



Operation and Maintenance Manual

ACE 26T

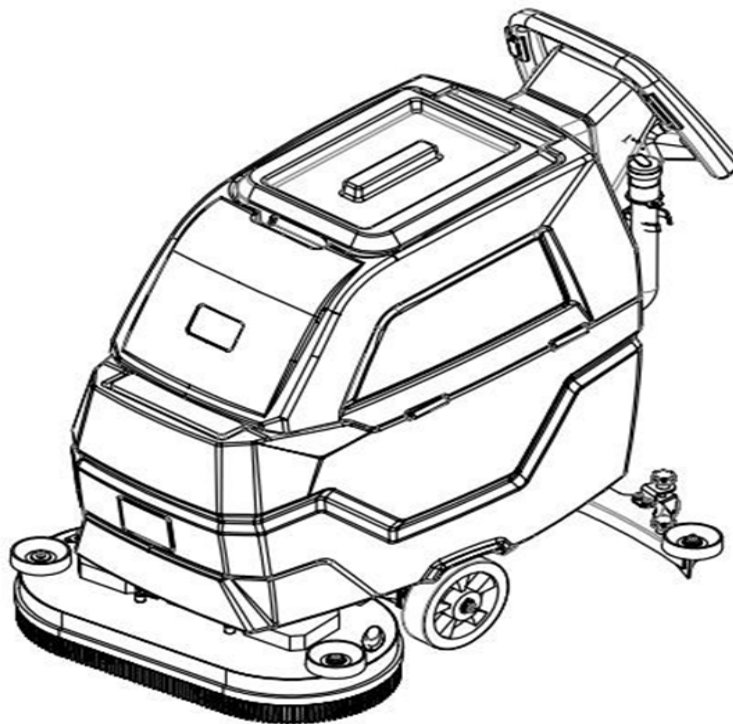


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CRATE CONTENTS

order	name	unit	quantity
1	ACE ^{26T} Machine	set	1
2	Charging cable	set	1
3	Battery cable	piece	1
4	Squeegee assembly	set	1
5	Suction hose	piece	1
6	Manual	piece	1
7	QC certificate	piece	1

**Additional parts**

Pad holder 21inch/13 inch
 Front squeegee blade
 Rear squeegee blade

INTRODUCING THE ACE^{26T}

A walk-behind floor scrubber and dryer. Combining the use of scrubbing brushes and water/ detergent solution, the ACE20T is capable of cleaning any type of hard flooring. As the machine cleans, dirt and water are suctioned off the floor surface. Maintaining your machine ensures optimal performance and longevity. Please read this manual thoroughly before operation. Please refer to the troubleshooting section should any problems arise. If the problem persists our company is always available for assistance and service.

TECHNICAL SPECIFICATIONS**ACE^{26T}**

Scrub Path	26 in
Squeegee Width	32.5 in
Max. Capacities	2800
Working Time	Up to 5 hours
Brush Pressure	99 lbs
Brush RPM	160 RPM
Brush Motor	550W
Suction Motor	500W
Drive Motor	300W
Solution Tank	16 gal
Recovery Tank	17 gal
Dimensions LWH	50.3" L x 23.6" W x 43" H
Batteries	24V 100AH
Total Battery Weight	77 lbs
Net machine weight	340 lbs

SYMBOL LEGEND



Attention



Manual



Watch Your Hand



Warning: hand injuries



No open flames



Caution Danger of exhalation of gas



Recycle



Information



Warning: corrosion



Caution: shock



Dangerous waste



Lifting means

GENERAL SAFETY GUIDELINES

The regulations below must be carefully followed in order to avoid harm to the operator and damage to the machine.

- ◆ Read machine labels carefully, replace if damaged
- ◆ Use machine only by authorized, trained personnel.
- ◆ Pay attention to others while using.
- ◆ Avoid mixing different detergents.
- ◆ Don't store the machine with residual liquid.
- ◆ The storage temperature must be between -13°f and 131°f.
- ◆ Conditions of use: room temperature between 32 °f and 104 °f with relative humidity between 30 and 95%.
- ◆ Do not use the machine in an explosive atmosphere.
- ◆ Do not use the machine as a means of transport.
- ◆ Avoid acid solutions.
- ◆ Avoid using brushes when machine is stationary.
- ◆ Do not vacuum flammable liquids
- ◆ Do not use the device to collect dangerous powders.
- ◆ In the event of a fire, use a powder extinguisher. Do not use water.
- ◆ Avoid knocking against objects.
- ◆ Select operating speed as per traction.
- ◆ Avoid using on steep surfaces.
- ◆ Store properly when not in use.
- ◆ Use machine only in authorized areas.
- ◆ Perform routine maintenance.
- ◆ Use original spare parts for replacements.
- ◆ Use specified brushes.
- ◆ Use emergency brake in risky situations.
- ◆ Switch off before maintenance.
- ◆ Ensure full electrical connection after maintenance.
- ◆ Do not remove protection devices.
- ◆ Avoid corrosive substances and high-pressure water.
- ◆ Service after 200 hours of use.
- ◆ Prevent scale formation in solution tank.
- ◆ Check hatches and covers before use.
- ◆ Empty recovery tank before moving.
- ◆ Observe disposal laws for consumables.
- ◆ Dispose materials properly.

**I. MACHINE PREPARATION
HANDLING THE PACKED MACHINE**

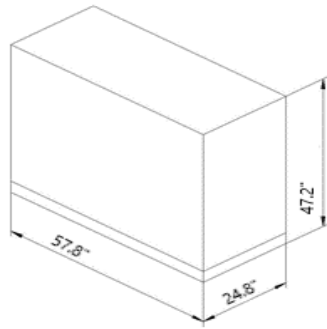
The machine is fixed to a pallet designed for forklift handling.

Overall dimensions of the package

L: 57.8 in

W: 24.8 in

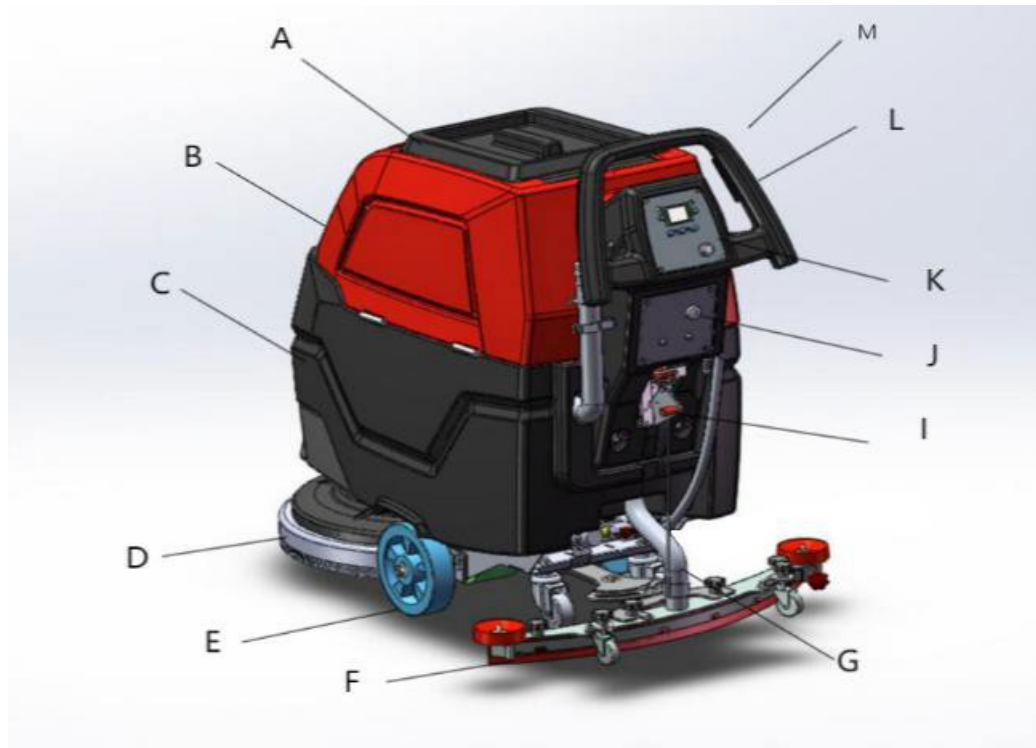
H: 47.2 in



HOW TO UNPACK THE MACHINE

1. Remove the outer packaging
2. Machine fixed to pallet with wedges and belts.
Remove belts.
3. Get machine down from pallet. Keep pallet for transport.

PARTS OF THE MACHINE



- | | | | |
|-----------------|------------------|------------------|--------------------------|
| A: Tank cover | B: Recovery tank | C: Solution tank | D: Brush |
| E: Drive wheel | F: Squeegee | G: Suction hose | I: Squeegee fixed handle |
| J: Key switch | K: Control panel | L: Handle | |
| M: Micro switch | | | |

Control panel button description



1.LCD area	2.Forward and backward	3.Water regulation
4.Speed control knob	5.Energy-saving mode	Suction Switch
7.Brush switch		

INSERTING THE BATTERIES

Place batteries in the compartment with poles "+" and "-" opposite each other.

CONNECTING THE BATTERIES

Connect charger to battery connector cable.
Seek professional help for connections to prevent harm and damage



BATTERY TYPE

3 types of battery can be used in this machine:

- Lead-acid battery composed of liquid plumbic acid, called WET Battery.
- Liquid electrolyte lead traction batteries, called AGM Battery.
- Sealed traction batteries with gas recombination or gel technology, called GEL Battery.

OTHER TYPES MUST NOT BE USED

Max size of the battery: Length=31 in Width=7 in Height=8.5 in Max weight of the battery: 79 lbs.

BATTERY MAINTENANCE

Follow battery manufacturer's maintenance instructions. Choose suitable charger. Dispose of worn-out batteries properly.

BATTERY DISPOSAL

Disconnect and remove worn-out batteries by trained personnel. Dispose according to laws and regulations.

RECHARGING THE BATTERIES

Recharge batteries before complete discharge to prevent damage. Follow charging indicator. Keep recovery tank raised during recharging.

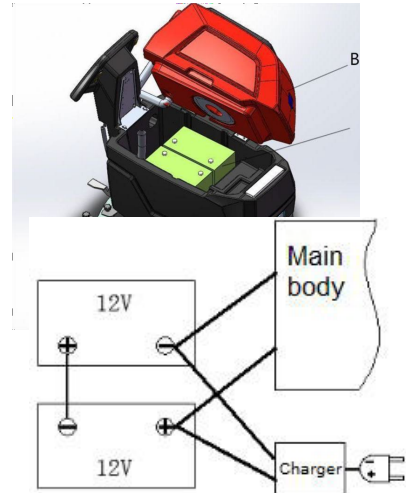
NOTE: never leave the batteries completely discharged, even if the machine is not being used.



Caution: shock



Caution: Danger of exhalation of gas and corrosion

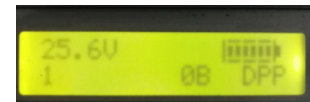




Danger of fire: do not go near with free flames

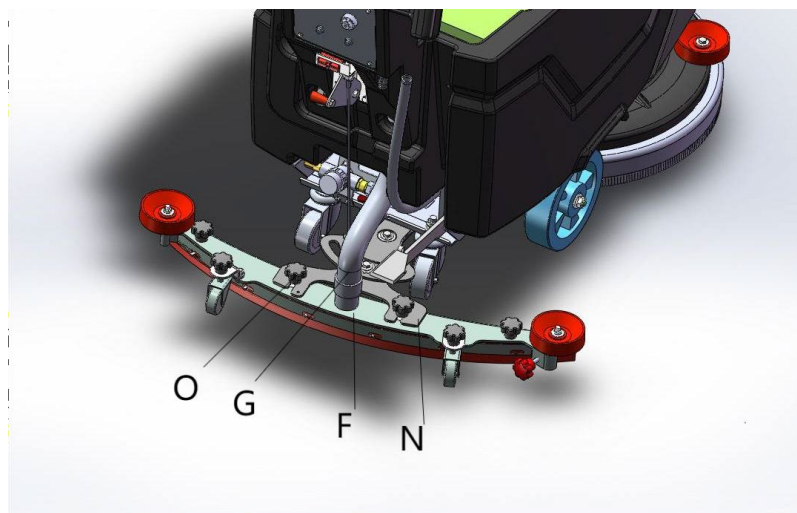
READING THE VOLTMETER

The voltmeter shows battery charging status. Green (full), Yellow (30% remaining), Red (low power). AGM battery users should use recommended charger.



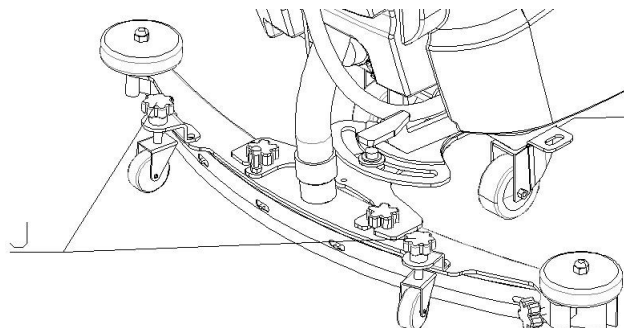
ASSEMBLING THE SQUEEGEE

Attach the squeegee to the support frame assembly (N). Connect the suction hose (G) to the squeegee.



ADJUSTING THE HEIGHT OF SQUEEGEE

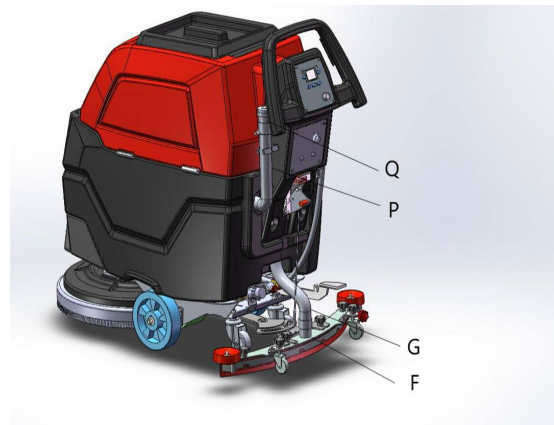
Adjust height to rubber. Rotate adjuster (J) clockwise to raise, counter clockwise to lower. Keep squeegee parallel with ground.



Rotate the adjuster of both sides simultaneously to keep the squeegee parallel with the ground.

RECOVERY TANK

Turn over the Recovery tank and check the joint of the suction hose and recovery tank to see if all components are connected correctly and sealed well. Further check whether the suction pipe (G) and the suction port (F), and the drain hose (P) and the plug (Q) are connected correctly and sealed well.



SOLUTION TANK

Remove the front inlet cap, fill it with clean water.



CLEAN WATER

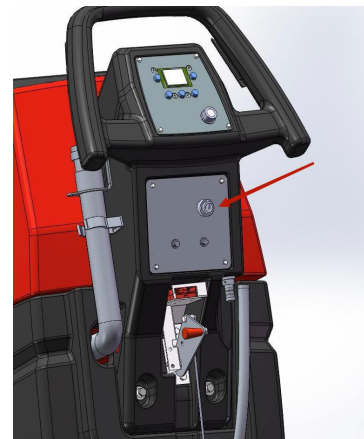
Fill the solution tank with clean water at a temperature not exceeding 122°F. Add the liquid detergent to the tank in the concentration and manner indicated on the detergent manufacturer's label. The formation of excess foam could damage the suction motor, so use only the minimum amount of detergent necessary. Cover the tank with cap(R).

ASSEMBLING THE BRUSH

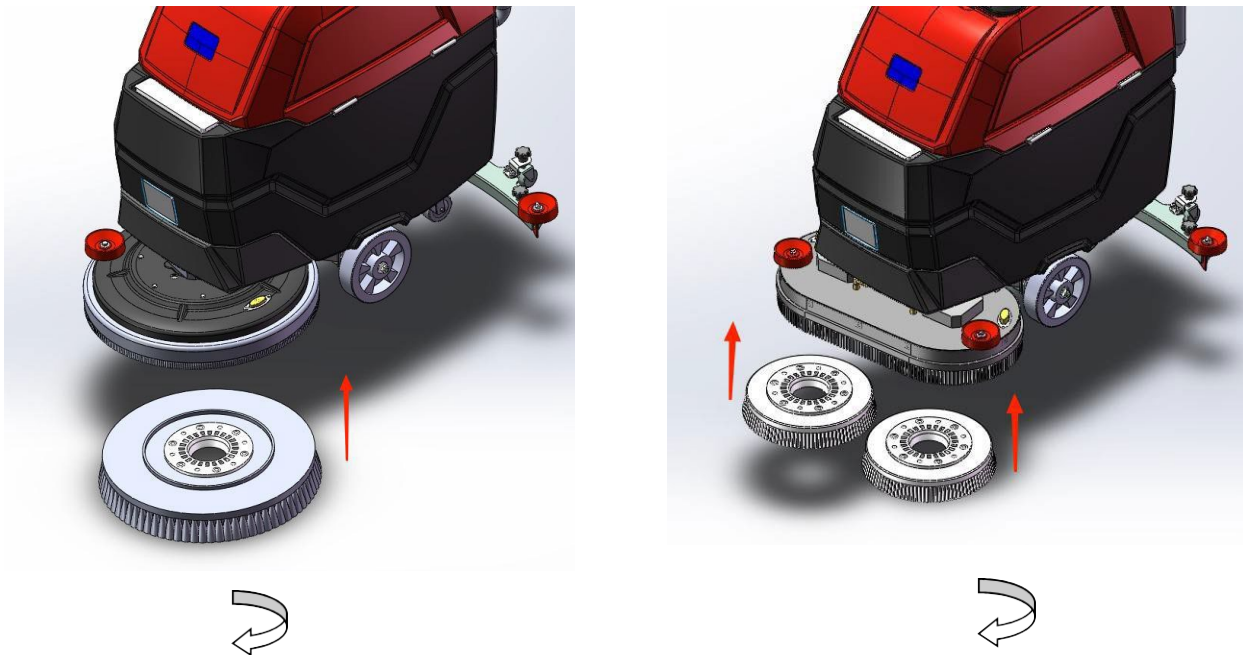
1. At first, turn the key to position "0" to turn off the power.



This operation must be carried out after switching off the power supply to protect your hands.



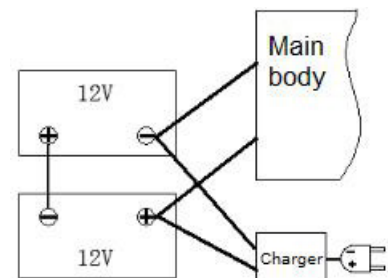
2. With the base up, place the brushes into the plate housing, turning the brushes until the three pins enter the niches in the plate itself; turn until the pin is pushed towards the coupling spring and is locked into place. The figure shows the rotation direction for coupling the brush



II. MACHINE OPERATION

PREPARING TO WORK

1. Connect the connector to the batteries;
2. Place the main switch key in the ON position (clockwise) and the LCD will light up immediately.
3. Rotate the water tap to adjust the flow. Select an appropriate level. The water falls automatically while the brushes are turning. You are advised to adjust the level according to the movement speed and the type of floor and dust;
4. Press the brush switch to lower the head.
5. Lower the squeegee, rotating the squeegee lifting lever (R).

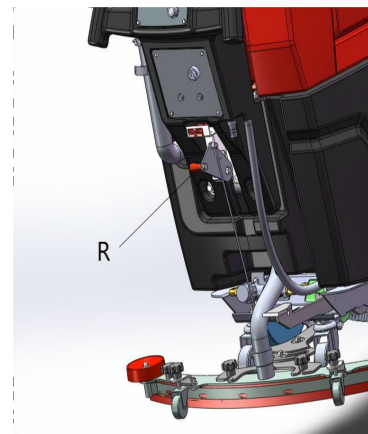


OPERATION

Walk forward: Press the brush switch and Squeegee switch.
Then hold the handle with the machine working



Raise squeegee when making reverse movements.



If there is an operation risk, turn off the machine using the key switch. Restart the machine after trouble shooting.

SOLUTION TANK

When the water in the Solution tank is used up, the sensor will alarm. Using the machine without water can damage the brush motor. Re-fill with clean water to continue function.

OVERFLOW DEVICE

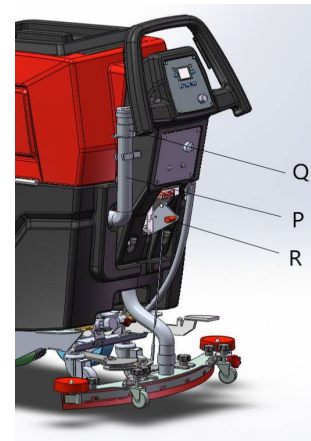
The machine has a float that will turn off suction when recovery tank is full. Empty tank to resume function.



Wear gloves for safety while emptying recovery tank.

AFTER USING THE MACHINE

1. Press the brush pedal to lift the brush.
2. Lift the squeegee by the lever(R).
3. Turn the key switch to "OFF" to switch off the machine.
4. Remove the drainage tube (P) from its compartment and drain tank.
5. Clean the brushes with water.



Wear gloves while emptying the tank to avoid contact with harmful liquids.

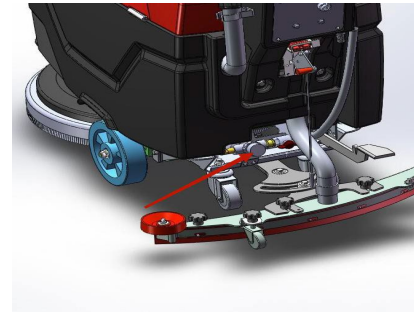
III. DAILY MAINTENANCE

CLEANING THE RECOVERY TANK

1. Remove the drain pipe. Remove cap and empty tank.
2. Rinse the inside of the tank with clean water. Drain tank.
3. Rinse all the elements with a jet of water to make clean
4. Reassemble all the elements



Wear gloves while emptying recovery tank to avoid contact with harmful liquids.



CLEANING THE SUCTION FILTER

1. Remove the suction filter from its seat.

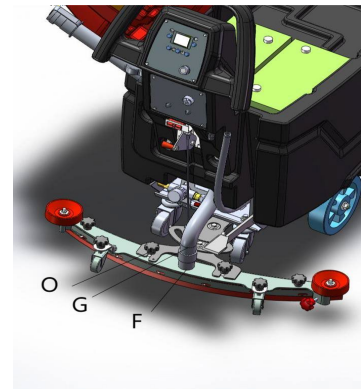
Use water to clean the walls and base of the filter.

2. Reassemble all the elements.

CLEANING THE SQUEEGEE

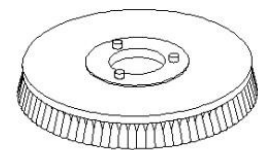
Check the squeegee is always clean, for better drying results, to clean it you must:

1. Remove the tube (G) from the squeegee.
2. Release the Squeegee fixed nut, then take down the squeegee.
3. Carefully clean the inside of the squeegee and rubbers.
4. Every week, or whenever suction seems to be unsatisfactory, check the squeegee tube is not obstructed.
5. Reassemble all the elements again.



DISASSEMBLING THE BRUSH

1. Press the brush switch to lift the head;
2. Turning the brush to the direction shown.
3. If you will not use the machine for a long time, remove the brushes to keep them dry.



CLEANING THE BATTERY BOX

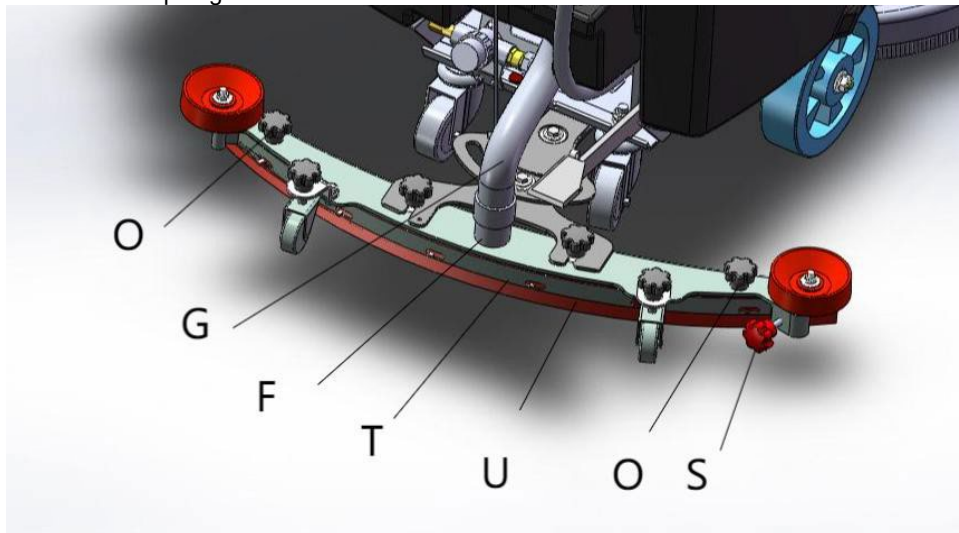
Keep battery box clean using a duster. Check cables and connectors.

REPLACING THE SQUEEGEE RUBBERS

Check the wear of the rubber. If the wear is severe, please replace it according to the following procedure:

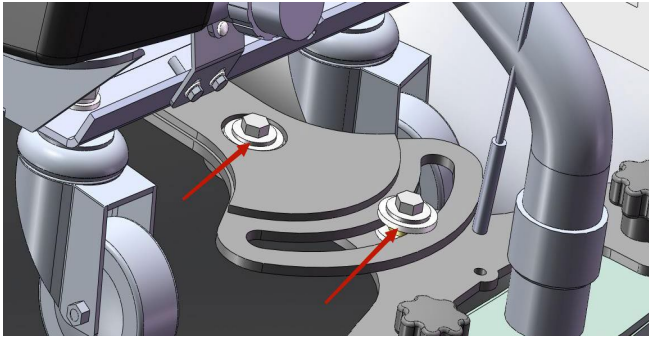
1. Pull the suction pipe G from the suction mouth F of the squeegee;
2. Turn the nut O on the squeegee assembly;
3. Remove the suction tip from the support.
4. Loosen the fixing screw S on the rubber fixing plate and remove the fixing steel bar T;
5. Replace the rubber U, two pieces.

Reinstall the squeegee as described above.

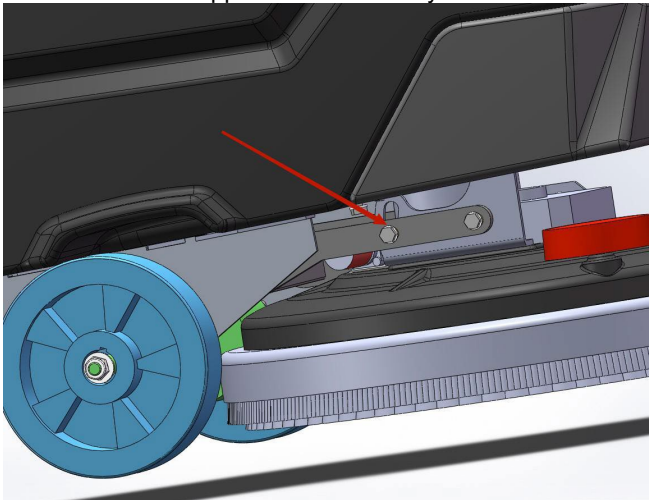


IV. WEEKLY MAINTENANCE

1. Add grease or lubricating oil to the sliding part regularly



support frame assembly



nose assembly

V. TROUBLE SHOOTING

Check common problems before seeking assistance.

Problem	Possible Cause	Solution
Brush motor will not work	<ol style="list-style-type: none"> 1. Electric not working 2. Low voltage 3. Motor not connected properly 	<ol style="list-style-type: none"> 1. Plug in the power and make sure the fuses are working 2. Make sure the batteries are fully charged 3. Check motor connections
Low solution/ no solution flow	<ol style="list-style-type: none"> 1. Filter or joint is clogged 2. The solenoid valve is clogged or needs replaced 3. Solution tank is empty 	<ol style="list-style-type: none"> 1. Clean out the filter or joint 2. Take out the solenoid valve, then wash it 3. Fill solution tank
Machine will not suction	<ol style="list-style-type: none"> 1. The cover of recovery tank is not sealed 2. Hose clamp loose 3. Suction Motor loose or defection 4. Suction hose is partially blocked 5. Battery low 6. Recovery tank is full 	<ol style="list-style-type: none"> 1. Check the seal 2. Check the hose clamp 3. Make sure the is motor install correctly 4. Clean the hose 5. Charge the batteries 6. Empty recovery tank
Battery terminal cable is hot	<ol style="list-style-type: none"> 1. Cable has bad connection 2. Cable has a short or break 	<ol style="list-style-type: none"> 1. Tighten the screw 2. Replace the battery cable
Water absorption is not even	<ol style="list-style-type: none"> 1. Suction motor does not work 2. Suction hose is blocked 3. The squeegee is blocked with something 4. The squeegee is total worn-out 5. The height of the squeegee is not suitable 	<ol style="list-style-type: none"> 1. Check the motor 2. Clean the suction hose 3. Clean the squeegee 4. Change squeegee blades 5. Adjust the height of the squeegee
The brush does not clean well	<ol style="list-style-type: none"> 1. The brush motor does not work 2. Dirt will not come off floor 3. Brush is scratching the floor 4. Something is tangled in the brush 	<ol style="list-style-type: none"> 1. Check the motor 2. Use appropriate cleaning fluid 3. Change the brush 4. Clean the brush

VI. CHOOSING THE RIGHT BRUSHES

POLYPROPYLENE BRUSH (PPL)

Used on all types of floors. Good resistance to wear and tear, and hot water (no greater than 140°F). Brush is non-hygroscopic and retains its characteristics even when working in wet conditions.

NYLON BRUSH

Used on all types of floors. Good resistance to wear and tear, and hot water (no greater than 140°F). Brush is hygroscopic and easy-extended will not retain characteristics when working in wet conditions.

ABRASIVE BRUSH

The bristles of this type of brush are extremely hard. It is used to clean very dirty floors. To avoid floor damage, work only with the pressure strictly necessary.

STEEL BRUSH

It is made up of steel wire and artificial fiber blends and used to clean rough roads, floors with big joints or dirt which is difficult to clean up.

THICKNESS OF THE BRISTLES

Thicker bristles are more rigid and are therefore used on smooth floors or floors with small joints. On uneven floors or those with deep joints, it is advisable to use softer bristles which can enter the gaps more easily.

Remember that when the bristles are worn and therefore too short, they will become rigid and are no longer able to penetrate and clean deep down. In this case, like with over-large bristles, the brush tends to jump.