Hercules 1S

PORTABLE SHAPE-MILLING MACHINE

OWNER'S MANUAL FOR USE AND MAINTENANCE

PLEASE, READ THE SAFETY INSTRUCTIONS CAREFULLY BEFORE USING YOUR HERCULES STONE PROFILING MACHINE. MAKE SURE TO KEEP THIS HANDBOOK IN A SAFE PLACE AND IN GOOD CONDITION FOR FUTURE REFERENCE. DISREGARDING INSTRUCTIONS IN THIS MANUAL COULD RESULT IN INJURY OF PEOPLE OR EQUIPMENT THE MANUFACTURER IS NOT RESPONSIBLE FOR PROBLEMS ARISING FROM NEGLECT OF INSTRUCTIONS OR MISUSE OF EQUIPMENT.

INTRODUCTION

The portable shape-milling machine "Hercules 1S" has been designed and built for milling, shaping and polishing the edges of slabs of marble, granite or other stone materials, in various profiles and thicknesses, safely and in compliance with current safety standards.

SPECIFICATIONS				
Model	Hercules 1S			
Power supply	230V, 60 Hz			
Power cable	25 feet, 12AWG w/ground			
Motor	1,8 kW (2.4 HP)			
Spindle speed	9000 rpm			
Dimensions	560x350x380 (22"x14"x15")			
Weight	36kg (80 lbs)			
Tool Holder Diameter	22.2 mm			





Important To avoid risk of electric shock hazard, do not operate this equipment without ground-fault protection provided.

GENERAL OPERATING INSTRUCTION

- Do not remove any labels and/or instructions attached to the equipment for any reason. They contain important information about the use and safe operation of the machine.
- Improper use, unauthorized repair and/or any other kind of modification to the machine may cause dangerous working conditions, and will automatically void any warranty rights. Improper use means the use of the machine under working conditions which are not in conformity with the instructions in this manual and which would be dangerous to operator or to bystanders.
- Do not block motor cooling vents. Blocking the vents could result in motor damage.
- Machine operator should wear personal protective equipment according to standard safety and accident prevention precautions.
- Disconnect the machine's electrical supply when not in use.
- Keep your workstation clean and organized to reduce the risk of accidents and injuries.

INSTRUCTIONS FOR CONNECTING THE POWER SUPPLY

- The safe use of electrical equipment requires adherence to fundamental safety precautions:
 - Do not use the equipment barefooted or without insulated footwear.
 - Do not remove the electrical plug from an outlet by pulling on the electrical cord.
 - Outdoor use is not recommended. Protect the machine from rain and store the machine in a dry place.

• Extreme caution and care must be observed when using any extension cord connected to the machine's electrical cord. If an extension cord must be used, make sure that it is of adequate wire size to carry the required voltage/ current safely. (Extension cord wire diameter must be proportionally larger than the machine's electrical cord, according to its length. If wire size is not adequate, each additional meter of extension cord causes a loss of voltage, which could damage the motor.)

• In general, the use of adapters and multiple jacks is not advised. If they are absolutely necessary, only use simple adapters or multiple jacks complying with the latest safety standards. Take care to not exceed the top limit of stated electrical supply and maximum power on the devices.

- Keep children away from work area and do not let untrained or unauthorized persons use the machine.
- Electrical safety of the machine is guaranteed only if it has been connected to an electrical system equipped with regular grounding and a ground fault interrupter according to electrical safety requirements.
- Please make sure that the machine has been connected to adequate electrical supply required for maximum motor performance.
- Power supply and outlet must meet motor requirements and machine capacity as stated on the accompanying wiring diagram.

INSTRUCTIONS FOR MACHINE USE

- Make sure the tool guard is correctly installed and securely attached before starting. Do not use the machine without the tool guard installed.
- Keep hands away from tools. Do not reach underneath work and do not attempt to remove any cut material while tool is in operation.
- Before fitting any tool on the spindle, make sure that all surfaces are completely clean. Do not use tools with incorrect sizeholes.
- Make sure that all rotating tools are perfectly balanced and never use a tool if it is cracked, bent or damaged.
- If spare parts are required, use original equipment spare parts only.

PREPARING THE MACHINE FOR OPERATION

I. GENERAL NOTES ON DELIVERY

In case of damaged or missing parts, do not use the machine. Inform the freight company as well as the seller

immediately. Open the case and carefully remove all transport bolts fastening the machine to the base.

Do not leave packing elements (foam polystyrene, bags or plastic materials, nylon, etc.) within children's reach as they present a suffocation hazard.

The "Hercules 1S" is equipped by the manufacturer with:

- Bolts and washers for fitting the tools
- · Owner's operating manual
- Plexiglas tool guard protection that attaches to the front of the machine.

II. INSTALLATION

Install the machine in a safe, appropriate work area. Do not leave machine unattended within reach of children, and keep it protected from damp conditions. Do not expose machine to rain or water sprayed from other nearby machines in use. The machine must be always used on a stable work surface, under which a proper drain fall or adequate waste line should be set to let the waste water used for tool lubrication flow away.

Plug the machine power cord into an appropriate 230V grounded receptacle.

III. CONNECTION TO WATER SUPPIY

Make sure that the two water valves are shut-off before you connect the water supply.

Connect one end of a flexible water hose of 1/2 inch (12mm.) inside diameter to your water supply (which must be equipped with a shut-off) and connect the other end to the male quick-connect hose fitting which comes with the machine. The water shut-off allows you to turn off the water flow when the unit is temporarily not in use, and during tool replacement.

The water supply must deliver a minimum pressure of 60 PSI and flow capacity of least 4 Gallons per minute (15 liters/min.). It is recommended to use clean water to ensure better machine performance.

Please be advised that water lubrication of all tools is very important in order to assure maximum production and to achieve good shape-milling results. Therefore it is absolutely necessary that the flexible water hoses, which can be aimed in any direction, be properly positioned to spray directly on the tool's point of contact with the stone work surface, following the rotation direction of the spindle.

The water supply shut-off valves must always be closed when the machine is not in use.

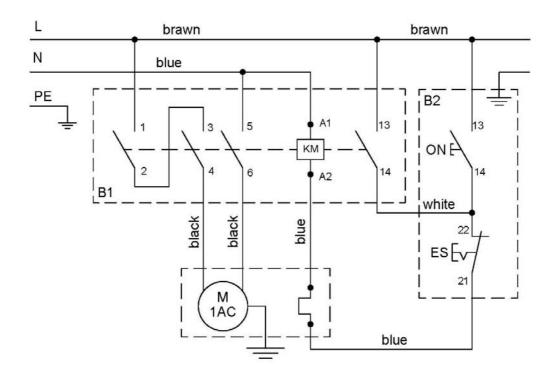
Hold the machine firmly when you turn-on the aqua - planning system.

IV. ELECTRICAL CONNECTION

A qualified electrician should perform any electrical connections. Before making any electrical connections, confirm that the data indicated on the identification plate corresponds exactly to your power supply, and that the circuit protection is adequate to operate the equipment. To avoid risk of overheating and short circuits, do not use adaptors and/or extension cords with this equipment.

The machine has been designed to run on a 230V, 60 Hz, grounded power supply.

The emergency stop push-button must be pressed as soon as any dangerous situation with the machine occurs. This safety feature instantly stops the machine by interrupting the power to the motor. Before restarting the machine after an E-stop, turn the emergency



OPERATION

I. INSTRUCTIONS FOR USE

According to standard accident prevention precautions, wear approved safety clothing in good condition and, in particular, overalls or other comfortable garments, sized to prevent the risk of entanglement in moving machinery. Wearing anti-slip rubber boots is highly recommended.

The operator is responsible for the correct use, adjustment, cleaning and maintenance of the machine. The operator should be profes- sionally qualified with specific training or experience in the use of shape-milling equipment, and capable of recognizing and prevent- ing possible dangerous situations while using the machine.

The operator should control the machine using two hands, one on the front and one on the rear handle.

To prevent overturning, always keep the base of the unit positioned on the work piece so that at least 2/3 of its base area is covered. Never use the machine on a smaller size work piece unless the work piece is firmly anchored.

Fasten the appropriate tool to the machine using the wrenches and bolts supplied, by fitting the tool (22.2 mm hole diam.) onto the spindle. Make sure that it firmly contacts the shoulder of the spindle shaft.

ATTENTION!

TOAVOID DAMAGE, THE SPINDLE MUST BE MOVING TO MAKE VERTICAL ADJUSTMENTS TO THE TOOL. Rotate the knob in a clockwise direction to raise, And counterclockwise to lower the tool.

Only use tools in good condition. Make sure that the tool hole is of the correct (22.2 mm) diameter tolerance and that it is clean, so that it fits smoothly onto the spindle shaft.

Tools for the "Hercules 1S" are intended to be used with plenty of water, supplied by the flexible water hoses at the point of contact of the tool with the work piece. When correctly positioned the water stream should follow the clockwise rotation of the tool.

MAINTENANCE AND CLEANING

Clean the machine periodically. Improper maintenance or lack of maintenance could cause injures to the operator and bystanders. Any defects encountered during maintenance should be corrected promptly, before the machine is used again.

I. DAILY MAINTENANCE

• General cleaning of the machine on a daily basis is recommended. Wash carefully with a damp sponge (do not use any corrosive or flammable agents).

II. MONTHI.Y MAINTENANCE

- Inspect the belt and, if necessary, tighten it by adjusting the bolts placed on the motor-mounting plate. Be sure to retighten bolts before operating the machine.
- Check the condition of the machine and replace any damaged or worn parts.
- Clean the water filter as unwinding the upper part and rinse the filtering net

GUARANTEE

Any claims for nonperformance have to be submitted within 15 days from date of delivery (Note: send by registered mail, addressed to the seller). This does not entitle the purchaser to postpone or neglect any sales terms agreed upon, nor does it entitle the purchaser to compensation for any possible damages.

New equipment is guaranteed for six (6) months from date of delivery note. Note: The guarantee does not cover damage, faulty performance, defects, etc. which occurred due to lack of proper maintenance or improper operation, neglect, wear and tear, and corrosive exterior conditions. Freight costs for replacement parts, overhaul of equipment parts or of the equipment itself, or the return of the equipment for any other reason, are the sole responsibility of the purchaser. Should the purchaser elect to commission on-site repair, purchaser is also responsible for expenses for on-site technicians, which may include travel, accommodation and living expenses

Specifications provided by manufacturer are not binding (i.e. measurement, weight, sketches etc.) and may be changed without notice.

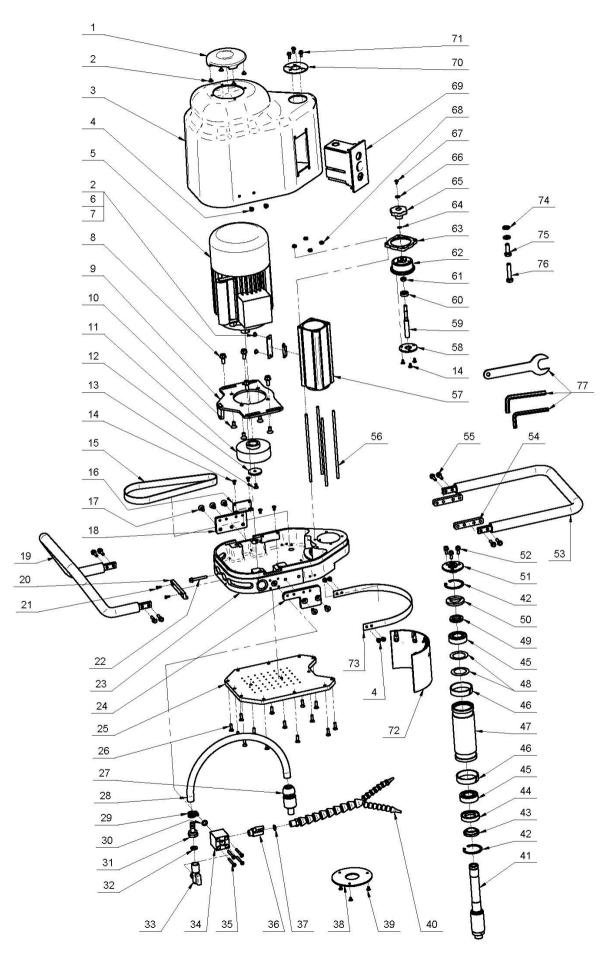
The seller inspects the equipment prior to delivery. Where specifically requested, thepurchaser may also inspect the machine prior to delivery. In case of inspection refusal, the equipment is considered as checked and in perfect condition upon seller's inspection.



Call Toll-Free 1-800-574-4401

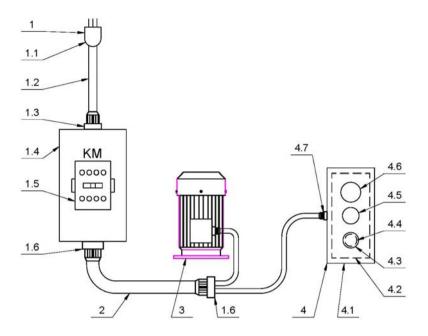
Fax 1-800-915-5501

SPARE PARTS



No.	Item No.	Description	Pcs.	No.	Item No.	Description	Pcs.
1	B2016-00.00.05	Satelit	1	39	M5X8DIN7991A2	Screw	3
2	M5X6ISO7380F	Screw	6	40	B2016-61.00.00	Hinged Water Supply	1
3	B2016-00.20.00	Cover	1	41	B2016-40.00.06	Spindle	1
4	M5X10ISO7380F	Screw	8	42	A52DIN472	Retaining Ring	2
5	B2016-00.00.03	Electro Motor	1	43	B2016-40.00.03	Labyrinth	1
5.1	B2016-00.00.03-01	Fan Cover	1	44	B2016-40.00.01	Labyrinth	1
5.2	B2016-00.00.03-02	Fan	1	45	6205-2RSL-C3	Bearing	2
6	B2016-00.00.10	Plate	1	46	B2016-40.00.07	Wear Ring	2
7	B2016-00.00.21	Key	1	47	B2016-40.00.02	Body Spindle	1
8	M8X20DIN6921	Bolt	4	48	B2016-40.00.05	Disc Springs	2
9	B2016-00.10.00	Plate Strain	1	49	M25X1.5KM5	Spindle Nut	1
10	M8X16DIN7991	Screw	4	50	B2016-40.00.04	Ring	1
11	B2016-00.00.18	Belt Sheave	1	51	B2016-40.00.08	Nut	1
12	L25SPS-00.00.00.15	Front Washer	1	52	M6X16DIN6921	Bolt	3
13	M6X12DIN7991	Screw	1	53	B2016-20.00.00	Front Handle	1
14	M5X10DIN7991	Screw	7	54	B2016-00.00.02	Spacer	2
15	TC-20EF 630x20x2	Endless Transmission Flat Belt	1	55	M6X25DIN6921	Bolt	8
16	B2016-00.00.22	Corner plate	2	56	B2016-00.00.20	Threaded bolts	4
17	M8X16DIN7991A2	Screw	5	57	B2016-00.00.16	Profile	1
18	B2016-00.00.07	Plate	1	58	B2016-50.00.01	Cover	1
19	B2016-30.00.00	Back Handle	1	59	B2016-50.00.04	Pin	1
20	B2016-00.00.01	Buffer	1	60	608-2RSH	Bearing	1
21	M4X10DIN6912A2	Screw	2	61	B2016-50.00.05	Nut	1
22	M6X45DIN6921A2	Bolt	1	62	B2016-50.00.03	Body	1
23	B2016-00.00.11	Body	1	63	B2016-50.00.02	Flange	1
24	B2016-00.00.08	Plate	1	64	B7DIN471	Retaining Ring	1
25	B2016-00.00.13	Hydroplaning Plate	1	65	F17750.TM0801	Handle	1
26	M6X20DIN7991A2	Screw	14	66	M4DIN9021	Washer	1
27	18213-29	Quick connection	1	67	M4X8DIN967	Screw	1
28	MAR13.50	Tube	1	68	M6DIN985	Self Locking Nut	4
29	14-27DIN3017	Clamp	1	69	B2016-70.10.00	Panel	1
30	D10X3	Seal	1	70	B2016-00.00.14	Plate	2
31	1050256	Hose Nipple	1	71	M5X12DIN6921	Bolt	3
32	1/2	Seal	1	72	B03.80.00.00	Holder	1
33	1050378	Spherical valve	1	73	B2016-00.00.19	Screen Holder	1
34	B2016-60.00.03	Тее	1	74	M10DIN125A	Washer	2
35	M5X45DIN7991A2	Screw	4	75	M10X30DIN933	Screw	1
36	1060471	Spherical valve	1	76	M10X50DIN933	Screw	1
37	B2016-60.00.01	Blend	1	77	B2016-01.00.00	Set of Wrenches	1
38	B2016-00.00.09	Cover	1				

CONTROL BOX PARTS



Hercules 18 Control box parts							
N⁰		Item №	Description				
1		B2016-70.20.00	Control Box with conn.end plug	1			
	1.1	B2016-70.20.04	Ground yellow pluge	1			
	1.2	B2016-70.20.03	Cable	1			
	1.3	M20X1.5	Cable Gland	1			
	1.4	B2016-70.22.00	Box Assembly	1			
	1.5	B2016-70.20.02	Contactor	1			
	1.6	M25X1.5	Cable Gland	2			
2		B2016-70.21.00	Cable Assembly	1			
3		B2016-00.00.03	Electro Motor	1			
4		B2016-70.10.00	Control panel	1			
	4.1	B2016-70.10.01	Flush mounting plate	1			
	4.2	B2016-70.10.02	Shroud	1			
	4.3	L20NS-30.10.06	Сар	1			
	4.4	A0009	Button On /Green/	1			
	4.5	B2016-70.10.03	Blanking plug	1			
	4.6	L20NS-30.10.10	Emergency Stop Button	1			
	4.7	L20NS-30.10.01	Cable Gland	1			