

### CRO 8055/8072 RIDE-ON SCRUBBER DRYER



CRO 8072

 $\Lambda$ 

Owner Instructions
Warning! Read instructions before using the machine



### RIDE ON SCRUBBER DRYER

### CRO 8055/8072

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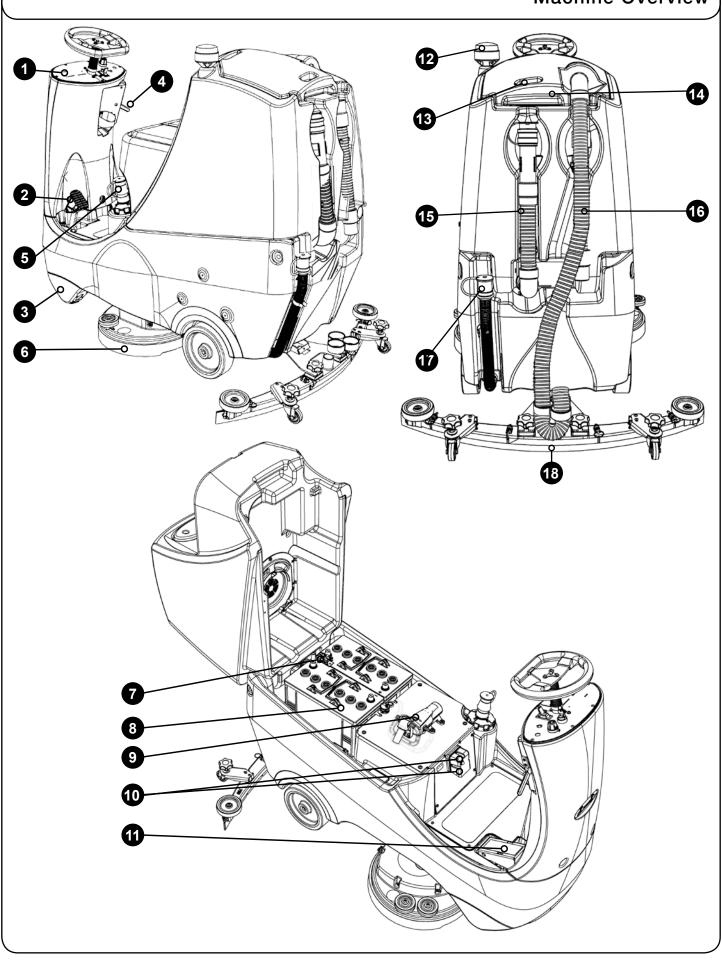
### PLEASE READ BEFORE COMMENCING OPERATION

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

- Owner Manual
- Battery Charging Lead
  - Isolator Key
  - 40 Amp Fuse
  - Maxi Fuse-puller

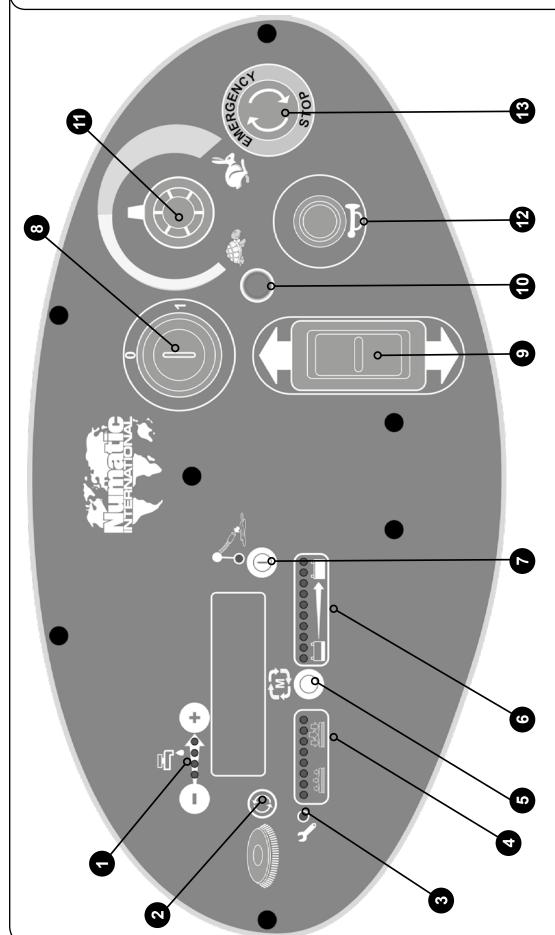
1	Operator control panel
2	Brush deck foot pedal
3	Anti-tip buffers
4	Floor-tool raise / lower lever
5	Clean water tank fill point
6	Brush deck
7	40 Amp battery fuse
8	Gel batteries
9	Clean water tank filter
10	On-board charger and charge indicator
11	Accelerator pedal
12	Pedestrian warning light
13	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

### Machine Overview



RIDE ON SCRUBBER DRYER

### CRO 8055/8072 Control Panel Overview



-	Water Flow Rate Indicator and Selection Button	8	8 On / Off Switch
8	Brush Engage and Disengage Button	6	Forward / Reverse Switch
ო	Service Indicator	10	10 LED Status Indicator
4	Brush Pressure / Load Indicator	11	Maximum Speed Control
2	Run Time Selection Button	12	12 Horn Button
9	Battery Charge Level Indicator	13	13 Emergency Stop Button
7	Off Aisle Vacuum Button		



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



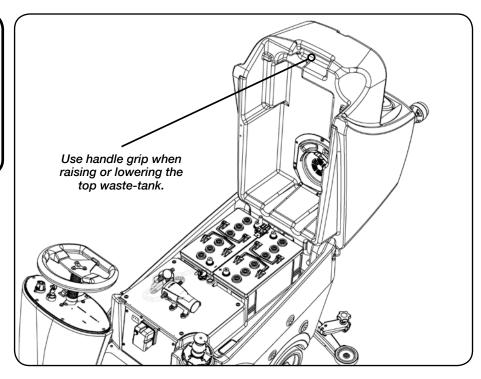
### **CONTENTS**

1 x Owner Manual
2 x Battery Charging Lead
2 x Keys
1 x 40 Amp Fuse (1 spare)
1 x Maxi Fuse-puller

Lift top tank assembly to reveal battery compartment.

Always lift using handle grips as shown.

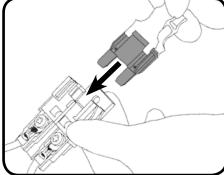
Remove transit block from pallet.



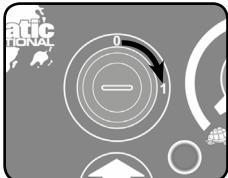
Ensure that no metal objects come into contact with battery terminals while the batteries are exposed.

ALWAYS WEAR GLOVES.

When inserting the first fuse you may notice a spark, this is normal.



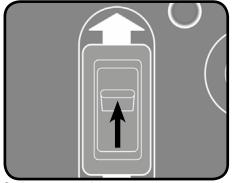
Fit the battery fuse



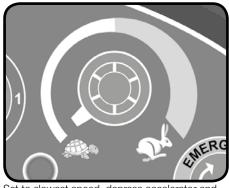
Switch on the machine.

NOTE: DO NOT depress accelerator pedal while software initialises.

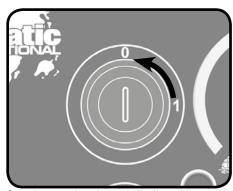
The seat is fitted with a pressure sensor that disables the machine until an operator is seated.



Set lever to forward.



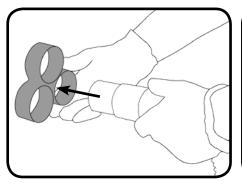
Set to slowest speed, depress accelerator and drive off the palette using ramp provided.



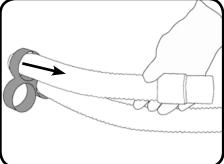
Once in a safe location switch off machine.

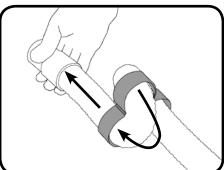
### Hose U-bend Clip

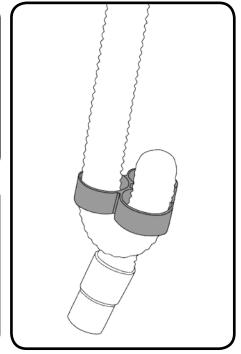
The U-bend in the hose prevents water spillage when the vacuum is switched off. Refit vacuum hose to the floor tool when finished.



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







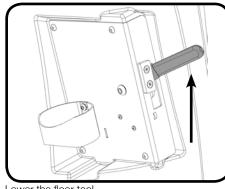
### Fitting the Floor Tool

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

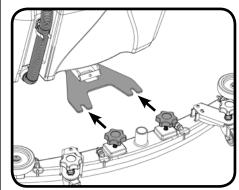
### **Break-away Floor Tool**

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.

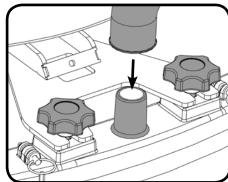
Make sure you do not over tighten the retaining knobs.



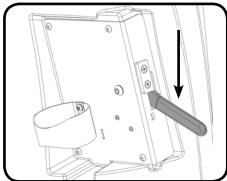
Lower the floor tool.



Slide floor tool onto bracket.



Tighten retaining knobs to finger tight and attach hose.

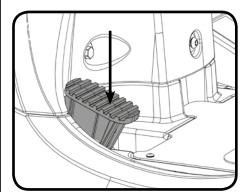


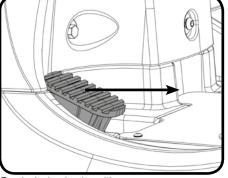


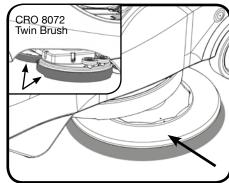
### Always ensure that the machine is switched off before making any adjustments.



### Raise Brush Deck / Fitting the Brush / Lower Brush Deck



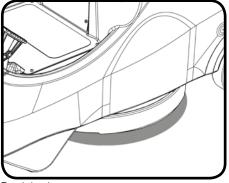


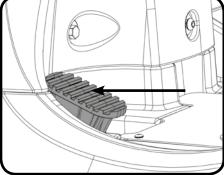


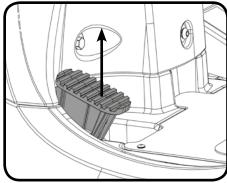
Raise brush deck.

Brush deck raised position.

Slide brush under machine.



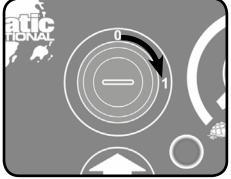


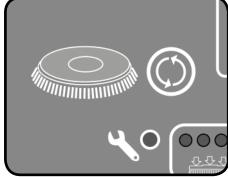


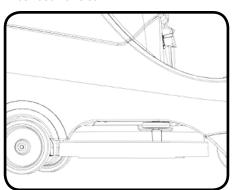
Brush in place.

Lower brush deck.

Brush deck lowered.







Switch machine on.

Press brush engage button.

Machine has picked up the brush.

Please follow the same process to fit both brushes to the CRO 8072 as is for the single brush fitting on the CRO 8055.

To disengage the brush, press the brush engage button with the brush deck in the raised position.

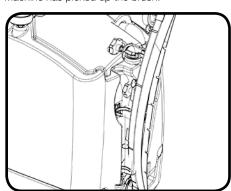
NOTE: Do not lift the brush deck until the brush has stopped revolving or the brush will release.

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.



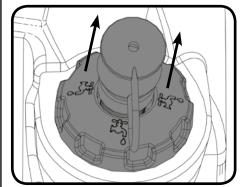


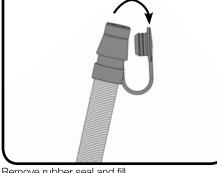
Always ensure that the machine is switched off before making any adjustments.

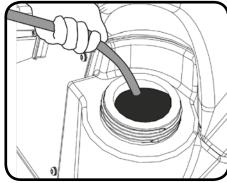


### Filling the Clean Water Tank

The CRO 8055/8072 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.

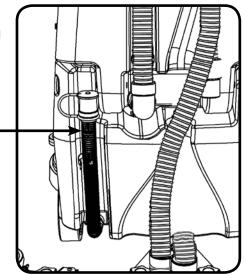
Alternatively remove filler cap completely.

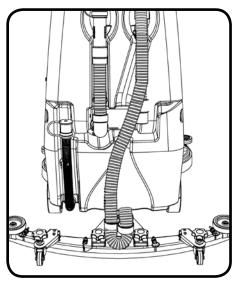
NOTE: Great care must be taken to ensure that contaminants (leaves, hair, dirt, etc.) are not allowed to enter the clean water tank during the filling process. If using a bucket or similar, ensure it is always clean and free from debris.

### 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.



### **Machine Operation**



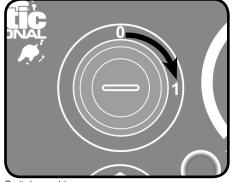
### **IMPORTANT**

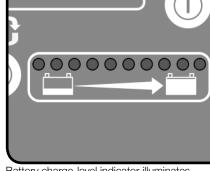
Do not operate machine unless the operator manual has been read and fully understood.

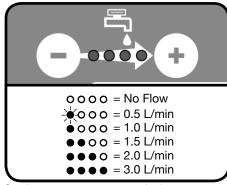


Drive the machine to the cleaning site (read set-up guide again if necessary - page 5). Before cleaning operation, place out appropriate warning signs and sweep or dust-mop the floor. When ready for cleaning lower the floor tool (page 6) and the brush deck (page 7).

### **Setting the Cleaning Controls**







Switch machine on.

Battery charge-level indicator illuminates.

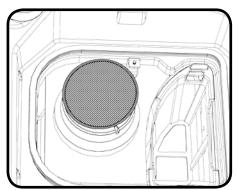
Set the water flow rate as required.

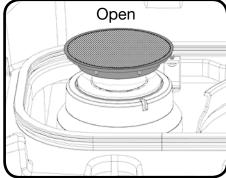
### Waste Water Tank Full

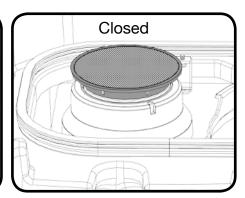
The vac shut off system stops the airflow when the top waste water tank is full.

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.







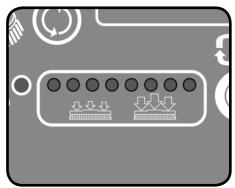


Always ensure that the floor is pre-swept and relevant safety signs are displayed.



### **Machine Operation**

### Brush Pressure / Emergency Stop Button / Horn



Brush pressure load warning lights. (Illuminates from left to right)



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



Horn button.

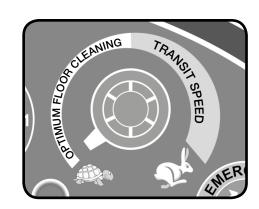
NOTE: The run-time of the machine may decrease if the load on the brushes is increased.

The CRO 8055/8072 is equipped with an electronic braking system. To reset, turn emergency stop button clockwise, to restart the machine turn the key off then on again.

### **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.



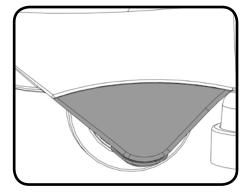
### **Anti-tip System**

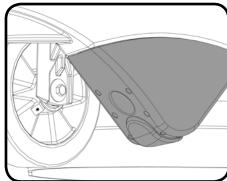
The CRO 8055/8072 is equipped with an Anti-tip system.

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.





### **Machine Operation**



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



### Machine in Use

To operate, select forward and depress the accelerator pedal.

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.

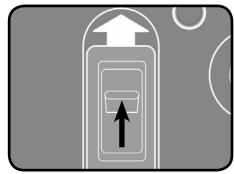
Overlap each scrubbing path by 10cm to ensure an even clean.

After stopping, the vac motor will run for a further 10 seconds to collect any water left in the vacuum hose.

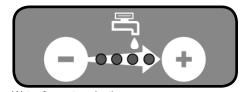
On heavily soiled floors use a 'double scrub' technique.

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.

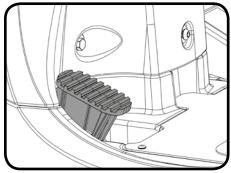
If your machine leaves streaks on the cleaned floor, either clean the floor tool blade or adjust blade height for optimum performance.



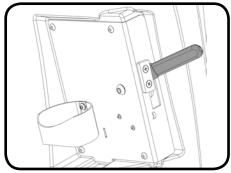
Set lever to forward.



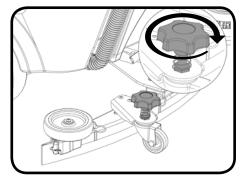
Water flow rate selection.



Brush deck in lowered position.



Floor tool lever in lowered position.

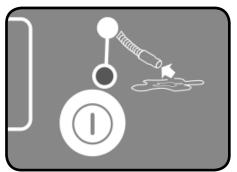


Adjusting the blade height.

### 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 off-aisle vacuum button on the control panel. Pressing the off-aisle button again will switch the vacuum off.

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



Off-aisle vacuum button.



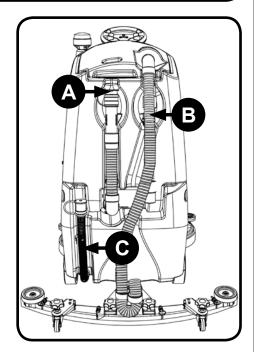
### **Machine Cleaning**

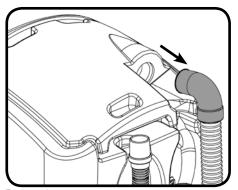


### Always ensure that the machine is switched off prior to any maintenance.

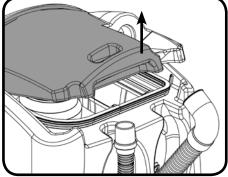


- After use, empty waste water tank using emptying hose and flush-out with clean water.
- **B** Remove floor tool vacuum hose ensuring you remove the U-bend clip and flush out with clean water.
- **6** Empty clean water tank, using emptying hose and again flush out with clean water.

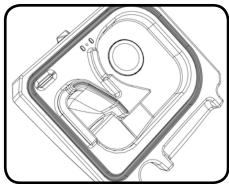




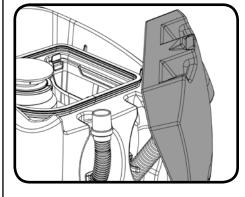
Remove hose.

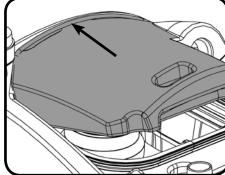


Remove separator and clean.



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.

### **Machine Cleaning**

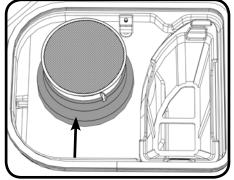


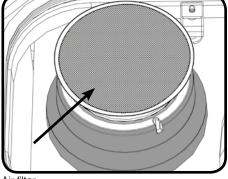
### Always ensure that the machine is switched off prior to any maintenance.

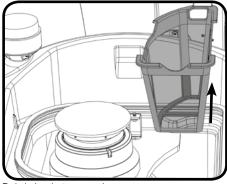


Located in your waste water top tank is a vacuum shut off system, this prevents suction when the waste water tank is full. It also prevents foam created by high-foaming detergents from entering the motor. Sometimes the float vents get clogged and blocked, clean to ensure correct operation. Regularly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





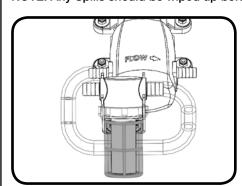


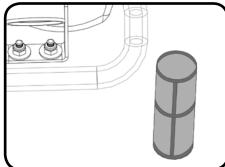
Float vent. Air f

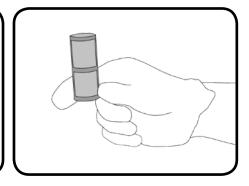
Debris basket removal.

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



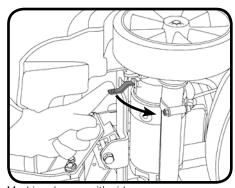
ALWAYS ENSURE THAT THE MACHINE IS ON LEVEL GROUND BEFORE DISENGAGING BRAKE ARM. NEVER DISENGAGE THE BRAKE WHEN THE MACHINE IS ON A SLOPE / GRADIENT.



The CRO 8055/8072 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

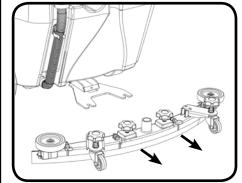


### Always ensure that the machine is switched off prior to any maintenance.



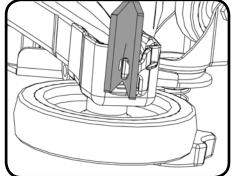
Lower the floor tool then unscrew the retaining knobs and slide it off the holding bracket.

Rinse the floor tool assembly with clean water and refit.

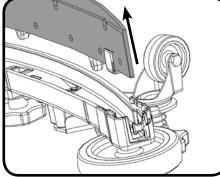


Remove floor tool.

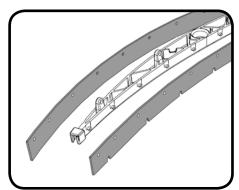
Remove four retaining pins.







Separate the blade from the carrier.



Peel away blades.

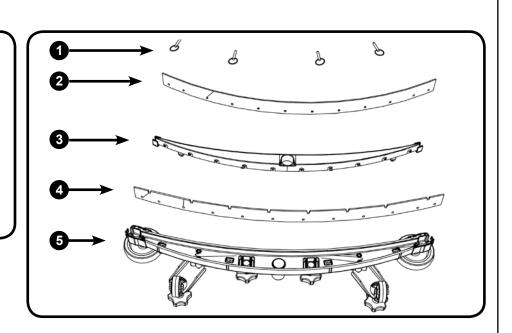
Periodically the floor tool blades should be examined and checked for wear and damage.

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.



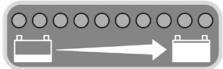
### **Machine Charging**

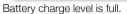


### Always ensure that the machine is switched off prior to charging.



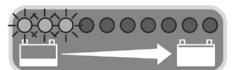
As the machine is used and the batteries are discharged, the meter lights will go out from right to left.







Charge machine when 3 red lights are illuminated.



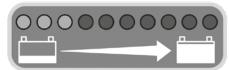
When 3 red lights flash all cleaning functions will disable, charge immediately.



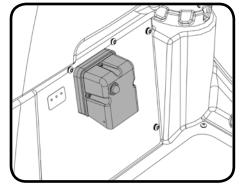
50-100%



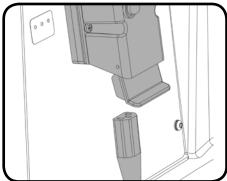
20-50%



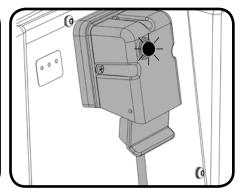




Machine charging point, above footplate.



Insert country specific charging lead.



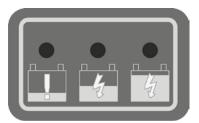
Red charging indicator illuminates when charging.

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 display panel will show 'INHIBITED'. The battery charge indicator display lights will flash in unison and the machine will not operate.



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.

NOTE: Charger viewing panel only available on certain models.

### **Battery Care**



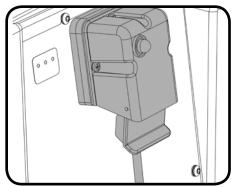
To ensure your machine remains at its maximum efficiency and prolong your battery life, please follow the simple steps below:



### **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.





### **Charging Light Sequence**

Signal (LED)	Meaning	1
Red LED on	First Phase (constant current Mode)	<u>.</u>
Orange LED on	Second Phase (Constant Voltage Mode)	IJ
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 10 hrs during phase 1 or 2 > 4 flashes between pause	se

NOTE: Only available on certain models.

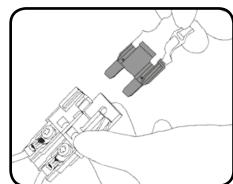
### Under abnormal use:

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 recharged every three months. Charge fully the day before you start using the machine again.





	Possible	Cause	Effect on Product	Investigate the Following	Action Required	If Fault Persists
Batteries voltage low Batteries not been charged	Batteries not been charged		Operating time	Check when machine last charged	Charge batteries immediately	
Possible bad connection or mad between batteries, controller, operat charger or fuses caused by loose connections, damaged wiring, water ingress	ř. B	or m oper	or machine will not operate	Switch OFF the machine: Remove Fuses Check connections to batteries, charger and fuses for loose wires or screws	Tighten loose connections and replace damaged components	
Not accepting charge due to faulty battery / cell	Not accepting charge due to faulty battery / cell			Check each battery Voltage individually to detect defect unit 10.5V min	Replace batteries as required	
Charger not functioning	Charger not functioning			Check battery voltage and charge current ensuring charger red fault light is extinguished	Replace charger	
Traction motor The motor has a bad The motor has a bad connection connection		The	The motor will not operate	Check all connections and leads between motor and controller	Tighten loose connections and replace damaged	
Motor disconnected	Motor disconnected				components	
TCO activated (Thermal Cut Out)	TCO activated (Thermal Cut Out)					
Motor failed to open circuit	Motor failed to open circuit					Con
Traction motor The motor has a short circuit Mowing trip to a battery		$\breve{\Xi}$	Motor will not operate	Check all connections and leads between the motor and controller	d controller	tact Sen
		Mag	Machine functions not working	Check battery voltage and charge current ensuring charger red fault light is extinguished	Charge batteries immediately	vice Age
is inhibiting machine functions	lockout tever and the controller is inhibiting machine functions			Check each battery voltage individually to detect defect unit 10.5V min		nt
Charger connected The controller is being inhibited Machine from driving, this may be working because the battery charger is connected		Mac work	Machine functions not working	Remove charger to operate machine		
Controller trip A controller trip is indicated wor		Mac	Machine functions not working	Check all connections and leads	Tighten loose connections and replace damaged components	
Brake deactivated Poor brake connections Trac		Trac	Traction drive disabled	Check brake wiring and brake lever	Replace brake or wing as necessary. Reactivate brake by engaging brake lever	
High battery voltage Poor connections between battery controller and traction wor	connections between controller and traction	Mac wor	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		

### **Specifications**

						Model - C	RO 8	055 / 807	2				
(Empty) Net 120 A/	•	Brush \	Weight	Brush Wi	dth	Brush Pressur		Pad Width	n	Pres		Brush Motor	Vac motor
CRO 8055 -	200 kg	CRO 805	5 - 23 kg	550 mm	ı	11.4 G/cr	m²	508 mr	m	9.3 G	i/cm²	24 V	24 V
CRO 8072 -	220 kg	CRO 807	2 - 32 kg	370mm x	2	19.9 G/cr	m²	360mm	x 2	16.6	G/cm <sup>2</sup>	600 W	400 W
Transaxle		Time 20 A/Hr		Time 00 A/Hr		Total Batter eight 120 A	•	Tota Weight	al Batte t 100 A	-		rge Times I 20 A/Hrs	Charge Times 2 x 100 A/Hrs
24 V 400 W	3	Hrs	2	Hrs		74 kg (163 lbs)			62 kg 36 lbs)		20/	A = 12 Hrs A = 7 Hrs = 4.5 Hrs	10A = 8 Hrs 20A = 5-6 Hrs 35A = 3-4 Hrs
Brush Spe	ed	AirFlow	,	Transit Sp	eed	Capacity	W	ater Flow F	Rates		Clean	ing Area	Sound Pressure
150 rpm		24.2 L/se	ec	0-6 Km/ł	nr	80L / 80L		0.5 / 1.0 / 1 2.0 / 3.0 L/min	.5			700m² @ 3.5 K/Hr 200m² @ 3.5 K/Hr	≤ 70dB (A)
Hand A	Arm Vibra	ation		Whole Body	y Vibra	ation	Height Length			Width	Max Gradient		
	ng (Quarry <sup>*</sup> .84 m/s <sup>2</sup>	Tiles)		Travelling (Qi		iles)	11	60 mm	1	460 mm	CF	RO 8055 - 805 mm	11%
,	ainty 0.92 O 5439-1	m/s²)		(Uncertainty ISO 24		n/s²)		OO IIIIII		400 11111	CF	RO 8072 - 948mm	1170

### **Trouble Shooting**

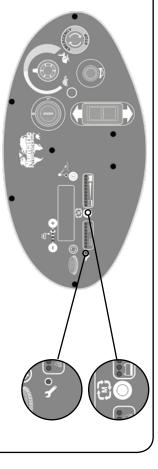
PROBLEM	CAUSE	SOLUTION
Machine will not operate	Missing or blown fuses Key in the 'OFF' (0) position Low battery charge Machine stop button in 'OFF' mode Machine is connected and charging	Fit or replace fuse (page 5) Turn key to 'ON' (1) position (page 5) Charge batteries (page 15) Reset stop button (page 10) Take off charge (page 15)
Vacuum will not operate	Floor tool in raised position Waste water tank full	Lower floor tool (page 6) 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 air 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 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) Renew (contact service dept) Recharge batteries (page 15)
No brush / scrub function	No brushes fitted Brush deck raised	Check and fit (page 7) Lower brush deck (page 7)
Little or no water flow	Clean water tank empty Clean water tank filter blocked / clogged Incorrect water flow setting Brush deck raised	Fill clean water tank (page 8) Remove and clean (13) Adjust as desired (Page 9) Lower brush deck (page 7)
Machine just 'stops' while operating	Too much load on the brush system	Reset the machine using the key and decrease the brush load to best suit the floor type (page 10)

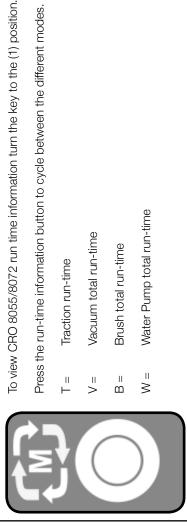
Failure to rectify the problem or in the event of a breakdown contact your Numatic dealer or Numatic Technical helpline +44 (0)1460 269268

## **Trouble Shooting**

LCD Display	Fault	Possible Cause	Effect on Product	Investigate the Following	Action Required	If Fault Persists
Blank	No power	Key switched off	Machine will not operate	Key switched off	Switch key on	
		Emergency stop pressed		Emergency stop pressed	Release emergency stop	
'OVER CURRENT'	Brush over current	Brush pressure too great	Vac. brush, water and detergent motors /	Release brush pressure	pressure	Co
		Brush current exceeds 32A	purity will not oberate   Brich   ED's all fact is inicas until the	Change type of brush	of brush	ontac
		Wrong type of brush for surface	pedal is released	Restart machine	chine	t Ser
'UNDER VOLTS'	Battery voltage dropped	Batteries require recharging	Machine will not operate	Battery leads and connections	Charge batteries	vice A
	Left most battery LED flashes	Faulty cell on battery			Replace battery (if cell damaged)	Agent
"VAC OVER CURRENT" Vacuum motor fault	Vacuum motor fault	Debris entering vacuum motor	Machine disabled	Restart machine		
		Water ingress		Replace vacuum motor		
'LO-FLO SQUEEGEE-STOP'	Squeegee down, reverse selected	Trying to reverse with squeegee down	Machine will not move	Raise Squeegee, restart machine.	start machine.	
'INHIBITED'						
			MACHINE INHIBITED - NO OPERATION			

potential service requirement (Contact your service engineer), to de-activate the warning Red service LED on dashboard lights up after 500 hours of brush use and indicates light hold the 'mode' button down for 7 seconds.





To view CRO 8055/8072 run time information turn the key to the (1) position.

Traction run-time

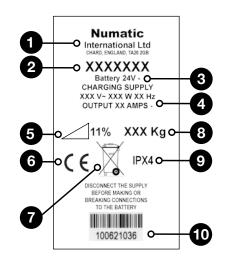
Vacuum total run-time

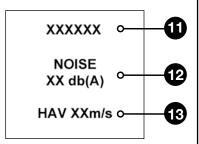
Brush total run-time

Water Pump total run-time

### About the Machine

Rating L	abel			
1	Company Name & Address			
2	Machine Description			
3	Power rating			
4	Voltage Frequency			
5	Max Gradient			
6	CE Mark			
7	Weight (ready to use)			
8	WEEE Logo			
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.



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

### **Safety Critical Component:**

Charging Leads: Ho5W-F x 1.0 mm<sup>2</sup> x 3 Core Transaxle: 205190 Battery Charger: (230V), (115V)

### CAUTION



No HOT drinks when operating this machine.



### **ORIGINAL INSTRUCTIONS READ MANUAL BEFORE USE**

### Information for Scrubber Dryer



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.



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.

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.



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

- 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.
- Remove any metallic items from hands, wrists and neck i.e. rings, chains etc. before working on a battery.
- Never rest tools or metallic objects on top of the battery. 4
- When charging is complete disconnect from the mains supply. 5.
- The machine must be disconnected from the supply when removing the battery. 6.
- 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.
- Do not allow the batteries to become fully discharged, it may not be possible to recharge them.
- Do not allow one battery to be discharged separately to the other.
   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.

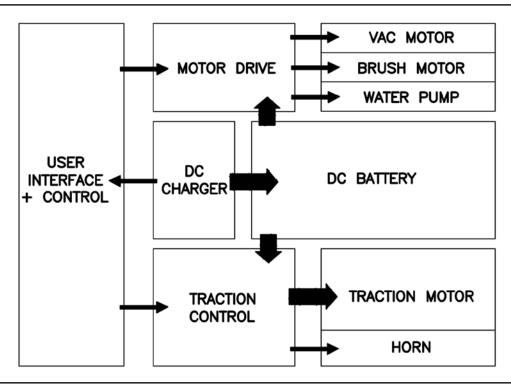
### **Battery Care**

- Always recharge the batteries after use. This can be done at any time it is not necessary to wait until they are fully discharged; they do not develop a "memory"
- Leaving the charger to operate for a minimum of 4 hours after the green light has come on, at least weekly, will pro-long battery life.
- Do not store the machine with the batteries discharged.

### **Spare Parts**

Part No.	SQUEEGEE	Part No.	BRUSHES
904691	Complete 650mm Squeegee Assembly Red Trim CRO 8055	606028	550mm Polyscrub Brush
900518	Squeegee Blade Set - Serilor Pu Green Fr & Rr CRO 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	Part No.	PUMP AND FILTER
903853	Complete 750mm Squeegee Assembly Red Trim CRO 8072	230278	Water Pump
904699	Squeegee Blade Set - Serilor Pu Green Fr & Rr CRO 8072	208888	Extended Filter Complete Assembly
Part No.	TOP TANK	208827	Strainer Black Top
903542	Grit Filter Basket	208889	Extended Strainer 50 Mesh Screen
208861	Air-Filter	208830	Strainer Gasket
208980	Cro Foam Pad	208890	68Mm Extended Strainer Clear Bowl
304503	Separator Seal Strip 1045Mm Long	Part No.	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 CRO 8055
208907	Gas Strut (100Nm)	208985	Lift Handle Nylon Guider
Part No.	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 CRO 8055
206842	Filler Stretch Hose	204068	Deck Buffer Wheel CRO8072
		903437	Splash Skirt CRO 8072

### Schematic Diagram



# **EU Declaration of Conformity**

Warranty



### EU DECLARATION OF CONFORMITY

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

Machinery Directive 2006/42/EC EMC Directive 2004/108/EC RoHS Directive 2011/65/EU Machine Description: Scrubber Dryer Machine Type: TTV, TRO, CRO series

# Manufactured by: Numatic International Limited

Relevant standards upon which conformity is declared include:

EC 60335-1 2001 + A1 2004 + A2 2006

+ National Deviations IEC 60335-2.72 Ed 2.0

EN 55014-1:2006

EN55014-2:1997+A1 EN61000-3-2:2006 EN61000-3-3:1995+A1+A2 BS 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: Technical Manager

**Date:** 15/06/2015



Numatic International Limited Chard, Somerset. TA20 2GB

www.numatic.co.uk

# Numatic International

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

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

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 a fault and for which a replacement will be supplied but cannot be extended to consitute a delain 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

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.

such variation is in writing and authorised I. No variation to this warranty may be made or implied by any member of Numatic International Limited or its Dealers unless by the Company



Numatic International Limited. Chard, Somerset, TA20 2GB Telephone: 01460 68600 Fax: 01460 68458

This Machine Has Been Packe With The Following	Distributed by:	
Brush / Pad		
Floor Tool		
NuTab		
Charging Lead		
Fuse Pack		
Signed		
	Numatic International	
	Numatic International Limited. Chard, Somerset TA20 2GB ENGLAND Tel.: 01460 68600 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	
	Numatic International SAS. 13 / 17 rue du Valengelier 77500 CHELLES, FRANCE Tel: 01 64 72 61 61 www.numatic.fr	
12.00	ReNel ux Distribution, Numatic International RV	



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Numatic International Schweiz AG. Sihlbruggstrasse 142, 6340 Baar. SCHWEIZ Tel: 0041 (0) 41 76 80 76 - 0 www.numatic.ch



Numatic International ULDA. Centro de Negócios da Maia, Rua Albino José Domingues, 581, 4470 - 034 Maia PORTUGAL 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 www.numatic.co.uk @ Numatic International Limited