

LUBRIMIST

LV RANGE

Air Cleaning Technology



OPERATING MANUAL

CONTENTS

PREFACE -----	p.3
PRODUCT SAFETY INSTRUCTIONS -----	p.4
CH1. PRODUCT DESCRIPTION -----	p.7
CH.2 SPECIFICATIONS -----	p.8
CH.3 PARTS DIAGRAM & TERMINOLOGY -----	p.9
3-1 Description of parts	
3-2 Machine part name	
CH.4 DIAGRAM -----	p.12
4-1 Electrical Diagram	
4-2 PCB Description	
4-3 Electrical control connection	
CH.5 LUBRIMIST MACHINE SETTING -----	p.14
5-1 Setting up / resetting the machine	
5-2 Testing the machine	
CH.6 STANDARD INSTALLATION GUIDE -----	p.15
6-1 Installation using the optional combination stand	
6-2 General Installation Notes	
6-3 Standard Installation guide	
6-4 Installation performance	
CH. 7 MAINTENANCE -----	p.20
7-1 Pre-filter / After-filter cleaning or changing guide	
7-2 Pre-filter cleaning method	
7-3 Oil Mist Air Cleaner maintenance steps	
CH.8 TROUBLE SHOOTING. -----	p.22
CH.9 WARRANTY TERMS & CONDITION -----	p.24
Annex 1 – Maintenance record -----	p.27

Please Read This Manual Thoroughly Before Operation

Thank you for buying Lubrimist LV.

In order to maintain the machine's peak performance and to prolong its life span, the operators must carefully read this manual for initial operation. Also, for your safety, please read the following precautions:

It is suggested to place this manual conveniently in proximity of the machine for ease of reference at anytime

TEL: +44 (0)1453 810379




EMAIL: info@lubriserv.com

Safety Notice

IMPORTANT

To avoid damage to property or unit, please follow the instructions.

 Denotes should be avoided	 Rules should be followed
--	---

	<ul style="list-style-type: none"> ● Read the manual before operation of the machine. ● Only to be used as instructed in this manual.
	<ul style="list-style-type: none"> ● Please confirm the voltage before connection and follow safety rules and the electrical diagram provided ● Live components must be insulated. The wires should be checked regularly.
	<ul style="list-style-type: none"> ● Pay attention! ● During handling, installation, or cleaning and maintenance, please check for any leaked oil on the machine and the ground. This might cause risk of injury, due to a slippery surface.



WARNINGS

	Description of situation	Accidents
1	Do not install the air filter in an environment with liquids, corrosive substances, flammable gas or near flammable substances.	Failure to follow these instructions may result in damage, fire or electric shock.
2	Do not install the machine in high vibration or impact areas.	
3	Do not power on the machine if the electrical cable is covered with water, oil or the outer cable is damaged.	
4	Do not connect the electrical wire or operate with wet hands.	
5	The electrical parts must be insulated. The wires should be fixed, do not leave loose cables.	
6	Please read the manual before installing the machine, confirming the voltage before electrical connection, and make sure the ground wire is earthed.	
7	Always have an accessible isolation switch to power off directly if required	
8	Make sure power is isolated before moving, wiring, installing, cleaning or replacing the filters.	
9	To avoid something falling into the air inlet, do not place any objects or tools in front of the open machine.	
10	Do not block ventilation, otherwise it will prevent cooling of the motor.	
11	Do not modify, disassemble or repair the machine by yourself.	
12	Do not place the machine in a strong magnetic field or a strong static area.	
13	Do not use corrosive liquid to clean the machine	
14	Do not run the machine if power supply has a phase failure	
15	The flexible pipe and drain should be a reasonable length, make sure the machine is collecting oil mist effectively.	Leaking or reduced air flow problem
16	Do not drop the product or damage the product.	Damage to the machine
17	DO not run the machine WITHOUT a pre-filter.	Will cause After-filter failure

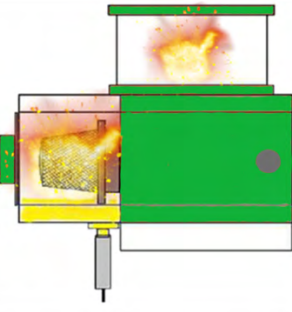

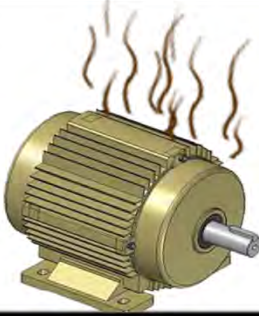







NOTICES – Guidelines

	Description of situation	Accidents
1	Before installation, ensure the fitting area has suitable load bearing capacity, and the correct voltage.	Failure to follow these instructions may result in damage, property loss, fire or electric shock.
2	Follow the instruction manual to install the machine.	
3	Install on the CNC machine or the combination stand, make sure it's fixed securely. Use the anti-vibration mounts when direct mounting to the machine.	
4	Before running the machine, it should be fitted securely and the electrical wiring, pre-filter, after-filter, air inlet, and oil drain outlet tube are checked and OK.	
5	The hanger bracket on the fan is only for machine moving, never move the machine in operation.	Use for moving on or off machine, if necessary.
6	The fan should be rotating clockwise	No air is drawn into the machine.
7	Daily maintenance - clean the gauzed air inlet, check the oil storage tank, and check the value on pressure meter or LED light color, make sure the machine is working normally.	Causing the motor temperature raise, after-filter failure, and possible fire risk.
8	Weekly maintenance – Clean the pre-filter, inside machine grease, iron fillings, make sure the inside space is clean to extend the life of the after-filter, make sure the machine is working normally.	

Warning : If maintenance advice is not followed it may cause the below issues

	<p>Maintenance and checks should be scheduled minimum every 2 weeks</p>
---	--

	<p></p> <p>DANGER FIRE RISK</p>	<p>If maintenance schedule is not adhered to, oil could accumulate, causing a fire risk.</p>
	<p></p> <p>DANGER MOTOR OVERHEATING</p>	<p>When the pre-filter is blocked (yellow/red light), there is no incoming air, which can cause the motor to over load and fail.</p>
	<p></p> <p>DANGER PRE-FILTER BLOCKAGE</p>	<p>If the pre-filter is not cleaned when required it can block, preventing incoming air flow problems as above.</p>
	<p></p> <p>DANGER AFTER-FILTER POPPING OUT OF SEAL DUE TO BLOCKAGE</p>	<p>The above situation can cause the tank to fill with oil and leak to the back side of the unit, the after-filter may be forced out of its seat by the pressure.</p>

CH1. PRODUCT DESCRIPTION

In metal cutting operations, materials are becoming more versatile, especially in high-speed machining, the toxic by product generated are becoming more harmful to human health. Contaminants can include aluminum, mercury and PCBs. The HSE has decided to set more stringent standards for fine particle emissions. For this reason, we have dedicated our R&D to offer air cleaners that can also recycle oil mist for reuse by capturing extremely small molecules and other toxic contents. We provide an effective solution for solving air quality problems while creating a comfortable working environment.

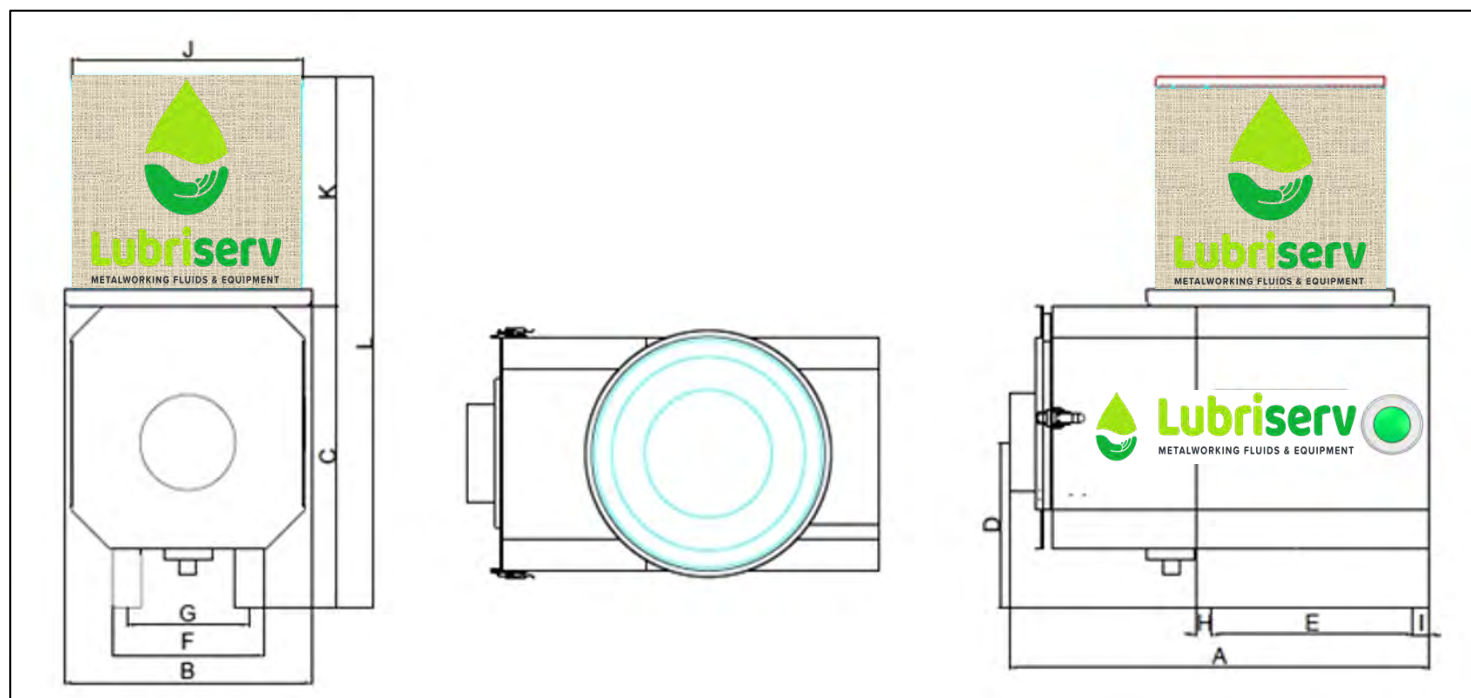
Our latest filter technology offers a high efficiency oil mist recycling machine, capable of filtering oil mist, fog, aerosols, oil smoke etc. The high precision innovative filter design complies with European standards to provide the optimum filtration with great recycling efficiency. Through pressure visualization, pressure gauge - digital LED indicator version. The air flow condition is continually monitored and digitized as a display to remind the user in advance that they are required to carry out maintenance or cleaning.



TYPICAL APPLICATIONS

- CNC Machining
- EDM machining factory
- Petrochemical factory
- Cold heading/forging
- Glass surface treatment factory
- Food processing and production factory
- Textile production
- Electronic manufacturing (clean rooms)

CH.2 SPECIFICATIONS



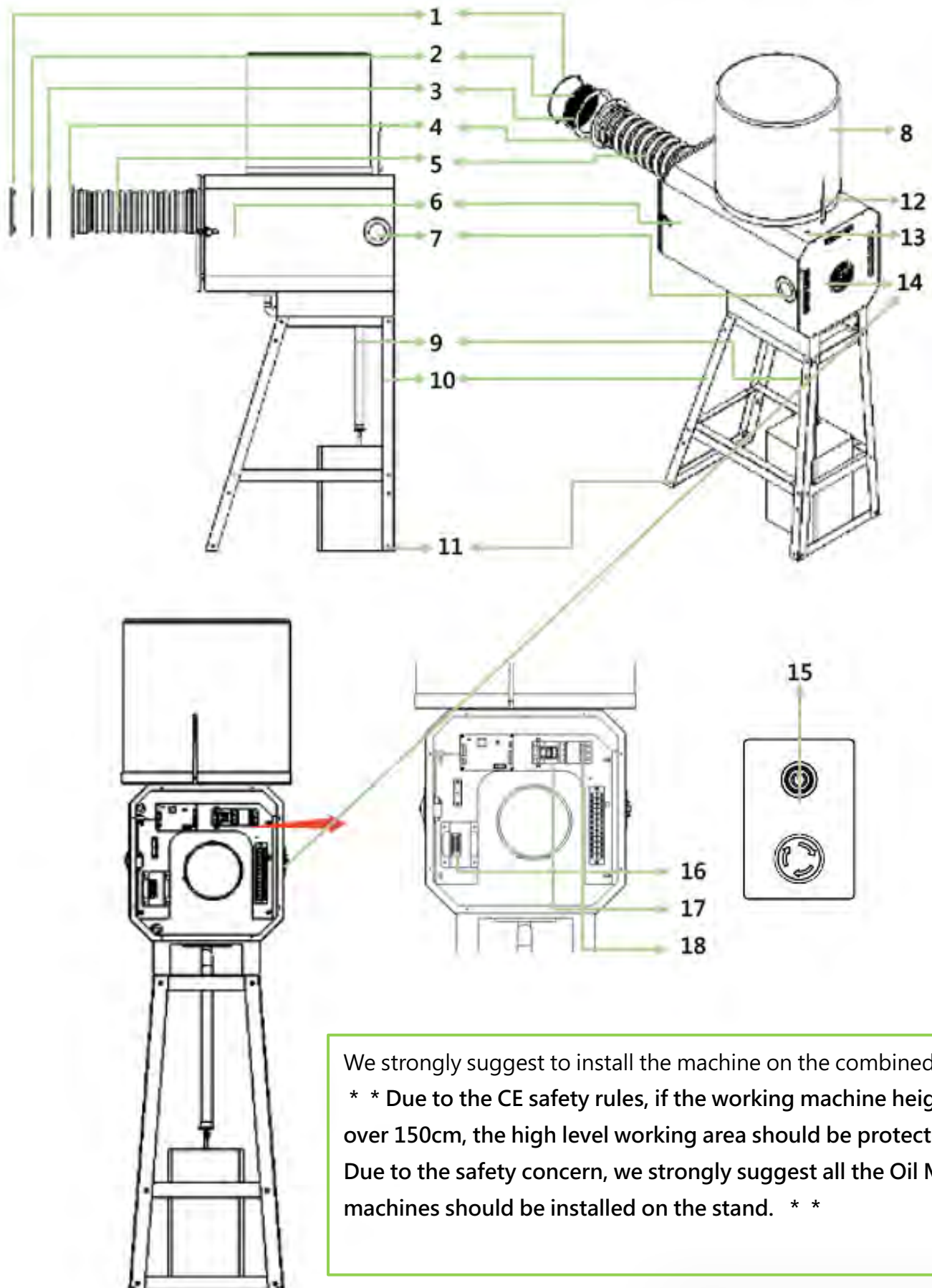
Model	A	B	C	D	E	F	G	H	I	J	K	L	Unit
LV – 10	621	369	435	253.5	295	209	162	25	25	φ 360	310	745	mm
LV – 20	646	369	464	253.5	310	234	187	25	25	φ 360	410	874	mm
LV – 30	750	450	513	279.3	363	284	237	30	35	φ 435	410	923	mm

		1 st - Pressure Meter	2 nd - Digital version
1	Pressure Visualization	V	
2	Cleaning Reminder		V
3	Block Interrupt		V
4	No Filter Reminder		V
5	Liquid Level Protection		V
6	Overheat Protection	V	V








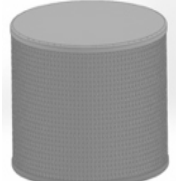
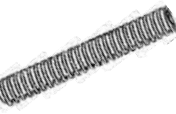


MODEL	Power source	Motor	Max flowrate m ³ /min	Static pressure kPa	Operating noise db(A)	Filter efficiency	Weight (Kg)	Inlet diameter (mm)	Air volume
LV-10	3PH 400V 50Hz	0.2 KW	9 / 12.8	0.75 / 1.13	64 / 67	Up to 99.5% EU E11 Class	41	Ø150	≤ 5m ³
LV-20		0.4 KW	18 / 21.5	1.08 / 1.74	65 / 68		46	Ø150	≤ 10m ³
LV-30		0.75 KW	28 / 32.5	1.42 / 1.82	68 / 73		63	Ø150	≤ 18m ³



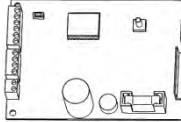





CH.3 PARTS DIAGRAM & TERMINOLOGY

3-1 Description of parts :



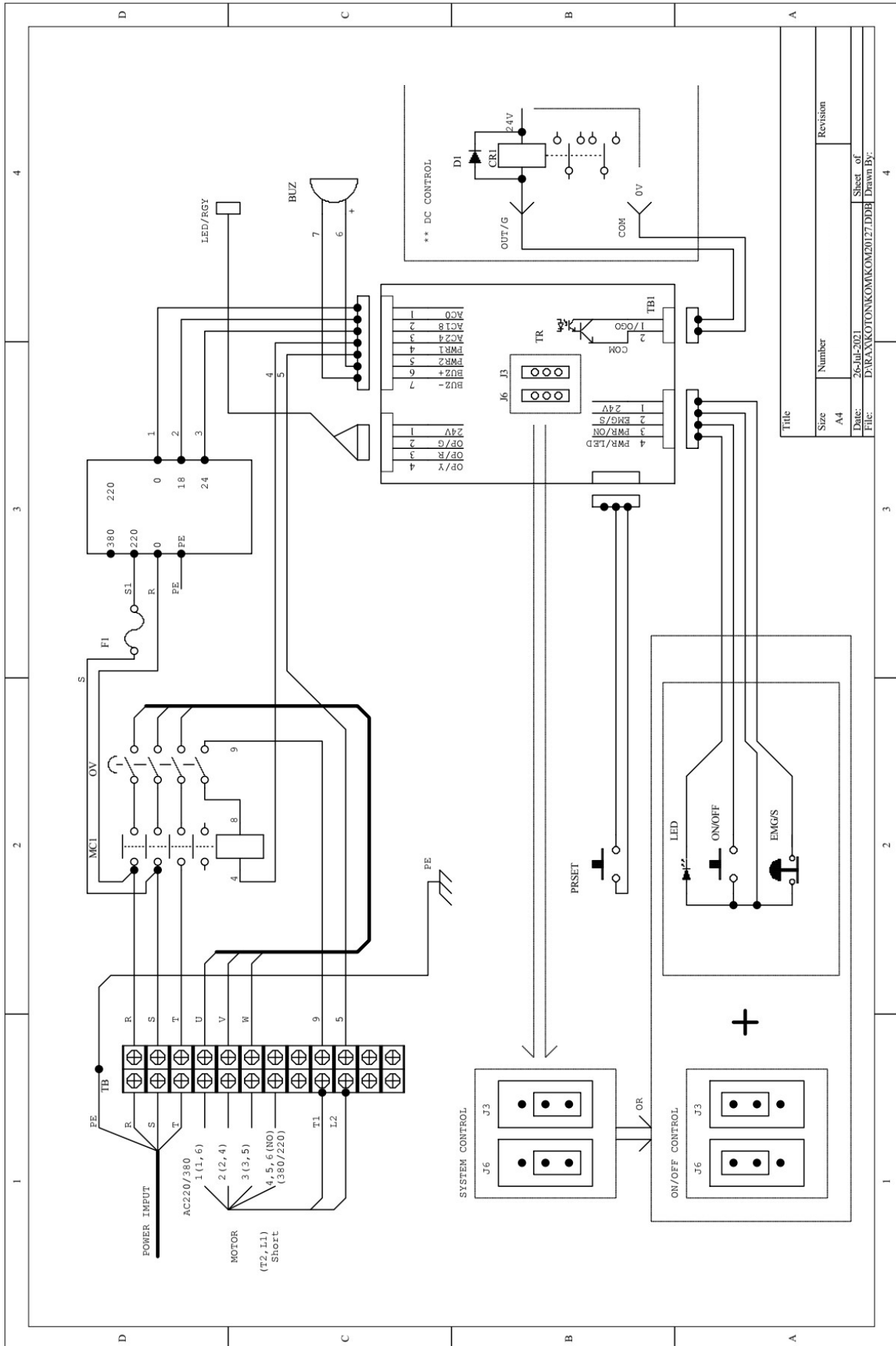
3-2 Machine part name :

	Part Description		Qty.	Model	LV - 10	LV - 20	LV - 30
1	Air inlet adaptor		1	Type	21100112		
2	O ring		1	Type	44500095		
3	Stainless steel sifting		1	Type	44500068		
4	Flexible tube clamp		2	Type	44500087		
				Outside	φ150		
5	Flexible tube		1	Type	44500080		
				Outside	φ150		
6	Pre-Filter		1	Type	32100033	32100036	32100039
				Outside	φ228	φ228	φ300
7	LED light		1	Type	21100110		
8	After-Filter		1	Type	32100051	32100054	32100057
				Outside	φ360*310L	φ360*410L	φ435*410L
9	Oil drain pipe		1	Type	HR- φ25.4		
10	Combination Stand		1	Type	21100180 Suitable for all models: Dimensions : 410*683* 850mm		
11	Anti-vibration mount		4	Type	44500072		

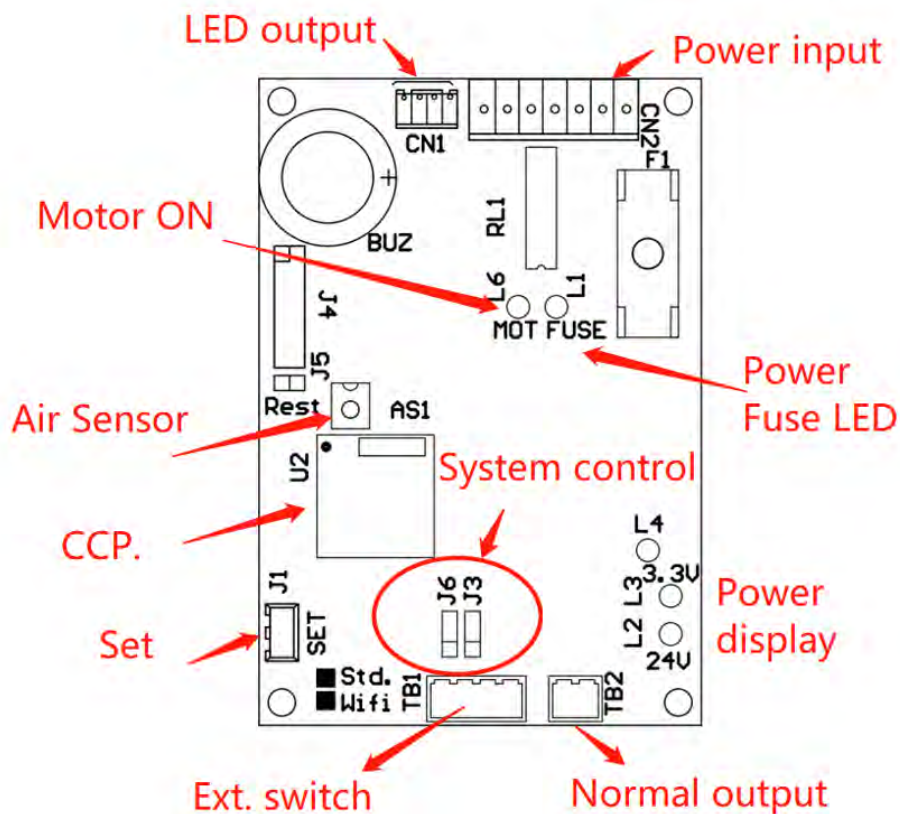
	Part Description	Qty.	Model	LV - 10	LV - 20	LV - 30
12	WIFI Antenna		1	Type	44500522 Optional system	
13	Set up button		1	Type	44500523 Metal push button	
14	Electrical control panel		1	Type	21100101	
15	Power Switch (New version)		1	Type	21100137	
15	Power Switch -1		1	Type	21100138 (Pressure meter using type)	
16	Transformer		1	Type	32100132 TBSW-1I-50VA22041501824	
17	Electro - magnetic contactor		1	Type	44500533~ 44500536	
18	Over relay		1	Type	44500538~ 44500541	

CH.4 DIAGRAM OF ELECTRICAL CONTROL PANEL

4-1 Diagram :

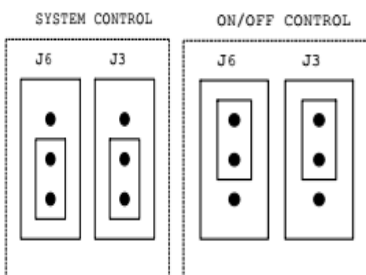


4-2 PCB Description :



4-3 Electrical control connection method:

A. Machine control by power switch or working machine system :

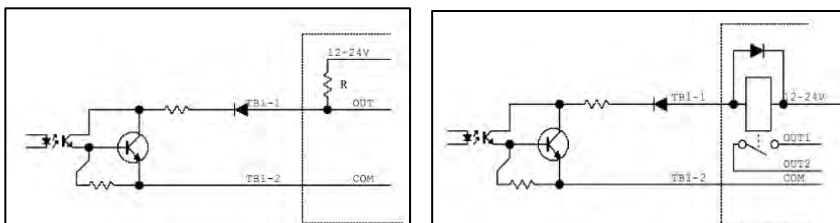


Short circuit J3, and J6 on the PCB :

System control : Control by machine system, could power on the oil mist machine in the same time.

Power switch control : Using power switch, manually control the oil mist machine.

B. Output oil mist machine signal :



There is an output signal on the PCB, please check the front pictures to know how to get the signal. The range of dotted line is connected the external wiring. When the oil mist machine is running normally, check the com point, it will be low voltage signal; if it' s abnormal, it will be the high voltage signal. The maximum voltage is 48V, the control current is 0.5A.

CH.5 LUBRIMIST MACHINE SETTING

(All new machines should be set before normal working)

5-1 Set up / resetting the machine:

After electrical connection, and installing the After-filter, **do NOT install the flexible tube yet**. Please make sure that this initial set up is completed at the same time, before continued use. POWER ON the machine → LED will show yellow color, and the motor rotates. (make sure the motor direction is clockwise).

Press & hold SET button → 1. LED flashes red light 5 times, and the alarm makes 5 short tones.

2. LED red light ON, and the alarm sounds a long tone.

3. LED red light flashes 3 times, and the alarm sounds 3 short tones.



Release the SET button then LED changes to green light ON.



Completely block the air inlet (e.g. hold a piece of card over inlet)

Press SET button, LED yellow light goes ON. Uncover inlet again.



Take off the top After-filter, and completely block the air outlet. (e.g. hold sheet of card over aperture)



Press "SET" button.



Set up is now complete, power off the machine automatically

5-2 Testing the machines :

Machine testing: (Make sure that the After-filter is installed – disconnect the flexible inlet hose)

A. Pre-filter blocked testing:

Power ON the machine → LED green light ON



Block the air inlet slowly → filter blocked percentage status

70%: LED yellow light flashing, the alarm makes 2 short tones.

90%: LED red light on, the alarm makes 3 short tones.

100%: LED red light on, the alarm makes long tone, automatically powers off the motor.

B. After-filter blocked test (Remove the top after-filter, half block/cover the air outlet aperture)

Power ON the machine → LED green light ON



Block the air inlet slowly → filter blocked percentage status

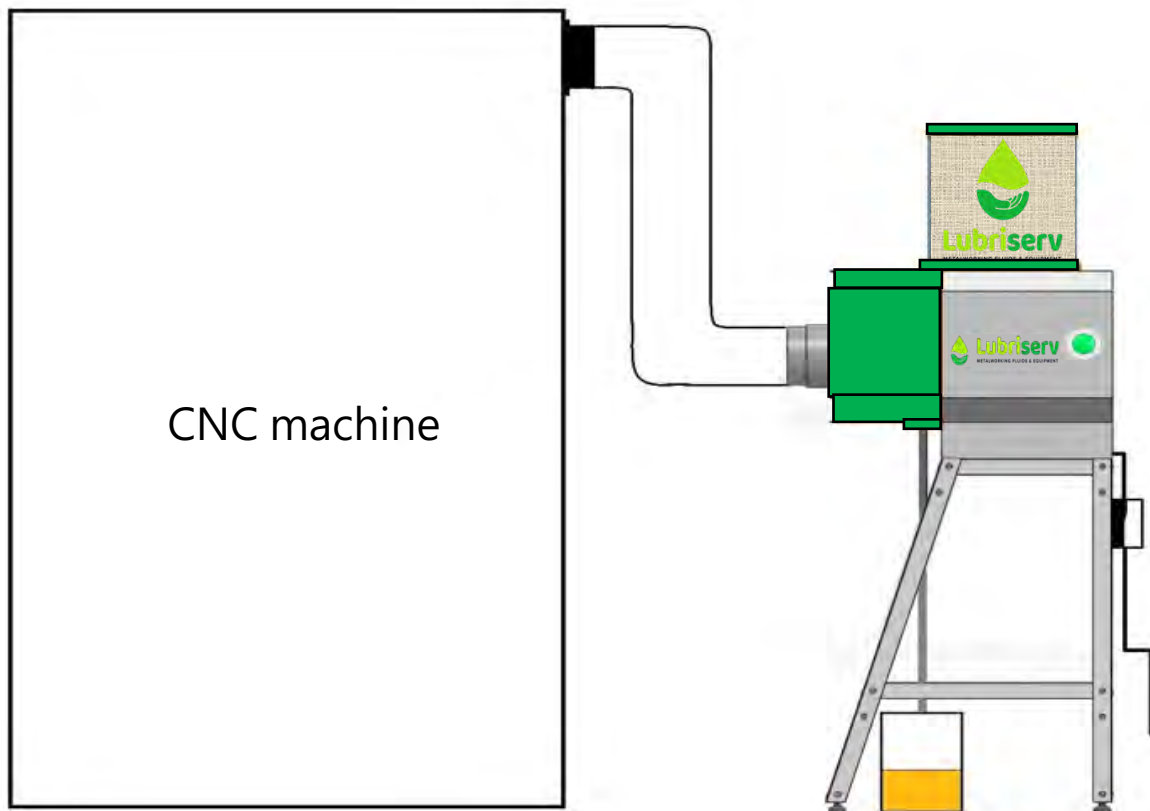
70%: LED yellow light flashing, the alarm makes 2 short tones.

90%: LED red light on, the alarm makes 3 short tones.

100% : LED red light on, the alarm makes long tone, automatically powers off the motor.

CH.6 STANDARD INSTALLATION GUIDE

6-1 We recommend for self-install to use the optional combination stand :

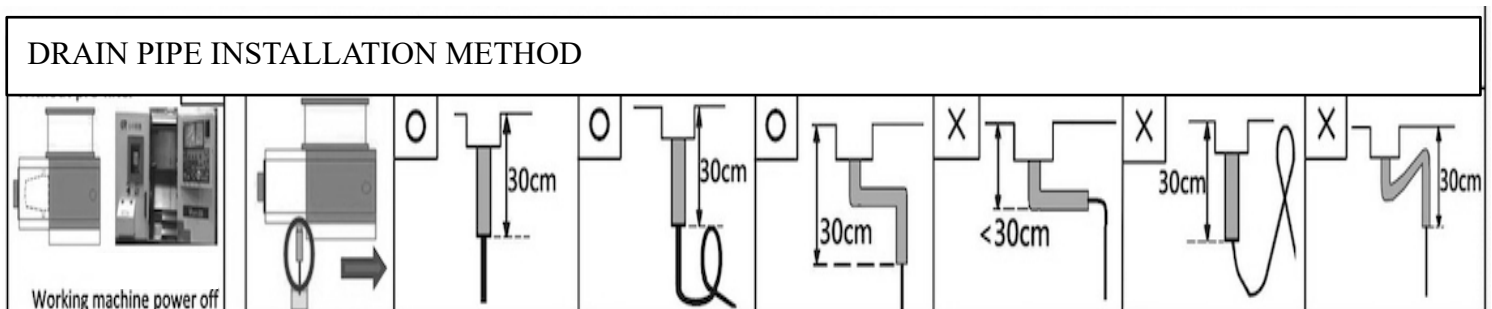


We suggest to install your Lubrimist unit on the optional stand mount.

* * Due to the CE safety rules, if the working machine height is over 150cm, and you require to mount the Lubrimist on top of the machine - the high-level working area should be protected. Due to the safety concerns when installing, we strongly suggest all the Oil Mist machines should be installed on the stand. * *

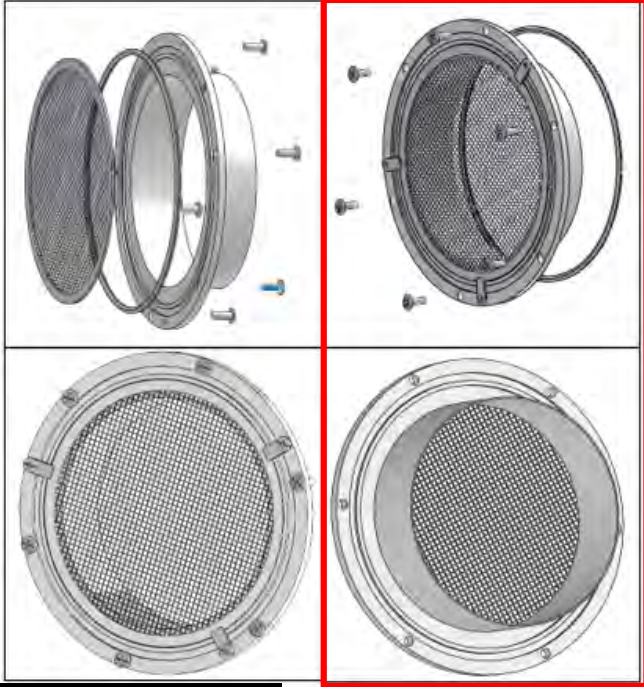
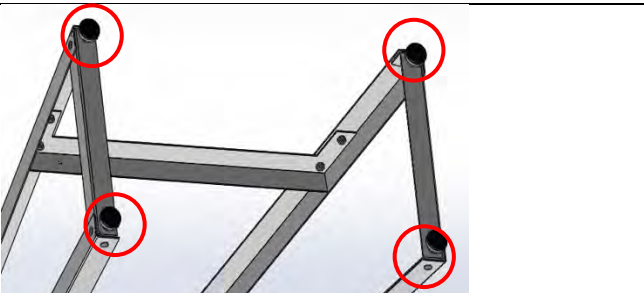

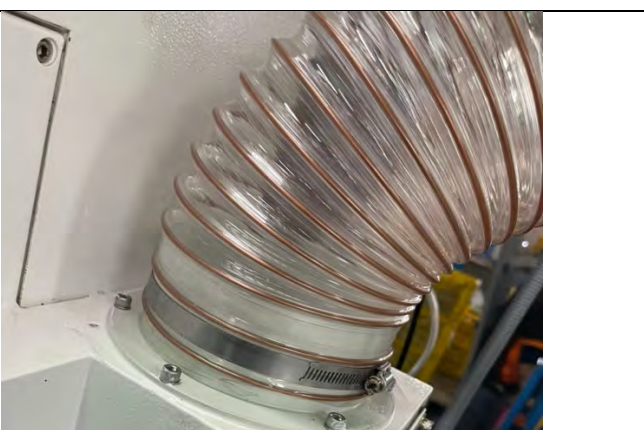
6-3 General Installation Notes :




- A. Installation must only be performed by an authorised technician who has carefully read the installation guide. This is to prevent against electric shock or machine damage.
- B. To maintain efficiency, the machine should be installed on a flat surface, and the bending positions of the oil drain pipe should be limited. **The oil drain pipe should be positioned as straight as possible, with no kinks or bends and the end of the pipe placed into a suitable waste container (e.g. 5L or 20L pail)**



- C. Due to the CE safety rules, If the CNC machine is higher than 150cm, follow the below advice:
- use a suitable secured ladder,
 - wear non-slip safety shoes, clean the oil from the machine, and use non slip matting
 - safeguard and tape off the working area
 - ensure at least 70cm around the working area for engineers.
- D. The electric wiring must comply with UK/European standards, the national electrical regulations and the installation guide.
- E. Do not break or use the conventional power wires, as this may lead to fire or electric shock. The Lubrimist air cleaner is wired for three-phase AC power source. For further electrical information, refer to the instruction label attached to the air cleaner.
- F. Do not change the electrical cable length or use an extension lead. In addition, do not use a shared socket together with other electrical devices.
- G. After installation, please check that the motor fan is rotating clockwise. It is necessary to perform running tests to ensure that oil exhaust circuit and electric supply are working normally.
**When the power is turned on, the light will flash for around 3 secs, then a steady Green Light will remain. **
- H. Check the following :
- Whether the motor rotating causes vibration.
 - The flexible tube is installed correctly, smooth, and without low spots where oil can collect.
 - When Pre and/or After-filter is blocked, the LED light changes and flashes with audible alarm.

6-4 Standard Installation Guide:

	<p>1. Locate a free area on top of the machine or in the side, usually in the right hand corner and away from any coolant/oil spray. Make a hole according to the hose size 152mm/198mm. This can be made using a hole saw or Jigsaw. (If you already have a hole on the top of your machine, you can skip this step.)</p> <p>2. Confirm the air inlet adaptor direction (from inside or from outside) From inside to outside, the stainless steel mesh is inside and can be removed for cleaning, the O ring on the outside between air inlet adaptor and machine metal sheet; if fitting on the outside, the O ring and the stainless steel mesh are between the adaptor and outer machine sheet so mesh can't be removed.</p>
<p>Inside to outside</p> <p>Outside to inside</p>	
	<p>3. For ease of cleaning the pre-filter, we strongly suggest installing the machine on the top of the stand. This method it doesn't require the anti-vibration mounts.</p>
	<p>4. Install the oil mist air cleaner on the anti-vibration mount using a socket or spanner. It doesn't need the anti-vibration mount, if the machine is installed on the stand.</p>
	<p>5. Put the flexible tube onto the air inlet adaptor (make sure the tube is pushed on all the way), then tighten the jubilee clip (the locked position should be on the spiral layer of the tube).</p>

	<p>6. Measure the length you need and cut it to size (use a sharp blade to cut the plastic and suitable wire cutter – electrical pliers to snip the wire spiral. Follow the step 5 to connect the flexible pipe to the air inlet adaptor</p>
	<p>7. Install the oil drain pipe under the oil mist machine. The oil drain pipe should not be kinked and able to freely drain downwards; the outlet pipe should be at least 30cm before reducing down as pictured on Page 15 and the end should be put into the oil vessel. Otherwise it will be easy to cause a blockage or a spill problem.</p>
<p>The power switch should be set up at the back of the stand or positioned away from liquids and oil.</p>	<p>8. Connect the Lubrimist unit to the power switch and connect the wires correctly. After checking the connected wires, turn the power on to check the motor direction, should be clockwise.</p>
	<p>To remove the front inlet panel:</p> <ol style="list-style-type: none"> 1. Open both of the side locks. 2. Pull up the door. 3. Move the bottom side out first. Then take off the door.

6-4: Installation Example :





CH. 7 MAINTENANCE

6-1 Pre-filter / After-filter clean or replacement guide:

- A. Please check the stainless mesh inlet on the CNC machine and the flexible duct is not blocking or collecting oil/metal fines every week – clean if required.
- B. Check the oil return pipe is straight and not blocked (no kinks or bends).
- C. Check / empty the storage oil tank regularly.

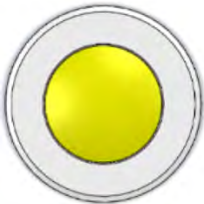


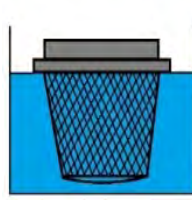

<p>The Lubrimist LV range comes with status LEDs for visual management</p> <p>◇ Green Light : Means the machine is working normally.</p>		
	<p>After-filter removal is tool free. Holding the machine with one hand, the other hand simply push the filter over. To replace with new filter, just press it back to the tray.</p>	
	<p>70% blocked: LED yellow light flashing, the beeper makes 2 short B-B.</p>	
	<p>90% blocked: LED red light flash, the beeper makes 3 short B-B-B. 100% blocked: LED red light on, the beeper makes long B----, automatically power off the motor. Please change the after-filter.</p>	

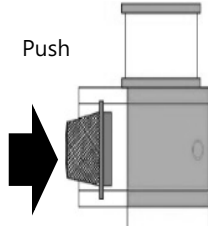
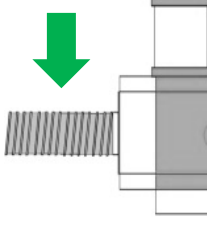

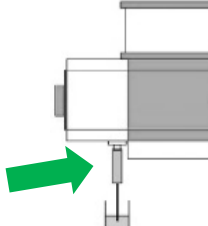
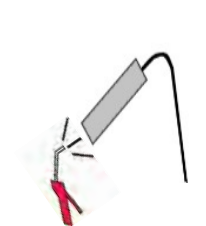
7-2 Pre-filter cleaning :

	<p>Pre-filter removal, wear gloves, reach the back side of the filter, and pull it from fitting. The dirty filter might be stiff to remove - you can also daub some Vaseline on the black rubber part. After removal of the pre-filter, do NOT power on the oil mist machine, otherwise the after-filter might get damaged.</p>	
	<p>The pre-filter should be checked at least once a week and cleaned if necessary with neutral cleaner. The cleaning time depends on the mist thickness, type, working time and flow rate. Future cleaning schedules can be determined once in use.</p>	
	<p>Ensure the pre-filter is thoroughly dry before replacing back into the machine so the after-filter doesn't get wet and damaged.</p>	
	<p>We suggest using industrial detergent to clean, ultrasonic machines are ideal to clean, or wash machines using detergent/surfactant chemicals. If using detergent/surfactant to clean, please do NOT soak the black seal part.</p>	

7-3 LUBRIMIST Air Cleaner maintenance steps:

- A. Please make sure to power off the machine before cleaning.
- B. Follow the 9 steps for cleaning pre-filter, maintain the inside of the machines. Please carry out the maintenance regularly, at least every one to two weeks.

	Step 1	Step 2	Step 3	Step 4
<p>LED</p> 				
<p>When LED lights Yellow it means that the pre-filter needs to be cleaned, please follow steps.</p>	<p>Remove if possible and clean our the oil and swarf from the air inlet mesh.</p>	<p>Wear protective gloves and remove the pre-filter. After removal, do NOT power on the Lubrimist unit.</p>	<p>Soak in neutral detergent, please do NOT soak the black foam seal. Treat seal with Vaseline.</p>	<p>After cleaning ensure the filter is thoroughly dry then put it back in the unit.</p>

Step 5	Step 6	Step 7	Step 8	Step 9
				
<p>Push back the pre-filter.</p>	<p>Undo the flexible hose</p>	<p>Clean the flexible hose and any swarf debris.</p>	<p>Take off the oil drain pipe</p>	<p>Clean inside the oil drain pipe ensuring there is no blockage.</p>

WARNING The following instructions are intended for qualified service personnel only. Disconnect power before servicing the unit.

	PROBLEM	CAUSE	SOLUTION
1	The motor is operating, but no air is drawn into the unit.	The fan is rotating in wrong direction. (The fan must be rotating clockwise.)	Turn off the power. Swap 2 of the R/S/T cables in the min power supply unit. Turn on the power again and make sure the fan is rotating clockwise.
2	The motor does not start after switching the power on.	A. Incorrect power voltage is supplied. B. Power switch is faulty.	A. Check whether the supplied power voltage is correct. B. Please contact us to replace the power switch.
3	Machine is making a loud noise.	A. The air inlet is jammed B. The air hose is deformed or squelched.	A. Check and clean the shielding net of the inlet. B. Check the position of the air hose to make sure the air is flowing smoothly.
4	Machine is strongly vibrating during operation.	A. Improper installation area. B. The oil mist collector is positioned without anti-vibration screws. C. The fan is rotating in wrong direction. (The fan must be rotating clockwise.)	A. The oil mist air cleaner must be installed on a proper area that is stable and vibration-resistant. B. Anti-vibration screws are necessary for positioning the oil mist air cleaner on a machine (It is a standard accessory in the package.) C. Turn off the power. Swap each 2 of the R/S/T cables in the main power supply unit. Turn on the power again and make sure the fan is rotating clockwise.
5	Inlet gauze or Pre-Filter blocked	A. The gauze or pre-filter has not been cleaned. B. The swarf particles are inside the filter.	A. The inlet gauze & Pre-filter needs to be checked/cleaned at least every week. If used in a heavy cutting area, it might need cleaning more frequent. B. Swarf particles must be cleaned out
6	After-filter blocked	A. Drain out oil pipe is blocked. B. Drain out pipe is bent , not straight down. C. The Lubrimist pre-filter area compartment is flooded, making the oil flow over to the fan area and wet the after-filter. D. Prolonged use	A. Check and clean the drain out oil pipe regularly, make sure it's unobstructed. B. Checking the drain oil pipe it should be straight going down smoothly, if there is any part bending, it will cause the air lock, and prevent collected oil draining out.. C. The above problem will cause the oil to flood to the fan area. When the fan is rotating, the oil will spread onto the after-filter, and block it. (It will then need replacing)

	PROBLEM	CAUSE	SOLUTION
7	Light is yellow or red	Air inlet is blocked, or the pre-filter and after-filter is blocked.	A. Clean the machine air inlet, including the flexible tube, and also the air inlet adaptor mesh. B. Clean the pre-filter or change the after-filter.
8	Light on Red and motor has immediately shutdown	A. Pre-filter or after-filter is blocked. B. The motor is broken.	A. Clean the pre-filter. B. After installing a clean pre-filter, it still shows error message, it means the after-filter needs to be changed. C. Check the motor steps as problem list #12.
9	Machine has no pressure	Air pipe has come off	Check the machine PCB pressure detection, if the air pipe is connected.
10	Could NOT power on (LED not lit up)	A. Emergency stop is unreleased. B. ON/OFF button is broken. C. The cable is not connected.	A. If the emergency stop is unreleased, turn right to release it. B. Check the ON/OFF cable hasn't disconnected, if not, it might be the ON/OFF switch problem. C. Check the main power steps, please check problem list #11.
11	No electrical power	A. Without main power B. The fuse/RCD is blown/tripped.	A. Check the cable, and electromagnetic switch (LED on the PCB should be light on green) B. If the Lubrimist is controlled by the CNC system, check the LED on the PCB, if it light on green or not. C. Control by ON/OFF switch, release the emergency stop button, and the LED on the PCB will light up green. D. After changing the fuses on the wiring panel and the PCB, if still not working, it means the PCB is broken, please change it. (When changing the PCB, it should be reset as the CH.5 steps.)
12	LED is lit up, but the motor is not running	A. The oil mist machine pre-filter area is flooded. B. Phases failure. C. Electromagnetic switch tripped	A. Check the pre-filter area, and clean the pre-filter. Also check the drain out oil pipe is straight down smoothly. B. Check the 3 phases voltage, if there is any phase failure, it will easily cause damage to the motor or PCB. C. Check the over relay - if tripped, press the black {R} on the side to reset. (wait for 5mins.) D. If the motor temperature control switch tripped, power off and wait 2hrs.

CH.9 WARRANTY TERMS & CONDITIONS

1. The warranty is held by the customer and shall be shown when a service is required.
2. The warranty is effective only when it is filled completely or stamped by the distributor. If the warranty is lost, the warranty period from the invoice date.
3. During the warranty period, if a problem is due to manufacturing or poor materials, we will provide free repair or part replacement.
4. The warranty period is one year for main unit, except the after filter.
5. During the warranty period, if any of the following conditions occur, we will charge for the maintenance cost:
 - A. Improper operation or use in a special working environment, example: high temperature or aggressive chemical environments.
 - B. Problem cause by natural disaster.
 - C. Self-repair or self-modification breakage or trouble caused during transportation.
 - D. Problem caused by abnormal power supply or incorrect voltage or frequency.
 - E. Used in a location containing too much dust or oil dust without proper maintenance. (Including the damage because of not cleaning the pre-filter)
6. If any of the following conditions occur, we will charge the actual costs:
 - A. The warranty period is over.
 - B. The warranty is not shown.
 - C. The contents of warranty are illegible not cause by original writer which cannot be read or modified.
 - D. The contents of warranty such as model and serial number, do not comply with the actual product.
 - E. Problem is caused by natural disaster.
7. When installing the oil mist air collector, if service space and personnel safety are not considered, it may result in service difficulty. The user shall be responsible for the cost of dismantling.
8. If the replacement part is not available after five years from the date of purchase, we will provide the equivalent for repair. However, in some cases, we are sorry for not being able to provide an equivalent for replacement.
9. The warranty is effective only for the original purchaser. If the product is resold, the warranty will be terminated.

Model :	Serial No. of machine :
Vendor :	TEL :
Machine install address :	
Selling date :	Warranty period :
Distributor :	TEL :
Vendor: Lubriserv	
Address: Lorridge Farm Est, Berkeley Heath, Gloucestershire. GL13 9EU	
TEL : 01453 810379	E-mail: info@lubriserv.com
Quality Assurance Signature :	

Annex 1 – Maintenance Record

A. Daily maintenance (10mins) : **Make sure power is off before any maintenance**

Item	Check Point	Examiner	Supervisor
Air inlet & the tube	Clean the air inlet and check the flexible duct is clear		
Drain out pipe and oil tank	Check/empty the waste oil tank and also check oil outlet drain pipe		
Appearance	Appearance is clean, free from leaks		
Fixed screws	Check the machine fixed screws, all tubes, pipes are stable.		
Power on the machine to check the pressure or LED light	<ol style="list-style-type: none"> 1. If LED status light shows yellow light it means pre-filter needs to be cleaned. 2. LED shows red light, it indicates blockage. 		

B. Weekly maintenance (30mins) : **Make sure power is off before any maintenance**

Item	Check Point	Examiner	Supervisor
Clean the air inlet	Clean the swarf debris near the air inlet		
Clean the pre-filter	<ol style="list-style-type: none"> 1. Take out the pre-filter, and soak in neutral detergent. 2. Before replacing, dry the pre-filter from inside ensuring its thoroughly dry before, installing back to the machine. 		

Notes Notes



Lubriserv

METALWORKING FLUIDS & EQUIPMENT

Lubriserv
Lorridge Farm Estate
Berkeley Heath
Gloucestershire
GL13 9EU

Tel: 01453 810379
Email: info@lubriserv.com