

# **LINEAR AIR PUMP**

**Oil-Less Compressor**

## **Operation & Maintenance Manual**

**IMPORTANT :** PLEASE READ THIS MANUAL AND SAVE FOR FURTHER REFERENCE.



- \*High Efficiency.
- \*Low Noise level.
- \*Smooth Air Flow.
- \*Easy Maintenance.
- \*Compact and Powerful.
- \*No Lubrication Required.



**ISO 9001:2008**

Thank you for purchasing this product ,It is manufactured to the highest standards using quality materials. Please follow all recommended maintenance, operational and safety instructions and You will receive years of trouble free service.

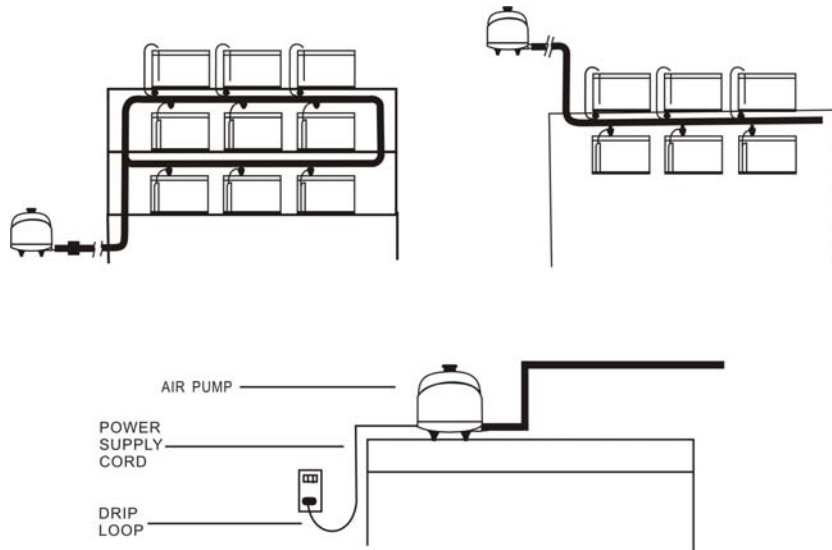
# WARNING

- ※ **IMPORTANT SAFEGUARDS—READ AND FOLLOW ALL SAFETY INSTRUCTIONS**
- ※ **TO REPLACE OR CHANGE ANY OF THE PARTS REFERRED IN THE SERVICE MANUAL, WE STRONGLY RECOMMEND YOU CONTACT AN AUTHORIZED TECHNICIAN.**

## **DANGER**

To avoid possible equipment electric shock, special care should be taken when the pump is used as industrial equipment. For each of the following situations, do not attempt repairs yourself, return the air pump to an authorized service facility for servicing, or discard the pump.

- 1) If the pump falls into the water, **DO NOT REACH FOR IT**. First unplug the pump, and then retrieve it. If the pump's electrical components get wet, unplug the pump immediately.
- 2) Carefully examine the air pump after installation. It should **NOT** be plugged in if there is water on parts that are not intended to be wet.
- 3) Do not operate if the cord or plug is damaged, or if the pump is malfunctioning, dropped, or damaged in any way.
- 4) To prevent the plug or electrical outlet getting wet, position the sewage tank and stand to one side of a wall mounted outlet. A "drip loop" shown in the figure below, should be arranged for each cord connecting an air pump to an electrical outlet. The "drip loop" is that part of the cord below the level of the outlet or connector if an extension cord is used. The "drip loop" prevents water traveling along the cord and coming into contact with outlet. If the plug or outlet does get wet, **DO NOT UNPLUG THE CORD**; Disconnect the fuse or circuit breaker supplying power to the pump. Then unplug and examine for the presence of water in the outlet.
- 5) Do not use the pump near volatile liquids such as gasoline, thinners, etc., as this creates the possibility of an explosion.



- 6) Safety switch system(only in DBMX and DBMS series): when the magnet, in the center of the machine, slides over times; or when either diaphragm in broken, causing an unusual longer stroke of the magnet, the microswitch on top of the coil frames will automatically shut down the power.

### **CAUTIONS FOR USE**

- 1) Close supervision is necessary when an appliance is used by or near children.
- 2) This pump is intended to **deal with clean, dry air only**. Do not, under any circumstances, attempt operation with water or other liquids, otherwise pump may be damaged.
- 3) The ambient operating temperature for this pump is between 41°F(5°C) and 104°F(40°C). Operation of pump in temperatures outside recommended temperature range may result in malfunction or severely shortened service life.
- 4) Do not block the air being discharged. Pump must have sufficient room to allow for heat dissipation. Under the extreme operating temperature conditions which may cause by failure to observe cautions 3) or 4), pump will automatically switch off until cool. **DO NOT REMOVE PUMP CASING UNLESS UNIT IS DISCONNECT FROM MAINS SUPPLY.**
- 5) Always unplug pump prior to servicing. Grasp plug to remove cord from outlet. Do not remove by pulling on power cord.
- 6) Do not use the air pump for other than intended use. The use of attachments not recommended or not sold by the air pump manufacturer may cause an unsafe condition.
- 7) Do not install pump where it will be exposed to weather, do not store pump in temperatures below freezing.
- 8) Ensure pump is securely mounted prior to operation.

- 9) Read and observe all important markings on pump.
- 10) Ensure that extension cords (if required) have the correct or higher rating (amperes or watts). Ensure cord is properly positioned to avoid tripping.
- 11) To avoid injury, do not contact moving parts or hot parts such as heaters, reflectors, lamp bulbs, and the like.
- 12) Always unplug an appliance from an outlet when not in use, before Putting on or taking off parts, and before cleaning.

## **SAVE THESE INSTRUCTIONS**

### **INSTALLATION**

Disconnect electrical power at the circuit breaker or fuse box before installing this product. Install this product where it will not come into contact with water or other liquids. Install this product where it will be weather protected. Electrically ground this product. Failure to follow these instructions can result in death, fire or electrical shock.

#### **Correct installation is your responsibility.**

Make sure you have the proper installation conditions and that installation clearances do not block air flow.

#### **Mounting**

This product must be installed on a flat, horizontal surface. Mounting the product to a stable, rigid operating surface and using shock mounts will reduce noise and vibration.

#### **Plumbing**

Remove plug from the OUT port. Connect with pipe and fittings that are the same size or larger than the product's port.

#### **Accessories**

Install relief valve and gauge at outlet to monitor performance. A check valve may be required to prevent back streaming through the compressor.

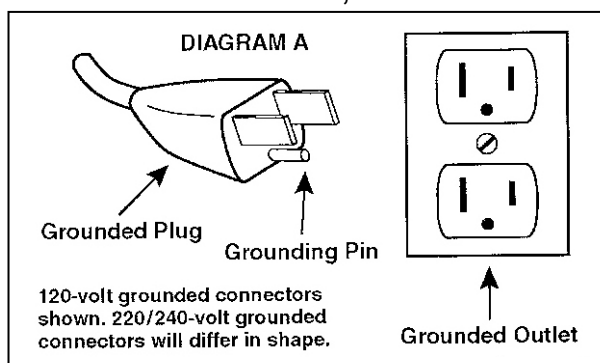
#### **Motor Control**

It is your responsibility to contact a qualified electrician and assure that the electrical installation is adequate and in conformance with all national and local codes and ordinances.

### **ELECTRICAL CONNECTION**

This product must be properly grounded. Do not modify the plug provided. If it will not fit the outlet, have the proper outlet installed by a qualified electrician.

If repair or replacement of the cord or plug is necessary, do not connect the grounding wire to either flat blade terminal. The wire with insulation that is green with or without yellow stripes is the grounding wire. Check the condition of the power supply wiring. Do not permanently connect this product to wiring that is not in good condition or is inadequate for the requirements of this product. Failure to follow these instructions can result in death, fire or electrical shock.



### **Model with a power supply cord:**

This product must be grounded. For either 120-volt or 220/240-volt circuits connect power supply cord grounding plug to a matching grounded outlet. Do not use an adapter. (See DIAGRAM A)

In the event of an electrical short circuit, grounding reduces the risk of electric shock by providing an escape wire for the electric current. This product may be equipped with a power supply cord having a grounding wire with an appropriate grounding plug. The plug must be plugged into an outlet that is properly installed and grounded in accordance with all local codes and ordinances.

Check with a qualified electrician or serviceman if the grounding instructions are not completely understood, or if you are not sure whether the product is grounded. Do not modify the plug provided. If it will not fit the outlet, have the proper outlet installed by a qualified electrician.

### **Model that is permanently wired:**

This product must be connected to a grounded, metallic, permanent wiring system, or an equipment grounding terminal or lead on the product.

Power supply wiring must conform to all required safety codes and be installed by a qualified person. Check that supply voltage agrees with that listed on product nameplate.

### **Extension cords:**

Use only a 3-wire extension cord that has a 3-blade grounding plug. Connect extension cord plug to a matching 3-slot receptacle. Do not use an adapter. Make sure your extension cord is in good condition. Check that the wire gage of the extension cord is the correct size wire to carry the current this product will draw. An

undersized cord is a potential fire hazard, and will cause a drop in line voltage resulting in loss of power causing the product to overheat. DIAGRAM B indicates the correct gage cord for length required and the ampere rating listed on the product nameplate. If in doubt, use the next heavier gage cord. The smaller the gage number, the heavier the wire gage.

**DIAGRAM B**  
Minimum gauge for extension cords

Ampere Rating Range	Voltage	Length of cord in ft								
	120V	25 ft	50 ft	100 ft	150 ft	200 ft	250 ft	300 ft	400 ft	500 ft
	240V	50 ft	100 ft	200 ft	300 ft	400 ft	500 ft	600 ft	800 ft	1000 ft
0 – 2		18	18	18	16	16	14	14	12	12
2 – 3		18	18	16	14	14	12	12	10	10
3 – 4		18	18	16	14	12	12	10	10	8
4 – 5		18	18	14	12	12	10	10	8	8
5 – 6		18	16	14	12	10	10	8	8	6

**OPERATION**

Use only recommended air handling parts acceptable for pressure not less than 10 psi. When provided, motor terminal covers must be in place for safe operation. Product surfaces may become hot during operation. Do Not direct air stream at body. Air stream from product may contain solid or liquid material that can result in eye or skin damage, wear proper eye protection. Do Not spray flammable or combustible liquid. Failure to follow these instructions can result in burns, eye injury or other serious injury.

It is your responsibility to operate this product at recommended pressure duty and room ambient temperature.

**Start Up**

If pump fails to start or slows down significantly under load, shut off and disconnect from power supply. Check that the voltage is correct for the pump.

**MAINTENANCE**

Disconnect electrical power supply cord before performing maintenance on this product. If product is hard wired into system, disconnect electrical power at the circuit breaker or fuse box before performing maintenance on this product. Failure to follow these instructions can result in death, fire or electrical shock. Product surfaces may become hot during operation; allow product surfaces to cool before handling. Do Not direct air stream at body. Air stream from product may contain solid or liquid material that can result in eye or skin damage, wear proper eye

protection. Clean this product in a well ventilated area. Failure to follow these instructions can result in burns, eye injury or other serious injury.

**It is your responsibility to:**

- Regularly inspect and make necessary repairs to product in order to maintain proper operation.
- Make sure that pressure is released from product before starting maintenance.
- Never add oil to this oil-less compressor.

Check intake filter after first 500 hours of operation. Clean filter and determine how frequently filter should be checked during future operation. This one procedure will help to assure the product's performance and service life.

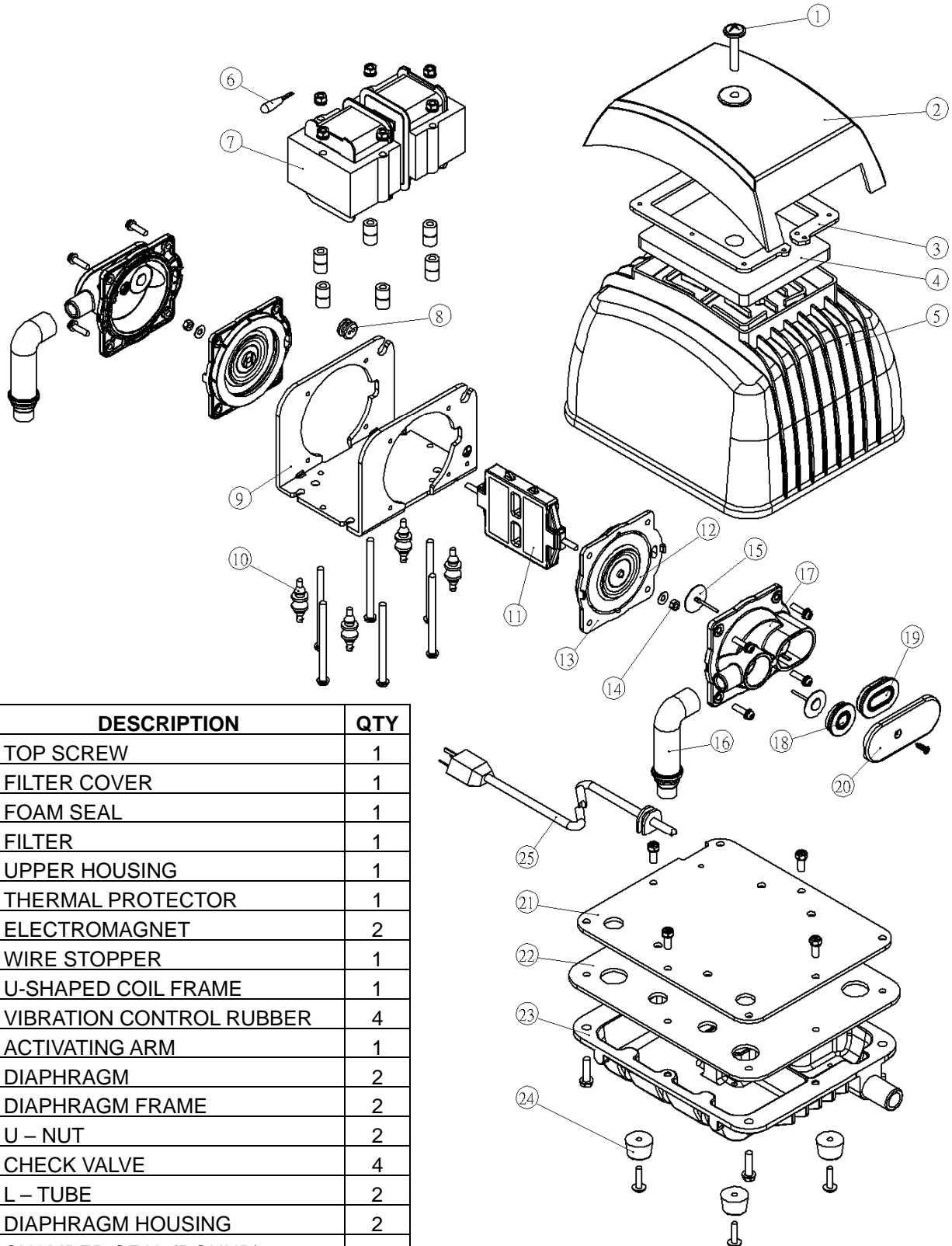
**Cleaning**

Do Not use kerosene or ANY other combustible solvent to clean product.

1. Remove filter and clean using detergent and water.
2. Rinse filter well and air dry.

Check that all external accessories such as relief valves and gauges are attached to cover and are not damaged before re-operating product.

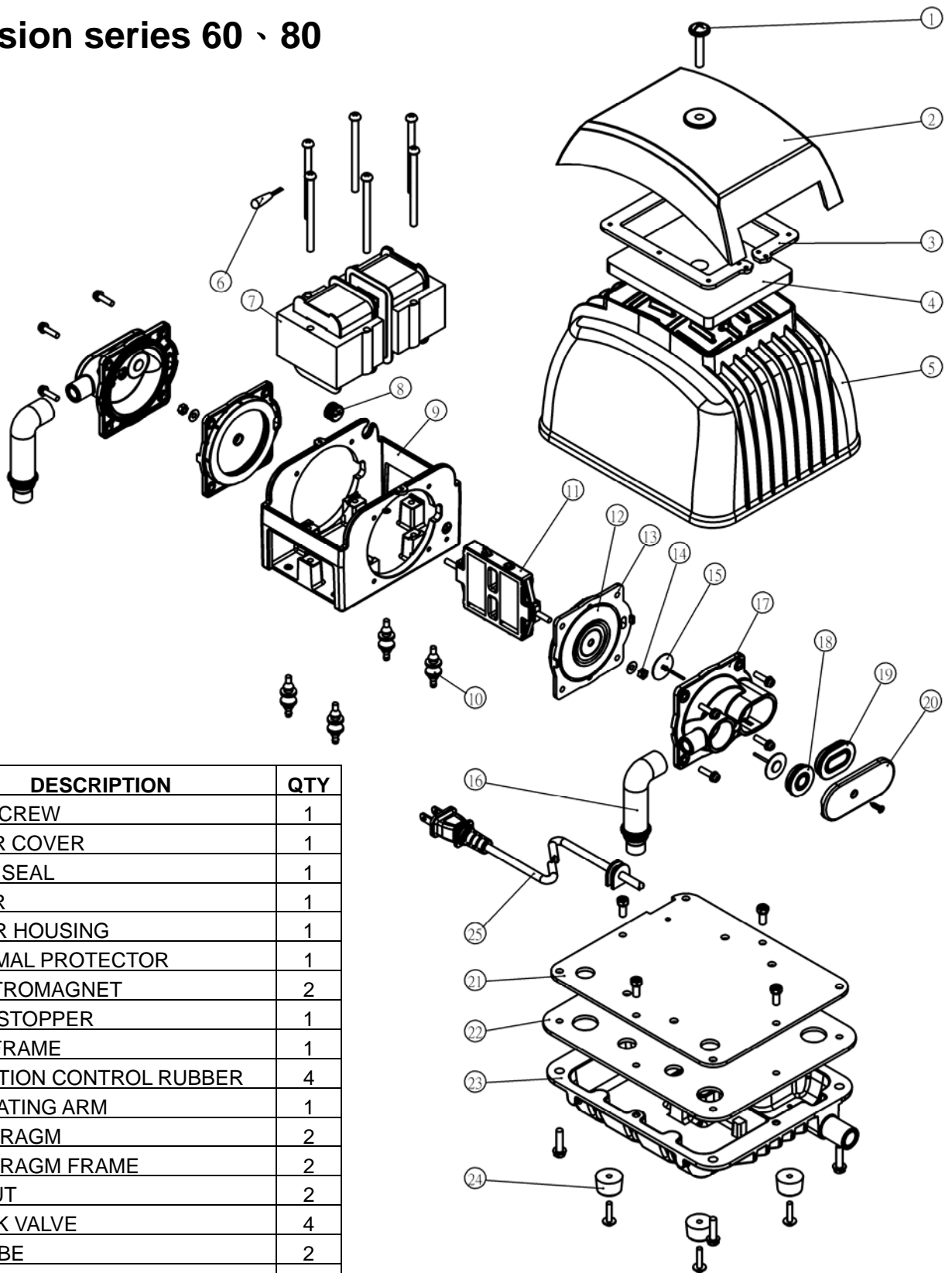
# DB version series 40



NO.	DESCRIPTION	QTY
1	TOP SCREW	1
2	FILTER COVER	1
3	FOAM SEAL	1
4	FILTER	1
5	UPPER HOUSING	1
6	THERMAL PROTECTOR	1
7	ELECTROMAGNET	2
8	WIRE STOPPER	1
9	U-SHAPED COIL FRAME	1
10	VIBRATION CONTROL RUBBER	4
11	ACTIVATING ARM	1
12	DIAPHRAGM	2
13	DIAPHRAGM FRAME	2
14	U – NUT	2
15	CHECK VALVE	4
16	L – TUBE	2
17	DIAPHRAGM HOUSING	2
18	CHAMBER SEAL (ROUND)	2
19	CHAMBER SEAL (OVAL)	2
20	SIDE COVER (STEEL)	2
21	STEEL PLATE	1
22	GASKET	1
23	LOWER HOUSING	1
24	RUBBER FEET	4
25	POWER CORD	1



# DB version series 60 - 80



NO.	DESCRIPTION	QTY
1	TOP SCREW	1
2	FILTER COVER	1
3	FOAM SEAL	1
4	FILTER	1
5	UPPER HOUSING	1
6	THERMAL PROTECTOR	1
7	ELECTROMAGNET	2
8	WIRE STOPPER	1
9	COIL FRAME	1
10	VIBRATION CONTROL RUBBER	4
11	ACTIVATING ARM	1
12	DIAPHRAGM	2
13	DIAPHRAGM FRAME	2
14	U - NUT	2
15	CHECK VALVE	4
16	L - TUBE	2
17	DIAPHRAGM HOUSING	2
18	CHAMBER SEAL (ROUND)	2
19	CHAMBER SEAL (OVAL)	2
20	SIDE COVER (STEEL)	2
21	STEEL PLATE	1
22	GASKET	1
23	LOWER HOUSING	1
24	RUBBER FEET	4
25	POWER CORD	1

# Maintenance Manual

## DB version 40 、 60 、 80

### 1. To clean the air filter ( Recommended once every six months )

- A. Loosen the screw on top. (As shown in Figure1)
- B. Remove the filter cover.
- C. Take the filter out and clean it with clean water and dry it.
- D. Put it back and secure the fixing plate with the screw in.

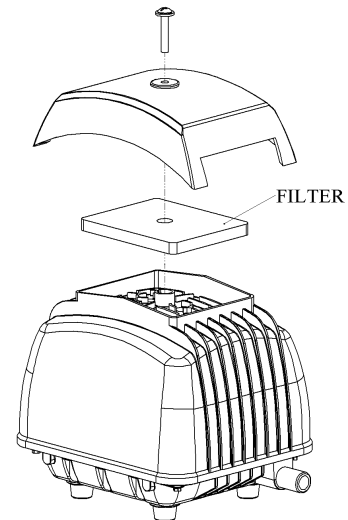


Figure 1

### 2. To change the diaphragms

**IMPORTANT : To open the upper housing, please make sure you have unplugged the power cord before opening.**

- A. Loosen the four screws around the aluminum upper housing, and take the housing off. (As shown in figure 2)
- B. Loosen the four screws and disassemble the parts. (As shown in figure 3)
- C. Loosen the u-nut in the center of diaphragm.
- D. Take the diaphragm off its place.
- E. Replace a new one by mounting the rubber studs into their position.
- F. Press the rim of the diaphragm into the ring.
- G. Secure the magnet with a new u-nut and screw and put the diaphragm housing back with the four screws on.

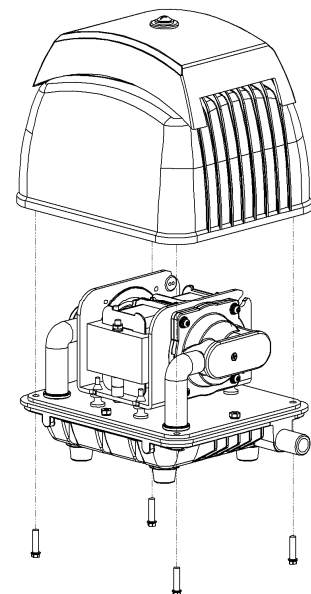


Figure 2

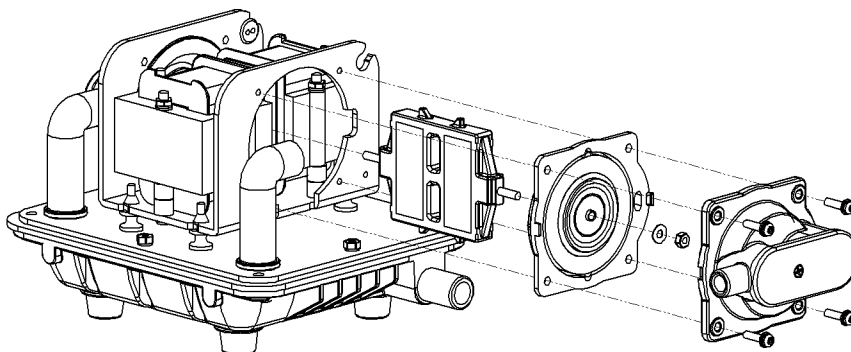
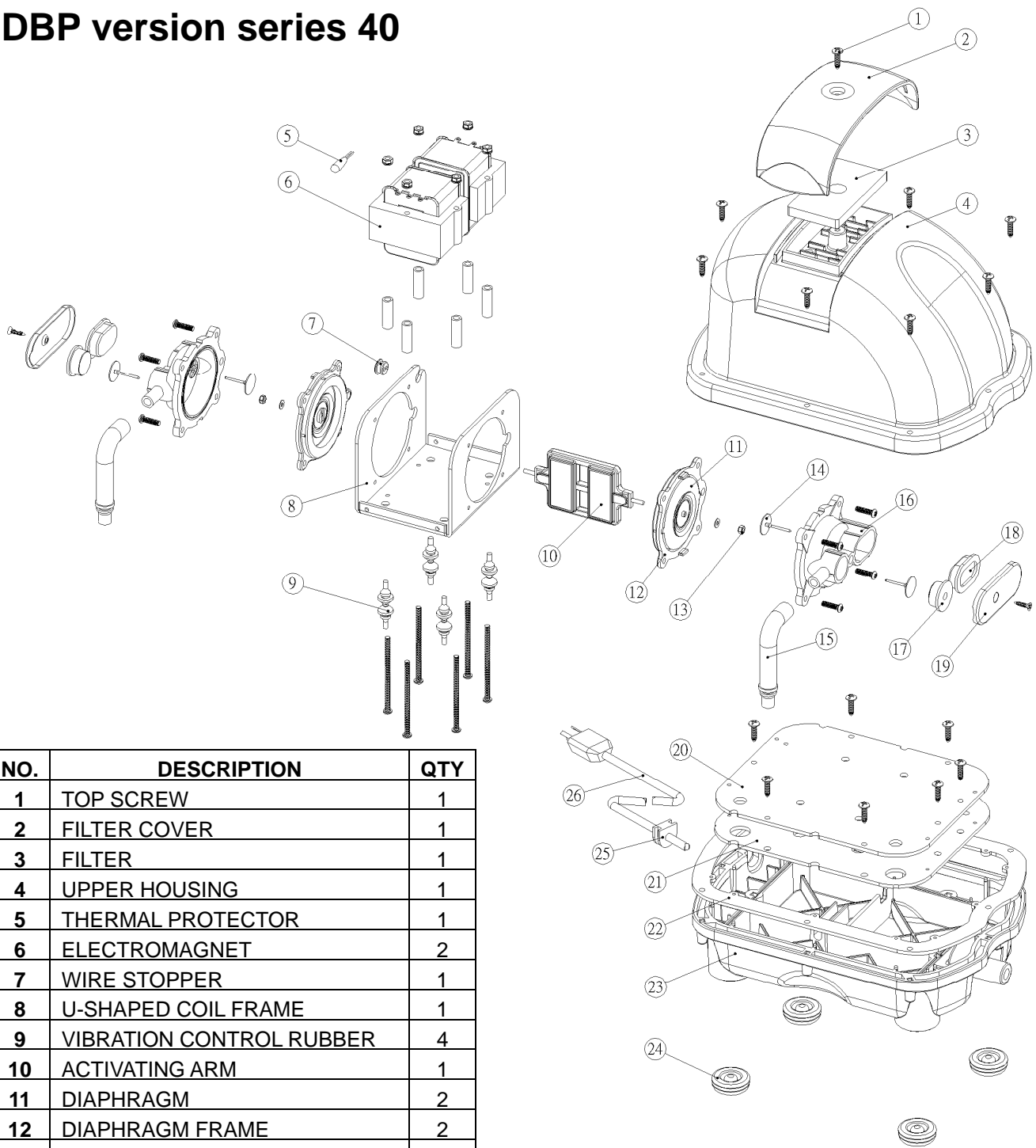


Figure 3

# DBP version series 40



NO.	DESCRIPTION	QTY
1	TOP SCREW	1
2	FILTER COVER	1
3	FILTER	1
4	UPPER HOUSING	1
5	THERMAL PROTECTOR	1
6	ELECTROMAGNET	2
7	WIRE STOPPER	1
8	U-SHAPED COIL FRAME	1
9	VIBRATION CONTROL RUBBER	4
10	ACTIVATING ARM	1
11	DIAPHRAGM	2
12	DIAPHRAGM FRAME	2
13	U – NUT	2
14	CHECK VALVE	4
15	L – TUBE	2
16	DIAPHRAGM HOUSING	2
17	CHAMBER SEAL (ROUND)	2
18	CHAMBER SEAL (OVAL)	2
19	SIDE COVER (STEEL)	2
20	STEEL PLATE	1
21	GASKET	1
22	GASKET	1
23	LOWER HOUSING	1
24	RUBBER FEET	4
25	CORD RELIEF	1
26	POWER CORD	1

# Maintenance Manual

## DBP version 40

### 1. To clean the air filter ( Recommended once every six months )

- A. Loosen the screw on top. (As shown in Figure1)
- B. Remove the plastic filter cover.
- C. Take the filter out and clean it with clean water and dry it.
- D. Put it back and secure the fixing plate with the screw in.

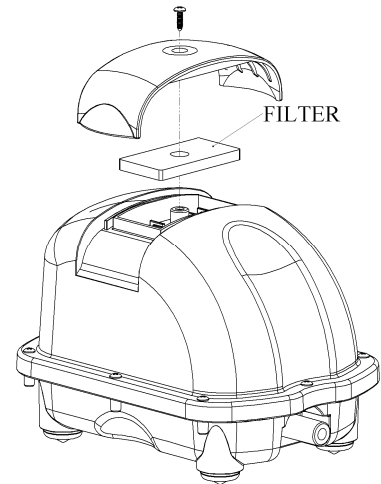


Figure 1

### 2. To change the diaphragms

**IMPORTANT : To open the upper housing, please make sure you have unplugged the power cord before opening.**

- A. Loosen the eight screws around the plastic upper housing, and take the housing off. (As shown in figure 2)
- B. Loosen the four screws and disassemble the parts. (As shown in figure 3)
- C. Loosen the u-nut in the center of diaphragm.
- D. Take the diaphragm off its place.
- E. Replace a new one by mounting the rubber studs into their position.
- F. Press the rim of the diaphragm into the ring.
- G. Secure the magnet with a new u-nut and screw and put the diaphragm housing back with the four screws on.

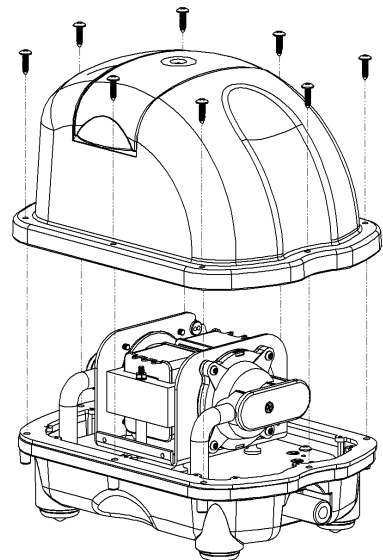


Figure 2

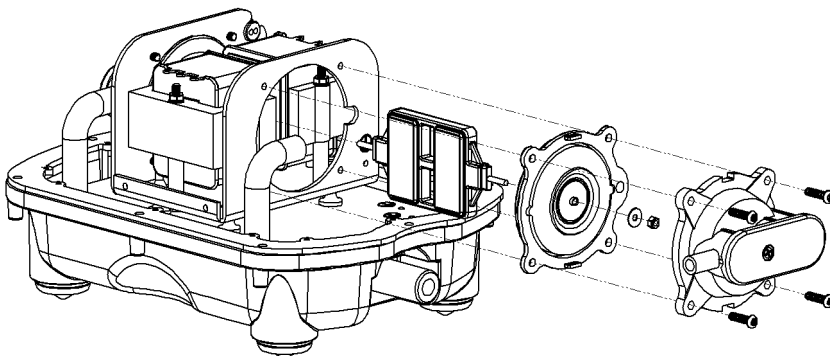
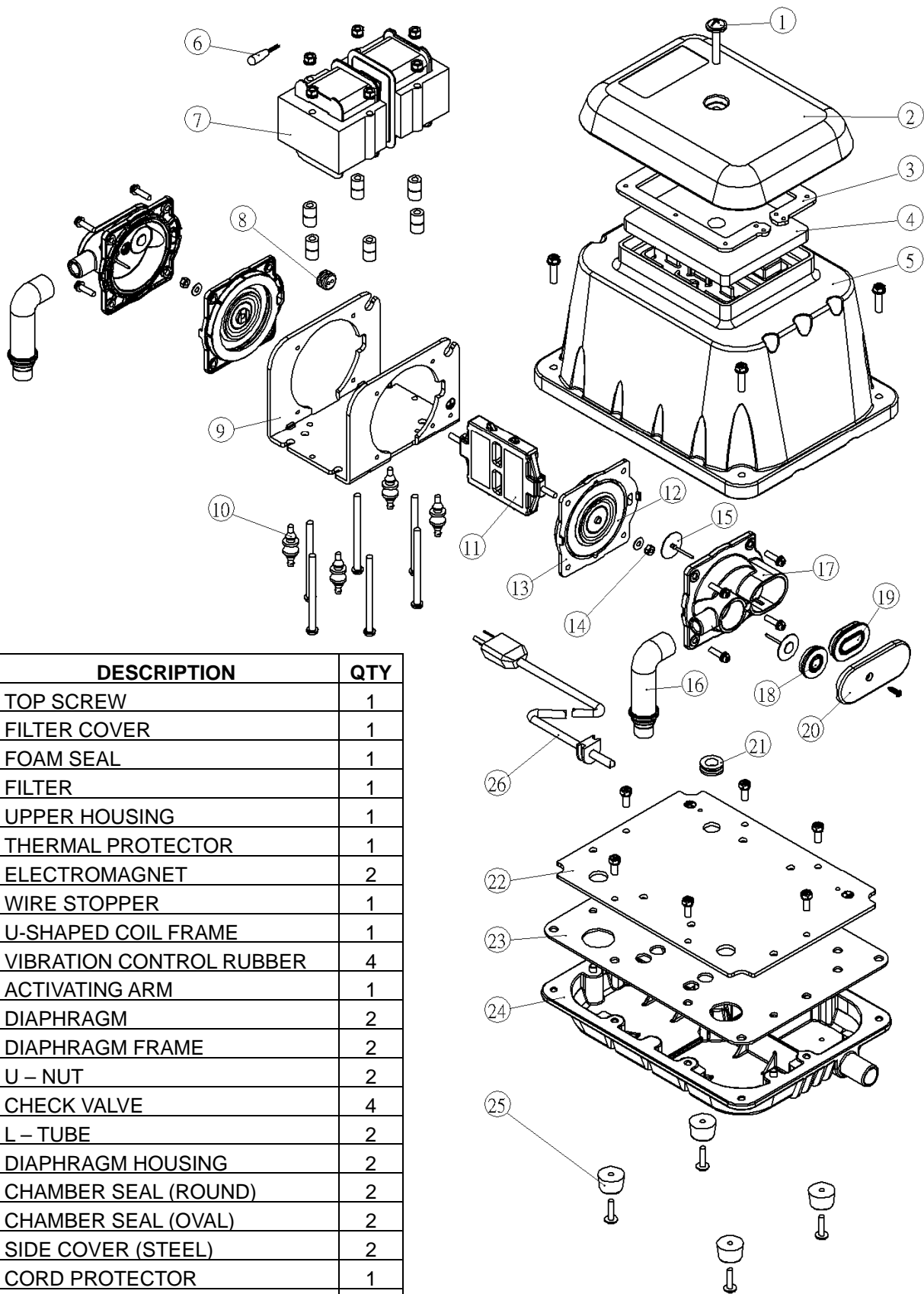


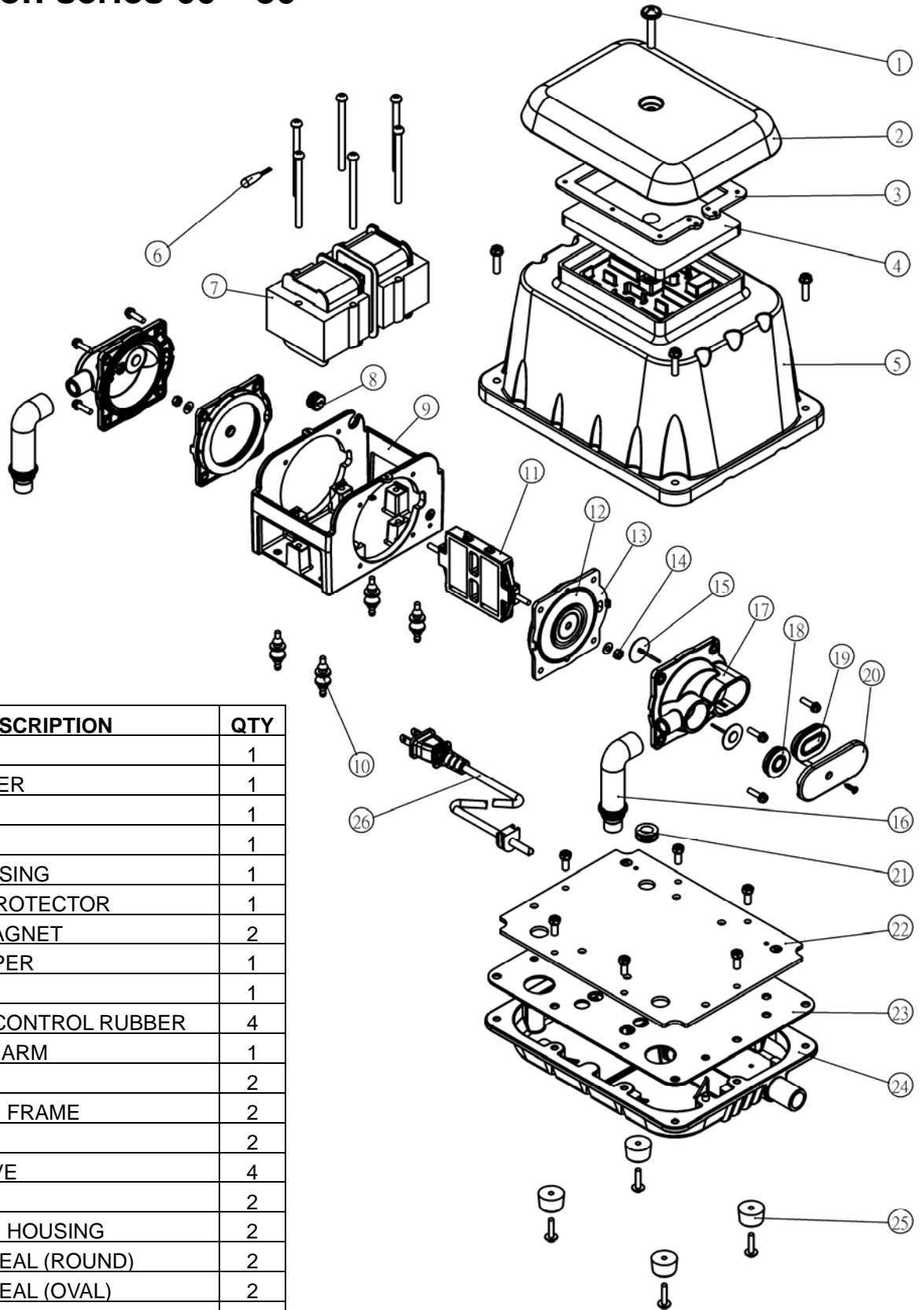
Figure 3

# DBM version series 40



NO.	DESCRIPTION	QTY
1	TOP SCREW	1
2	FILTER COVER	1
3	FOAM SEAL	1
4	FILTER	1
5	UPPER HOUSING	1
6	THERMAL PROTECTOR	1
7	ELECTROMAGNET	2
8	WIRE STOPPER	1
9	U-SHAPED COIL FRAME	1
10	VIBRATION CONTROL RUBBER	4
11	ACTIVATING ARM	1
12	DIAPHRAGM	2
13	DIAPHRAGM FRAME	2
14	U – NUT	2
15	CHECK VALVE	4
16	L – TUBE	2
17	DIAPHRAGM HOUSING	2
18	CHAMBER SEAL (ROUND)	2
19	CHAMBER SEAL (OVAL)	2
20	SIDE COVER (STEEL)	2
21	CORD PROTECTOR	1
22	STEEL PLATE	1
23	GASKET	1
24	LOWER HOUSING	1
25	RUBBER FEET	4
26	POWER CORD	1

# DBM version series 60 · 80



NO.	DESCRIPTION	QTY
1	TOP SCREW	1
2	FILTER COVER	1
3	FOAM SEAL	1
4	FILTER	1
5	UPPER HOUSING	1
6	THERMAL PROTECTOR	1
7	ELECTROMAGNET	2
8	WIRE STOPPER	1
9	COIL FRAME	1
10	VIBRATION CONTROL RUBBER	4
11	ACTIVATING ARM	1
12	DIAPHRAGM	2
13	DIAPHRAGM FRAME	2
14	U – NUT	2
15	CHECK VALVE	4
16	L – TUBE	2
17	DIAPHRAGM HOUSING	2
18	CHAMBER SEAL (ROUND)	2
19	CHAMBER SEAL (OVAL)	2
20	SIDE COVER (STEEL)	2
21	CORD PROTECTOR	1
22	STEEL PLATE	1
23	GASKET	1
24	LOWER HOUSING	1
25	RUBBER FEET	4
26	POWER CORD	1

# Maintenance Manual

## DBM version 40 、 60 、 80

### 1. To clean the air filter ( Recommended once every six months )

- A. Loosen the screw on top. (As shown in Figure1)
- B. Remove filter cover.
- C. Take the filter out and clean it with clean water and dry it.
- D. Put it back and secure the fixing plate with the screw in.

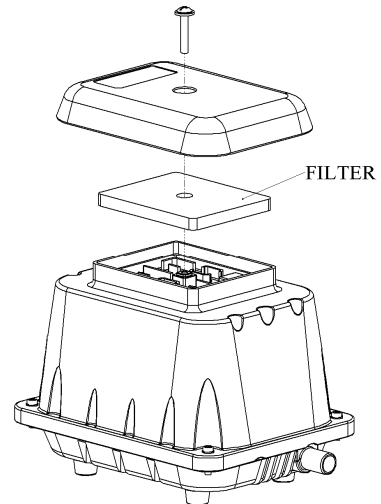


Figure 1

### 2. To change the diaphragms

**IMPORTANT : To open the upper housing, please make sure you have unplugged the power cord before opening.**

- A. Loosen the four screws around the aluminum upper housing, and take the housing off. (As shown in figure 2)
- B. Loosen the four screws and disassemble the parts. (As shown in figure 3)
- C. Loosen the u-nut in the center of diaphragm.
- D. Take the diaphragm off its place.
- E. Replace a new one by mounting the rubber studs into their position.
- F. Press the rim of the diaphragm into the ring.
- G. Secure the magnet with a new u-nut and screw and put the diaphragm housing back with the four screws on.

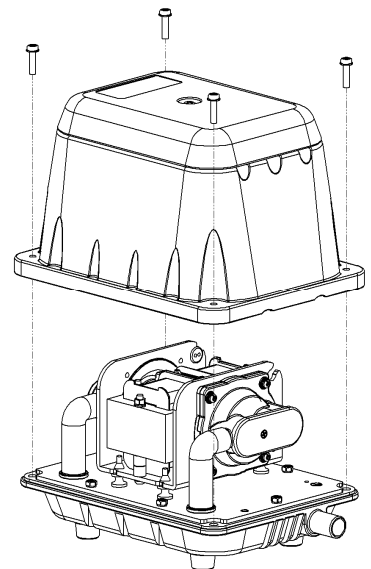


Figure 2

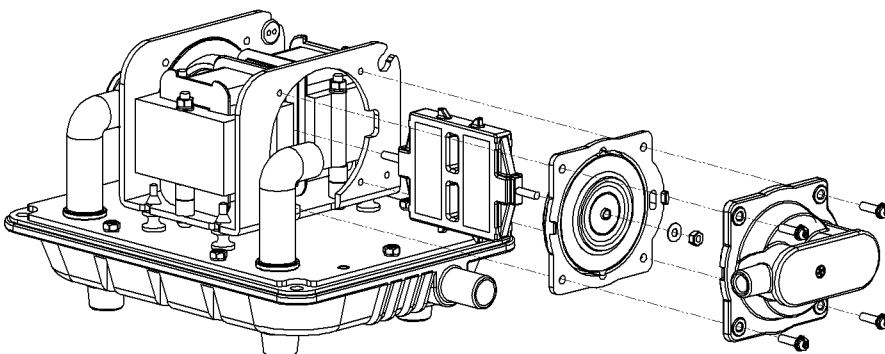
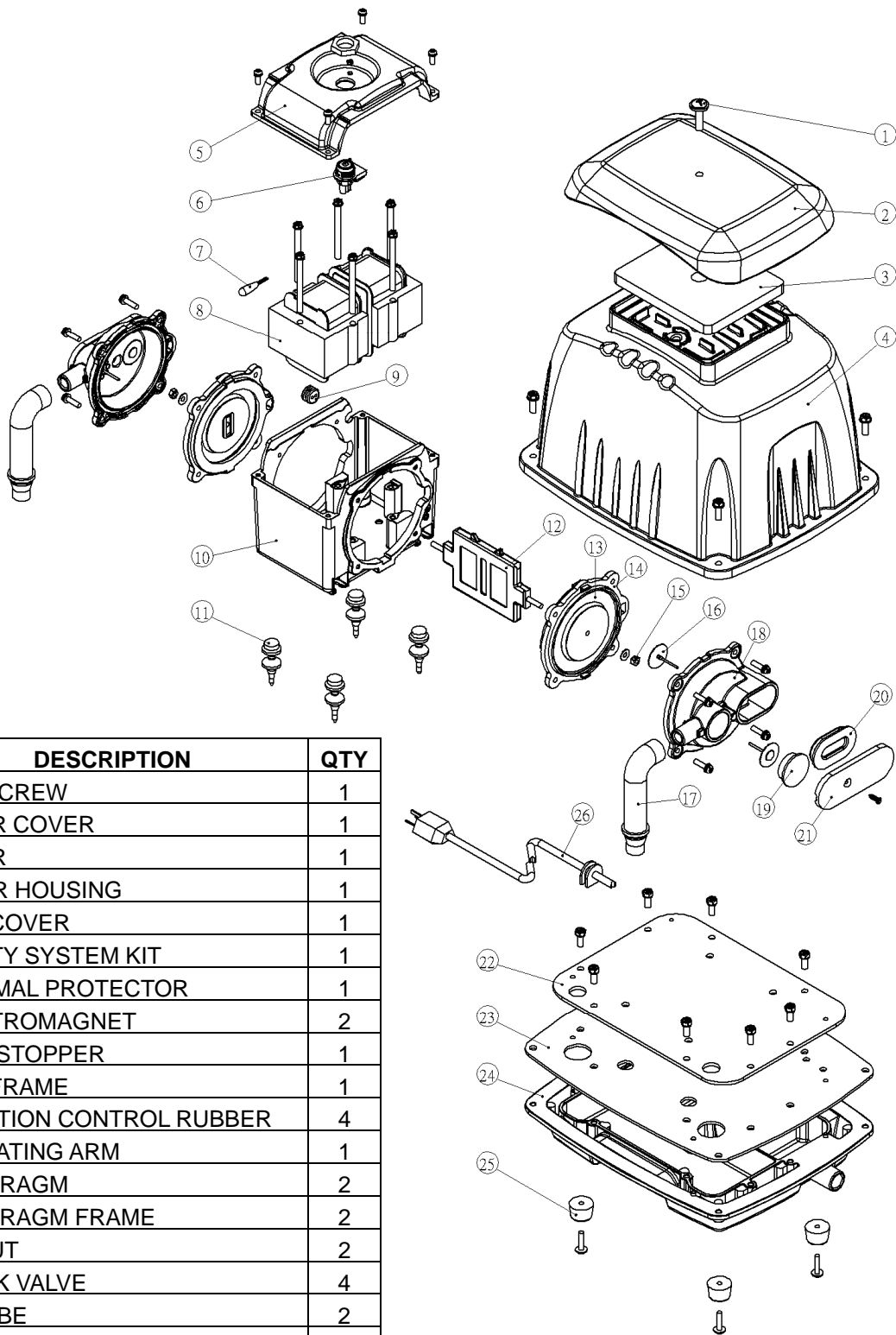


Figure 3

# DBMX version series 80 、 100



NO.	DESCRIPTION	QTY
1	TOP SCREW	1
2	FILTER COVER	1
3	FILTER	1
4	UPPER HOUSING	1
5	COIL COVER	1
6	SAFETY SYSTEM KIT	1
7	THERMAL PROTECTOR	1
8	ELECTROMAGNET	2
9	WIRE STOPPER	1
10	COIL FRAME	1
11	VIBRATION CONTROL RUBBER	4
12	ACTIVATING ARM	1
13	DIAPHRAGM	2
14	DIAPHRAGM FRAME	2
15	U – NUT	2
16	CHECK VALVE	4
17	L – TUBE	2
18	DIAPHRAGM HOUSING	2
19	CHAMBER SEAL (ROUND)	2
20	CHAMBER SEAL (OVAL)	2
21	SIDE COVER (STEEL)	2
22	STEEL PLATE	1
23	GASKET	1
24	LOWER HOUSING	1
25	RUBBER FEET	4
26	POWER CORD	1



# Maintenance Manual

## DBMX version 80 、 100

### 1. To clean the air filter ( Recommended once every six months )

- A. Loosen the screw on top. (As shown in Figure1)
- B. Remove filter cover.
- C. Take the filter out and clean it with clean water and dry it.
- D. Put it back and secure the fixing plate with the screw in.

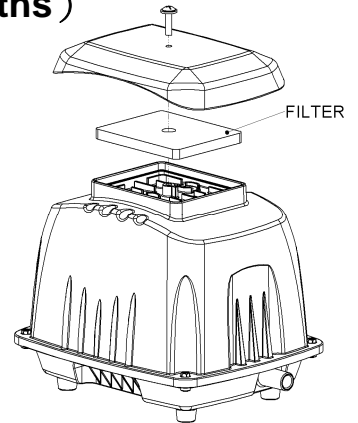


Figure 1

### 2. To change the diaphragms

**IMPORTANT :** To open the upper housing, please make sure you have unplugged the power cord before opening.

As rare earth is applied on magnets of the activating arm on models DBMX80, DBMX100, DBMX120, please be very careful after you have disassembled these parts—Do NOT allow the magnets to come into contact with any electronic devices, the watch on your wrist, cell phones, etc. **DYSFUNCTION OF THE MENTIONED OBJECTS OR DEVICES CAN RESULT FROM THE CONTACTS.**

**ALWAYS** use the fixture we have included when locating activating arm to the center spacing between the two electromagnets.

- A. Loosen the four screws around the aluminum upper housing, and take the housing off. (As shown in figure 2)
- B. Loosen the four screws around the coil cover, and take the cover off. (As shown in figure 3)
- C. Loosen the four screws and disassemble the diaphragm housing.
- D. Loosen the u-nut in the center of diaphragm.
- E. Take the diaphragm off its place.
- F. Replace a new one by mounting the rubber studs into their position.
- G. Press the rim of the diaphragm into the ring.
- H. Secure the magnet with a new u-nut and screw and put the diaphragm housing back with the four screws on.
- I. Put the coil cover back with the four screws on.
- J. Put on the aluminum cover and secure the four screws firmly.

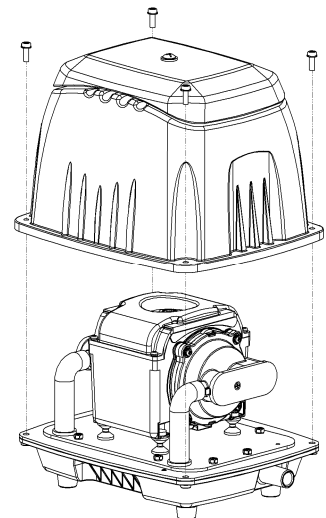


Figure 2

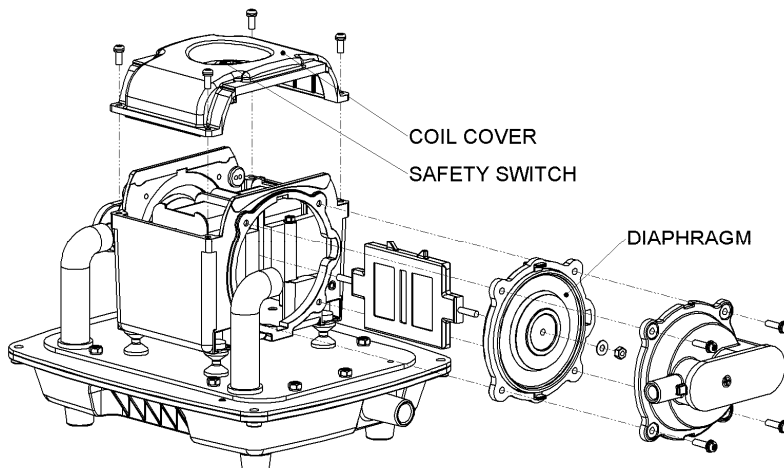
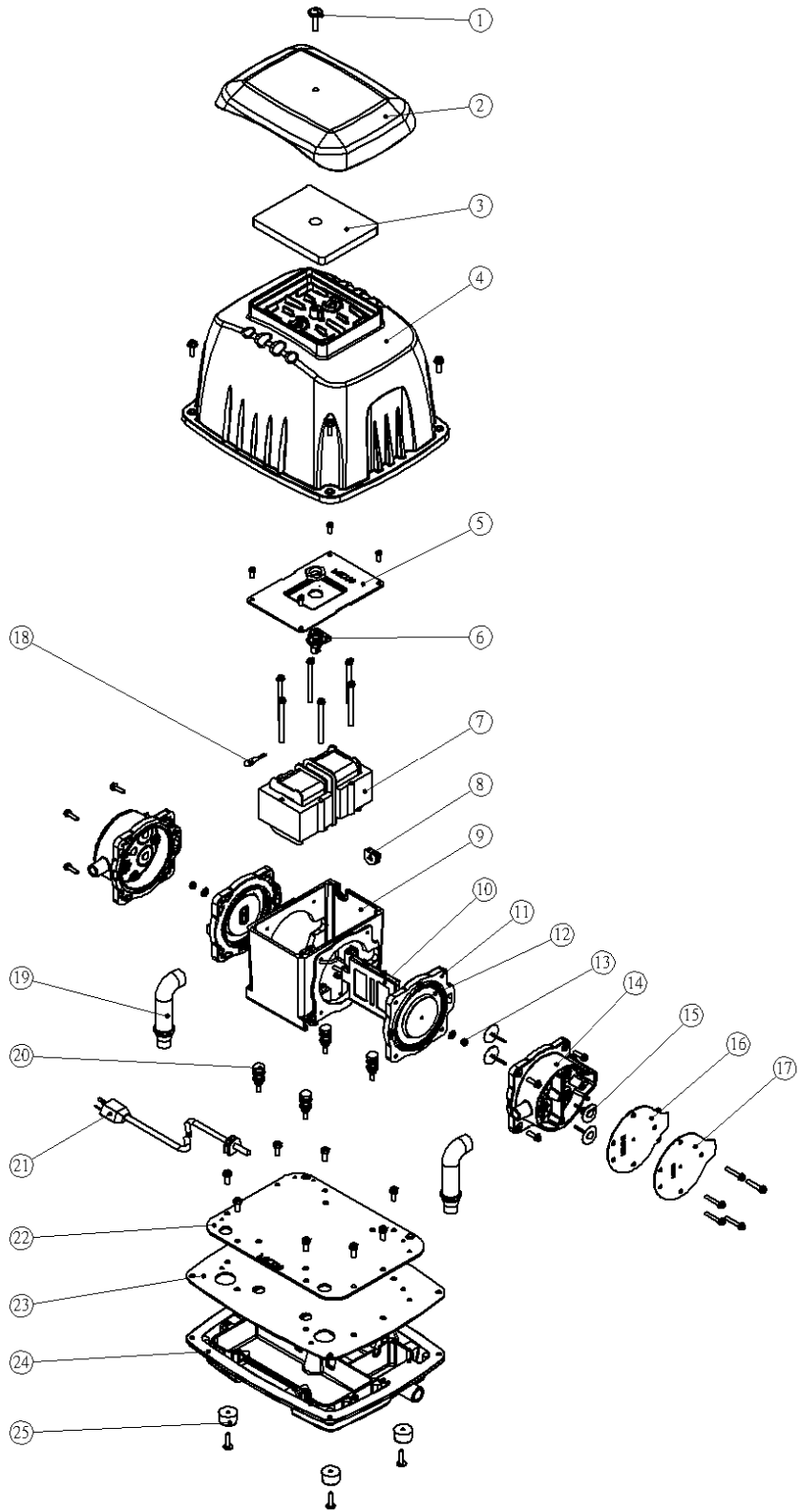


Figure 3

# DBMX version series 120



NO.	DESCRIPTION	QTY
1	TOP SCREW	1
2	FILTER COVER	1
3	FILTER	1
4	UPPER HOUSING	1
5	COIL COVER	1
6	SAFETY SYSTEM KIT	1
7	ELECTROMAGNET	2
8	WIRE STOPPER	1
9	COIL FRAME	1
10	ACTIVATING ARM	1
11	DIAPHRAGM FRAME	2
12	DIAPHRAGM	2
13	U – NUT	2
14	DIAPHRAGM HOUSING	2
15	CHECK VALVE	8
16	GASKET – 1	2
17	DIAPHRAGM HOUSING COVER	2
18	THERMAL PROTECTOR	1
19	L – TUBE	2
20	VIBRATION CONTROL RUBBER	4
21	POWER CORD	1
22	STEEL PLATE	1
23	GASKET – 2	1
24	LOWER HOUSING	1
25	RUBBER FEET	4

# Maintenance Manual

## DBMX version 120

### 1. To clean the air filter ( Recommended once every six months )

- A. Loosen the screw on top. (As shown in Figure1)
- B. Remove filter cover.
- C. Take the filter out and clean it with clean water and dry it.
- D. Put it back and secure the fixing plate with the screw in.

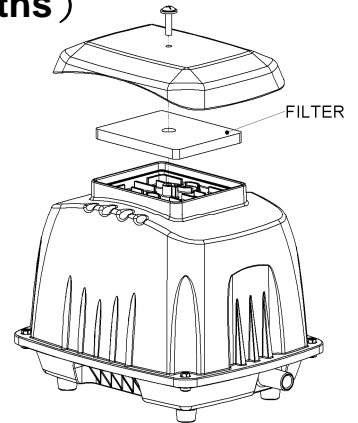


Figure 1

### 2. To change the diaphragms

**IMPORTANT :** To open the upper housing, please make sure you have unplugged the power cord before opening.

As rare earth is applied on magnets of the activating arm on models DBMX80, DBMX100, DBMX120, please be very careful after you have disassembled these parts—Do NOT allow the magnets to come into contact with any electronic devices, the watch on your wrist, cell phones, etc. **DYSFUNCTION OF THE MENTIONED OBJECTS OR DEVICES CAN RESULT FROM THE CONTACTS.**

**ALWAYS** use the fixture we have included when locating activating arm to the center spacing between the two electromagnets.

- A. Loosen the four screws around the aluminum upper housing, and take the housing off. (As shown in figure 2)
- B. Loosen the four screws around the coil cover, and take the cover off. (As shown in figure 3)
- C. Loosen the four screws and disassemble the diaphragm housing.
- D. Loosen the u-nut in the center of diaphragm.
- E. Take the diaphragm off its place.
- F. Replace a new one by mounting the rubber studs into their position.
- G. Press the rim of the diaphragm into the ring.
- H. Secure the magnet with a new u-nut and screw and put the diaphragm housing back with the four screws on.
- I. Put the coil cover back with the four screws on.
- J. Put on the aluminum cover and secure the four screws firmly.

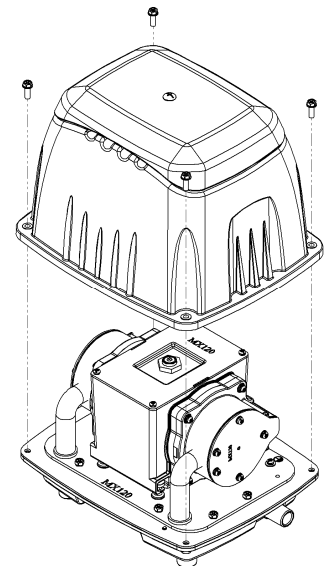


Figure 2

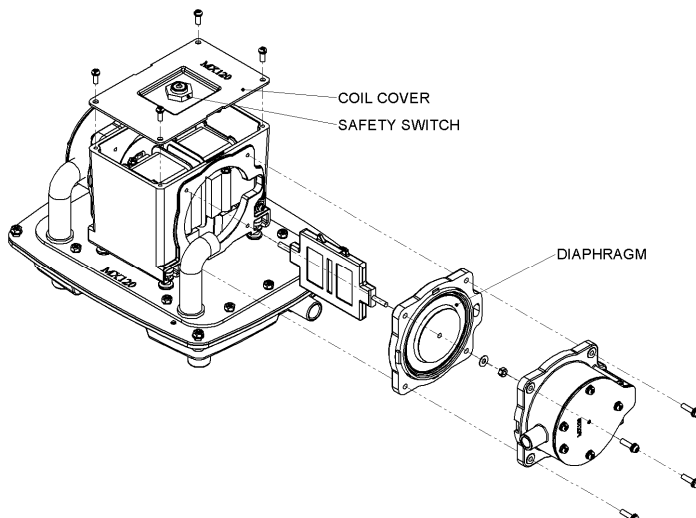
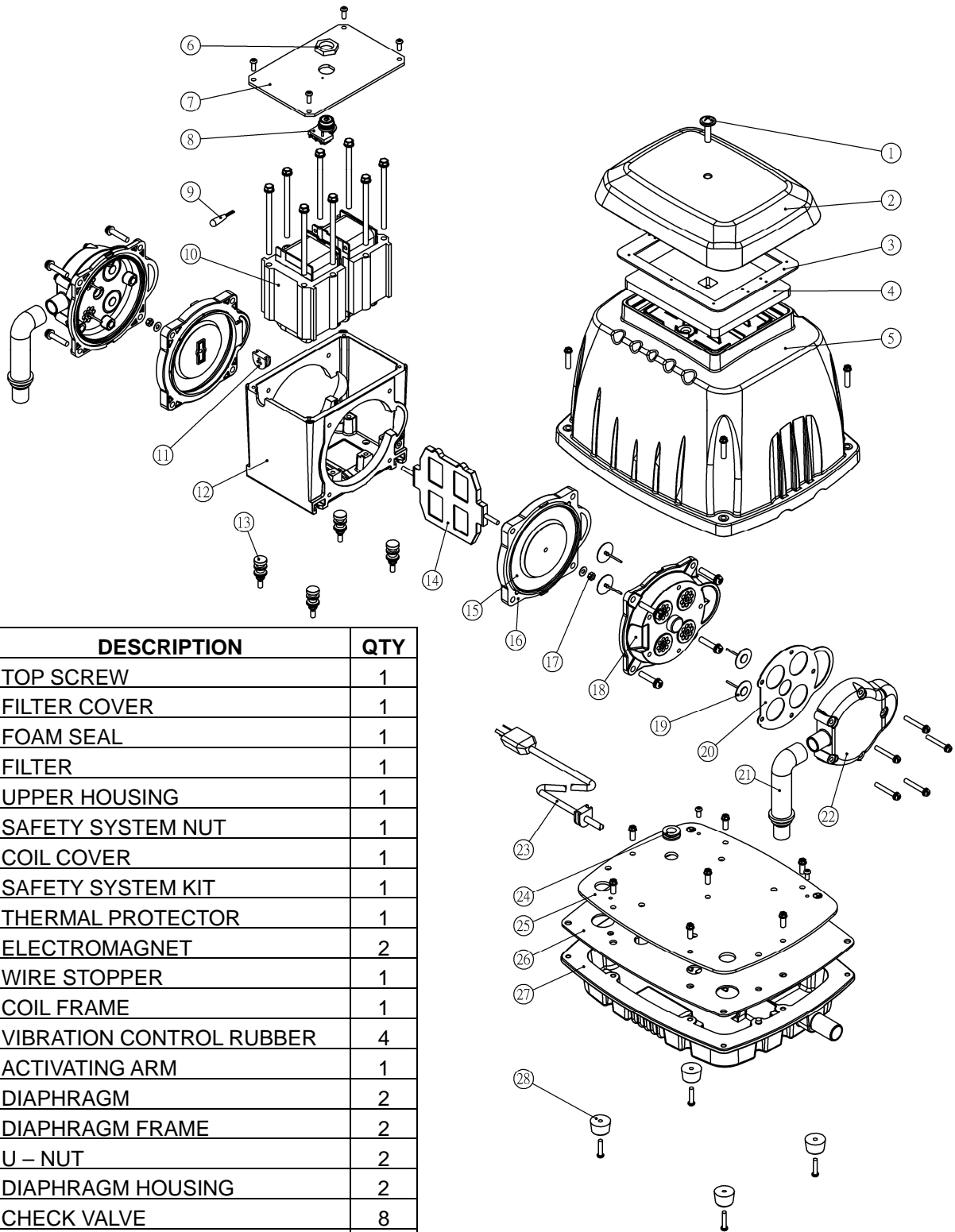


Figure 3

# DBMX version series 150 、 200



NO.	DESCRIPTION	QTY
1	TOP SCREW	1
2	FILTER COVER	1
3	FOAM SEAL	1
4	FILTER	1
5	UPPER HOUSING	1
6	SAFETY SYSTEM NUT	1
7	COIL COVER	1
8	SAFETY SYSTEM KIT	1
9	THERMAL PROTECTOR	1
10	ELECTROMAGNET	2
11	WIRE STOPPER	1
12	COIL FRAME	1
13	VIBRATION CONTROL RUBBER	4
14	ACTIVATING ARM	1
15	DIAPHRAGM	2
16	DIAPHRAGM FRAME	2
17	U – NUT	2
18	DIAPHRAGM HOUSING	2
19	CHECK VALVE	8
20	GASKET – 1	2
21	L – TUBE	2
22	DIAPHRAGM HOUSING COVER	2
23	POWER CORD	1
24	CORD PROTECTOR	1
25	STEEL PLATE	1
26	GASKET – 2	1
27	LOWER HOUSING	1
28	RUBBER FEET	4

# Maintenance Manual

## DBMX version 150 、 200

### 1. To clean the air filter ( Recommended once every six months )

- A. Loosen the screw on top. (As shown in Figure1)
- B. Remove filter cover.
- C. Take the filter out and clean it with clean water and dry it.
- D. Put it back and secure the fixing plate with the screw in.

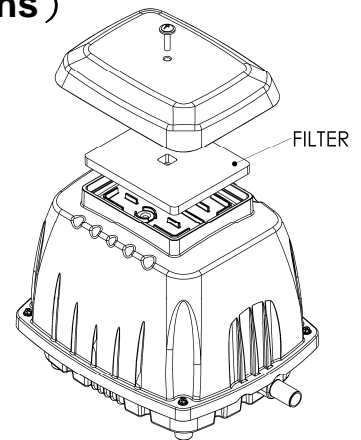


Figure 1

### 2. To change the diaphragms

**IMPORTANT :** To open the upper housing, please make sure you have unplugged the power cord before opening.

As rare earth is applied on magnets of the activating arm on models DBMX150, DBMX200, please be very careful after you have disassembled these parts—Do NOT allow the magnets to come into contact with any electronic devices, the watch on your wrist, cell phones, etc. **DYSFUNCTION OF THE MENTIONED OBJECTS OR DEVICES CAN RESULT FROM THE CONTACTS.**

**ALWAYS** use the fixture we have included when locating activating arm to the center spacing between the two electromagnets.

- A. Loosen the four screws around the aluminum upper housing, and take the housing off. (As shown in figure 2)
- B. Loosen the four screws around the coil cover, and take the cover off. (As shown in figure 3)
- C. Loosen the four screws and disassemble the diaphragm housing.
- D. Loosen the u-nut in the center of diaphragm.
- E. Take the diaphragm off its place.
- F. Replace a new one by mounting the rubber studs into their position.
- G. Press the rim of the diaphragm into the ring.
- H. Secure the magnet with a new u-nut and screw and put the diaphragm housing back with the four screws on.
- I. Put the coil cover back with the four screws on.
- J. Put on the aluminum cover and secure the four screws firmly.

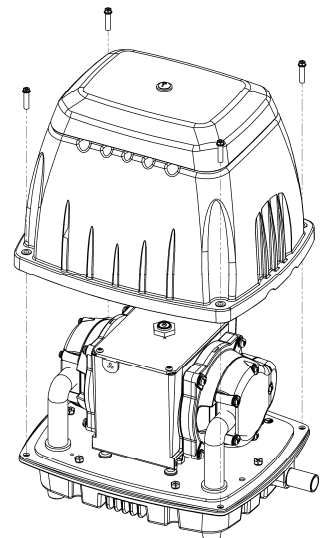


Figure 2

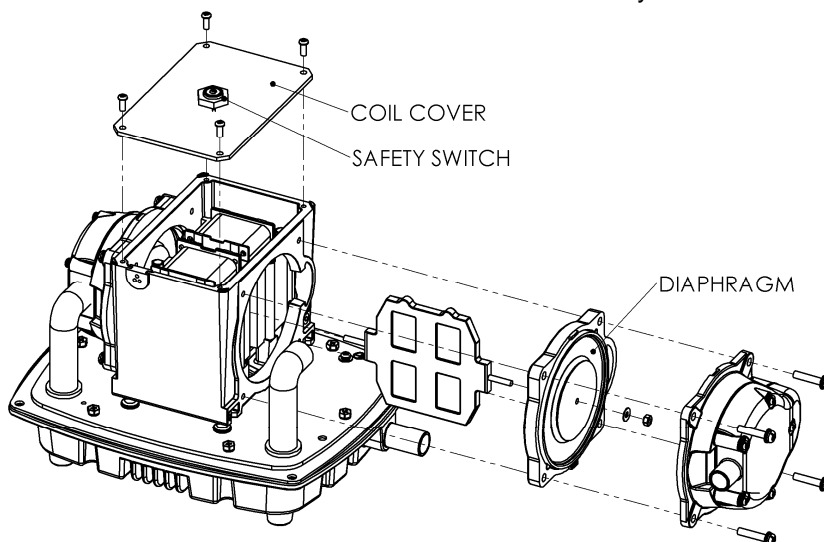
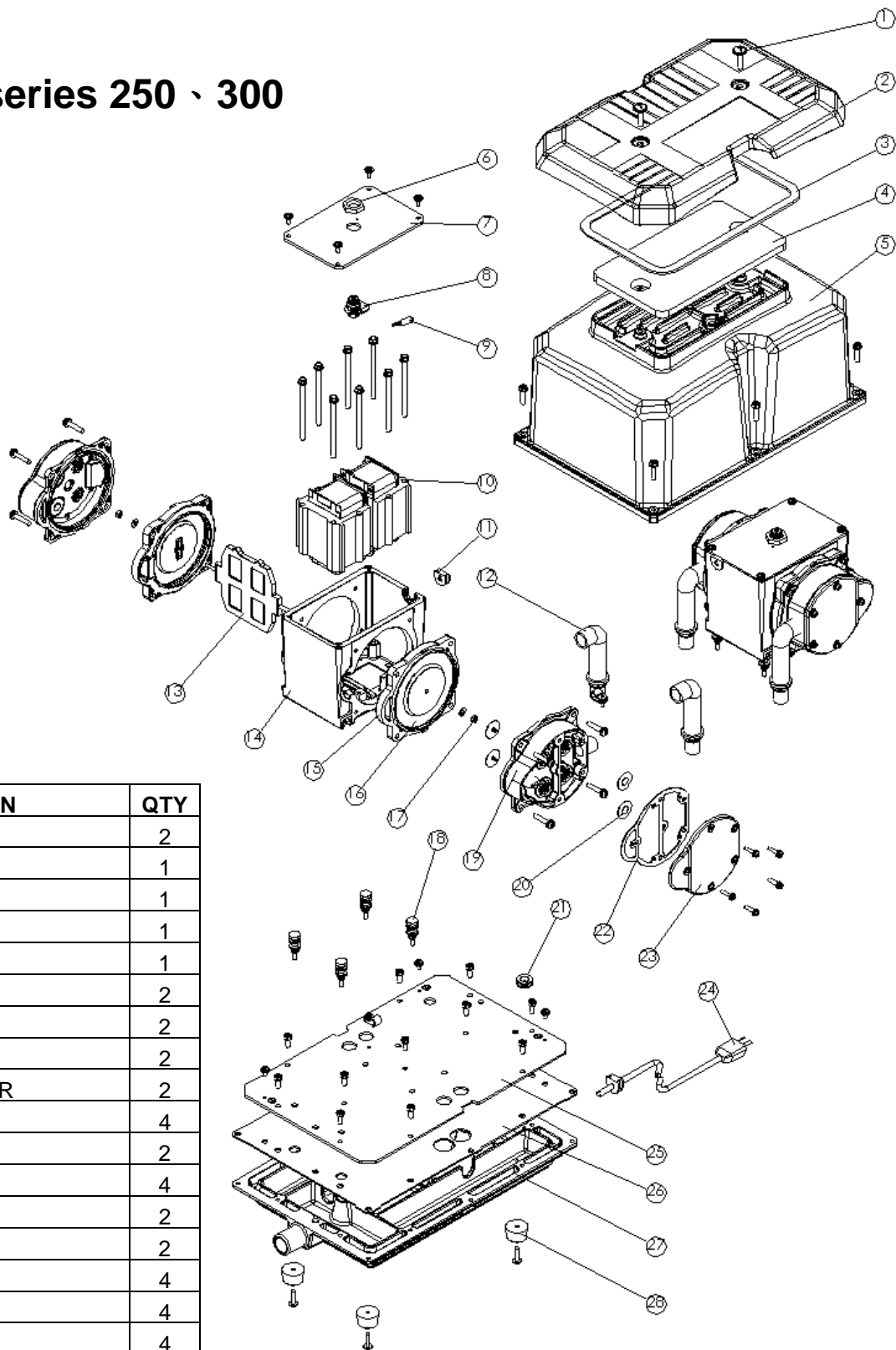


Figure 3

# DBMX version series 250 、 300



NO.	DESCRIPTION	QTY
1	TOP SCREW	2
2	FILTER COVER	1
3	FOAM SEAL	1
4	FILTER	1
5	UPPER HOUSING	1
6	SAFETY SYSTEM NUT	2
7	COIL COVER	2
8	SAFETY SYSTEM KIT	2
9	THERMAL PROTECTOR	2
10	ELECTROMAGNET	4
11	WIRE STOPPER	2
12	L – TUBE	4
13	ACTIVATING ARM	2
14	COIL FRAME	2
15	DIAPHRAGM FRAME	4
16	DIAPHRAGM	4
17	U – NUT	4
18	VIBRATION CONTROL RUBBER	8
19	DIAPHRAGM HOUSING	4
20	CHECK VALVE	16
21	CORD PROTECTOR	1
22	GASKET – 1	4
23	DIAPHRAGM HOUSING COVER	4
24	POWER CORD	1
25	STEEL PLATE	1
26	GASKET – 2	1
27	LOWER HOUSING	1
28	RUBBER FEET	4

# Maintenance Manual

## DBMX version 250 、 300

### 1. To clean the air filter ( Recommended once every six months )

- Loosen the two screws on top. (As shown in Figure1)
- Remove filter cover.
- Take the filter out and clean it with clean water and dry it.
- Put it back and secure the fixing plate with the screw in.

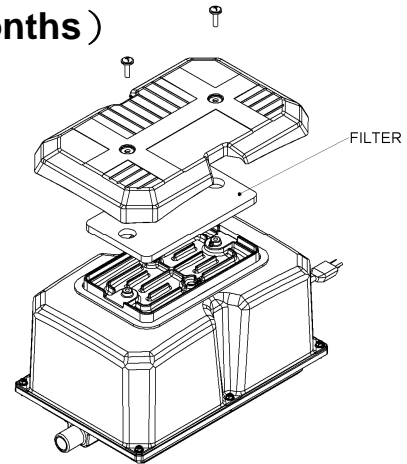


Figure 1

### 2. To change the diaphragms

**IMPORTANT :** To open the upper housing, please make sure you have unplugged the power cord before opening.

As rare earth is applied on magnets of the activating arm on models DBMX250, DBMX300, please be very careful after you have disassembled these parts—Do NOT allow the magnets to come into contact with any electronic devices, the watch on your wrist, cell phones, etc. **DYSFUNCTION OF THE MENTIONED OBJECTS OR DEVICES CAN RESULT FROM THE CONTACTS.**

**ALWAYS** use the fixture we have included when locating activating arm to the center spacing between the two electromagnets.

- Loosen the six screws around the aluminum upper housing, and take the housing off. (As shown in figure 2)
- Loosen the four screws around the coil cover, and take the cover off. (As shown in figure 3)
- Loosen the four screws and disassemble the diaphragm housing.
- Loosen the u-nut in the center of diaphragm.
- Take the diaphragm off its place.
- Replace a new one by mounting the rubber studs into their position.
- Press the rim of the diaphragm into the ring.
- Secure the magnet with a new u-nut and screw and put the diaphragm housing back with the four screws on.
- Put the coil cover back with the four screws on.
- Maintenance for the operated units is the same.
- Put on the aluminum cover and secure the four screws firmly.

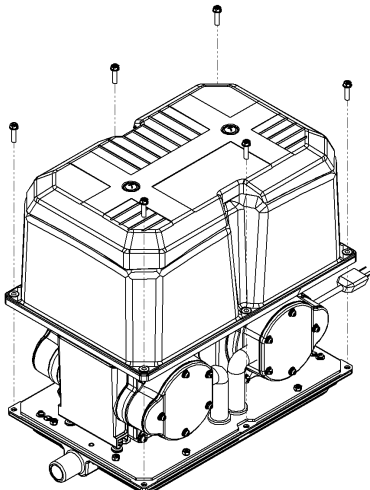


Figure 2

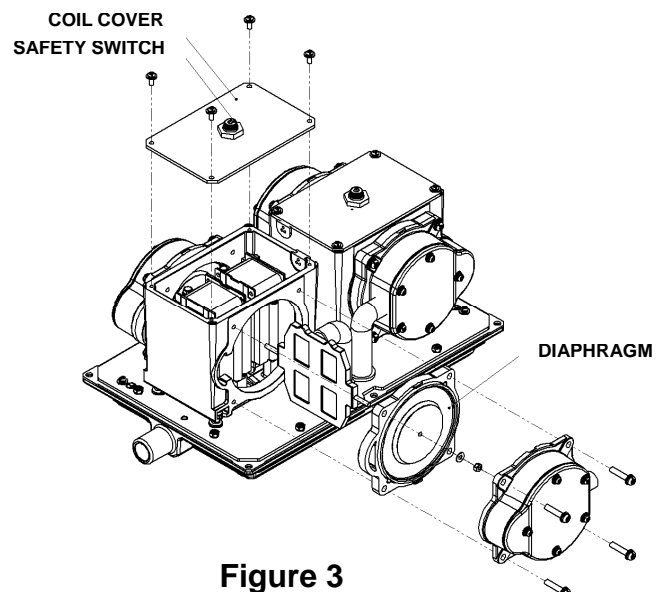
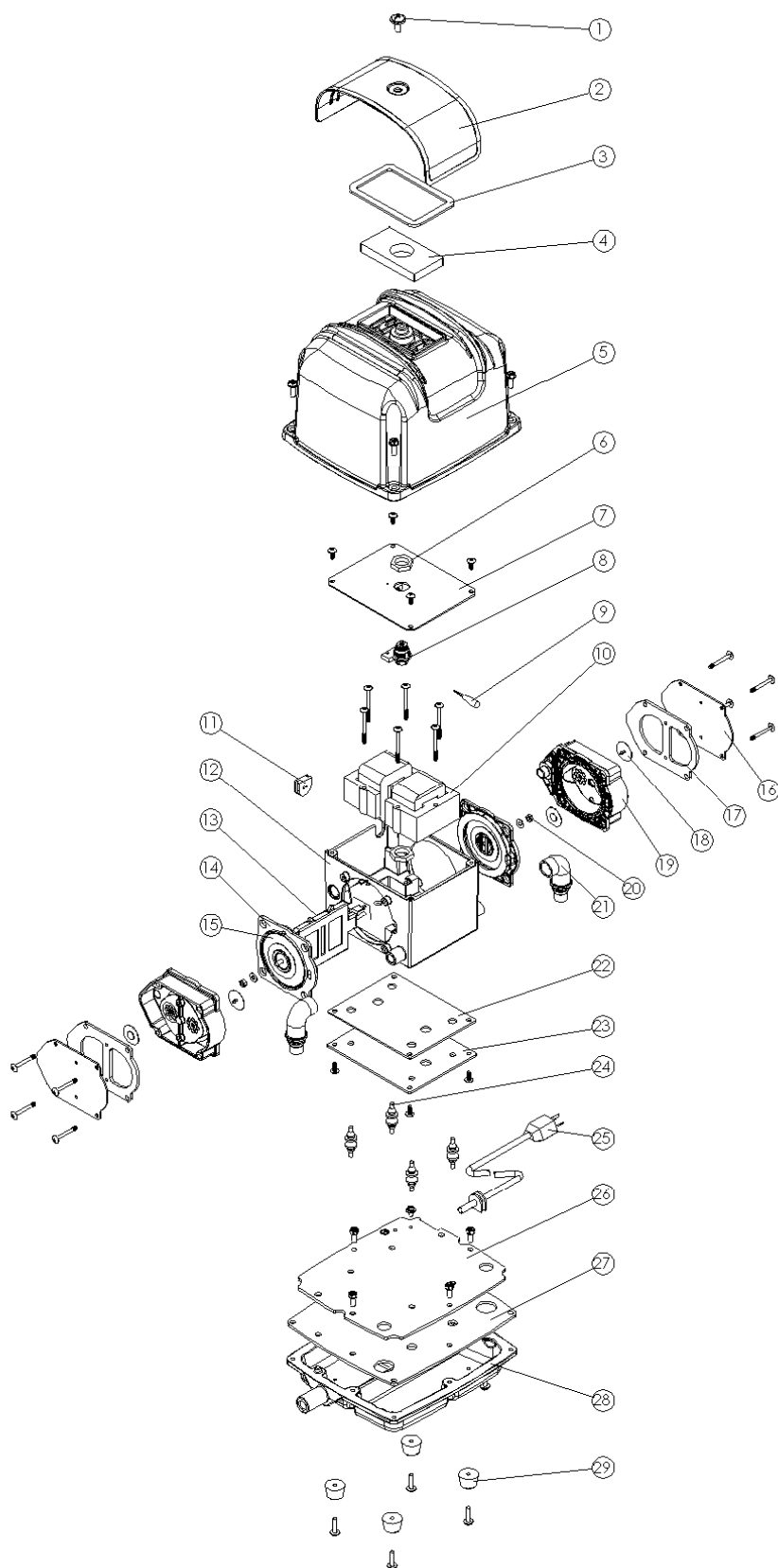


Figure 3

# DT version series 60 · 80

NO.	DESCRIPTION	QTY
1	TOP SCREW	1
2	FILTER COVER	1
3	FOAM SEAL	1
4	FILTER	1
5	UPPER HOUSING	1
6	SAFETY SYSTEM NUT	1
7	COIL COVER	1
8	SAFETY SYSTEM KIT	1
9	THERMAL PROTECTOR	1
10	ELECTROMAGNET	2
11	WIRE STOPPER	1
12	COIL FRAME	1
13	ACTIVATING ARM	1
14	DIAPHRAGM FRAME	2
15	DIAPHRAGM	2
16	DIAPHRAGM HOUSING COVER	2
17	GASKET – 1	2
18	CHECK VALVE	4
19	DIAPHRAGM HOUSING	2
20	U – NUT	2
21	L – TUBE	2
22	GASKET – 2	1
23	STEEL PLATE – 1	1
24	VIBRATION CONTROL RUBBER	4
25	POWER CORD	1
26	STEEL PLATE – 2	1
27	GASKET – 3	1
28	LOWER HOUSING	1
29	RUBBER FEET	4





# Maintenance Manual

## DT version 60 、 80

### 1. To clean the air filter ( Recommended once every six months )

- Loosen the screw on top. (As shown in Figure1)
- Remove filter cover.
- Take the filter out and clean it with clean water and dry it.
- Put it back and secure the fixing plate with the screw in.

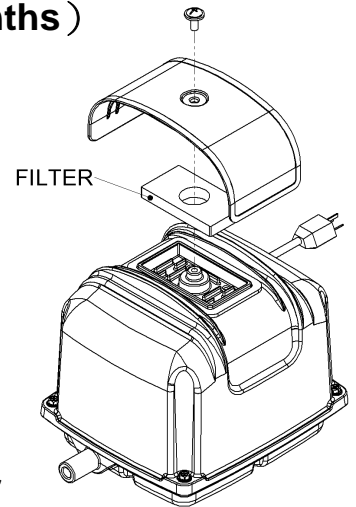


Figure 1

### 2. To change the diaphragms

**IMPORTANT :** To open the upper housing, please make sure you have unplugged the power cord before opening.

As rare earth is applied on magnets of the activating arm on models DT60, DT80, please be very careful after you have disassembled these parts—Do NOT allow the magnets to come into contact with any electronic devices, the watch on your wrist, cell phones, etc. **DYSFUNCTION OF THE MENTIONED OBJECTS OR DEVICES CAN RESULT FROM THE CONTACTS.**

**ALWAYS** use the fixture we have included when locating activating arm to the center spacing between the two electromagnets.

- Loosen the four screws around the aluminum upper housing, and take the housing off. (As shown in figure 2)
- Loosen the four screws around the coil cover, and take the cover off. (As shown in figure 3)
- Loosen the four screws and disassemble the diaphragm housing.
- Loosen the u-nut in the center of diaphragm.
- Take the diaphragm off its place.
- Replace a new one by mounting the rubber studs into their position.
- Press the rim of the diaphragm into the ring.
- Secure the magnet with a new u-nut and screw and put the diaphragm housing back with the four screws on.
- Put the coil cover back with the four screws on.
- Put on the aluminum cover and secure the four screws firmly.

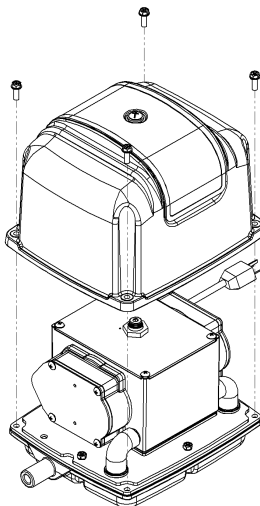


Figure 2

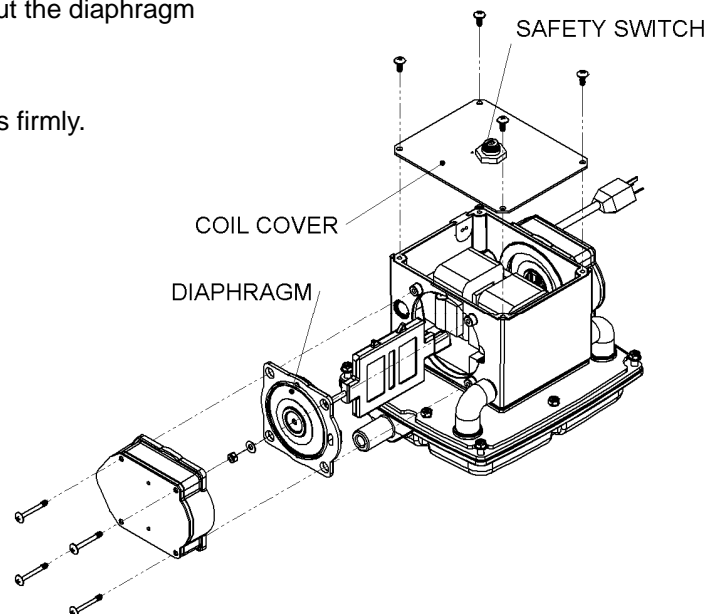


Figure 3

# WARRANTY

## GUARANTEE PROVISIONS

Warranty policy covers the structure of the air pump within two years operation.
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Warranty policy guaranteed under the condition that:

- (A) It is operated in accordance with the instruction manual.
- (B) Any repairs to this air pumps must be accompanied by this certificate undertaken by the dealer from whom it was purchased.

Though the guarantee period may not have expired, repair fees must be made in the following cases:

- (A) When the fault is due to improper usage, or repairs have been attempted by persons other than an authorized dealer.
- (B) When the fault is due to fire, natural disaster or incorrect voltage.
- (C) If the guarantee has been lost, incorrectly completed or details fraudulently changed.

**Please read this Manual and save for future reference.**

This pump is Oil-less compressors requiring NO lubrication.

Consult your supplier before using at high altitudes.

Distributor/ Representative:	
Model No:	
Serial No:	
Guarantee Period	