

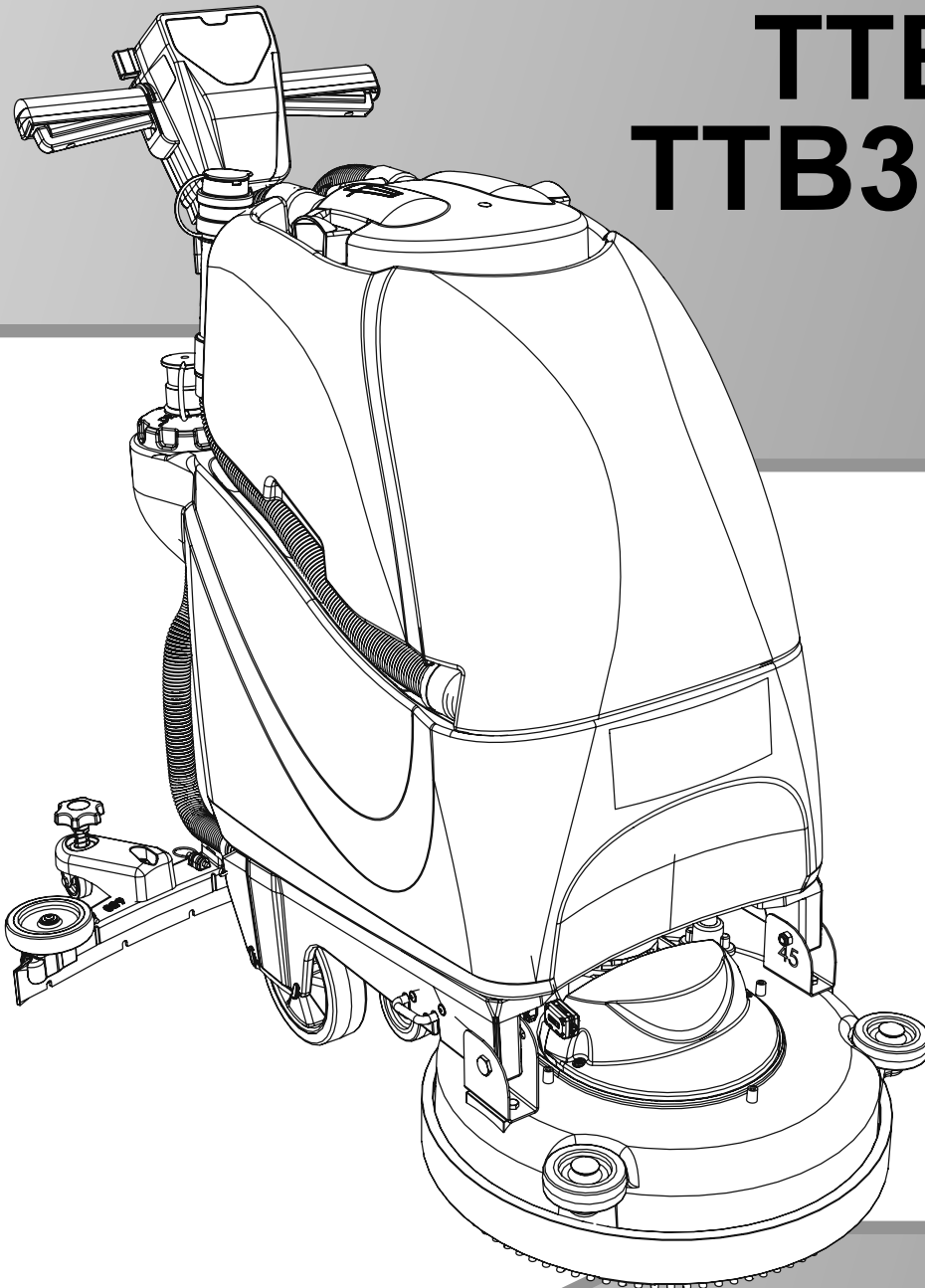
EN

Numatic

**NX
300**

**TTB3045NX
TTB3045NX-R**

**SCRUBBER
DRYER**



Original Instructions

CAUTION, Read instructions before using the machine
Keep for future reference



Nu-Assist



numatic.com

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PLEASE READ BEFORE COMMENCING OPERATION

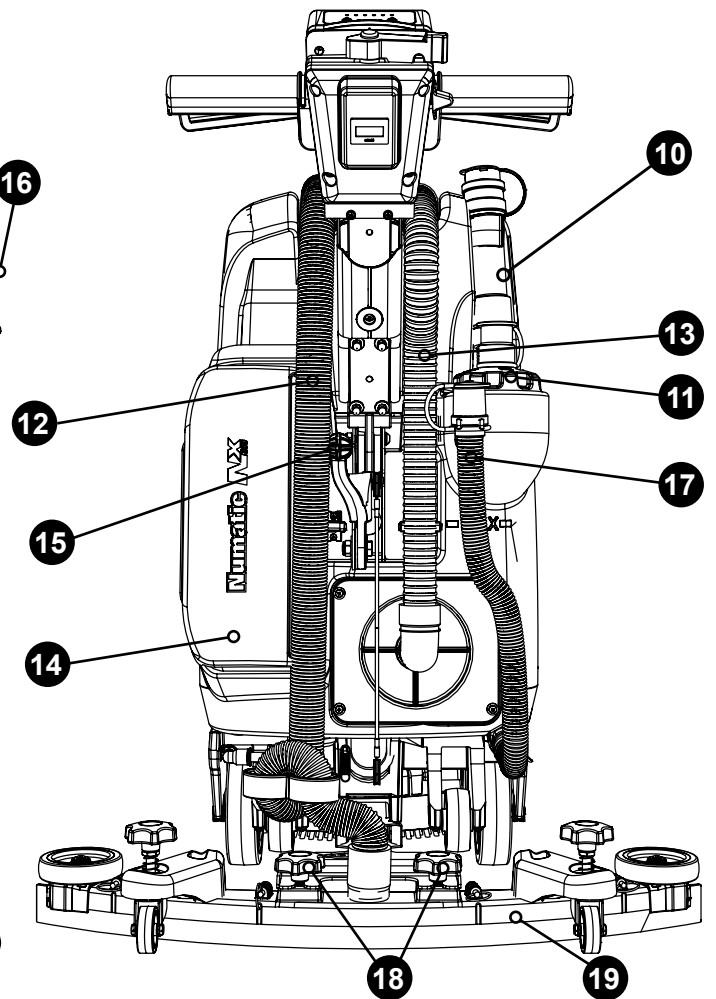
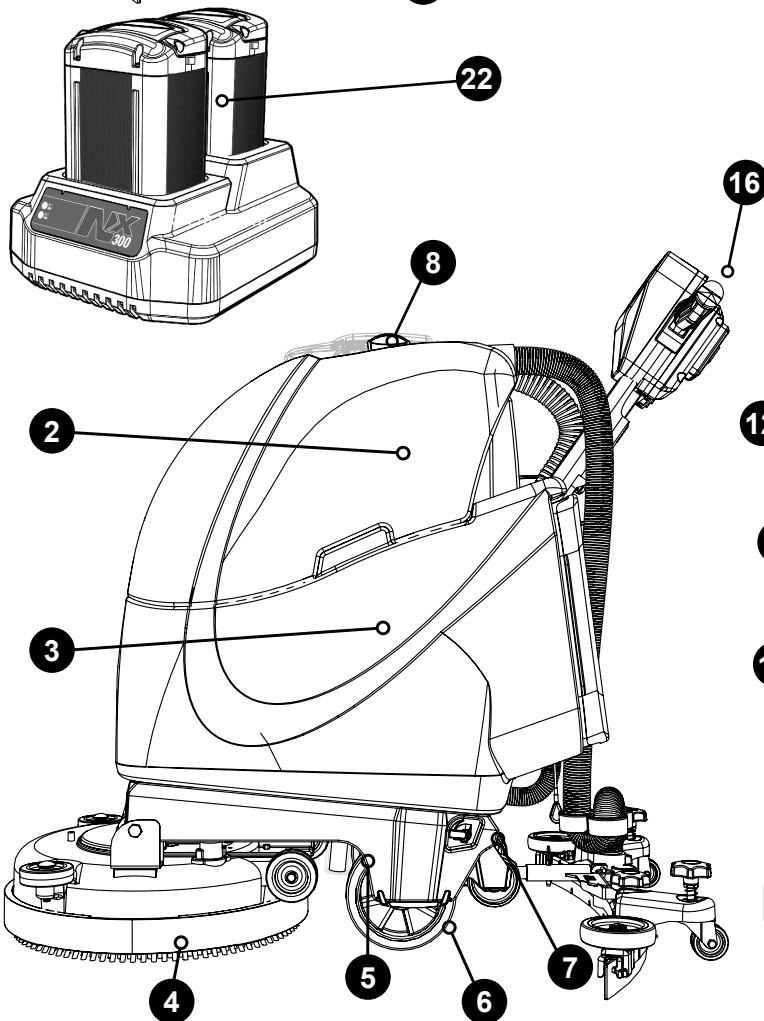
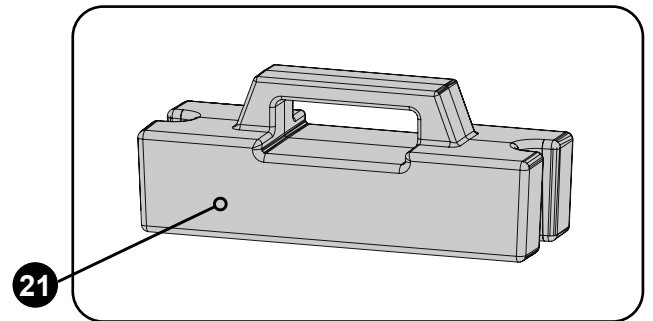
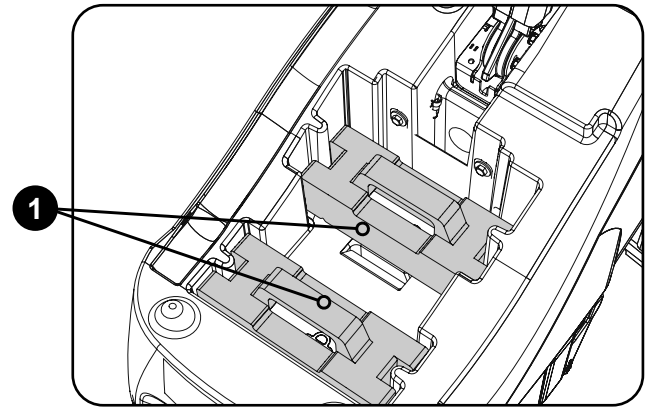
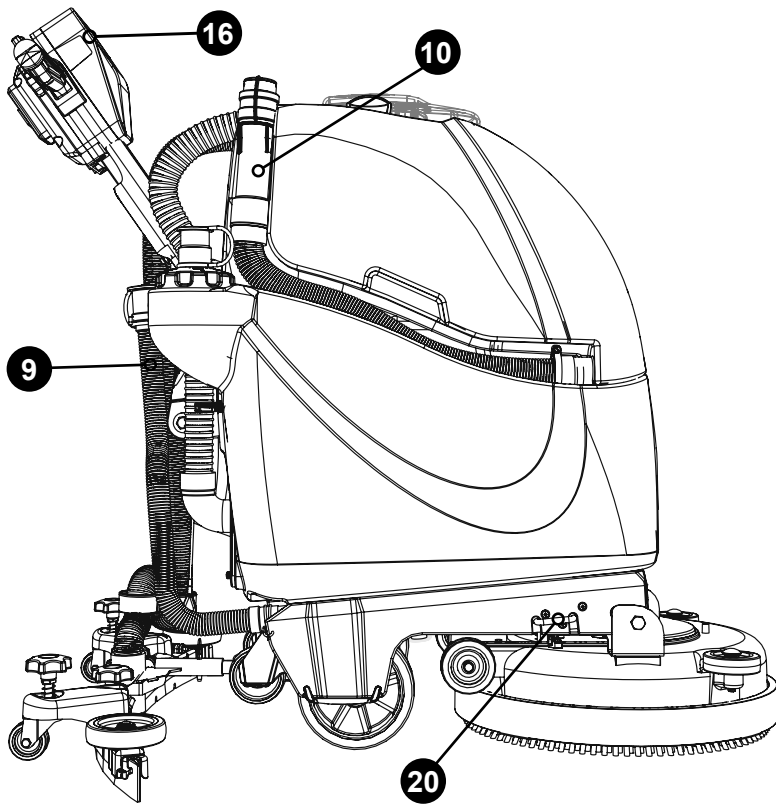
After the removal of all the packaging, carefully open and check the contents

- Owner Manual
- Battery & Charger Manual
- Battery Charger & Lead
 - Battery
 - Scrub Brush
 - Floor tool
 - Brush / Pad

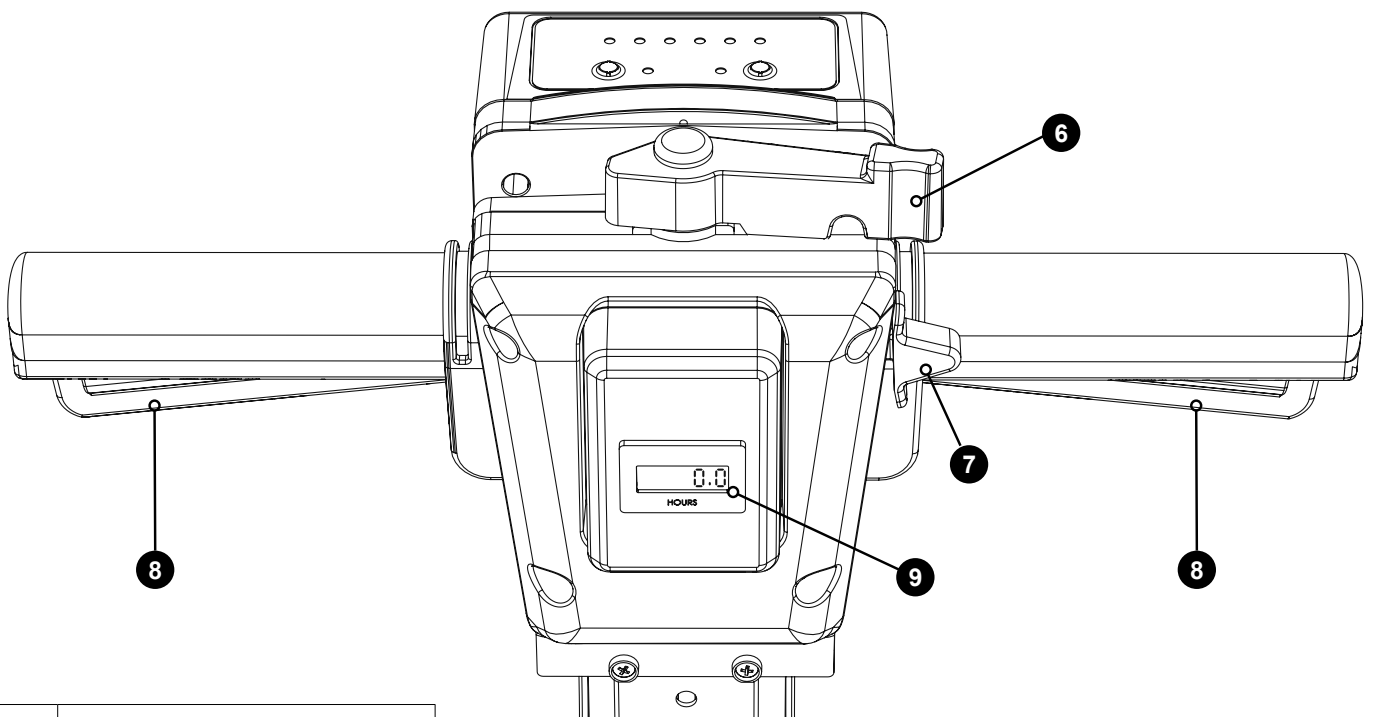
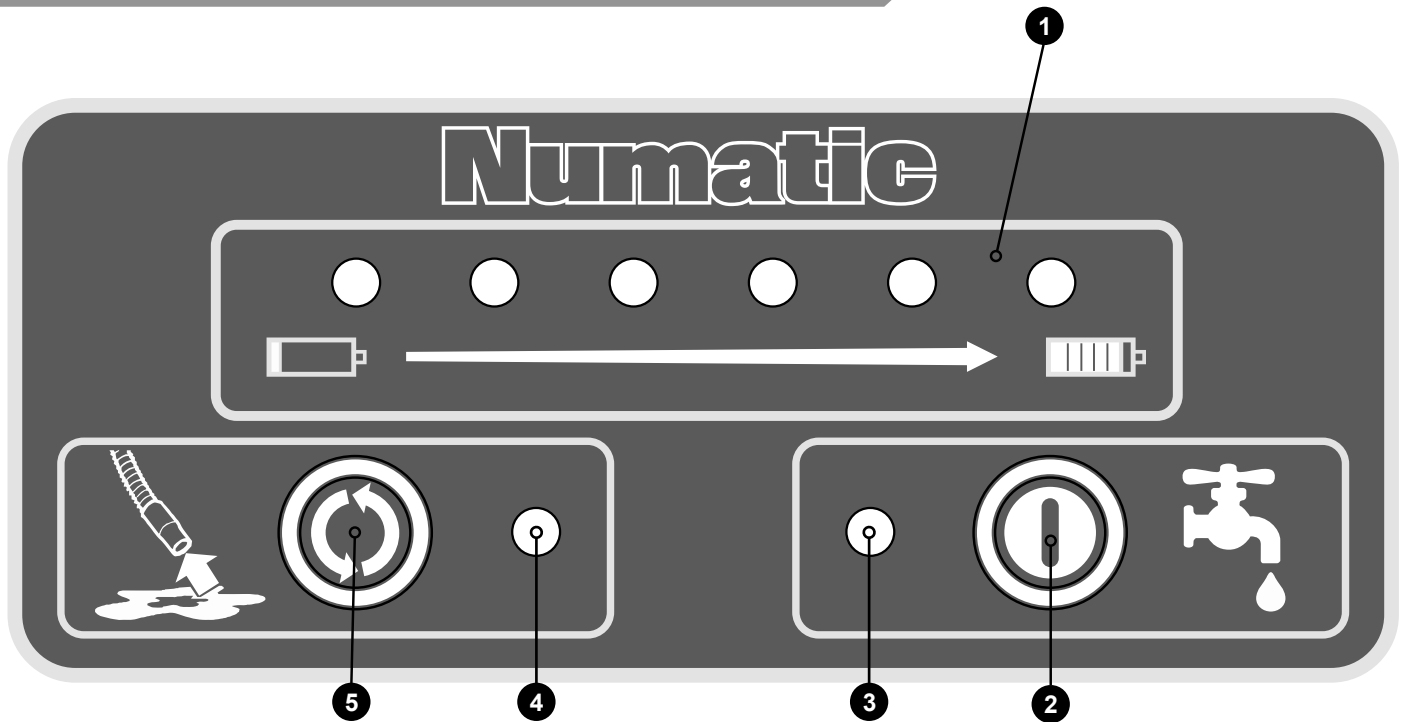
| | |
|----|---|
| 1 | Deck Pressure Weights Location |
| 2 | Top Tank (Waste Water) |
| 3 | Bottom Tank (Clean Water) |
| 4 | Brush Deck |
| 5 | Clean Water Tank Filter |
| 6 | Rear Wheels |
| 7 | Clean-Water On/Off Tap |
| 8 | Separator |
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In the event of a breakdown contact your Numatic dealer or the
Numatic Technical
Helpline +44 (0)1460 269268

Machine Overview



Control Panel Overview



| | |
|---|------------------------------|
| 1 | Battery Charge Level Display |
| 2 | Water Flow On / Off Button |
| 3 | Water Flow Indicator |
| 4 | Vacuum Off/On Indicator |
| 5 | Vacuum Off/On Button |
| 6 | Handle Position Lever |
| 7 | Start Switch |
| 8 | Triggers |
| 9 | Hours Meter |

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Machine Set-up Guide



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

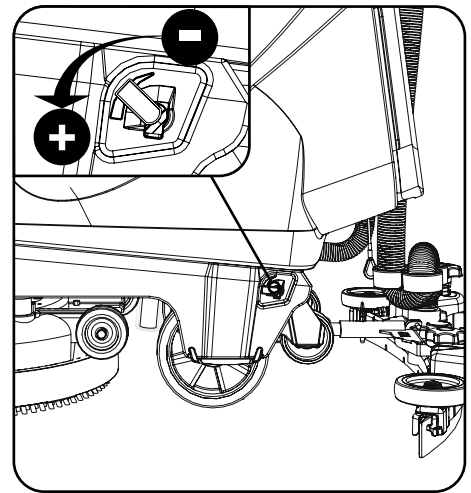
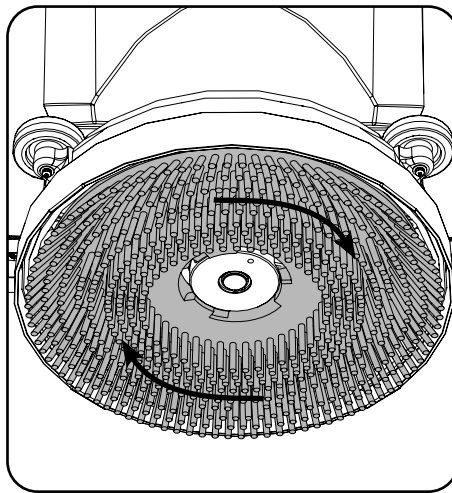
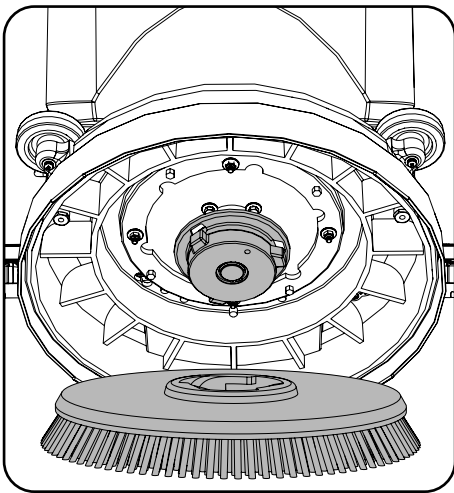


Fitting the Brush/Pad

Turn on Water

450mm Brush or 400mm Pad.
Featuring the Nulock brush system.

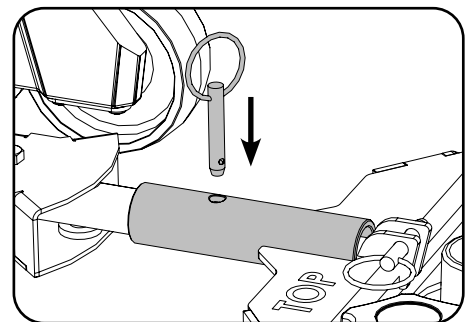
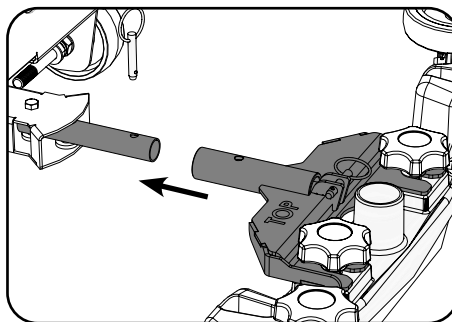
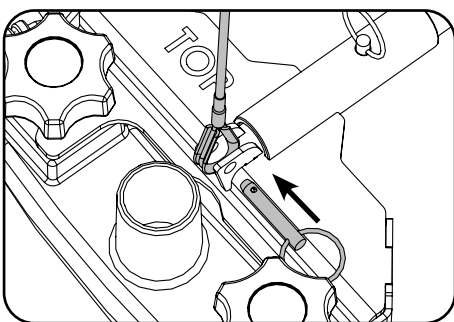
The brush is pushed and twisted to lock, making fitting and removal a simple process. Slide the brush / pad under the brush deck. Fit the brush / pad onto the Nulock drive chuck, twist to lock the brush / pad in place. Safety gloves are recommended for the changing of used brushes. Turn on the clean water tap.



Fitting the Floor Tool

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

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

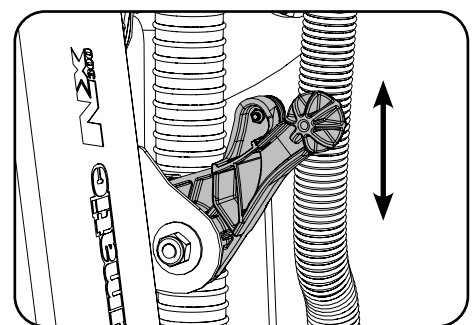
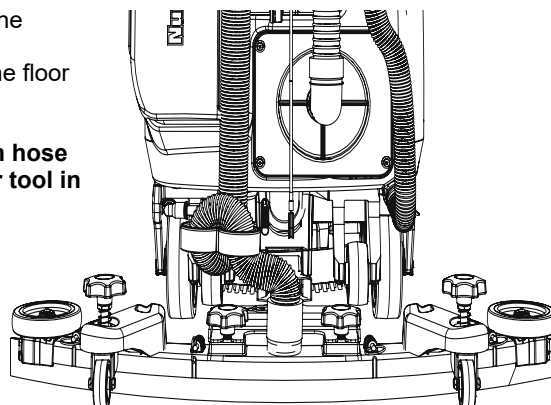


Fit the floor tool and retain using the detent pins. Push waste collection pipe onto the floor tool; ensure a tight fit.

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

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

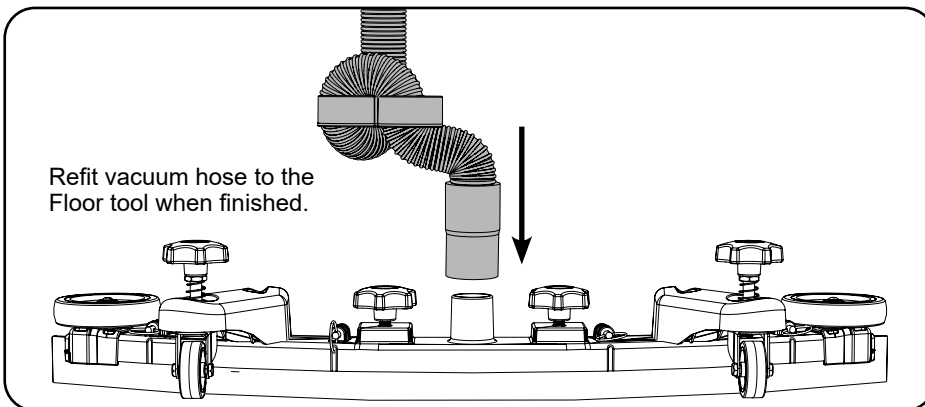
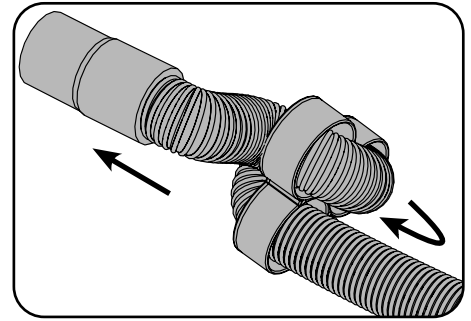
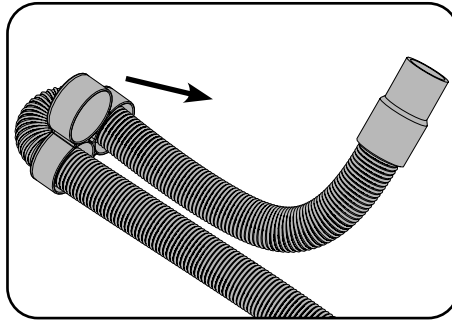
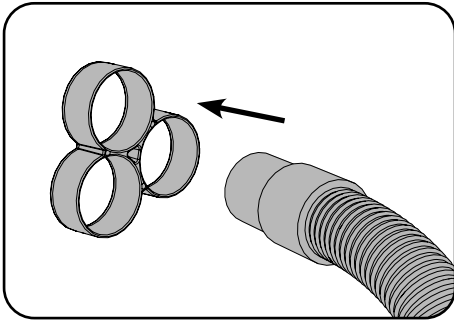
For fitting the floor tool blades (See Page 13).



Machine Set-up Guide

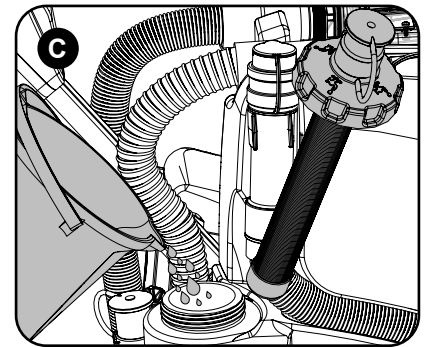
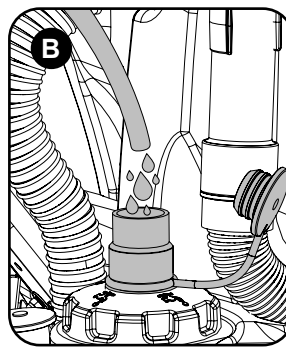
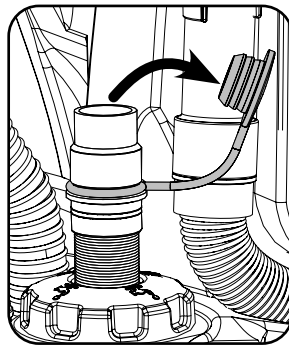
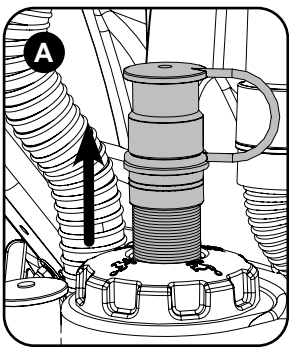
Fitting the Hose Guide

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



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

Filling the Clean Water Tank



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

The large cap can also be used for filling from a bucket or suitable container. (Fig.C).

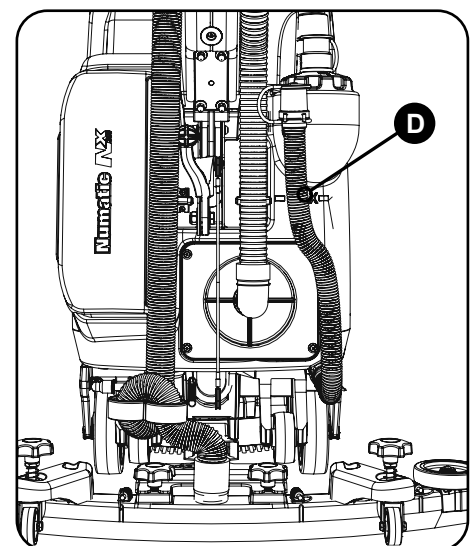
Fill the clean-water tank to MAX line indication on tank, including cleaning chemicals if required. Follow chemical manufacturing guide lines.

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

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

Control of Substances Hazardous to Health (COSHH)

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



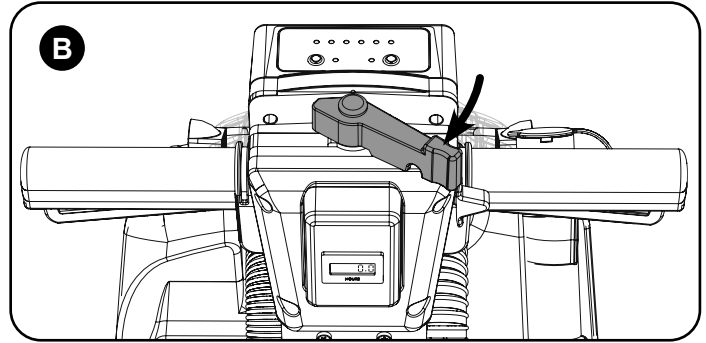
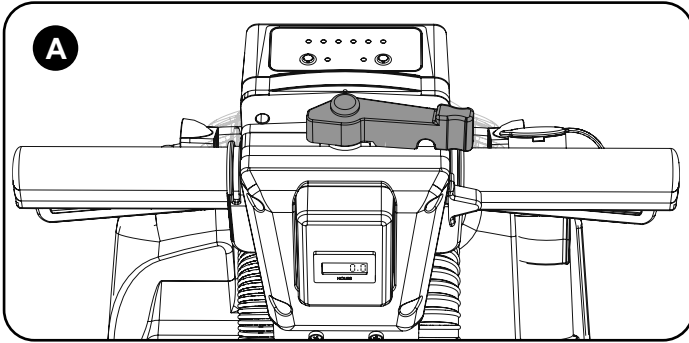
WHEN HANDLING AND MIXING CHEMICALS
Always ensure that chemical manufacturer's safety guidelines are followed.



Machine Set-up Guide

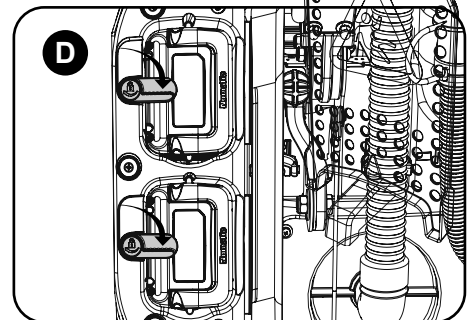
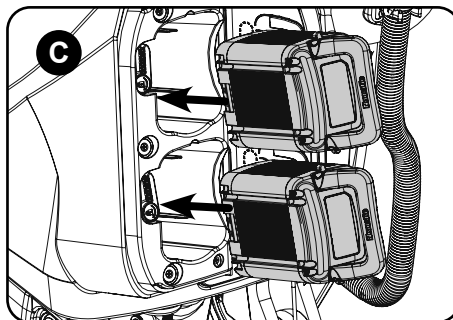
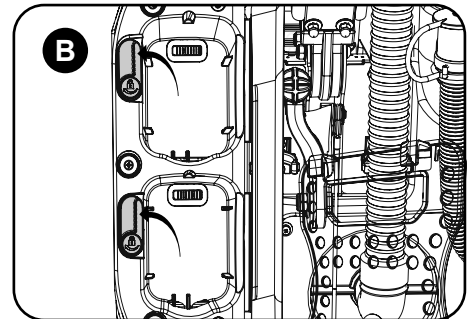
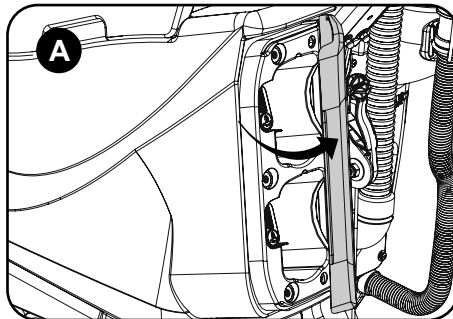
Handle Height Adjustment

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



Fitting and Locking the Batteries

Open the battery door (A).
Make sure Battery locks are open (B) and insert both fully charged batteries (C).
Secure the batteries into the machine using the battery locks (D) before closing the battery door

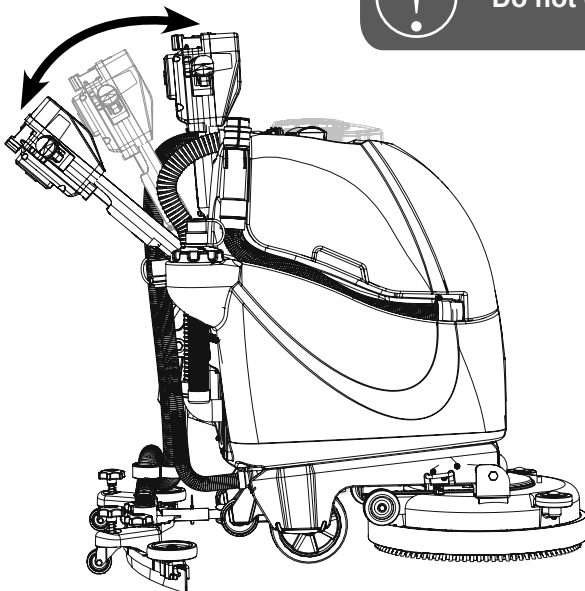


Note: it is important to make sure battery locks are fully engaged before operating or moving your TTB3045NX/TTB3045-R



IMPORTANT

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



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

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



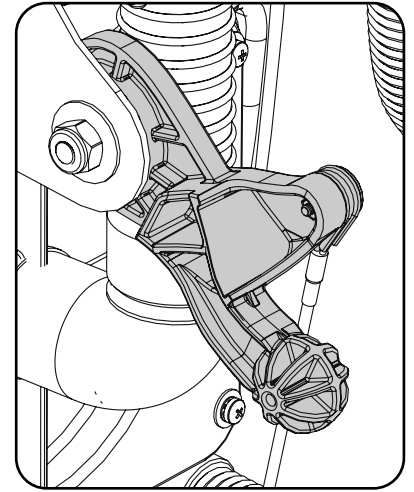
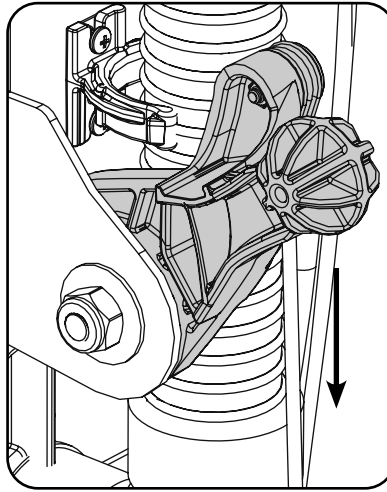
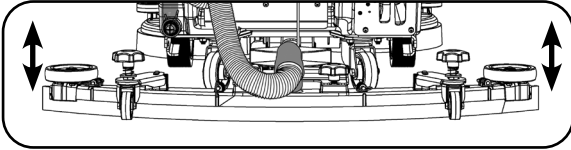
Machine Operation

Raising/Lowering the Floor Tool

After preparing the floor (see page 7), we are now ready to set the controls to suit the cleaning conditions.

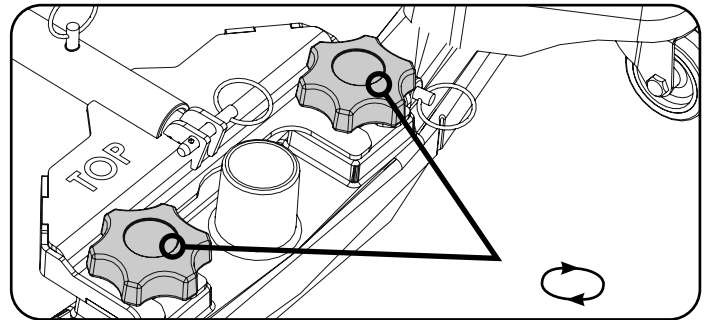
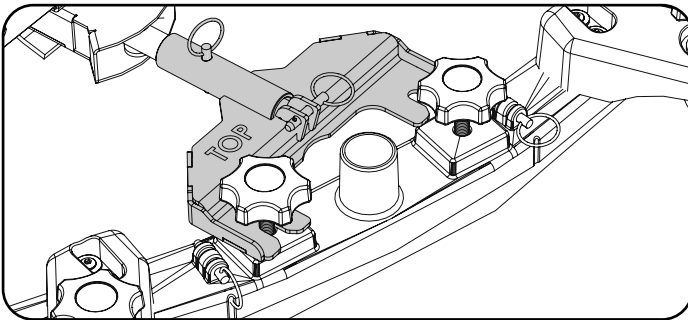
Before any settings can be applied, ensure the brush deck is lowered. Move the floor tool lever to its lower position.

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



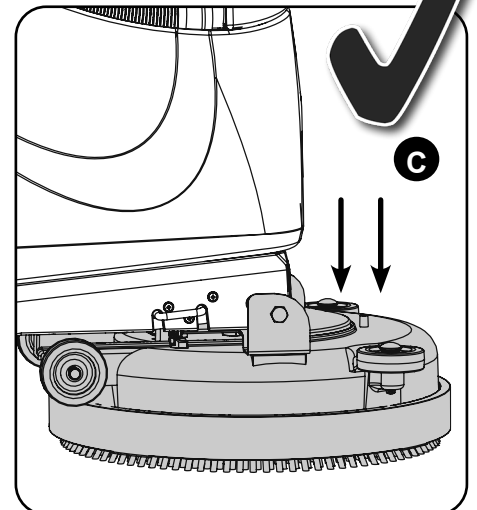
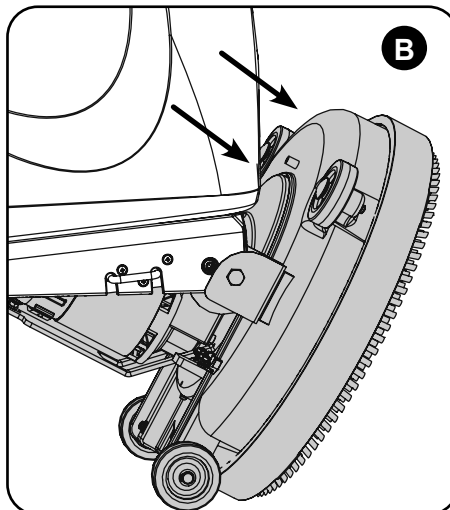
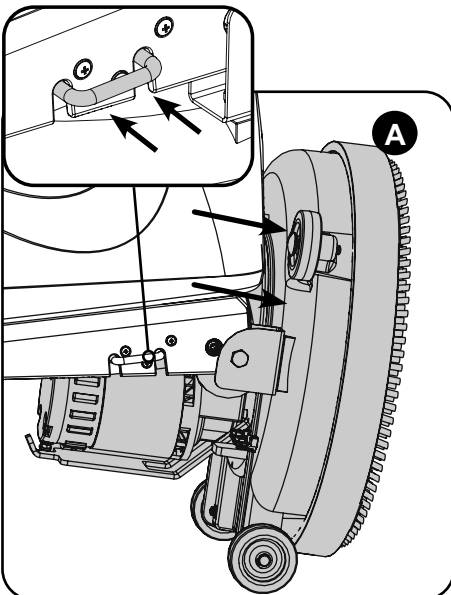
The floor tool design incorporates a break-away feature. Allowing it to safely disengage from its mounting should it become caught on an obstruction, during forward machine movement. To re-attach the blade to its holder. First loosen the retaining knobs on the floor tool body and slide onto the holding bracket. Tighten retaining knobs to finger tight.

Break-away Floor Tool



Raising/Lowering the Brush Deck

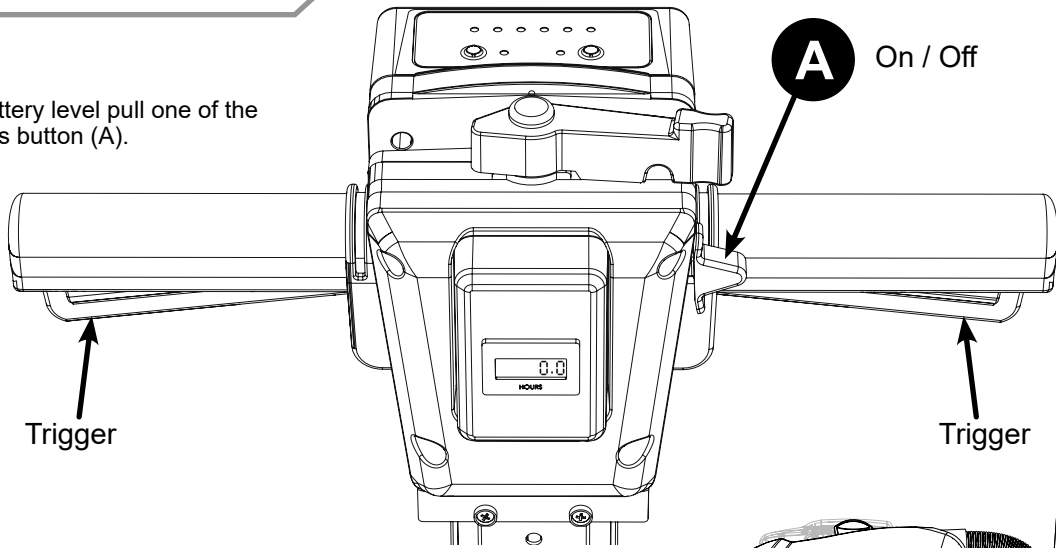
To tip the deck into the down position (Operating mode). Press in the brush deck locking pin (Fig.A) and rotate the brush deck (Fig.B & C). To change to brush deck up position, (Transit mode) simply lift the deck and the spring loaded locking pin will activate to hold the deck up.



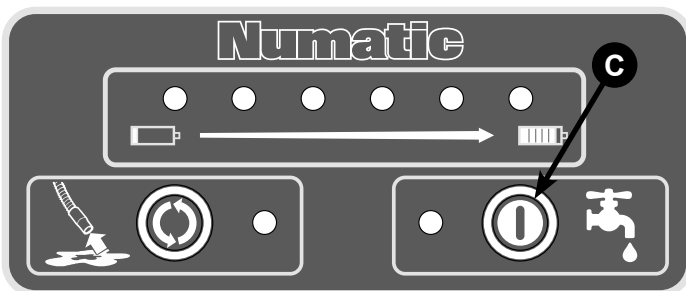
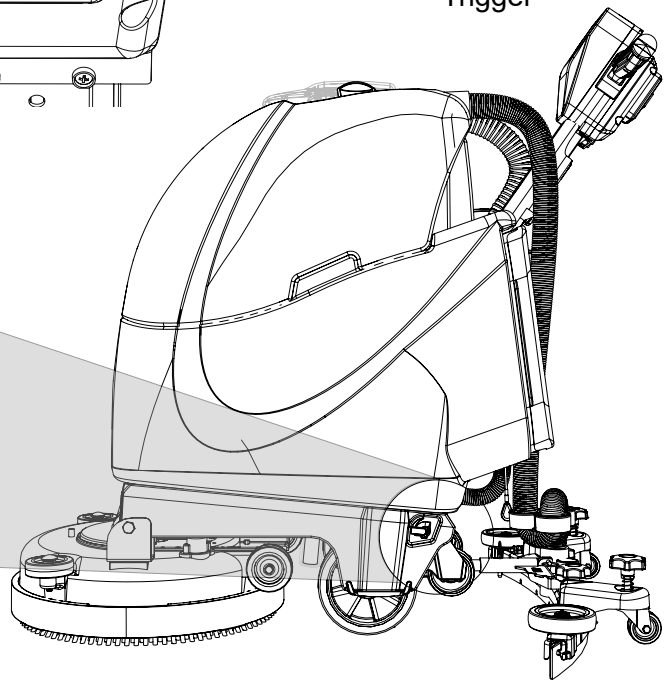
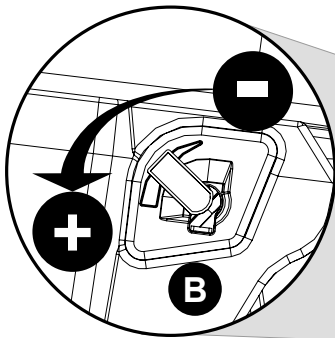
Machine Operation

Setting the Cleaning Controls

To check the battery level pull one of the Triggers or press button (A).

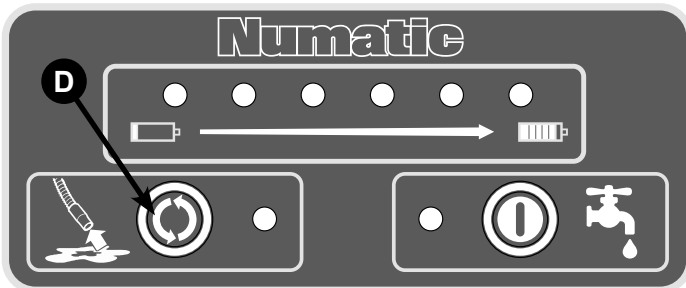


Adjust water flow using the fluid control tap (B).



To start the brush with the configured water and vacuum settings pull either trigger and press the Start switch (A) once.

This will also cause the hours meter to start counting up, recording machine usage, indicated by the flashing dot on the display. The hours meter display will always show the total hours even if the batteries are removed from the product.



The running state of the vacuum (D) and water (C) can be adjusted whilst the brushes are running.

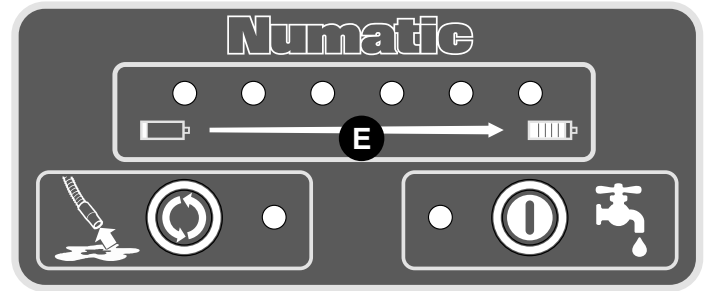
To cancel vac overrun press any switch (vac/water/handle/start)

HOURS METER ONLY RECORDS WHEN BRUSHES ARE SPINNING

Machine Operation

System Error Indicators

In the event of a fault the battery lights (E) will flash and the unit will stop operating.
The lights will flash a number of times then pause.
The number of flashes can be used to identify the fault.



The errors are split into two groups, low and high priority. Low priority errors are to be expected in normal operation and are represented by the left-hand battery light flashing.

High priority errors indicate something more serious has happened and are represented by all six battery lights flashing.

In normal operation the battery display will show the state of charge of the battery with the least charge, there is no indication which battery this is.

The error display can indicate battery related errors, there is no indication which battery has the fault.

| Number of Flashes | Priority | Description | Solution |
|-------------------|----------|---|------------------------------|
| 1 | Low | Low Battery | Replace, Charge Batteries |
| 2 | Low | Start sequence error, both trigger and handle must be active within 2 seconds of each other. If one is held for longer while the machine is idle the unit will enter this error state | *Reset Machine |
| 4 | High | Battery over temp | *Reset Machine |
| 5 | High | Battery communications fail | *Reset Machine |
| 6 | High | Battery over current | *Reset Machine |
| 7 | High | Control board over temp | *Reset Machine |
| 8 | High | Vacuum over current | *Reset Machine |
| 9 | High | Brush over current | *Reset Machine |
| 10 | High | Control board failure | Renew (contact service dept) |

*Releasing the handle triggers, or remove the batteries will allow the machine to reset.



IMPORTANT

*If the brush motor keeps overloading consider using a different type of brush.
Heavy brush load decreases the available battery run time.*

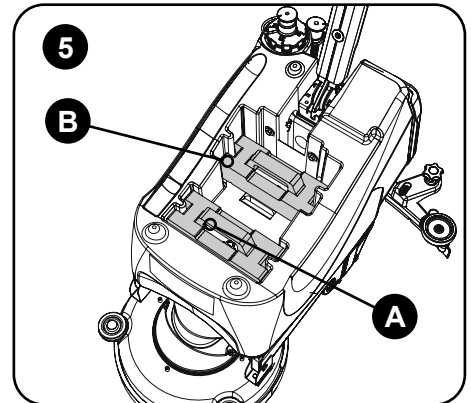
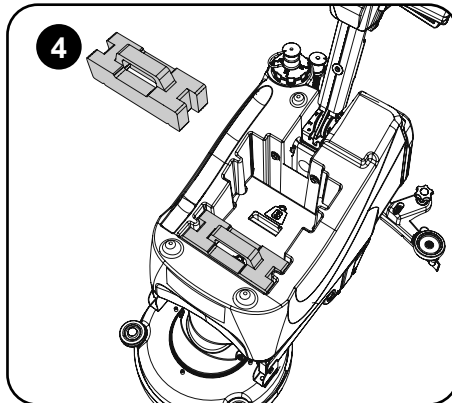
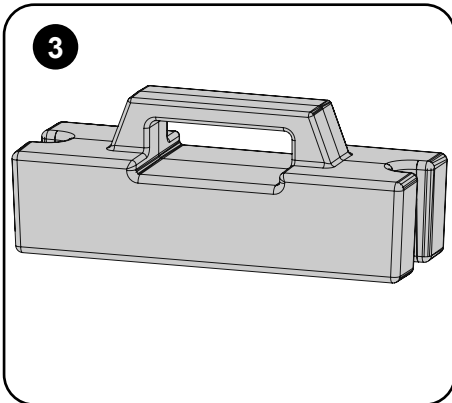
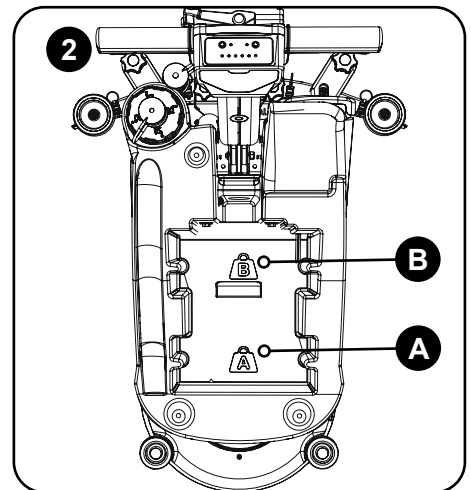
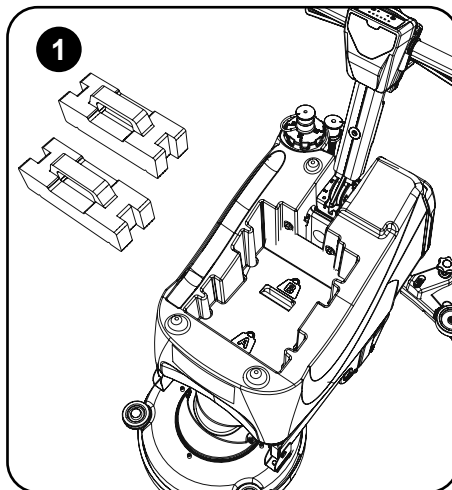


Brush Pressure / Load Adjustment

Using the Deck Pressure Weights

To obtain the best out of your TTB3045NX/TTB3045NX-R Numatic have supplied a 'Deck Pressure Weight' allowing the operator to add or remove pressure on the brush or pad for optimum performance on all floor types.

Remove the Top (Waste Water) tank (1). Set in the lower tank are location pillars (2) to locate the Deck Pressure Weights (5).



TTB3045NX/TTB3045NX-R comes with one 11kg weight (3). Place the Deck Pressure Weight into the machine before using (4). For lightly soiled floors one 11kg weight would suffice, for heavily soiled areas the TTB3045NX/TTB3045-R has been designed to use extra weight if needed (available as an optional extra).

| | | Brush (gCM ²) | Pad (gCM ²) |
|---|---|---------------------------|-------------------------|
| Pressure 1 (Light) | 1 x 11kg in weight location B | 24.52 | 25.28 |
| Pressure 2 (Medium) | 1 x 11kg in weight location A | 29.14 | 30.05 |
| * Additional 11kg weight available as an optional extra. | | | |
| Pressure 3 (Heavy) | 2 x 11kg weights one location A and one in location B | 31.63 | 32.61 |
| Pressure 4 (Extra Heavy) | 2 x 11kg weights in position A (Stacked) | 35.54 | 36.64 |

NOTE* Additional weight will decrease run time. The TTB3045NX/TTB3045NX-R has been designed to have no more than a **Maximum** of two weights.

Machine In Use

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

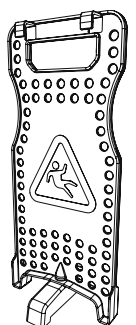
To operate, set water flow rate tap, lower brush deck, lower the floor tool, press the vacuum / water switches, pull either trigger and press the on/off switch once.

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

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

If streaking occurs wipe floor tool blades clean.

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

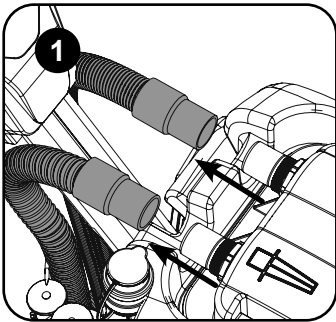


Regular Maintenance

Scan for
Daily Maintenance
Poster



ALWAYS ENSURE THAT THE MACHINE IS SWITCHED OFF PRIOR TO ANY MAINTENANCE REMOVE BOTH BATTERIES PRIOR TO ANY MAINTENANCE OPERATION.

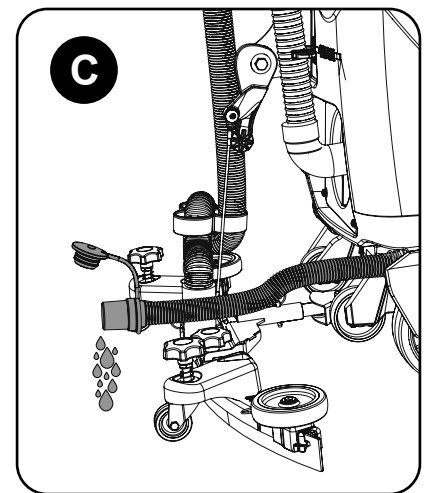
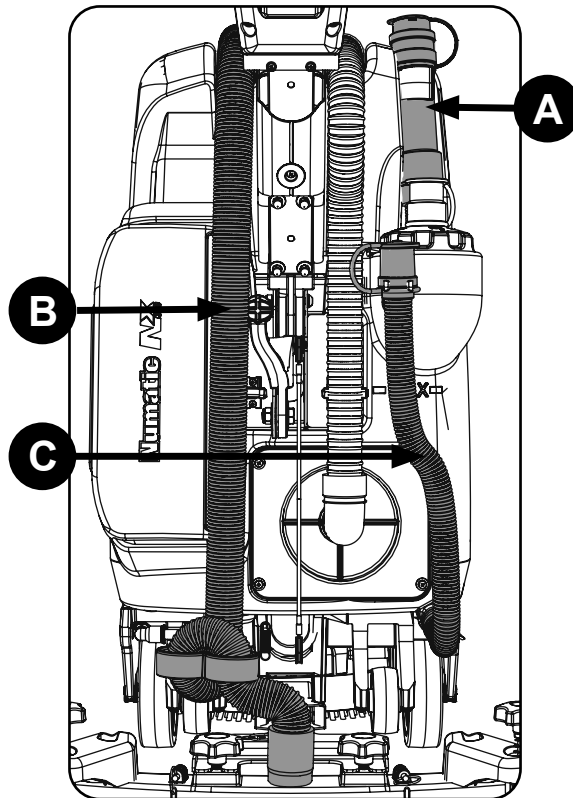
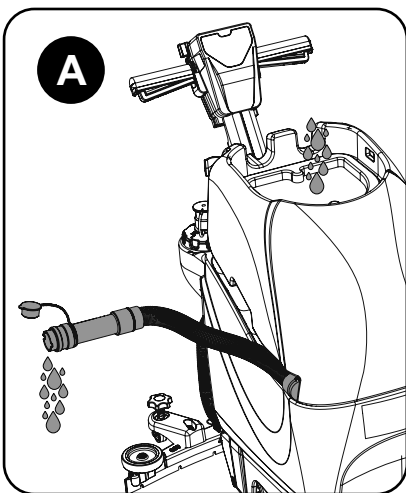
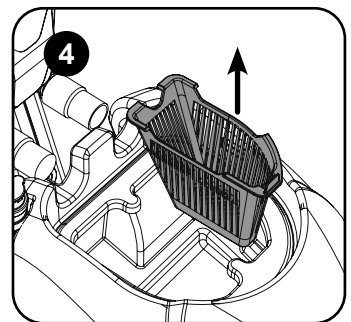
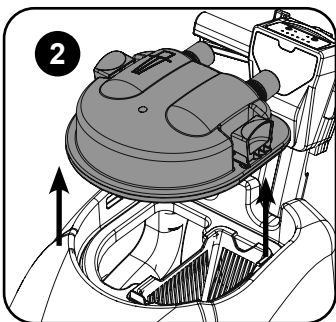
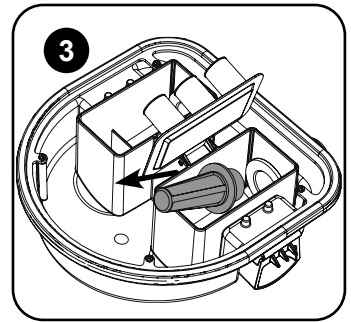


Remove the two hoses to disconnect the separator from the machine (Fig 1).
Whilst pulling the top tank separator toggles up and inwards, remove the separator. (Fig 2)
The separator has a sealing rubber which should be examined at every clean-down.

Rinse using clean water, avoiding the vac filter.
Remove the filter fitted into the separator and flush with clean-water (Fig.3)

IMPORTANT

Remove vac filter and clean if required (keep dry).
Never use the machine without the recommended filter as it may cause damage to the machine.
Remove debris basket filter and rinse using clean water, and refit. (Fig 4)



A After use, empty waste water tank using emptying hose and flush out with clean water.

B Next remove floor tool vacuum hose and flush out with clean water.

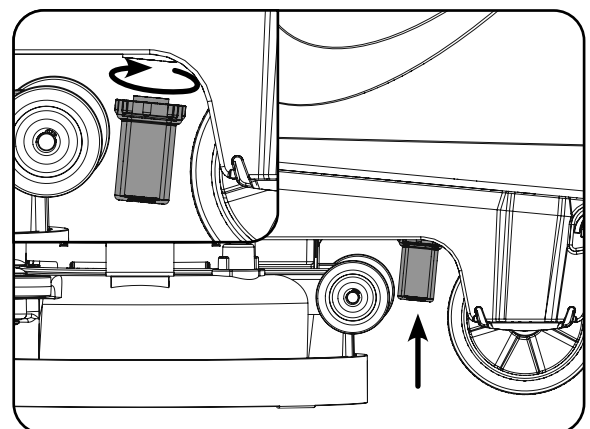
C Next empty clean water tank, using emptying hose and again flush out with clean water.

IMPORTANT

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

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

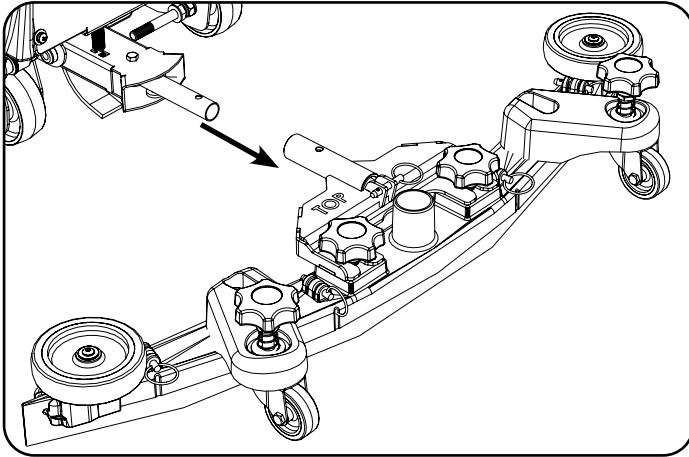
Note: To make access easier, raise the brush deck.



Changing the Floor Tool Blades



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



To clean the floor tool, remove securing-pin and pull-free from the holder.

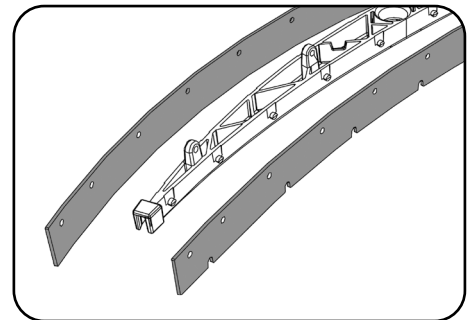
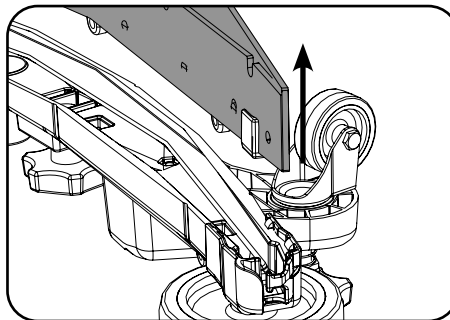
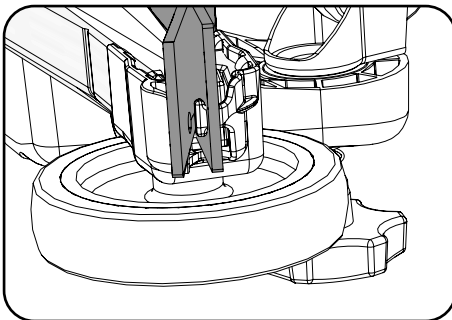
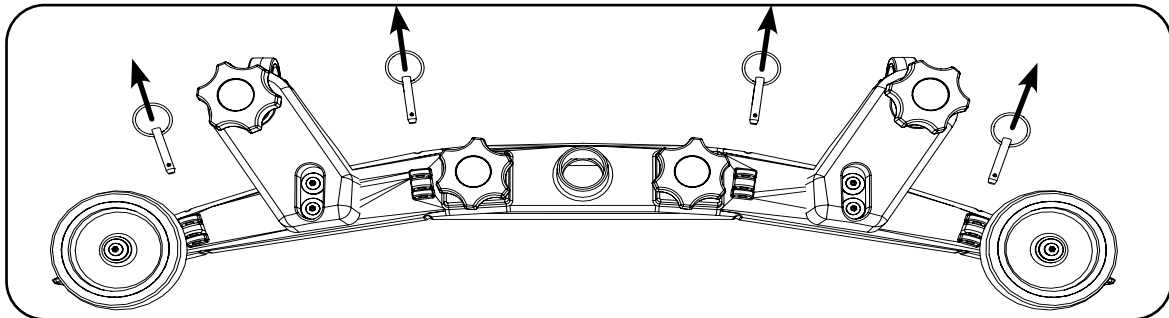
Rinse the floor tool assembly with clean water and refit.

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

The blade removal is easy. Simply start by removing the four retaining pins, turn the floor tool over and separate the blade carrier from the body.

Peel away the blades from their locating lugs and examine or renew as required.

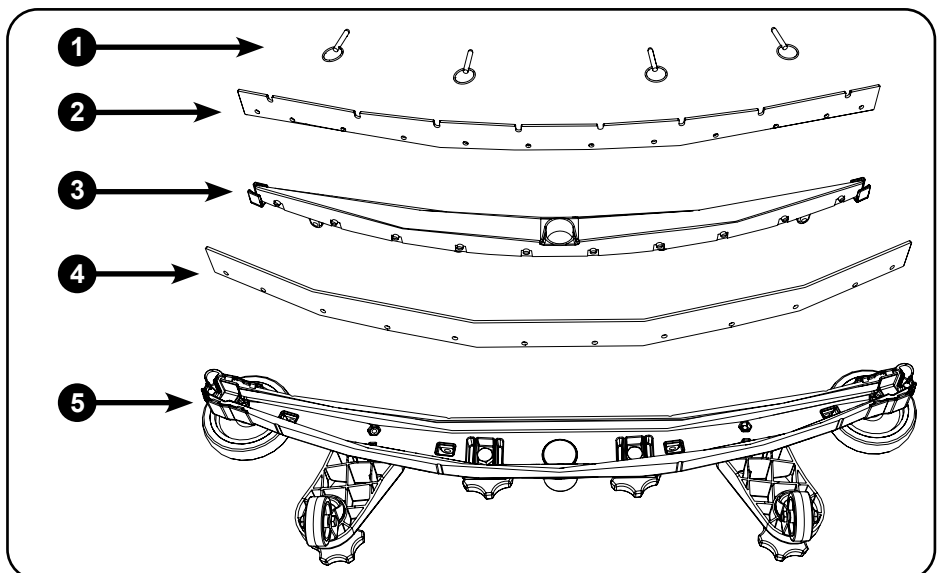
Replacement is a reversal of the removal process.



Floor Tool Overview

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

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



Specifications

| TTB3045NX / TTB3045NX-R | | | |
|--------------------------------|--|-------------------------------------|---|
| CLEANING AREA | 1,215m ² /HOUR @ 2.7 kph | GROSS WEIGHT (i.e. with liquid) | 109 kg |
| BRUSH MOTOR POWER | 300W | NETT WEIGHT (i.e. NO liquid) | 79.3 kg |
| BRUSH SPEED | 100 rpm | POWER SOURCE | 2 x Lithium-ion 36V 8400mAh 300Wh |
| BRUSH DIA | 450mm | RUN TIME (BATTERY LIFE) | 65 MINS |
| PAD DIA | 400mm | RECHARGING TIME | 1 HR to 80% - 2HR to 100% |
| VAC MOTOR MAX. POWER | 210W | HEIGHT | 1100mm |
| VAC MOTOR - SUCTION @ SQUEEGEE | 155 mbar | LENGTH | 915mm (1065mm) |
| VAC MOTOR - AIRFLOW @ SQUEEGEE | 18.5 l/sec | WIDTH | 470mm (805mm) |
| WATER CAPACITY | 30L | SQUEEGEE LENGTH | 805mm |
| WATER FLOW - AVERAGE | 0-2 l/min | SOUND PRESSURE LEVEL | LpA ≤ 70 dB(A) Uncertainty (KpA) ± 3dB |
| WATER INGRESS PROTECTION | IPX4 | | |
| MAX GRADIENT | 2% | VIBRATION LEVEL | HAV ≤ 2.5 m/s ² |

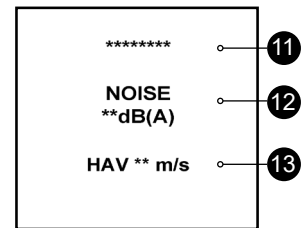
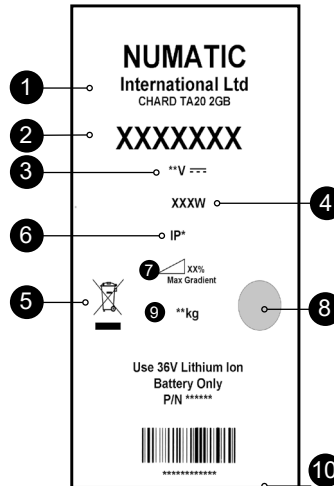
Trouble Shooting

| PROBLEM | CAUSE | SOLUTION |
|--------------------------------------|---|---|
| Machine will not operate | Low battery charge Battery not fitted | Charge batteries (See charger documentation) Fit battery (page 7) |
| Vacuum will not operate | Waste water tank full | 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 | Empty waste water tank (page 12) Remove and clean (page 12) Push tight connections (page 6) Remove and clean (page 12) 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 (See charger documentation) |
| No brush / scrub function | No brushes fitted | Check and fit (page 5) |
| Little or no water flow | Clean water tank empty Clean water tank filter blocked / clogged Water flow not on Brush deck raised | Fill clean water tank (page 6) Remove and clean (page 12) Switch on water flow (Page 5) Lower brush deck (page 8) |
| Machine just 'stops' while operating | Too much load on the brush system | Decrease the brush load to best suit the floor type. (Page 11) |

About the Machine

Rating Label

| | |
|----|-----------------------------|
| 1 | Company Name & Address |
| 2 | Model |
| 3 | Voltage / Direct Current |
| 4 | Rated Input Power |
| 5 | WEEE Logo |
| 6 | Ingress Protection |
| 7 | Max Gradient |
| 8 | Approval Mark |
| 9 | Weight (ready to use) |
| 10 | Machine yr/wk Serial Number |
| 11 | Model |
| 12 | Noise Rating |
| 13 | Hand Arm Vibration |



Daily

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

Weekly – as daily and –

Check brush or pad and skirt and rinse.
 Check floor tool blades for wear and wipe clean.
 Clean separator assembly including filter and check condition of seal.
 Flush out system with clean water and clean filters.

Batteries

Always re-charge the batteries after use.

TwinTec Maintenance

WEEE (Waste, Electrical and Electronic Equipment)

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

Only for UK / EU countries.

Do not dispose of scrubber-dryer into household waste.
 According to the European Directive 2012/19/EU on waste electrical electronic equipment and its incorporation into national law.
 Scrubber-dryers that are no longer suitable for use must be separated, collected and sent for recovery in an environmentally-friendly manner.



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

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

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

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

Information for Scrubber Dryer

READ MANUAL BEFORE USE  

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



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. Operators shall be adequately instructed on the use of these machines.

WARNING

Failure to carry out maintenance as necessary, including the replacement of parts to the correct standard could render this equipment unsafe and the manufacturer can accept no responsibility or liability in this respect.

When ordering spare parts always quote the Model Number / Serial Number specified on the Rating Plate.
Warning do not use on slopes exceeding 2%.

This machine is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge.

Children should be supervised to ensure that they do not play with the appliance.

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.

When cleaning, servicing or maintaining the machine, replacing parts or converting to another function the battery should be removed.

Battery operated machines shall be disconnected by removing the battery.

Machines left unattended shall be secured against unintentional movement.

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



CAUTION

This machine is not suitable for picking-up hazardous dust.
This machine is not to be stored outdoors or in wet conditions.
This machine is for indoor use only.

NOTES: This machine is intended for commercial use, for example in hotels, schools, hospitals, factories, shops, offices and rental businesses.

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



- 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.



- Use steam cleaners or pressure washers to clean the machine or use in the rain.
- Allow any inexperienced repairs. Call the experts.
- Leave the brush pad on the machine when not in use.
- Allow the machine to be used by inexperienced or unauthorised operators or without appropriate training.
- Use the machine without the solution tanks properly positioned on the machine, as shown in the instructions.
- Expect the machine to provide trouble-free, reliable operation unless maintained correctly.
- Lift or pull the machine by any of the operating triggers, use the main handle.
- Allow water solutions to ingress to the battery.
- Remove the handle from the machine except for service and repair.
- Attempt machine maintenance or lifting unless the battery has been removed.

Numatic Lithium-ion Rechargeable Battery

36V | 8400mAh | 300Wh | 2.06KG | 10INR19/65-3



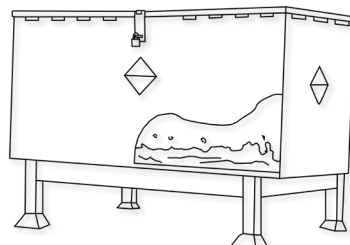
It is important that you observe the following information and warnings!

| Emergency Contact Information | | |
|---|---|---|
| Address: | CBAK BATTERY HEADQUARTERS Shenzhen BAK ENERGY Co. LTD, 2603A BAK Tech Bldg, 9th Keyan Rd, Hi-tech Park, Nanshan Dist, Shenzhen City, China | NUMATIC INTERNATIONAL LTD Millfield Road, Chard, Somerset, TA20 2GB, UK |
| Tel: | 0086-755-83283710 | 0044-146-068600 |
| Fax | 0086-755-8328649 | 0044-146-068458 |
| www.numatic.com www.numatic.de www.numatic.ch www.numatic.fr www.numatic.nl www.numatic.co.za www.numatic.pt www.numatic.es www.numatic.it www.numatic.dk | | |

1. DEFECTIVE BATTERIES

1. If a customer wishes to return a battery to a supplier, then collection of the battery must be arranged by the supplier; however, **Faulty batteries must not be returned through the postal system or by courier.**
2. If on return to a supplier, OR at a customer base, a suspected defective battery shows any signs of impact damage, distortion, blistering, loose parts, liquid ingress or leakage then on no account should it be offered for condition checking. It must be considered defective and the procedures described from item 9 below should be followed.
3. If, on return to a supplier, OR at a customer base, a suspected defective battery, that shows No signs of impact damage, distortion, blistering, loose parts, liquid ingress or leakage, may be offered for condition checking with an appropriate battery condition checking device operated by a competent person.
4. If battery is subjected to any liquid ingress users should put the pack upright immediately, with the terminal face downwards.
5. If checking shows the battery to be defective then the procedures described from item 9 below should be followed.
6. If on checking the battery is found to be operational then a single recharge cycle under observation can be attempted with the appropriate Numatic charger.
7. If the battery recharges correctly on this single recharge cycle then it can be deemed a good battery.
8. If the battery fails to recharge correctly on this single recharge cycle then it must be deemed a defective battery and the procedures described from item 9 below should be followed. **On no account must any further attempt to recharge be made. A defective battery should not be stored inside buildings on any account.**
9. The defective battery should be discharged by placing it in a container of salt water located in a well- ventilated area. This container should contain 25 litres minimum of saline water at a concentration of 15g common salt / litre of water. The container should have a closed locked lid but should not be sealed. The battery should be left fully immersed in the water to a depth of at least 100mm for at least 2 weeks. The water should be disposed of as hazardous waste when the discharge is complete.
10. The defective discharged battery can then be stored in a locked battery waste container which should be plastic or plastic lined and placed away from buildings and clearly signed as a defective battery container with appropriate warnings.
11. The batteries should then be sent for waste disposal according with your country's waste regulations.
12. Exhausted batteries are to be removed from the appliance and safely disposed of.

An example of a waste battery storage bin well away from buildings.



2. HANDLING AND STORAGE

DANGER!

Improper handling can lead to an explosion or ignite a fire!
Store batteries out of reach of children.

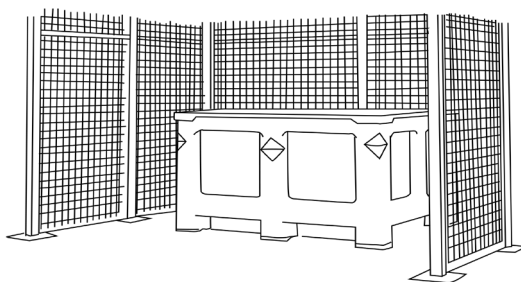
- Insert the battery in the appliance only when it is in use.
- Always remove the battery from the appliance for transport and when it is not in use.
- Storage temperature range: -10°C~55°C.
- Temperatures must not exceed 55°C.
- Relative humidity range: 45 to 80%.
- Optimum preservation of functionality: 15°C~25°C.

WARNING:

- Do not open the battery, disassemble it or allow it to fall from a substantial height.
- Protect the battery against short-circuiting – danger of explosion!
- Protect the battery against rain, do not immerse in liquids especially flammable liquids – danger of short-circuiting potential risk of fire or explosion. Follow defective battery disposal safety procedure. Insure the product is moved away from any combustible source.
- Protect the battery against direct sunlight, heat and fire.
- Do not incinerate the battery – danger of explosion!
- Do not use defective or deformed batteries.
- Use only original NUMATIC chargers to charge the battery.

STORAGE:

- If the appliance is to be stored unused for a long period, the batteries should be removed.
- Good batteries should be stored in a protected area away from sources of direct heat and sunlight and should be kept dry.
- The temperature should not exceed 55°C but preferably not be above 25°C to maintain good battery performance.
- Storage area should be of low humidity, non dusty and a non corrosive atmosphere.



- An example of a well protected area with a cage to protect against accidental impact damage and with the batteries stored in a protective container to protect from heat, impact and accidental spillage of liquids.
- Care when handling / moving with forklift trucks or pallet trucks is needed at all times to avoid any physical damage to the batteries.
- If a good battery at any time is mishandled or subjected to any conditions that may damage it, as described in the battery instruction manual supplied, it must then be considered as defective and procedures followed from Item 1 of this document overleaf.

3. HAZARDS IDENTIFICATION

- Electrolyte may escape from damaged batteries. Avoid contact.
- Contact can cause skin irritation, burns and chemical burns.
- If liquid comes into contact with eyes, seek medical attention.
- Avoid inhaling any vapours formed or released – caustic.

4. FIRST AID MEASURES

In the event of contact with released electrolyte or electrolyte vapours:

- Eye contact – flush eyes for at least 15 minutes with plenty of clean water without rubbing and seek medical attention.
- Skin contact – wash affected areas of skin with plenty of water and soap; if irritation persists, seek medical attention.
- Inhalation – provide fresh air or administer oxygen immediately and seek medical attention.
- Ingestion – if electrolyte has been ingested, seek medical attention immediately.

Information for physicians:

- Contains caustic alkaline electrolytes in cells with lithium oxide, nickel oxide and cobalt/lithium manganese oxide cathodes – NO LITHIUM METAL OR LITHIUM ALLOYS.

5. FIRE FIGHTING MEASURES

- In case of fire – Keep clear of vapours and gases generated, take wind direction into consideration. If possible without danger, remove batteries from the vicinity of the fire. In principle, cooling or extinguishing with water is possible, but should only be done by trained personnel with sufficiently large quantities of water.
- If the hazard situation is unclear, extinguish only with ABC powder extinguishers (Class D extinguishers for fires involving metals are especially suitable).
- Fire fighters should only approach the fire wearing protective clothing and self-contained breathing apparatus.
- Once the fire has been extinguished, as a rule, the area should be monitored (fire watch) and cleaned up by trained and appropriately equipped personnel; fire residue should be contained and disposed of properly.

6. EXPOSURE CONTROLS, PERSONAL PROTECTION

Respiratory Protection:

- In case of battery venting, providing as much ventilation as possible. Avoid confined areas with venting batteries.
- Respiratory Protection is not necessary under conditions of normal use.

Ventilation:

- Not necessary under conditions of normal use.
- Protective Gloves:
- Not necessary under conditions of normal use.

Other Protective Clothing or Equipment:

- Not necessary under conditions of normal use.
- Personal Protection is recommended for venting batteries: Respiratory Protection, Protective Gloves, Protective Clothing and safety glass with side shields.

7. ACCIDENTAL RELEASE

Disposal – Wear protective gear, wipe up with absorbent textile and dispose of as hazardous waste at collection points for hazardous waste according to national regulations.

8. DO

- Use NUMATIC batteries only with NUMATIC appliances and charge them only using NUMATIC chargers.
- Charge battery before use.
- Store the battery out of the reach of children.
- Secure the appliance against unintentional start up – remove the battery from the appliance before transporting or storing the appliance.
- Protect from rain and liquid ingress
- Protect from direct sunlight, heat, and open flames.
- Be aware of the risk of terminals of the battery-operated appliance or battery being short circuited by metal objects.
- Follow the disposal advice of the manufacturer and any internal waste management guidance.
- Use and store the battery with-in temperature range (as shown in Temperature Range Table).

Warning: Use only with Numatic battery charger. The battery included in this product must only be charged by the Numatic Charger and docking system supplied with the product and in NO circumstances should an alternative non Numatic charger be used as there is risk severe damage and fire could result.

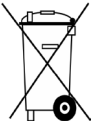
Note* "If batteries are subjected to temperatures beyond normal operating limits automatic shutdown will occur. Under these conditions allow the batteries to acclimatise at room temperature (18°C – 22°C) for several hours to allow the battery to wake up".

| | |
|-----------------|------------|
| CHARGING | 5°C~35°C |
| DISCHARGING | 5°C~35°C |
| STORAGE OPTIMUM | 15°C~25°C |
| STORAGE LIMIT | -10°C~55°C |

9. DO NOT

- Throw battery into fire – risk of explosion!
- Charge or use a defective, damaged or deformed battery including batteries subjected to liquid ingress.
- Open, damage or drop the battery.
- Expose the battery to microwaves or high pressure.
- Immerse in fluids, especially flammable liquids.
- Insert objects in the battery's cooling slots.
- Bridge (short circuit) the battery terminals with metallic objects since this may damage the battery.
- Use metal containers for transporting batteries.
- Expose the appliance or battery to excessive temperatures.
- Expose the batteries to high temperatures including direct sunlight.
- Crush, break open or physically abuse the batteries or the equipment that contains them.
- Use modified or damaged batteries.

10. DISTRIBUTOR TAKE-BACK / DISPOSAL



- On the basis of Battery Directive, the manufacturers take responsibility for financing collection, treatment and recycling of batteries used in devices. To this end, batteries must be handed over for disposal to the collection systems established for this under national law. Disposal of batteries together with household waste is prohibited; batteries must be collected separately according to type.
- Return the battery free of charge to your NUMATIC servicing dealer for disposal or hand it over to an appropriate public collection point.

11. CHARGING BATTERIES

- The charger is intended for use only on flat surfaces, place horizontally on floor or work surface. The charger is intended for use with the detachable power cord supplied, the power unit is capable of operating at different voltages without user adjustment. If the charger is damaged or does not charge anymore, please return to service centre.

Charging Procedure:

- Rechargeable batteries are to be removed from the appliance before being charged.
- Ensure the battery is fully inserted into the charger.
- Fit the mains power cord to charger and suitable power supply.

Please Note: If the battery is above its optimum charging temperature (due to ambient temperature or it if was recently discharged) the charger LED will illuminate on/off RED for a maximum of 40 minutes whilst the battery temperature falls to an acceptable level for charging to begin.

- The LED should show RED to indicate charging.
- Once fully charged the LED will show GREEN.
- If power is supplied to the charger with no battery fitted the LED will show GREEN to indicate STAND-BY status.

CAUTION!

- Protect the charger against moisture and store it in a dry place.
- Check the mains cord regularly for any sign of damage.
- Do not use damaged devices.
- If the mains cord of the charger is damaged, it must be replaced by an original NUMATIC INTERNATIONAL cord available from the manufacturer or service agent.

Battery Charger State of Charge Indicator (SoC)

| | |
|--|----------------------|
| No Battery Connected | Green Flashing Light |
| Charging | Red Light |
| 80% Charged | Green Light |
| Error Condition / Battery Over Temperature | Red Flashing Light |

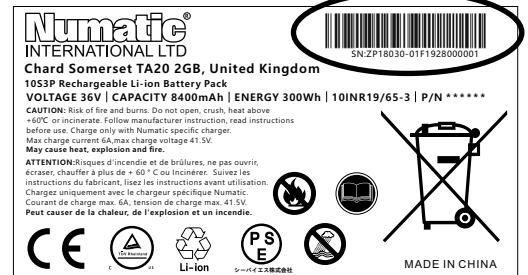
12. WARRANTY

Lithium-Ion Battery Warranty

Warranty: Commercial Use

- Batteries are warranted (3 Year) providing all battery care rules are followed
- To claim warranty the following details must be supplied
 - Serial number of the machine (See page 15)
 - Battery date code
 - Date purchased
 - Proof of Purchase
 - Maintenance history and charging regime

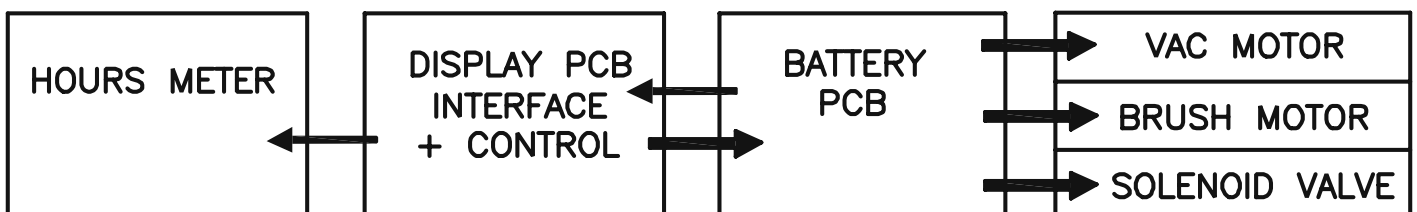
Failure to use the correct Numatic charger will void your warranty.



ZP19006-01FYYWW00001

Serial number
Week of production
Year of production

Schematic Diagram



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

Numatic International Limited. Chard, Somerset, TA20 2GB

Telephone: 01460 68600 Fax: 01460 68458

© Numatic International Limited

This Machine Has Been Packed
With The Following

Brush / Pad

Floor Tool

Battery & Charger Manual

Battery Charger & Lead

Battery

Signed

Distributed by:

Numatic

numatic.com

Numatic International Limited (Head Office)

Chard, Somerset TA20 2GB, UNITED KINGDOM
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This Product has been comprehensively inspected and checked during every stage of its manufacture.
Including an in-depth electrical safety and functionality test.

Specification subject to change without prior notice

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