

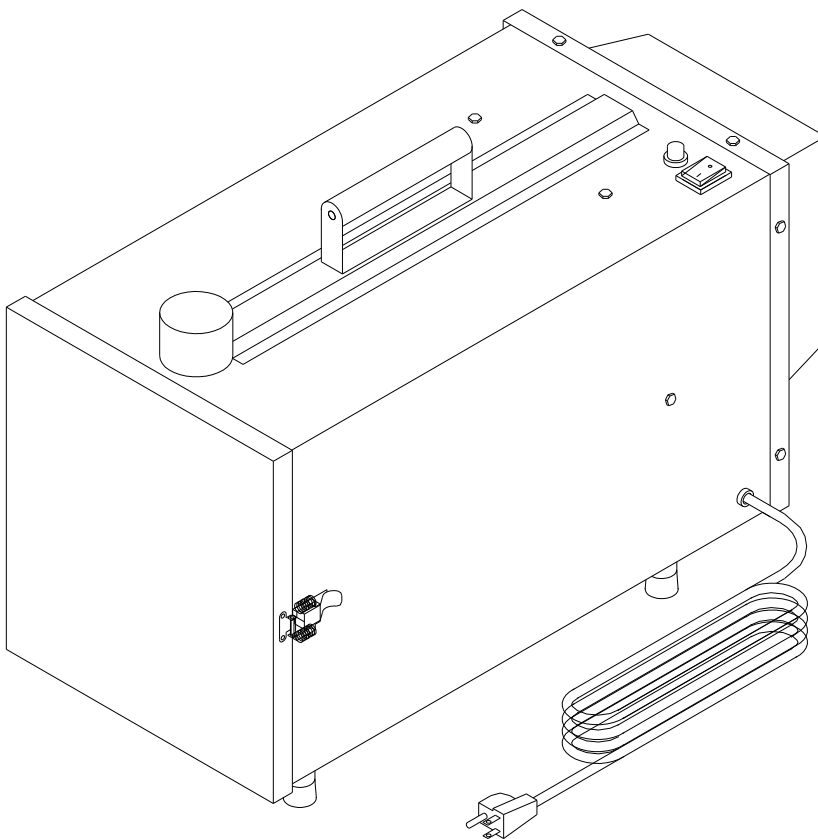
# W270

WE-100

13-1-09

# INSTRUCTION MANUAL

PORTABLE WELDING EXTRACTOR  
MODEL: WE-100



- ❖ Please follow the rules described in this Manual when using the product.
- ❖ The product has certain level of hazard; please follow this Operation Manual to avoid the hazard from occurring.

## “PORTABLE WELDING EXTRACTOR”

Model No.	WE-100	Unit
Motor	800W x 2 pcs	WATT
C.F.M.	240	FT <sup>3</sup> /MIN
Air Suction	2.5	INCH
Packing Size	51.5 x 47.5 x 80.5	CM
Net Weight/Gross Weight	30.2 / 32.2	KGS

\*Importer: \_\_\_\_\_

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## **Safety Rules**

Warning! Please use this product carefully to effectively avoid any possible danger resulting from using.

Please observe the following safety regulations to avoid bodily injury due to electrocution during use.

Read this Manual carefully before operating the product and preserve the Operation Manual properly.

1. Keep the cleanliness of the working environment.
  - (1) A disorderly working environment will cause inconvenience and danger during operation.
2. Please check if the working environment is suitable for using the product.
  - (1) Do not use the product under a humid environment.
  - (2) Please use the product under a good working environment to reduce risks.
  - (3) Do not use the product in flammable gas or liquid environment to avoid causing danger.
3. Please keep other persons from approaching the product to avoid causing danger, except for the operator.
  - (1) Do not let children get close to the product. All wires used by the product shall be safely located to prevent children from touching the electrical wire.
4. All tools shall be safely stored.
  - (1) When the tools are not used, please store them in a dry place safely beyond the reach of children to prevent others from accessing as to cause danger.
5. If the machine breaks down, inform a service technician. Do not attempt to repair to avoid damaging the machine.
6. When using the product, be sure to put on welding suit and mask.
7. Use the electrical wires correctly.
  - (1) During use, do not drag the electrical wires with force and avoid using these wires if fraying or current leakage occurs to avoid hurting the operator.
8. When replacing the parts, confirm that the machine is under power shutoff status.

- (1) Please check if the switch is in “on” or “off” status. Do not conduct the replacement when the machine is running. To replace parts or filter material, please ensure that the switch is in “off” status.
9. Use the power cord correctly. The total length of power cord shall not be over 4M to avoid low power due to voltage drop and to prevent hazard.

#### 10. Warning

- (1) When connecting the product, it is recommended to operate according to the requirements of Operation Manual to avoid injuries.

#### 11. Care and Maintenance

- (1) Please confirm that the parts/accessories have been fully assembled and will not affect the machine operation.
- (2) Please check if the machine is operated normally.
- (3) Please replace the damaged parts or accessories by the instructions of the Manual. If the said instructions are not specified in the Manual, then ask professional technician to carry out the tool maintenance or replacement.
- (4) The electrical specifications of this machine meet the safety requirements, and the maintenance shall be carried out by professional technician. The original manufacturer’s parts and accessories shall be used to avoid injuries from occurring.
- (5) If any problem happens, contact your dealer immediately.

## **Description of Portable Welding Extractor Safety Rules**

The Portable Welding Extractor may cause danger if it is operated incorrectly. Therefore, the product must be used cautiously to avoid causing hazard or damage. Unnecessary injuries may occur if failing to follow the instructions of the Safety Rules Manual. Be sure to put on protection equipment or suit that can protect your body, such as protection equipment, helmet, and eye mask to avoid injuries from occurring. If any doubt for using or any unfitness occurs during use, be sure to stop the operation immediately. Please keep in mind that the user shall be liable for using according to the specified safety rules so as to operate the machine correctly.

1. Read this Manual carefully before operating the product.
2. Be sure to follow local electrical and safety regulations and observe the electrical safety standards practiced in the relevant area. All electrical wire connections and installation shall be carried out by a professional technician.
3. Do not operate the product near flammable materials, as sparks may ignite these materials and cause explosion. Please confirm there aren't any flammables near around the working site to avoid hazard.
4. This product is suitable for collecting smoke and welding oil gas. Do not use it in collecting iron chips and dust at the same time to avoid producing sparks.
5. During replacing of the parts or filter materials, check the switch is disconnected.
6. Do not kink the power cord and keep it away from oil, chemicals or flammables.
7. Check if the voltage, phase count and earthing wire fit the machine.
8. When the fan blades are operated at high-speed, do not reach hand near these blades to prevent finger from breaking or clothes/necktie from getting caught. Do not put the hand or foreign matter into the air inlet to avoid getting caught due to the high-speed rotation of fan blades.
9. When not in use, all air inlets of Welding Smoke Treatment Machine shall be covered.

## **Packing and Assembly**

1. The machine should be packed and dismantled carefully.
2. Check if the machine and components are consistent with those indicated in the Parts List.
3. The Smoke Treatment Machine shall be assembled according to the attached Decomposition Diagram.
4. If any doubt arises or when the components are incomplete, please contact your dealer.

Warning: Do not connect the Welding Smoke Treatment Machine before finishing the assembly and confirm you have read and understood all of the precautions stated in the

Manual.

Notice: For correct assembly and Parts List, please refer to the Installation Diagram.

## Machine Operation

1. Purpose: The Portable Welding Extractor is specially suitable for treating the smoke generated during ordinary welding processing work, which can effectively collect and screen the smoke resulting from the welding work in maintaining the air quality of the working environment.
2. Instructions before starting the machine:
  - (1) Before starting the machine, be sure to read this Manual carefully.
  - (2) Before starting the machine, check if relevant safety protection measures have been taken according to the Manual.
  - (3) Before starting the machine, watch the motor turning direction according to the instruction of arrow direction.

## Moving and Transportation

The machine weighs approximately 30 kgs. **Do not move the unit without the help of others to avoid causing danger.**

## Electrical Installation

1. Power Connection
  - a. Please confirm that the power is properly connected under normal power supply condition. It is recommended to provide manual shutdown device before connecting power.
  - b. It is recommended to protect the control equipment with suitable grade of fuse, and the length of fuse and power cord shall not be over **3M**.
2. Shutdown:
  - a. Please disconnect power by manual method.

b. When stopping operation, check if the switch is under off status.

3. Earthing Wire:

Connect yellow/green wires to the earthing wire power jack. Confirm that the earthing wire has been properly connected before connecting main power cord to the machine at all times. **<Warning!> Do not disconnect the wiring jack before cutting off power!**

4. Power Installation and Storage:

The electrical power is configured as following. If the power is beyond the scope stated below, then it is required to ensure that the power is well arranged and safe in performance.

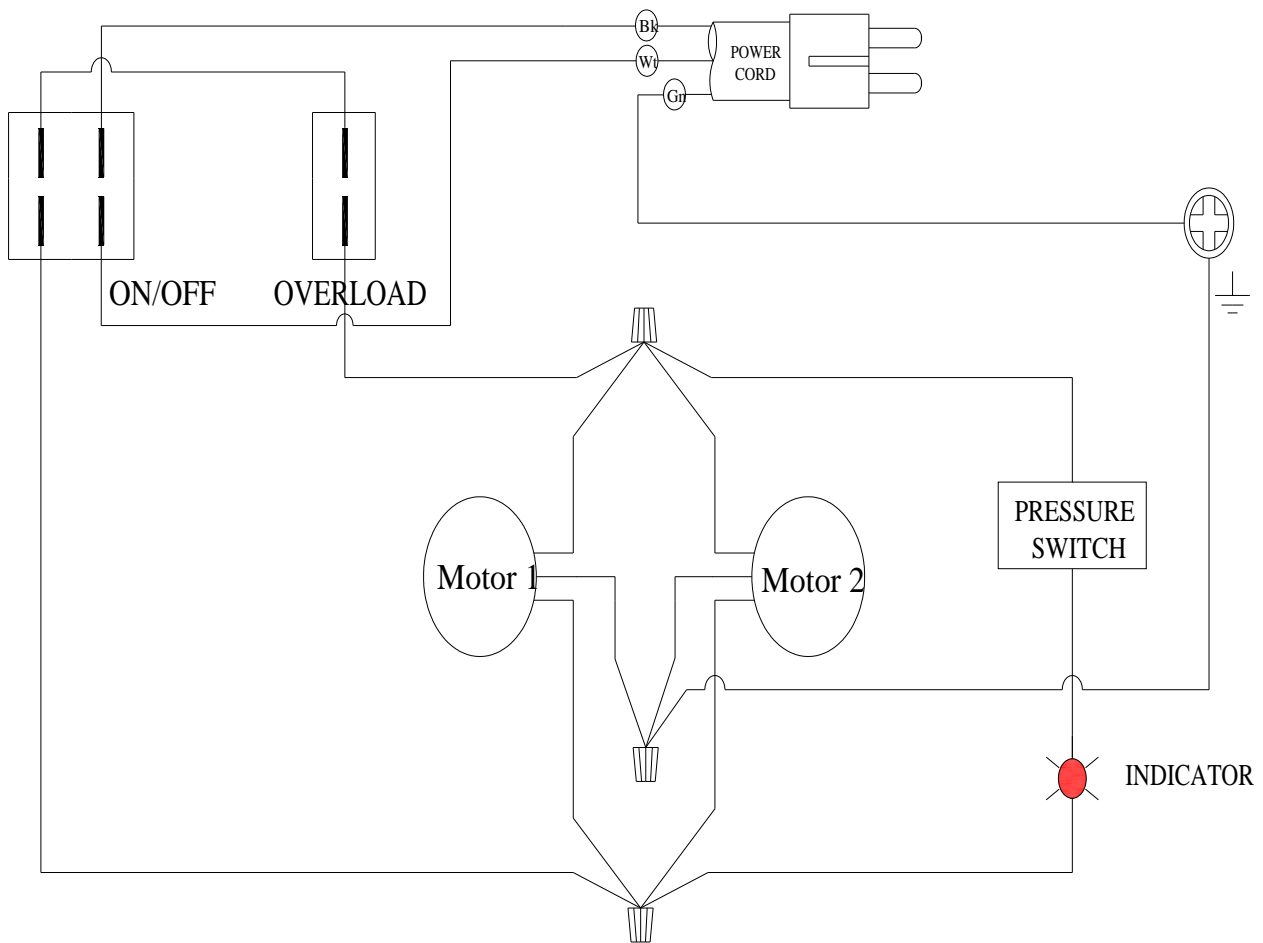
(1) Ambient temperature: Between  $+5^{\circ}\text{C}$  ~  $+55^{\circ}\text{C}$ . If the time is over 24 hours, then the ambient average temperature shall not be over  $+50^{\circ}\text{C}$ .

(2) Humidity: Between 30% ~ 95%

(3) Altitude: 1,000 meters

(4) Moving and Storing:  $-25^{\circ}\text{C}$  ~  $+55^{\circ}\text{C}$ . For short-time storage (less than 24 hours), the storage temperature can be up to  $70^{\circ}\text{C}$ .

## Electric Circuit Diagram

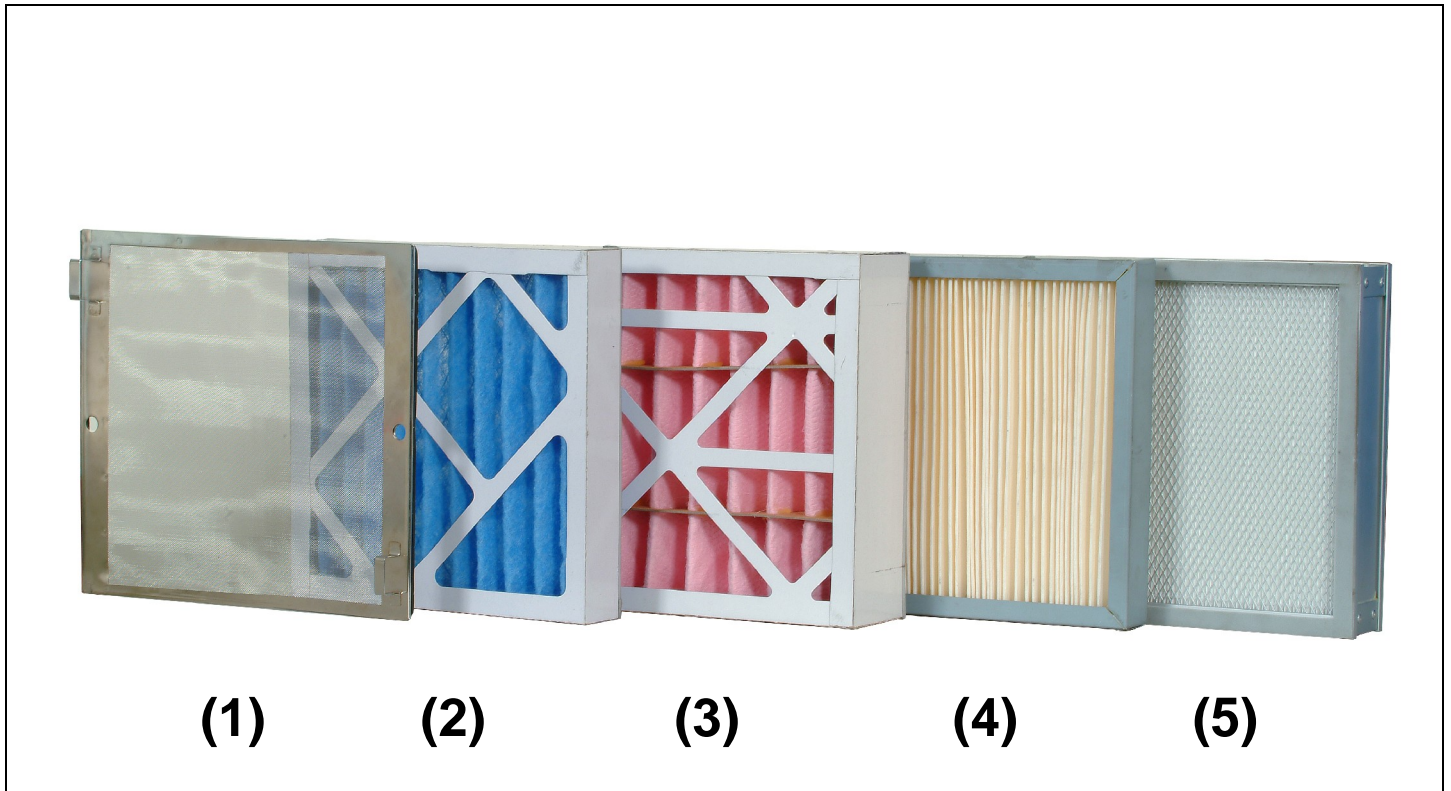


## Operation

1. To ensure satisfactory performance for the Welding Smoke Treatment Machine, please confirm the air volume, power and the matching table of the Welding Smoke Treatment Machine.
2. Connect power according to *Electrical Installation* after installing the Welding Smoke Treatment Machine and the table, and disconnect power according to *Electrical Installation* when the machine is not used.
3. The Welding Smoke Treatment Machine shall be turned on and off by pushing I/O button. Under normal operation status, use such I/O button to turn on or off the Smoke Treatment Machine.



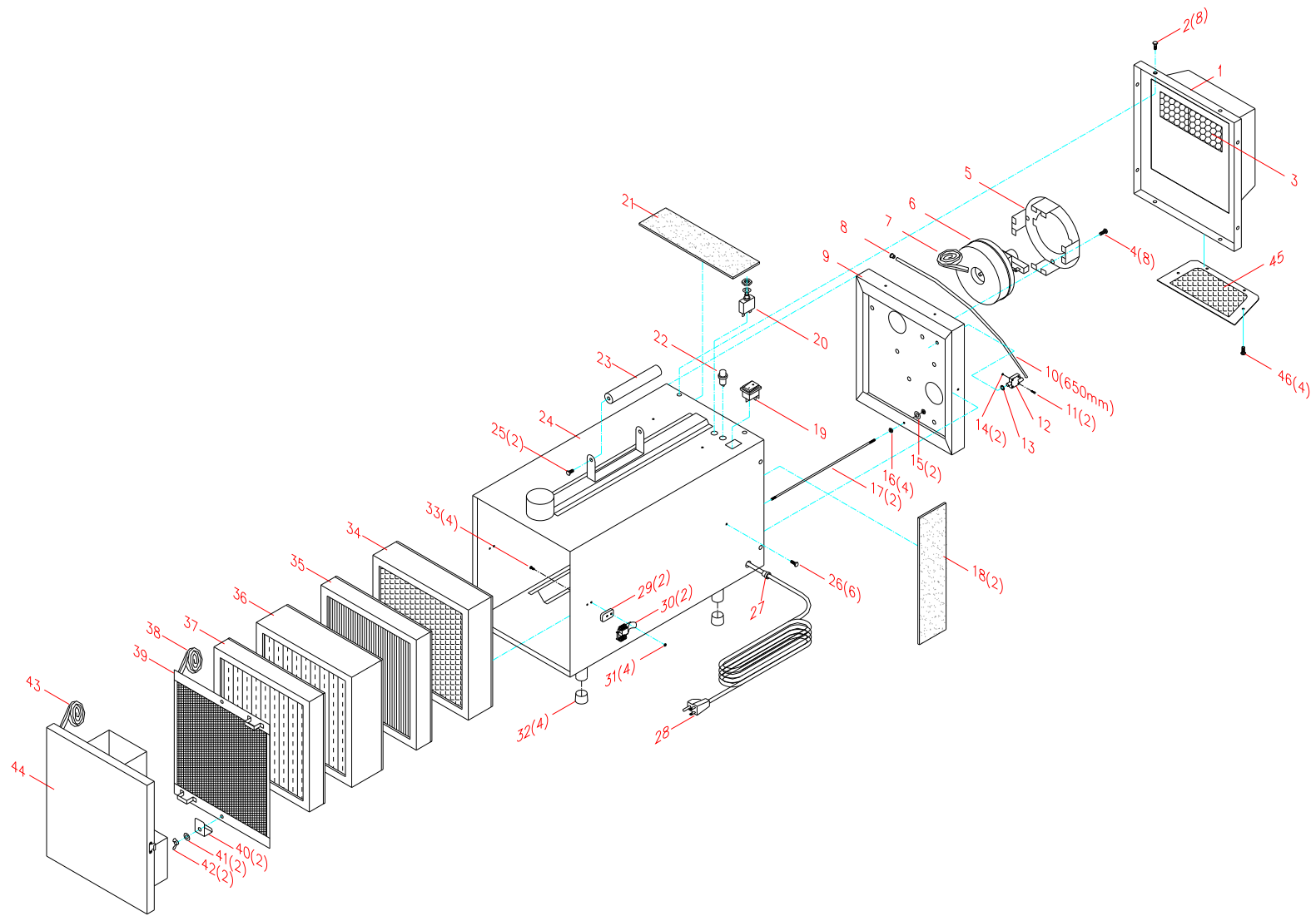
## Description of Filters



- (1) **STAINLESS FILTER** captures up to 95% of the sparks and steel chips down to 1 – 2 micron.
- (2) **PREFILTER** captures 35% of the 2 – 10 micron small particles and it absorbs oil which extends the lives of the PLEATED FILTER & HEPA FILTER.
- (3) **PREFILTER** captures 85% of the 1 – 2 micron small particles and it absorbs oil which extends the lives of the PLEATED FILTER & HEPA FILTER.
- (4) **PLEATED FILTER** to filter fine dusts.
- (5) **PLEATED HEPA FILTER** captures up to 99.97% of the 0.3 micron noxious fumes and provides better working environment.

※ **PLEATED FILTER & HEPA FILTER** can be reused after cleaning with compressed air.

# WE-100 Decomposition Diagram and Parts List

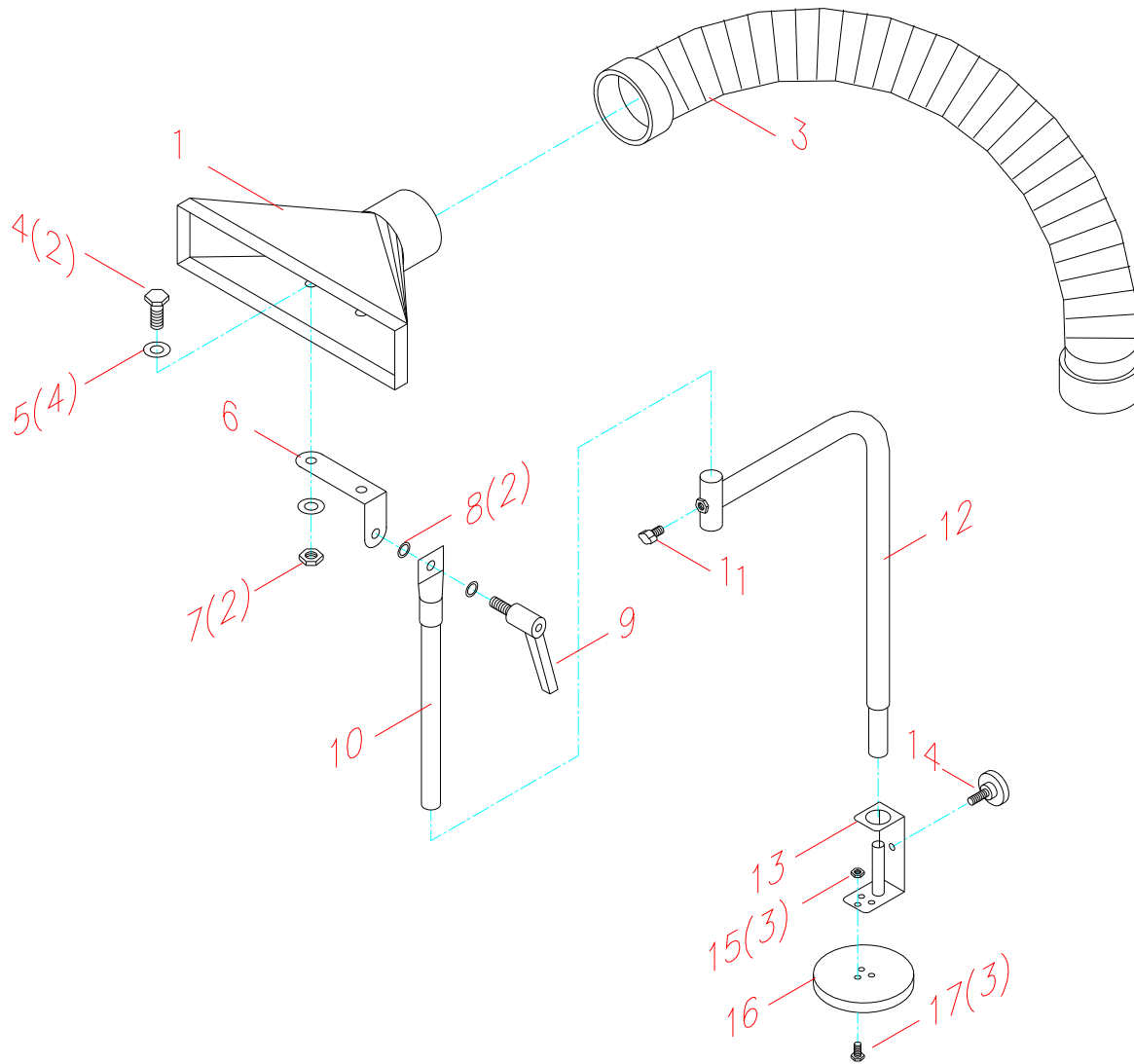


## Parts List for WE-100

Ref No	Part Name	Specification	Q'ty
1	Silencer		1
2	Philips Head Screw	M6*20	8
3	Flat Noise Foam	350*315*10mm	1
4	Philips Head Screw	M6*70	8
5	Motor Fixing Base		2
6	Brush Motor	800W/120V	2
7	Foam Tape	3*6*455mm	2
8	Fixed Pipe Cover	SB-10	1
9	Motor Base		1
10	Transparent Pipe	ψ5*ψ7*650mm	1
11	Inner Hex Screw	M2*20mm	2
12	Pressure Gauge	MDS-3(0~2"H2O)	1
13	Pressure Gauge Ring	GM-0705	1
14	Hex Nut	M2	2
15	Flat Washer	1/4"*OD19*2t	2
16	Hex Nut	M6	4
17	Filter Fixing Shaft	M6	2
18	Flat Noise Foam	340*120*10mm	2

Ref No	Part Name	Specification	Q'ty
19	Switch	TR-26	1
20	Overload Protector	50HZ-7A	1
21	Flat Noise Foam	305*120*10mm	1
22	Indicator (Red)	120VAG(ψ14)	1
23	Handle		1
24	Cabinet		1
25	Truss Head Philips Screw	1/4"*3/4"	2
26	Round Head Philips Screw	#10*5/8"	6
27	Cord Buckle	6R1	1
28	Cord	14AWG*3C*3.3M	1
29	Door Buckle Base		2
30	Dual Spring Buckle	42#	2
31	Hex Nut	M3	4
32	Cushion	1" Outer Cover	4
33	Countersunk Philips Head Screw	M3*15mm	4
34	HEPA Filter	99.97%	1
35	Pleated Filter	45%	1
36	85% Prefilter	85%	1
37	35% Prefilter	35%	1

Ref No	Part Name	Specification	Q'ty
38	Foam Tape	3*6*1300mm	1
39	Stainless Filter		1
40	Filter Fixing Base		2
41	Flat Washer	1/4"*OD19*2t	2
42	Wing Nut	M6	2
43	Foam Tape	3*6*1360mm	1
44	Front Cover		1
45	Silencer Outlet Cover		1
46	Metalsheet Screw	M4.2*12	4



## Parts List for WE-100 Accessory

Ref No	Part Name	Specification	Q'ty
1	Air Suction Hood		1
3	PVC Hose	2-1/2*3M	1
4	Hex Screw	5/16"*3/4"	2
5	Flat Washer	5/16" OD18*2t	4
6	Hood Supporting Plate		1
7	Hex Nut	5/16"	2
8	Spring Washer	5/16"	2
9	Handle	5/16"*1	1
10	Hood Supporting Pipe		1
11	Wing Screw	5/16"*5/8"	1
12	L-shape Pipe		1
13	Supporting Plate		1
14	Pipe Fixing Knob	5/16"*1"Bolt	1
15	Hex Nut	3/16"	3
16	Magnet	G23	1
17	Philips Head Screw	3/16"*3*8"	3