



## Operation and Maintenance Manual for **VS400**

Vacuum Pump



Finetech Research and Innovation Corporation

[www.finetech-filters.com](http://www.finetech-filters.com)



Please read this operation and maintenance manual carefully and thoroughly before operating the pump.



This is the hazard alert symbol. It is used to alert you that personal injury or property damage is possible.



**DANGER** Severe personal injury or death will occur if hazard is ignored.



**WARNING** Severe personal injury or death can occur if hazard is ignored.



**CAUTION** Minor injury or property damage can occur if hazard is ignored.

### SPECIFICATION

Model	Open Flow		Max. Vacuum	HP	Watt	N.W.
	220V/50Hz	110V/60Hz				
VS400	32	40	660 mmHg (±6%)	1/6	120	5.5

### GENERAL INFORMATION

This unit is designed to be used for the purpose of pumping air. This pump should not be used for the pumping of fluids, particles, solvent, solids or any combustible substances likely to cause explosions.

## Warranty Card

### Customer Information

Name:

Tel:

Address:

### Product Information

Model No:

Distributor:

Distributor Tel:

Purchase  
Date:

Distributor  
Address:

Vacuum Pump Model NO.: VS400

Warranty

1. Warranty period: 1 year from the purchase date
2. Conditions: We provide repair service free of charge, but such service will be limited to normal use only. Any damage caused by misuse by users shall not be covered by the warranty here from Finetech.

Contact Information : Finetech Research and Innovation Corp. Head Office  
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## SERVICE

### UNIT DISASSEMBLY:

Disconnect the unit from the electrical power.

**⚠ WARNING** You must disconnect the unit from electrical power before servicing it. Failure to do so can result in severe personal injury or death.

**⚠ WARNING** You must vent all air lines to the unit to remove pressure before servicing it. Failure to do so can result in severe personal injury.


NOTE: Finetech CO., LTD. will not guarantee the performance of a field rebuilt unit. You can return the unit to Finetech CO., LTD. or authorized distributor.


### TROUBLE SHOOTING GUIDE


REASON	LOW PRESSURE	HIGH PRESSURE	LOW VACUUM	EXCESSIVE NOISE	OVER HEATING	WON'T START
Dirty Filter	x				x	
Dirty Muffler			x		x	x
Dirty Valves	x		x			
Damaged Valves	x		x			x
Worn/Damaged Cup	x		x	x		
Improper Cylinder Shimming	x	x	x	x	x	x
Leaky Hose	x		x			
Plugged Vac. Or Press. Line	x	x	x		x	x
Low Voltage	x		x		x	x
Leaky Relief Valve	x		x			




1. Vacuum Gauge
2. Outlet
3. Inlet
4. Pressure Regulator
5. Needle valve (for drainage)
6. silencer
7. Filter Element


 **DANGER** Do not pump flammable or explosive gases or operate the unit in an atmosphere containing them.


 **CAUTION** The unit is designed for pumping air. Do not allow corrosive gases or particulate material to enter the pump. Water, oil-based contaminants, or other liquids must be filtered out.


 **CAUTION** Normal ambient temperature should not exceed 40°C (104°F). This is particularly important when the unit is installed in a confined space where heat may build up during operation.

 **WARNING** This unit is oil-less design. Never lubricate this oil-less unit. Most components are made of aluminum and steel.


## **INSTALLATION**


 **WARNING** To avoid risk of electrocution do not use this product in an area where it could come in contact with water or other liquids. If exposed to the elements, it must be weather protected.


 **CAUTION** Do not block the flow of cooling air over the unit in any way.


 **CAUTION** Be sure that the available electric power matches specifications marked on the unit. Serious damage may occur to the unit if connected to an improper voltage.

## **OPERATION**

 **CAUTION** This unit is designed to start against atmospheric pressure only, not under load (Pressure or vacuum). Care must be taken to eliminate load when pump is turned off for any reason.

 **CAUTION** Do not operate this unit above recommended pressures or vacuum duties. To do so will damage the unit.

 **CAUTION** After use, disconnect plumbing and let the unit run open for about 5 minutes in air before switching it off, to purge out droplets of liquid that may have formed on the inside of the unit. This prevents crystallization and/or absorption of liquids.

 **WARNING** This unit is thermally protected and will automatically restart

unexpectedly when the overload device resets. Do not pump Solvent, flammable or explosive gases or operate this unit in an atmosphere containing flammable or explosive gases.

## **MAINTENANCE AND INSPECTION**

Intake filter requires periodic inspection and replacement. Initial inspection is suggested at 500 hours, then the user should determine the frequency thereafter. Most problems can be prevented by keeping filters clean. Dirty filter decreases unit performance and can decrease unit life.