



BRUMBY RIDE-ON SCRUBBER/DRYER
OPERATIONS MANUAL AND TROUBLESHOOTING GUIDE



Thank you for purchasing **Mitchell Professional Floor Cleaning Equipment**. Please be sure to read the manual before operation.



Overview

The Mitchell BRUMBY GS-560D ride-on scrubber/dryer integrates both scrubbing and drying in one machine, leaving the floor clean and dry in a single pass.

It is equipped with a quiet electric motor producing a low noise output of 58dB and capable of up to a continuous 3-4 hours operation with a single charge.

The compact sized body is able to fit into most elevators for multi-storey transport and allows for a smaller swing diameter capable of cleaning tight spaces efficiently.

How the machine works

Cleaning solution and water from the solution tank are released to the floor through a manually controlled solution valve. The brush uses the detergent and water solution to scrub the floor clean.

As the machine moves forward, the suction motor and squeegee wipes the dirty solution from the floor and draws it into the recovery tank.



IMPORTANT SAFETY INSTRUCTIONS

When using an electrical appliance, basic precautions should always be followed, including the following:

READ ALL INSTRUCTIONS BEFORE USING (THIS APPLIANCE)

WARNING - To reduce the risk of fire, explosion, electric shock, or injury:

1. Do not use appliance with flammable or combustible liquids/fumes such as gasoline or use in areas where they may be present.
2. Do not handle plug or appliance with wet hands, electric shock or personal injury may occur.
3. Do not use with damaged cord or plug, electric shock or personal injury may occur. If appliance is not working as it should, has been dropped, damaged, left outdoors, or dropped into water, return it to a service center.
4. Do not leave appliance when plugged in. Unplug from outlet when not in use and before servicing.
5. Use only commercially available floor cleaners and waxes intended for machine application.
6. Do not allow to be used as a toy. Close attention is necessary when used by or near children.
7. Use only as described in this manual. Use only manufacturer's recommended attachments.
8. Do not pull or carry by cord, use cord as a handle, or pull cord around sharp edges or corners. Do not run appliance over cord. Keep cord away from heated surfaces.
9. Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
10. Do not put any object into openings. Do not use with any opening blocked; keep free of dust, lint, hair, and anything that may reduce air flow.
11. Keep hair, loose clothing, fingers, and all parts of body away from openings and moving parts.
12. Turn off all controls before unplugging.
13. All repairs must be carried out by qualified service personnel.



SAFETY PRECAUTIONS

This machine is intended for commercial use. It is designed exclusively to scrub hard floors in an indoor environment and is not intended for any other purposes. Use only recommended scrubbing brushes and commercially available floor cleaners and waxes intended for machine application. All operators must read, understand and practice the following safety precautions.

Do not operate machine:

1. In an area where flammable liquids/vapors or combustible dusts are present.
2. Unless trained and authorized.
3. Unless operator manual is read and understood.
4. If not in proper operating condition.
5. Unless mentally and physically capable of following machine instructions.
6. If battery emits an unusual odor. Move machine to a ventilated area and contact Customer Service immediately.
7. If battery is leaking any substance. Avoid contact with battery substance and contact Customer Service immediately.
8. If battery becomes excessively hot. Disconnect battery charger. Move machine to a ventilated area and contact Customer Service immediately.

Before starting machine:

1. Make sure all safety devices are in place and operate properly
2. Follow safety guidelines concerning wet floors.

When using machine:

1. Do not operate on inclines.
2. Wear non-slip shoes.
3. Reduce speed when turning.
4. Report machine damage or faulty operation immediately.
5. Do not allow children to play on or around machine.
6. Follow mixing and handling instructions on chemical containers.

Before leaving or servicing machine:

1. Stop on level surface.
2. Turn off machine.
3. Set parking brake if equipped.
4. Remove key.



When servicing machine:

1. Avoid moving parts. Do not wear loose clothing or jewelry.
2. Disconnect battery connections before working on machine.
3. Wear protective gloves and eye protection when handling batteries or battery cables.
4. Avoid contact with battery acid.
5. Do not power spray or hose off machine. Electrical malfunction may occur.
6. Use manufacturer supplied or approved replacement parts.
7. All repairs must be performed by a qualified service person.
8. Do not modify the machine from its original design.

When transporting machine:

1. Drain tanks before loading.
2. Turn machine off.
3. Do not lift machine when batteries are installed.
4. Get assistance or use a mechanical lift when lifting machine.
5. Use a recommended ramp when loading/unloading into/off truck or trailer.
6. Use tie--down straps to secure machine to truck or trailer.
7. Put scrub head in the lowered position.
8. Set parking brake if equipped.



Battery installation

1. Park the machine on a level surface, then turn off and remove the key.
2. Lift the water tank to expose the battery compartment.
3. To avoid damage to the batteries and machine, carefully place batteries into the battery compartment
4. Before wiring, place a sponge pad between the two batteries, separating the two batteries.
5. Please make sure the electrode and terminal is clean before connecting the wires. The battery assembly consists of 3 components;
 - Sweeper power cord (1 red 1 black 16mm²)
 - Charging Cable (1 red 1 black 4mm²)
 - Battery Wire (1 black 16mm²)
6. Wiring sequence:
 - a. First connect the sweeper power cord (1red) and charging cable (1red) together to the battery positive (red)
 - b. Connect the sweeper power cord (1 black) and charging cable (1 black) together to the battery negative (black)
 - c. Finally connect the battery short wire (1 black), to the end of the battery pack, positive and negative (black)
7. After the wiring is connected, place the charging cord into the space between the two batteries.

Battery power gauge

The battery power gauge indicates the charge level of the battery. When the batteries are fully charged, all indicator lights will be on. As the battery is depleted, the indicator lights will dim from the right to left. To extend the life of the battery, do not let the battery charge fall below the power level shown below. Do not leave the battery uncharged for an extended time period.

Battery charging instructions

1. Move the machine indoors to a well-ventilated place for charging.
2. Park the machine on a level surface, then turn off and remove the key.
3. To charge, firmly plug the charging cable to a power outlet
4. The charger will automatically start charging and will shut down when fully charged.
5. Do not attempt to operate the machine while it is charging.
6. Please ensure the battery is fully charged before operation.



Attaching squeegee assembly

1. Park the machine on a level surface, then turn off and remove the key.
2. Lower the vacuum squeegee bracket to the low position.
3. Install the vacuum squeegee onto the bracket and tighten the 2 nuts to secure the bracket and vacuum squeegee.
4. Check the vacuum squeegee is firmly in place.

Attaching brushes / pads

1. Park the machine on a level surface, then turn off and remove the key.
2. Raise the scrub head off the floor by lifting the brush head lever.
3. Position the brush or pad under the scrub head.
4. Lower the scrub head over the brush or pad.
5. Properly align and center the scrub head over the brush or pad.
6. Insert the key and turn it to ON position, then push the brush toggle switch to activate the brush motor.
7. The brush or pad will automatically attach when the brush motor is activated.

Filling Solution Tank

1. Remove the solution tank cover and fill with 60 liters of water (<140F/60C temperature). Do not fill beyond the "MAX" level. **NOTE:** When filling the solution tank with a bucket, make sure that the bucket is clean. Do not use the same bucket for filling and draining the machine.
2. Pour a recommended cleaning detergent into the solution tank and mix according to instructions on the bottle. **Warning: Fire or Explosion Hazard. Never use flammable liquids.**



MACHINE OPERATION

WARNING: Fire Or Explosion Hazard. Never Operate Machine In Or Near Flammable Liquids, Vapors Or Combustible Dusts.

PRE--OPERATION CHECKS

- Sweep and dust-mop the floor.
- Check the battery discharge indicator.
- Check pad/brush for wear.
- Check the squeegee blades for wear and proper adjustment.
- Make sure the recovery tank is empty and the float shut--off screen and debris tray are clean.
- Check the scrub head skirt for wear.

Operating the machine

1. Turn the main power key switch to the ON position
2. Lower the squeegee assembly by adjusting the squeegee lever.
3. Lower the scrub head by adjusting the brush head lever.
4. Adjust the solution flow controls to a desired flow rate.
5. Adjust the appropriate speed and depress the foot pedal to begin operation. (Note: When the squeegee assembly is in the lowered position, the machine cannot reverse.)
6. To stop scrubbing, remove pressure from the foot pedal.
7. Turn off the brush and vacuum motors, then lift the squeegee assembly and brush head off the ground.



Draining recovery tank

The recovery tank should be drained and cleaned out after every use.

The solution tank should be cleaned out periodically to remove any water deposit buildup

For safety: before servicing machine, stop on level surface, turn off machine and remove key.

Draining Recovery tank

1. While holding the drain hose upward, remove the cap and lower hose to drain.
2. Open the recovery tank and rinse out the tank.
3. Clean the debris tank located in the recovery tank.

Draining solution tank

1. To drain any remaining water from the solution tank, pull the solution tank fill hose off the hose fitting and empty into a bucket.

Machine Maintenance

To keep the machine in good working condition, follow the machine maintenance procedures.

WARNING: Electrical Hazard. Disconnect Battery Cables Before Servicing Machine.

Daily Maintenance

1. Drain and rinse out the recovery tank.
2. Remove the debris tray and empty.
3. Drain the solution tank.
4. Remove the pad/brush and clean. Rotate pad or replace when worn.
5. Wipe the squeegee blades clean. When machine is not in use, raise squeegee assembly off floor or hang on storage blanket.
6. Check the condition of the squeegee blade wiping edge. Rotate blade if worn.
7. Clean the machine with an all purpose cleaner and damp cloth.
- 8.

For safety: When cleaning machine, do not power spray or hose off machine. Electrical malfunction may occur.



Monthly Maintenance

1. Remove the solution tank filter from underneath the machine and rinse out the screen. Make sure the solution tank is empty before removing the filter.
2. Lead acid batteries: clean the battery tops to prevent corrosion.
3. Check for loose cables connections.
4. Inspect and clean the recovery tank cover seal. Replace if damaged.
5. Lubricate all pivot points and rollers with silicone spray then coat with a water resistant grease to maintain smooth operation.
6. Check the machine for loose nuts and bolts.
7. Check the machine for leaks.

Storing Machine

1. Charge the batteries before storing. Never store the machine with discharged batteries
2. Drain and rinse the tanks thoroughly.
3. Store the machine in a dry area with the squeegee and scrub head in the raised position.
4. Keep the recovery tank cover open to promote air circulation.



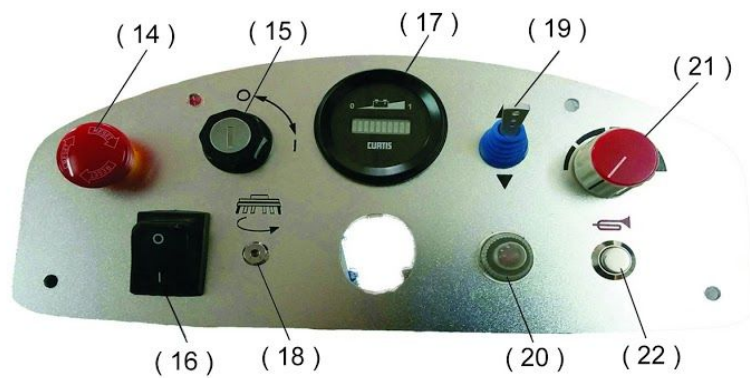
Troubleshooting Guide

PROBLEM	POSSIBLE CAUSE	SOLUTION
Weak suction	Suction motor is not switched on	Switch on the suction motor
	Waste collection hose is clogged up	Clear the waste collection hose and remove any clogs
	Waste collection tank filter is clogged up	Clean the waste collection tank filter and remove any clogs
	Suction squeegee is clogged up	Clean the suction squeegee and remove any clogs
	Waste collection hose leakage or disconnection	Check waste collection hose for any leakage and make sure the hose is firmly connected to the unit.
	Waste collection tank is full	Empty the waste collection tank
	Waste collection tank sensor is dirty, damaged, or blocked	Check the waste collection tank sensor is clean and un-blocked or replace the sensor if damaged
	Weak battery charge	Charge batteries
Machine will not turn on	Discharged batteries	Charge batteries
	Faulty batteries	Replace battery(s)
	Loose battery cable	Tighten loose cable
	Faulty key switch	Contact service center
On-board battery charger will not operate	Plug not connected to power supply	Check plug connection
	Faulty power supply cord	Replace cord

Brush motor will not operate	Scrub head is raised off floor	Lower scrub head
	Faulty brush motor or wiring	Contact service center
	Worn brush plates	Replace brush plates
	Squeegee is raised off the floor	Lower squeegee



Suction motor will not operate	Vacuum motor fuse blown	Replace 25 Amp fuse
	Faulty vacuum motor or wiring	Contact service center
	Worn brush plates	Contact service center
Little or no solution flow	Clogged solution tank filter or solution hose	Clean solution tank filter or flush out solution hose
	Clogged solution valve	Remove valve and clean
	Solution flow control knob set too low	Adjust solution control flow knob
	Loose screw on control knob	Calibrate knob and re-tighten screw
Short run time	Batteries not fully charged	Fully recharge batteries
	Defective batteries	Replace batteries
	Faulty battery charge	Replace battery charger





BRUMBY Parts Diagram		
No#	DESCRIPTION	CODE
1	HAZARD TAIL LIGHT	KAR001
2	WASTE COLLECTION TANK COVER	KAR002
3	OPERATOR SEAT CUSHION	KAR003
4	SQUEEGEE ASSEMBLY WITHOUT BLADES	KAR004
5	REAR WHEEL	KAR005
6	BRUSH SKIRTING	KAR006
7	FRONT WHEEL	KAR007
8	FOOT PEDAL	KAR008
9	WASTE DUMP HOSE	KAR009
10	SOLUTION TANK LID	KAR010
12	DRIVE MOTOR	KAR012
13	SQUEEGEE BLADES	KAR013
14	EMERGENCY STOP SWITCH	KAR014
15	KEY SWITCH	KAR015
16	BRUSH SWITCH	KAR016
17	BATTERY METER	KAR017
18	LED LIGHT	KAR018
19	DIRECTION SWITCH	KAR019
20	OVERLOAD SWITCH	KAR020
21	SPEED CONTROL SWITCH	KAR021
22	HORN BUTTON	KAR022
23	SQUEEGEE CONTROL LEVER	KAR023
24	BRUSH CONTROL LEVER	KAR024
	21" BRUSH FOR BRUMBY	KAR025
	21" PAD HOLDER FOR BRUMBY	KAR026
	SOLENOID VALE FOR BRUMBY	KAR027



WARRANTY

1. When a warranty repair is justified, Mitchell welcomes such repair by any of its authorized Service Centres. In most instances, the request for warranty brought to the attention of our service Divisions or Agents are handled in a prompt routine manner with no question of their validity. However, in some requests for warranty are received which are not justified. In these cases machine owners will be made aware that the premature failure of their equipment was the result of abuse, neglect or other cause not covered by Warranty.
2. The Mitchell warranty covers only DEFECTIVE MATERIAL and/or DEFECTIVE WORKMANSHIP. It does not cover labour.
3. Your machine is warranted for 12 months from date of purchase by the original user against faulty workmanship or material. The warranty covers only the replacement, repair or adjustment of any part which in the opinion of Mitchell fails as a result of a fault in manufacture assembly.
4. In the case of Hire Companies or similar using the unit to rent on a casual basis then 3 months shall apply.
5. This warranty does not cover service calls, travelling time, consumable parts, e.g. drive belts, chains, flexible skirt or hose, dust bags, mains leads, brushes, buffer, buffer strips, sanding discs, light bulbs, nozzles, filters, pressure pumps, piston seals, diaphragms and like items.
6. In the case of proprietary components used by the manufacturer in his product, such as engines, electrical motors, chargers and the like Mitchell will pass on any warranty given by the manufacture of these items.
7. This warranty excludes batteries which are guaranteed for 90 days, by the manufactures from date of purchase of the equipment provided that the battery is kept filled to the proper level with distilled water and not abused.
8. Accidental damage is not covered by warranty.
9. Fair wear and tear is not covered by warranty.
10. Only approved chemicals are to be used in the machine.
11. All charges to and from the manufacturer, agent or service centre will be the responsibility of the owner.
12. Repairs carried out by any other person other than an authorized Mitchell repairer will void the warranty.
13. A charge for traveling time and labour will be applicable for on-site warranty service.

MITCHELL WARRANTY IS SUBJECT TO THE LAWS AND REGULATIONS OF THE INDIVIDUAL STATES AND COMMONWEALTH TERRITORIES OF AUSTRALIA. THIS WARRANTY IS NOT TRANSFERRABLE.