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SAFETY INSTRUCTIONS
FOR COMMERCIAL USE
READ ALL INSTRUCTIONS BEFORE USING THIS MACHINE

• Use indoors only. Do not expose to rain.
• Do not allow it to be used as a toy. Use caution when operating near children.
• Use only as described in this manual.
• Use only manufacturer’s recommended accessories.
• Charge batteries in a ventilated room. Gases given off during charging could ignite in a confined space. To avoid an explosion, top cover should be open and battery caps installed when charging.
• Disconnect all positive and negative battery terminals before attempting any adjustment or maintenance. Brush drive and vacuum motors and components can cause injury if accidentally started.
• Battery acid can cause injury to the eyes or skin. Wear protective goggles, gloves and clothing BEFORE filling or charging batteries.
• If charger is not working properly, (due to it being dropped, damaged, left outdoors or exposed to water) return it to a Powr-Flite Service Center.
• Do not handle the plug or machine with wet hands.
• Do not put any objects into openings. Keep the openings unblocked
• Keep it away from dust, lint, hair and anything that may reduce air flow.
• Keep hair, loose clothing, fingers and all body parts away from openings and moving parts.
• Make sure the main power switch is OFF before removing or installing pads or brushes.
• Never operate the machine if you are tired or under the influence of drugs and/or alcohol.
• Always operate the machine while standing behind it.
• Use care when working on electrical terminals. Short circuits can cause burns.
• Do not store the machine on inclines.
• If it is suspected that there is hazardous dust or flammable materials stop cleaning the area immediately and consult your supervisor.
• Only use accessories and spare parts provided with the machine or those approved by the manufacturer. The use of other accessories may impair the safety of the machine and void the warranty.

Machine Specification

<table>
<thead>
<tr>
<th>PAS20BA-BD Automatic Scrubber</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Brush Width</strong></td>
</tr>
<tr>
<td><strong>Squeegee Width</strong></td>
</tr>
<tr>
<td><strong>Solution Tank</strong></td>
</tr>
<tr>
<td><strong>Recovery Tank</strong></td>
</tr>
<tr>
<td><strong>Brush Rotation</strong></td>
</tr>
<tr>
<td><strong>Productivity Rate</strong></td>
</tr>
<tr>
<td><strong>Voltage</strong></td>
</tr>
<tr>
<td><strong>Vacuum Motor Power</strong></td>
</tr>
<tr>
<td><strong>Brush Motor Power</strong></td>
</tr>
<tr>
<td><strong>Weight (without Batteries)</strong></td>
</tr>
<tr>
<td><strong>Length x Width x Height</strong></td>
</tr>
</tbody>
</table>
Machine Set-Up

1. Handle Bar
2. Control Panel
   a. Hour Meter
   b. Battery Condition Indicator
   c. Brush Motor Switch
   d. Vacuum Motor Switch
   e. Solution Switch
3. Squeegee Release Handle
4. Brush Lift Pedal
5. Wheel, Bump
6. Squeegee Mount Knob
7. Squeegee
8. Squeegee Tilt Knob
9. Water level sight tube
10. Battery
11. Valve, Solution Volume Control
12. Frame
13. Wheel
14. Brush/Pad Holder
15. Strap, Splash Guard
16. Solution Tank
17. Solution Fill Hole
18. Recovery Drain Hose
19. Recovery Tank
20. Squeegee Hose
21. Vacuum Hose
22. Key Switch

Replacement Parts

<table>
<thead>
<tr>
<th>PART</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>SF219</td>
<td>Poly Scrub Brush (Optional)</td>
</tr>
<tr>
<td>PFLG19</td>
<td>Lite Grit Scrub Brush (Optional)</td>
</tr>
<tr>
<td>PFMG19</td>
<td>Medium Grit Scrub Brush (Optional)</td>
</tr>
<tr>
<td>PFHG16</td>
<td>Heavy Grit Scrub Brush (Optional)</td>
</tr>
<tr>
<td>UP2P</td>
<td>Clutch Plate (must be used with all scrub brushes)</td>
</tr>
<tr>
<td>PAS20PD</td>
<td>20” Pad Driver</td>
</tr>
<tr>
<td>B27TMX</td>
<td>12 Volt Battery (2 Required)</td>
</tr>
<tr>
<td>EC24</td>
<td>24 Volt, 20 Amp Charger</td>
</tr>
</tbody>
</table>
Daily Operation and Maintenance

How to Install Batteries

⚠️ **Caution: Batteries are heavy.**

Install (2) 12-volt deep cycle batteries. New Batteries should be given a full charge before first use.

1. Unplug the hoses (20, 21) from the recovery tank (19).
2. Make sure the recovery tank is empty then lift it up.
3. Place batteries on the tray. Use the bracket to secure them. Position them correctly.
4. Connect all the cable terminals.

   ⚠️ **Caution:** Make sure you connect RED (+) cable terminals to positive (+) posts and BLACK (-) cable terminals to negative (-) posts. Machine will not operate if not connected properly. Failure to do so will result in damage to batteries and possible explosion.

   Spray each post with a protective lubricant. Place battery terminal protectors over all posts.

How to Charge the Batteries

⚠️ **Caution:** Only use a battery charger designed for the machine. Failure to do so can result in damage to the batteries.

Remove the recovery tank from machine and disconnect anderson plug from the control panel. Next connect the charging plug to the anderson plug connected to the battery terminal. Plug the other charger plug to wall outlet. The charger will automatically begin to charge the batteries.

How to Install the Squeegee

1. Put squeegee Release Handle (3) in the UP and locked position.
2. Position the squeegee blade assembly on the swing arm. Make sure the guide wheels face the rear of the squeegee.
3. Hand tighten the 2 thumb screw (6).
4. Place the solution recovery hose (20) over the nozzle. Make sure it fits tight.

How to Install Pad Holder and Brush

1. Raise the brush pad by stepping on Brush Lift Pedal (4) at the rear of the machine.
2. With the pad holder/brush (14) in lifted position, insert it into the plate underneath by turning it counter-clockwise until it locks.

How to Fill the Solution Tank

1. Open the solution fill cover (17).
2. Fill the tank (16) with the desired level of clean water.
3. Add cleaning chemical.

⚠️ **Do not overfill.**
How To Operate The Machine

1. To turn the power on, turn the key switch (22). The power/battery indicator (b) will light up.
2. Check the battery capacity to see if it is full – all indicators are lit up when batteries are fully charged.
3. To turn on the brush motor, vacuum motor and the solution flow, press the switches (c,d,e).

⚠️ Turn off the brush motor when the brush deck is in the up position.

How to Turn the Vacuum Motor On and Off

1. Push the top half of the right switch (d) down. This turns the vacuum motor on.
2. To turn the vacuum motor off, push the lower half of the right switch (d) down.

How to Lower/Raise the Brush/Pad

1. To raise the brush pad, step down on the Brush Lift Pedal (4) until it locks in place.
2. To lower the brush pad, slightly step on the Brush Lift Pedal (4) to unlock it, and raise it up slowly.

How to Lower/Raise the Squeegee

1. Pull the handle (3) down to lower the squeegee.
2. Lift the handle (3) up to raise the squeegee.

How to Set the Solution Flow

Adjust the water flow based on the floor conditions. Turn the adjustment knob (11) to control the water flow. Position 1 shows the closed position. Position 2 shows the maximum water flow position.
What to Do When Operating The Machine

Vacuuming Up Solution

1. Make sure the squeegee is in the down position.
2. As the machine moves forward and solution is dispensed, the squeegee will vacuum it up into the recovery tank.
3. If necessary adjust squeegee pressure by turning knob (8).

If solution is missed, reduce the amount of solution flow, raise the squeegee and pull the machine back over the missed area. Lower the squeegee and move the machine forward to pick up any remaining solution.

How to Control Excess Foam in the Recovery Tank

Watch the liquid as it accumulates in the recovery tank. If you notice excess foaming, stop the machine. Add the recommended amount of chemical defoamer in the recovery tank (19).

How to Empty the Recovery Tank

Open the Recovery Drain Hose (18) to empty the Recovery Tank (19).

Maintenence

Daily

1. Empty and rinse the recovery tank with clean water. Leave the tank cover (21) open on top to air dry.
2. Remove the squeegee assembly, rinse and wipe clean. Check the squeegee inlet for clogs or debris.
3. Clean and wipe the tops of batteries with an ammoniated window cleaner.
4. Fill each battery cell with DISTILLED water as needed. DO NOT use tap water.
5. Charge the batteries as described in this manual.

Weekly

⚠️ Never test the strength of the battery unless it is fully charged and cool.
Check the battery cells with a hydrometer.

Monthly

1. Lubricate brush and squeegee lift mechanisms with light oil.
2. Check for wear or damage of clutch plate, brushes, pads or squeegee blades.
3. Clean all battery terminals.
4. Check all electrical connections and tighten if any are loose.
5. Clean the entire machine with all purpose cleaner.
**WARNING** - Before performing maintenance or making adjustments, switch off the machine and disconnect the battery.

<table>
<thead>
<tr>
<th>Problem:</th>
<th>Possible Cause:</th>
</tr>
</thead>
</table>
| Solution is not being picked up | Vacuum motor is not running  
Water filter is clogged  
Recovery tank is full  
Squeegee or vacuum hose is clogged, broken or disconnected  
Bad seal at tank cover, vacuum motor or squeegee  
Worn or misaligned squeegee blades.  
Incorrect squeegee pressure.  
Squeegee swing arm mechanism not functioning properly |
| Squeegee is leaving streaks | Debris is on blade  
Blades are torn or damaged  
Floors not properly swept before cleaning |
| Solution is not feeding or turning off properly | Clogging of hose or valve |
| Batteries are not holding a charge | Batteries need to be replaced  
High current draw from high brush pressure  
Charger needs servicing  
Battery is run down |
| Floors are not being scrubbed, stripped or buffed properly | Brush motor not working  
Excessive pad or brush wear  
Going too fast over dirty spots  
Inadequate solution feed  
Inadequate cleaning procedure |

* If the fuse blows several times, the machine should be checked by an authorised Service Agent
Powr-Flite Warranty Statement
All Powr-Flite equipment has been tested and inspected at the factory and is guaranteed to be free from defects in material and workmanship for the duration described below. For full details, contact your authorized Powr-Flite Distributor, Service Center, or the Powr-Flite Technical Service Department.

5 Years - Tanks
2 Years - Motors
1 Year - Parts/Labor

IMPORTANT WARRANTY CONDITIONS:
Warranty starts from the date of sale to the consumer or, at Powr-Flite’s discretion, six months after the dealer has purchased the unit from Powr-Flite, whichever comes first. All non-wear parts purchased after machine warranty expiration are warrantied for one year. Proof of purchase is required to process all claims. Powr-Flite sales and service representatives are not authorized to waive, alter, or increase the terms of this warranty.

Warranty DOES NOT cover the following:
• Routine wear and tear items such as brushes, filters, points, plugs, bulbs, switches, brooms, wheels/tires, casters, fuses, belts, hoses, and sheer pins/motor couplings.
• Damage that occurs during shipping. A claim should be filed directly with the carrier to collect damages.
• Unauthorized machine modifications or parts not purchased directly from Powr-Flite or an authorized reseller.
• Failure to properly inspect, maintain, operate, and store the machine. Misuse/abuse is determined at Powr-Flite’s sole discretion and examples include damage from pressure washing the machine, exposing the machine to rain, cold, or snow, and damage to the vacuum motor caused by failure to use defoamer.
• Cleaning and refinishing charges or machine downtime. Rentals and other replacement machines are not available from Powr-Flite during the repair period.

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