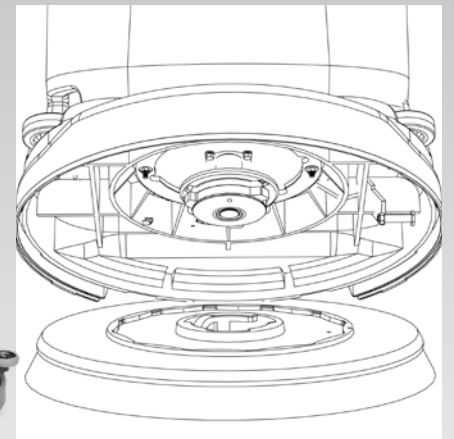


HGB 3045 / 55
HBG 3045 / 55
TGB 3045 / 55
TGB 4045 / 100
TGB 4055 / 100
TGB 4055 / 100T
SCRUBBER DRYER



Owner Instructions
Warning! Read instructions before using the machine



SCRUBBER DRYER

HGB 3045/55, HBG 3045/55, TGB 3045/55, TGB 4045/100, TGB 4055/100, TGB 4055/100T.

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PLEASE READ BEFORE COMMENCING OPERATION

After the removal of all the packaging, carefully open and check the contents

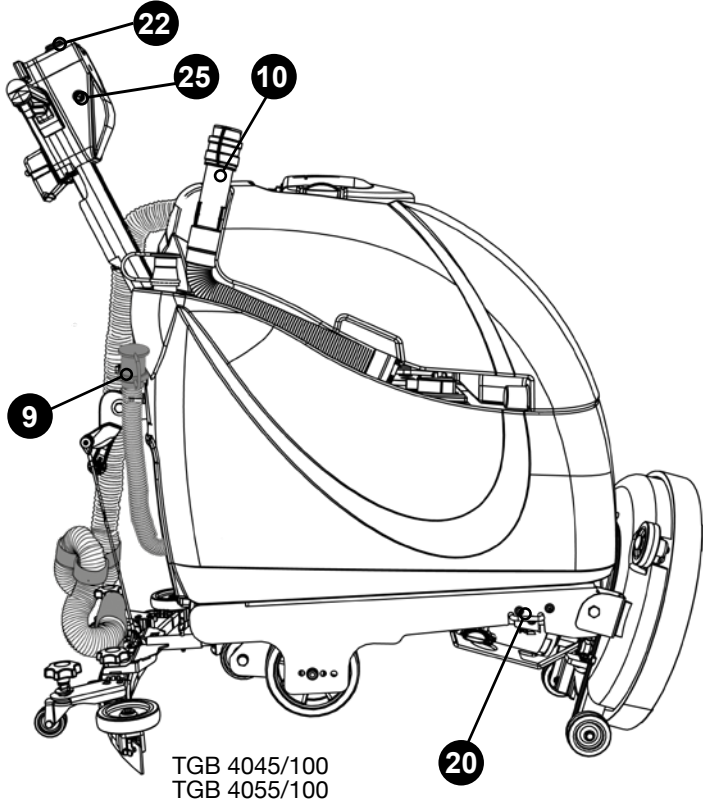
- Owner Manual • Battery Charging Lead
- 2 x Isolator Keys • 2 x 40 Amp Fuse
- 1 x 30 Amp Fuse • 1 x 20 Amp Fuse
- 1 x 2.5 Amp Fuse • Maxi Fuse-puller
- Traction Model 2 x 50 Amp Fuse

For Charger-less Model, all the above plus:

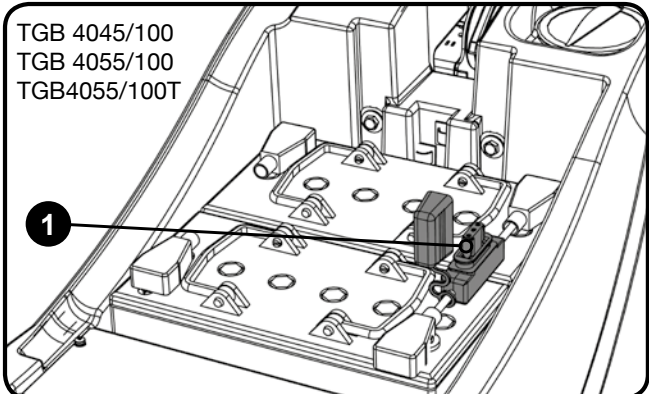
- 1 x Charger Connector • 2 x Charger Connector Terminals • 4 x Battery Terminal Connectors • 1 x Fuse Holder

1	TGB 4045/100, 4055/100 40 Amp & 4055/100T 50 Amp Battery Fuse
2	Top Tank (Waste Water)
3	Bottom Tank (Clean Water)
4	Brush Deck
5	Clean Water Tank Filter
6	Rear Wheels
7	Clean-Water On/Off Tap
8	Separator
9	Clean-Water Emptying Hose
10	Top Tank (Waste-Water) Drainage Hose
11	Clean-Water Filler Cap
12	Floor Tool Vacuum Hose
13	Vacuum Hose
14	Isolator Key
15	Floor-Tool Lifting Lever
16	Hour Meter
17	Clean Water Level Indicator / Drainage Hose
18	Floor-Tool Retaining Knobs
19	Squeegee Blades
20	Deck Locking Mechanism
21	Clean-Water Filler Hose
22	Operator Control Panel
23	Brush & Vacuum Motor Fuse
24	HGB 3045/55, HBG 3045/55, TGB3045/55 40 Amp Battery Fuse
25	Safety Fuse 3045/55, 4045/100, 4055/100, 4055/100T 2.5 Amp Fuse

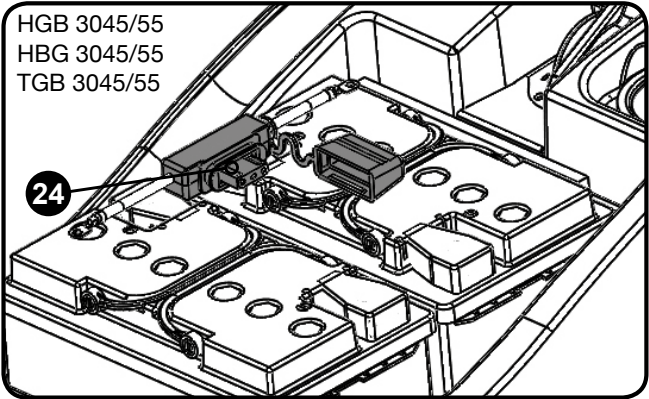
Machine Overview



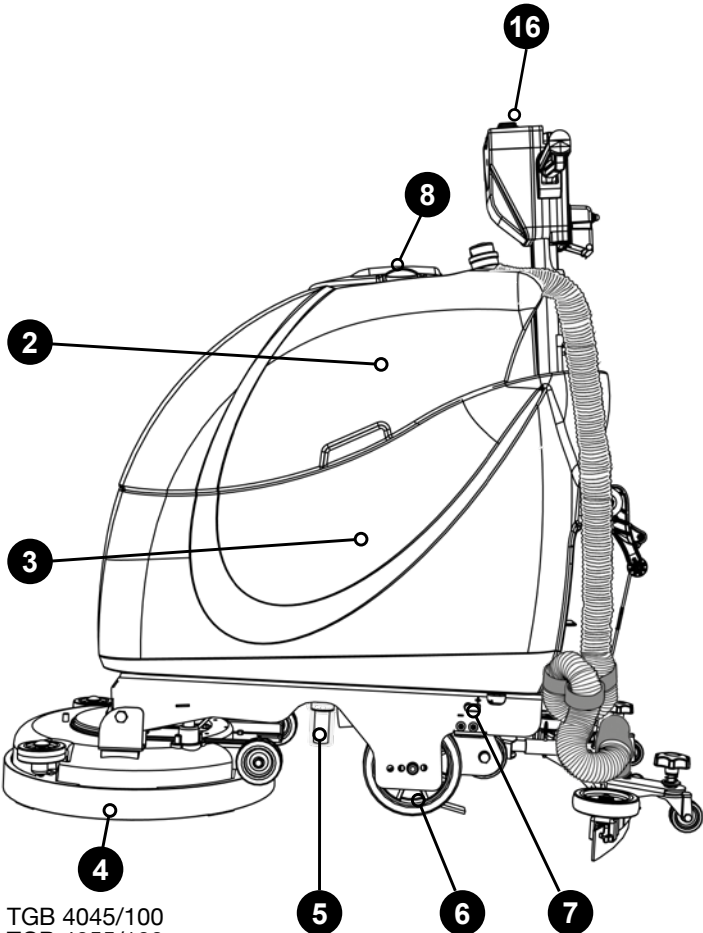
TGB 4045/100
TGB 4055/100



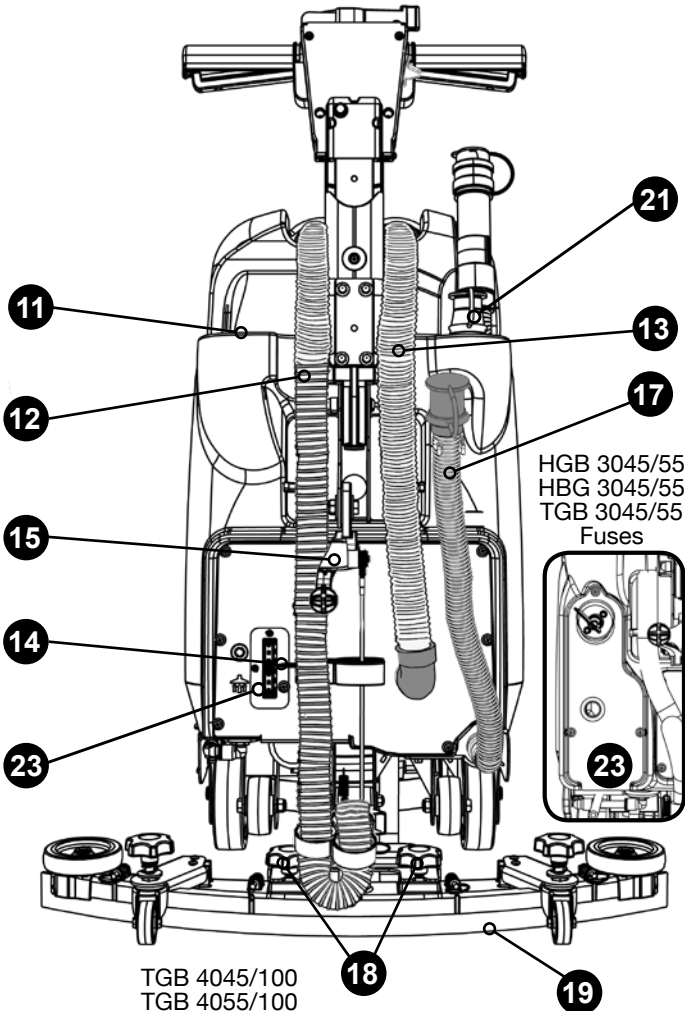
TGB 4045/100
TGB 4055/100
TGB4055/100T



HGB 3045/55
HBG 3045/55
TGB 3045/55



TGB 4045/100
TGB 4055/100



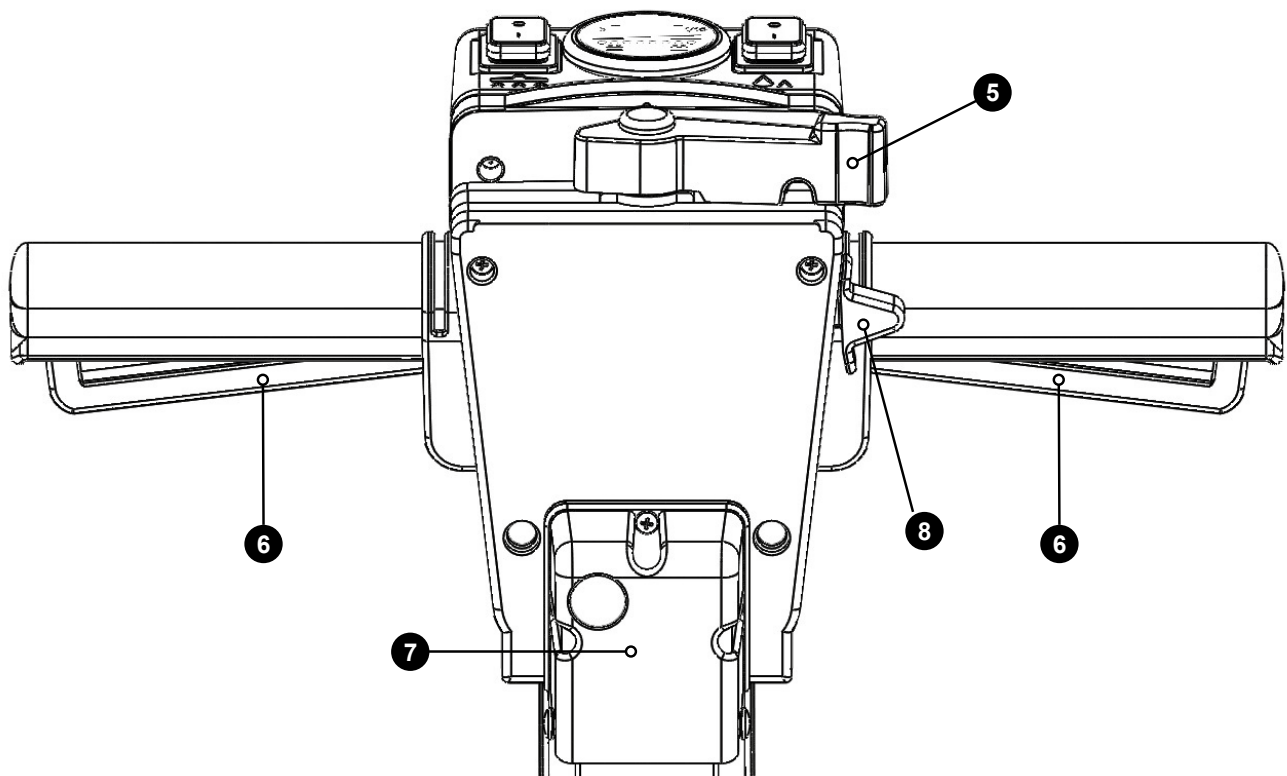
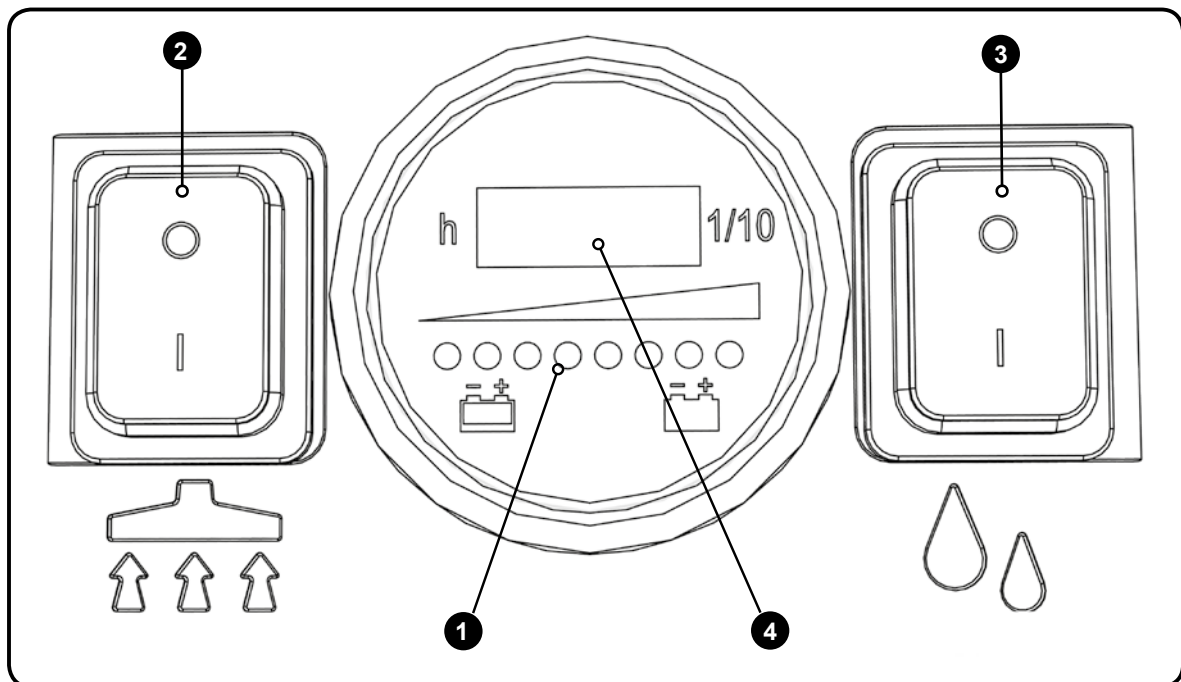
HGB 3045/55
HBG 3045/55
TGB 3045/55
Fuses

TGB 4045/100
TGB 4055/100

SCRUBBER DRYER

**HGB 3045/55, HBG 3045/55, TGB 3045/55, TGB 4045/100,
TGB 4055/100, TGB 4055/100T.**

Control Panel Overview

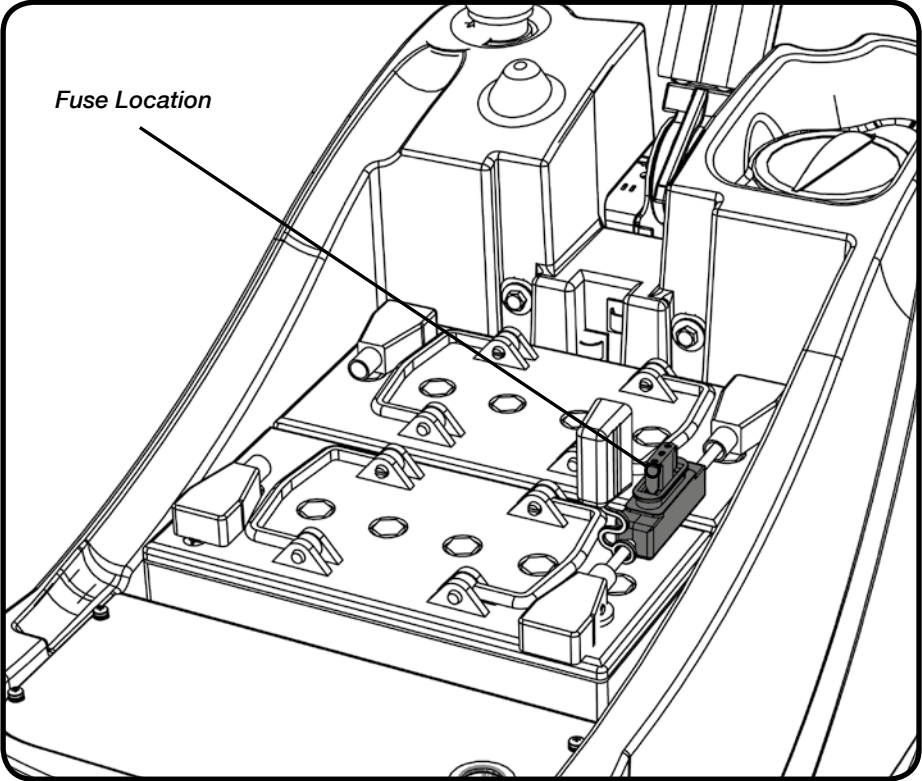


1	Battery Charge Level Indicator
2	Vacuum Pick Up On / Off
3	Water Flow On / Off
4	Hours Meter
5	Handle Position Lever
6	Triggers
7	Charging Point
8	On / Off Switch

*In the event of a breakdown contact
your Numatic dealer or the
Numatic Technical
help line +44 (0)1460 269268*

PLEASE READ BEFORE COMMENCING ANY OPERATION AFTER THE REMOVAL OF ALL THE PACKAGING, CAREFULLY OPEN AND CHECK THE CONTENTS.

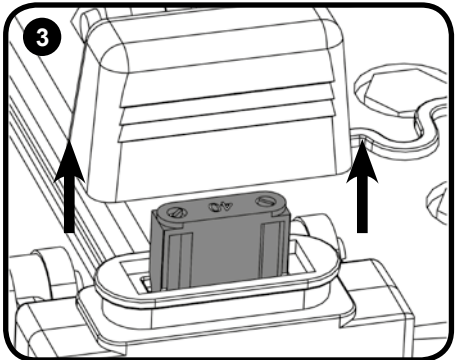
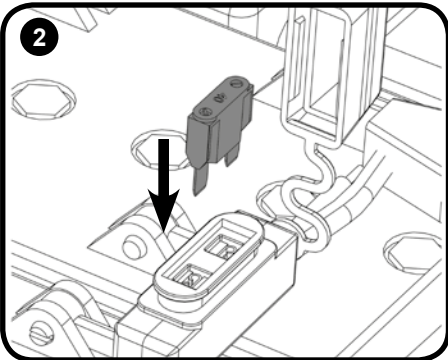
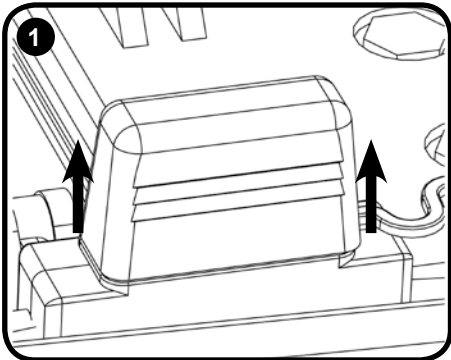
- CONTENTS**
- 2 x Isolator Keys • 2 x 40 Amp Fuse
 - 1 x 30 Amp Fuse • 1 x 20 Amp Fuse
 - 1 x 2.5 Amp Fuse • Maxi Fuse-puller
 - Traction Model 2 x 50 Amp Fuse
- For Charger-less Model,
all the above plus:
- 1 x Charger Connector • 2 x Charger Connector Terminals • 4 x Battery Terminal Connectors • 1 x Fuse Holder



Lift off top tank assembly to reveal battery compartment.
Fit battery fuses (contained in start-up pack) into the battery fuse holder as illustrated.

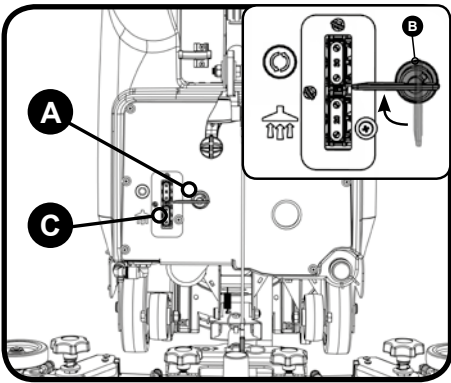
Fit the isolator key and switch the machine on (See below, TGB 4045/100, 4055/100, 4055/100T (Fig. A) HGB 3045/55, HBG 3045/55 & TGB 3045/55 (Fig.D))

NOTE: Wear suitable gloves when inserting fuses.



Less Battery Models - Numatic International Ltd recommends using Sonnenschein batteries for 3045 machines and MK Batteries for 4045 and 4055 in the machines mentioned in this manual. For full battery specifications see page 22.

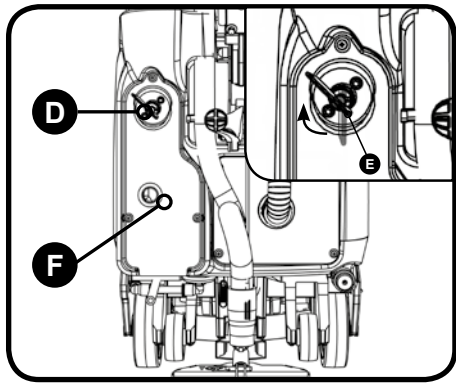
Ensure that no metal objects come into contact with battery terminals while the batteries are exposed. When inserting the first fuse you may notice a spark, this is normal.



Insert the Isolator key and switch the machine on.

TGB 4045/100, 4055/100, 4055/100T
Isolator Key (Fig. A, B) Vac & Brush Fuses (Fig.C)

HGB3045/55, HBG3045/55, TGB3045/55
Isolator Key (Fig D, E)
Vac & Brush Fuses behind cover plate (Fig.F)



Machine Set-up Guide



**ALWAYS ENSURE THAT THE MACHINE IS SWITCHED OFF
BEFORE MAKING ANY ADJUSTMENTS**



Fitting the Brush / Pad / Turn on water

450mm / 550mm Brush or a Pad.

Featuring the Nulock brush system.

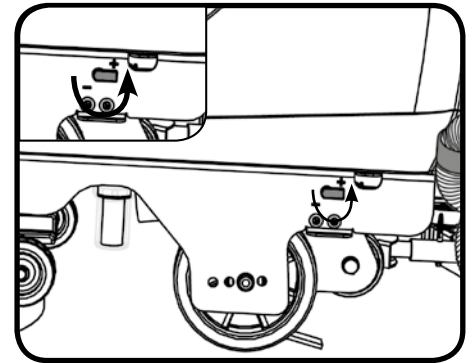
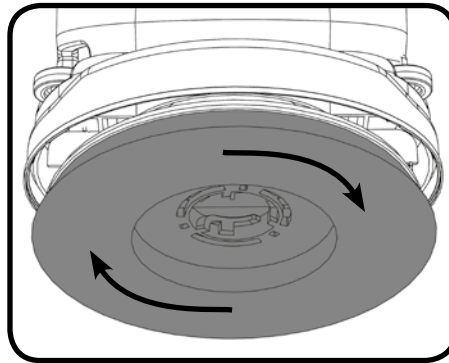
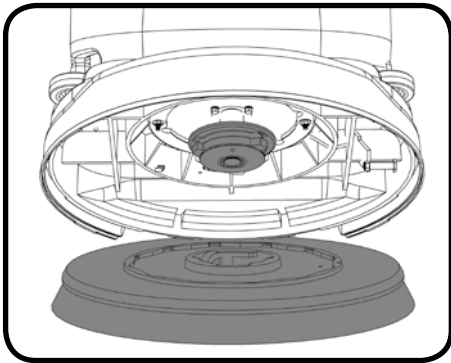
The brush is simply pushed and twisted to lock, making fitting and removal a simple process.

Slide the brush / pad under the brush deck.

Fit the brush / pad onto the Nulock drive chuck, twist to lock the brush / pad in place.

Safety gloves are recommended for the changing of used brushes.

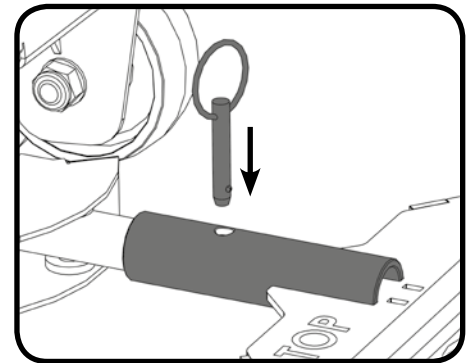
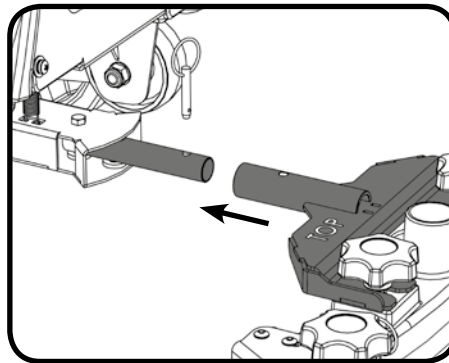
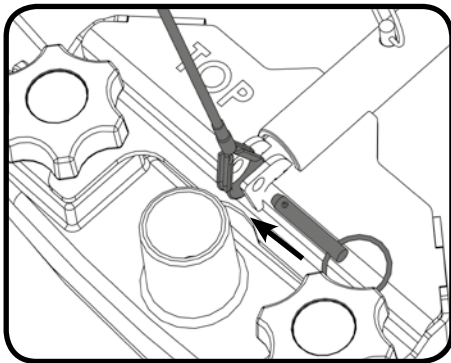
Turn on the clean water tap.



Fitting the Floor Tool

The floor tool has been designed for quick fitting, allowing easy squeegee blade replacement and a safety knock-off feature if the floor tool gets snagged, whilst in transit.

NOTE: It is easier to fit the floor tool if the weight of the machine is resting on the brush. Ensure the brush is fitted first.

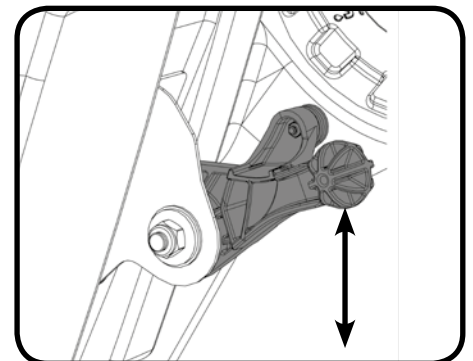
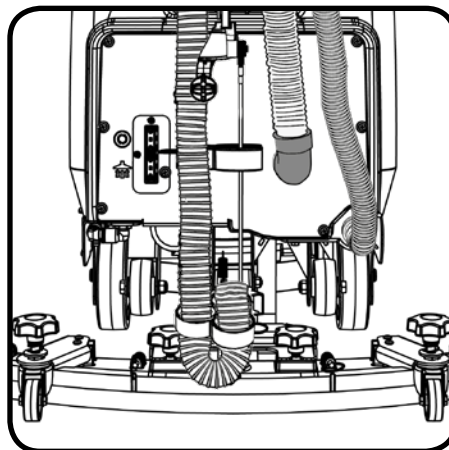


Fit the floor tool and retain using the detent pins.

Push waste collection pipe onto the floor tool; ensure a tight fit.

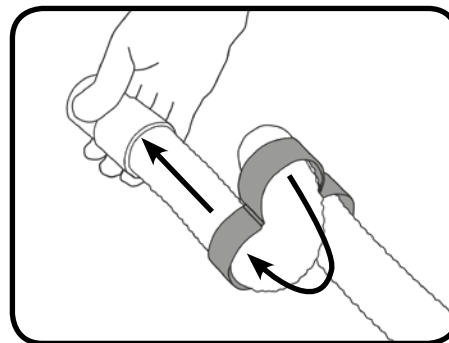
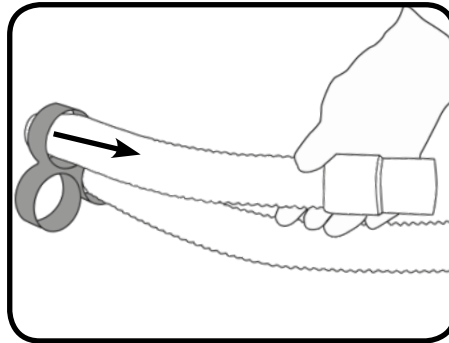
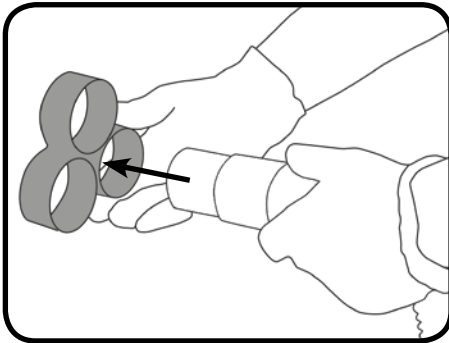
Raise the floor tool for transit or lower for cleaning operation using the lifting handle fitted to the back of the machine.

For fitting the floor tool blades
(See Page 12).

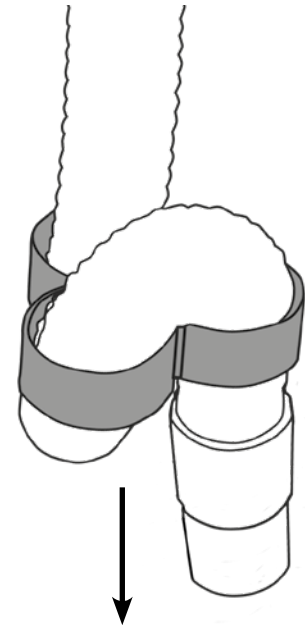


Fitting the Hose Guide

The vacuum hose has a U-bend clip which creates a U-bend in the hose preventing water spillage when the vacuum is switched off. If you need to remove the U-bend clip for any reason always ensure it is refitted correctly before you resume operation.

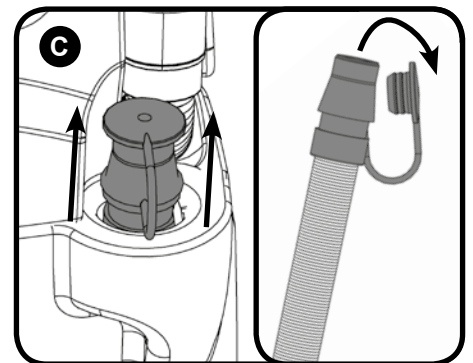
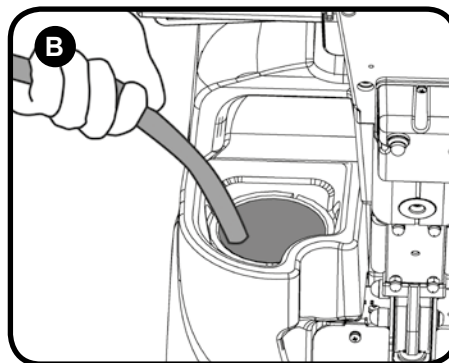
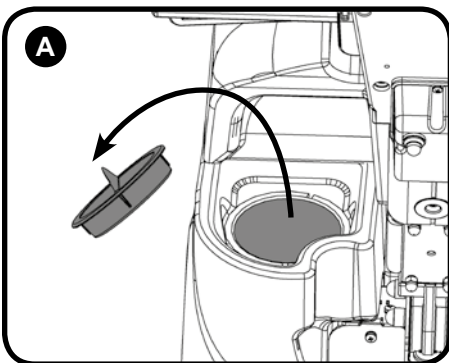


NOTE: DO NOT push the vacuum hose onto the floor tool with the floor tool in the raised position.



Refit vacuum hose to the Floor tool when finished.

Filling the Clean Water Tank



To fill the clean-water tank, use the FLEXI - FILL pipe from either a tap or hose pipe. (Fig.C).

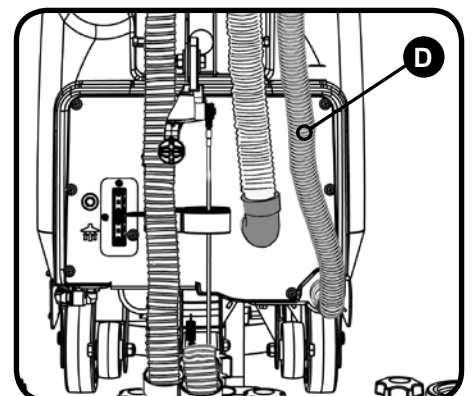
The large cap can also be used for filling from a bucket or suitable container. (Fig.A & B). Fill the clean-water tank to MAX line indication on tank, including cleaning chemicals if required. Follow chemical manufacturing guide lines.

The clear dump hose at the rear of the machine can be used to see the level of the clean-water. (Fig.D).

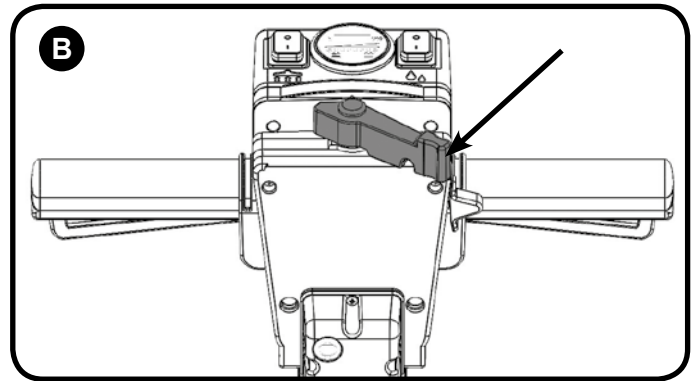
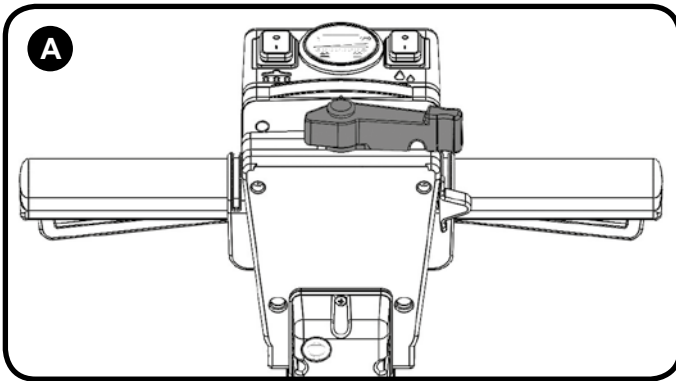
NOTE: Great care must be taken to ensure that contaminants (leaves, hair, dirt, etc.) are not allowed to enter the clean water tank during the filling process. If using a bucket or similar, ensure it is always clean and free from debris.

Control of Substances Hazardous to Health (COSHH)

For best results use a non-foaming type of chemical, dilute to the manufacturers specification. For further guidance on hazardous substances refer to health and safety instructions online.



Machine Set-up Guide



Handle Height Adjustment

Using the handle position lever, lower the handle to a comfortable working position.



WHEN HANDLING AND MIXING CHEMICALS
*Always ensure that chemical manufacturer's safety guidelines are followed.
Only use chemicals recommended for use in auto scrubber-dryers.*

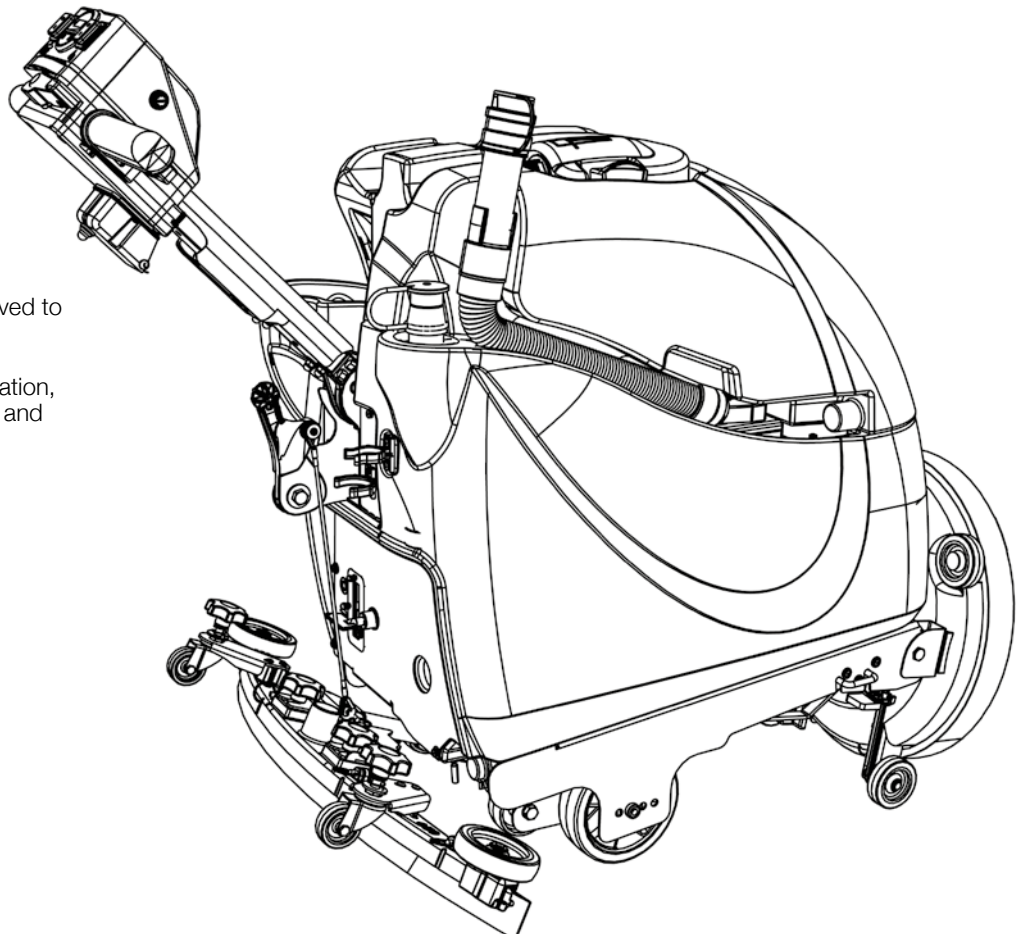
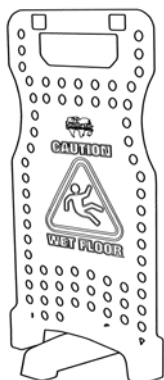


IMPORTANT
Do not operate machine unless the Operator Manual has been read and fully understood.



The machine is now ready to be moved to the cleaning site.

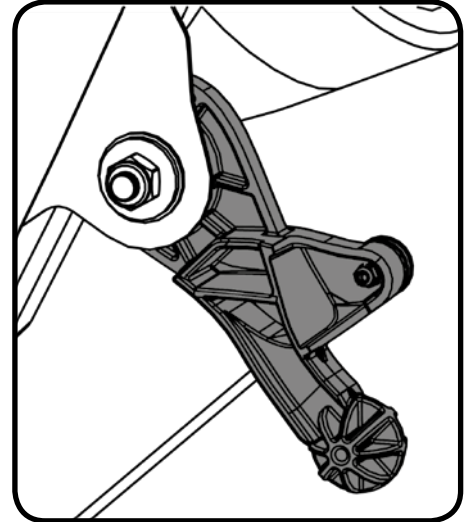
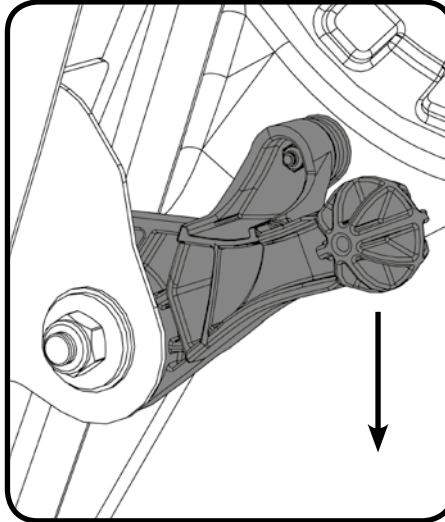
Before performing the cleaning operation, place out appropriate warning signs and sweep or dust-mop the floor.



Raising/Lowering the Floor Tool

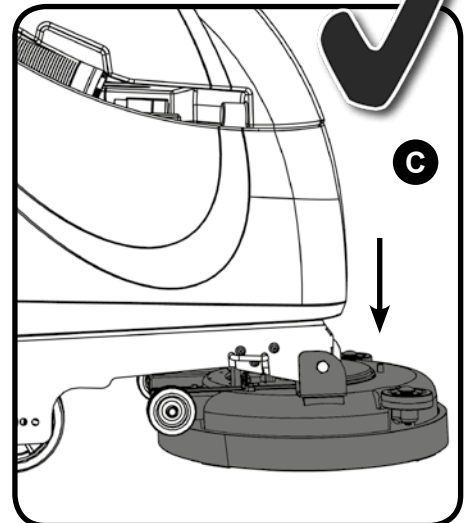
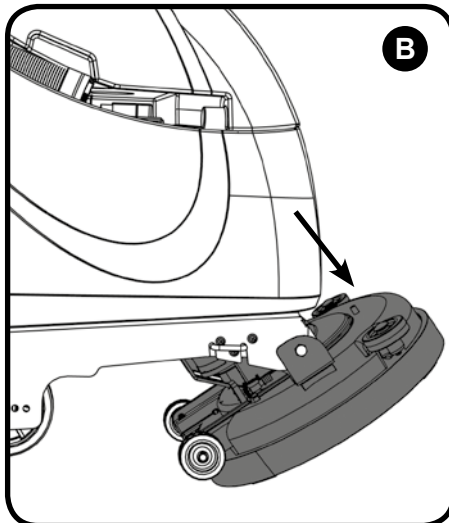
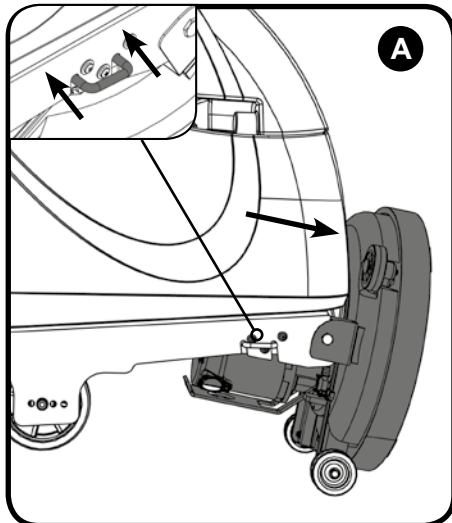
After preparing the floor (see previous section), we are now ready to set the controls to suit the cleaning conditions. Before any settings can be applied, ensure the brush deck is lowered. Move the floor tool lever to its lower position.

NOTE: Do not pull the machine backwards with the floor tool in the lowered position, this could possibly damage the blades.



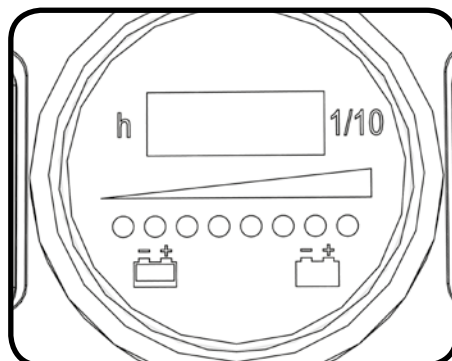
Raising/Lowering the Brush Deck

To tip the deck into the down position (Operating mode). Press in the brush deck locking pin (Fig.A) and rotate the brush deck (Fig.B & C). To change to brush deck up position, (Transit mode) simply lift the deck and the spring loaded locking pin will activate to hold the deck up.

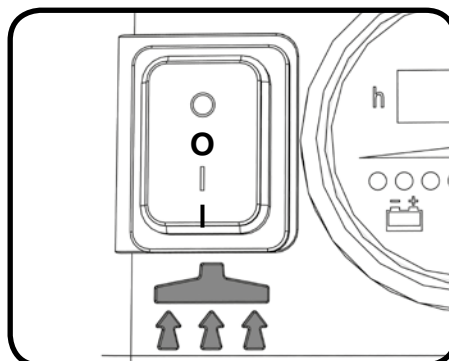


Setting the Cleaning Controls

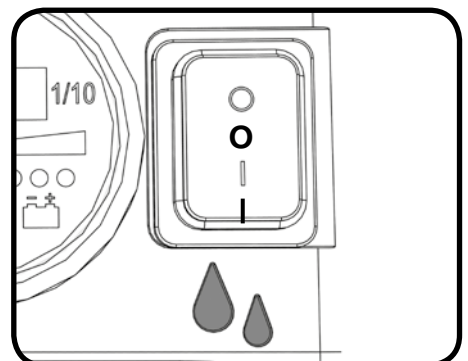
To start: hold down either trigger and press the yellow On / Off Switch once



Hour meter and battery power.



Vacuum On / Off



Water On / Off

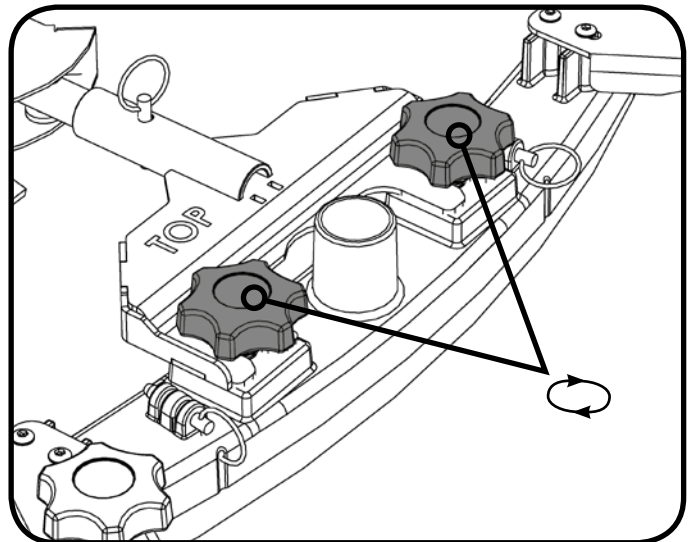
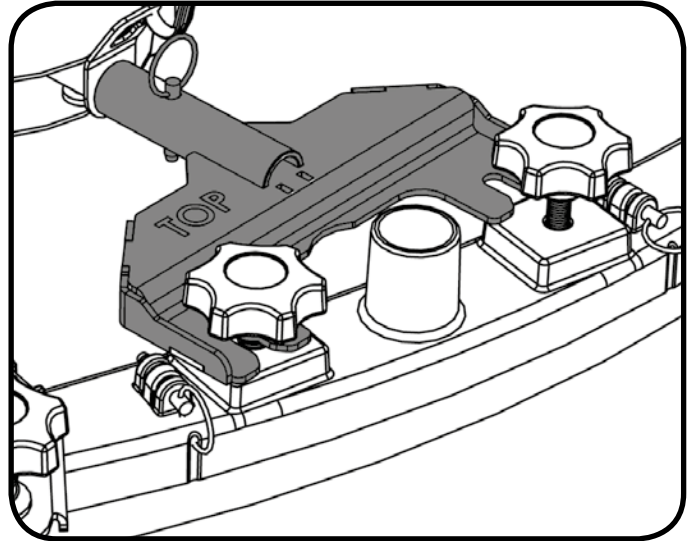
Machine Operation

Break-away Floor Tool

The floor tool design incorporates a break-away feature.

Allowing it to safely disengage from its mounting should it become caught on an obstruction, during forward machine movement.

To re-attach the blade to its holder. First loosen the retaining knobs on the floor tool body and slide onto the holding bracket. Tighten retaining knobs to finger tight.



**ALWAYS ENSURE THAT THE FLOOR IS PRE-SWEPT
AND RELEVANT SAFETY SIGNS ARE DISPLAYED.**



Machine In Use

To operate, set water flow rate tap, lower brush deck, lower the floor tool, press the vacuum / water switches, pull brush On/Off trigger.

The waste water is then retrieved by the suction floor tool.
Overlap each scrubbing path by 10cm to ensure an even clean.
Do not operate the machine on inclines that exceed (2%), when full.

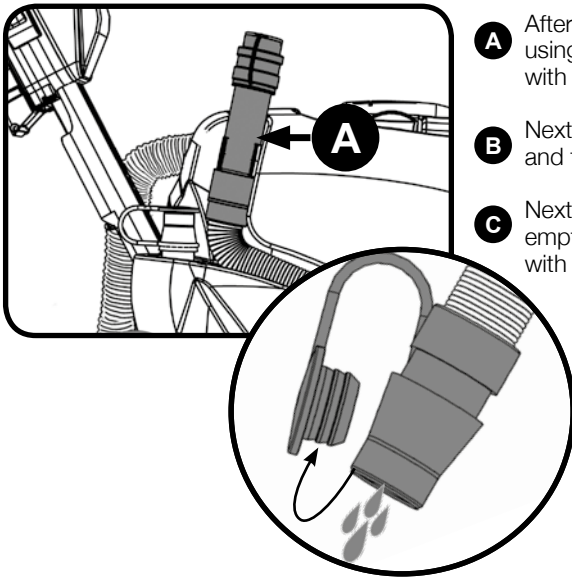
On heavily soiled floors use a 'double scrub' technique.
First pre-scrub the floor with the floor tool in the raised position, allow the chemical time to work then scrub the area a second time with the floor tool lowered.

If streaking occurs wipe floor tool blades clean.

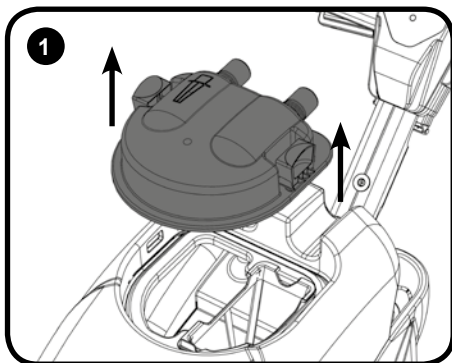
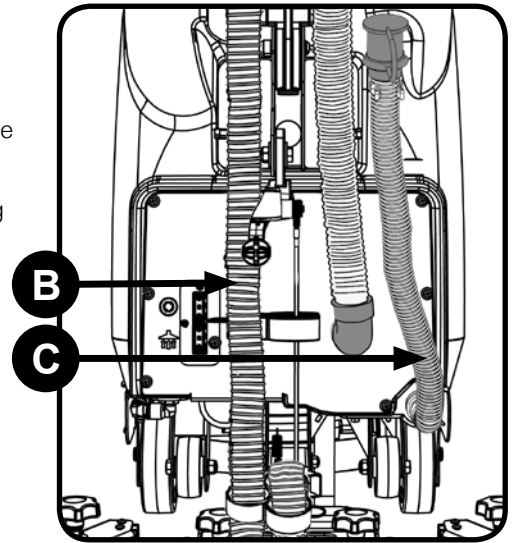
NOTE: Care must be taken to reduce speed when cornering or when manoeuvring around obstacles



ALWAYS ENSURE THAT THE MACHINE IS SWITCHED OFF PRIOR TO ANY MAINTENANCE USING THE MASTER CONTROL ON/OFF KEY. REMOVE THE KEY PRIOR TO ANY MAINTENANCE OPERATION.

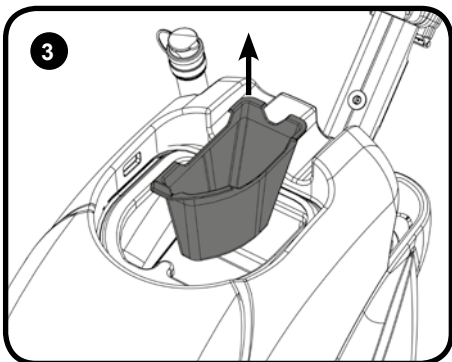
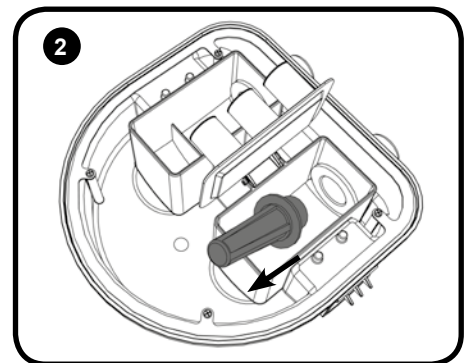


- A** After use, empty waste water tank using emptying hose and flush out with clean water.
- B** Next remove floor tool vacuum hose and flush out with clean water.
- C** Next empty clean water tank, using emptying hose and again flush out with clean water.



1 Whilst pressing in the top tank hood toggles, remove the hood. (Fig.1) The hood also has a sealing-rubber which should be examined at every clean-down. Rinse using clean water, avoiding the vac filter.

Remove the filter fitted into the separator and flush with clean-water (Fig.2)



IMPORTANT

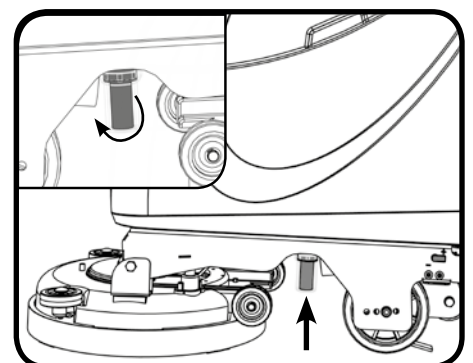
Remove vac filter and clean if required (keep dry).
Never use the machine without the recommended filter as it may cause damage to the machine.

Remove debris basket filter and rinse using clean water, and refit. (Fig.3)

IMPORTANT If the debris basket is allowed to become clogged, vacuum performance can deteriorate.

Located under the left hand side is a clean water filter, make sure the clean water tank is empty before removing this filter.

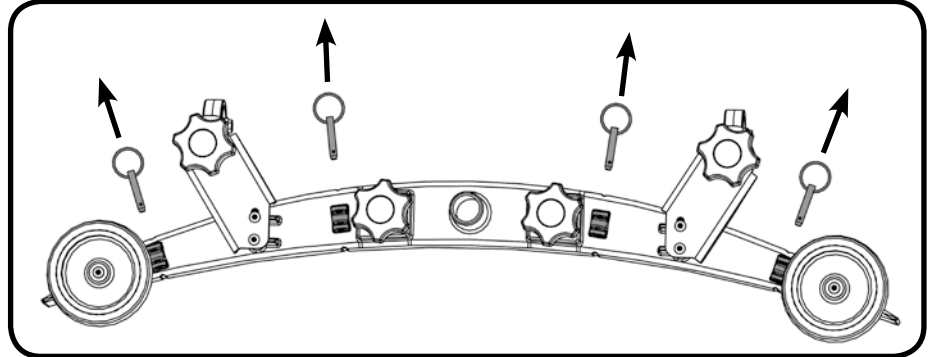
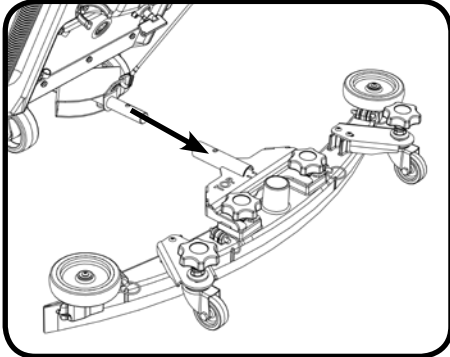
Note: To make access easier, raise the brush deck.



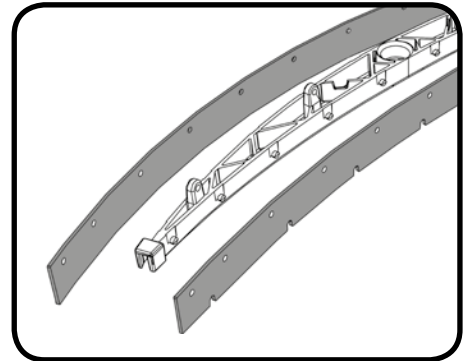
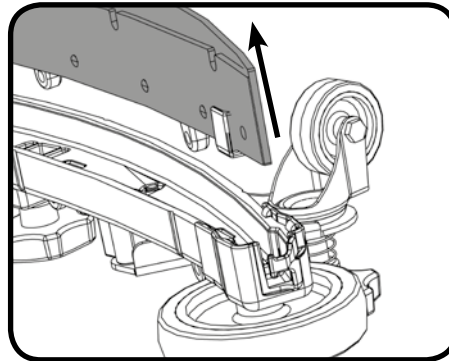
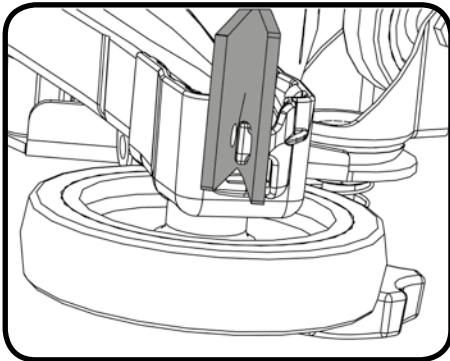
Changing the Floor Tool Blades



Always ensure that the machine is switched off prior to any maintenance.



To clean the floor tool, remove securing-pin and pull-free from the holder. Rinse the floor tool assembly with clean water and refit.

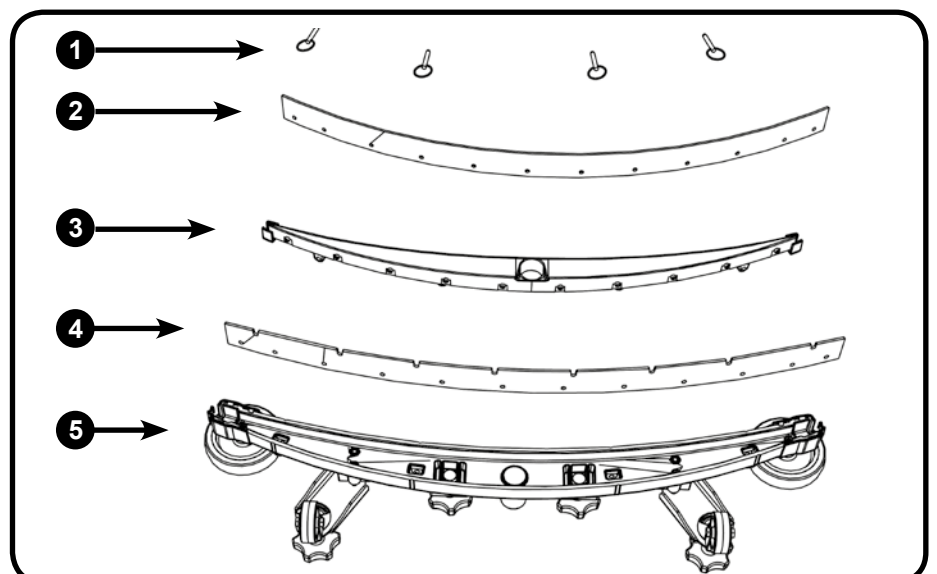


Periodically the floor tool blades should be examined and checked for wear and damage. The blade removal is easy. Simply start by removing the four retaining pins, turn the floor tool over and separate the blade carrier from the body. Peel away the blades from their locating lugs and examine or renew as required. Replacement is a reversal of the removal process.

Floor Tool Overview

1. Retaining pins x 4
2. Front blade (slotted)
3. Blade carrier
4. Rear blade
5. Floor tool main body

NOTE: The blades are designed to be reversible, thus extending their useful working life.

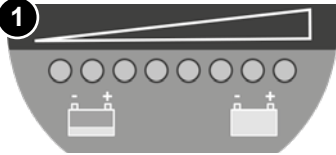




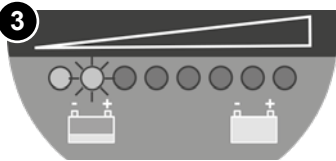
Always ensure that the machine is switched off prior to charging.



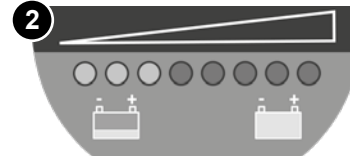
The battery meter displays the charge level of the batteries; when fully charged, all meter lights are illuminated.



When the machine is getting close to empty the second light from the end starts to flash, the operator should then take the machine to a suitable charging point.



As the machine is used and the batteries are discharged, the meter lights will go out from right to left. If the battery-charge level is allowed to discharge to the point that only the red light remains illuminated, the operator must consider charging the machine.



The large capacity gel batteries are sealed for life and are totally maintenance free.

The on-board charger automatically monitors the charging process and will switch off when the batteries are fully charged.

Insert the charging lead required for your country into the charging point.

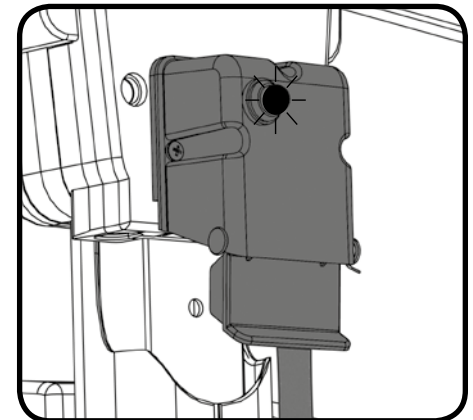
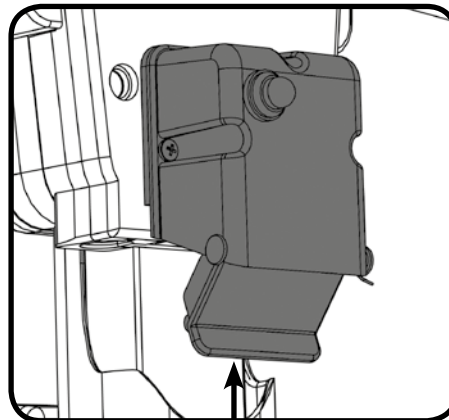
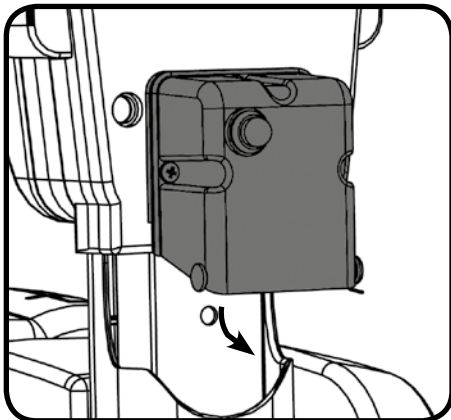
The machine charging point is located to the rear of the machine under the control panel.

Connect to a suitable power supply.

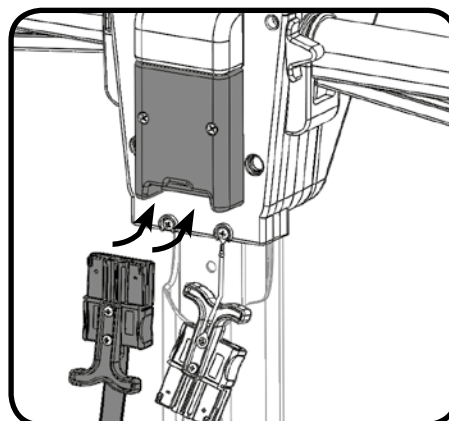
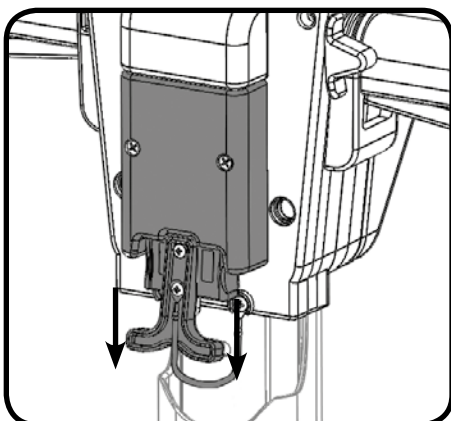
Once mains power is connected the red charging indicator will illuminate.

To ensure a full charge, the machine should be left for a period of 8 hrs.

Once fully charged, disconnect the charging lead from both the power supply and the machine.



External Charging Point



ALWAYS ENSURE THE MACHINE IS SWITCHED OFF PRIOR TO CHARGING.

Recharge batteries after each use, regardless of machine operation time.

The machine charging point is located to the rear of the machine under the control panel.

Remove Isolator Plug and connect your external charger.

Refit Isolator Plug before operating the machine.

Note: Only use the recommended charger and leads. Contact Numatic International Ltd for recommended charger and leads.

Battery Care



To ensure your machine remains at its maximum efficiency and prolong your battery life, please follow the simple steps below:

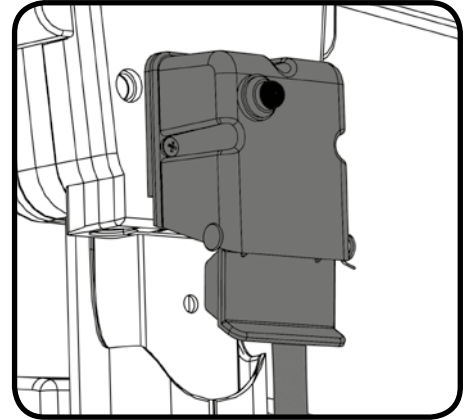


UNDER NORMAL DAILY USAGE:

Re-charge the machine FULLY after each use regardless of machine operation time. Do not leave the machine in a discharged state.

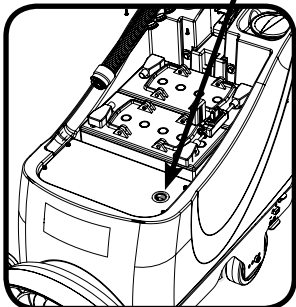
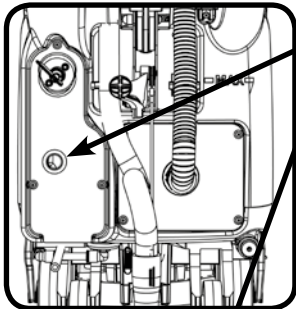


Periodically inspect the battery connections for tightness and corrosion



Charging Light Sequence

HGB 3045/55, HBG 3045/55 TGB 3045/55



Signal (LED)	Meaning
Red LED on	First Phase (Constant Current Mode)
Yellow LED on	Second Phase (Constant Voltage Mode)
Green LED on	Third Phase (Constant Voltage Mode) Charge Complete
Red LED flashing followed by Pause	Charging System Error Unsuitable battery or charging malfunction safety timer exceeded Internal short circuit, disconnect from power supply, switch power supply, OFF then ON, to restart the charging cycle
Yellow LED flashing	Battery not connected

TGB 4045/100, 4055/100, 4055/100T

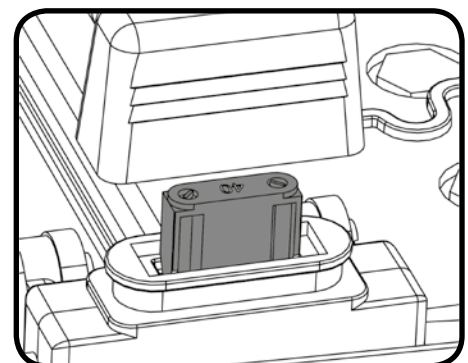
Re-charge the machine fully after its last use. **Do not leave the machine in a discharged state.**

Under abnormal use;

i.e. leaving the machine without charging for a period of time, we advise that you follow these steps:

If the machine will be standing unused for a period of 30 days or more, then batteries must be fully charged and battery fuses removed using the maxi fuse-puller provided, prior to this period.

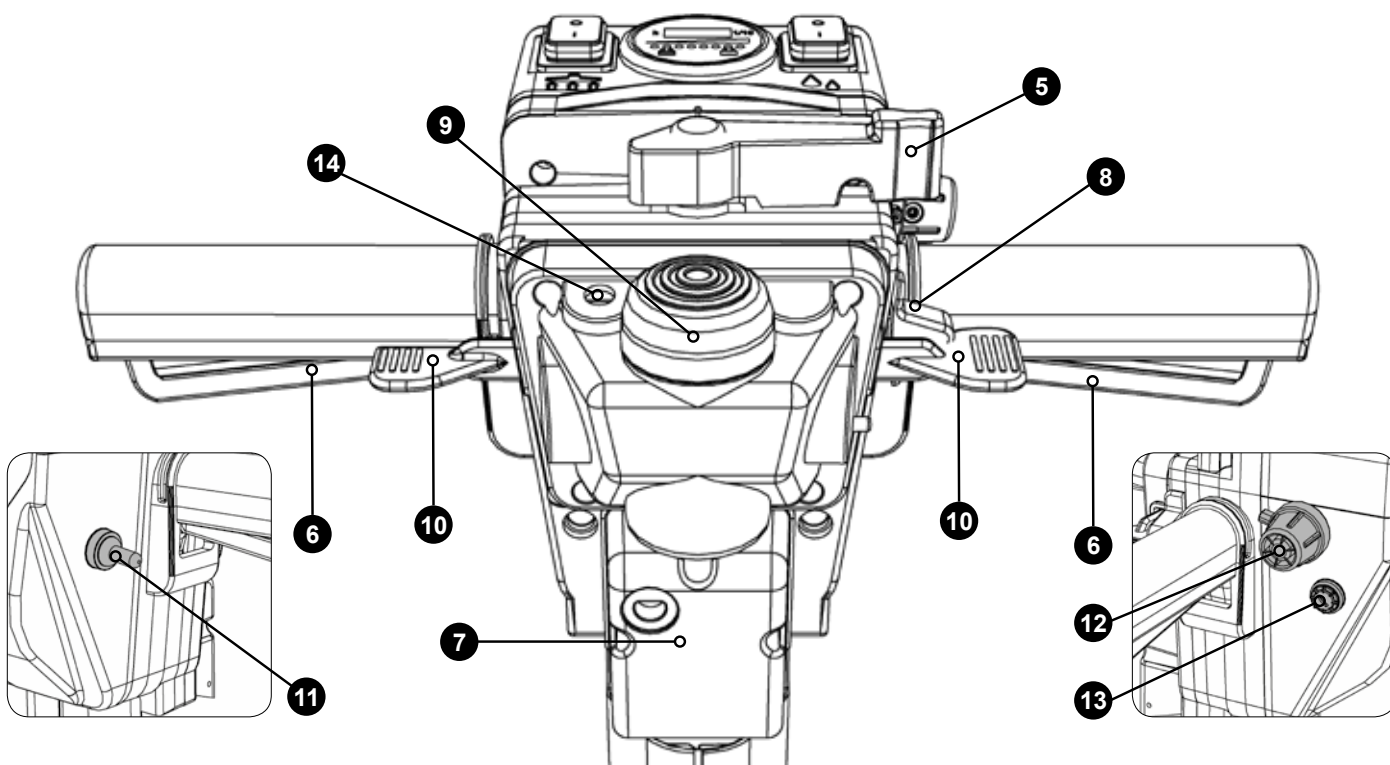
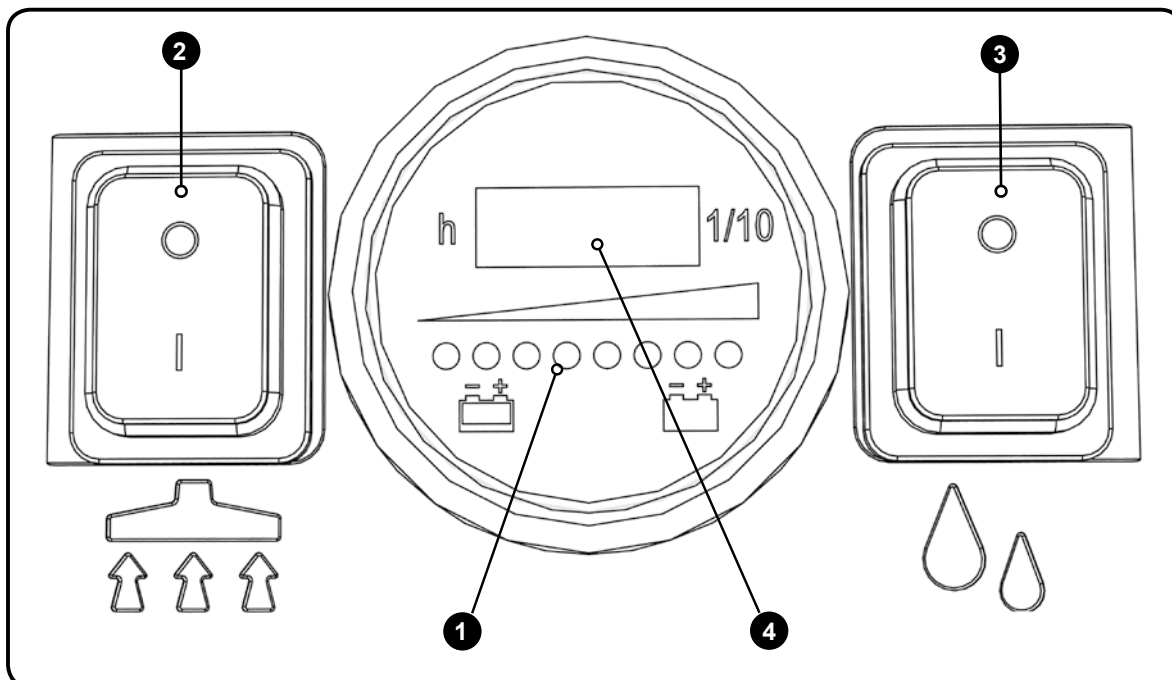
Batteries should be re-charged every three months.
Charge fully the day before you start using the machine again.



BATTERY SCRUBBER DRYER, TRACTION DRIVE

TGB 4055/100T

Control Panel Overview



1	Battery Charge Level Indicator	8	On / Off Switch
2	Vacuum Pick Up On / Off	9	Anti Crush Switch
3	Water Flow On / Off	10	Speed Boost Lever
4	Hours Meter	11	Forward / Reverse Switch
5	Handle Position Lever	12	Speed Control Dial
6	Triggers	13	Safety Fuse (2.5Amp)
7	Charging Point	14	Traction Status LED

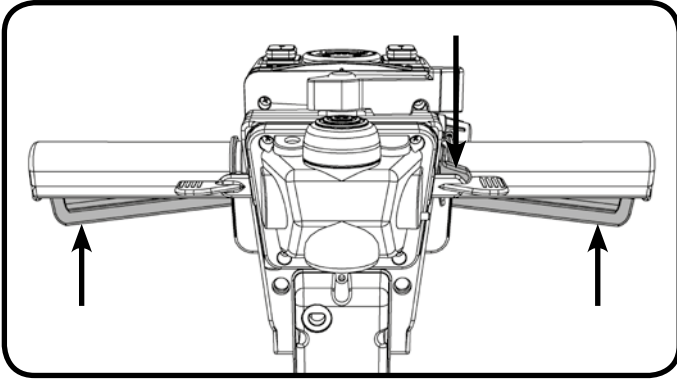


Warning this Applies to TGB4055T

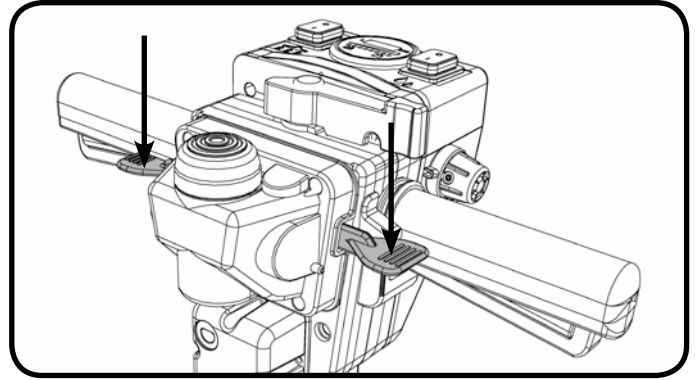
This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures. This Machine is only for use in an Industrial environment.



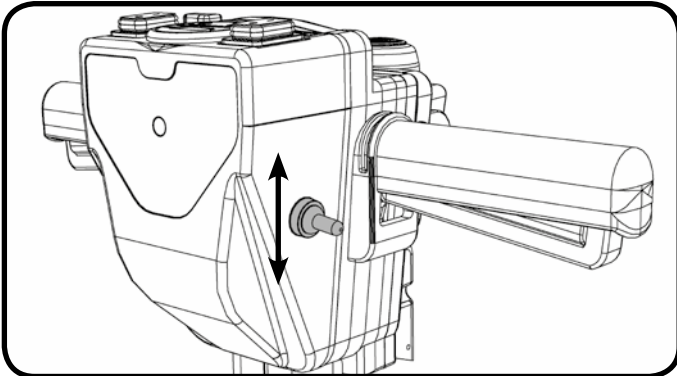
Machine Operation



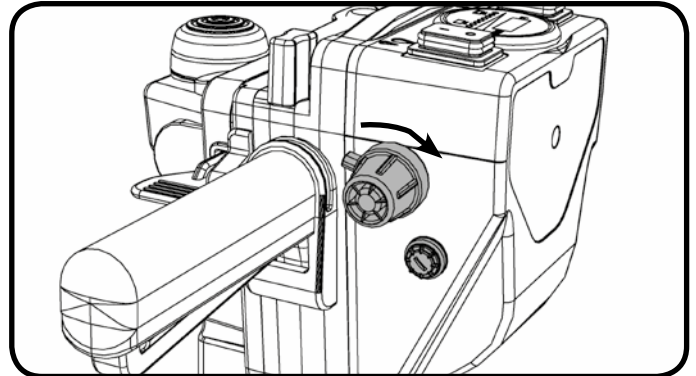
To start: hold either trigger and press the Yellow On / Off Switch once to start the machine.



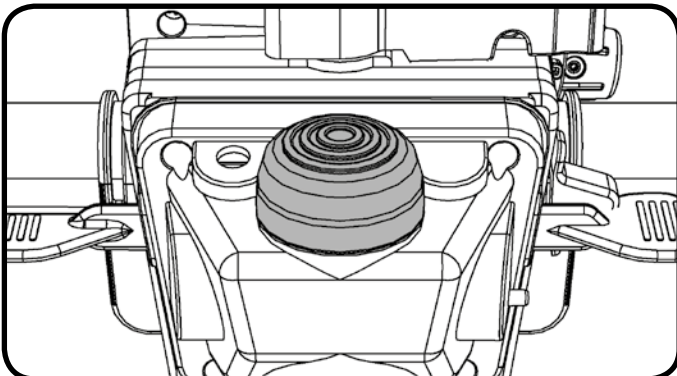
For a speed boost when moving the machine press the grey fast moving lever down.



Direction is controlled using the direction switch fitted to the left side of the handle



The speed is controlled by the speed control knob fitted to the right hand side of the handle

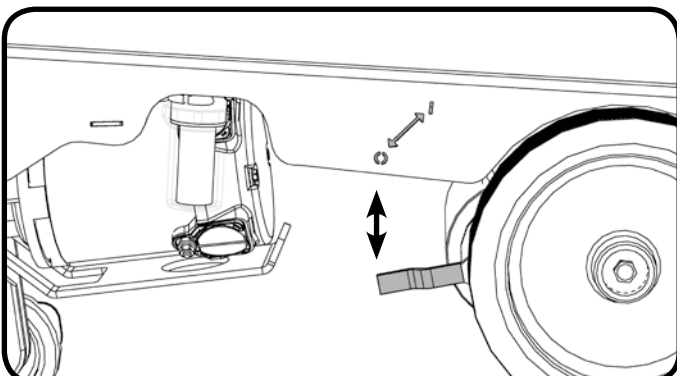


Anti Crush Switch

This machine is fitted with an Anti Crush Switch, instantly stopping and moving the machine forward if accidentally reversed into the operator.

Note: To drive machine in "Transport Mode" hold down both triggers.

Free Wheel Function



Located on the left side of the machine is the Free Wheel lever. To disengage the brake / drive mechanism, push the lever down. This allows the machine to be moved in free wheel mode.

Note: When the machine is in free wheel mode the brake has been disengaged, avoid slopes.

Specifications

HGB 3045/55, HBG 3045/55, TGB 3045/55

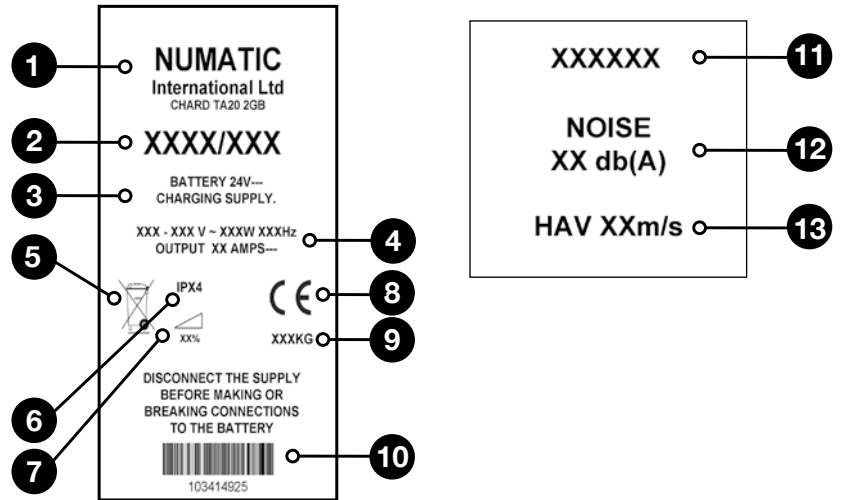
BRUSH WEIGHT	29.0 kg	GROSS WEIGHT (i.e. with liquid)	120 kg
BRUSH PRESSURE	21.7 g/cm ²	NETT WEIGHT (i.e. NO liquid)	90 kg
PAD PRESSURE	23.1 g/cm ²	POWER SOURCE	GELL BATTERY 24 VOLT (2 x 12V) 55Ah
CLEANING AREA	800m ² /HOUR @ 2 kph	RUN TIME (BATTERY LIFE)	1 HRS 30 MINS
BRUSH MOTOR POWER	300W	RECHARGING TIME	10 HRS (Option for external charger)
BRUSH SPEED	100 rpm	INTERNAL CHARGER INPUT	235W
BRUSH DIA	450mm	INTERNAL CHARGER OUTPUT	5A DC
PAD DIA	400mm	BATTERY WEIGHT (TOTAL)	37.6 Kg
VAC MOTOR MAX. POWER	400W	HEIGHT	1100mm
VAC MOTOR - SUCTION @ SQUEEGEE	120 mbar	LENGTH	890mm (1065mm)
VAC MOTOR - AIRFLOW @ SQUEEGEE	25.0 l/sec	WIDTH	470mm (805mm)
WATER CAPACITY	30L	SQUEEGEE LENGTH	805mm
WATER FLOW - AVERAGE	0-2 l/min	SOUND PRESSURE LEVEL	≤70 dB(A)
DRIVE MOTOR POWER/DRIVE SPEED	N/A	VIBRATION LEVEL	HAV ≤1.0 m/s ²
WATER INGRESS PROTECTION	IPX4	MAX GRADIENT	2%

TGB 4045/100, TGB 4055/100, TGB 4055/100T

BRUSH WEIGHT	TGB4045 - 24-45Kg TGB4055 - 32-48Kg TGB4055T - 32Kg	GROSS WEIGHT (i.e. with liquid)	TGB4045 - 100Ah: 168kg, 80Ah: 159kg TGB4055 - 100Ah: 169.5kg, 80Ah: 160.5kg TGB4055T - 100Ah: 179.5kg, 80Ah: 170.5kg
BRUSH PRESSURE	TGB4045 - 17-33g/cm ² TGB4055 - 19-28g/cm ² TGB4055T - 19g/cm ²	NETT WEIGHT (i.e. NO liquid)	TGB4045 - 100Ah: 128kg, 80Ah: 119kg TGB4055 - 100Ah: 129.5kg, 80Ah: 120.5kg TGB4055T - 100Ah: 139.5kg, 80Ah: 130.5kg
PAD PRESSURE	TGB4045 - 19-35g/cm ² TGB4055 - 16-24g/cm ² TGB4055T - 16g/cm ²	POWER SOURCE	GELL BATTERY 24 VOLT (2 x 12V) 100Ah / 80Ah
CLEANING AREA	TGB4045 - 800m ² /Hr @ 2kph TGB4055 - 970m ² /Hr @ 2kph TGB4055T - 970m ² /Hr @ 2kph	RUN TIME (BATTERY LIFE)	2 Hrs 25 Mins
BRUSH MOTOR POWER	300W	RECHARGING TIME	8 Hrs (Option for external charger)
BRUSH SPEED	100 rpm	INTERNAL CHARGER INPUT	350W
BRUSH DIA	TGB4045 - 450mm TGB4055 - 550mm TGB4055T - 550mm	INTERNAL CHARGER OUTPUT	10A DC
PAD DIA	TGB4045 - 400mm TGB4055 - 508mm TGB4055T - 508mm	BATTERY WEIGHT (TOTAL)	80Ah : 54.5kg, 100Ah: 63.5kg
VAC MOTOR MAX. POWER	400W	HEIGHT	TGB4045 - 1160mm TGB4055 - 1160mm TGB4055T - 1160mm
VAC MOTOR - SUCTION @ SQUEEGEE	120 mbar	LENGTH	TGB4045 - 1070mm (1155mm) TGB4055 - 1115mm (1200mm) TGB4055T - 1115mm (1200mm)
VAC MOTOR - AIRFLOW @ SQUEEGEE	24.2 L/sec	WIDTH	TGB4045 - 470mm (805mm) TGB4055 - 560mm (805mm) TGB4055T - 560mm (805mm)
WATER CAPACITY	40L	SQUEEGEE LENGTH	805mm
WATER FLOW - AVERAGE	0-2 l/min	SOUND PRESSURE LEVEL	≤70 dB(A)
DRIVE MOTOR POWER/DRIVE SPEED	TGB4055T - 250W	VIBRATION LEVEL	HAV ≤0.59 m/s ²
WATER INGRESS PROTECTION	IPX4	MAX GRADIENT	TGB4045/4055 - 2%, TGB4055T - 9%

About the Machine

Rating Label	
1	Company Name & Address
2	Machine Description
3	Voltage Frequency
4	Power rating
5	WEEE Logo
6	Ingress Protection Rating
7	Max Gradient
8	CE Mark
9	Weight (ready to use)
10	Machine yr/wk Serial number
11	Machine Description
12	Noise Rating
13	Hand Arm Vibration



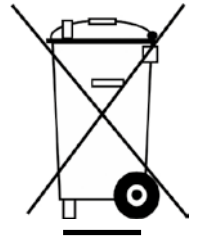
WEEE (Waste, Electrical and Electronic Equipment)

Scrubber dryer Accessories and packaging should be sorted for environmentally-friendly recycling. Only for EU countries.

Do not dispose of scrubber-dryer into household waste.

According to the European Directive 2012/19/EU on waste electrical electronic equipment and its incorporation into national law.

Scrubber-dryers that are no longer suitable for use must be separated, collected and sent for recovery in an environmentally-friendly manner.



PPE (Personal protective equipment) that may be required for certain operations.

Ear Protection	Safety Footwear	Head Protection	Safety Gloves	
Dust / Allergens Protection	Eye Protection	Protective Clothing	Hi-Vis Jacket	Caution Wet Floor Sign

NOTE: A risk assessment should be conducted to determine which PPE should be worn.

Safety Critical Component:

Charging Leads: H05VV-F x 1.0 mm² x 3 Core
Battery Charger: 220 / 240 Volt

***In the event of a breakdown contact
your Numatic dealer or the
Numatic Technical
help line +44 (0)1460 269268***



**ORIGINAL INSTRUCTIONS
READ MANUAL BEFORE USE**

Information for Scrubber Dryer

COMPONENT	INTERVAL	INSPECT FOR
Mains Lead	DAILY	Scuffing, cracks, splits, conductors showing
Brushes	DAILY	Bristle damage, wear, drive collar wear
Squeegee Blade	BEFORE EACH USE	Wear, cracks, splits
Filters	BEFORE EACH USE	Clogging and debris retention
Tanks	AFTER EACH USE	Rinse dirty water tank after use



WARNING

As with all electrical equipment care and attention must be exercised at all times during its use, in addition to ensuring that routine and preventative maintenance is carried out periodically in order to ensure its safe operation.

Failure to carry out maintenance as necessary, including the replacement of parts to the correct standard could render this equipment unsafe and the manufacturer can accept no responsibility or liability in this respect. When ordering spare parts always quote the Model Number / Serial Number specified on the Rating Plate. Warning do not use on slopes exceeding 2% for non traction machines and 9% for traction machines.

This appliance 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 appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance. When detergents or other liquids are used, read the manufacturer's instructions.

Only use brushes provided with the appliance or those specified in the instruction manual. The use of other brushes may impair safety.

A full range of brushes and accessories are available for this product.

Only use brushes or pads which are suitable for the correct operation of the machine for the specific task being performed.

It is essential that this equipment is correctly assembled and operated in accordance with current safety regulations.

When using the equipment always ensure that all necessary precautions are taken to guarantee the safety of the operator and any other persons who may be affected.

Wear nonslip footwear when scrubbing. Use a respiratory mask in dusty environments.

The machine, while charging, must be positioned so that the mains plug is easily accessible.

When cleaning, servicing or maintaining the machine, replacing parts or converting to another function the power source shall be switched off.

Mains operated machines shall be disconnected by removing the power plug, and battery operated machines shall be disconnected by removing the fuse.

In order to prevent unauthorised use of the machine the power key must be removed after use.

Machines left unattended shall be secured against unintentional movement.

When detergents or other liquids are used, read the manufacturer's instructions.

Operators shall be adequately instructed as to the correct use of the machine.

If this product does not have a factory installed Numatic battery charger, then it is the responsibility of the owner and user of the product to ensure that the charging system and battery combination are compatible, fit for purpose and safe to use.



CAUTION

This machine is not suitable for picking-up hazardous dust.

Do not use on surfaces having a gradient exceeding that marked on the appliance.

The machine is not to be stored outdoors in wet conditions.

This machine is for indoor use only.

Read the instruction manual before using the appliance.

This product meets the requirements of IEC 60335-2-72

NOTES: This machine is also suitable for commercial use, for example in hotels, schools, hospitals, factories, shops and offices for other than normal housekeeping purposes.



DO

- Ensure only competent persons unpack/assemble the machine.
- Keep your machine clean.
- Keep your brushes in good condition.
- Replace any worn or damaged parts immediately.
- Regularly examine the power cord for damage, such as cracking or ageing. If damage is found, replace the cord before further use.
- Only replace the power cord with the correct Numatic approved replacement parts.
- Ensure that the work area is clear of obstructions and / or people.
- Ensure that the working area is well illuminated.
- Pre-sweep the area to be cleaned.



DON'T

- Use steam cleaners or pressure washers to clean the machine or use in the rain.
- Attempt machine maintenance or cleaning unless the power plug has been removed from the supply outlet.
- Allow any inexperienced repairs. Call the experts.
- Strain cable or try to unplug by pulling on cable.
- Leave the brush pad on the machine when not in use.
- Allow the machine to be used by inexperienced or unauthorised operators or without appropriate training.
- Use the machine without the solution tanks properly positioned on the machine, as shown in the instructions.
- Expect the machine to provide trouble-free, reliable operation unless maintained correctly.
- Run the machine over power cable during operation.
- Lift or pull the machine by any of the operating triggers, use the main handle.
- Remove the handle from the machine except for service and repair.



Precautions when working with batteries

1. Always wear protective clothing e.g. face visor, gloves and overalls when working with batteries.
2. Whenever possible always use a properly designated and well-ventilated area for charging.
Do not smoke or bring naked flames into the charging area.
3. Remove any metallic items from hands, wrists and neck i.e. rings, chains etc. before working on a battery.
4. Never rest tools or metallic objects on top of the battery.
5. When charging is complete disconnect from the mains supply.
6. The batteries must be removed from the machine before it is scrapped.
7. The machine must be disconnected from the supply when removing the battery.
8. To remove the batteries:- Disconnect machine from the mains supply (if charging) and ensure batteries are switched off with circuit disconnect switch (see page 19). Disconnect hoses from separator and tanks.
Remove separator and tanks. Unscrew battery strap fixings and remove.
Undo battery terminals and remove. Remove batteries.
9. The batteries are to be disposed of safely and in accordance with the battery directive.
10. Only use genuine Numatic replacement batteries.
11. Do not allow the batteries to become fully discharged; it may not be possible to re-charge them.
Batteries should not be discharged below 9.5 volts with 10 amps flowing.
12. Do not allow one battery to be discharged separately to the other.
13. Do not mix batteries from different machines.
14. The batteries fitted to this product are Valve Regulated Lead Acid (VRLA) gel electrolyte type.
The fitting of any other type of battery may cause a safety hazard.

Battery Care

1. Battery Storage:

- a. Batteries must be stored in a dry, level and clean location not exceeding a temperature range of 5°C to 25°C.
- b. Batteries must be fully charged after 6 months when on-the-shelf and as a minimum every 3 months thereafter or if the battery voltage reduces to 12.6V.
- c. Batteries must be put into use within 12 months of the date of manufacture, failure to do so will lead to reduced capacity in the field.
(battery date code) - silver label on the battery - (e.g. 1649) = Year - 2016 / Week - 49.
- d. If a battery reaches 10.5V, irreversible damage has occurred. Under this condition, a battery should not enter into service and should be disposed of according to local authority guidelines.

2. During Use:

- a. Batteries must be recharged after every use regardless of machine run time
- b. If the machine is to be left dormant for any length of time complete the following:
 - i. Fully charge the batteries and remove the battery fuses
 - ii. Every 3 months insert the fuses and recharge
 - iii. Do not leave batteries dormant for more than 6 months

3. Warranty:

- a. Batteries are warranted for 600 cycles (2 Years) providing all battery care rules are followed
- b. To claim warranty the following details must be supplied
 - i. Serial number of the machine
 - ii. Battery date code (Show picture of battery date code)
 - iii. Date purchased
 - iv. Proof of Purchase
 - v. Maintenance history and charging regime

Battery Model	Battery Weight	Battery Dimensions
Sonnenschein	18.48 Kg	278mm x 175mm x 190mm
MK Battery	31.8 Kg	327.5mm x 169mm x 218mm

**TwinTec
Maintenance**

Daily

Keep the machine clean.
Ensure brushes/ pads/ squeegee/ filters are in good condition.
Check for any worn or damaged parts and replace immediately.
Drain and rinse dirty water tank after every use.
Store machine with brush deck secured in tilted position.

Weekly – as daily and –

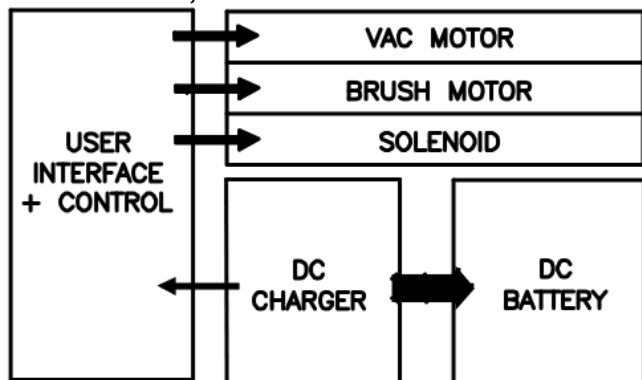
Check brush or pad and skirt and rinse.
Check floor tool blades for wear and wipe clean.
Clean separator assembly including filter and check condition of seal.
Flush out system with clean water and clean filters.
Do not steam clean or pressure wash.

Batteries

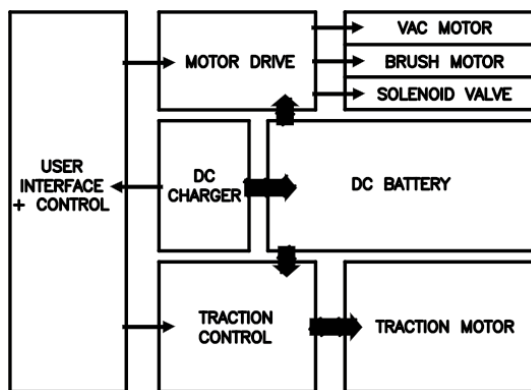
Always re-charge the batteries after use.
Charge for a minimum of 4 hours after the green light has come on, this will prolong battery life.

Schematic Diagram

HGB3045/55, HBG3045/55, TGB3045/55
TGB4045/100, TGB4055/100.



TGB4055/100T



Notes:

Spare Parts

BRUSHES		HOSES	
606028	550 mm Polyscrub Brush	903341	Hose Closure (Bottom Tank)
606550	550 mm Nyloscrub Brush	903341	Hose Closure (Filling Hose)
606551	550 mm Long Life Brush	900903	Hose Closure (Top Tank)
900526	500 mm NuLoc2 Drive Board	GENERAL PARTS	
606203	450mm Polyscrub Brush	221091	20 Amp Maxi Fuse (VAC)
606204	450mm Nyloscrub Brush	230104	30 Amp Maxi Fuse (Brush)
606306	450mm Longlife Brush	221047	40 Amp Maxi Fuse (Battery)
900525	400mm NuLoc2 Drive Board	221107	50 Amp Maxi Fuse (Battery Traction)
SQUEEGEE		903066	2.5 Amp Handle Fuse
903281	Red Squeegee Knob	903736	24v Contactor
215006	Squeegee Castor Wheel	903542	Grit Filter Basket (Red)
606319	Squeegee Castor Assembly Set	208888	(CWF) Clean Water Filter (Complete)
900518	Squeegee 650 Blade Set	208827	CWF Strainer Base Moulding
903486	Complete 650 Squeegee Assembly	208830	CWF Strainer Gasket
900519	Squeegee 750 Blade Set	208889	CWF Extended Strainer 50 Mesh Screen
904699	Complete 750 Squeegee Assembly	208890	CWF 68mm Extended Strainer Clear Bowl
206953	Detent Pin	208638	160mm Rear Wheel
		220386	Charging Lead (V17 - UK)

Trouble Shooting

PROBLEM	CAUSE	SOLUTION
Machine will not operate	Missing or blown fuses Low battery charge Machine is connected and charging	Fit or replace fuse (page 5) Charge batteries (page 13 / 14) Take off charge (page 13)
Vacuum will not operate	Waste water tank full Check fuse	Empty waste water tank (page 11) Check fuse (page Page 5)
Poor water pick-up	Waste water tank full Clogged / blocked vacuum hose Loose hose connections Debris basket filter clogged / blocked Separator filter clogged / blocked Poor separator seal Damaged separator seal Damaged / split vacuum hose Damaged floor tool blades Low battery charge	Empty waste water tank (page 11) Remove and clean (page 11) Push tight connections (page 7) Remove and clean (page 11) Remove and clean (Page 11) Clean and refit (page 11) Renew (contact service dept) Renew (contact service dept) Renew (contact service dept) Re-charge batteries (page 13 / 14)
No brush / scrub function	No brushes fitted Check fuse	Check and fit (page 6) Check fuse (page Page 5)
Little or no water flow	Clean water tank empty Clean water tank filter blocked / clogged Water flow not on Brush deck raised	Fill clean water tank (page 7) Remove and clean (11) Switch on water flow (Page 9) Lower brush deck (page 9)
Machine just 'stops' while operating	Too much load on the brush system	Decrease the brush load to best suit the floor type.

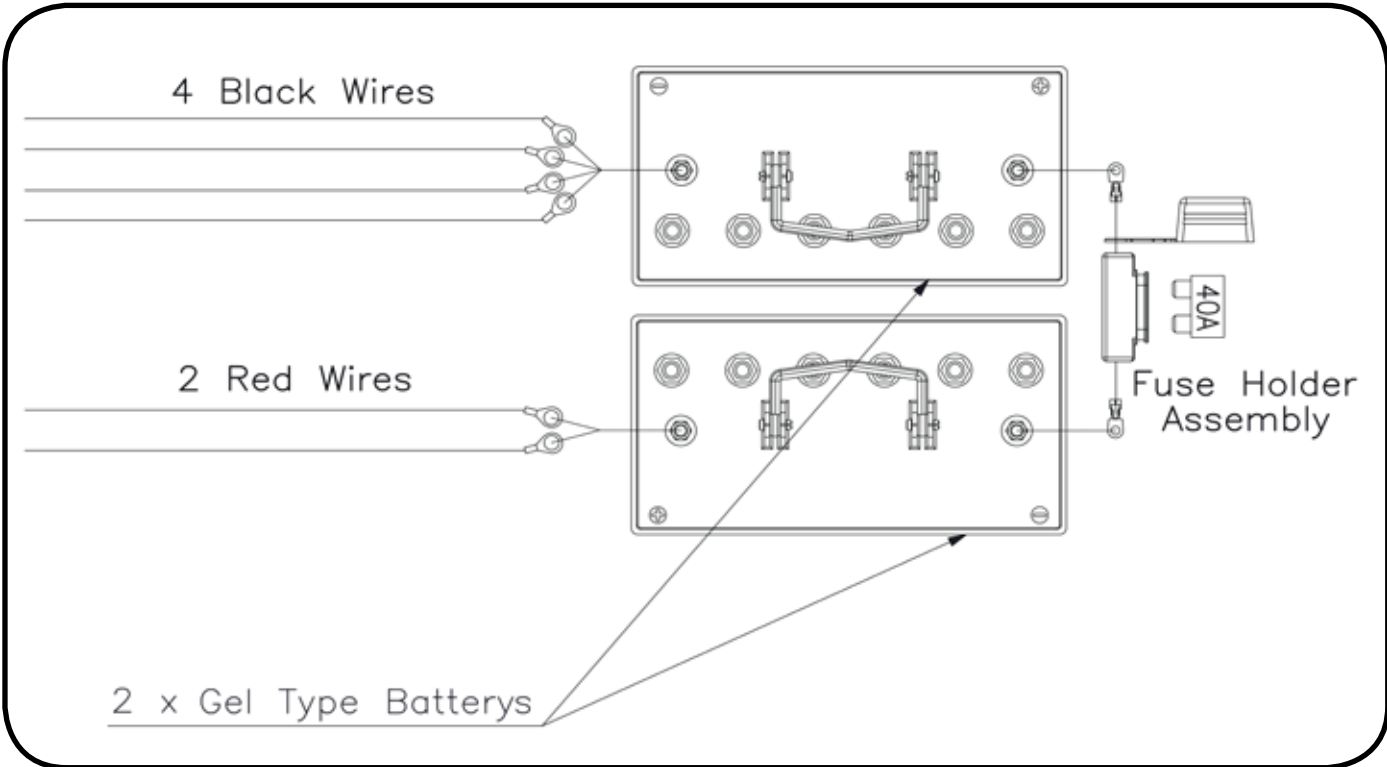
Failure to rectify the problem or in the event of a breakdown contact your Numatic dealer or Numatic Technical helpline +44 (0)1460 269268

TGB 4055T Fault Codes

Contact Service Agent

Green Status Indicator	Fault	Possible Cause	Effect on Product	Investigate the Following	Action Required	If Fault Persists
1 Flash with pause ●	Batteries voltage low	Batteries not been charged Possible bad connection between batteries, controller, charger or fuses caused by loose connections, damaged wiring, water ingress Not accepting charge due to faulty battery / cell Charger not functioning	Operating time severely reduced or machine will not operate	Check when machine last charged Switch OFF the machine : Remove Fuses Check connections to batteries, charger and fuses for loose wires or screws Check each battery Voltage individually to detect defect unit 10.5V min Check battery voltage and charge current ensuring charger red fault light is extinguished	Charge batteries immediately Tighten loose connections and replace damaged components Replace batteries as required Replace charger	
2 Flashes with pause ●●	Traction motor disconnected	The motor has a bad connection Motor disconnected TCO activated (Thermal Cut Out) Motor failed to open circuit	The motor will not operate	Check all connections and leads between motor and controller	Tighten loose connections and replace damaged components	
3 Flashes with pause ●●●	Traction motor wiring trip	The motor has a short circuit to a battery	Motor will not operate	Check all connections and leads between the motor and controller		
4 Flashes with pause ●●●●	Battery Lockout	The battery charge level has fallen below the battery lockout level and the controller is inhibiting machine functions	Machine functions not working	Check battery voltage and charge current ensuring charger red fault light is extinguished Check each battery voltage individually to detect defect unit 10.5V min	Charge batteries immediately	
6 Flashes with pause ●●●●●●	Charger connect-ed	The controller is being inhibited from driving, this may be because the battery charger is connected	Machine functions not working	Remove charger to operate machine		
8 Flashes with pause ●●●●●●●●	Controller trip	A controller trip is indicated	Machine functions not working	Check all connections and leads	Tighten loose connections and replace damaged components	
9 Flashes with pause ●●●●●●●●●●	Brake deactivated or failed	Poor brake connections Brake failure or deactivation	Traction drive disabled	Check brake wiring and brake lever	Replace brake or wiring as necessary. Reactivate brake by engaging brake lever	
10 Flashes with pause ●●●●●●●●●●●●	High battery voltage	Poor connections between battery controller and traction motor	Machine functions not working	Check each battery Voltage individually to ensure voltage < 14 volts Check connections on controller batteries and traction motor Check combined battery pack voltage is < 28 volts		

Battery Wiring Diagram



For optimum performance Numatic International Ltd recommend the use of the following batteries in the Twintec machines.

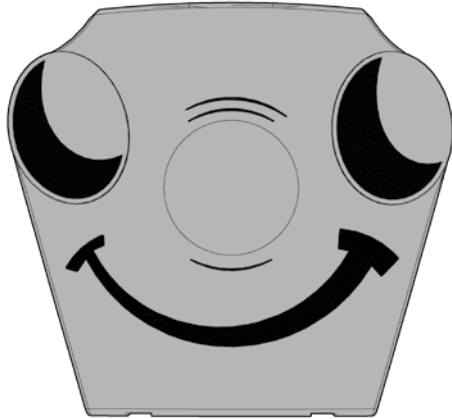
<i>Machine</i>	<i>Numatic Recommended Battery</i>	<i>Numatic Number</i>
TGB 3045 Less Battery	Sonnenschein Battery - 55A/h Stud Terminal Gel Type - Suppliers Ref: GF 12 050V	901161
HGB 3045 Less Battery	Sonnenschein Battery - 55A/h Stud Terminal Gel Type - Suppliers Ref: GF 12 050V	901161
HGB 3045 Less Battery	Sonnenschein Battery - 55A/h Stud Terminal Gel Type - Suppliers Ref: GF 12 050V	901161
TGB 4045 Less Battery	MK Battery - 98A/h Stud Terminal Gel Type - Suppliers Ref: E31 SLD G ST	205112
TGB 4055 Less Battery	MK Battery - 98A/h Stud Terminal Gel Type - Suppliers Ref: E31 SLD G ST	205112
TGB 4055T Less Battery	MK Battery - 98A/h Stud Terminal Gel Type - Suppliers Ref: E31SLD G ST	205112

<i>Make</i>	<i>Voltage</i>	<i>Capacity</i>	<i>Weight</i>	<i>Size</i>
Sonnenschein	12 V	55 A/h	18.48 Kg	278mm x 175mm x 190mm
MK Battery	12 V	98 A/h	31.8 Kg	327.5mm x 169mm x 218mm

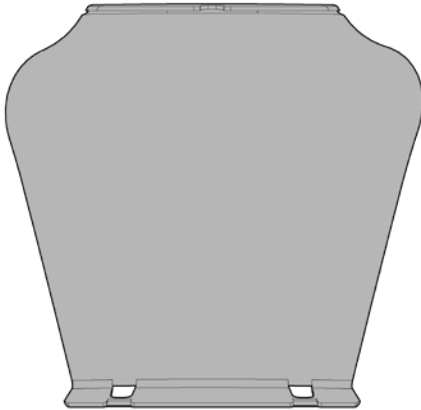
Face Fitting Instructions

1

FRONT

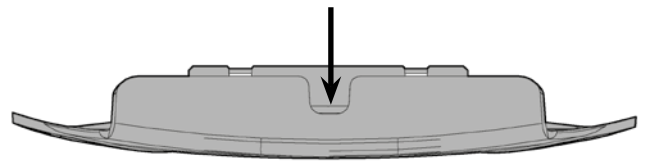


BACK

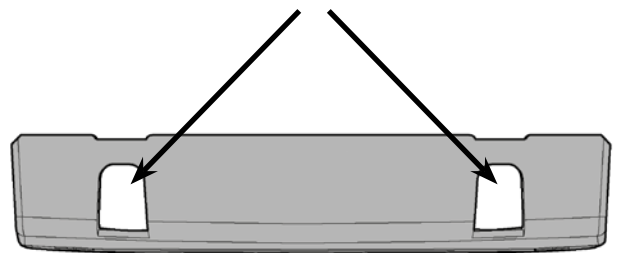


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TOP CLIP

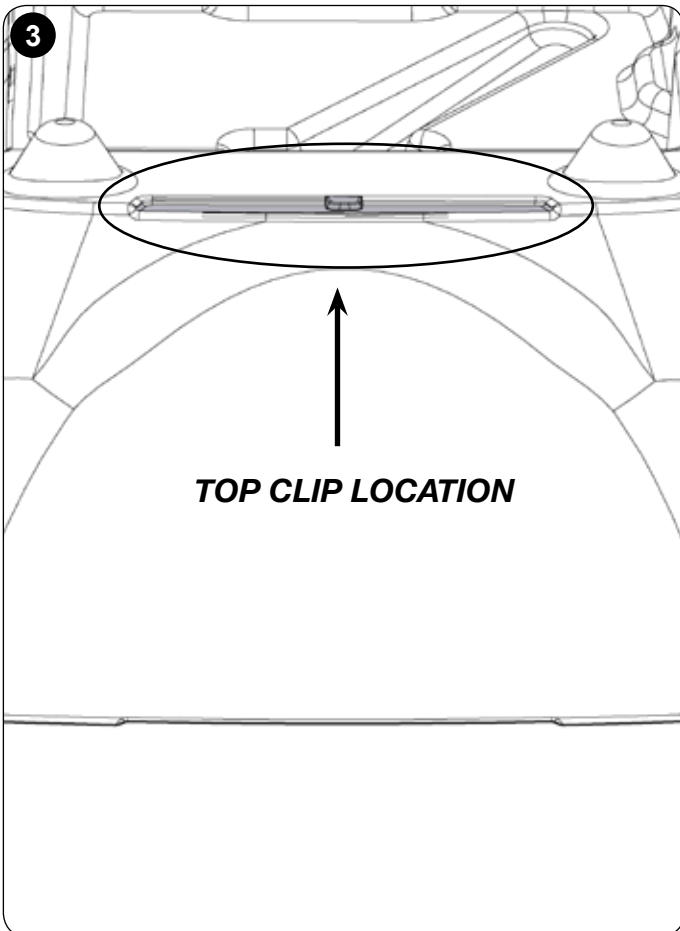


BOTTOM CLIPS



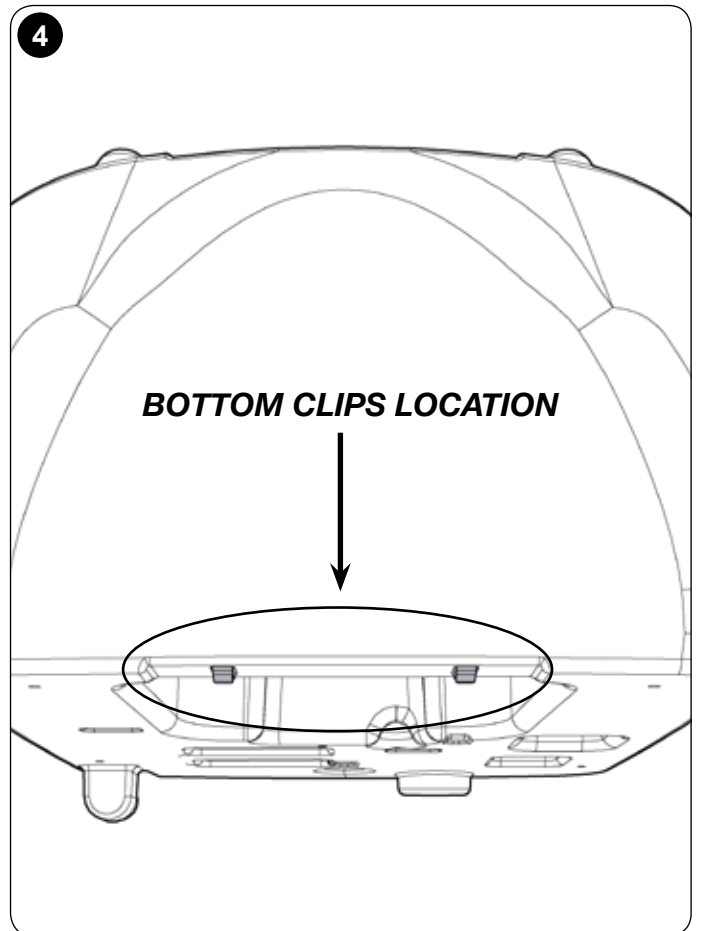
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TOP CLIP LOCATION



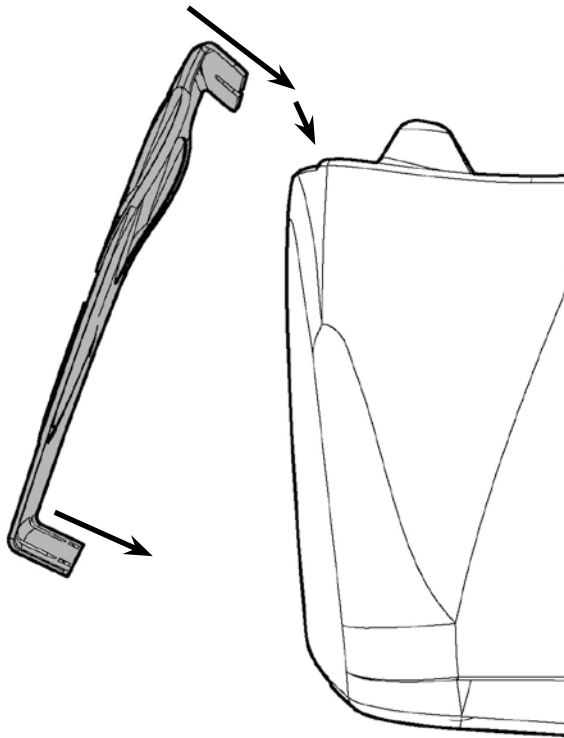
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BOTTOM CLIPS LOCATION

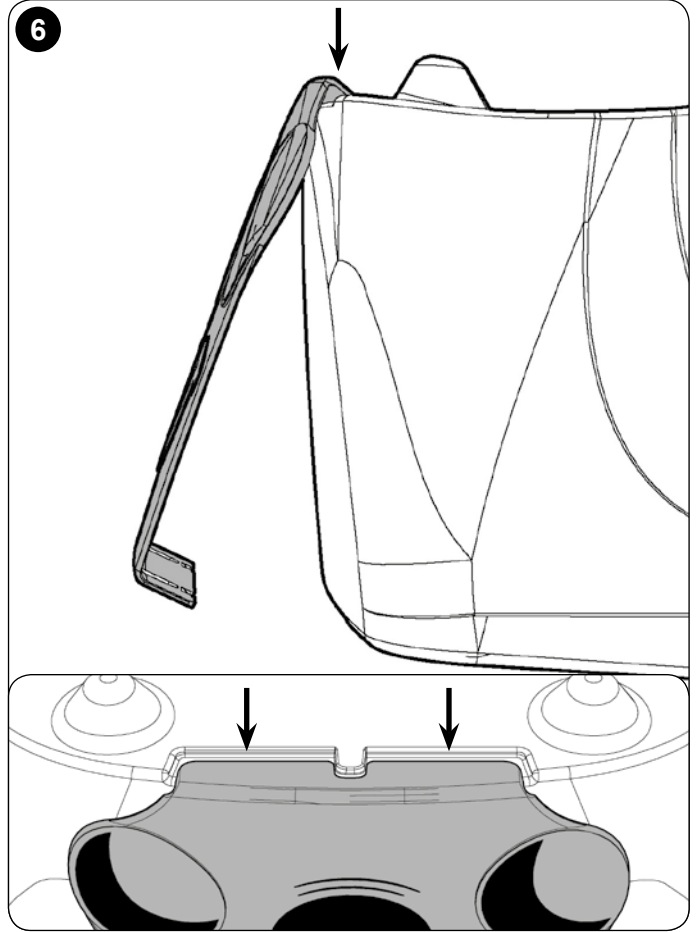


Face Fitting Instructions

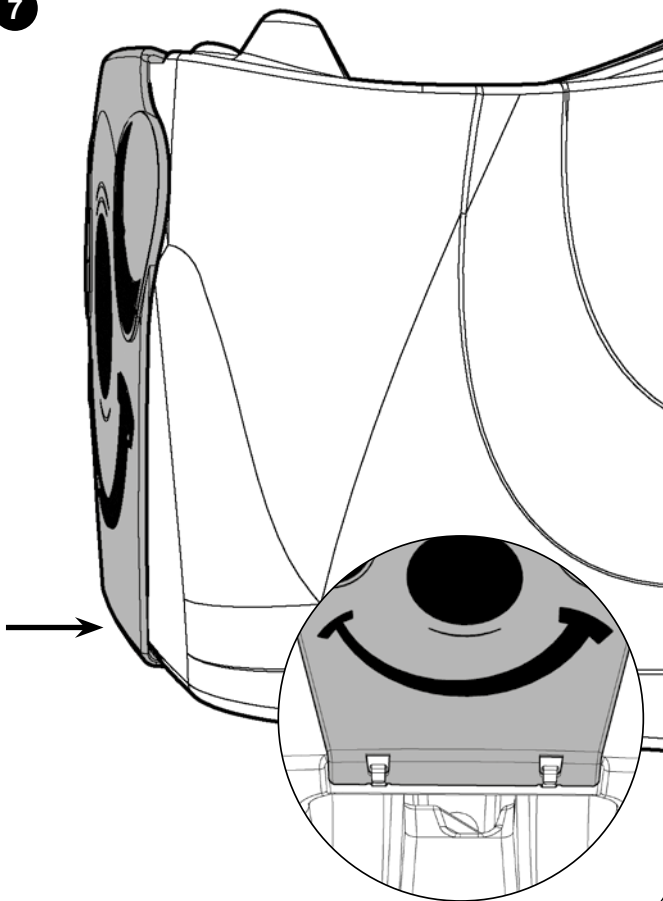
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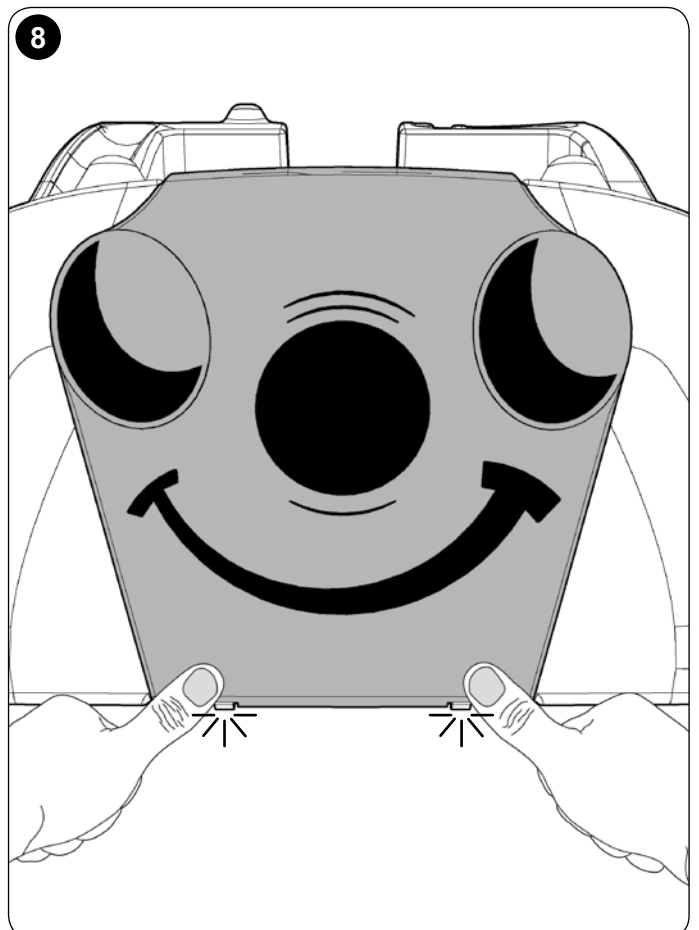
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7



8





EU DECLARATION OF CONFORMITY

We hereby declare under our sole responsibility that the following equipment fulfils all the relevant provisions of the following EU Directives

Machinery Directive 2006/42/EC
EMC Directive 2014/30/EU
RoHS Directive 2011/65/EU

Machine Description: Scrubber Dryer
Machine Type: TTB, ETB, TGB, HGB, HBG Series.

Relevant standards upon which conformity is declared include:

EN 60335-1: 2012 + A11:2014
EN 60335-2-72: 2012
EN 55014-1: 2006 + A1:2009 + A2:2011
EN 55014-2: 1997 + A1:2001 + A2:2008
EN 61000-3-2: 2014
EN 61000-3-3: 2013
EN 62233: 2008

A technical construction file for this equipment is retained at the manufacturer's address under the authorisation of the following signatory:

Name: Allyn Boyes Position: Development Manager

Signed  Date 29/9/17



Numatic International Ltd
Chard Somerset
TA20 2GB
www.numatic.co.uk

GB

Numatic International Warranty

Numatic International Limited warrant to the original purchaser that its products are free of defects in both material or workmanship for the period shown below:-

Homecare and Cleancare Vacuum cleaners.....	2 Years
Rotary Floor Machines.....	2 Years
Twintec Auto Scrubber Dryer.....	1 Year
Vario Ride-On Scrubber Dryer.....	1 Year / 1500 hours
Mopping, Compacts, Combi and Servocare Products.....	1 Year
Individual Accessories and Spare Parts.....	6 Months

Note: This warranty expressly excludes consumable parts such as carbon brushes, floor brushes, mops, batteries etc, that are considered replaceable from time to time during the normal working life of the machine.

- A. The warranty period commences from the date the goods are purchased.
- B. All warranty claims must be processed through the Dealer from whom the equipment was purchased. The Dealer will co-operate with the purchaser throughout the warranty claims procedure and will arrange any necessary repairs using genuine Numatic parts.
- C. If the original Dealer is no longer able to fulfil his obligations please contact Numatic International Limited with full details of the claim and proof of purchase so that this may be processed without delay.
- D. Any warranty claim can only relate to the specific part that is proven to be at fault and for which a replacement will be supplied but cannot be extended to constitute a claim against the complete machine.
- E. Numatic International will supply the Dealer with any warranty parts required, subject to the claim being validated, after return of the faulty items in accordance with Numatic International Limited's General Conditions of Sale.
- F. Claims will not be accepted if they are the result of fair wear and tear, misuse or abuse of any kind.
- G. No replacement will be given unless the appropriate evidence of the validity of the claim has been provided to the satisfaction of Numatic International Limited.
- H. Numatic International Limited reserve the right to charge for any unnecessary work carried out as a result of an invalid claim.
- I. No variation to this warranty may be made or implied by any member of Numatic International Limited or its Dealers unless such variation is in writing and authorised by the Company



Numatic International Limited. Chard, Somerset, TA20 2GB

Telephone: 01460 68600 Fax: 01460 68458

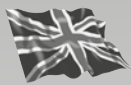
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**This Machine Has Been Packed
With The Following**

- | | |
|---------------|--------------------------|
| Brush / Pad | <input type="checkbox"/> |
| Floor Tool | <input type="checkbox"/> |
| NuTab | <input type="checkbox"/> |
| Charging Lead | <input type="checkbox"/> |
| Fuse Pack | <input type="checkbox"/> |

Signed

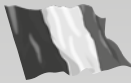
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Chard, Somerset TA20 2GB ENGLAND
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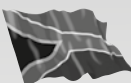
Numatic International GmbH. Fränkische Straße 15–19
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77500 CHELLES, FRANCE
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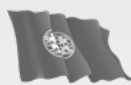
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Tel: +351 220 047 700 www.numatic.pt

This Product has been comprehensively inspected and checked during every stage of its manufacture.
Including an in-depth electrical safety and functionality test.

Specification subject to change without prior notice
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