



SMALL MACHINE **BIG POWER**

MotorScrubber MS2000S/M/L Instruction Manual

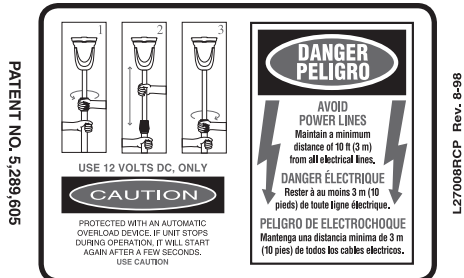
PLEASE READ ALL INSTRUCTIONS

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.**

Save these instructions for future reference.

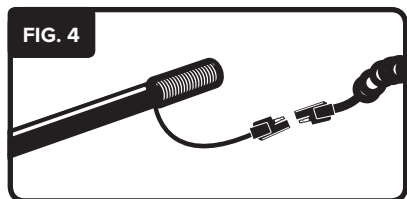
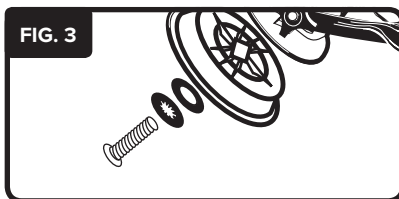
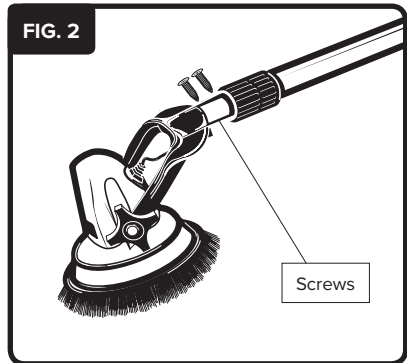
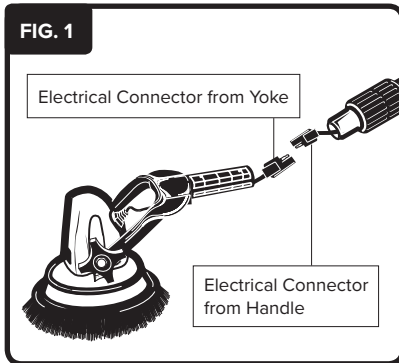


ASSEMBLING YOUR MOTORSCRUBBER



If you have purchased a MotorScrubber MS2000S or MS2000M model please skip to point 3 below. 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), 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). 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 below.
3. 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).
4. 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.

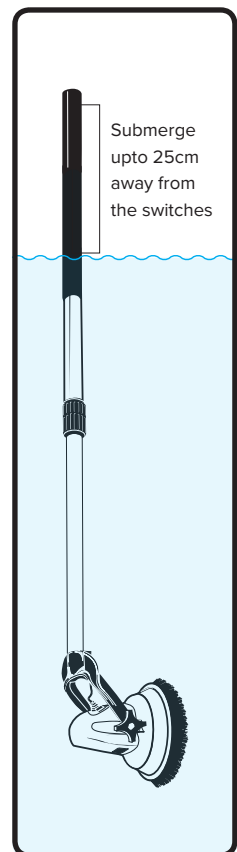
For an instructional video please visit the support section of www.motorscrubberclean.com

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

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.
- **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 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.
2. 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



YOUR WARRANTY

LIMITED ONE-YEAR WARRANTY MOTORSCRUBBER 12-VOLT DC TOOL

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.

THIS WARRANTY IS VOID IF:

1. Alterations have been made to the product.
2. Repairs are required because of normal use.
3. Repairs have been made or attempted by anyone other than an authorised MotorScrubber agent.
4. The product has been mistreated, misused or improperly maintained or operated.
5. The warranty certificate is not completed and returned to MotorScrubber.

In no event shall MotorScrubber be liable for any damages beyond repair or replacement as described above, including without limitation, warranties of merchantability and fitness for a specific purpose. This warranty gives you specific legal rights and you may also have other rights which vary from state to state. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. Some states do not allow limitation on how long an implied warranty lasts, so the above limitations may not apply to you.

To register your warranty visit www.motorscrubberclean.com/#!warranty/nja4l