



SMALL MACHINE **BIG POWER**

MotorScrubber MS2000S/M/L Instruction Manual



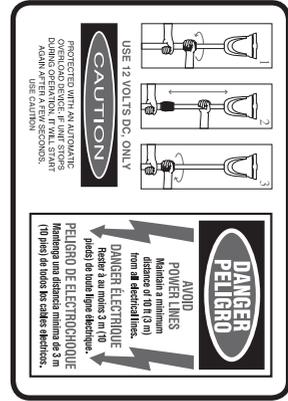
PLEASE READ ALL INSTRUCTIONS

When using electric products, basic safety precautions should always be followed to reduce the risk of electric shock and personal injury, including the following:

Consider your work area environment. When using the MotorScrubber be aware of overhead electrical wires. **MOTOR SCRUBBER IS POWERED BY DC CURRENT ONLY. DO NOT ATTEMPT TO OPERATE MOTORSCRUBBER WITH AC CURRENT.**

- Never pull the MotorScrubber by its cord or yank it to disconnect it from the battery.
- Keep the cord away from heat, oil and sharp edges.
- Keep your MotorScrubber clean. For safer operation follow instructions for attaching accessories. Keep the upper handle switch area dry, clean and free from oil, grease and water.
- Disconnect the MotorScrubber when not in use **AND WHEN ATTACHING ACCESSORIES.**
- Inspect for damage before using MotorScrubber.
- When servicing, use only genuine parts and accessories.
- **MOTORSCRUBBER IS A POWER TOOL. AS WITH ANY POWER TOOL, ALWAYS USE BOTH HANDS TO ENSURE SAFE OPERATION.**

PATENT NO. 5,289,605



ASSEMBLING YOUR MOTORSCRUBBER



If you have purchased a MotorScrubber MS2000S or MS2000M model please skip to point 3, page 4. Points 1 and 2 only apply to the MS2000L model which comes non assembled.

1. Remove the motor housing and yoke from carton. Connect the electrical plug from the yoke to the electrical plug from the end of handle. Push together **FIRMLY**, see Fig. 1 (Page 4), be certain the electrical plugs are fully locked together. Then insert the yoke into the handle aligning the screw holes in the yoke with the two holes in the handle, see Fig. 2 (Page 4). Insert the thumb screws and finger tighten.
2. Attach the hub to the motor assembly using the flat washer, lock washer, and bolt provided. Assemble in the order shown in Fig.3 (Page 4).

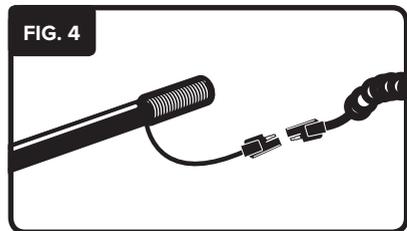
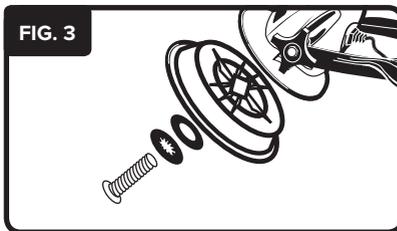
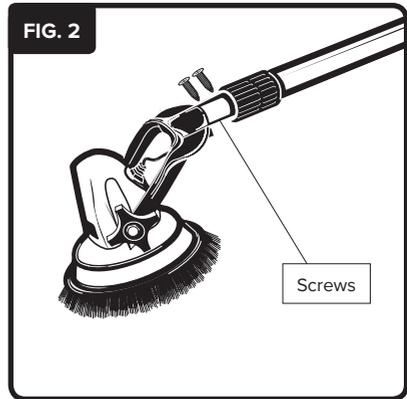
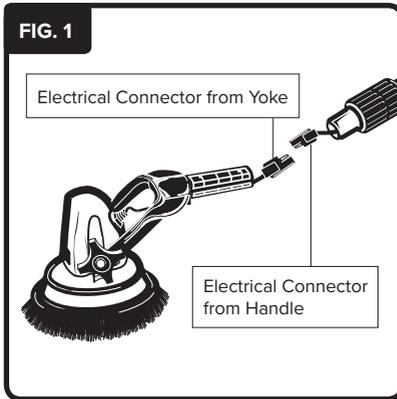
3. IMPORTANT INFORMATION.

Before use, the battery coiled cord needs connecting to the battery terminals. It is vitally important to connect the cable with the correct polarity. If the cable is connected incorrectly it could cause fire when plugged into the charger.

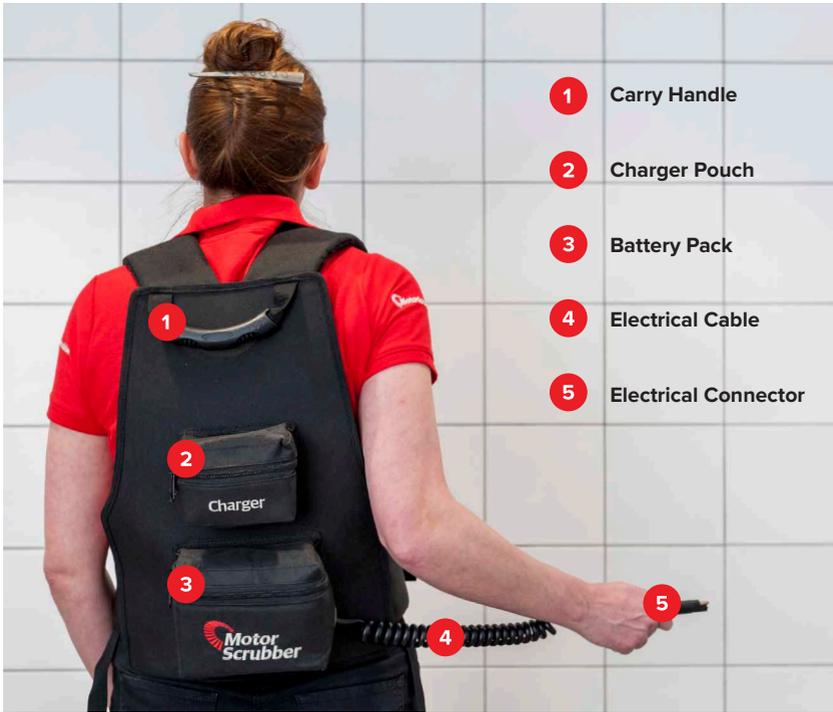
Connect the red wire from the battery coiled cord to the battery terminal and connect the black wire from the battery coiled cord to the black battery terminal.



4. To operate the MotorScrubber using the rechargeable battery, connect the electrical plug from the battery to the electrical plug attached to the handle (See Fig. 4).
5. To operate the MotorScrubber using the 25' cord (MS-1025), connect the electrical plug from the MS-1025 to the electrical plug attached to the handle, then connect the other end of the MS-1025 to either the MS-1020 12VDC vehicle battery post adapter, the MS-1022 cigarette lighter adapter, or the battery pack.



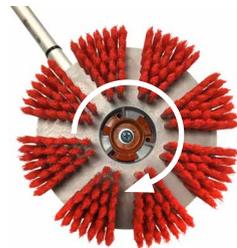
THE HARNESS



- The harness should be put over your shoulders like a backpack. There are two adjustable straps which can be pulled to tighten the shoulder supports to a comfortable user level.
- The sternum clip offers extra support and is tightened by pulling the adjustment strap.
- The Velcro belt strap can be fastened across your abdomen or if you prefer not to use this make sure this is fixed behind you, then the shoulder straps only can be used without the belt.

CHANGING A MOTORSCRUBBER BRUSH

- Line-up the tabs on the disc with the hub on the MotorScrubber.
- Hold the hub to prevent rotation. Press down while turning the disc clockwise until it locks in place.
- To remove, press down on the disc and turn it counter-clockwise holding hub until tabs are free. Then lift off the disc.



For an instructional video please visit motorscrubberclean.com/support

ADJUSTING THE FLIP CLIP

The flip clip allows for super fast adjustment of the telescopic pole



Release the black clip by pushing up the release catch. Adjust the pole to your desired length then push the black clip back into position.



TIGHTENING

If the telescopic pole is slipping while in use you will need to ensure the clip is tightened appropriately.

To do this locate the green adjustment screw and ensure the black clip is in an open position as indicated in the photo, left.

Being careful not to over tighten, turn the screw clockwise until you can comfortably push the black clip back into its lock position. If the black clip is difficult to push back, turn the green screw anti-clockwise until it is easy to push back into position.

For an instructional video please visit motorscrubberclean.com/support

ATTACHING THE CONTROL HANDLE



1. Cut the rubber strip into two pieces. Place one piece into the half circle of the handle grip and the other in the half circle of the handle base. See Fig 1.
2. The handle is best positioned 30cm from the bottom of the switch housing however this can be placed wherever is the most comfortable for the user.
3. Make sure the on/off switch is facing downwards.
4. In your desired position, rest the MotorScrubber pole in the half circle of the handle grip, as shown in Fig 2. Place the handle base directly on top of the handle grip and insert the two screws.
5. Use a 4.5mm Allen key to tighten the two screws evenly. See Fig 3.

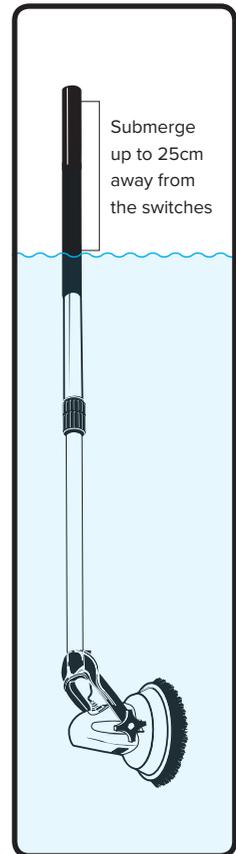


CLEANING WITH THE MOTORSCRUBBER

- Apply soap/cleaning solution to the surface with a sprayer or directly to the scrub disc. You may also mix soap concentrate in a bucket and dip the scrub head into the bucket.
- Scrub with straight, light strokes. You do not have to exert pressure. MotorScrubber will do the work.
- **DO NOT USE MOTORSCRUBBER WITH FLAMMABLE CLEANING FLUIDS.**
- **AUTOMATIC SHUT-OFF:** MotorScrubber is equipped with a self-resetting circuit breaker to prevent damage to the motor. If the unit is stalled, the circuit breaker will interrupt the electrical power from your 12-volt battery. Remove MotorScrubber from the work surface. The circuit breaker will re-set in 6 to 10 seconds. Resume using MotorScrubber.

UNDERWATER USE

- Because its motor head can be fully-immersed in water, the MotorScrubber is ideal for many underwater cleaning tasks. One of the more popular uses of the MotorScrubber is cleaning the “scum line” above the water level in swimming pools, spas, boats, etc.
- Immersing the head for long periods of time could affect its water-proofing seals due to the effects of prolonged heating and cooling. The seals could contract and allow water to make direct contact with the motor, which would cause a motor failure. Guidelines need to be followed to avoid this.
- The seals should be inspected before each use to check for signs of corrosion that would compromise its water tightness. If the unit is used underwater on a regular basis an internal inspection of the head is required each month by a competent technician, this is to check for water ingress.
- **WE RECOMMEND NOT USING THE MOTORSCRUBBER FULLY SUBMERGED IN WATER FOR MORE THAN 2 MINUTES CONTINUOUSLY. MOTORSCRUBBER SHOULD THEN BE REMOVED AND ALLOWED TO COOL FOR 5 MINUTES.**
- Waterline cleaning where MotorScrubber is half in and half out of the water has no limitations.
- Regular underwater usage will reduce the lifetime of the head unit. MS4000 complete motor head can be purchased and replaced when required. 1 year is the suggested life of regular underwater use.



BATTERY INFORMATION

The battery should be charged before using your MotorScrubber, after each use, and if unused for 4 months. A full charge takes 8 hours. First, connect the coil cord into the charger and then plug the charger directly into a 120 VAC/60HZ or 240 VAC electrical outlet or use an adapter or a charger made for the AC source being used. (Do not use an extension cord). After charging, disconnect the charger from the AC outlet and (IMPORTANT) disconnect the charger from the battery.

There are two sources of battery power for the MotorScrubber: (A) the rechargeable battery pack with harness; and (B) a 25-foot cord (MS-1025) which connects to the boat/vehicle 12-volt DC battery supply via MS-1022 or MS-1020.

- MotorScrubber uses a rechargeable sealed lead-acid battery
- Capacity: 12-volt, 7.0 amp-hour
- Non-spillable
- Depending upon the average depth of discharge, over a thousand discharge/charge cycles can be expected.

The battery pack contains a fuse for protection against a short circuit. If your MotorScrubber will not run, open the fuse holder in the battery pack and check the fuse. Replace if necessary with: 30 AMP-32 VOLT, ABC GLASS FUSE (MSS038).

- Do not charge in a gas-tight container
- Do not short the battery terminals
- Do not incinerate
- Flush with water at once if contact is made with electrolyte (acid)

IMPORTANT SAFETY INSTRUCTIONS FOR BATTERY & CHARGER

- To protect against risk of electrical shock do not put battery charger in water or any other liquid.
- Do not operate in the presence of explosives and/or flammable fumes or liquids.
- Do not store or carry battery so that metal objects can contact battery terminals - the battery could short circuit causing fire, personal injury or damage to the battery.
- Never attempt to open battery for any reason. If the housing of the battery breaks or cracks, immediately discontinue use and do not recharge. The battery should be replaced.
- Do not charge a battery if it is wet or shows any evidence of corrosion.
- Do not incinerate the battery; it can explode in a fire.
- Plug the battery charger directly into a 120VAC/60HZ or 240VAC, with the correct plug adaptor, electrical outlet (Do not use an extension cord).
- Charge the battery only with the MotorScrubber battery charger.

- Do not use the charger in wet or damp conditions. It is intended for indoor use only.
- Do not use the charger near sinks or tubs. Do not immerse in water.
- Do not allow the cord to hang over the edge of a table or counter, or touch hot surfaces.
- Do not use charger for any other uses other than MotorScrubber batteries; other batteries may explode.
- Do not operate charger with damaged cord or plug, have them replaced immediately.
- Do not operate charger if it has received a sharp blow, been dropped or otherwise damaged in any way. Return the appliance to your local distributor for examination, repair or electrical or mechanical adjustment. Do not disassemble charger.
- For best results do not charge a battery when it or air temperature is below 40°F (5°C) or above 105°F (40°C).
- Unplug the charger when not in use and before cleaning or maintenance.
- Do not abuse the cord. To reduce the risk of damage to the electric plug or cord, never carry the charger by its cord or yank the cord to disconnect. Instead, grasp the charger plug and pull to disconnect. Keep charger cord away from heat, oil and sharp edges.
- Flush eyes and skin with water if contact is made with acid.
- **NEVER ATTEMPT TO OPERATE THE MOTORSCRUBBER FROM AN ELECTRICAL OUTLET. OPERATE THE MOTORSCRUBBER ONLY FROM THE 12-VOLT BATTERY.**

TROUBLESHOOTING

If your MotorScrubber is not turning on or is turning slowly:

1. First, check the fuse.
2. Check the battery terminals are connected properly and motor to handle plugs are connected securely. Next, using a voltmeter, simply open the battery pack, disconnect the two leads at the battery, and touch the voltmeter probes to the terminals accordingly. A satisfactory reading would be approximately 11.5 to 13 volts.
3. If the battery tests as satisfactory, the motor should be tested next. Disconnect the plug between the handle and the motor (wrap cord from handle with rubber band to prevent cord from retracting into handle), connect the battery pack coil cord directly to the motor. If the motor now turns properly then the off/on switch or wiring harness within the handle is not functioning properly. If the motor still does not turn, the MS4000 is defective. Consult your selling distributor.

For additional help on using the MotorScrubber please visit the support section of our website www.motorscrubberclean.com

Certificate of Conformity

24/01/2017

The following products have been tested by us with the listed standards and are found in compliance with the council EMC Directive 2014/30/EU. It is demonstrative for the compliance with this EMC Directive.

Applicant: T L Killis & Sons Limited

Address: 6 Orgreave road, Sheffield S13 9LQ Great Britain

Product: Motorscrubber Battery operated Cleaning Machine

Model No: MS2000S, MS2000M, MS2000L, MSJET, MSPROWASH, MSFORCE

Rated Input: AC 100 – 240Volt~ , 50/60Hz, 0.6Amp

Rated Output: DC 12 Volt, 7Ah

Test Standards: IEC 60335-2-10:2002 (Fifth edition) and EN 60335-2-10:2003 in conjunction with IEC 60335-1:2001 (Fourth edition) + Corr.1 and EN60335-1:2002+ A11:2004

Yours Sincerely,



IMRE KILLI

MANAGING DIRECTOR

Date: 24/01/2017

The statement is based on a single evaluation of one sample of above mentioned products, it does not imply an assessment of the whole production.



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Register your warranty at:
motorscrubberclean.com/warranty

YOUR WARRANTY

LIMITED ONE-YEAR WARRANTY MOTORSCRUBBER 12-VOLT DC TOOL

We at Motorscrubber UK work hard to build the highest quality cleaning tool, we strive for perfection! As the market leader in compact scrubbing machines we select the highest grade components and continuously develop our machines based on the valuable feedback from our customers. Our aim is to build the worlds most powerful compact cleaning tool which you can use all day every day without failure. We want you to be 100% satisfied with your Motorscrubber, in the rare event a fault should occur we are here to help and ensure your machine is back up and running as soon as possible. So that we can cover your warranty fully please follow the below terms.

Every MotorScrubber is thoroughly inspected and tested before leaving the factory. It is warranted to be free from defects in workmanship and materials for the period of one year from the date of original purchase. Should any problem covered by this warranty develop during the one-year period, follow the instructions in this booklet and return the unit carefully packaged with freight prepaid to your original supplier.

Your supplier will inspect the item and liaise with us directly. If inspection shows the problem was caused by a defect in workmanship or materials, your supplier will repair (or at our joint option, replace) the unit without charge, return freight prepaid.

PLEASE DON'T VOID YOUR WARRANTY BY:

1. Making alterations to the product.
2. Repairing or attempting to make repairs by anyone other than an authorised MotorScrubber agent.
3. Mistreating, misusing or improperly maintaining or operating the product.

*Terms and conditions may vary depending on your Country, please contact your local supplier for exact terms.

