

# **Powr-Flite**<sup>®</sup>

**COMMERCIAL FLOOR CARE EQUIPMENT**

## **Model CAS16 Compact Automatic Scrubber**



### **OPERATING INSTRUCTIONS**

COMMERCIAL AND HOUSEHOLD  
COMPACT AUTOMATIC SCRUBBER

The CAS16 is a compact, electric automatic scrubber designed for small to medium sized areas. Equipment must be operated, serviced and maintained in accordance with the manufacturer's instructions.

**Save These Instructions**

# SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

\*When using an electrical scrubber, basic precautions should be followed.

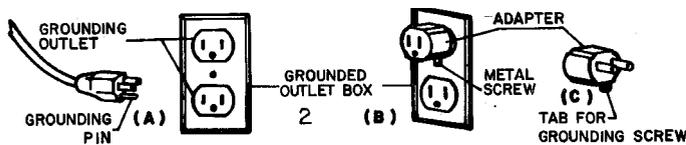
\*Read all instructions before using your scrubber.

## IMPORTANT SAFETY ADVICE

When using electrical equipment basic safety precautions should be followed including the following:

You must have training in the operation of this machine before using it. Read all instructions carefully before use.

- Keep children and unauthorized persons away from the machine when in use.
- Do not leave the machine plugged in when not in use.
- Switch the machine off before removing the plug from the outlet.
- When unplugging, pull the plug, not the cord.
- The machine must be unplugged prior to cleaning or servicing the machine.
- Keep the power cord clear of moving parts.
- Do not run the machine over the power cord.
- Do not operate the machine with a damaged power cord or plug, or if the machine malfunctions or is damaged in any way.
- Do not use where hazardous dust is present.
- Do not use in an explosive atmosphere.
- Do not use where flammable liquids or gasses are present.
- Do not use or pick up flammable chemicals or liquids with this machine.
- Take care when using the machine near the top of stairs to avoid overbalancing.
- Maintenance and repair must be done by authorized personnel only.
- Loose objects on the floor can become dangerous projectiles if struck by the high-speed brush. Remove them before operating this machine.
- Wear suitable footwear to avoid slipping.
- Do not operate this machine in bare feet or with open-toed shoes or sandals.
- Keep hands and feet well clear of the rotating brush.
- Do not smoke when using the machine.
- CAUTION:-This machine is for indoor use only and should not be used or stored outdoors or in wet conditions.



## TRANSPORTING THE MACHINE

**CAUTION** – This machine is heavy.

Do not attempt to lift the machine without assistance. Incorrect lifting techniques may result in personal injury. It is recommended two people lift the machine using a lifting point at the front and rear. DO NOT lift the machine by the handle. Empty both the recovery and the solution tank before lifting.

To move the machine to the work area, lock the handle and tilt it backwards to raise the front off the floor and wheel into position.

## PREPARING FOR USE

Before connecting the machine to the power supply, check that the supply voltage corresponds with that marked on the rating label on the rear of the machine.

**IMPORTANT** – If the power cord is damaged, it must only be replaced with the appropriate type cord, available from the manufacturer.

Should an extension cord be used, ensure the cord rating is adequate for



the equipment. Do not use extension cord in coiled condition as this could result in overheating of the cord.

**WARNING:** This machine must be grounded.

## ADJUSTING THE HANDLE HEIGHT

1. Select the most comfortable handle height using the adjustment lever on the handle and lock in position.

## FILLING THE SOLUTION TANK

1. The solution tank can be filled on or off the machine. To fill the tank off the machine the recovery tank must first be removed.
2. Remove vacuum hose and clear dome from recovery tank and lift off tank.
3. Disconnect solution feed hose from solution tank and lift tank off base. To release hose pull connector collar forward.
4. Fill the solution tank with clean water using a bucket, tap or hose, and an appropriate measure of detergent.
5. Replace tanks on base and reconnect hoses. Ensure solution hose is fully engaged and captive in the connector allowing solution to flow, thus preventing the pump from overheating.



**IMPORTANT** – Only chemicals recommended by the manufacturer should be used, i.e. low foaming, and follow the chemical manufacturer's directions regarding use, handling, disposal and health and safety provisions. The tank capacity is 4 gallons. Do not overfill the tank as spillage may occur when in use.

**IMPORTANT** – When the solution tank has emptied, switch off the machine and empty the recovery tank before refilling the solution tank.



## CONTROLS

The operating controls are located on the handle.

### Brush motor switch

Used to switch motor ON and OFF. Lights when in the ON position.

### Neon indicator

Lights when the machine is connected to the power supply

### Vacuum motor switch

Used to switch motor ON and OFF. Provides suction at the squeegee. Lights when in the ON position.

### Solution feed triggers

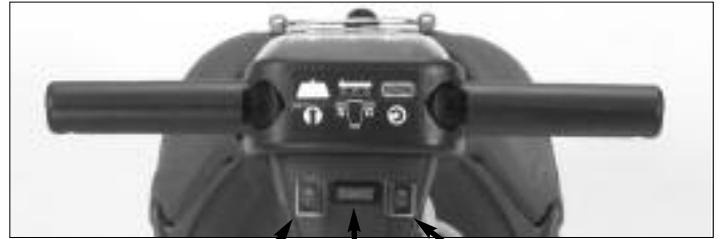
Supplies cleaning solution to the brush head when squeezed.

### Handle adjustment lever

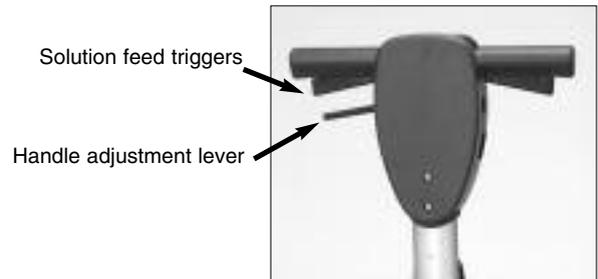
Used to adjust handle to comfortable working height.

### Thermal reset button

Thermal protects brush motor from overheating. Press button once to reset cut-out and restart motor.

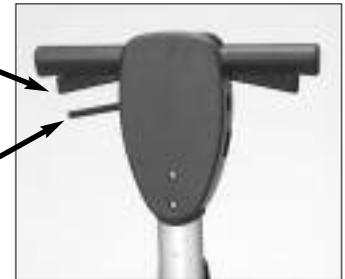


Vacuum motor switch    Neon indicator    Brush motor switch



Solution feed triggers

Handle adjustment lever



Thermal reset button

## OPERATION

### STARTING THE MACHINE

1. Fully unwind the supply cord and plug in to a convenient socket outlet.
2. With the solution tank filled and the handle set at a comfortable height, the machine is ready for use.
3. Switch ON the brush motor, followed by the vacuum motor.
4. Release cleaning solution at regular intervals by squeezing the handle triggers.

**WARNING** – Always ensure adequate solution is on the floor. Scrubbing without solution could damage the floor surface and/or the machine brush. Keep the machine moving while the brush is rotating.

**IMPORTANT** – Should the brush stop rotating due to operation of the thermal reset button on the brush motor, switch the machine OFF and allow to cool for a few minutes. Press the thermal reset button on left hand side and restart the machine.

**WARNING** – If foam or liquid is emitted, switch off immediately and empty recovery tank. Liquid emitted could be hazardous as a result of its temperature, or chemical content.

5. To stop the machine, release solution feed triggers, switch OFF brush motor and then vacuum motor.
6. Normal movement of the machine is in a forward and backward direction.
7. Proceed to operate the machine in the normal manner, releasing cleaning solution as required.
8. For heavy soil, scrub floor with cleaning solution but with vacuum motor OFF. Scrub floor again the pick up the solution.
9. When scrubbing is complete, unplug the machine from the power supply, empty the solution tank and recovery tanks and clean and dry the machine.

**IMPORTANT** – Dispose of unused cleaning solution in accordance with the manufacturer's directions.

## MAINTENANCE

**WARNING** – Before undertaking maintenance operations or adjustments, switch machine OFF and unplug from the electricity supply. The machine requires minimum maintenance apart from the following checks by a trained operator.

**Power cord** – regularly inspect sheath, plug and cord anchorage for damage or loose connection. Only replace the power cord with the type specified in these instructions.

**Solution tank** – check water flow, if restricted inspect tubing for blockage. Check that filter is clean and undamaged. A damaged filter must be replaced.

**Recovery tank** – check condition and clean tank.

**Squeegee blades** – check condition and replace worn or damaged blades.

**Solution spray bar** – remove the brush to access the spray bar. Check that the solution feed holes are not blocked or restricted and clean as necessary.

## MAINTENANCE

### CHANGING THE BRUSH

**WARNING** – This has been designed for use with the brushes specified by the manufacturer. The fitting of other brushes may affect its safety. Always ensure machine is unplugged before fitting or removing parts.

1. To change the brush, first remove both the recovery and solution tanks.
2. Move handle to upright position, pull backwards and downwards to rest on the floor with the base raised.
3. Push end of brush shaft with a finger and withdraw shaft completely.
4. Place new brush in position and insert shaft through brush until it clicks into place.
5. Return machine to the floor, replace tanks and reconnect hoses, etc.

### Changing squeegee blades

The squeegee blades are self adjusting for wear. However, when wet pick-up becomes ineffective, or blades are damaged they should be replaced.

1. Raise machine base as for a brush change.
2. Slide squeegee blades out sideways from the holder.
3. Slide new blades into place with the ribbed side facing outwards.
4. Return machine to the floor, replace tanks and reconnect hoses.

## STORAGE

1. When cleaning is finished, unplug the machine from the power supply and lift off and empty the recovery and solution tanks over a suitable sink or drain.
2. Flush out the recovery tank with clean water.
3. Replace tanks and wipe the machine with a damp cloth. Wipe squeegee blades clean.

**IMPORTANT** – Dispose of unused cleaning solution in accordance with the manufacturer's directions.

4. Remove brush and wash in warm soapy water, rinse and allow to dry naturally.

After use always wipe down and dry the machine and remove and clean the brush. The solution tank and recovery tank should be emptied and flushed out with clean water. When storing the machine for long periods, raise the base to protect the brush and squeegee from possible distortion. Wrap power cord around the handlebar and cable winder, ensuring that the plug is not trailing on the floor. Fold handle down as necessary. Store the machine in a dry indoor area only.



Withdraw shaft completely.



Slide squeegee blades out sideways from the holder.



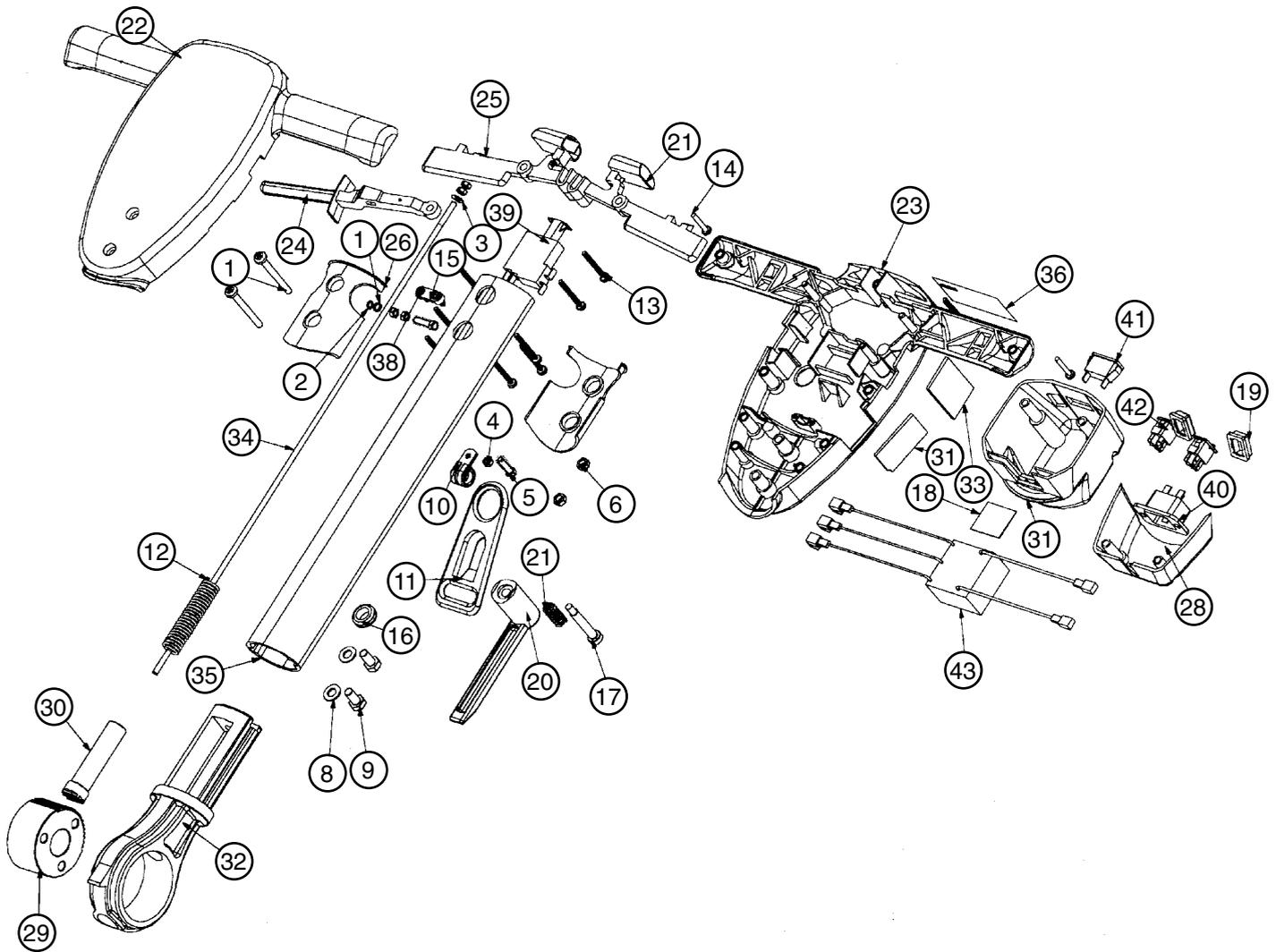
Clean and inspect spray bar.

## TROUBLESHOOTING

The following simple checks may be performed by the operator

<b>Problem</b>	<b>Reason</b>	<b>Remedy</b>
Machine not working, motors not running.	Lack of voltage/electrical supply.	Check fuse*, supply cord, plug and socket outlet.
Vacuum motor not running, switch illuminated.	Faulty motor.	Contact service.
Brush motor running, but brush not rotating.	Brush shaft incorrectly positioned. Loose or broken drive belt.	Refit shaft. Contact service.
Cleaning solution not flowing.	Solution hose not correctly fitted to tank connector. Hose blocked. Waterways in spray bar blocked. Solution tank empty. Blocked filter in solution tank. Damaged pump.	Check connection is secure. Check and clear hose, Check and clean spray bar. Refill tank. Contact service.
Vacuum motor running but squeegee not picking up.	Hose from squeegee blocked or split. Squeegee slot blocked or blades damaged. Vacuum dome out of position.	Check and clear hose. Check and clean squeegee. Reposition dome. Contact service.
Brush motor not running	Thermal reset button tripped.	Check thermal reset button

## Model CAS16 Parts



## Model CAS16 Parts

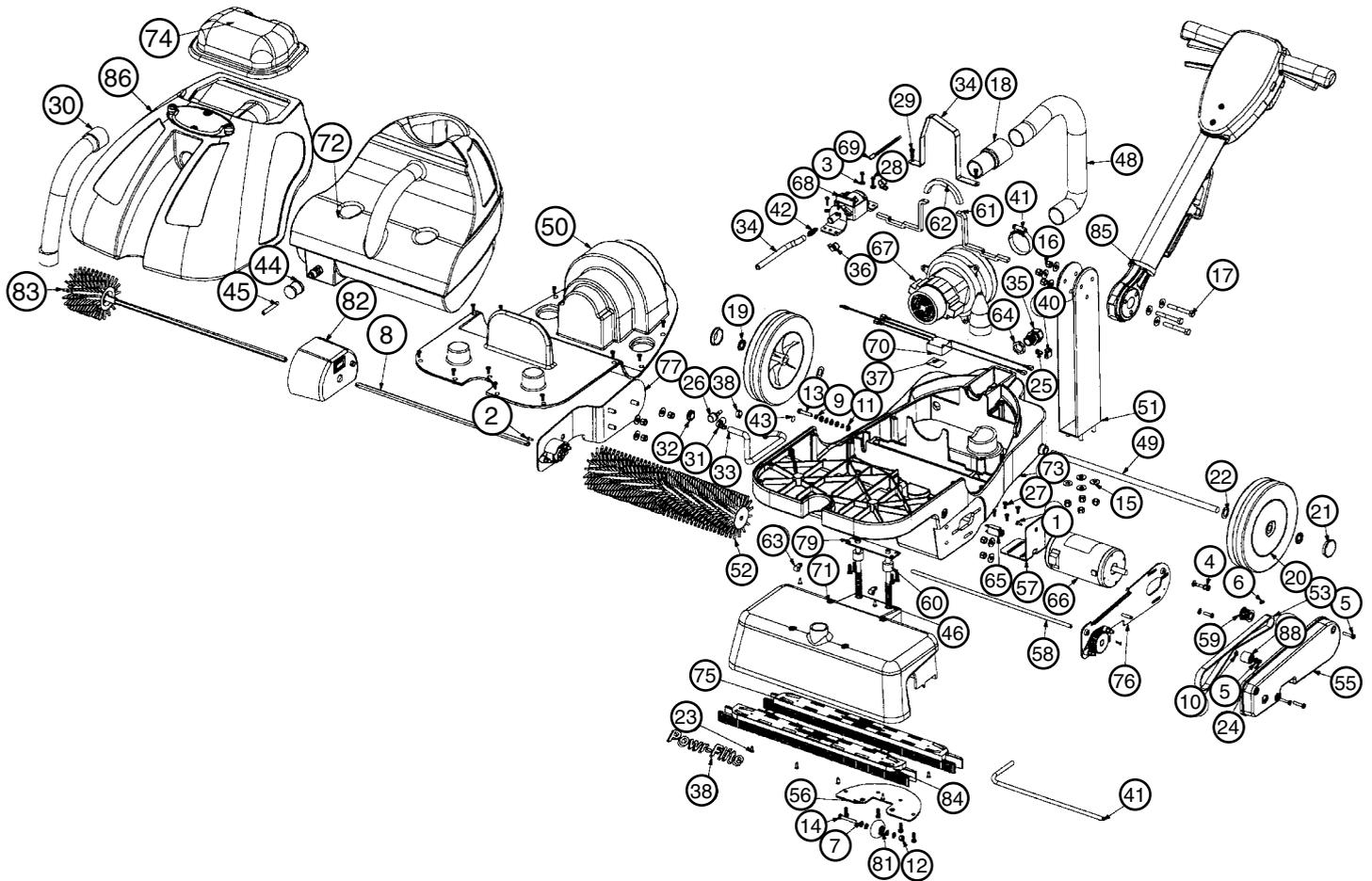
ref #	item #	description
10	CAS20	clip
11	CAS21	cable strain relief bracket
12	CAS22	gear dog spring
13	CAS23	self tapper
14	CAS24	self tapper
15	CAS25	self tapper
17	CAS26	bolt
20	CAS27	cable winder
21	CAS28	cable winder spring
22	CAS29	control box front
23	CAS30	control box rear
24	CAS31	gear operating lever
25	CAS32	trigger
27	CAS33	interlock bottom
28	CAS34	cord retainer

ref #	item #	description
29	CAS35	handle gear
30	CAS36	gear dog
33	CAS37	solution trigger plate
34	CAS38	gear rod
37	CAS39	cord inlet box
39	CAS40	schulte switch
40	CAS41	inlet socket 5 amp
41	CAS42	neon indicator black/green
42	CAS43	rocker switch
43	CAS44	supressor 110 v

NOT ILLUSTRATED

CAS45 supply cordset

## Model CAS16 Parts



## Model CAS16 Parts

ref #	item #	description
20	CAS47	wheel assembly
21	CAS48	wheel - center cap
22	CAS49	crinkle washer
26	CAS55	female coupling connector
30	CAS50	vac pick up hose
31	CAS51	metal male hoesetail and elbow
32	CAS52	grommet
44	CAS53	filter
47	CAS54	spray bar
49	CAS56	axle
51	CAS57	handle support
52	CAS58	brush
53	CAS59	vacuum motor strap
60	CAS60	vacuum shoe spacer
65	CAS61	1.5 amp current overload
66	CAS62	commutator motor
67	CAS63	motor tangential discharge
68	CAS64	pump with mounts
69	CAS65	thermal overload
70	CAS66	motor supressor
74	CAS67	clear dome assembly
75	CAS68	squeegee assembly
76	CAS69	motor plate assembly
77	CAS70	bearing plate assembly
78	CAS71	brush asle assembly
79	CAS72	vacuum show mount runner assembly
80	CAS73	idler assembly
81	CAS74	side brush cover assembly
83	CAS75	side brush assembly
84	CAS76	front squeegee carrier assembly

ref #	item #	description
NOT ILLUSTRATED		
	CAS82	caster wheel
	CAS83	wheel bearing
	CAS84	front squeege blade
	CAS85	squeegee roller assembly
	CAS86	aluminium pop rivet
	CAS92	rear squeegee blade
	CAS87	idler pulley
	CAS83	bearing for pulley 626-2RS SNH
	CAS72	vac shoe runner assembly
	CAS90	bearing plate countersunk screw
	CAS91	bearing plate nyloc zinc plated nut
	CAS88	bearing plate bearing 6003-2RS
	CAS89	bearing plate brush
	CAS88	motor plate bearing
	CAS93	motor plate brush sprocket
	CAS90	motor plate countersunk screw
	CAS91	motor plate nyloc zinc plated nut
	CAS94	clear dome lid
	CAS95	clear dome lid seal
	CAS96	clear dome lid inlet grommet
	CAS97	chassis bridge rectifier 25 amp
	CAS98	chassis outlet cover
	CAS99	chassis outlet filter
	CAS100	chassis pan screw
	CAS24	chassis self tapper
	CAS101	chassis grommet
	CAS102	solution tank metal bulkhead coupling

***The Powr-Flite Limited Warranty***

The manufacturer warrants to the original purchaser that products manufactured are free from defects, provided such goods are installed, operated and maintained in accordance with written manuals or other instructions for a period of 1 year from date of purchase on workmanship, motor, and parts. In case you, as our customer, meet any trouble with your machine, contact a Powr-Flite representative, who will be happy to be of service to you and will take care of any warranty issues.



3101 Wichita Court  
Fort Worth, TX 76140  
800.880.2913