering dust or debris such as asbestos or chemical waste. If this is suspected **do not proceed**, contact your supervisor, supplier or Truvox International for advice.

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.**

NOTE - To protect the machine from possible damage during transit, the machine base and handle are packed separately. Ensure that both items are present and follow the simple assembly instructions to bring the machine into service.

These instructions are valid for the following models:

**OB38200, OB38400, OB45200, OB45400,
OB50200, OB50400, OBLP452/400**

1.1 Important Safety Advice

When using electrical equipment basic safety precautions should be followed including the following.

- Read all instructions carefully before use.
- This appliance is suitable for commercial use, for example in hotels, schools, hospitals, factories, shops, offices, rental businesses and other than normal housekeeping purposes.
- 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.
- Keep children and unauthorised persons away from the machine when in use.
- Before using the appliance, check that the mains power voltage corresponds with the voltage shown on the rating plate.
- All parts are to be positioned as indicated in the instructions before using the machine.

- Do not operate the machine if it malfunctions or is damaged in any way. Contact an authorised service agent for repair or adjustment.
- Do not operate switches or touch the mains plug with wet hands as this may cause electric shock.
- When unplugging pull the plug, not the supply cord.
- Do not pull or carry by cord, use cord as a handle, close a door on cord, or pull around sharp edges or corners.
- Keep hair, loose clothing, fingers and all parts of body away from openings and moving parts.
- Keep cord away from heated surfaces.
- Do not use where hazardous dust is present.
- Do not use in an explosive atmosphere.
- Do not pick up oil or other flammable material.
- Do not use to pick up moisture or any liquids.
- Do not leave the machine connected to the electricity supply when not in use, always remove the plug from the socket-outlet.
- Switch off the machine before removing the plug.
- The power supply cord must be regularly inspected for signs of damage. If the power supply cord is damaged, it shall only be replaced by the manufacturer, its service agent or a similar qualified person in order to avoid a hazard.
- Only replace the supply cord with the type specified in the instruction manual.
- Do not operate the machine with a damaged supply cord or plug, or after the machine malfunctions or is damaged in any way. Contact an authorised Service Agent for repair or adjustment.
- The plug of the power supply cord must be removed from the socket-outlet before commencing cleaning of the machine or undertaking maintenance operations.
- Do not kink or twist the power cord.
- Take care when using a machine near the top of stairs to avoid overbalancing.



WARNING

Keep the power supply cord clear of moving parts and/or rotating brushes. During operation hazard may occur when running the machine over the power supply cord.

1.2 Guidelines for the operator



WARNING

Operators must be fully trained in the use of the machine in accordance with these instructions, able to perform user maintenance and the correct selection of accessories.

- Operators should be physically capable to manoeuvre, transport and operate the machine.
- Operators should be able to recognise unusual operation of the machine and report any problems.
- Only use the machine on firm level surfaces.
- Wear suitable footwear to avoid slipping.
- Wear suitable clothing to keep dry and warm.
- Where possible implement job rotation and adequate rest periods to avoid continuous use of the same muscles.
- Let the machine do the work. Grip the handle as lightly as possible.
- Stand with feet slightly apart to maintain good balance. Avoid twisting the body more than 45 degrees.
- Do not leave machine running unattended
- Do not smoke when using the machine.
- Do not put any objects into openings. Do not use with any opening blocked: keep free of dust, debris, hair, or anything that may reduce air flow.



WARNING This machine is for dry use only.



CAUTION - This machine is for indoor use only and should not be used or stored outdoors or in wet conditions.



CAUTION - If it is suspected that there is hazardous dust or flammable materials stop cleaning the area immediately and consult your superior.



WARNING Only use accessories and spare parts provided with the machine or those approved by the manufacturer. The use of other accessories may impair the safety of the machine.

- Ensure the machine is switched off before adding or changing accessories.

1.3 Transporting the machine



CAUTION – Incorrect lifting techniques may result in personal injury, where applicable do not lift large and heavy machines without assistance. We advise that the manual handling regulations are followed. Please refer to the technical table for details on weight of machine.

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. Detach hose and wand from machine where applicable.

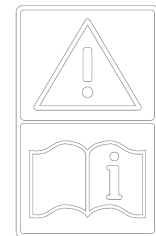
When transporting the machine the handle should be locked in the upright position.

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

1.4 Symbols & Markings



WARNING



WARNING – READ THESE INSTRUCTIONS BEFORE USING MACHINE



Earth symbol

2 Preparing for use

2.1 Electrical connection

Before connecting the machine to the power supply, check that your supply voltage corresponds with that marked on the rating label.

The power supply cord plus any extension leads should not exceed 30m in total, otherwise you may experience problems starting up the machine. The cross-section of any extension cable wiring must be at least 2,5 mm².

Should an extension cord be used, ensure cord rating is adequate for the equipment. Do not use extension cord in coiled condition as this could result in overheating of the cord.

UK only

The supply cord for 230v models is fitted with a plug containing a 13 amp fuse. Should the fuse require replacement it must only be replaced by a 13 amp fuse conforming to BS1362, and the fuse cover must be refitted. If the fuse cover is lost the plug must not be used until the correct replacement cover is fitted.

IMPORTANT - If the supply cord is damaged, it must only be replaced by a special cord available from the manufacturer or an authorised service agent.



WARNING – THIS APPLIANCE MUST BE EARTHED

3 Preparing for use

3.1 Fitting the handle

- 1 Carefully remove the machine base and handle from their respective packaging.
- 2 Check that the following items are present with the base:-
 - M8 x 70 Bolt (3)
 - Nyloc Hex. nut (3)
 - Plain washer (6)
 - 13mm A/F Spanner (2)
- 3 Take handle and check that 'O' rings on either side of the knuckle pivot are seated in their grooves, and that the datum mark on the pivot gear is aligned with the handle tube. If this is not the case, raise the handle adjustment lever and rotate the pivot gear until the datum mark is in line with the handle tube, and release the adjustment lever.
- 4 With the handle held vertically and cable winder to the rear, lower pivot between the raised flanges on the machine base.
- 5 Align holes in pivot with those on base and fit the three M8 bolts, washers and nuts, and tighten using the spanners supplied (Fig.1).
- 6 Connect supply lead from handle to socket on motor housing.

4 Controls

The operating controls for all models are located on the handle (Fig 2).

1 - Switch trigger, left hand

Used to switch motor ON and OFF. Can only be operated with handle in working position, and if left hand interlock button (2) has previously been depressed

2 - Interlock button, left hand

This must be depressed initially to enable left hand switch trigger to switch motor on.

3 - Switch trigger, right hand

Used to switch motor ON and OFF. Can only be operated with handle in working position, and if right hand interlock button (4) has previously been depressed.

4 - Interlock button, right hand

This must be depressed initially to enable right hand switch trigger to switch motor on.

5 - Handle adjustment lever

Used to adjust handle to comfortable working height. **Note:** For safety reasons the machine cannot be operated unless the handle is moved to a working height.

6 - Solution feed lever

Operates flow valve in solution tank (if fitted).

- Pull lever to release solution.
- Release lever to stop flow.

7 - Socket connector

Connection point for vacuum unit lead.

Drive plate

Attachment point for brush or drive disc and pad.

Cable winder

Used to hold supply cord in place on handle when machine is not in use. Can be turned to enable quick release of cord.

Motor overload cut-out

Protects motor from overload and possible damage. The cut-out will reset automatically when cooled sufficiently, enabling the motor to restart.

Neon indicator (on handle)

Lights when the machine is connected to the power supply.

5 Fitting a brush or drive disc and pads



WARNING - This appliance has been designed for use with the pads specified by the manufacturer. The fitting of other pads may affect its performance and safety.

Always ensure machine is unplugged before fitting or removing parts.

- Adjust handle to the fully upright position.
- Pull handle down until it rests on the floor and the brush guard is raised.
- Fit the brush/drive disc onto the drive plate and rotate it anti-clockwise until secure.
- Return machine to upright position.
- **IMPORTANT - Never allow the cleaning head to rest on the brush or drive disc and pad when not in use.**

6 Adjusting the handle height

Select the most comfortable handle height using the adjustment lever as previously described (see **Controls**) and lock in position.

7 Operation

The normal movement of a machine in use is from side to side across the floor. This is achieved automatically by raising or lowering the handle whilst it is engaged in the normal working position.

Lowering the handle thereby increasing the pressure at the rear of the brush/drive disc, moves the machine to the left. Raising the handle increasing the pressure on the front of the brush/drive disc moves the machine to the right.

Effective cleaning and polishing is achieved by moving the machine in a **backwards** direction.

Do not leave the machine standing on a brush or drive disc and pad when not in use.

7.1 Starting the machine

- Fully unwind the supply cord from the handle and plug into a convenient socket outlet. The neon indicator on the handle should light showing that power is available.
- With the handle set at a convenient working height and with both left and right hands on the handle, depress both interlock buttons with the

thumbs and squeeze both switch triggers to start the machine (Fig.3).



WARNING - Never start the machine without pads fitted.

- Once the machine has started the interlock buttons should be released.
- To stop the machine release both switch triggers.

Orbis 452/400 dual speed

The speed selector switch on the dual speed model is located on the motor housing. Ensure machine is switched off before changing the speed setting.

7.2 Polishing

- Fit polishing brush or drive disc and pad suitable for the speed of the machine and the surface to be polished. (see **Accessories**).
- Apply polish to the floor in accordance with the manufacturers instructions.
- **Do not** keep the machine rotating on one spot for more than 3 seconds, as this could cause overheating and damage the floor surface.

7.3 Scrubbing and Shampooing

- For scrubbing or shampooing the solution tank must be fitted as described (see **Fitting the solution tank**).
- Fit a brush or drive disc and pad suitable for the surface to be cleaned. (see **Accessories**).
- **WARNING - This appliance has been designed for use with the brushes specified by the manufacturer. The fitting of other brushes may affect its safety.**
- Fill the solution tank with water and an appropriate measure of detergent.
- **IMPORTANT** - Use only cleaning agents suitable for automatic machines i.e. low foaming, and follow the chemical manufacturers' directions regarding use, handling, disposal and health and safety provisions.
- Before starting the machine release a liberal amount of cleaning solution from the tank to the floor. The flow of solution from the tank is controlled by moving the left hand lever. Releasing the lever stops the flow.
- Proceed to operate the machine in the normal manner, releasing more cleaning solution from time to time as required.
- **Do not** keep the machine rotating on one spot for more than 3 seconds, as this could cause overheating and damage the floor surface.
- Dirty water should not be allowed to accumulate on the floor, it should be removed to prevent dirt from settling. We suggest using a suction dryer for this purpose.
- When scrubbing/shampooing is complete, unplug the machine from the power supply,

empty the solution tank and clean and dry the machine.

- **IMPORTANT** - Dispose of unused cleaning solution in accordance with the manufacturer's directions.

7.4 Fitting the solution tank

NOTE - The solution tank is supplied as an accessory item, complete with attachments and fitting instructions.

- Move the handle to the upright position and clamp the tank support bracket to the handle tube in the specified position (Fig.4). (Refer to the instructions supplied with the tank).
- Take the solution tank and pass the ring on the tank chain over the left hand operating lever and locate the ring in the inside slot on the top of the lever. Rest the solution tank on the support bracket with the handle tube in the groove on the back of the tank.
- To secure the tank in position, engage the locking bar on the back of the tank.
- Adjust the length of the chain by means of the screw and nut adjuster to ensure there is no tension on the chain when the flow control lever is not being used.
- Take the plastic tube supplied and push rigid end of tube into the connector on the underside of the solution tank, and the other end onto the tube at the rear of the motor housing. The tank connector is of the sealed lock-in type once the tube is connected. To release, press down on the orange collar of the connector with the finger tips and pull out tube.

7.5 Removing the solution tank

- Pull off plastic tube from machine base.
- Raise locking bar on back of tank.
- Lift off tank and detach chain ring from lever.

7.6 The vacuum unit

NOTE - The vacuum unit and vacuum skirt are supplied as accessory items, complete with attachments and fitting instructions. The vacuum unit combined with the vacuum skirt provides full dust control, eliminating the need to pre-dust or post dust the floor. The unit is designed to fit readily to all Orbis models.

IMPORTANT - The vacuum unit is NOT suitable for any form of wet cleaning.

7.7 Fitting the vacuum skirt

- Unplug and lay the machine down with the handlebar resting on the floor. Remove the brush or drive disc.
- Stretch and fit the rubber buffer around the brush guard.
- The flexible section of the skirt has a special spring sewn into the fabric. Fit this spring section into the groove in the rubber buffer.

- The spring is a reasonably tight fit to prevent accidental movement in use and therefore must be pulled onto the buffer by stretching.
- With the skirt on the buffer it can be moved in its groove to bring the hose connector to the rear, ensuring the base moulding lies in the cut-out provided in the outer ring of the skirt, enabling free movement when in use (Fig.5).

7.8 Fitting the vacuum unit

- Stand machine upright, and clamp the vacuum unit support bracket to the handle tube in the specified position. (Refer to the instructions supplied with the unit).
- Rest the vacuum unit on the support bracket with the control switch to the rear, and engage the locking bar on the back of the unit to secure it in position.
- Push the flexible hose on to the vacuum unit and skirt.
- Plug the electrical lead from the vacuum unit into the socket situated on the left side of the handle moulding.
- The machine is now ready for use. The switch controlling the vacuum unit is located on the back of the unit. The OFF position is marked O.

7.9 Using the vacuum unit

IMPORTANT - For maximum suction the sliding shutter on the top of the unit must be closed.

- Dust collected by the unit is contained within the filter bag located behind the front cover.
- To replace the filter bag, switch off vacuum unit, release front cover catch and lift off cover.
- Remove and dispose of used bag. Fit new bag and replace front cover.

8 Storage

- Always unplug the machine after use.
- Wrap the supply cord around the handlebar and cable winder ensuring that the plug is not trailing on the floor.
- The machine should normally be stored with the handle in the fully upright position.
- Never store the machine with a brush or drive disc and pad fitted as this causes distortion, and results in instability during operation.
- Store the machine in a dry indoor area only.

9 Maintenance



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

The machine requires minimum maintenance apart from the following checks by a trained operator.

- **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.
- **Solution tank** - Check water flow, if restricted inspect hoses and tubes for blockage or kinks. Dismantle control valve to clean if necessary. Check switch interlock for correct operation.
- **Vacuum unit** - All dust bags must be changed regularly and hoses and connectors checked for blockage to avoid unsatisfactory results.
- **Motor overload cut-out** - All machines are fitted with an automatic reset motor overload cut-out. The cut-out will operate to protect the motor from overheating by switching the machine off when there is excessive friction/resistance to the cleaning head on the floor. This is usually caused by the stickiness of the pad or floor. Turn the cleaning pad over or if both sides are dirty replace with a clean pad. It is not possible to obtain a good finish on the floor using a dirty pad. Should the cut-out operate it will reset automatically when the motor has cooled sufficiently, usually after 15 - 30 mins.

10 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.

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 dangers to the user.

11 Guarantee

Your product is guaranteed for **two** 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 Number.
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 distributors shall be liable for any incidental or consequential loss.
4. This guarantee is governed by the laws of England. This guarantee does not cover any of the following: Periodic maintenance, and repair or replacement of parts due to normal wear and tear.
5. This guarantee is governed by the laws of England. 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 and wear parts such as drive belts.

This guarantee does not affect your statutory rights, nor your rights against the supplier arising from their sales or purchase contract.

12 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.

13 Technical specification

All models : 230-240 V ~ 50 Hz, Class I construction. Enclosure to IPX4. Fitted with 15m supply cord and 13A fused plug.

Model		Orbis 200 38cm OB38200	Orbis 200 43cm OB45200	Orbis 200 50cm OB50200	Orbis 200hd 43cm OB45200/HD	Orbis 400 38cm OB38400	Orbis 400 43cm OB45400	Orbis 400 50cm OB45400	Orbis Duo 43cm OB38200
Voltage AC (~) / Frequency	V / Hz	230 / 50	230 / 50	230 / 50	230 / 50	230 / 50	230 / 50	230 / 50	230 / 50
Pad Diameter	cm	38	43	50	43	38	43	50	43
Height	mm	1150	1210	1210	1210	1210	1210	1210	1210
Pad Pressure	g/cm ²	28	22	18	27	28	22	18	27
Speed	rpm	190	190	190	190	380	380	380	Lo/hi speed
Motor		ac induction							
Motor Rating	W	1100	1100	1100	1100	1100	1100	1100	1100
Cable Length	m	15	15	15	15	15	15	15	15
Weight	kgs	32	32	32	32	40	32	32	40
Noise Level	dB(A)	53	53	53	53	53	53	53	53
Noise level with vacuum	dB(A)	69	69	69	69	69	69	69	69
Handle vibration	m/s ²	< 2,5	< 2,5	< 2,5	< 2,5	< 2,5	< 2,5	< 2,5	< 2,5
Warranty		2 years							

- 1 Noise levels measured at a distance of 0.25 metre from machine and 1.5 metres above floor, when scrubbing a hard floor. Measurements recorded using a hand held meter.
- 2 Handle vibration does not exceed 2,5 m/s², when operating on any surface with brush or pads. Measurements recorded by an independent test laboratory

14 Accessories

Item	Part No.	Usage
Polypropylene scrubbing brush	03-3431-0000	wet scrubbing
Tynex scrubbing brush	03-3432-0000	heavy duty wet scrubbing
Shampoo brush	03-3433-0000	carpet cleaning
Bassine polishing brush	03-3434-0000	polishing and spray cleaning
Gumati polishing brush	05-3435-0000	polishing and spray cleaning
Standard drive disc (see note 1)	05-3436-0000	retains cleaning pads
Flexi-drive disc	05-3437-0000	retains cleaning pads
Solution tank	05-3438-0000	scrubbing/shampooing
Anti-splash water skirt	05-3439-0000	prevents splashing when wet scrubbing
Vacuum unit and hose	05-3440-0000	dust extraction
Vacuum skirt	05-3441-0000	dust extraction
Paper filter bags (10 pack)	02-3526-0000	dust collection

1 - Suitable for 45cm 200 machine only.

IMPORTANT : Genuine accessories are only available from authorised Service Agents or Truvox Customer Services Department

15 Fault diagnosis



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

The following simple checks may be performed by the operator.

Trouble	Reason	Remedy
Machine not working, neon indicator not lit.	Lack of voltage/electrical supply.	Check fuse *, supply cord, plug and socket outlet.
Machine not working, neon indicator lit.	Switch interlock incorrectly operated. Loose overload cut-out operated.	Check operating procedure in instructions. Check brush/pad for good condition Check correct liquid type and quantity. Check liquid dilution. Allow motor to cool.
Machine wobbles or vibrates excessively.	Pad worn or damaged Pad dirty Pad loose	Renew pad Clean the pad Tighten pad lock

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

16 Declaration of Conformity

EC Declaration of Conformity

We, Truvox International Ltd.
of Third Avenue, Millbrook,
Southampton, Hampshire
England
SO15 0LE

declare that the machinery

Make : Rotary floor cleaning machines
Type : Orbis Rotaries
Model : **OB38200...**, **OB38400...**, **OB45200...**, **OB45400...**,
OB50200..., **OB50400...**, **OBLP452/400...**

Serial Number : from 000001
Year of Construction : 2010

has been manufactured using the following transposed harmonised European Standards and technical specifications.

Ref No	Title
2006/42/EC	Machinery Directive and subsequent amendments
2006/95/EC BS EN 60335-1 BS EN 60335-2-67	The Low Voltage Directive and subsequent amendments
2004/108/EC EN61000-3-2 EN61000-3-3 EN55014-1 EN55014-2	The EMC Directive and subsequent amendments

Signed in : SOUTHAMPTON, England

on the 29th day of December 2009

Signature : 

Name : David Overell
Position : Managing Director



Technical file: Orbis 200, 400, Duo Iss. 1
Mark Campbell
Product Support Manager

Authorised dealer:

Truvox International Limited
Third Avenue, Millbrook, Southampton, Hampshire SO15 0LE, England
Tel: +44 (0) 23 8070 2200 Fax: +44 (0) 23 8070 5001
e-mail: truvox@truvox.com Web: www.truvox.com



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