VEVOR®

TOUGH TOOLS, HALF PRICE

EFRIGERANT RECOVERY MACHINE OPERATING MANUAL

We continue to be committed to provide you tools with competitive price. "Save Half", "Half Price" or any other similar expressions used by us only represents an estimate of savings you might benefit from buying certain tools with us compared to the major top brands and doses not necessarily mean to cover all categories of tools offered by us. You are kindly reminded to verify carefully when you are placing an order with us if you are actually saving half in comparison with the top major brands.

VEVOR®

REFRIGERANT RECOVERY MACHINE OPERATING MANUAL



NEED HELP? CONTACT US!

Have product questions? Need technical support? Please feel free to contact us:

⊠CustomerService@vevor.com

This is the original instruction, please read all manual instructions carefully before operating. VEVOR reserves clear interpretation of our user manual. The appearance of the product shall be subject to the product you received. Please forgive us that we won't inform you again if there are any technology or software updates on our product.

Technical Parameters

Brand	Vevor	Vevor
Model	RR250	RR250
Voltage	120V∼ 60Hz	220-240V∼ 50Hz
Power	3/4hp	3/4hp
Product Size	13.4kg	13.4kg
Product Weight	400*250*360mm	400*250*360mm

NOTICE FOR USE

- ♦ Dear customers, thanks for your trust and support. Thanks for using our refrigerant recovery unit. We will provide you with the best quality and service.
- ♦ Please check if the product you see now is the product you purchased and if the attachments and manual are fillly equipped, if any damage is done during transportation Jf you have come across any of these, please contact the local distributor or our A/S.
- ♦ Please read carefully the Operation Manual and follow the instructions while operating this unit.
- ♦ For a long lifetime and safe running, please carefully read this manual before operating, testing or maintaining this unit.

GENERAL SAFETY

SECURITY LABELS

Marning

Warning means that mis-operation can lead to body injury,

⚠ Notice

Notice means that mis-operation can do harm to the unit and lower the

performance of the unit, or even make the unit unable to work properly.

For your better understanding of the security labels in this manual, we have listed the content of these security labels for your reference.

Marning

Only a qualified technician should operate this recovery unit.

Marning

Before starting the equipment, be sure that it is well grounded.

Warning

While using electrical wire, the wire must be well connected and grounded.

⚠ Warning

Only a qualified electrician should do the wire connection according to the technical standard and circuit diagram.

riangle Warning

Be sure the power is off before examining or repairing the recovery unit.

Warning

If the original power supply cord is damaged, choose carefully for the replacing one, or you may directly buy from us.

Warning

When the unit breaks down, be sure the power is off before you do any operation.

Warning

Please take power supply and the capacity of your ammeter and electrical wire.

Marning

Use only authorized refillable refrigerant tanks. It requires the use of recovery tanks with a minimum working pressure of 40 bar (580psi). Do not overfill the recovery tank. Tank is full at 80% capacity. There should be enough space for liquid expansion. Overfilling of the tank may cause a violent explosion.

Warning

An electric scale is needed to prevent overfilling.

⚠ Warning

Always wear safety goggles and protective gloves while working with refrigerants to protect your skin and eye from refrigerant gases or liquid. Avoid getting in touch with caustic gas or liquid.

A Warning

Be sure that the room where you are working is thoroughly ventilated.

⚠ Notice

Be sure the unit is working under the right power supply.

M Notice

When using an extension cord, it should be a minimum 1.5mm2 AWG and no longer than 7.5 meters, or it may cause the voltage drop and damage the compressor.

⚠ Notice

The input pressure of the unit should not exceed 26bar(377.1psi).

⚠ Notice

The unit need to be laid horizontally, otherwise it will lead to unexpected vibration, noise or even abrasion.

⚠ Notice

Do not expose the equipment to sun or rain.

⚠ Notice

The ventilation opening of the unit must not be blocked.

⚠ Notice

If the overload protector pops, reposition it after 5 minutes.

Type X attachment: If the supply cord is damaged, it must be placed

by a special cord or assembly available from the manufacturer or its service agent.

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

OPERATION MANUAL

- 1. Do not mix different refrigerants together in one tank, or they could not be separated or used.
- 2. Before recovering the refrigerant, the tank should achieve the vacuum

level:-75cmHg(-29.6psi)> which is for purging non-condensable gases. Each tank was full of nitrogen when it was manufactured in the factory, thus the nitrogen should be evacuated before the first use.

- 3. The switch should be at "Position 0" before operation. All the valves must be closed, the input and output fittings should be covered with protective caps when the unit is not in operation. The air moisture is harmful to the recovery result and will shorten the life span of the unit.
- 4 .A filter drier should always be used and should be replaced frequently. And each type of refrigerant must have its own filter. For the sake of ensuring the normal operation of the unit, please use the filter specified by our company. High quality filter drier will bring high quality services.
- 5. Special-caution is needed when recovering from burnt system, and two dry filter is needed.
- 6. The unit has an Internal High Pressure Shut-Off Switch. If the

pressure inside the system is above 38.5 bar, compressor will automatically shut off. To restart the compressor, please decrease the internal pressure (High pressure shut-off switch reset automatically).

When High Pressure Protection is initiated, please find out the cause and deal with it before restarting the unit.

Cause of High Pressure Protection and Trouble Shooting:

- ①The input valve of the refrigerant tank is closed—open the valve will help solve the problem.
- ②The connecting hose between the recovery unit and refrigerant tank is stuck—close all the valves and replace the connecting hose.
- 3The temperature of the refrigerant tank is too high, pressure is too high—give it some time to cool down and the pressure will come back to normal.
- 7. In order to gain maximum recover speed, a hose with inner diameter bigger than 4mm is recommended and the hose should better be shorter than 1.5m.
- 8. While recovering large amounts of liquid, use the Push/Pull Mode. (see Push/Pull mode operation on Pagell)
- 9. After recovering, make sure there is no refrigerant left in the unit. Read the Purge Operation carefully. Liquid refrigerant remained in the unit may be expanded and destroy the components.
- 10. If the unit is to be stored or not used for any length of time, we recommend that it be completely evacuated of any residual refrigerant and purged with dry nitrogen.
- 11. Connection hose with check valve is recommended, it can prevent refrigerant lose.
- 12. The intake port is equipped with filter screen, please wash it frequently to keep it clean.
- 13. The One Key Operation switch is not allowed between the positions ("0", "1", "2", "3"), it must point directly to the numbers.

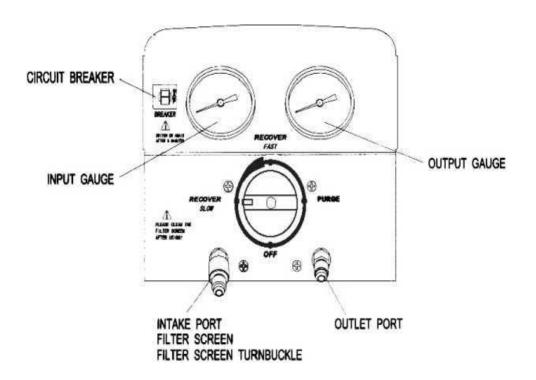
- 14. If it is difficult to start the unit, please turn the Switch two rounds to balance the internal pressure and make it easier to start the unit*
- 15. The Low Pressure Gauge shows the pressure of the intake port of the compressor and the High Pressure Gauge shows the pressure of the outlet port of the recovery unit.
- **16.** After using, please turn the knob to "0" position.

SPECIFICATION

MODEL	RR250			RR500		
Refrigerants	Category III: R12, R134a, R401C, R406A, R500					
Power	11	0-120VA	C 60Hz, 2	220-240 V	'AC 5O-6	OHz
Motor	3/4HP, Single cylinder system 1 HP,twin cjdinder system			r system		
Motor Speed	1450rpm^)50Hz			175	0rpm{a)6	0Hz
Maximal Current Draw	110V:8A 220V:5A			110V:10A 220V:SA		
Compressor		Oil-less, Air-cooled, Piston				
High Pressure Shut-off		383 bar/38S0kPa(558psi)				
	Catego ry III	Categor y IV	Categor y V	Categor y III	Categor y IV	Categor y V
Vapor	0. 20	0. 25	0.25	0.40	0.50	0.50
Recovery Rate(kg/ min) Liquid	1. 60	1. 80	2.20	3.00	3.50	3.50

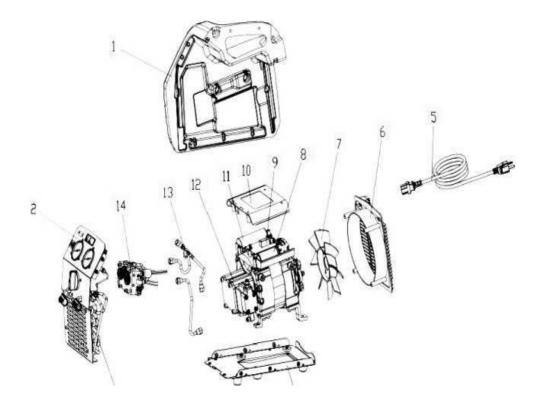
Push/Pull	4. 60	5. 60	6.30	7.50	8.50	9.50
Operating Temperature		0C~4OC/32~104°F				
Dimensions	400mmx250nunx360mm					
Net Weight	13.5kg				14.0kg	

INTRODUCTION OF OPERATION PANEL

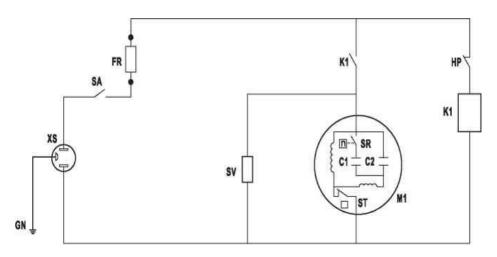


PARTS DIAGRAM

NO.	Component	NO.	Component
1	Cover	8	Starting Capacitor
2	Front Panel	9	Plugboard
3	Air-Cool Condenser	10	Junction Box Cover
4	Base	11	Running Capacitor
5	Power Supply Cord	12	Compressor
6	Fan Cover	13	Copper pipes
7	Fan	14	Control Valve



WIRING DIAGRAM

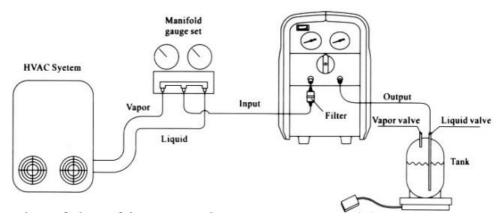


ITEM	GRAPHICS CODE	DESCRIPTION	REMARKS
1	XS	Power Outlet	
2	SA	Power Switches	
3	FR	Overload Protection Device	
4	MI	Compressor Motor	
5	SR	Centrifugal Switch	
6	CI	Start Capacitor	
7	C2	Running Capacitor	
8	ST	Motor Thermal Protectors	
9	HP	High Pressure Switch	
10	SV	Solenoid Valve	
11	KI	Relay	

RECOVERY METHOD

- 1. Turn the Switch to position "1"
- 2. Correctly and firmly connect the hoses. (See Connection Drawing)
- 3. Connect the unit to the right power supply(as shown on the Name plate)

Please Press the "START" button to start the unit



- 4. Open the gas valve and liquid valve of the refrigerant tank.
- 5. Turn the Switch to position "2" to start Push/Pull Mode operation recovery
- 6. Slowly turn the Switch to Position"2" for faster recovery.

∧ Notice

①If compressor impact occurs, turn the Switch to position "1" If the impact still occurs, please slowly turn the switch within the limits of the yellow area, and the indicating value of Low Pressure gauge begin to drop, until the impact stops. But the pressure should be above 0> otherwise the intake port cannot take air.

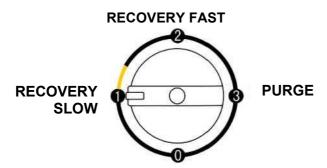
(About the yellow, please see the knob diagram in page 10)

- ②If the power goes off when the unit is working, and the unit cannot restart, you can turn, the Switch 2 rounds and stop at position turn the power on and hit the Start button to start the unit.
- 7. When liquid recovery is finished, turn the Switch to position "2" for faster recovery.

8. The unit will automatically stop when recovery is finished, please do the Purge operation now.

SELF-PURGE METHOD

- 1. ① If the ultimate vacuum meet your request but the unit is still working, please turn the switch to position "3" to start purge directly.
- 2. When reaches the required vacuum, purging ends.
- ① Close the valve of the refrigerant tank.
- ② Close the check valve of the connecting hoses.
- ③ Close the liquid valve and gas valve of the manifold gauge.
- ④ Close the connecting valve between the refrigeration system and the manifold valve.
- ⑤ Press 'START'button, and disconnect all the external hoses.
- 6 Cap the intake port and the outlet port



△ Warning

After each use the unit must be purged, make sure there is no refrigerant left in the unit. Liquid refrigerant remained may expand and damage the components.

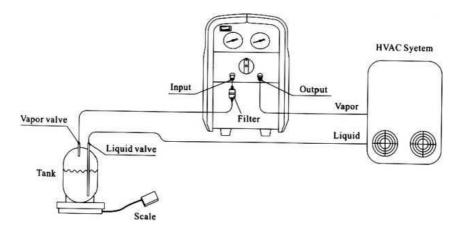
LIQUID PUSH/PULL METHOD

When recovering liquid refrigerant more than 10kgs, Push/Pull is recommended.

Warning

An electric scale needs to be used together with the recovery unit to monitor the recover process. The siphon can. continue even if the machine was turned off. You must manually close the valves on the tank and the unit to prevent overfilling.

- 1. Turn the Switch to position "1".
- 2. Correctly and firmly connect the hoses. (See Connection Drawing)
- 3 .Press "START" buttg.



- 4. Open the gas valve and liquid valve of the refrigerant tank.
- 5. Turn the Switch to position "2" to start Push/Pull Mode operation recovery.
- 6. When the showing of electric scale is not changing or changing very slowly, it means that the liquid recovery is finished, and it's time for gas recovery. (The hoses need to be re-connected and please follow the Purge Operation to purge the gas refrigerant.)
- 7. Close the gas valve of the refrigerant tank and then turn press "START" button again.

- 8. Close all the valves and disconnect all the external hoses. Connect the hoses according to the Recovery Operation to do the gas refrigerant recovery.
- 9.Purge.

Warning

When the showing of the electric scale show that the refrigerant in the tank reaches 80 % capacity, please press "START" button again and close the valves of the tank.

TROUBLE SHOOTING

FAULT	CAUSE	SOLUTION
Fan not revolving	Mechanical damage	Replace the fan Factory service is needed
Compressor Don't work	Shut off by High Pressure Protection	Lower the pressure of the unit Check the connection Turn the switch two rounds and stop at
Compressor can't start (Jammed)	too high toor failure or other component damage	Turn the Switch 2 rounds and point to positionaland then restart Factory service is needed
Compressor starts but stops within a few minutes	1. High Pressure Protection caused by mis-operation shuts the unit off like: Outlet valve closed, refrigerant tank valve closed 2. Motor Overload Protection shut the motor off 3. Recovery finished, green light ON 4. Overload during liquid	 Read carefiilly the Operation Manual and follow the instructions while operating Give the motor some time to restart Follow the purge Operation to do the Purging Turn the switch 2 rounds and stop position "1 "while recovering liquid refrigerant Cool the circut breaker down and restart after 5 minutes

Low recovery speed	1. The pressure of the refrigerant tank is too high 2. Piston ring of the compressor is damaged	Cool the tank down can help bringing down the pressure Factory service is needed
Not vacuum enough		Tighten the connecting hoses Factory service is needed

This product is subject to the provision of European Directive 2012/19/EC.

The symbol showing a wheelie bin crossed through indicates that the product requires separate refuse collection in the European Union. This applies to the product and all accessories marked with this symbol. Products marked as such may not be discarded with normal domestic waste, but must be taken to acollection point for recycling electrical and electronic devices.



This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2)this device must accept any interference received, including interference that may cause undesired operation.



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Importer: FREE MOOD LTD

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