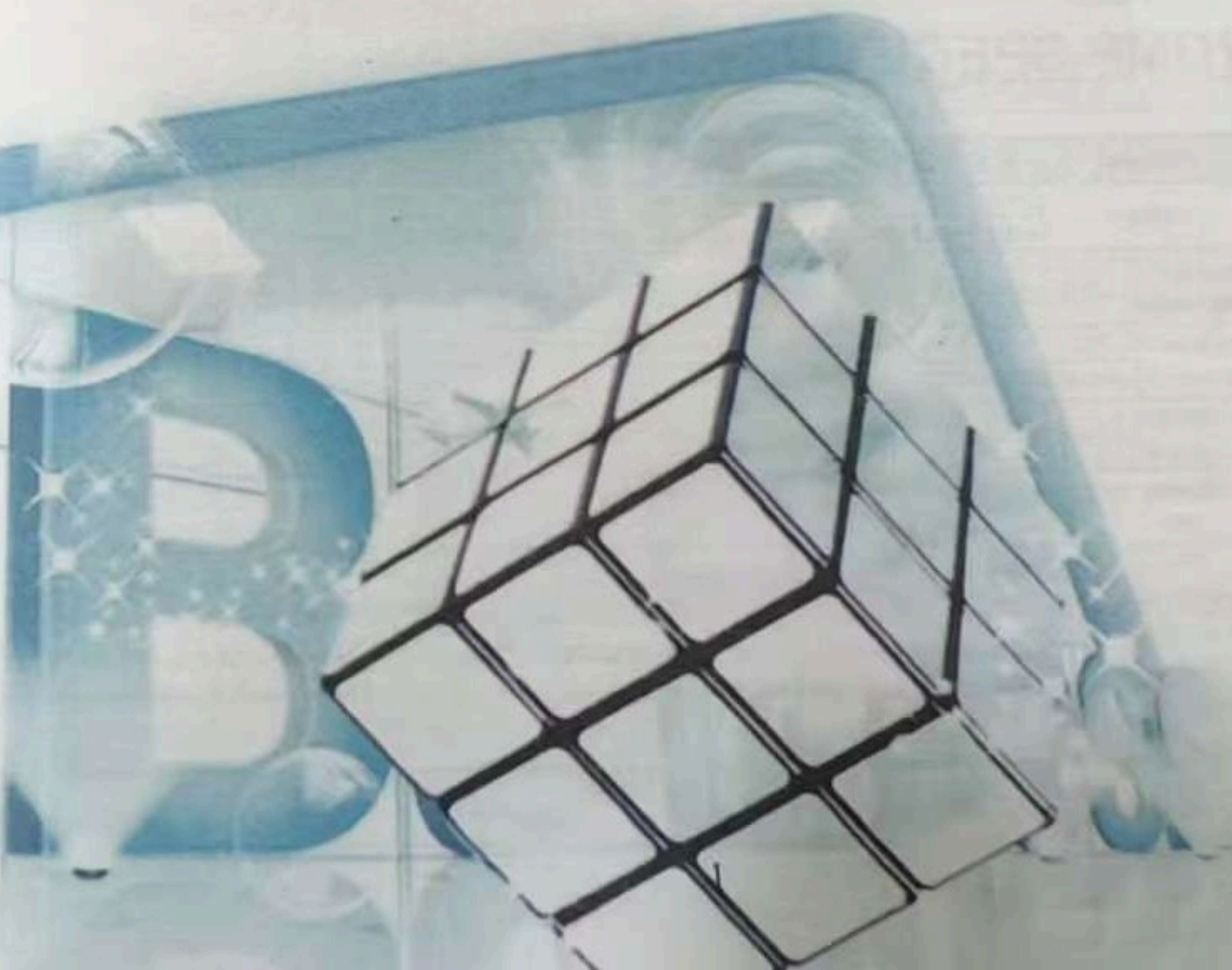


VACUUM PUMP INSTRUCTION MANUAL

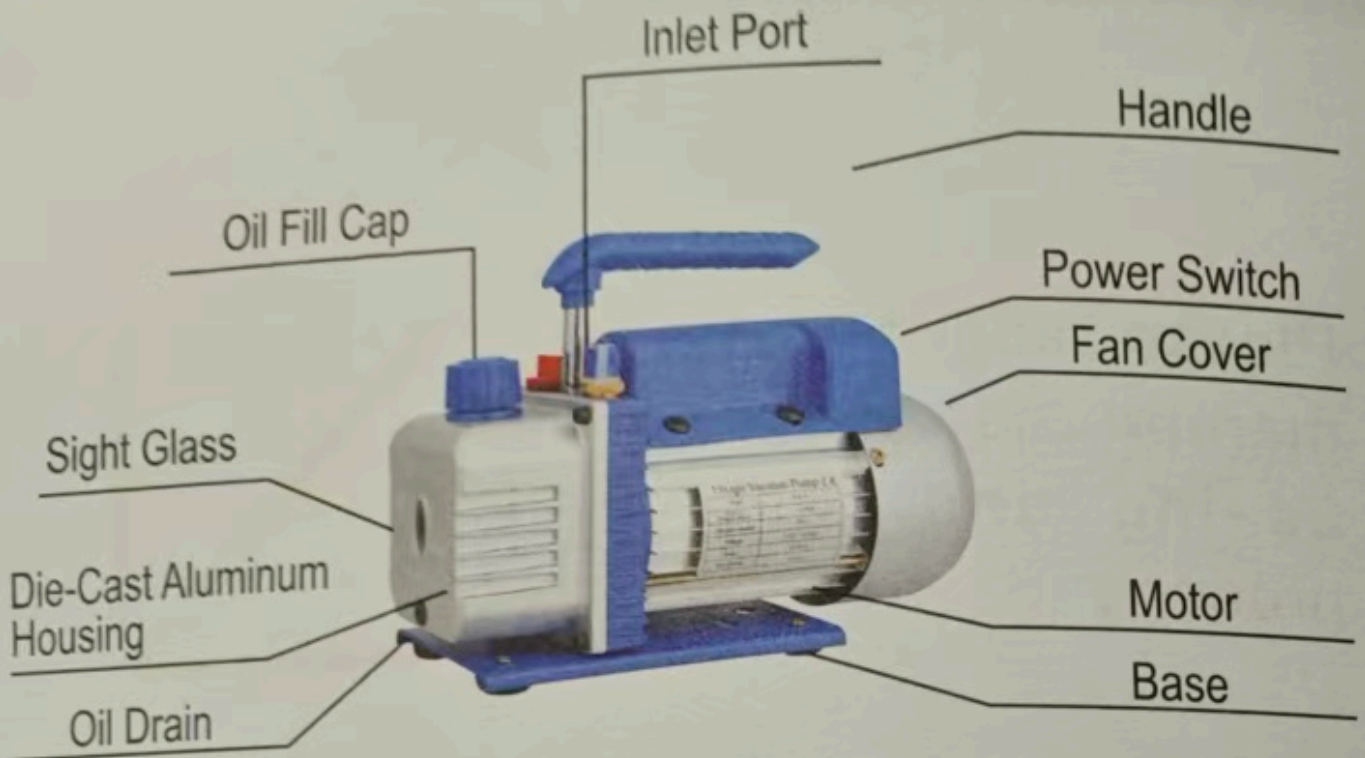


VACUUM PUMP

Please read the operating manual carefully before using and reserve it properly



PARTS ILLUSTRATION



PUMP SPECIFICATIONS

Model		RS-0.5		RS-1		RS-1.5		RS-2		RS-3		RS-4		RS-6	
Voltage		110V	220V	110V	220V	110V	220V	110V	220V	110V	220V	110V	220V	110V	220V
		60HZ	50HZ	60HZ	50HZ	60HZ	50HZ	60HZ	50HZ	60HZ	50HZ	60HZ	50HZ	60HZ	50HZ
Free Air Displacement	CFM	1.8	1.5	3	2.5	4	3.5	5	4.5	7.0	6.0	9.0	8.0	12	10
	PA	5		5		5		5		5		5		5	
Ultimate Vacuum	Mbar	0.05		0.05		0.05		0.05		0.05		0.05		0.05	
	Rotating Speed	1720	1440	1720	1440	1720	1440	1720	1440	1720	1440	1720	1440	1720	1440
Power (HP)		1/4		1/4		1/3		1/3		1/2		3/4		1	
Oil Capacity (ml)		170		220		225		250		250		300		450	
Dimension (mm)		243x114x207		260x110x240		275x115x240		290x120x240		310x125x255		360x135x270		430x142x280	
Weight (Kg)		5		5.5		6.5		8.5		11		12		18	

Model		2RS-0.5		2RS-1		2RS-1.5		2RS-2	
Voltage		110V	220V	110V	220V	110V	220V	110V	220V
		60HZ	50HZ	60HZ	50HZ	60HZ	50HZ	60HZ	50HZ
Free Air Displacement	CFM	2	1.5	3	2.5	4	3.5	5	4.5
Ultimate Vacuum	PA	3×10^{-1} Pa		3×10^{-1} Pa		3×10^{-1} Pa		3×10^{-1} Pa	
Rotating Speed		3500	2800	3500	2800	3500	2800	3500	2800
Power (HP)		1/4		1/3		1/3		1/2	
Oil Capacity (ml)		250		250		330		330	
Dimension (mm)		280x110x215		280x110x215		290x115x220		290x115x220	
Weight (Kg)		7		7.5		8		9	
Model		2RS-3		2RS-4		2RS-5			
Voltage		110V	220V	110V	220V	110V	220V		
		60HZ	50HZ	60HZ	50HZ	60HZ	50HZ		
Free Air Displacement	CFM	7	6	12	10	14	12		
Ultimate Vacuum	PA	3×10^{-1} Pa		3×10^{-1} Pa		3×10^{-1} Pa			
Rotating Speed		1720	1440	1720	1440	1720	1440		
Power (HP)		3/4		1		1			
Oil Capacity (ml)		370		500		550			
Dimension (mm)		360x135x275		430x142x280		430x142x280			
Weight (Kg)		11		17		18			

USER'S MANUAL

- ▶ Examine the oil level before operation, make sure the oil level is not lower than the oil level line. Ensure to fill oil with the right level and oil specification before starting to power on (use high-speed vacuum oil specification "HFV 32")
- ▶ Take off the gas filling cap and connect the pump container. The pipe should be short and sealed to avoid any leak.
- ▶ Take off the exhaust cap, plug in and switch on for readiness of operation and uses.
- ▶ After using the machine, unplug it, remove the connecting pipes, and cover the exhaust cap and oil plug.

CAUTIONS


- ▶ Do not pump inflammable, explosive and poisonous gases.
- ▶ Do not pump gases which can corrode metals and can exert chemical changes with the pump oil
- ▶ Do not pump gases containing pellet dust and gases with plenty of steam.
- ▶ The temperature of the pumped gas should not be over 80°C and the environment temperature should not be lower than 5°C - 6°C.
- ▶ Do not use it as a compression or a convey pump.
- ▶ Do not use or operate without oil.
- ▶ Do not pull on the wire when unplugging from the outlet.
- ▶ Do not put heavy weights on the wire to avoid being extruded.
- ▶ Do not use when the plug or outlet if it is damaged.
- ▶ Do not plug or unplug with your wet hands.
- ▶ Unplug or switch off the machine when there is any kind of leak of coal gas.

INSTALLATION

- ▶ When using the pump it should be in horizontal and put it in dry and clean ventilation. The distance to the periphery should be over 2cm and the space distance between the fronts and back should be at least 5cm. When installing it onto the equipment make sure that sufficient amount of air can enter at the side of the vane shell.
- ▶ The gas entering mouth can be connected according to the screw thread of it and can be also plugged with a leather pipe.
- ▶ Installation onto a complete set:
 - a. Remove the rubber base from the bottom base and connect with ST4.2 screw nail. If you have no special equipment for installation, you're welcome to be assisted with our company for this task.
- ▶ If the pump gases are harmful to ones health or have a bad effect on the environment, you can extend pipes so you can extend the exhaust mouth going outside, however, ensure to practice logical method that will protect the environment.
- ▶ If especially needed, an electromagnetic valve can be installed at the gas entering mouth.

TROUBLESHOOTING GUIDE

FORM OF BREAKDOWN	CAUSES	REMOVING WAYS
LOW DEGREE OF VACUUM	1. Lack of oil	Fill the oil at the above level line
	2. The pumping oil is emulsified or dirty	Change the oil
	3. The oil-entering mouth is blocked up or short in oil	Clean the oil-entering mouth, wash the filter net
	4. The connection of drain pipes	Check the connection of the pipes
	5. The pump is not suitable	Pump container recalculates suitable one
OIL DRAIN	1. The oil-setter is damaged	Change it
	2. The tank is loose or worn out	Screw it and the O shaped ring
OIL SPRAY	1. Too much oil	Put the oil at the level line only
	2. The pressure of the gas-entering mouth is too high or it has pumped much	Choose a bigger pump
DIFFICULT IN STARTING	1. The oil temperature is too low	Starts the machinery several times or heat the oil
	2. There is some breakdown in the electrical machinery	Check and fix it
	3. Some foreign matter is in the pump	Check to remove



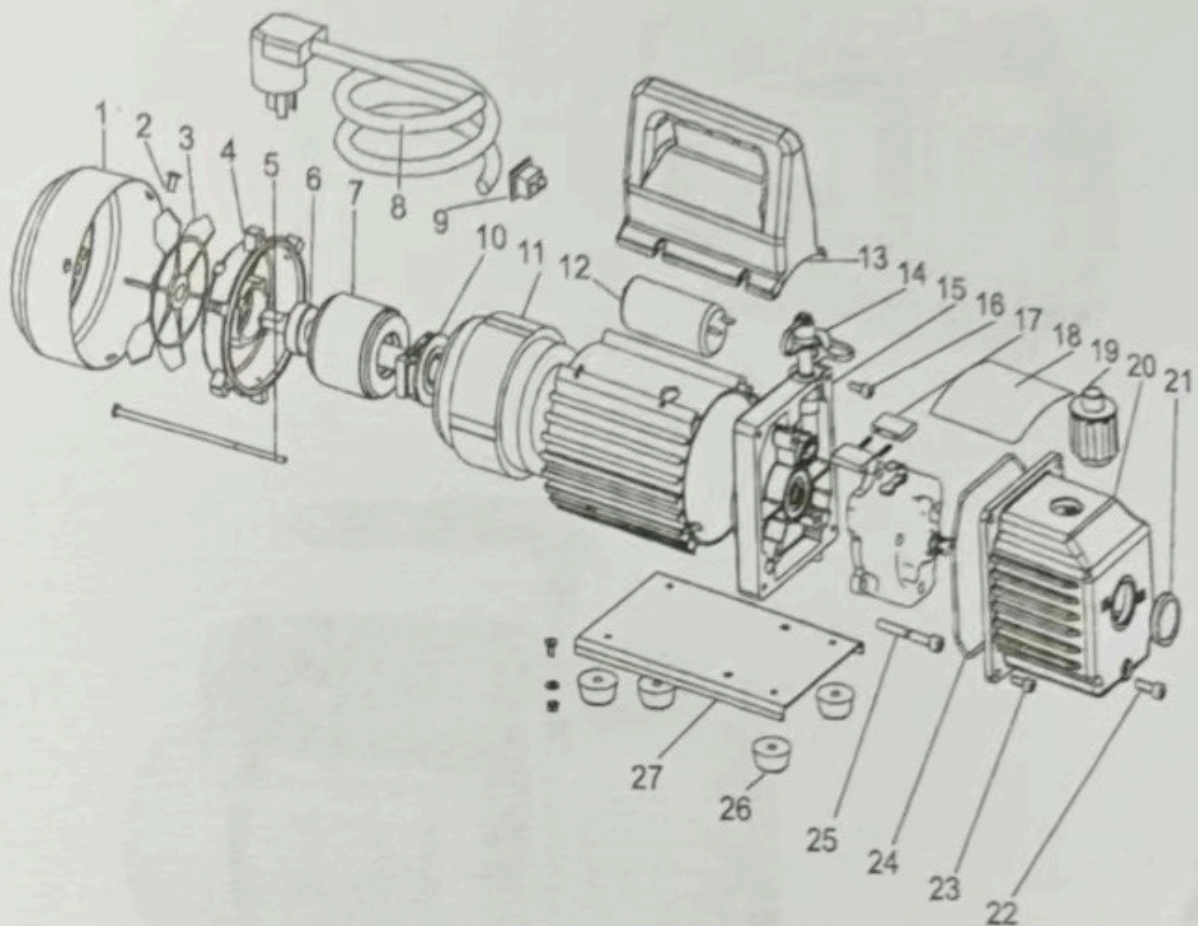
MAINTENANCE

- ▶ Keep the pump clean and prevent foreign matter from entering it.
- ▶ Keep the oil level. Do not keep it running without oil.
- ▶ Keep the oil clean. If it becomes dirty, muddy or has water or other volatile substances which affect limit vacuum the oil should be replaced. Before replacing the oil, start the pump and have it run about 30 minutes to make the oil thin and then stop it and let out the oil from the oil-outing mouth. Then have it run for 1-2 minutes with the gas-entering mouth open. During this time, add a small quantity of clean oil from the gas-entering mouth so as to replace the remaining oil in the pump. Do it repeatedly. After making sure the pump is clean put on the oil-outing screw plug and then fill clean pump oil to the oil-level line from the oiling mouth.
- ▶ If it is not in use for long, cover the oiling cap and exhaust cap and put it in a dry place. Meanwhile, damp proof and anti-rust should be considered.
- ▶ If it needs removing and fixing, have an experienced or professional technician to do it.

WARRANTY

- ▶ Within 7 days from the date of purchased and found out having manufacturing defects, you may return to us for replacement and bring along with the Sales Invoice and Receipt. But reassure No Physical damage before replacing the item.
- ▶ If after the 7 days from the date purchased and the item had a defect, you may call the local dealer for service.
- ▶ Vacuum pump has a 1 year warranty for the Parts and motor, except physical damage.

EXPLODED VIEW AND PARTS LIST



1	Fan Cover
2	Cross screw
3	Fan
4	Motor cover
5	Cross screw
6	Bearing
7	Motor rotor
8	Power supply cords
9	Power switch
10	Centrifugal switch
11	Motor stator
12	Capacitor
13	Handle
14	Inlet fitting
15	Trestle
16	Screw

17	Rotary-vane
18	Cap board
19	Exhaust fitting
20	Die cast aluminum housing
21	Sight glass
22	Oil drain cap
23	Screw
24	Seal
25	Screen
26	Rubber foot
27	Base

