



LEFON
MACHINERY & ENGINEERING GROUP

Operation Manual for Lite4 / Lite6 Portable Orbital Cutting Machine





December, 2008

Version 1.5

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Section 1: Operation Safety

The portable Pipe Cutting and Beveling machine –Lite4 / Lite6 are designed to handle carry easily for field use. Please use it properly based upon the procedure in this manual. Using it for purpose other than those described in this manual may cause injury to the user or to others. It may also cause damage to the machine or other equipment.

Therefore:

- Always ensure the machine is in good working condition and comply with these notes on safety
- Keep complete documents nearby the machine
- General valid regulations for the prevention of accidents must be observed.
- Only use the machine for cutting and beveling of pipes
- Damage caused by not following the manual is user's responsibility
- Only use the dimensions and material specified in these instructions. Consult LEFON for cutting material that is not covered in the manual.
- Inspect the machine daily of visible sign of wear or damage.
- Repair any damage or defect immediately
- Only qualified electrician can work on the electrical equipment
- Only operate the machine if the Electrical Restart Inhibitor is working properly
- Unplug the power input before carrying out any maintenance or repair work on the machine.

Keep Safety in Mind

- Report any unusual response from the machine to the person in charge of this machine
- Keep Safety in mind all the time
- Wear protective goggles, safety gloves and ear protection when working with the machine
- Keep hands off the machine during processing
- Pay attention to the surroundings. Don't use any electric tools in humid area. Make sure to have excellent lighting. Do not working near combustible liquids or gases.





Danger of death by electric shock

If the main cable is damaged, live parts may cause death when touching directly.

- Keep the main cable of the machine motor away from the saw blade or beveling cutter
- Secure the falling pipe piece
- Don't let the cut-off piece of pipe drop in an uncontrolled way
- Don't run the machine unattended
- While cutting the pipe, always pay attention to the positions of the main cable.



Danger of injury by sharp cutting edges

- Keep hands away from the machine during cutting or beveling
- Wear safety gloves



Disposal

- Recycle discarded electric tools and accessories containing valuable materials
- Dispose of chips and used gear oil according to regulation requirement

Section 2: Specification

Model		Lite4	Lite6
Cutting Range (Pipe OD)	mm	6-120	50-170
	inch	0.236 - 4.724	1.969* - 6.69
Maximum Wall Thickness	mm	2.5	2.5
	inch	0.098	0.098
Motor Horse Power	w	1000 w	1000 w
Motor Voltage		1 phase AC Metabo motor, 110/220 V, 50/60 Hz	1 phase AC Metabo motor, 110/220 V, 50/60 Hz
Blade Speed	RPM	30-160 - Lower speed is for large OD tube, for thicker wall, for softer material such as stainless steel	30-160 - Lower speed is for large OD tube, for thicker wall, for softer material such as stainless steel
LxWxH	mm	570x320x390mm	600x330x410mm
Net Weight	Kg	22kg	24kg
Gross Weight	Kg	31kg	34kg
Protection		Double insulated	Double insulated
Application		- Plastic(PE,PP,PVDE,PVC) - Copper - Brass - Annealed cast iron pipe - General structural steel - Black and galvanized steel pipe - Aluminum	- Plastic(PE,PP,PVDE,PVC) - Copper - Brass - Annealed cast iron pipe - General structural steel - Black and galvanized steel pipe - Aluminum



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Section 3: Package & Installation



Deliver Package Item List

One set of Lite4 / Lite6 should include the following item. Please inform the manufacturer or forwarder of any missing parts or transportation damage immediately.

1. 3 saw blade
2. 1 lubricant
3. 19-22 mm spanner
4. operation manual



Installation Instruction

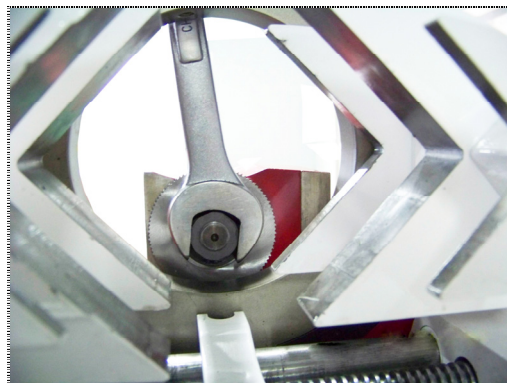
Step 1: Install fixture on the mounting plate before put it onto the work bench.



Step 2: Align square top of motor with the trough inside gear housing then put it into the gear housing and get fastened onto the work bench



Step 3: Install the saw blade depending on application.



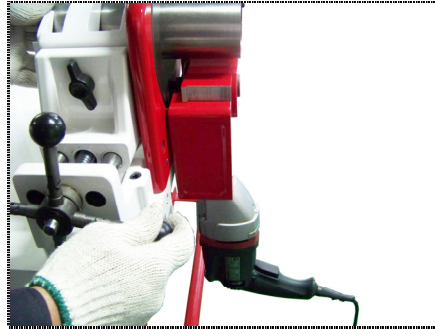


Section 4: Operation Procedure

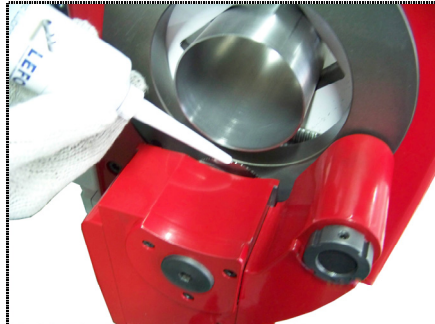
Step 1: Lower the saw blade by rotating the hand wheel



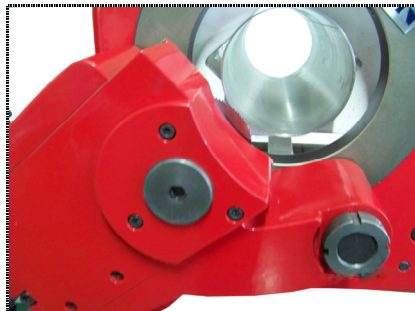
Step 2: Insert the tube, to the position where the blade would cut off the tube, and then fasten the clamp.



Step 3: Apply lubricant to the saw blade for each cut.



Step 4: Rotate the motor clockwise about 45° until the saw blade reaches the tube. Rotate the hand wheel to adjust the cutting depth, normally there is about 1-2mm teeth length into the tube. Then keep rotating the motor to finish the cutting.



Section 5: Maintenance & Troubling Shooting

Maintenance summary

Time Interval	Action
Before starting machine	• Remove chips and dirt from the saw blade • Keep the vent holes free of chips
Every cleaning, Every blade change	• Don't use pressurized air to clean, which would blow cuttings into machine to compromise the accuracy of future use • Use cloth or brush to clean the end of the shaft
Every week	• Clean and lubricate

Trouble Shooting

Symptom	Cause	Correction
The sliding housing doesn't turn	Pipe diameter is not correctly adjusted	Adjust the top handle wheel correctly following earlier instruction
Blade doesn't cut and is slipping	Hexagon nut on the saw blade shaft not tightened	Tighten hexagon nut
Pipe can't be cut	Saw blade is mounted in the wrong way	Reverse the blade, make labeled side facing outwards
Pipe diameter can't be adjusted	Slide guide is dirty	Clean the slide guide(refer to earlier instruction on slide guide cleaning)
The motor is not running	The overload protection relay has been triggered	Set the switch to off, wait about 15 minutes, and switch on the machine again
	The restart inhibitor has been triggered	Set the switch to off, then switch on the machine again