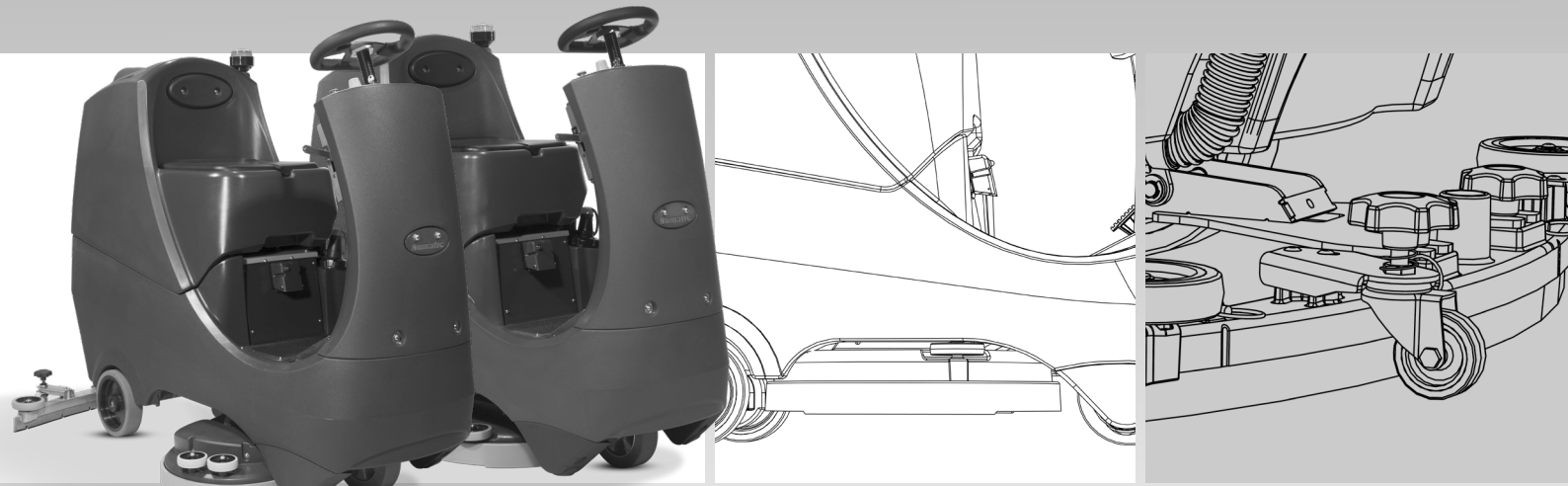




**NACECARE**<sup>MC</sup>  
S O L U T I O N S

# TGB 2120 TGB2128 RIDE-ON SCRUBBER DRYER



TGB2128

TGB 2120

## Owner Instructions



**CAUTION, Read instructions before using the machine**



# RIDE ON SCRUBBER DRYER

## TGB 2128/ 2120

Index

Machine Overview .....	Pages 2-3
Control Panel Overview .....	Page 4
Machine Set up Guide .....	Page 5
Hose U Bend Clip .....	Page 6
Fitting the Floor tool .....	Page 6
Breakaway Floor tool Feature .....	Page 6
Raise / Lower Brush Deck.....	Page 7
Fitting the brush .....	Page 7
Floor tool Transit Bracket .....	Page 7
Filling the Clean Water Tank .....	Page 8
Fill Level Indicator .....	Page 8
Setting the Cleaning Controls .....	Page 9
Waste Water Tank Full .....	Page 9
Emergency Stop Button and Horn.....	Page 10
Maximum Speed Control .....	Page 10
Anti-tip System .....	Page 10
Machine in Use .....	Page 11
Off-aisle Cleaning Kit .....	Page 11
Machine Cleaning .....	Pages 12-13
Free-Wheel Function .....	Page 13
Changing Floor tool Blades .....	Page 14
Machine Charging .....	Page 15
Battery Care .....	Page 16
Charging Lights Sequence .....	Pages 16-17
Specifications .....	Page 18
Trouble Shooting .....	Page 18
Rating Label / Personal Protective Equipment / Recycling .....	Page 19
Safety Precautions .....	Page 20-21
Recommended Spare Parts .....	Page 22
Schematic Diagram .....	Page 22
Battery Wiring .....	Page 23
EU Declaration Document .....	Page 24
Warranty .....	Page 24
Company Address .....	Page 28

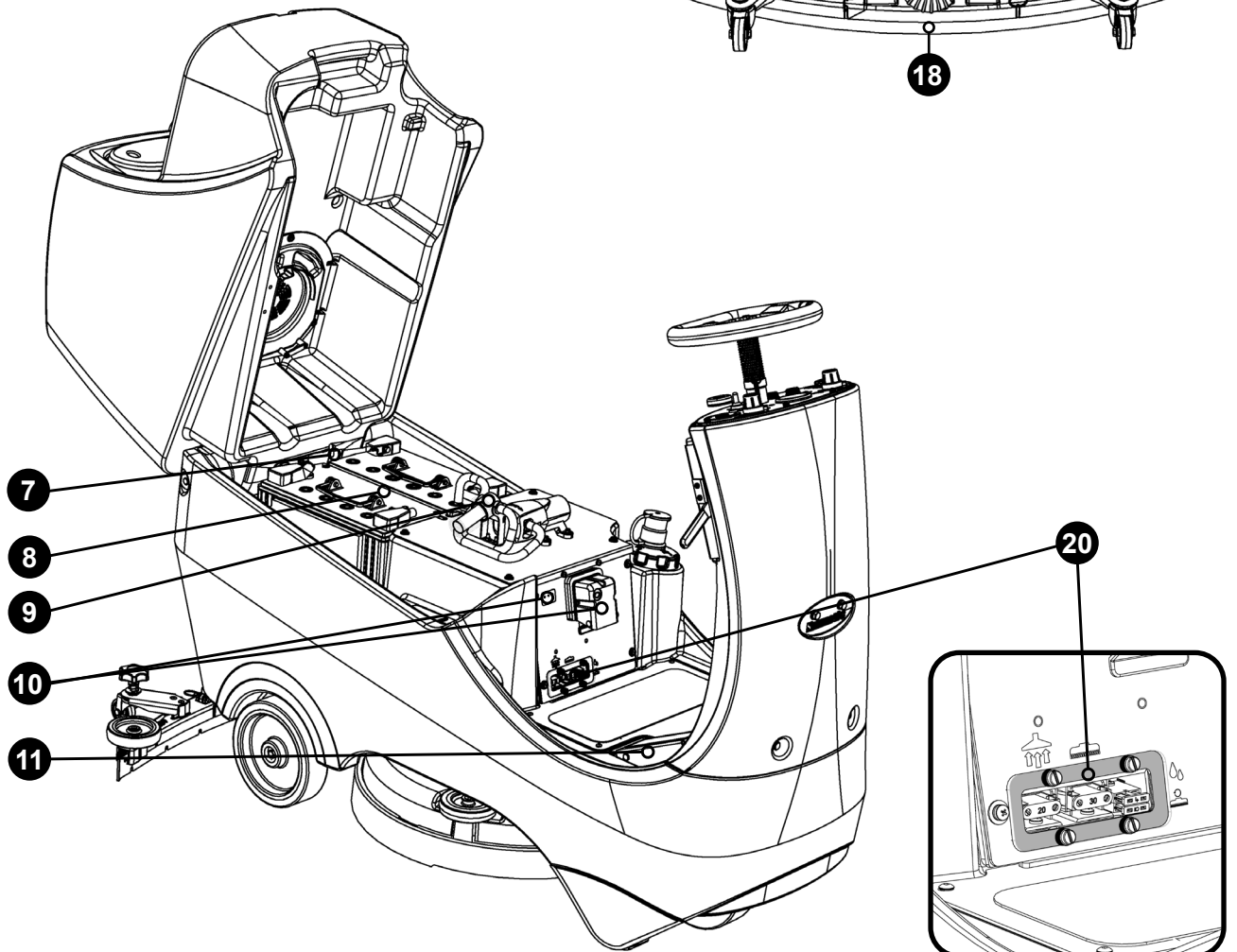
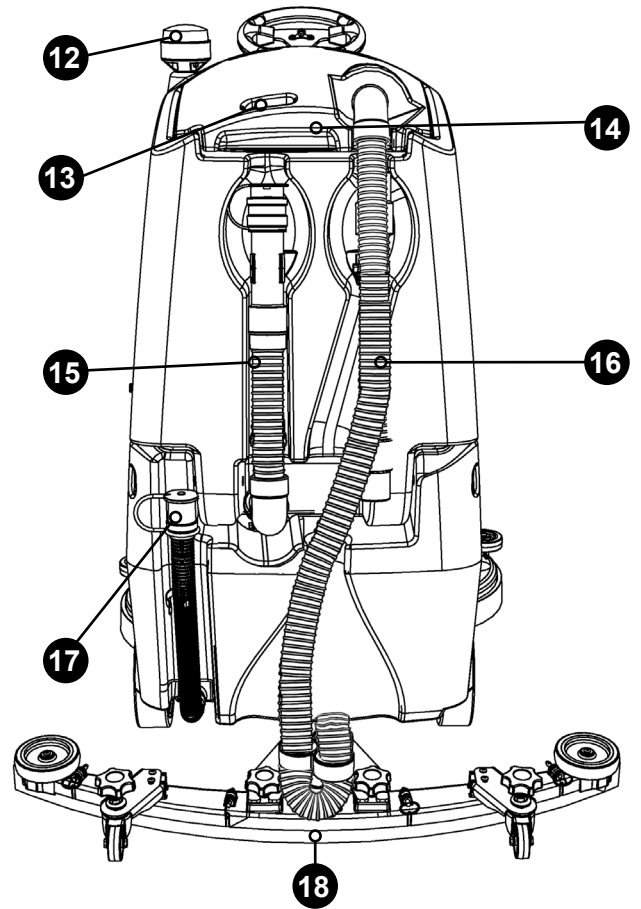
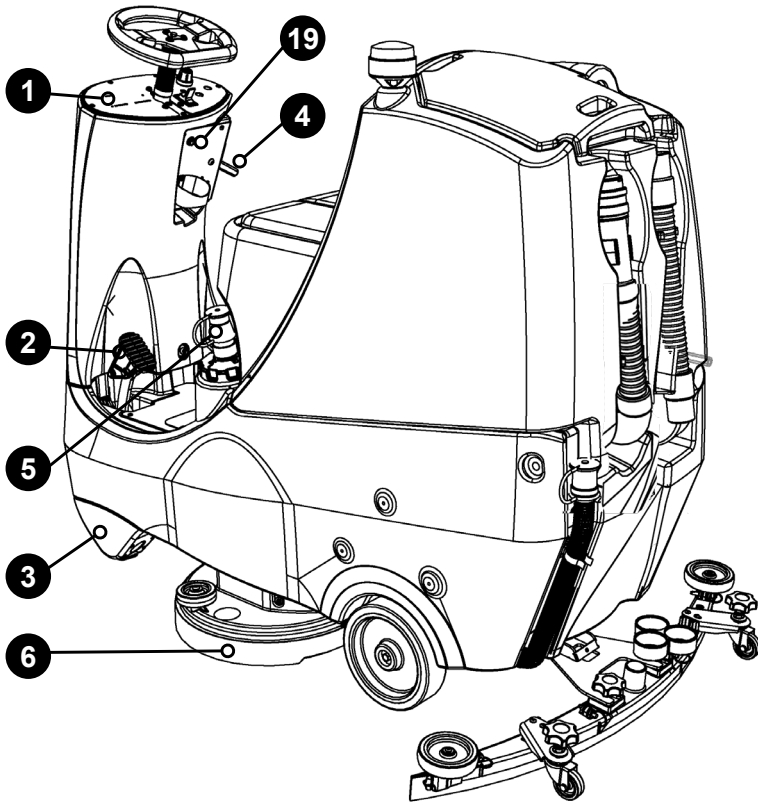
### PLEASE READ BEFORE COMMENCING OPERATION

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

- Owner Manual
- Battery Charging Lead • 2 x Keys
- 40 Amp Fuse • 30 Amp Fuse
- 20 Amp Fuse • 10 Amp Fuse
- 4 Amp Fuse • 2.5 Amp Fuse
- Maxi Fuse Puller

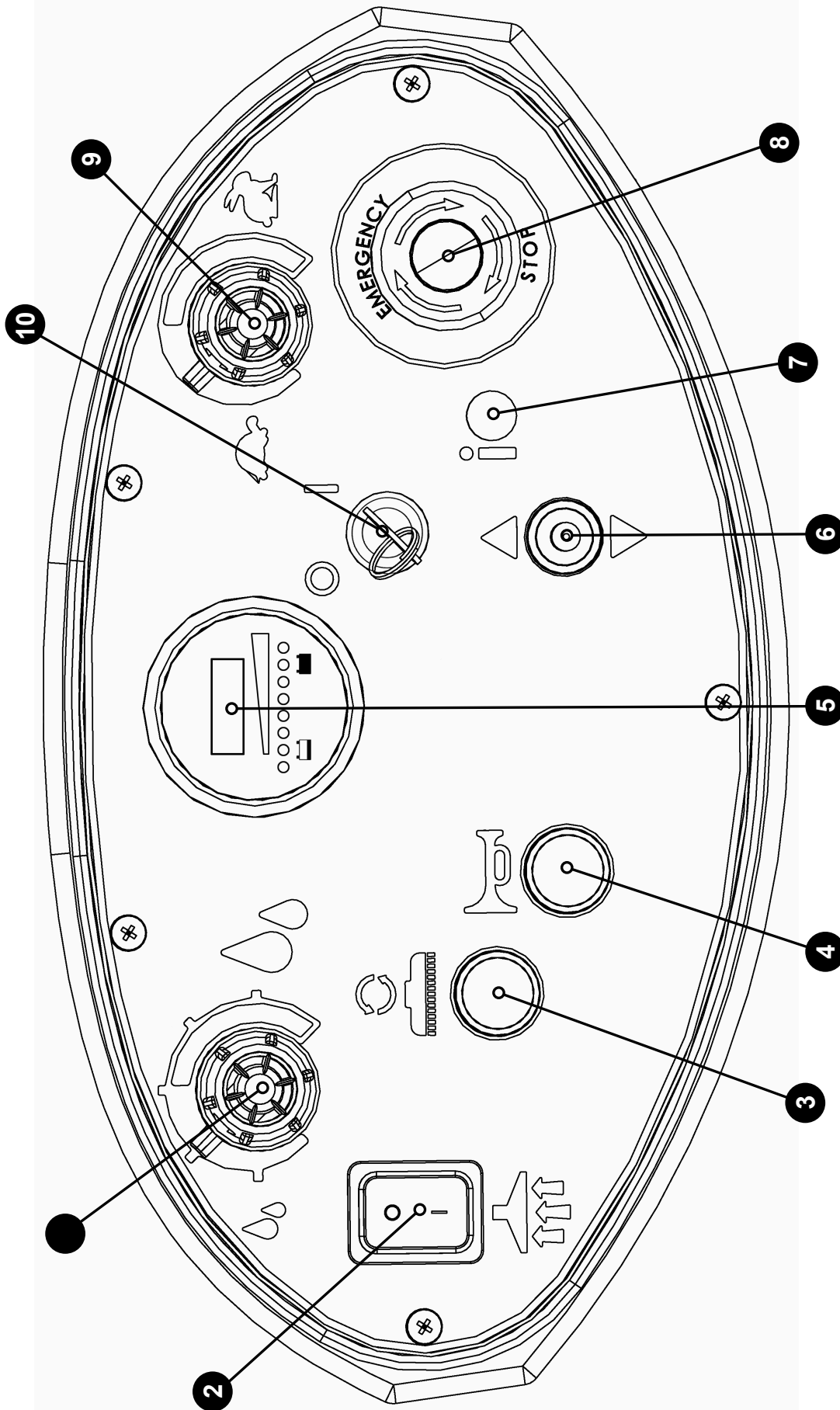
1	Operator control panel
2	Brush deck foot pedal
3	Anti-tip buffers
4	Floor-tool raise / lower lever
5	Clean water tank fill point
6	Brush deck
7	40 Amp battery fuse
8	Gel batteries
9	Clean water tank filter
10	On-board charger and charge indicator
11	Accelerator pedal
12	Pedestrian warning light
13	Floor-tool transit bracket
14	Air separator assembly
15	Waste water emptying hose
16	Vacuum hose
17	Clean water tank emptying hose
18	Floor-tool
19	Safety Fuse (2.5A)
20	Fuse Panel (20A Vac / 30A Brush Motor / 4A Water pump / 10A Brush engage).

# Machine Overview



# RIDE ON SCRUBBER DRYER TGB 2120/2128

## Control Panel Overview

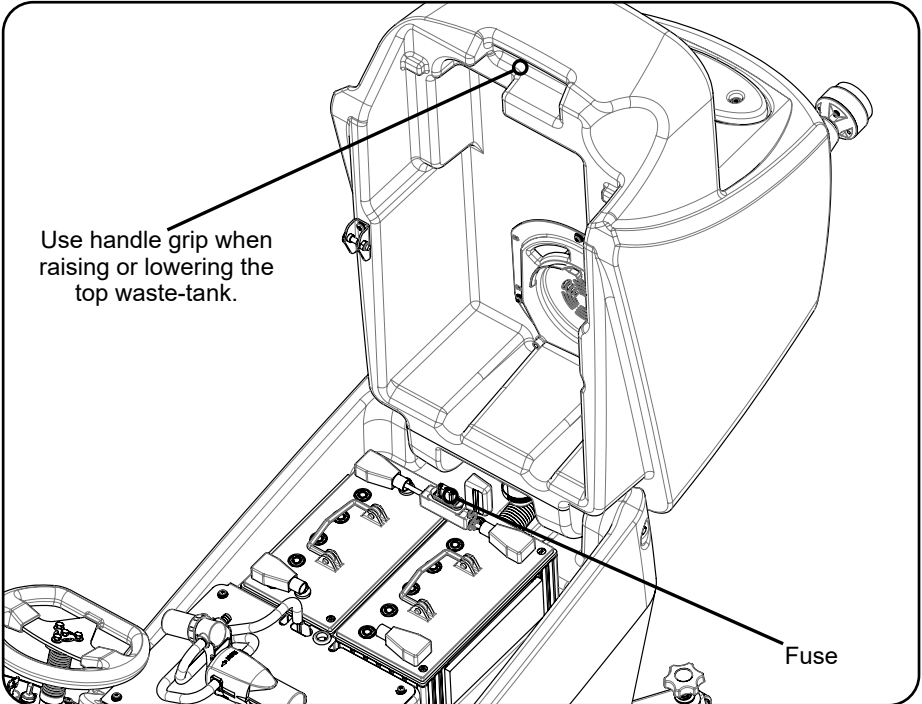


1	Water Flow Rate	6	Forward / Reverse Switch
2	Suction On/Off switch	7	Traction LED
3	Brush Engage Button	8	Emergency Stop Button
4	Horn Button	9	Maximum Speed Control
5	Hours and Battery Meter Display	10	Key Ignition Switch

*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**
- Owner Manual • Battery Charging Lead • 2 x Keys
  - 40 Amp Fuse • 30 Amp Fuse
  - 20 Amp Fuse • 10 Amp Fuse
  - 4 Amp Fuse • 2.5 Amp Fuse
  - Maxi Fuse Puller

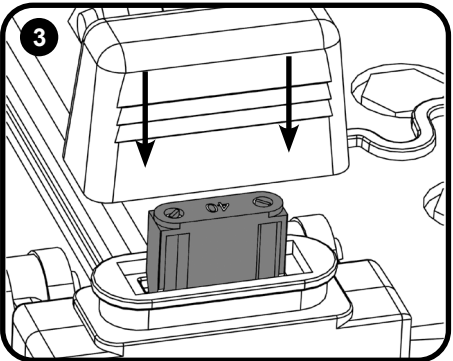
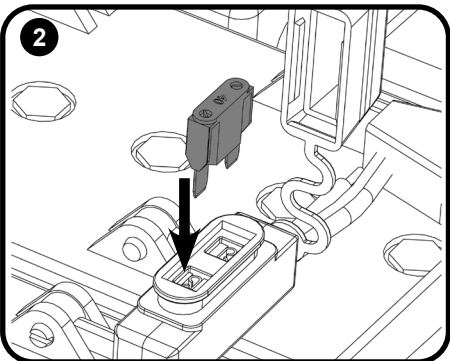
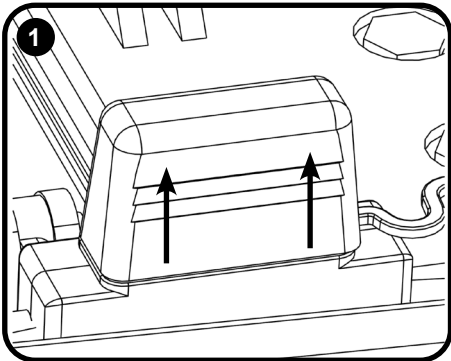


Lift top tank assembly to reveal battery compartment, ensuring you use the handle grip provided.

Fit battery fuse (contained in start-up pack) into the battery fuse holder as illustrated. (Fig. 1, 2, 3.)

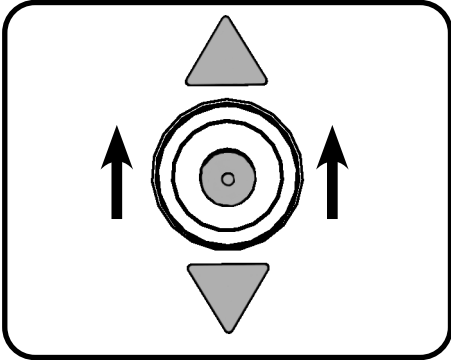
Insert Key into ignition located on the control panel.

**Note: Wear suitable gloves when inserting fuses.**

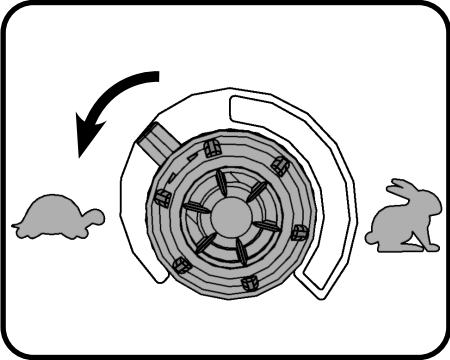


Less Battery Models - Numatic International Ltd recommends using MK or Sonnenschein Batteries for the 8055 & 8072 machines mentioned in this manual. For full battery specifications see page 22.

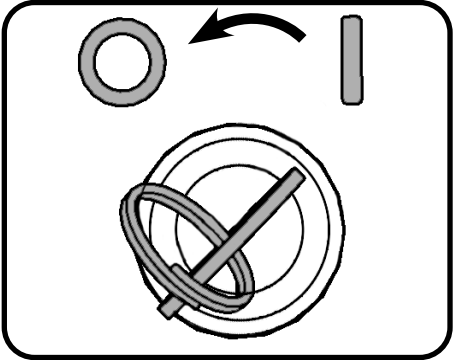
**ENSURE THAT NO METAL OBJECTS COME INTO CONTACT WITH BATTERY TERMINALS WHILE THE BATTERIES ARE EXPOSED. WHEN INSERTING THE FIRST FUSE YOU MAY NOTICE A SPARK, THIS IS NORMAL.**



Turn the key to switch on the machine, set lever to forward.



Set to slowest speed, depress accelerator and drive off the pallet using ramp provided.



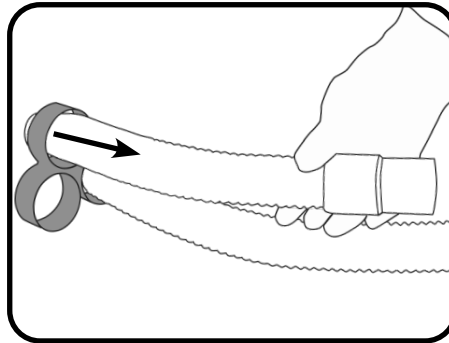
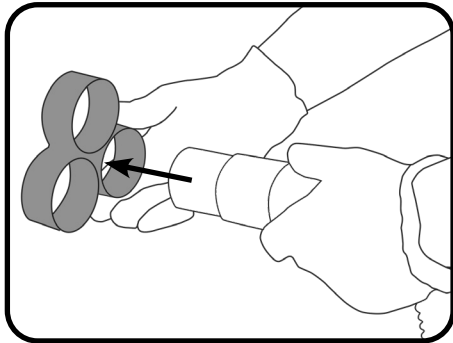
Once in a safe location switch off machine.

**Note: DO NOT depress accelerator pedal while software initialises. The machine will not operate in reverse with the floor tool lowered. The seat is fitted with a pressure sensor that disables the machine until an operator is seated.**

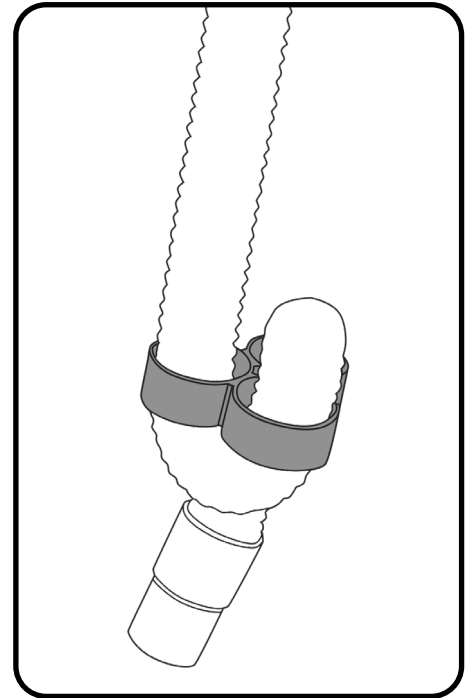
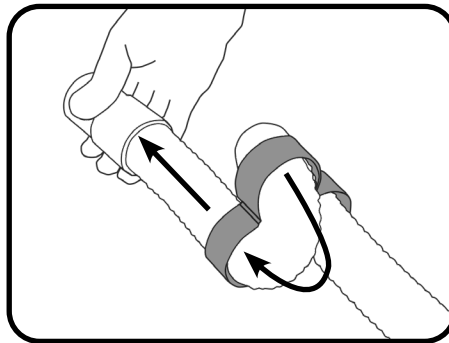
## Machine Set-up Guide

### Hose U-bend Clip

The U-bend in the hose prevents water spillage when the vacuum is switched off.  
Refit vacuum hose to the floor tool when finished.



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



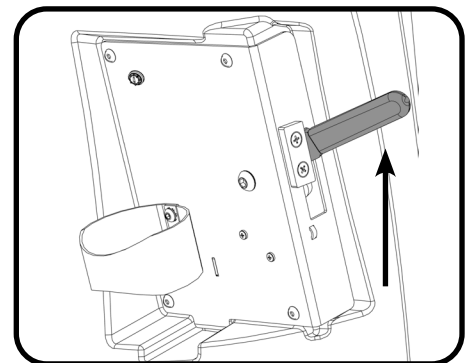
### Fitting the Floor Tool

**Note: Raise floor tool before driving to the cleaning area.**  
The machine will not operate in reverse with the floor tool lowered.

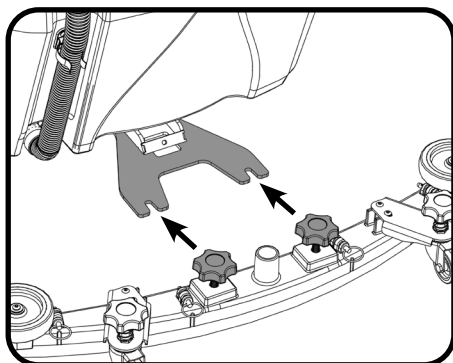
### Break-away Floor Tool

The floor tool design incorporates a safety knock-off feature, this allows it to safely disengage from its mounting should it become caught on an obstruction during forward movement.

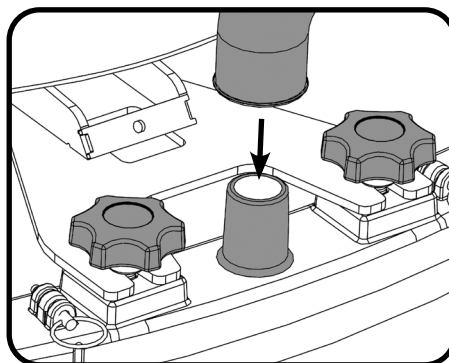
Make sure you do not over tighten the retaining knobs.



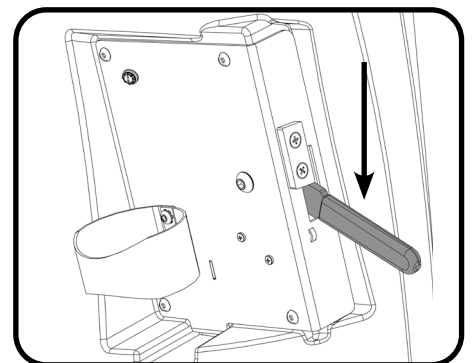
Lower the floor tool.



Slide floor tool onto bracket.



Tighten retaining knobs to finger tight and attach hose.



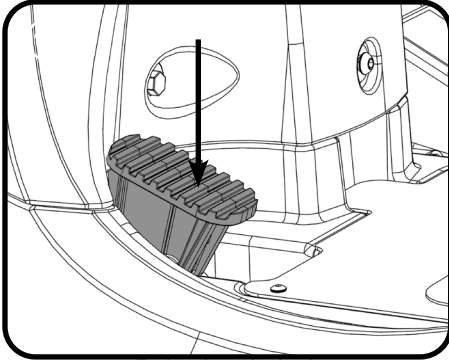
Raise the floor tool.



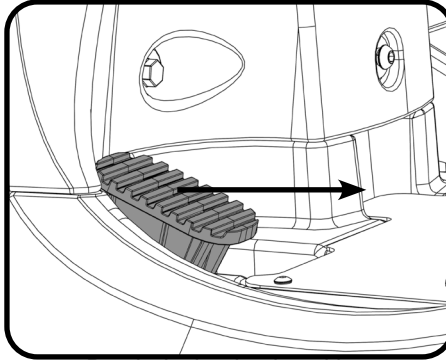
Always ensure that the machine is switched off before making any adjustments.



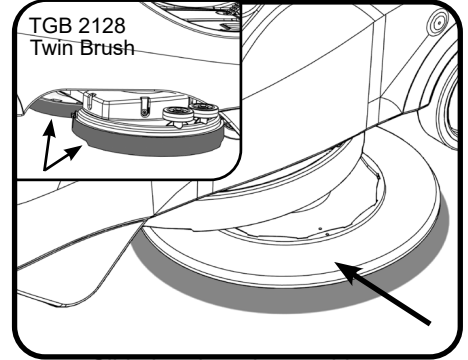
Raise Brush Deck / Fitting the Brush / Lower Brush Deck



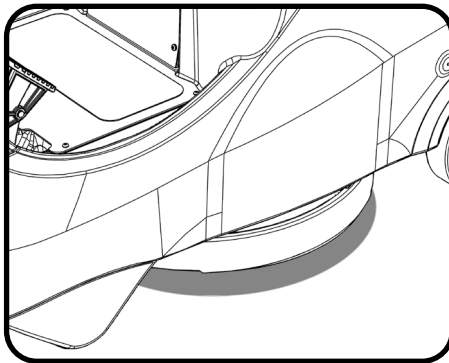
Raise brush deck.



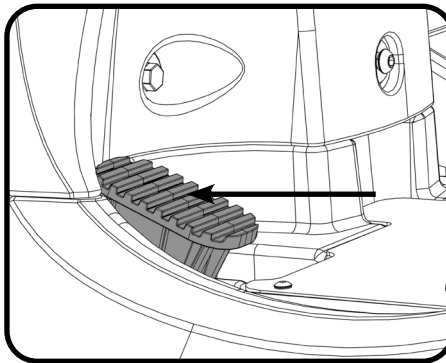
Brush deck raised position.



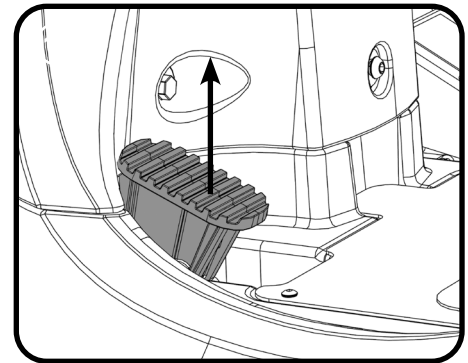
Slide brush under machine.



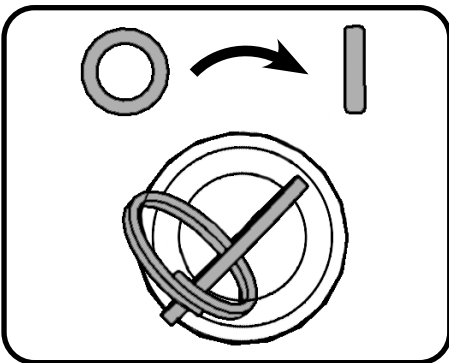
Brush in place.



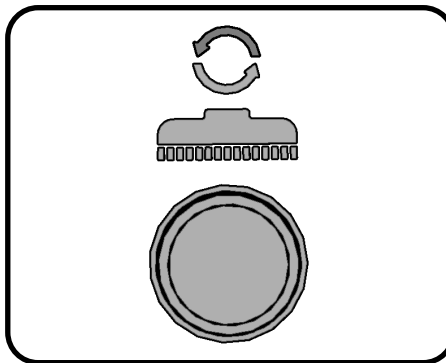
Lower brush deck.



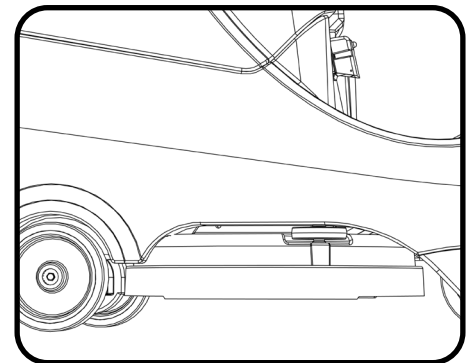
Brush deck lowered.



Switch machine on.



Press and hold brush engage button.



Machine has picked up the brush.

When fitting the brushes make sure it is done on a smooth surface.

Please follow the same process to fit both brushes to the TGB 2128 as is for the single brush fitting on the TGB 2120.

To disengage the brush, remove manually.

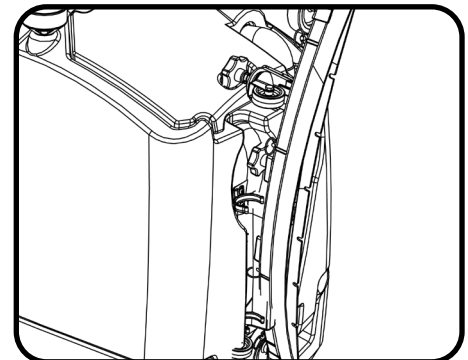
**Note: Do not lift the brush deck until the brush has stopped revolving or the brush will release.**

Make sure you raise the brush deck before driving to the cleaning site.

Safety Gloves are recommended for the changing of used brushes.

Floor Tool Transit Bracket

When in transit, the floor tool can be placed on the bracket at the rear of the machine. Simply slot the retaining knob into the bracket.



## Machine Set-up Guide

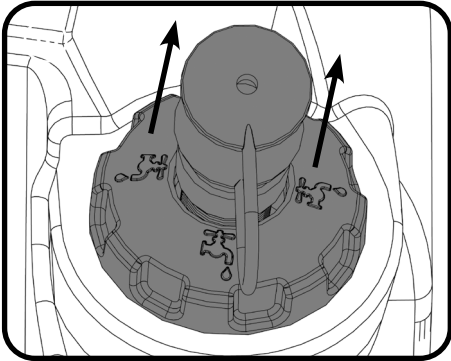


Always ensure that the machine is switched off before making any adjustments.

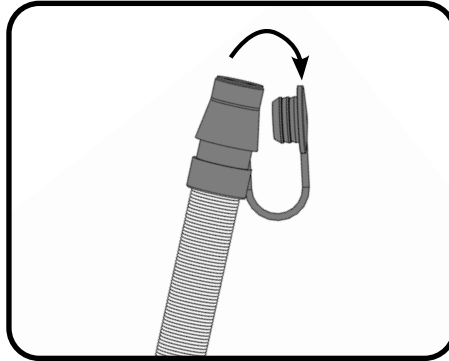


### Filling the Clean Water Tank

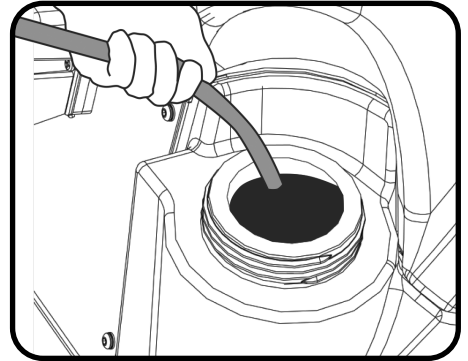
The TGB 2120/2128 is equipped with a large capacity 80 litre clean water tank, allowing for large areas to be covered in a single fill.



To fill clean water tank extend fill hose.



Remove rubber seal and fill.



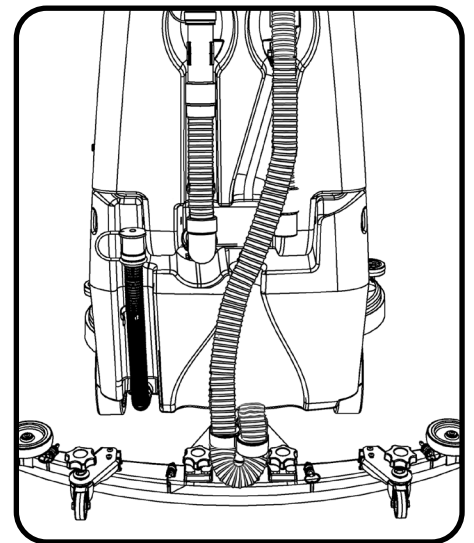
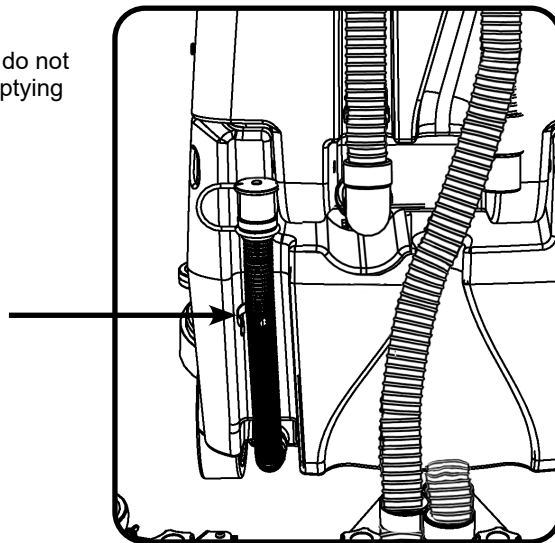
Alternatively remove filler cap completely.

**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.

### Fill Level Indicator

When filling the clean water tank, do not fill above the clean water tank emptying hose retaining clip.

This can be found at the rear of the machine.



If you need to access the batteries, make sure that the waste water tank is empty before lifting.





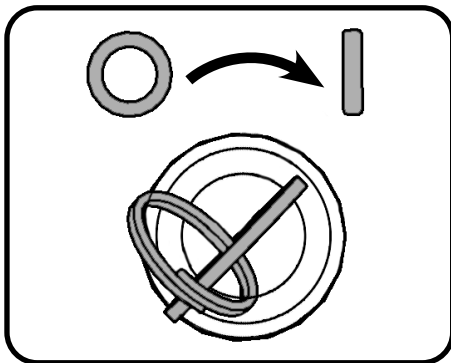


**IMPORTANT**  
Do not operate machine unless the operator manual has been read and fully understood.

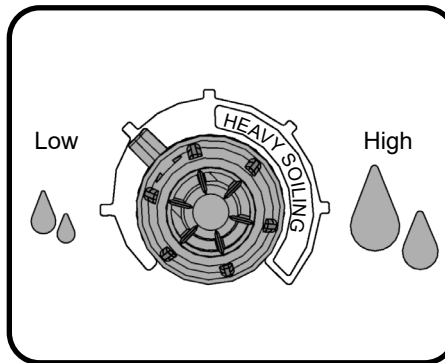


Drive the machine to the cleaning site (read set-up guide again if necessary - page 5).  
Before cleaning operation, place out appropriate warning signs and sweep or dust-mop the floor.  
When ready for cleaning lower the floor tool (page 6) and the brush deck (page 7).

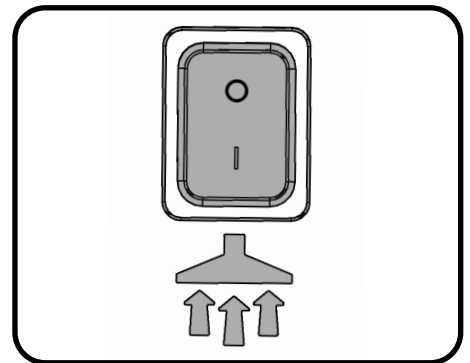
## Setting the Cleaning Controls



Switch machine on. Battery charge-level indicator illuminates.



Set the water flow rate as required.



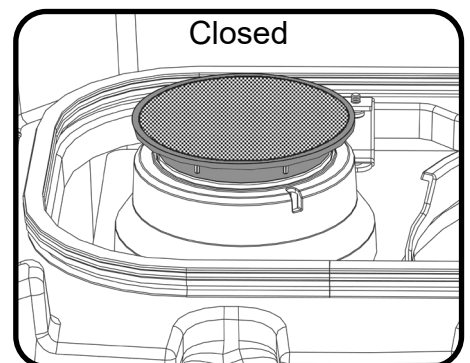
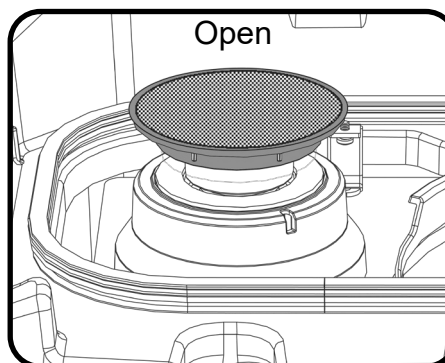
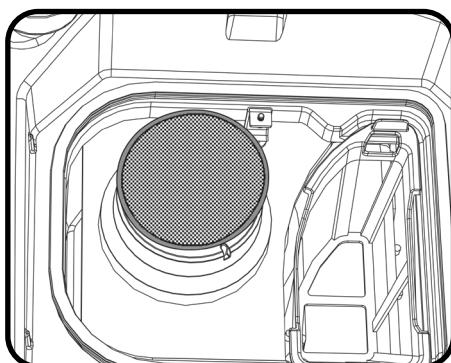
Switch the vacuum motor on.

## Waste Water Tank Full

The vac shut off system stops the airflow when the top waste water tank is full.

The vac motor will continue to run, there is an audible difference in the sound when the shut off system operates.

For more details on checking and cleaning the shut off system see page 13.

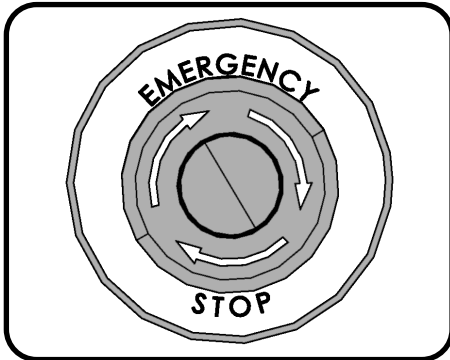


**Always ensure that the floor is pre-swept and relevant safety signs are displayed.**

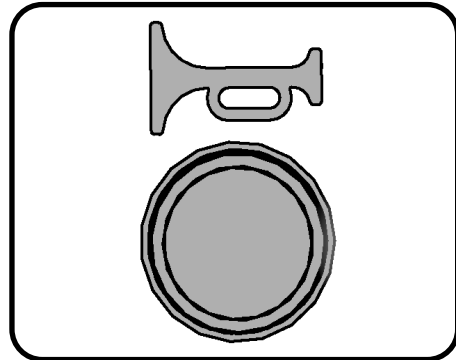


## Machine Operation

### Emergency Stop Button / Horn



In an emergency, strike the emergency stop to disable the machine.



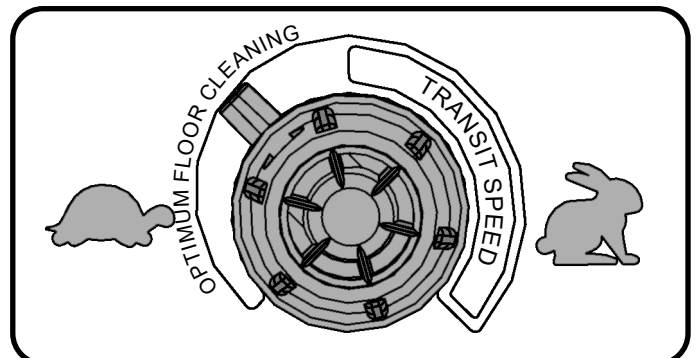
Horn button - for sounding a warning signal

**Note:** After the Emergency Stop button has been pressed the Traction LED will flash 7 times, pause and repeat until the Emergency Stop button has been reset and the machine switched off / on.

### Maximum Speed Control

Set desired traction speed as required, depending on floor type and level of soiling.

Once the Max speed has been set using the control knob on the control panel, fine adjustments can be made using the variable control speed pedal located on the right side of the footplate.



**Care must be taken to reduce speed when cornering or manoeuvring.**



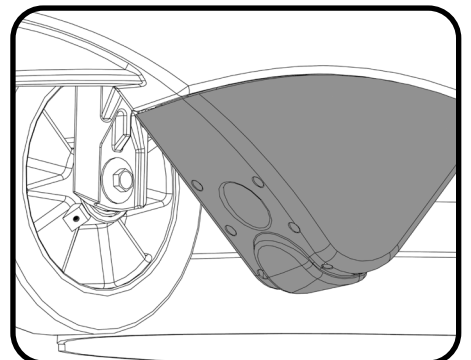
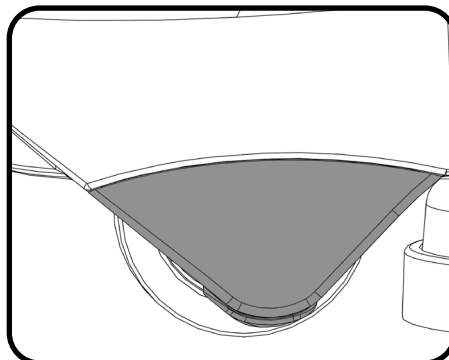
### Anti-tip System

The CRG 8055/8072 is equipped with an Anti-tip system.

The machine automatically slows down preventing the machine from tipping over if cornering at speed.

The buffers at the front are designed to prevent the machine tipping in the event of the operator turning sharply.

The buffers are designed to be replaceable when worn.



**Do not operate the machine on inclines that exceed 11%.**

Machine in Use

To operate, select forward and depress the accelerator pedal.  
Note: The machine will not operate in reverse with the floor tool lowered.

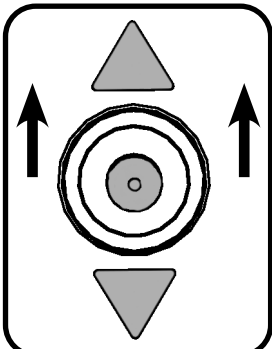
Vacuum pick-up and water flow will turn on if selected, and providing the brush and floor tool are in the lowered position, the machine will move forward.

Clean water is dispersed evenly via 'THRU- FEED' scrubbing brushes.  
The waste water is then retrieved by the suction floor tool.  
Overlap each scrubbing path by 10cm to ensure an even clean.

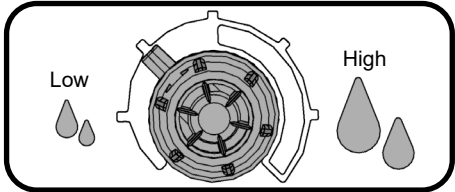
After stopping, let the vacuum motor run for 10 seconds to collect any water left in the vacuum hose, then switch the vacuum motor off.

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

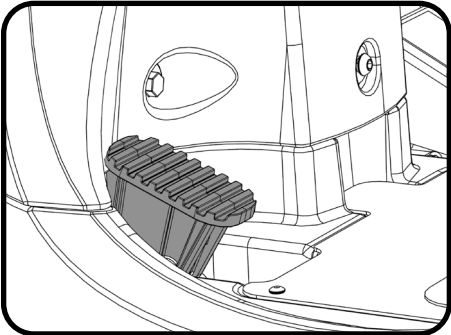
If your machine leaves streaks on the cleaned floor, either clean the floor tool blade or adjust blade height for optimum performance.



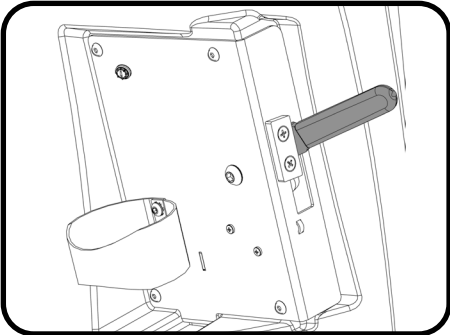
Set lever to forward.



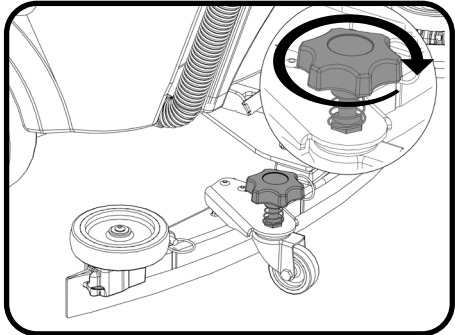
Water flow rate selection.



Brush deck in lowered position.



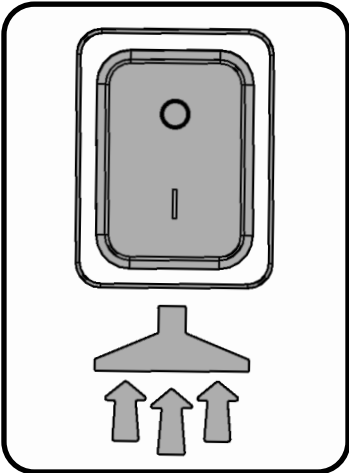
Floor tool lever in lowered position.



Adjusting the blade height.

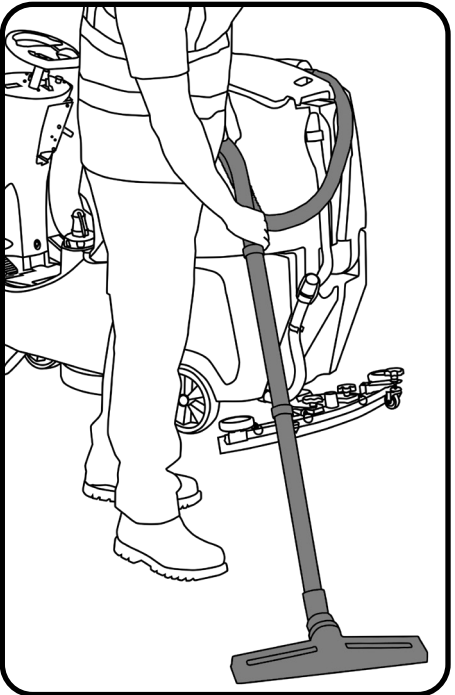
Off-aisle Cleaning Kit (Optional Extra Accessory) 606182

The optional off-aisle cleaning kit gives added flexibility to the operator.  
The kit can be used to clean hard to reach / inaccessible areas.  
Remove the vacuum hose from the floor tool and attach to the off-aisle kit.  
To operate the vacuum, press the vacuum switch on.



Vacuum switch.

Note: Return the hose to the floor tool once finished using the off-aisle facility.



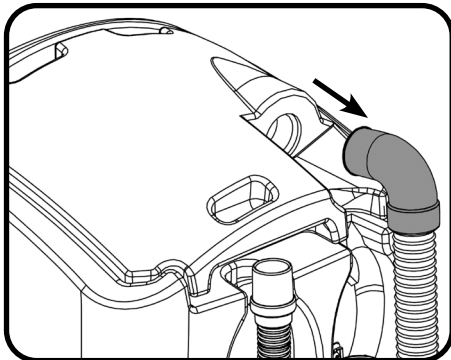
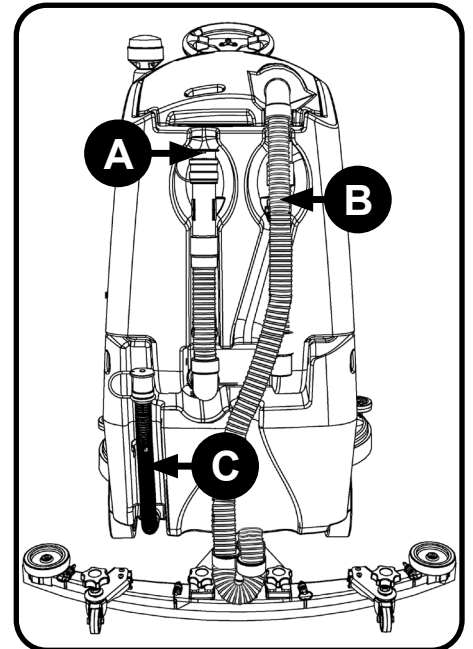
## Machine Cleaning



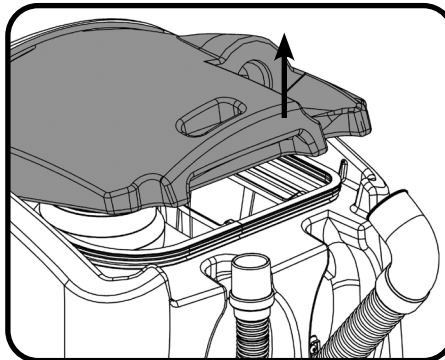
Always ensure that the machine is switched off prior to any maintenance.



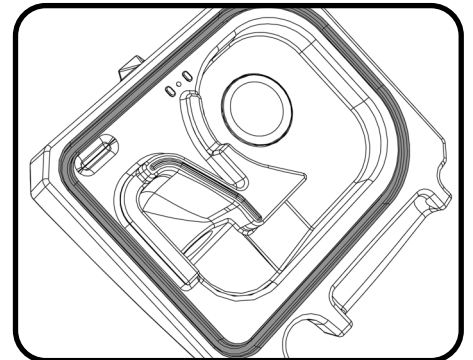
- A** After use, empty waste water tank using emptying hose and flush-out with clean water.
- B** Remove floor tool vacuum hose ensuring you remove the U-bend clip and flush out with clean water.
- C** Empty clean water tank, using emptying hose and again flush out with clean water.



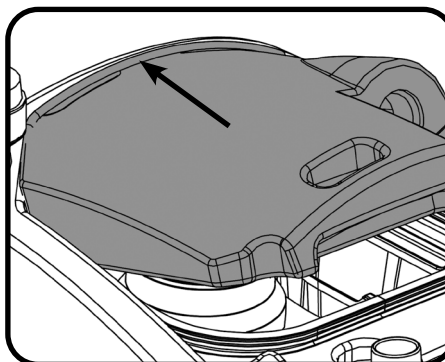
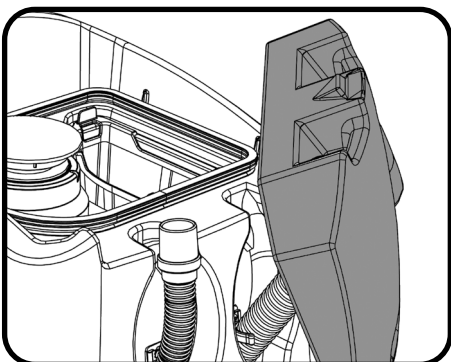
Remove hose.



Remove separator and clean.



Clean and examine rubber seal during each clean.



**Note:** The separator can be hung from either side of the top tank while you maintain the machine using the clip on the front of the lid.

When refitting the separator make sure you engage the front of the separator BEFORE pushing the separator down.

Refit the vacuum hose.

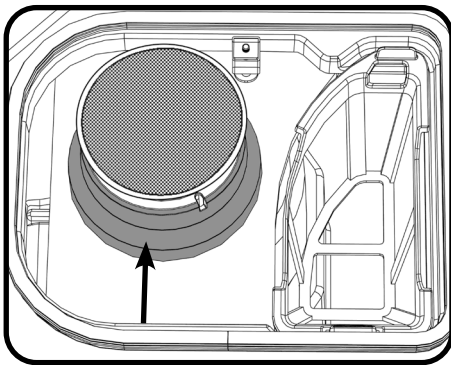


**Always ensure that the machine is switched off prior to any maintenance.**

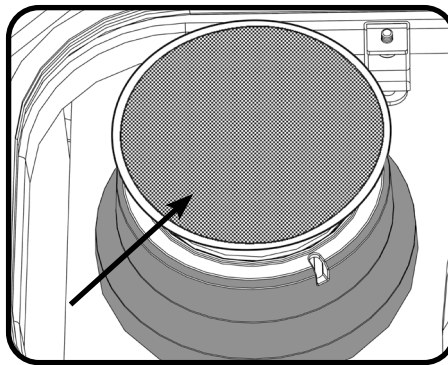


Located in your waste water top tank is a vacuum shut off system, this prevents suction when the waste water tank is full. It also prevents foam created by high-foaming detergents from entering the motor. Sometimes the float vents get clogged and blocked, clean to ensure correct operation. Regularly check and clean the air filter in the top of the assembly. Remove debris basket filter and rinse using clean water, and refit.

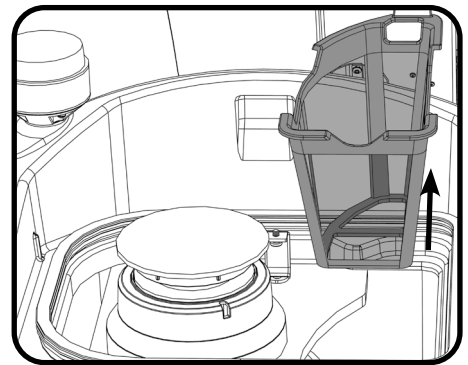
**IMPORTANT: If the debris basket is allowed to become clogged, vacuum performance can deteriorate.**



Float vent.



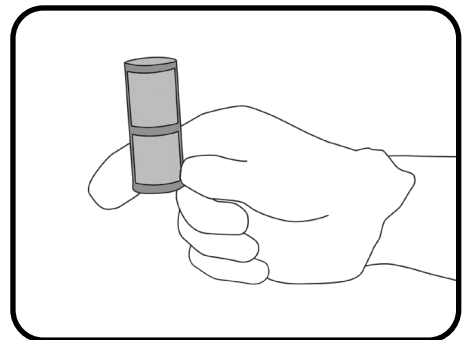
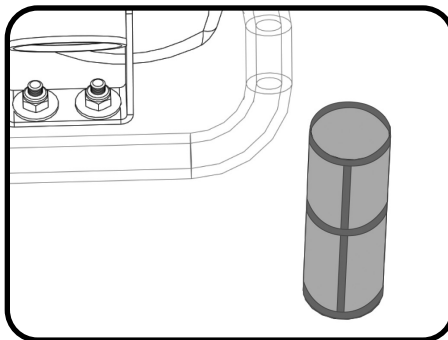
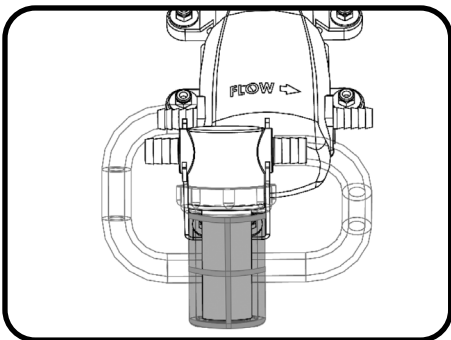
Air filter.



Debris basket removal.

The clean water tank filter is located to the front of the battery compartment, and should be checked at regular intervals. Lift the filter off of the cradle, unscrew the bottom and remove, taking care not to spill any liquid on to the batteries. Rinse using clean water and refit, refitting is reversal of removal.

**Note: Any Spills should be wiped up before tank is lowered.**



## Free Wheel Function



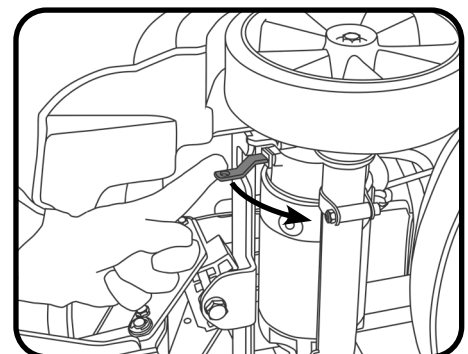
**ALWAYS ENSURE THAT THE MACHINE IS ON LEVEL GROUND BEFORE DISENGAGING BRAKE ARM. NEVER DISENGAGE THE BRAKE WHEN THE MACHINE IS ON A SLOPE / GRADIENT.**



The TGB 2120/2128 is equipped with a free wheel function that will enable the operator to move the machine.

The free wheel lever can be found on the right hand side of the rear axle. To disengage the brake, pull the lever into the down position. Re-engage the brake by moving the lever into the up position.

**Note: When the brake is disengaged the machine has no braking facility. Care must be taken when moving the machine in free wheel mode.**



Machine shown on it's side.

## Changing the Floor Tool Blades

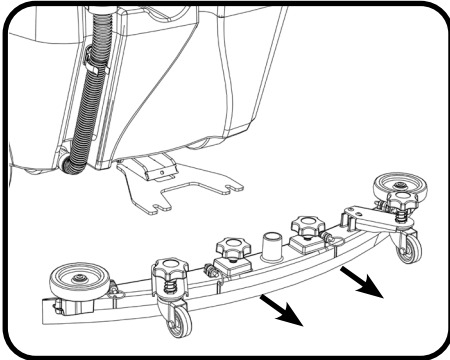


Always ensure that the machine is switched off prior to any maintenance.

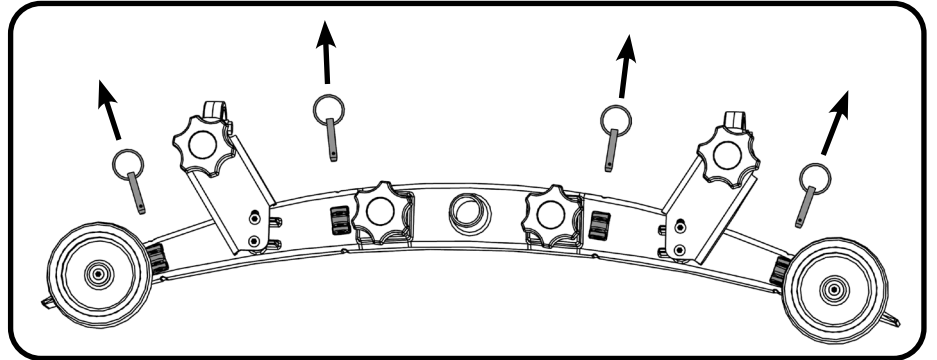


Lower the floor tool then unscrew the retaining knobs and slide it off the holding bracket.

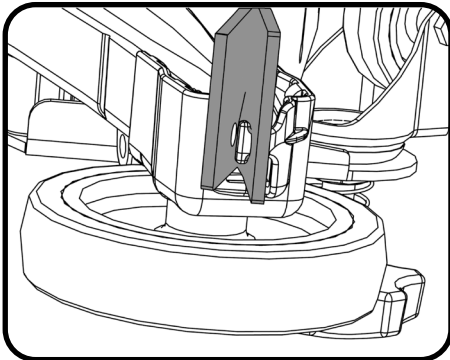
Rinse the floor tool assembly with clean water and refit.



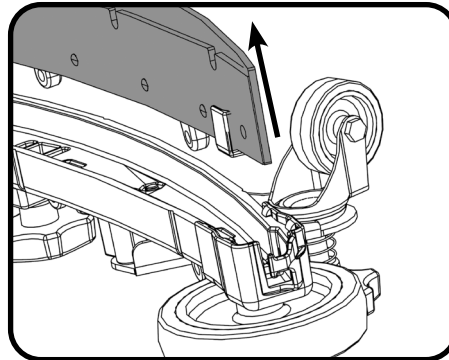
Remove floor tool.



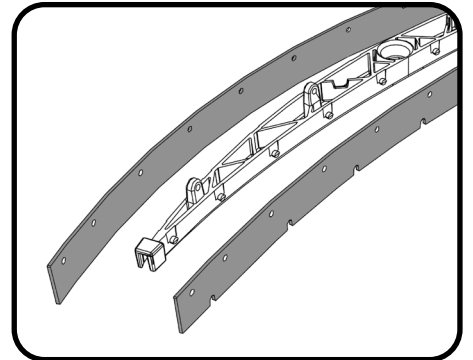
Remove four retaining pins.



Turn the floor tool over.



Separate the blade from the carrier.



Peel away blades.

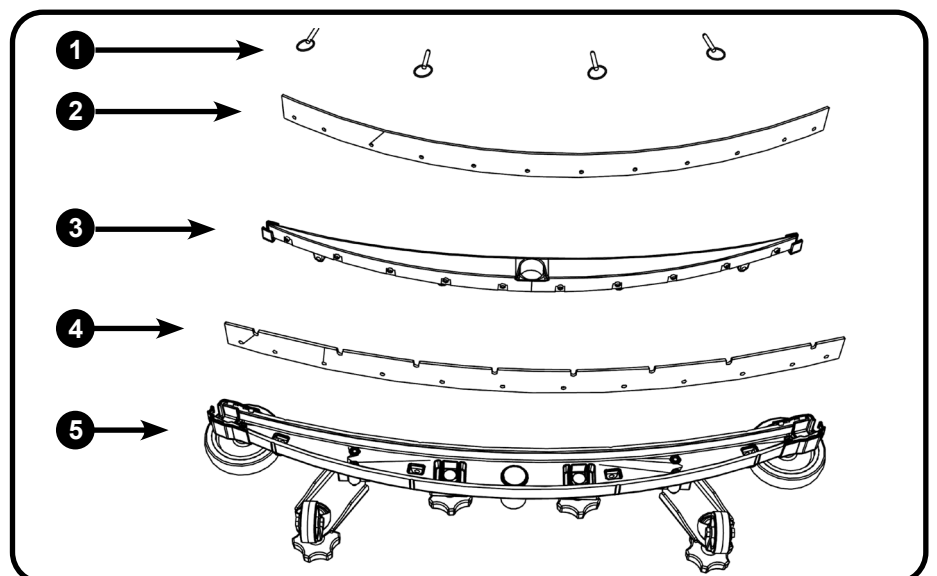
Periodically the floor tool blades should be examined and checked for wear and damage.

Replacement is a reversal of the removal process.

### Floor Tool Overview

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

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

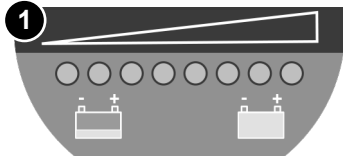




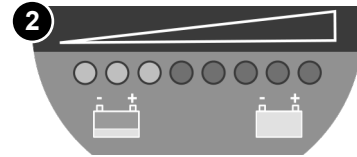
**Always ensure that the machine is switched off prior to charging.**



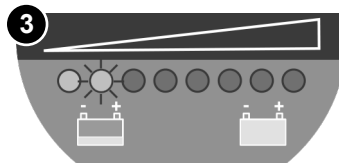
1. The battery meter displays the charge level of the batteries; when fully charged, all meter lights are illuminated.



2. As the machine is used and the batteries are discharged, the meter lights will go out from right to left.



3. When the battery meter turns RED the vacuum motor and the brush motor will stop. Once the motors have stopped, turn off the vacuum motor and lift the brush deck. Turn the key off then back on. If required switch the vacuum motor on to pick up any remaining liquid. Take machine to charging location and place on charge. Ensure the vacuum motor is switched off and the machine is turned off by the key before charging.



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

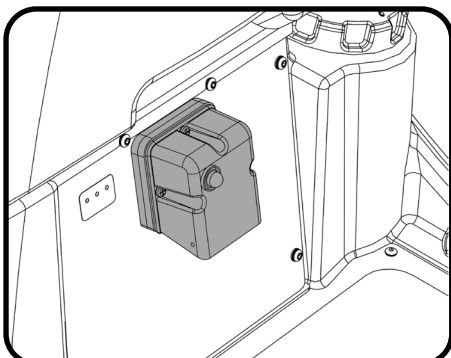
The machine charging point is located to the rear of the machine under the control panel.

Connect to a suitable power supply.

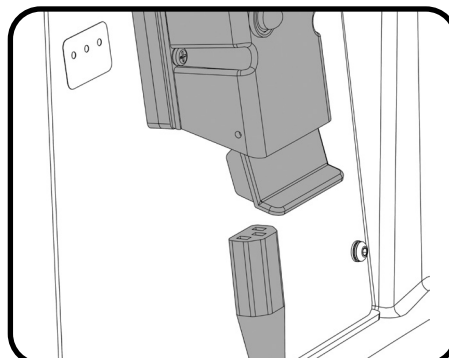
Once mains power is connected the red charging indicator will illuminate.

To ensure a full charge, the machine should be left for a period of 8 - 10 hrs.

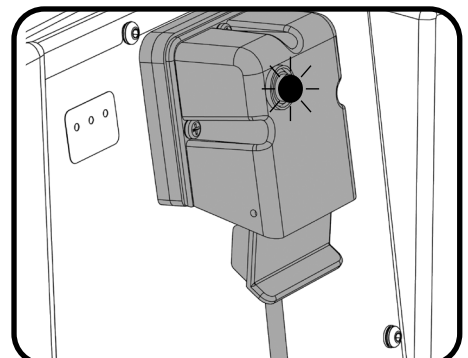
Once fully charged, disconnect the charging lead from both the power supply and the machine.



Machine charging point, above footplate.



Insert country specific charging lead.



Red charging indicator illuminates when charging.

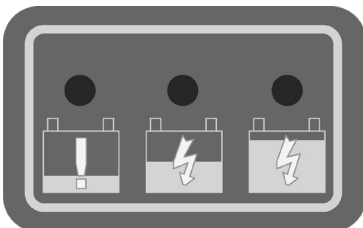
The large capacity gel batteries are sealed for life and are totally maintenance free.

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

**Note: The charging lead supplied with your machine may differ than the lead shown.**

Once the charging lead has been connected the machine will be INHIBITED.

The battery charge indicator display lights will show the current charge state.



Charging indicator (see page 16).

To ensure a full charge, the machine should be left until the charging indicator shows green.

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

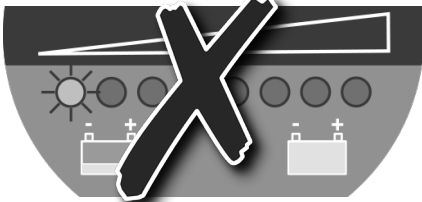
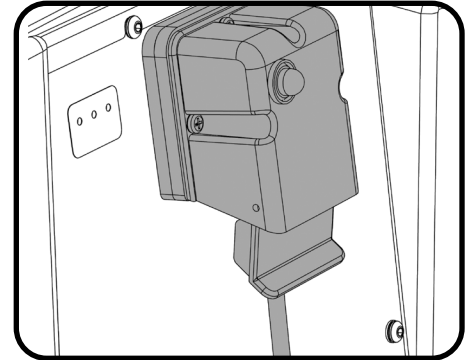
## Battery Care



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



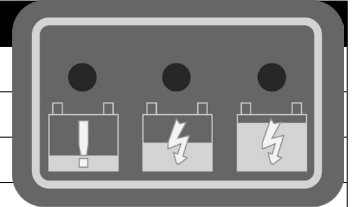
Under normal daily usage:  
Re-charge the machine FULLY after each use regardless of machine operation time.  
Do not leave the machine in a discharged state.



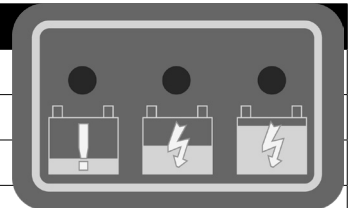
Periodically inspect the battery connections for tightness and corrosion.

## Charging Light Sequence 10 & 20Amp On-board Charger

Signal (LED)	10Amp	Meaning
Red LED on		First Phase (constant current Mode)
Orange 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
Orange LED flashing		Battery not connected



Signal (LED)	20Amp	Meaning
Red LED on		First Phase (constant current Mode)
Orange LED on		Second Phase (Constant Voltage Mode)
Green LED on		Third Phase (Constant Voltage Mode) Charge Complete
Red LED flashing followed by Pause		Cooling Fan Locked > 1 flash between pause Over Voltage Protection / Output Short Circuit / Battery Reverse Polarity > 2 flashes between pause Over Temperature Protection > 3 flashes between pause Charge Time has exceeded 16 hrs during phase 1 or 2 > 4 flashes between pause

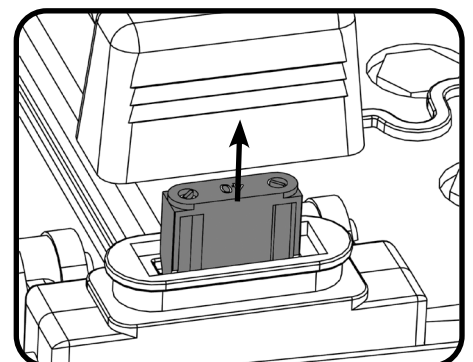


### Note: Check machine rating label for correct charger amperage

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 fuse 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.





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  Check all connections and leads between motor and controller	Charge batteries immediately  Tighten loose connections and replace damaged components  Replace batteries as required  Replace charger  Tighten loose connections and replace damaged components	
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 the 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  The controller is being inhibited from driving, this may be because the battery charger is connected	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  Remove charger to operate machine	Charge batteries immediately	
6 Flashes with pause ●●●●●●	Charger connected	E-Stop pressed	Machine functions not working	Check E-Stop	Release E-Stop and cycle key switch	
7 Flashes with pause ●●●●●●●	Machine inhibited	A controller trip is indicated	Machine functions not working	Check all connections and leads	Tighten loose connections and replace damaged components	
8 Flashes with pause ●●●●●●●●	Controller trip	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	
9 Flashes with pause ●●●●●●●●●	Brake deactivated or failed	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		
10 Flashes with pause ●●●●●●●●●●	High battery voltage					

Contact Service Agent

# Specifications

## Model - CRG 8055 / 8072

(Empty) Net Weight 120 A/Hr	Brush Weight	Brush Width	Brush Pressure	Pad Width	Pad Pressure	Brush Motor	Vac Motor
CRG 8055 - 200 kg	CRG 8055 - 17 kg	550 mm	8.4 G/cm <sup>2</sup>	508 mm	6.8 G/cm <sup>2</sup>	24 V 600 W	24 V
CRG 8072 - 220 kg	CRG 8072 - 32 kg	370mm x 2	19.9 G/cm <sup>2</sup>	360mm x 2	16.6 G/cm <sup>2</sup>		400 W
Transaxle	Run Time 2 x 120 A/Hr	Run Time 2 x 100 A/Hr	Total Battery Weight 120 A/Hrs	Total Battery Weight 100 A/Hrs	Charge Times 2 x 120 A/Hrs	Charge Times 2 x 100 A/Hrs	
24 V 400 W	3 Hrs	2 Hrs	74 kg (163 lbs)	62 kg (136 lbs)	10A = 12 Hrs 20A = 7 Hrs	10A = 8 Hrs 20A = 5-6 Hrs	
Brush Speed	Airflow	Transit Speed	Capacity	Water Flow Rate	Cleaning Area	Sound Pressure	
150 r/min	24.2 L/sec	0-6 km/h	80L / 80L	0 - 3 L/min	CRG 8055 - 1700m <sup>2</sup> @ 3.5 K/Hr CRG 8072 - 2200m <sup>2</sup> @ 3.5 K/Hr	≤ 70dB (A)	
Hand Arm Vibration	Whole Body Vibration	Height	Length	Width	Max Gradient		
Travelling (Quarry Tiles) 1.84 m/s <sup>2</sup> (Uncertainty 0.92 m/s <sup>2</sup> ) ISO 5439-1	Travelling (Quarry Tiles) 1.11 m/s <sup>2</sup> (Uncertainty 0.56 m/s <sup>2</sup> ) ISO 2431-1	1160 mm	1460 mm	CRG 8055 - 805 mm CRG 8072 - 948mm	11%		

# Trouble Shooting

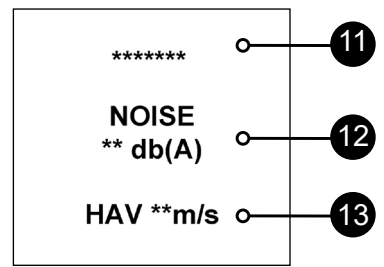
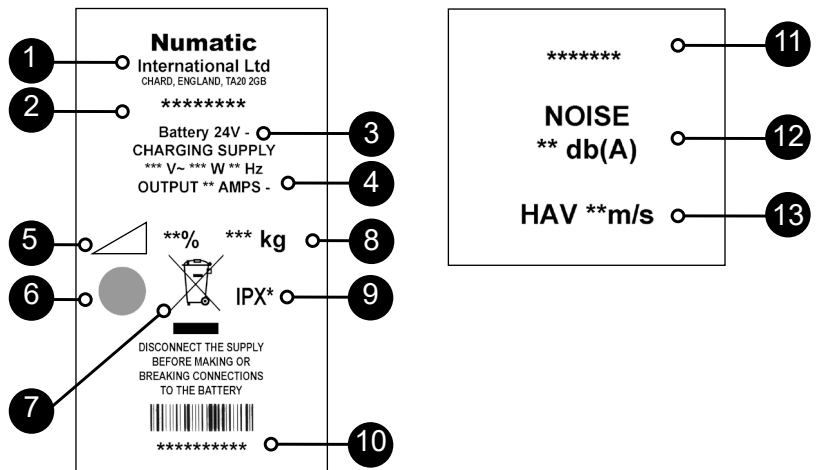
PROBLEM	CAUSE	SOLUTION
Machine will not operate	Missing or blown fuses Low battery charge Machine is connected and charging Key is off or missing Handle safety fuse blown	Fit or replace fuse (page 3 & 5) Charge batteries (page 15 / 16) Take off charge (page 15) Insert key & turn to operating position Replace fuse - No 19 (page 2 / 3) (or contact service engineer)
Vacuum will not operate	Missing or blown fuse Vacuum switch not engaged Waste water tank full	Fit or replace fuse (page 3 & 5) Press switch (page 9) Empty waste water tank (page 12)
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 Floor tool incorrectly adjusted	Empty waste water tank (page 12) Remove and clean (page 12) Push tight connections (page 6) Remove and clean (page 13) Remove and clean (page 12) Clean and refit (page 12) Renew (contact service dept) Renew (contact service dept) Renew (contact service dept) Re-charge batteries (page 15 / 16) Adjust floor tool (page 11)
No brush / scrub function	No brushes fitted Brush deck raised Missing or blown fuses	Check and fit (page 7) Lower brush deck (page 7 & 11) Fit or replace fuse (page 3 & 5)
Little or no water flow	Clean water tank empty Clean water tank filter blocked / clogged Water flow not on Brush deck raised Blown pump fuse	Fill clean water tank (page 8) Remove and clean (13) Switch on water flow (Page 9) Lower brush deck (page 7 & 11) Replace fuse - No 20 (page 2 / 3)
Machine just 'stops' during operating	Brush motor fuse blown due to high load Handle safety fuse blown	Replace fuse & reduce load (page 3 & 5) Replace fuse - No 19 (page 2 / 3) (or contact service engineer)

Warning Do not fit a replacement fuse link having a higher rating than the value stated on the fuse label.

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

# About the Machine

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



## WEEE (Waste, Electrical and Electronic Equipment)

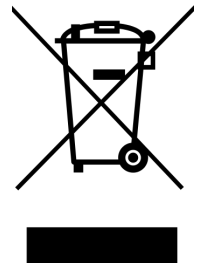
Scrubber dryer Accessories and packaging should be sorted for environmentally-friendly recycling.

Only for EU countries.

Do not dispose of scrubber-dryer into household waste.

According to the European Directive 2002/96/EC 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: Ho5VV-F 3 Core x 1.0 mm<sup>2</sup>  
 Transaxle: 205190  
 Battery Charger: (230V), (115V)

## CAUTION



**No HOT drinks  
 when operating  
 this machine.**



ORIGINAL INSTRUCTIONS  
READ MANUAL BEFORE USE

## Information for Scrubber Dryer



**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.

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.

If this product does not have a factory installed Numatic battery charger and batteries 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.

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 non-slip 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.

Remove the key from the ignition when cleaning and carrying out routine maintenance.

In order to prevent unauthorized use of the machine, the power source shall be switched off or locked, for example by removing the key of the main switch or the ignition key.

When replacing major components the ignition key and battery fuses **MUST** be removed.

If this product does not have a factory installed Numatic battery charger and batteries 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.

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.



**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 BS EN / IEC 60335-2-72.

**NOTE: 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, if the machine is in charge mode or remove the key if in normal use.
- Allow any inexperienced repairs. Contact your nearest service centre.
- Strain charger lead or try to unplug by pulling on charger lead.
- Leave the brush deck in the lowered position when not in use.
- Expect the machine to provide trouble-free, reliable operation unless maintained correctly.
- Run the machine over any power cables during operation.



## 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 machine must be disconnected from the supply when removing the battery.
7. To remove the batteries:- Disconnect machine from the mains supply (if charging), raise waste water tank and ensure batteries are isolated by removing fuses. Disconnect hoses from separator and tanks, undo battery terminals and remove batteries.
8. Only use genuine Numatic replacement batteries.
9. Do not allow the batteries to become fully discharged, it may not be possible to recharge them.
10. Do not allow one battery to be discharged separately to the other.
11. Do not mix batteries from different machines.
12. 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.
13. The batteries must be removed from the machine before it is scrapped.
14. Dispose of the batteries safely in accordance with local government regulations.

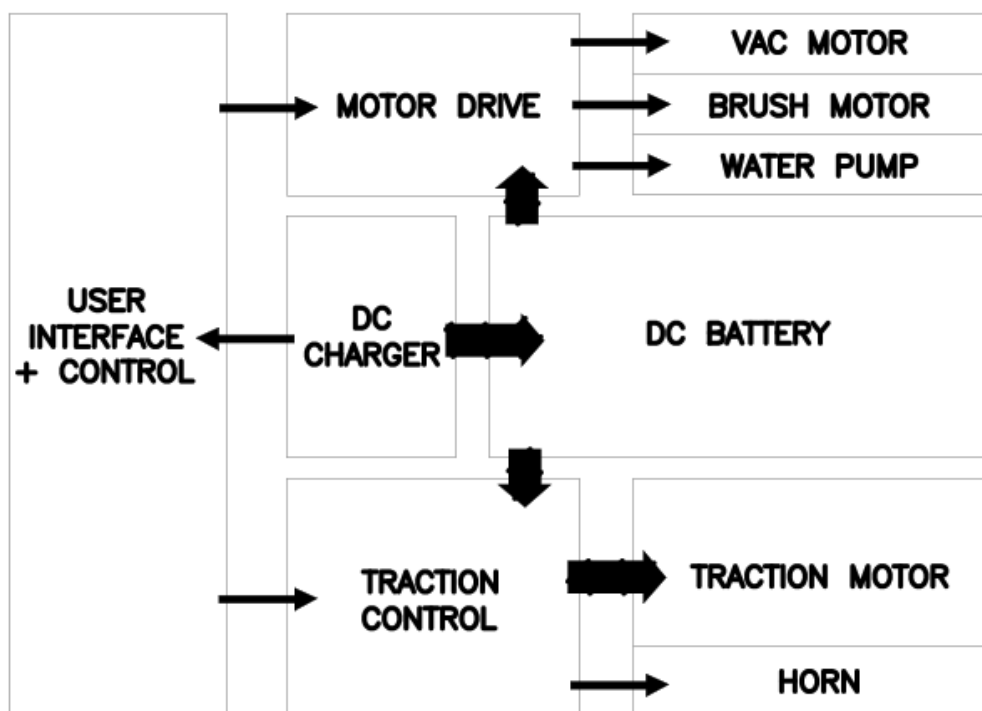
## Battery Care

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

## Spare Parts

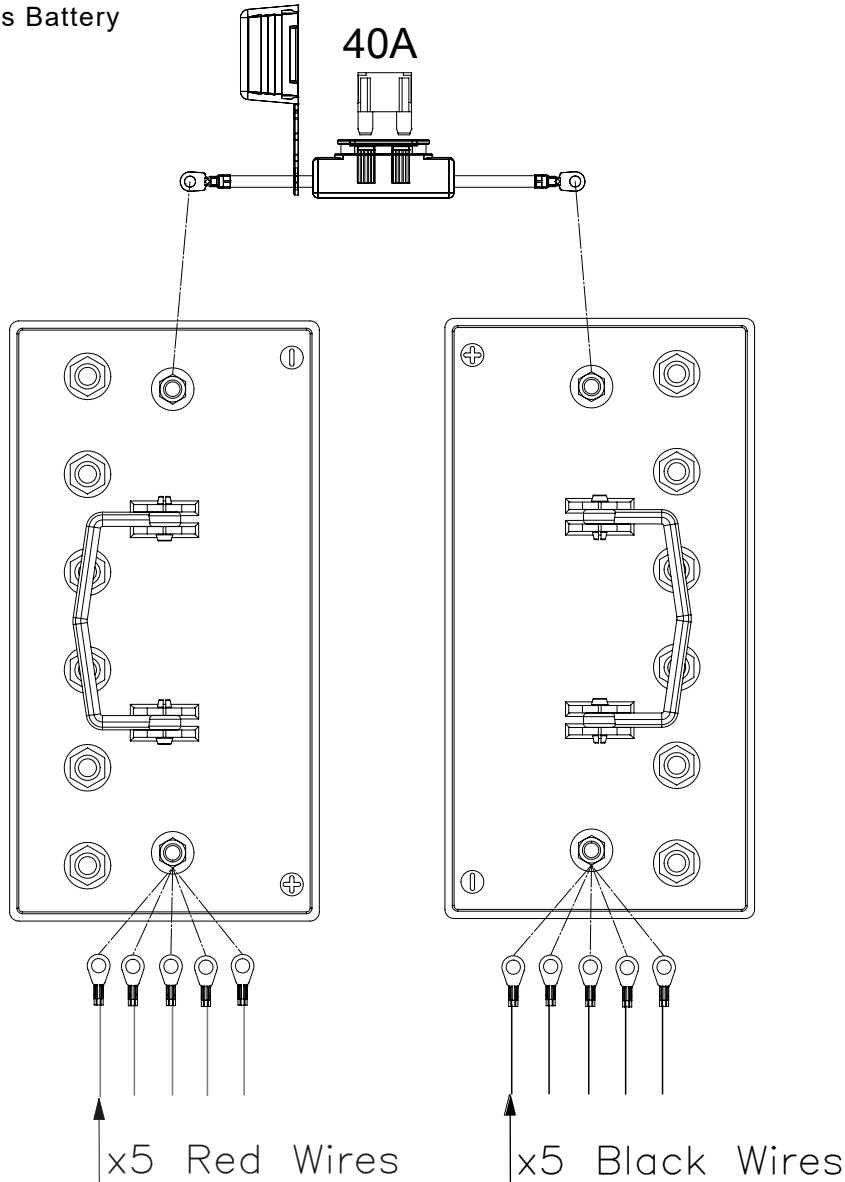
SQUEEGEE		BRUSHES	
904691	Complete 650mm Squeegee Assembly Red Trim CRG 8055	606028	550mm Polyscrub Brush
900518	Squeegee Blade Set - Serilor Pu Green Fr & Rr CRG 8055	606550	550mm Nyloscrub Brush
208497	Squeegee Castor	900526	500mm Nuloc2 Drive Board
206953	Detent Pin	903994	370mm Nyloscrub Brush (2 required)
208796	Squeegee Buffer Wheel	903449	370mm Polyscrub Brush (2 required)
604013	Squeegee Lift Inner Cable Kit	900524	360mm Nuloc2 Drive Board (2 required)
208156	M6 Pinch Bolt	PUMP AND FILTER	
903853	Complete 750mm Squeegee Assembly Red Trim CRG 8072	230278	Water Pump
904699	Squeegee Blade Set - Serilor Pu Green Fr & Rr CRG 8072	208888	Extended Filter Complete Assembly
TOP TANK		208827	Strainer Black Top
903542	Grit Filter Basket	208889	Extended Strainer 50 Mesh Screen
208861	Air-Filter	208830	Strainer Gasket
208980	CRG Foam Pad	208890	68Mm Extended Strainer Clear Bowl
304503	Separator Seal Strip 1045Mm Long	BOTTOM TANK AND STEERING COLUMN	
208862	Seat Pad	237685	Bottom Tank Scuff Moulding Left Hand
208864	Back Pad	237684	Bottom Tank Scuff Moulding Right Hand
208867	Beacon Light	303942	Deck Buffer Wheel CRG 8055
208907	Gas Strut (100Nm)	208985	Lift Handle Nylon Guider
HOSES		392438	Bottle Plate
208188	Squeegee Suction Hose	208897	Steering Drive Belt
237718	3 Ring Hose Guide	204120	Front Wheel
208938	Bottom Tank Dump Hose	901209	Rear Wheels
902468	Top Tank Dump Hose c/w Adjustable Cuff	237609	Splash Skirt CRG 8055
903696	Filler Stretch Hose	204068	Deck Buffer Wheel CRG8072
		903437	Splash Skirt CRG 8072

## Schematic Diagram



# Battery Wiring Diagram

CRG 8055 / 8072 Less Battery



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

Machine	Numatic Recommended Battery	Numatic Number
TGB 2120	MK Battery - 98A/h Stud Terminal Gel Type - Suppliers Ref: E31 SLD G ST	205112
TGB 2120	Sonnenschein Battery - 120A/h Stud Terminal Gel Type - Suppliers Ref: GF 12 105V	901161
TGB 2128	MK Battery - 98A/h Stud Terminal Gel Type - Suppliers Ref: E31 SLD G ST	205112
TGB 2128	Sonnenschein Battery - 120A/h Stud Terminal Gel Type - Suppliers Ref: GF 12 105V	901161

Make	Voltage	Capacity	Weight	Size (L x W x H)
MK Battery	12 V	98 A/h	31.8 kg	329mm x 171mm x 237mm
Sonnenschein	12 V	120 A/h	37.5 kg	345mm x 174mm x 283mm

# 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

© Numatic International Limited







<b>UKCA Declaration of Conformity</b>	
<b>Manufacturer:</b>	Numatic International Limited Chard Somerset TA20 2GB www.numatic.co.uk
<b>Product:</b>	<b>CRG, CRL</b>
<b>Description:</b>	Floor Treatment – Ride On – Commercial
<b>We, Numatic hereby declare under our sole responsibility, that the above-mentioned product(s) is/are in conformity with the following directives and standards.</b>	
<b>S.I. 2008: 1597</b>	<b>Supply of Machinery Regulations</b> EN60335-1:2012 + AC:2014 + A11:2014 + A13:2017 + A15:2021 EN60335-2-72:2012 EN62233:2008
<b>S.I. 2016: 1091</b>	<b>EMC Regulations</b> EN55014-1:2017 + A11:2020 EN55014-2:1997 + A1:2001 + A2:2008 EN61000-3-2:2014 EN61000-3-3:2013
<b>S.I. 2012: 3032</b>	<b>RoHS Regulations</b>

Authorised Signatory: Mr. Matthew Coles

Position: Head of Technology

Numatic International Limited,  
Chard,  
Somerset, TA20 2GB, UK

Signed: *M Coles* Date: 17<sup>th</sup> Aug 2023

DEC-055 V2.2

<b>EU, EC, EL, UE, ES:</b> <b>Declaration of Conformity</b> Prohlášení o shodě Konformitáserklárung Overensstemmelseserklaring Declaración de conformidad Vastavusdeklaratsioon Déclaration de conformité	<b>Декларация за съответствие</b> Дηλώνση συμμόρφωσης Megfelelőségi nyilatkozat Dichiarazione di conformità Atitikties deklaracija Conformiteitsverklaring Samsvarserklæring Declaração de conformidade	<b>Declaracja zgodności</b> Декларация о соответствии Förklran om överensstämmelse Izjava o skladnosti Vaatumustenmukaisuusvakuutus	
<b>Manufacturer:</b> / Výrobce / Hersteller / Fabricant / Fabricante / Toetaja / Fabricator / Производители / Κατασκευαστής / Gyártó / Fabricante / Producent / Producător / Производители / Tillverkare / Proizvajalca / Valmistaja:	Numatic International Limited Chard Somerset TA20 2GB www.numatic.co.uk CRG, CRL	Numatic International Limited Chard Somerset TA20 2GB www.numatic.co.uk CRG, CRL	
<b>Product:</b> / Προϊόν / Термék / Producto / Produto / Toetod / Product / Produkts / Artikeli / Produkt / Produkts / Produkt / Produe / Товар / Produkt / Izdelka / Tuote:	Продукт / Προϊόν / Термék / Producto / Produto / Toetod / Product / Produkts / Artikeli / Produkt / Produkts / Produkt / Produe / Товар / Produkt / Izdelka / Tuote:	Продукт / Προϊόν / Термék / Producto / Produto / Toetod / Product / Produkts / Artikeli / Produkt / Produkts / Produkt / Produe / Товар / Produkt / Izdelka / Tuote:	
<b>Description:</b> / Popis / Beschreibung / Beskrivelse / Descripción / Kirjeldus / La description / Описание / Περιγραφή / Leirás / Descriziune / Apibudinimas / Omschrijving / Beskrivelse / Descrição / Opis / Descrriere / Описание / Beskrivning / Opis / Kuvaus:	Popis / Beschreibung / Beskrivelse / Descripción / Kirjeldus / La description / Описание / Περιγραφή / Leirás / Descriziune / Apibudinimas / Omschrijving / Beskrivelse / Descrição / Opis / Descrriere / Описание / Beskrivning / Opis / Kuvaus:	Floor Treatment – Ride On – Commercial	
<b>GB We, Numatic hereby declare under our sole responsibility, that the above-mentioned product(s) is/are in conformity with the following directives and standards.</b>	<b>BG</b> Ние, Numatic С настоящото деоповръзаве на своя лична отговорност, че посочените по-горе продукти са в съответствие със следните директиви и стандарти. <b>GR</b> Εμείς, Numatic δηλώνουμε με αποκλειστική μας ευθύνη, ότι το προαναφερμένο προϊόν συμμορφώνεται με τις ακόλουθες οδηγίες και πρότυπα. <b>HU</b> Mi, Numatic kijelentjük, egyedüli felelősséggel, hogy a fent említett termék megfelel az alábbi irányelveknek és szabványoknak <b>IT</b> Noi, Numatic dichiariamo sotto la propria responsabilità, che il prodotto di cui sopra è conforme alle seguenti direttive e norme. <b>LT</b> Mes, "Numatic pareikiu vienašališkos atsakomybės, kad pirmiau minėtas produktas atitinka šias direktyvas ir standartus <b>NL</b> We verklaren Numatic hierbij op eigen verantwoordelijkheid, dat het bovengenoemde product voldoet aan de volgende richtlijnen en normen <b>NO</b> Vi, Numatic erklærer herved under eget ansvar, at det ovennevnte produktet er i samsvar med følgende direktiver og standarder	<b>PT</b> Nós, a Numatic declaramos, sob nossa exclusiva responsabilidade, que o produto acima mencionado está em conformidade com as diretivas e normas a seguir. <b>PL</b> My, Numatic Niniejszym oświadczamy z pełną odpowiedzialnością, że wyżej wymieniony produkt jest zgodny z następującymi dyrektywami i normami. <b>RO</b> Noi, Numatic Prin prezenta declarăm pe propria răspundere, că produsul mai sus menționat este în conformitate cu următoarele standarde și directive. <b>RU</b> Мы, Нипфиск овим изъавляем под луном одговорношћу, да наведенор производа је у складу са следећим директивама и стандардима. <b>SE</b> Vi Numatic förklarar härmed under eget ansvar att ovan nämnda produkt överensstämmer med följande direktiv och normer. <b>SI</b> Mi, Numatic izjavljam s polno odgovornostjo, da je zgoraj omenjeni izdelek v skladu z naslednjimi smernicami in standardi. <b>FI</b> Me, Numatic täten vakuutamme omalla vastuulla, että edellä mainittu tuote on yhdenmukainen seuraavien direktiivien ja standardien mukaisesti	
<b>2006/42/EC</b>	<b>Machinery Directive</b> A15:2021 EN60335-2-72:2012 EN62233:2008	<b>EN60335-1:2012 + AC:2014 + A11:2014 + A13:2017 + A15:2021</b>	
<b>2014/30/EU</b>	<b>EMC Directive</b>	<b>EN55014-1:2017 + A11:2020</b> <b>EN55014-2:1997 + A1:2001 + A2:2008</b> <b>EN61000-3-2:2014</b> <b>EN61000-3-3:2013</b>	
<b>2011/65/EU</b>	<b>RoHS Directive</b>		

Authorised Signatory: Mr. Matthew Coles

Position: Head of Technology  
Numatic International Limited

Signed: *M Coles* Date: 17<sup>th</sup> August 2023

Chard,  
Somerset, TA20 2GB, UK

DEC-055 V3.3

This Machine Has Been Packed  
With The Following

Brush / Pad

Floor Tool

Charging Lead

Battery

Fuse Pack

Signed

Distributed by:

# Numatic

numatic.com

Numatic International Limited.  
Chard, Somerset TA20 2GB ENGLAND  
Tel: 01460 68600 [www.numatic.co.uk](http://www.numatic.co.uk)

Numatic International GmbH. Fränkische Straße 15–19  
D-30455 Hannover, DEUTSCHLAND  
Tel: 05 11 98 42 16 0 [www.numatic.de](http://www.numatic.de)

Numatic International SAS. 13 / 17 rue du Valengelier  
EAE La Tuilerie, 77500 CHELLES, FRANCE  
Tel: 01 64 72 61 61 [www.numatic.fr](http://www.numatic.fr)

Numatic International BV, Vennootsweg 15  
2404 CG, Alphen aan den Rijn, Nederland  
Tel: 0172 467 999 [www.numatic.nl](http://www.numatic.nl)

Numatic International (Pty.) Ltd.  
16th & Pharmaceutical Roads, Midrand, Gauteng,  
SOUTH AFRICA 1685  
Tel: 0861 686 284 [www.numatic.co.za](http://www.numatic.co.za)

Numatic International Schweiz AG.  
Sihlbruggstrasse 3A, 6340 Baar. SCHWEIZ  
Tel: 0041 (0) 41 76 80 76 - 0 [www.numatic.ch](http://www.numatic.ch)

Numatic International ULDA. Rua da Boa Viagem, 177  
4470.210 Maia. PORTUGAL  
Tel: +351 220 047 700 [www.numatic.pt](http://www.numatic.pt)

Numatic International SLU. C/ La Forja, 41, 08840 Viladecans  
(Barcelona), Spain  
Tel: +34 93 647 22 22 [www.numatic.es](http://www.numatic.es)

Numatic International Denmark. Fränkische Straße 15-19,  
30455 Hannover, DEUTSCHLAND  
Tel: +45 (0) 31 64 08 08 [info@numatic-online.dk](mailto:info@numatic-online.dk)  
[www.numatic-online.dk](http://www.numatic-online.dk)

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  
numatic.com © Numatic International Limited  
906754 09/23 (A10)