



# Clemas & Co Ltd

Industrial Cleaning Equipment  
Sales - Hire - Service

## ORBIS BATTERY SCRUBBER DRYER OPERATOR MANUAL



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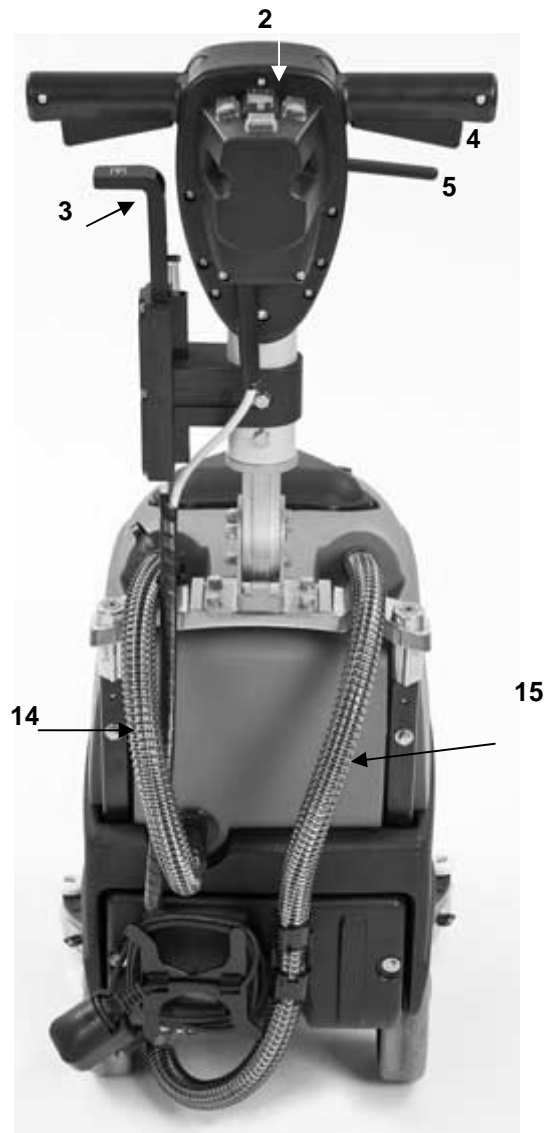
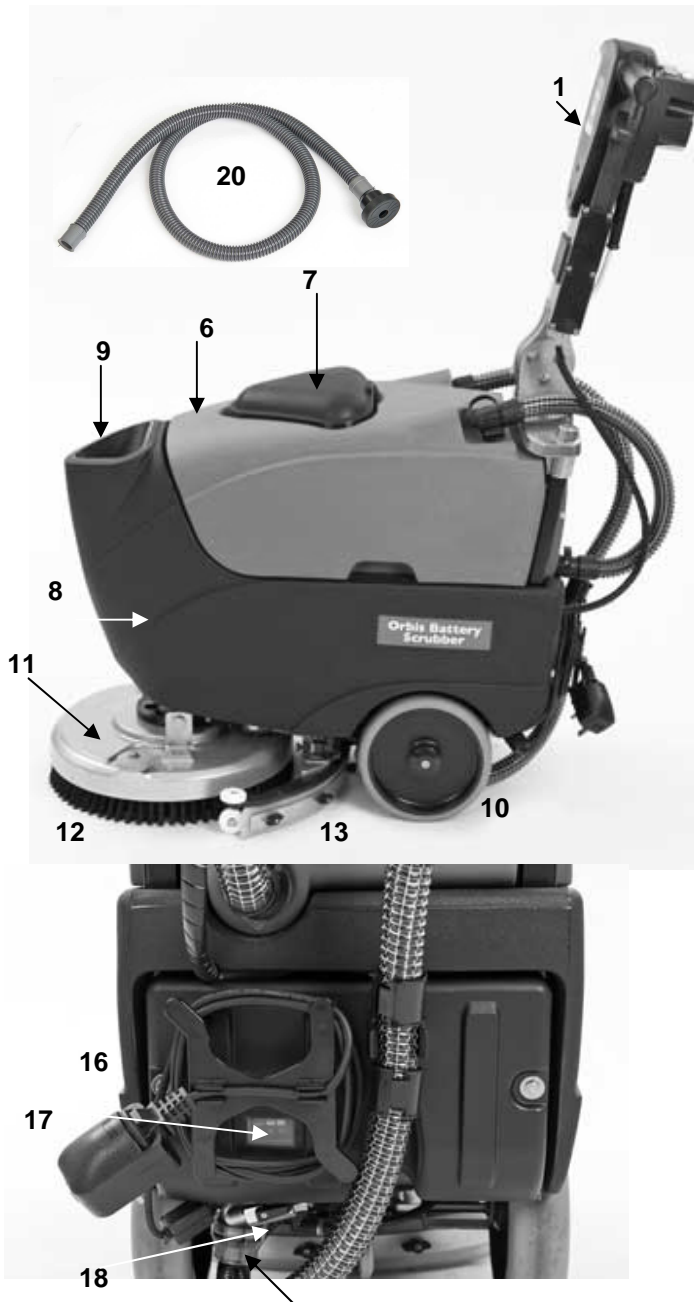
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## Contents

Getting to know the machine .....	4
1 Product Information.....	5
1.1 Important Safety Advice .....	5
1.2 Non intended use of the machine .....	5
1.3 General warnings about batteries .....	6
1.4 Guidelines for the operator.....	6
1.5 Transporting the machine.....	6
1.6 Symbols & Markings.....	6
1.7 Electrical connection .....	6
2 Preparing for use .....	7
2.1 Connecting the batteries .....	7
2.2 Charging the batteries .....	7
2.3 Adjusting the handle height.....	7
2.4 Fitting brushes and pads.....	7
2.5 Filling the solution tank.....	8
3 Controls.....	8
4 Operation .....	9
4.1 Checks before use .....	9
4.2 Preparing the machine and choosing the cycle .....	9
4.3 Using the machine.....	10
5 Warnings while using the machine .....	10
5.1 When cleaning is finished.....	11
5.2 Draining and cleaning the recovery tank.....	11
5.3 Draining and cleaning the solution tank .....	11
5.4 Cleaning the squeegee blades.....	11
6 Storage .....	12
6.1 Prolonged machine standstill .....	12
7 Maintenance .....	12
7.1 Replacing the squeegee rubber blades .....	12
7.2 Squeegee set up .....	12
7.3 Changing the brushes or pad drivers .....	13
7.4 Replacing the fuses .....	13
7.5 Operations to perform weekly .....	13
8 After Sales Service .....	14
9 Guarantee .....	14
10 Waste Electrical & Electronic Equipment (WEEE) .....	14
11 Technical specification.....	15
12 Accessories.....	15
13 Fault diagnosis.....	16
14 Parts Lists & Diagrams .....	18
15 Declaration of Conformity .....	35

## Getting to know the machine



1. Handle
2. Control panel
3. Squeegee lifting lever
4. Lever for starting brush rotation and/or dispensing water
5. Handle adjusting lever
6. Recovery tank
7. Recovery tank lid
8. Solution tank
9. Solution tank filling opening
10. Wheels

11. Brush guard
12. Brush
13. Squeegee
14. Recovery tank drain hose
15. Vacuum hose
16. Battery charger lead
17. Battery charger indicator
18. Water regulation tap
19. Water filter
20. Solution filling hose

**IMPORTANT**  
**BEFORE USE READ THESE INSTRUCTIONS AND RETAIN FOR FUTURE REFERENCE**

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## 1 Product Information

These commercial floor treatment machines are designed for the scrubbing of hard floors in indoor areas.

Maintenance free (gel) batteries must be used which provide up to 80 minutes running time. A battery life indicator allows the operator to assess the degree of battery life available, and an on board battery charger provides convenient charging.

This machine must only be used for the manufacturer's approved application. **Do not use** the machine where it is suspected that the floor surface 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.**

These instructions are valid for the following models:

### Orbis Battery Scrubber – OBS38130...

#### 1.1 Important Safety Advice

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

- Read all instructions carefully before use.
- Please note that the safety information described in the manual supplements and does not replace standards in force in the country in which the machine is used.
- 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 operate the machine when connected to the mains electrical supply.
- The battery charging lead must be regularly inspected for signs of damage. If the lead 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 charge the machine with a damaged battery charging lead 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 charger cable must be removed from the socket-outlet before commencing cleaning of the machine or undertaking maintenance operations.
- When re-charging ensure the area is sufficiently ventilated.
- Take care when using a machine near the top of stairs to avoid overbalancing.

#### 1.2 Non intended use of the machine



##### WARNING

- Washing floors with water which is hotter than 50°C;
- Using diesel/petrol or corrosive detergents to wash floors;
- Washing and vacuuming of corrosive, flammable and/or explosive liquids, even if diluted.

### 1.3 General warnings about batteries



**WARNING** Use appropriate personal protection equipment to avoid contact with the skin (see standards in force in the country in which the machine is used).

- Do not inhale the vapour: it is dangerous.
- It is forbidden to smoke and/or use naked flames within 2 metres of the battery during charging, in the charging area and while the battery is cooling after charging.
- Report any liquid leaking from the battery: leaks are dangerous and highly polluting.



**WARNING** In the event of a fire, use approved powder extinguishers only; do NOT use water to put out the fire.

### 1.4 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, no more than a 2% slope.
- 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.
- 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.
- Keep hands and feet well clear of rotating pads and brushes.



**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.



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

### 1.5 Transporting the machine



**CAUTION - THIS MACHINE IS HEAVY**  
Do not attempt to lift the machine without mechanical assistance.



**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 battery charging lead and plug are not trailing. Detach hose and wand from machine where applicable.

To move the machine to the work area lock handle and tilt backwards to raise the front off the floor, and wheel into position.



**CAUTION** – Bumping over thresholds, kerbs and similar obstacles can damage the machine. Small obstacles can be overcome by pulling the machine backwards.

### 1.6 Symbols & Markings

In order to highlight information and procedures regarding safety, maintenance etc, the following symbols have been adopted in the manual:



**WARNING**



**Earth symbol**

### 1.7 Electrical connection

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

#### **UK only**

The supply cord is fitted with a plug containing a 3 amp fuse. Should the fuse require replacement it must only be replaced by a 3 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 battery charging lead is damaged, it must only be replaced by an approved cord available from the manufacturer or an authorised service agent.

 **WARNING – THIS APPLIANCE MUST BE EARTHED**

## 2 Preparing for use

### 2.1 Connecting the batteries

- Unscrew the bolts that fasten the tank to the handle support (Fig 1).



Fig 1

- Remove the recovery water tank (Fig 2).



Fig 2

- Connect the battery connectors (Fig 3 & 4).



Fig 3

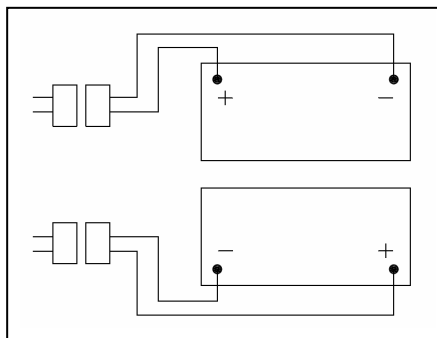


Fig 4

- Replace the recovery water tank and screw into place.



### **WARNING**

Make sure that the mains system is equipped with an RCD (circuit breaker).



### 2.2 Charging the batteries

**WARNING** Charge batteries in a well ventilated area which comply with standards in force in the country of use.

- Move the machine close to a mains electrical socket.
- Unwind the battery charging lead at the rear of the machine and connect to the outlet.



**WARNING** Check that the mains voltage is compatible with the operating voltage of the battery charger (220 – 240V, 50/60Hz).

- Leave the batteries to charge until the “Green” LED comes on, then remove the plug and wind the battery charging lead around the cable holder (Fig 5).

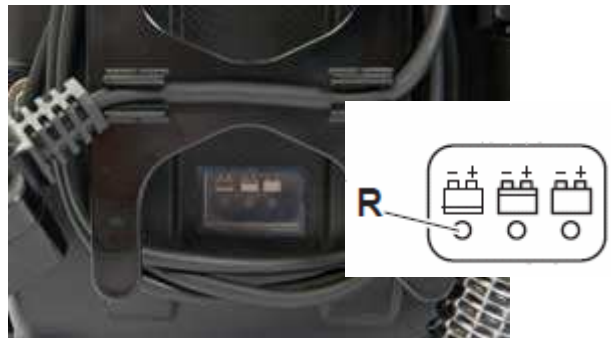


Fig 5

**NOTE:** 10 hours are required for complete battery charge.

- **IMPORTANT** - Opportunity / top up charging will damage the batteries. This will cause run time to fall and overall battery life will be affected. **AVOID TOP UP CHARGING.**

### 2.3 Adjusting the handle height

Select the most comfortable handle height using the adjustment lever on the handle. Release the lever and lock in position.

**NOTE:** By positioning the handle vertically, it is possible to effect a more thorough cleaning of corners by rotating the machine on itself.

### 2.4 Fitting brushes and pads



**WARNING – This appliance has been designed for use with quality brushes and pads only. The fitting of inappropriate brushes and pads may affect its performance and safety.**



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

- Ensure handle is in the upright position and the squeegee is in the up position.
- Position the brush on the ground.
- Lift the front of the machine and remove the polystyrene support.
- Position the brush guard above the brush (Fig 6).



**Fig 6**

- Press the brush motor button (3 in Fig 9), start the rotation of the brush by pressing lever (5 in Fig 10) until hearing the coupling “Click” of the attachment of the brush. Release lever (5) and press the brush motor button (3) off.



**Fig 7**

**IMPORTANT** Never allow the cleaning head to rest on the brush or drive disc and pad when not in use.

### 2.5 Filling the solution tank

**WARNING** Only add clean mains water to the tank at a temperature no greater than 50°.

- Remove the filter from the solution tank opening.
- Connect one end of the filling hose to a tap and insert the other end in the solution tank (Fig 8).



**Fig 8**

- Turn on the tap and fill the tank.
- Pour the liquid detergent into the tank.
- **IMPORTANT** - Only chemicals recommended by the appliance manufacturer should be used, i.e. non foaming, and follow the chemical manufacturer's directions regarding use, handling, disposal and health and safety provisions.



**WARNING** If the detergent comes in contact with the eyes and/or skin or if swallowed, refer to the use and safety information booklet provided by the manufacturer of the detergent.

Once the tank is filled remove the filling hose and insert the filter supplied into the tank.

- The tank capacity is 17 litres. Do not overfill the tank as spillage may occur when in use.
- **IMPORTANT** - When the solution tank has emptied, switch off the machine and empty the recovery tank before refilling the solution tank.

### 3 Controls

The operating controls are located on the handle and indicated in the logos below the switches (Fig 9).



**Fig 9**

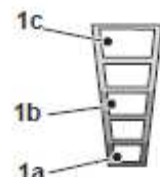


**Fig 10**

#### 1 - LEDs status of battery charge

When the brush button is pressed it is illuminated and indicates the charging status of the battery.

- When LED (1c) is illuminated, it indicates that the battery charge status is at maximum.
- When LED (1b) is illuminated, it indicates that the battery charge status is at about half.



- When LED (1a) is illuminated (red LED) it indicates that the battery charge is at minimum. When the battery is discharged (red LED 1a), the machine turns off or will not start and the red LED "R" (Fig 5 page 8) of the battery charger flashes for a few seconds. At this point the battery requires recharging.

### 2 – Vacuum motor switch

Used to switch motor ON and OFF. Provides suction at the squeegee. Button illuminated when in the on position.

### 3 – Brush motor switch

Used to switch motor ON and OFF. Button illuminated when in the on position.

To start the brush rotating press the lever on the right hand side.

### 4 – Water dispensing button

When button 4 is pressed it illuminates and enables the dispensing of water for scrubbing. The water is controlled by pressing both switch 3 and by pressing lever 5.



Fig 11

### 5 – Brush rotating and/or water dispensing lever

Pressing lever 5 and holding it pressed will start the rotation of the brush and if enabled the dispensing of cleaning solution (Fig 11).

### 6 - Handle adjustment lever

Used to adjust handle to comfortable working height.

## 4 Operation

### 4.1 Checks before use

- Check the status of the battery charge by the indicator (1 in Fig 9).
- Check the drain hose tube of the recovery tank is properly coupled and sealed.
- Check that the squeegee vacuum hose is correctly coupled and inserted in the recovery tank (See Fig 12).



Fig 12

- Check that the connector on the squeegee is not blocked and that the hose is connected correctly (See detailed image 13).

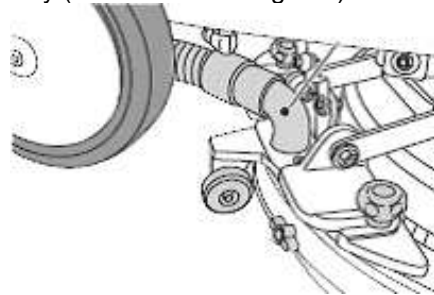


Fig 13

- Check the status of the battery charge by pressing switch 3.
- Check water filter is clean and free of debris (Fig 14).



Fig 14

### 4.2 Preparing the machine and choosing the cycle

- Press the brush motor button, switch 3, the light illuminates.
- Pull the squeegee lifting lever and release it to lower the squeegee to the floor (Fig 15).



Fig 15

The machine can perform 4 working cycles:

- **Drying cycle**

To perform the drying cycle, pull lever 5 to start brush rotation and press button 2 to start the vacuum.

- **Brushing only cycle**

To operate the rotating brush only press lever 5. Releasing the lever stops the brush.

- **Washing, brushing cycle:**

Press button 4 to prepare for the dispensing of solution, then press lever 5 to release solution onto floor.

- **Washing, brushing, drying cycle**

Press button 2 to start the vacuum, button 4 to release solution and press lever 5 to start the cycle.

#### 4.3 Using the machine



**WARNING** Never start the machine without a brush or pad fitted.

With the handle set at a comfortable working height:

- Start the machine and select the type of cycle. Start the cleaning operation by pressing the lever and holding it pressed to start rotation of the brush or pad and the dispensing of cleaning solution, then push the machine in a forwards direction by means of the handles on the handle bar.
- Releasing the lever stops the rotation of the brush and the dispensing of water.



**WARNING** – to avoid damaging the floor do not use the machine in a fixed position with the brush rotation activated.

- **IMPORTANT** – the correct way of cleaning and drying the floor is to move the machine forwards. Moving the machine backwards damages the blades as well as not allowing correct vacuum of the water present on the floor.

- If necessary, adjust the quantity of solution flow using the tap (See fig 16 & 17).



Fig 16 Water regulation tap fully opened



Fig 17 Water regulation tap fully closed



**WARNING** - If foam or liquid is emitted, switch off immediately and empty recovery tank. Liquid emitted could be hazardous as a result of its temperature, or chemical content.

- To STOP the machine, release solution feed levers, switch off brush motor then vacuum motor.
- Proceed to operate the machine in the normal manner, releasing cleaning solution as required.
- For heavy soilage, scrub floor with cleaning solution but with vacuum motor OFF. Scrub floor again picking up the solution with the vacuum motor on.

**IMPORTANT** If it is necessary to replace the brush or pad during cleaning please follow section 2.4.

#### 5 Warnings while using the machine

While using the machine, the occurrence of the following errors is indicated by the illumination of the LEDs (Fig 18).

- Vacuum motor overcurrent error LED 1 is flashing and LED 2 is constantly lit.
- Brush unit outlet overcurrent error LED 1 is flashing and LED 3 is constantly lit.
- Vacuum motor open circuit error LED 1 is flashing and LED 4 is constantly lit.
- Brush unit outlet open circuit error LED 1 is flashing and LED 5 is constantly lit.

**NOTE:** When any of the above mentioned error signals are displayed, it is necessary to turn off the machine and then turn the machine back on again, in order to clear the error and re-set the machine back to normal functioning.

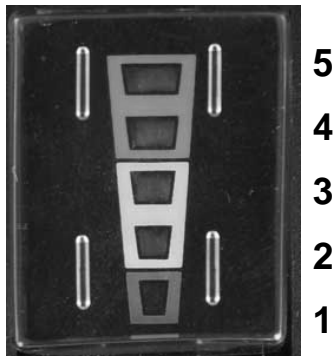


Fig 18

### 5.1 When cleaning is finished

- When cleaning is finished and before turning off the machine, stop the dispensing of solution and the rotation of brushes by releasing levers. Continue with the vacuum on to remove all of the liquid present on the floor, and then turn off the vacuum by pressing button 2.
- Raise the squeegee by pulling the squeegee lifting lever and releasing it. The lever remains in an upper position thus maintaining the squeegee blades in the raised position.

**IMPORTANT** – to prevent the deformation of the squeegee blades always lift up the squeegee at the end of the cleaning cycle.

- Remove brush or pad from machine and wash in warm soapy water.

### 5.2 Draining and cleaning the recovery tank

At the end of the cleaning cycle or when the recovery tank is full, it is necessary to empty the tank by proceeding as follows:

- **IMPORTANT** – To dispose of the recovery water tank, comply with the standards in force in the country in which the machine is being used.
- Position the machine near to a drain outlet.
- Disconnect the drain hose from the support at the rear of the machine.
- Remove the cap from the hose and drain all the water contained in the tank (Fig 19).



Fig 19

**WARNING** at the end of the cleaning operations it is necessary to clean the recovery tank to prevent deposits or scaling and the proliferation of bacteria, odours or mould.

- Remove the cover and clean the inside of the cover and the vacuum safety float with running water.
- Leaving the hose lowered and the cap off, add water through the upper opening, cleaning the inside of the tank until clean water comes out of the drain hose.

- Replace all components in reverse order.

### 5.3 Draining and cleaning the solution tank

**WARNING** – at the end of the cleaning operation, it is necessary to drain and clean the solution tank to prevent deposits or scaling.

After draining the recovery tank, drain the clean water tank as follows:

- Position the machine over a drain outlet.
- Turn the drain connector outwards (Fig 20).



Fig 20

- Push the hose clip inwards and at the same time remove the cap and let all the water drain out.
- Wash the inside of the tank, leaving the drain cap off and flush water through the solution tank filling opening
- After cleaning, replace the cap, pushing inwards.
- **IMPORTANT** – To dispose of unused cleaning solution, comply with the standards in force in the country in which the machine is being used.

### 5.4 Cleaning the squeegee blades

In order to clean the squeegee correctly, it is necessary to remove it as follows (Fig 21):

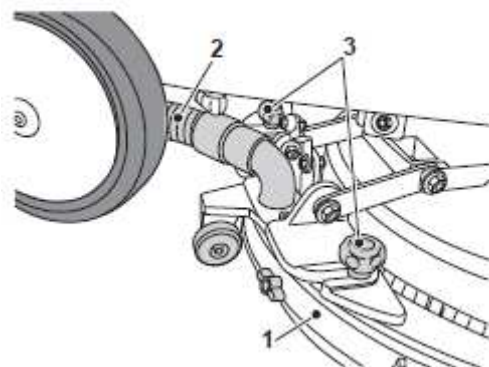


Fig 21

- Pull the squeegee unit outwards (1).
- Disconnect the hose (2) from the squeegee (1).
- Loosen the knobs (3) and remove the squeegee (1).

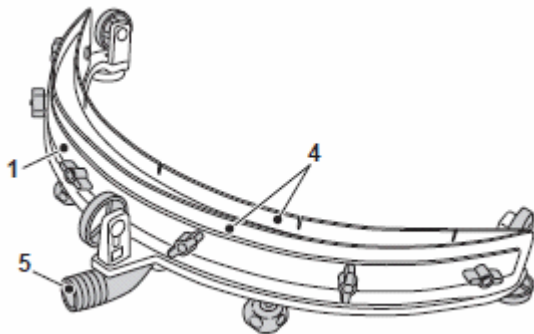


Fig 22

- Wash the squeegee and in particular the rubber blades (4) and the inside of the vacuum hose connector (5) (Fig 22).

**If, during washing, it is clear that the rubber blades are damaged or worn, it is necessary to replace them or turn them over.**

## 6 Storage

- Always switch off, empty, wipe down and dry the machine after use.
- The solution tank and recovery tank should be emptied and flushed out with clean water.
- Wrap the battery charger lead around the cable winder ensuring that the plug is not trailing on the floor.
- When storing the machine for long periods, ensure the brush is removed and the squeegee is in the upright position.
- Store the machine in a dry indoor area only.

### 6.1 Prolonged machine standstill

- Place the machine under cover, sheltered from atmospheric agents in a place where the temperature is between 5°C and +40°C.
- Drain the solution contained in the tank.
- Charge the batteries and, once they are charged, disconnect them from the charger. Refer back to section 2.1 and follow in reverse order.
- Charge the batteries once a month.

## 7 Maintenance



**WARNING - Before undertaking maintenance operations or adjustments switch off machine and unplug from the electricity supply. In addition safely disconnect the non earthed pole of the battery (or by equivalent method).**

- Do not rest tools and metal objects on the batteries; danger of short circuits.
- Do not use aggressive detergents, acid, lye etc. during cleaning and washing and take particular care with electrical parts.
- Do not wash the machine with direct or pressurised jets of water.
- When the machine must be lifted for any maintenance operations, it is necessary to

work safely by placing fixed supports underneath it.

- Contact an authorised service agent for repairs and request ORIGINAL spare parts only.

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

- **Battery charge 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.
- **Recovery tank** - Check condition and clean tank
- **Squeegee blades** - Check condition and replace worn or damaged blades.

### 7.1 Replacing the squeegee rubber blades (Fig 23).

When it becomes clear that drying the floor is difficult or traces of water remain on the floor, it is necessary to check the wear on the squeegee rubber blades (3):

- Remove the squeegee unit (1) as indicated in the "Cleaning the squeegee blades" paragraph.
- Loosen the thumb screws (2) and remove the rubber blades (3).

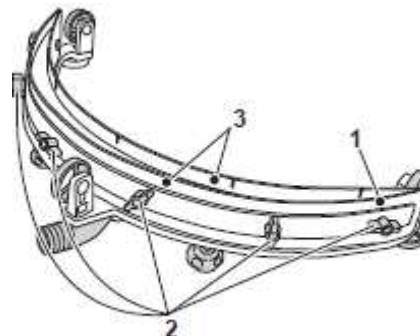


Fig 23

- Replace or turn over the rubber blades (3) without inverting them.
- Replace all the components in reverse order.

#### **N.B.:**

*There are two squeegee blade types available. Para rubber blades for all types of floor and polyurethane rubber blades for mechanical workshop floors which are dirty with oil.*

### 7.2 Squeegee set up

#### (Fig. 24)

- Lower the squeegee using the specific lever.
- Start the vacuum motor and advance for some metres before stopping the vacuum motor and the machine.
- Check for the correct squeegee blade positioning (1) on the floor.

Fig. A = too squatted

Fig. B = too high

Fig. C = correct position.

- Take off the squeegee from the machine

- To set up, loosen the screw (2) of the wheel (3) and move the wheel vertically in the slot; by lifting the wheel, the angle of incidence increases, vice versa it decreases.

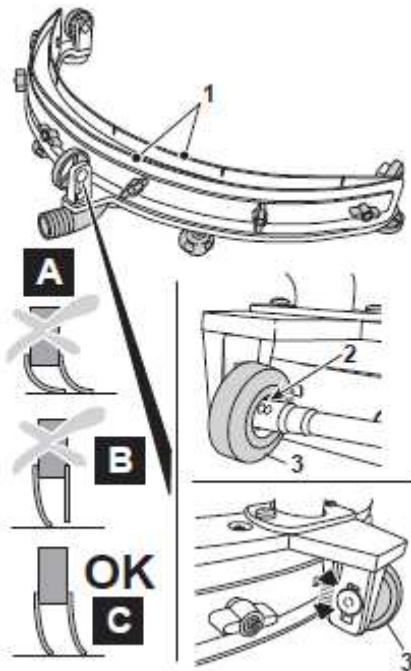


Fig 24

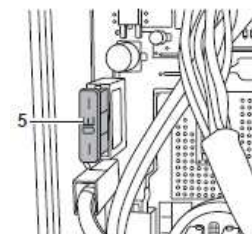
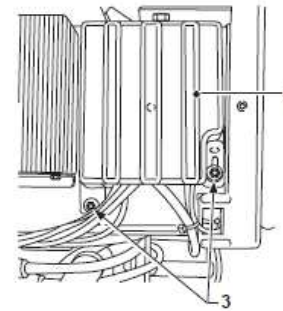
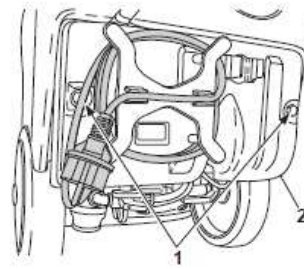


Fig 26

### 7.3 Changing the brushes or pad drivers

- Lift the machine up slightly at the front.
- Press the brush rotation button (3) to enable the rotation of the brush, then press lever (5) and release it; the brush becomes disconnected (Fig 25).



Fig 25

- To replace the brush or pad refer to point 2.4 fitting brushes or pads.

### 7.4 Replacing the fuses (Fig 26)



**WARNING** Replace the blown fuse with one with the same amperage.

- Unscrew the two bolts (1) that fasten the charger cover (2) and remove it.
- Unscrew the two bolts (3) of the printed circuit board cover (4) and remove it.
- Replace fuse (5) Green 30A
- Put the printed circuit board cover (4) and the charger cover (2) into place in reverse order.

### 7.5 Operations to perform weekly

#### Cleaning the clean water filter (Fig. 27)

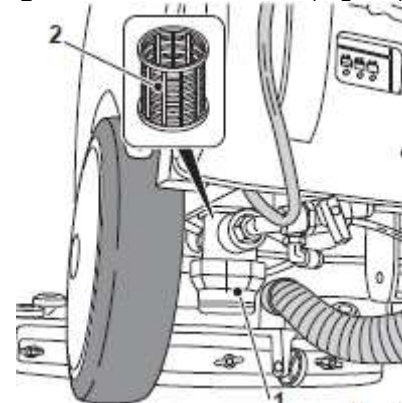


Fig 27

- Ensure that the water regulation tap is fully closed, refer to fig 17.
  - Unscrew the transparent filter cover (1) and remove the filter (2).
  - Clean the filter (2) in running water. If it is blocked, replace it.
  - Replace all the components in reverse order.
- 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 the instruction manual. If the problem / remedy is not listed please contact

Truvox Customer Service Department for rapid attention.

## 8 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.

## 9 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 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.
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 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.

## 10 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

## 11 Technical specification

Class I construction. Enclosure to IPX3.

Model		Orbis Battery Scrubber OBS38130
Charging voltage AC (~) / Frequency	V / Hz	220 – 240 / 50 – 60
Battery voltage DC	V	24
Charge time	hours	10
Run time	minutes	80 minutes
Brush/cleaning width	cm	38
Drying width	cm	45
Brush pressure	g/cm <sup>2</sup>	35
Brush speed	rpm	130
Theoretical hourly working capacity	m <sup>2</sup> /hour	1100
Solution tank capacity	litres	17
Recovery tank capacity	litres	26
Brush motor rating	W	260
Vacuum motor rating	W	250
Air flow rate	l/sec	28
Waterlift	inches	28
Sound pressure level	dB(A)	65
Handle vibration	m/s <sup>2</sup>	<2.5
Size (L x W x H)	cm	90 x 40 x 110
Height (handle folded)	cm	90 x 40 x 75
Weight – with batteries	kg	62
Weight – without batteries	kg	43
Weight – GVW	kg	76
Warranty		1 year

- 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.
- Handle vibration does not exceed 2,5 m/s<sup>2</sup>, when operating on any surface with brush or pads.

Measurements recorded by an independent test laboratory

## 12 Accessories

Item	Part No.	Usage
Standard brush (black)	05-4621-0000	General purpose scrubbing
Soft brush (white)	05-4622-0000	Light scrubbing
Drive board	05-4620-0000	For use with pads
Squeegee front & rear blades PARA (1 pair of blades)	95.0048.00	Wet pick up on all types of floor
Squeegee front & rear blades PARA (5 pairs of blades)	95.0049.00	Wet pick up on all types of floor
Squeegee front & rear blades Anti-oil (1 pair of blades)	95.0050.00	Oil resistant squeegee blades
Squeegee front & rear blades Anti-oil (5 pairs of blades)	95.0051.00	Oil resistant squeegee blades

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

### 13 Fault diagnosis



**WARNING - Before undertaking maintenance operations or adjustments switch off machine and unplug from the electricity supply. In addition safely disconnect the non earthed pole of the battery (or by equivalent method).**

The following simple checks may be performed by the operator.

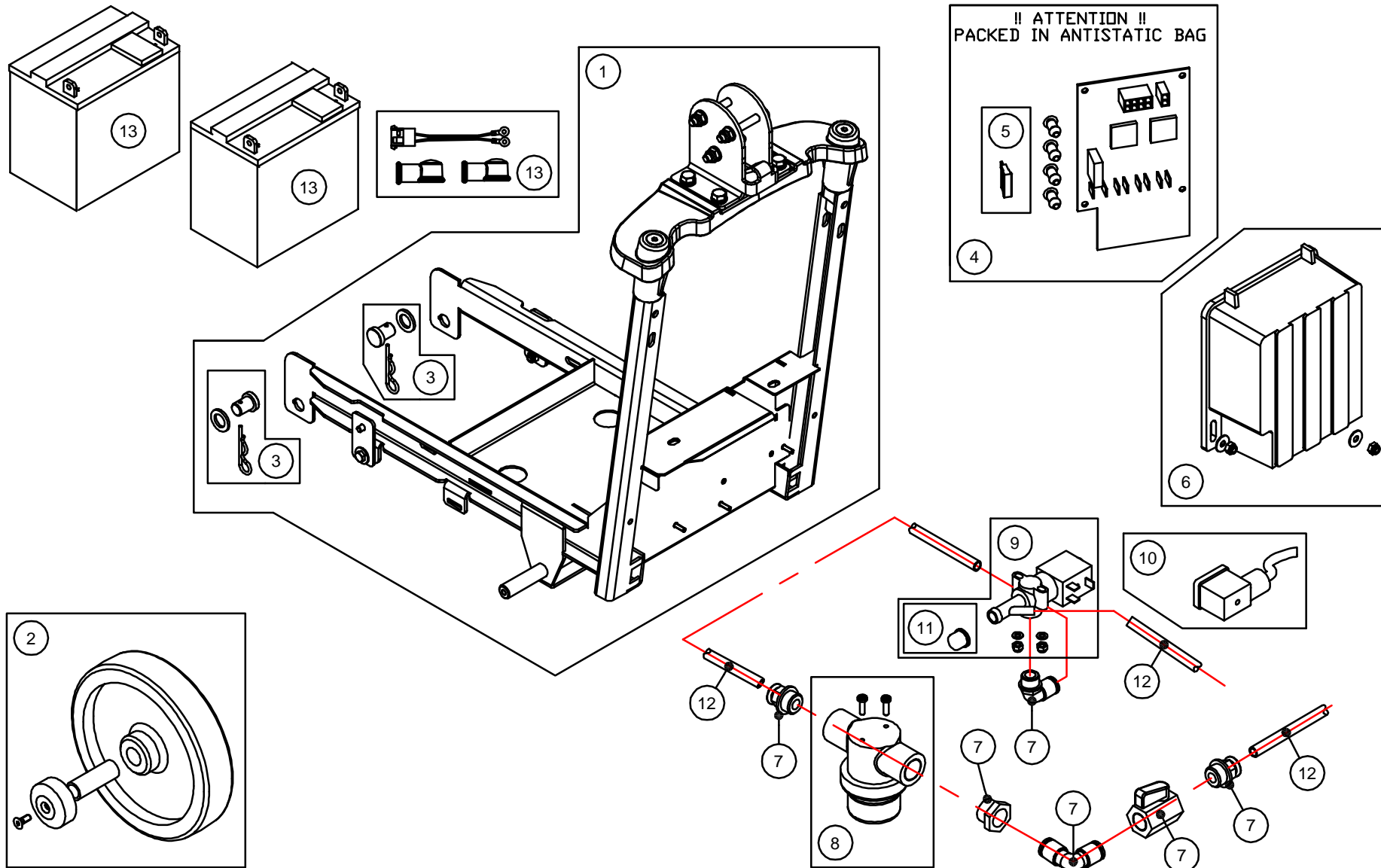
Trouble	Reason	Remedy
The machine does not start up	Low battery Main fuse blown	Check the battery is charged Replace the GREEN 30A main fuse.
The brush does not rotate	Brush unit outlet overcurrent error or brush unit open circuit error Brush rotation button not pressed on handle controls	See paragraph 'Warning signals while using the machine' Press the button
Vacuum does not work	Vacuum motor over current error or vacuum motor circuit error Vacuum button not pressed on handle controls	See paragraph 'Warning signals while using the machine'. Press the button
The machine does not dry well, leaving traces of water	Vacuum off Vacuum tube blocked Squeegee rubbers not correctly set up Recovery tank full Squeegee rubber blades worn	Start the vacuum Check and if necessary clean the vacuum tube that connects the squeegee to the recovery tank. Set up the squeegee rubbers as indicated in paragraph "squeegee set up" Empty the recovery tank Replace or turn over the squeegee blades.
No water comes out	Tank empty Solenoid valve button not pressed on handle controls Water regulation tap turned off Filter blocked Solenoid valve does not work	Fill the tank Press the button Turn on the tap located at the bottom of the machine Clean the filter Call the technical support service
Insufficient floor cleaning	Unsuitable burshes or detergent Brush worn	Use brushes or detergents which are suitable for the type of floor or dirt to be cleaned. Replace the brush.

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



14. Parts Lists & Diagrams

Tacony CFC		Orbis Scrubber Drier		
		Part Reference: CHASSIS ASSEMBLY		
MACHINE:	OBS38130			
REF. DWG. #:	09-1125-0000 SHEET 1			
SERIES:	A			
REVISION	ECN#	DESCRIPTION OF CHANGE	MOD. BY	DATE
1	N/A	ORIGINAL ISSUE		27-09-2010
Drawing Ref. No.	Kit No.	Part Description	Qty	
1	95.0025.00	<b>CHASSIS ASSEMBLY CONSISTING OF:</b>		
		Chassis	1	
		Washer D 6 A2 DIN 127	2	
		Washer D.6X18 A2 DIN9021N	6	
		Nut M 6 A2 DIN 982	2	
		Solution Tank Fixing Plate	2	
		Washer D6 A2 DIN 125A	2	
		Screw M 6X12 A2 DIN 933	2	
		Screw M6X20 A2 DIN 933	2	
		Handle Support	1	
		Handle Support Frame	1	
		Handle Support Fixing Pin	2	
		Screw M8X25 A2 DIN 7991	2	
		Washer D8 A2 DIN 125A	10	
		Washer D8 A2 DIN 127	4	
		Screw M8X16 A2 DIN 933	4	
		Nut M8 A2 DIN 982	3	
Screw M8X60 A2 DIN 933	3			
Screw M6X20 A2 DIN 7991	2			
2	95.0026.00	<b>WHEEL ASSEMBLY (2 KITS PER MACHINE) CONSISTING OF:</b>		
		Wheel Tube	1	
		Wheel	1	
		Screw M6 x 16 A2 DIN 7991	1	
		Ball Bearing Cover	1	
3	95.0027.00	<b>BRUSH COVER FIXING KIT CONSISTING OF:</b>		
		Pin	2	
		Washer D.14XD.20X1 DIN 998	2	
		Split Pin A2,8	2	
4	95.0002.00	<b>ELECTRONIC BOARD CONSISTING OF:</b>		
		Spacer	4	
		Electronic Board ( 1 fuse included )	1	
5	34.0031.00	Fuse 30Amp	1	
6	95.0028.00	<b>ELECTRONIC BOARD COVER ASSEMBLY CONSISTING OF:</b>		
		Nut M4 A2 DIN 982	2	
		Electronic Board Cover	1	
		Washer D4X12 A2	2	
7	95.0029.00	<b>HOSE CONNECTOR KIT CONSISTING OF:</b>		
		Connection Nipple	1	
		Connection Elbow	1	
		Flow Valve	1	
		Connection 1/4" TUBO D. 8 RL1	1	
		Connection D.3/8" TUBO 8 DIRITTO	1	
		Connection 1/4" TUBO D. 8	1	
		Elbow Connector 3/8" D.12	1	
		Hose Connector D.12	1	
		Elbow Connection Tank Drain 3/8" TUBO D. 8	1	
		Elbow Connector 1/4" D.8	1	
8	95.0030.00	<b>SOLUTION FILTER KIT CONSISTING OF:</b>		
		Solution Filter	1	
		Screw TCC M3,5x12 A2 DIN 7982C	2	
9	95.0031.00	<b>SOLENOID VALVE KIT CONSISTING OF:</b>		
		Solenoid Valve EV.2/2NC 1/4" 24VDC D150PS75/3/301	1	
		Washer M4 A2 DIN 125A	2	
		Nut M4 A2 DIN 982	2	
		Cap	1	
10	34.0126.00	SOLENOID VALVE CONNECTOR	1	
11	95.0067.00	CAP	1	
12	95.0061.00	<b>SOLUTION HOSE KIT CONSISTING OF:</b>		
		Solution Hose L=360	1	
		Solution Hose L=400	1	
		Solution Hose L=560	1	
13	04-3918-0000	GEL BATTERY 12V 25Ah	1	
14	95.0069.00	<b>BATTERY CONNECTION CABLE KIT CONSISTING OF:</b>		
		Cover	4	
		Battery Connection Cable	2	



**Tacony CFC**

ORBIS BATTERY SCRUBBER DRIER

DRAWING NO: 09-1125-0000 SHEET 1 - CHASSIS ASSEMBLY

MACHINE:	OBS38130		
REF. PARTS LIST:	OBS38130 ISSUE 1		
SERIES:	A		
REVISION	ECN #	DESCRIPTION OF CHANGE	MOD. BY
A	-	ORIGINAL ISSUE	-
			DATE
			27 SEPT 10

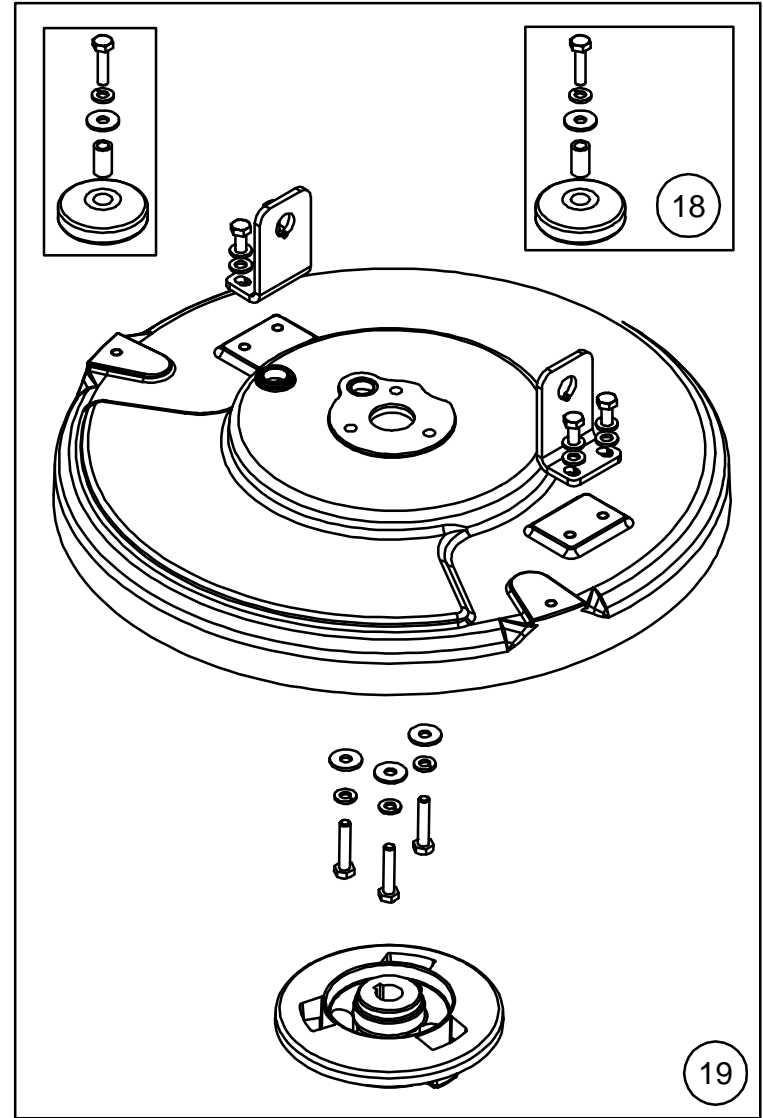
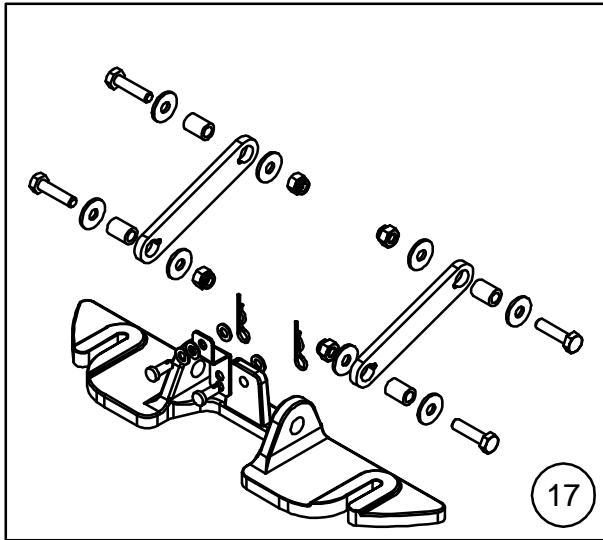
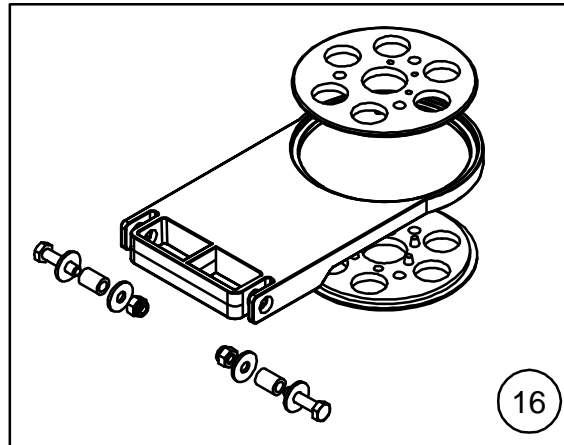
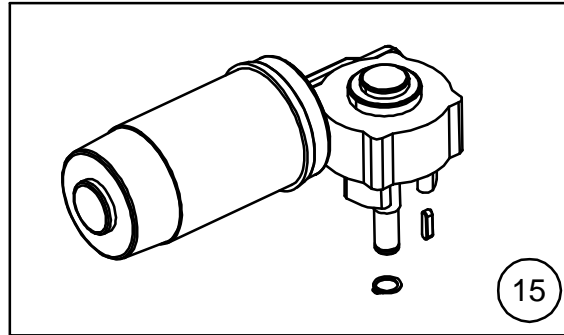
MACHINE: OBS38130

REF. DWG. #: 09-1125-0000 SHEET 2

SERIES: A

REVISION	ECN#	DESCRIPTION OF CHANGE	MOD. BY	DATE
1	N/A	ORIGINAL ISSUE		27-09-2010

Drawing Ref. No.	Kit No.	Part Description	Qty
15	95.0032.00	<b>BRUSH MOTOR KIT CONSISTING OF:</b>	
		Brush Motor 250W 24V + CONNETTORE IP44	1
		Shaft Key 5X5X20 UNI 6604 A2	1
		Circlip UNI 7435 D.15 E A2	1
16	95.0033.00	<b>FULCRUM ARM ASSEMBLY CONSISTING OF:</b>	
		Fulcrum	2
		Fulcrum Arm Bracket	1
		Washer D.6X18 A2 DIN9021N	4
		Screw M 6X25 A2 DIN 933	2
		Bush	2
		Nut M6 A2 DIN 982	2
17	95.0034.00	<b>SQUEEGEE SUPPORT ASSEMBLY CONSISTING OF:</b>	
		Washer D.6X18 A2 DIN9021N	8
		Screw M 6X25 A2 DIN 933	5
		Washer D6 A2 DIN 125A	2
		Fulcrum Arm Bar	2
		Squeegee Support	1
		Bush	4
		Nut M6 A2 DIN 982	5
		Connection to squeegee lift cable	1
		Coupling	2
		Washer D5 A2 DIN 125A	4
		Spring split pin	2
		18	95.0035.00
Washer D.6X18 A2 DIN9021N	2		
Washer D 6 A2 DIN 127	2		
Bumper Spacer	2		
Bumper	2		
19	95.0036.00	<b>BRUSH COVER ASSEMBLY (MALISH CLUTCH) CONSISTING OF:</b>	
		Brush Cover	1
		Washer D.6X18 A2 DIN9021N	3
		Washer D 6 A2 DIN 127	7
		Screw M 6X30 A2 DIN 933	3
		Brush Cover Angle Bracket	2
		Washer D6 A2 DIN 125A	4
		Malish Clutch	1
Screw M 6X16 A2 DIN 933	4		



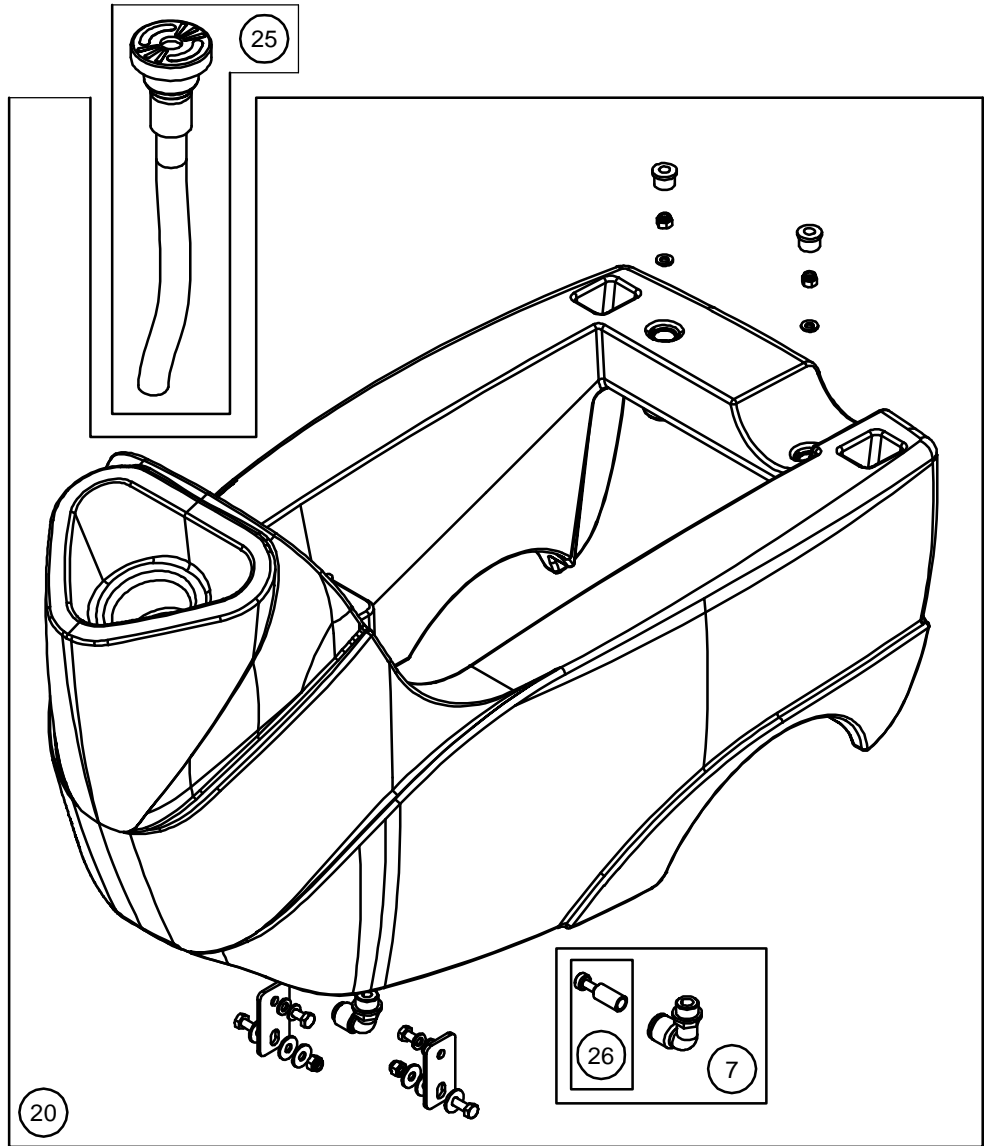
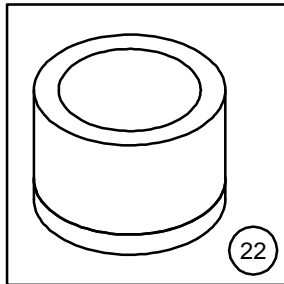
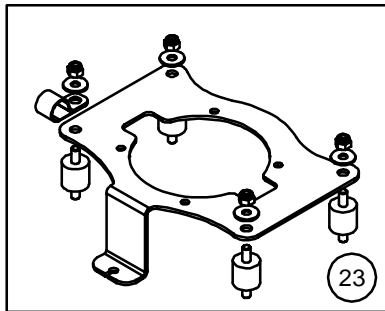
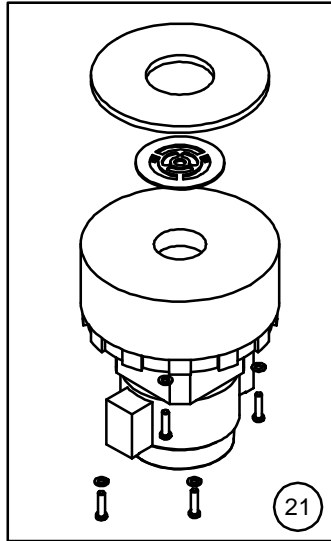
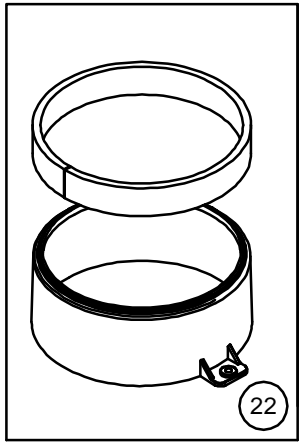
**Tacony CFC**

ORBIS BATTERY SCRUBBER DRIER

DRAWING NO: 09-1125-0000 SHEET 2 - BRUSH HEAD ASSEMBLY

MACHINE:	OBS38130		
REF. PARTS LIST:	OBS38130 ISSUE 1		
SERIES:	A		
REVISION	ECN #	DESCRIPTION OF CHANGE	MOD. BY
A	-	ORIGINAL ISSUE	-
			DATE
			27 SEPT 10





**Tacony CFC**

ORBIS BATTERY SCRUBBER DRIER

DRAWING NO: 09-1125-0000 SHEET 3 - SOLUTION TANK AND VACUUM MOTOR ASSEMBLY

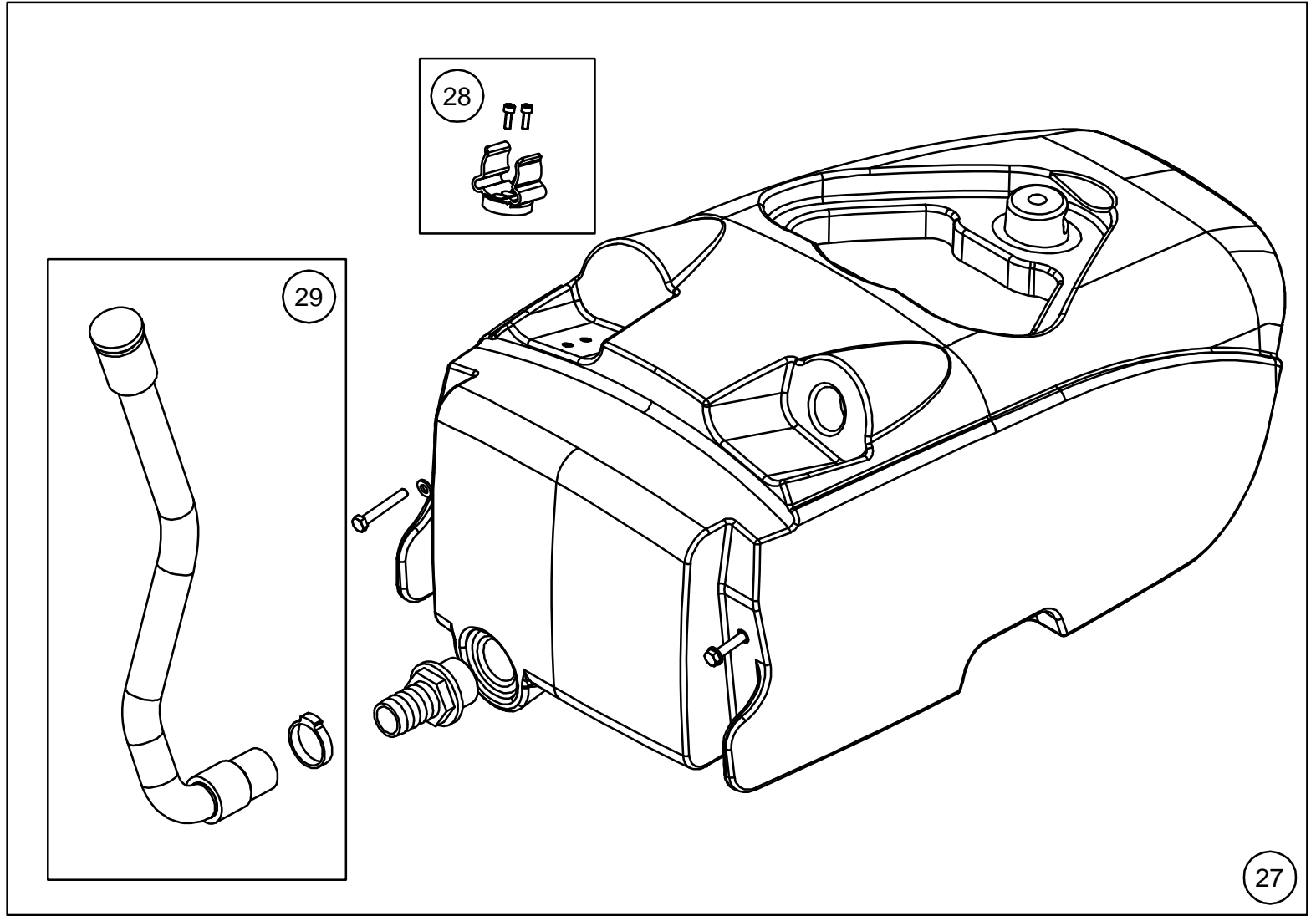
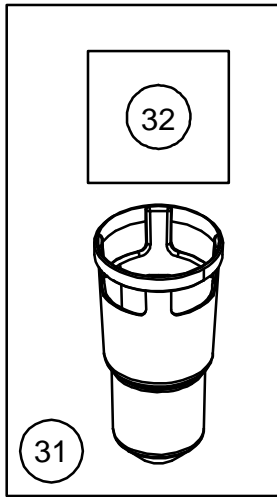
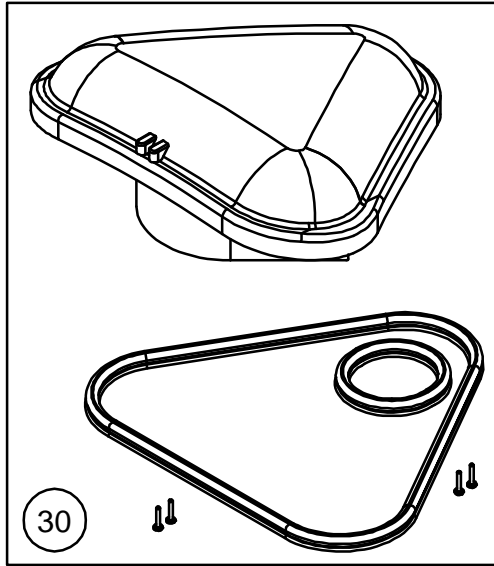
MACHINE: OBS38130

REF. PARTS LIST: OBS38130 ISSUE 1

SERIES: A

REVISION	ECN #	DESCRIPTION OF CHANGE	MOD. BY	DATE
A	-	ORIGINAL ISSUE	-	27 SEPT 10





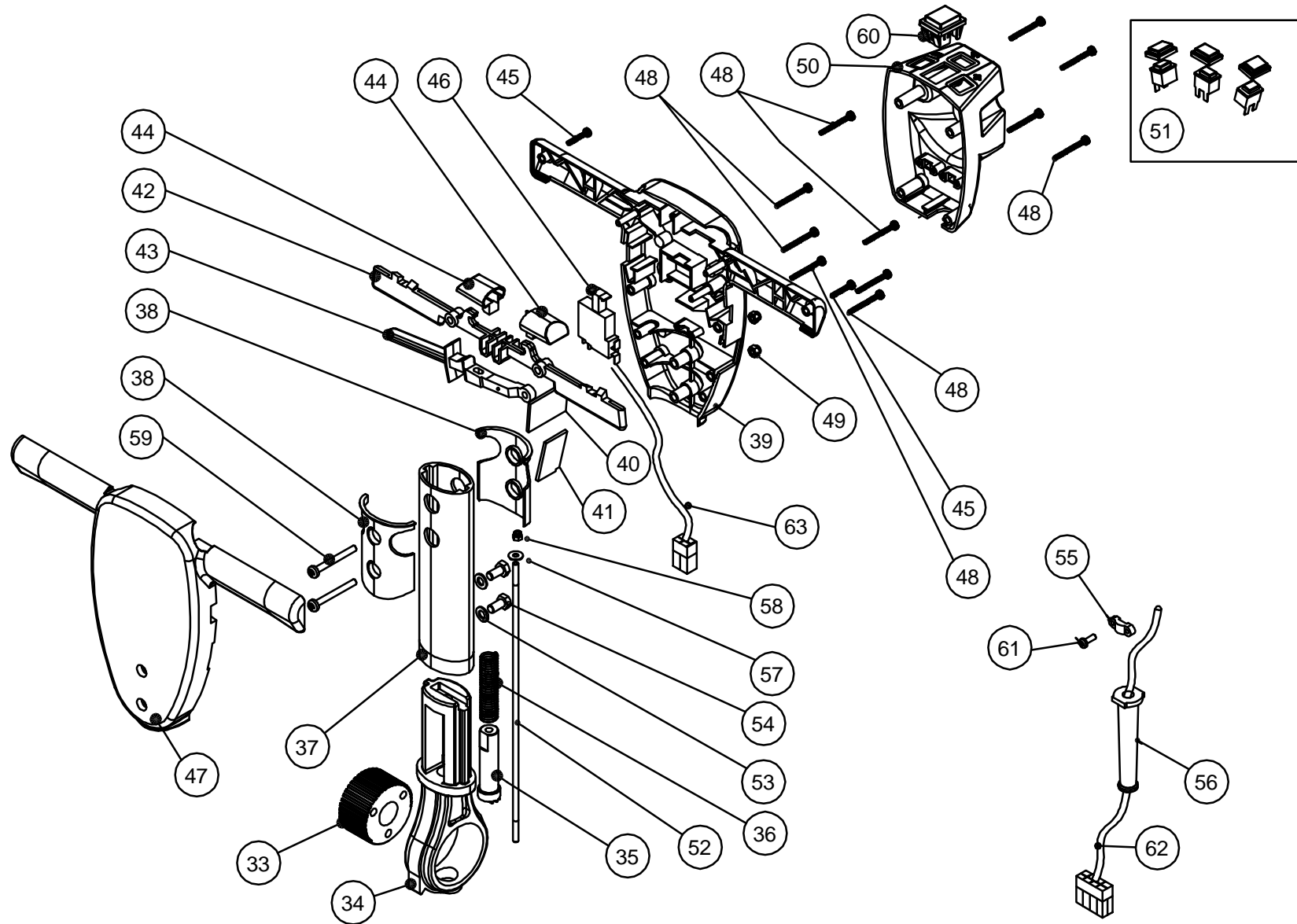
**Tacony CFC**

ORBIS BATTERY SCRUBBER DRIER

DRAWING NO: 09-1125-0000 SHEET 4 - RECOVERY TANK ASSEMBLY

MACHINE:	OBS38130		
REF. PARTS LIST:	OBS38130 ISSUE 1		
SERIES:	A		
REVISION	ECN #	DESCRIPTION OF CHANGE	MOD. BY
A	-	ORIGINAL ISSUE	-
			DATE
			27 SEPT 10





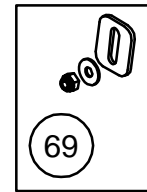
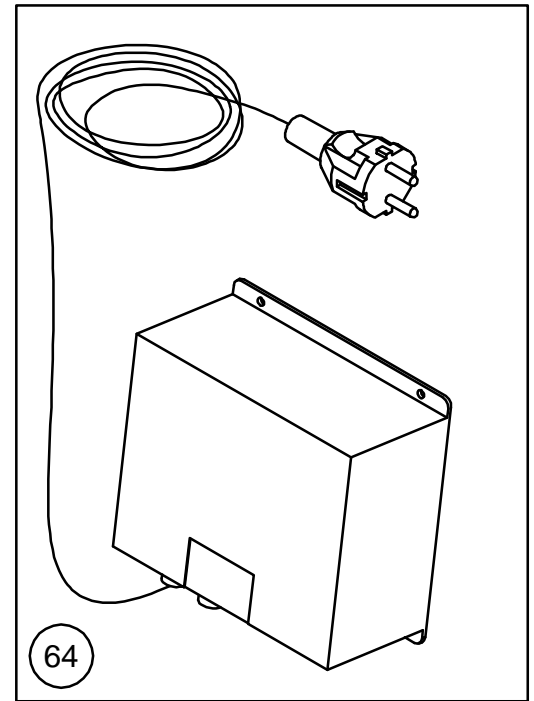
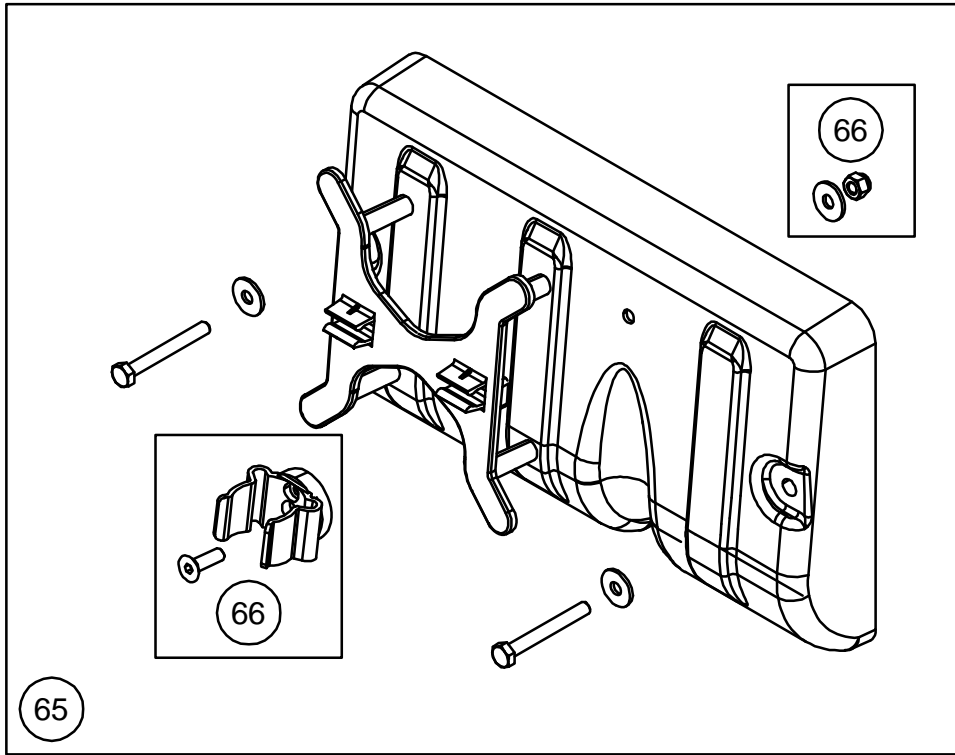
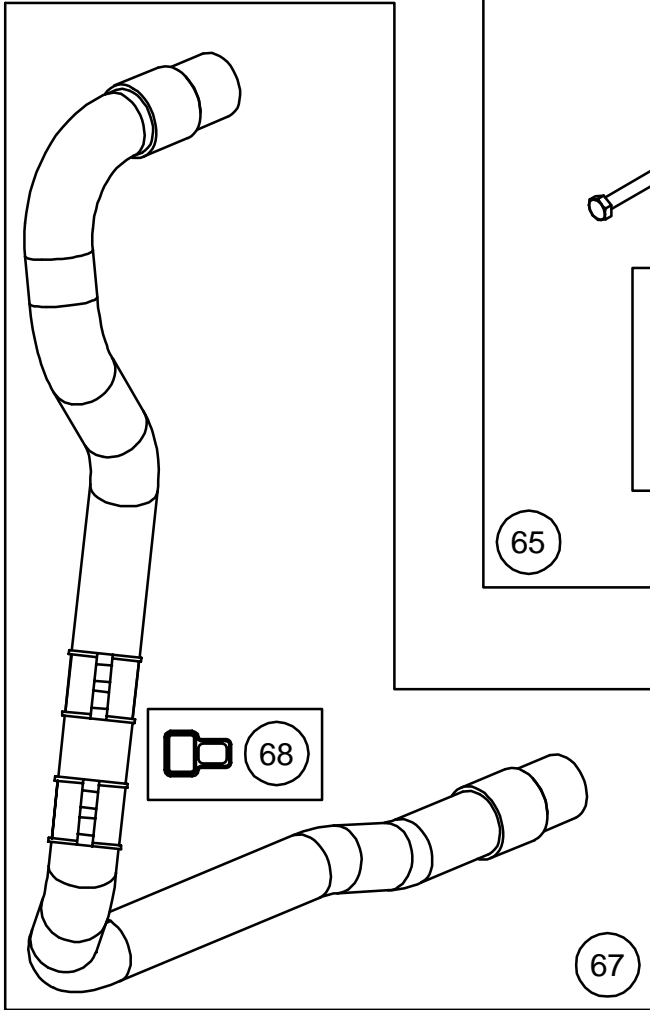
**Tacony CFC**

ORBIS BATTERY SCRUBBER DRIER

DRAWING NO: 09-1125-0000 SHEET 5 - HANDLE ASSEMBLY

MACHINE:	OBS38130		
REF. PARTS LIST:	OBS38130 ISSUE 1		
SERIES:	A		
REVISION	ECN #	DESCRIPTION OF CHANGE	MOD. BY
A	-	ORIGINAL ISSUE	-
			DATE
			27 SEPT 10





<b>Tacony CFC</b>		ORBIS BATTERY SCRUBBER DRIER		
DRAWING NO: 09-1125-0000 SHEET 6- CHARGER AND REAR COVER ASSEMBLY				
MACHINE:	OBS38130			
REF. PARTS LIST:	OBS38130 ISSUE 1			
SERIES:	A			
REVISION	ECN #	DESCRIPTION OF CHANGE	MOD. BY	DATE
A	-	ORIGINAL ISSUE	-	27 SEPT 10

**Tacony CFC**

**Orbis Scrubber Drier**

Part Reference: SUCTION BEAM ASSEMBLY

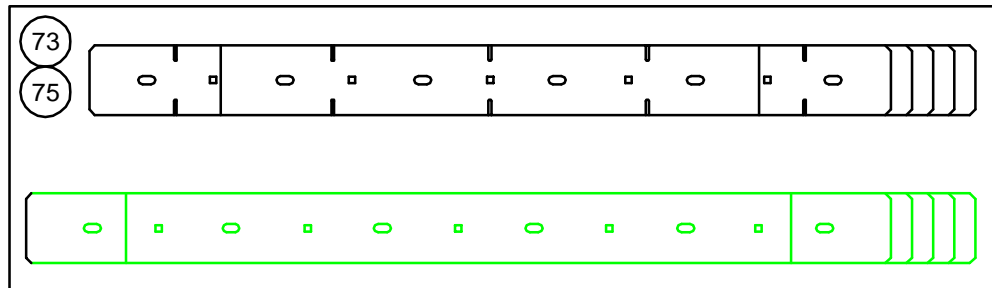
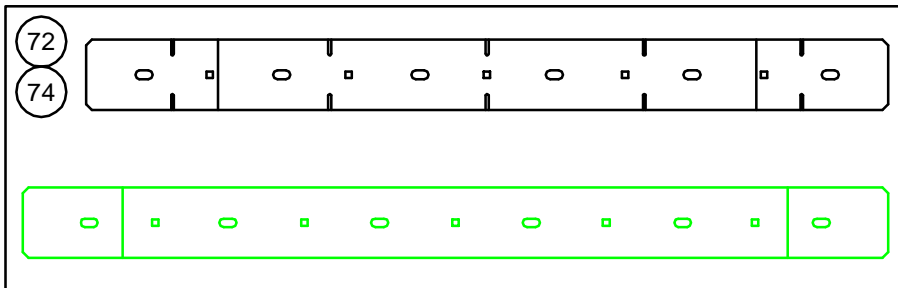
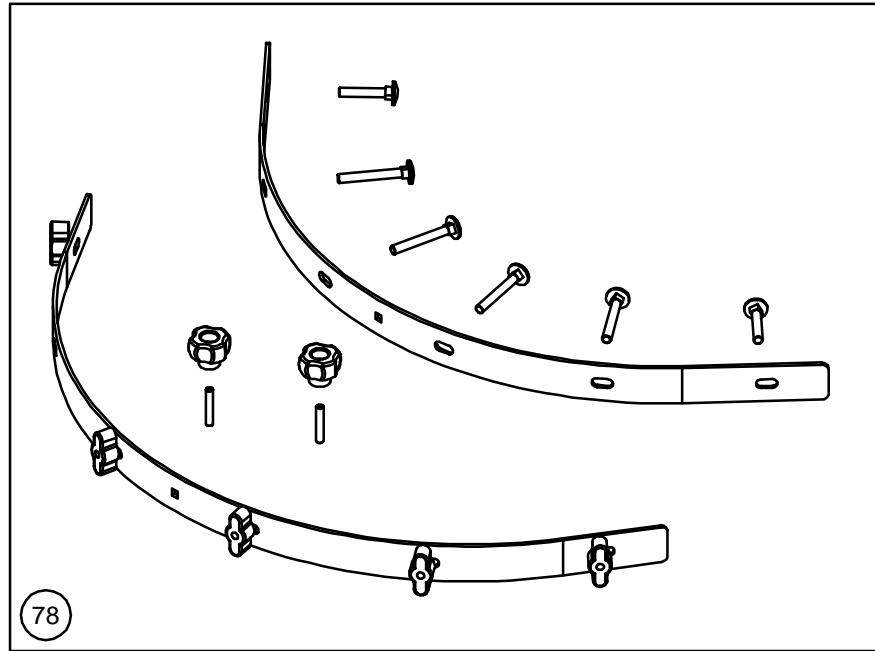
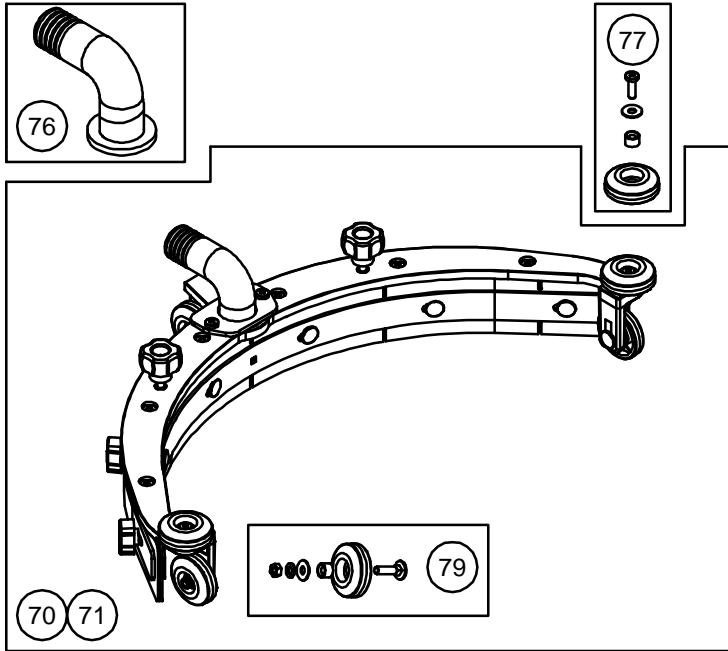
MACHINE: OBS38130

REF. DWG. #: 09-1125-0000 SHEET 7

SERIES: A

REVISION	ECN#	DESCRIPTION OF CHANGE	MOD. BY	DATE
1	N/A	ORIGINAL ISSUE		27-09-2010

Drawing Ref. No.	Kit No.	Part Description	Qty
70	22.0134.01	COMPLETE SQUEEGEE ASSEMBLY WITH PARA BLADES	
71	22.0134.00	COMPLETE SQUEEGEE ASSEMBLY WITH ANTI-OIL BLADES	
72	95.0048.00	SQUEEGEE FRONT & REAR BLADES PARA (PAIR) CONSISTING OF:	
		Front Squeegee Blade PARA	1
		Rear Squeegee Blade PARA	1
73	95.0049.00	SQUEEGEE FRONT & REAR BLADES PARA (5 PAIRS) CONSISTING OF:	
		Front Squeegee Blade PARA	5
		Rear Squeegee Blade PARA	5
74	95.0050.00	SQUEEGEE FRONT & REAR BLADES ANTI-OIL (1 PAIR) CONSISTING OF:	
		Front Squeegee Blade Anti-Oil	1
		Rear Squeegee Blade Anti-Oil	1
75	95.0051.00	SQUEEGEE FRONT & REAR BLADES ANTI-OIL (5 PAIRS) CONSISTING OF:	
		Front Squeegee Blade Anti-Oil	5
		Rear Squeegee Blade Anti-Oil	5
76	30.0098.00	ELBOW CONNECTOR 1,1/4" DN 25	1
77	95.0052.00	BUMPER WHEEL ASSEMBLY CONSISTING OF:	
		Washer D.5X15 A2 DIN9021N	2
		Wheel	2
		Spacer	2
		Screw self tapper M5x16	2
78	95.0053.00	SQUEEGEE RETAINER KIT CONSISTING OF:	
		Front retainer	1
		Screw M 5X30 A2 DIN 603	2
		Screw M 5X40 A2 DIN 603	4
		Squeegee Blade Retainer Fastener	6
		Rear Retainer	1
		Squeegee Blade Assembly Fastener	2
		Screw M5X30 A2 DIN 913	2
79	95.0054.00	SQUEEGEE BLADE WHEELS CONSISTING OF:	
		Washer D.5X15 A2 DIN9021N	3
		Wheel	3
		Spacer	3
		Screw M 5X20 A2 DIN 603	3
		Nut M5 UNI5588 A2	3



<b>Tacony CFC</b>		ORBIS BATTERY SCRUBBER DRIER			
DRAWING NO: 09-1125-0000 SHEET 7 - SUCTION BEAM ASSEMBLY					
MACHINE:	OBS38130				
REF. PARTS LIST:	OBS38130 ISSUE 1				
SERIES:	A				
REVISION	ECN #	DESCRIPTION OF CHANGE	MOD. BY	DATE	
A	-	ORIGINAL ISSUE	-	27 SEPT 10	

**Tacony CFC**

**Orbis Scrubber Drier**

Part Reference: SQUEEGEE LIFTING SYSTEM ASSEMBLY

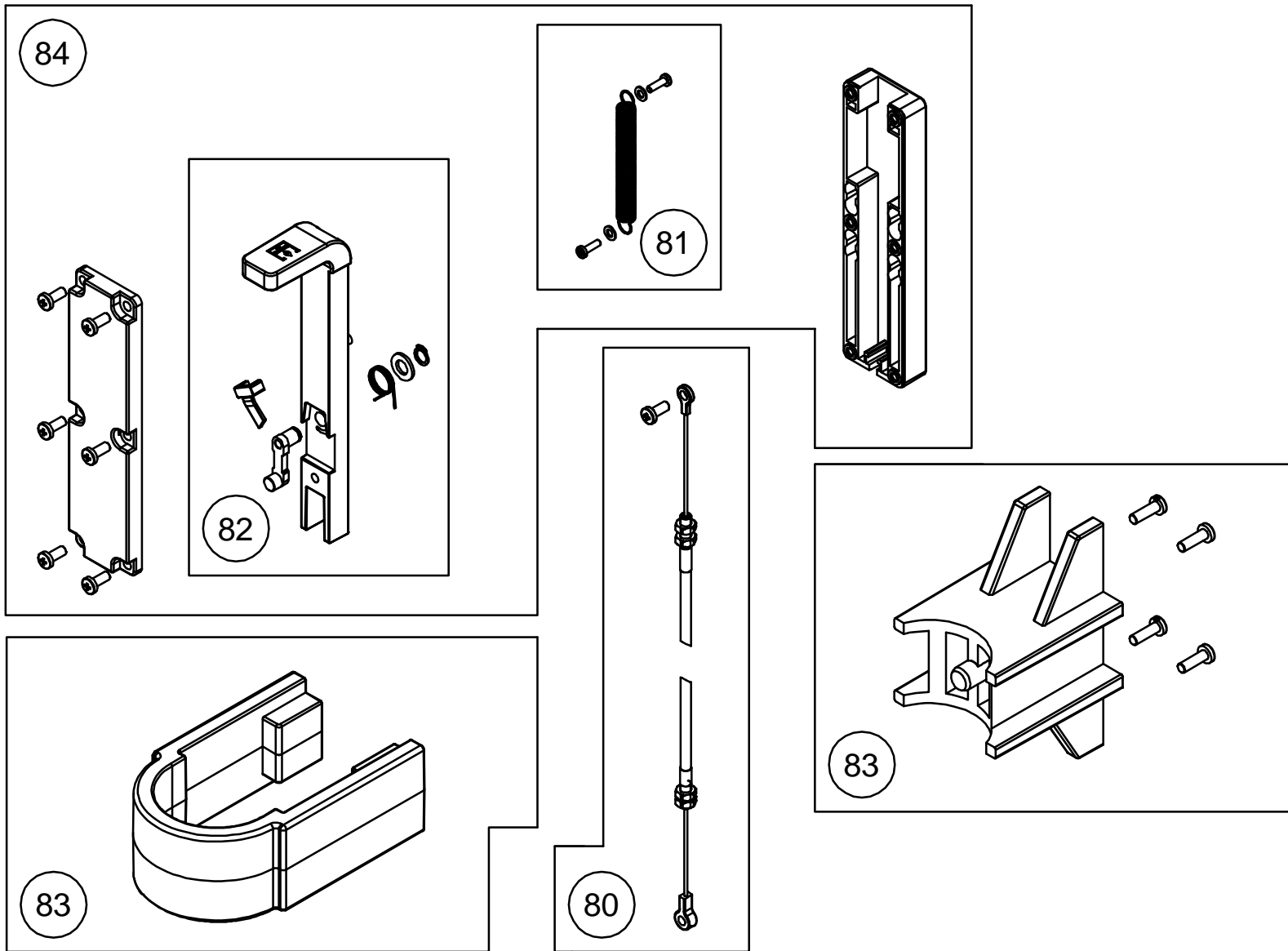
MACHINE: OBS38130

REF. DWG. #: 09-1125-0000 SHEET 8

SERIES: A

REVISION	ECN#	DESCRIPTION OF CHANGE	MOD. BY	DATE
1	N/A	ORIGINAL ISSUE		27-09-2010

Drawing Ref. No.	Kit No.	Part Description	Qty
<b>80</b>	<b>95.0055.00</b>	<b>SQUEEGEE LIFTING CABLE KIT CONSISTING OF:</b>	
		Squeegee Lifting Cable	1
		Screw 5X13 SP ZB	1
<b>81</b>	<b>95.0056.00</b>	<b>LEVER RETURN SPRING KIT CONSISTING OF:</b>	
		Spring	1
		Washer D4 DIN 125A	2
		Screw M3,5x13 DIN 7982C	2
<b>82</b>	<b>95.0057.00</b>	<b>LEVER KIT CONSISTING OF:</b>	
		Lever	1
		Spring	1
		Curser	1
		Spring	1
		Washer D8 A2 DIN 125A	1
		Circlip D8 E UNI7435	1
<b>83</b>	<b>95.0058.00</b>	<b>CLAMP &amp; SUPPORT KIT CONSISTING OF:</b>	
		Squeegee Lifting Clamp	1
		Squeegee Lifting Support	1
		Screw 5X16 SP INOX A2	4
<b>84</b>	<b>95.0059.00</b>	<b>LEVER ENCLOSURE KIT CONSISTING OF:</b>	
		Screw 5X13 SP ZB	6
		Circlip D8 E UNI7435	1
		Washer D8 A2 DIN 125A	1
		Spring	1
		Spring	1
		Holder, closure, lever, curser and spring kit	1
		Washer Dia 4	2
		Screw M3.5 x 13	2
		<b>95.0060.00</b>	<b>MACHINE WIRING KIT (NOT SHOWN ON DRAWINGS) CONSISTING OF:</b>
Main board cable	1		
Brush motor cable	1		
Suction motor cable	1		
Handle cable	1		
Batteries connection cable	2		
Packging bag 250x350mm	1		



**Tacony CFC**

ORBIS BATTERY SCRUBBER DRIER

DRAWING NO: 09-1125-0000 SHEET 8 - SQUEEGEE LIFTING SYSTEM ASSEMBLY

MACHINE:	OBS38130			
REF. PARTS LIST:	OBS38130 ISSUE 1			
SERIES:	A			
REVISION	ECN #	DESCRIPTION OF CHANGE	MOD. BY	DATE
A	-	ORIGINAL ISSUE	-	27 SEPT 10