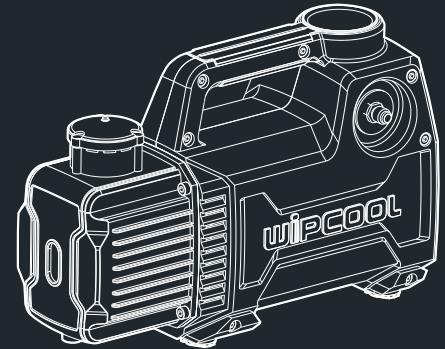


wipcool®

FEELING FOR MORE

NEW REFRIGERANT VACUUM PUMP

— OPERATION MANUAL —



wipcool®
FEELING FOR MORE

Website: www.wipcool.com

Vacuuming Quickly



1. Notice for Use

- Thank you for buying WIPCOOL Fast series vacuum pump, we are dedicated to providing you with high quality products.
- Please check if your ordered goods in good shipment condition, with the correct accessories, any damage during transportation, please contact us or the local distributors in time if you find any problems.
- If there is any change in the product (including the specification), we won't inform any more.

WARNING

To ensure the long-term stability of the product, please read this manual carefully before you install, transport, repair or maintain in order to fully understand the safety issues, the technical parameters and operation methods of the pump, etc.

2. Caution

WARNING

- 2.1 To ensure safety of the pump, please select manufacturer's original accessories and charger. (For cordless vacuum pump)
- 2.2 Do not extract gases that are corrosive or chemically react with pump oil.
- 2.3 Don't disassemble, open or chop the battery. Keep away from heat sources and flames and avoid storage under direct sunlight.(For cordless vacuum pump)
- 2.4 Don't use the battery seat to withstand mechanical impact. And don't continue to use it if battery is damaged or leaked.(For cordless vacuum pump)
- 2.5 Keep battery packs clean and dry.(For cordless vacuum pump)
- 2.6 The temperature of the inhaled gas shall not be higher than 80 °C, and the allowable ambient temperature shall be 0 °C ~ 50 °C.
- 2.7 Don't operate the pump without oil or short of oil.
- 2.8 Do not use in the rain, water enters into the machine will easily trigger electric shock.

WARNING

Charging Process (Apply for cordless vacuum pump only)

1. Remove the battery from the vacuum pump and insert it into the charger.
 2. Make sure the power supply is correct voltage. Plug the charger into the socket.
 3. The light is red indicate it's in charging, light turn off indicate it's fully charged.
- It is normal the battery pack is slightly hot during charging.

If the vacuum pump is not used for a long time, disconnect the battery charger from the pump.

Before using the vacuum pump, please fully charge the lithium battery so as not to affect your work.

Please charge the battery at the ambient temperature 50°F - 110°F (10°C - 45°C). After using for a long time, please cool down the battery and recharge.

WARNING

When the battery is discharged and fully placed in the protection state, turn off the power switch immediately. Don't turn on the machine frequently, it will cause damage to the battery and shorten battery life.

3. Product Introduction

3.1 Product Overview

Wipcool Fast series single stage and dual-stage rotary vane vacuum pumps are the basic tools for generating vacuum in sealed containers. they are suitable for refrigeration equipment using new and old refrigerants, printing equipment, medical instruments, vacuum packaging, gas analysis, thermoplastic molding and other industrial products. It can also be equipped on various high vacuum equipment

3.2 Technical Data

3.2.1 Single stage new refrigerant vacuum pump

| Model | F1 | F1.5 |
|------------------|-----------------------------|---------|
| Voltage | 230V~/50-60Hz or 115V~/60Hz | |
| Ultimate Vacuum | 150 microns | |
| Flow Rate (Max.) | 1.5CFM | 3CFM |
| | 42L/min | 85L/min |
| Oil Capacity | 370ml | 330ml |
| Weight | 4.2Kg | 4.5Kg |
| Dimensions | 309x113x198 | |
| Input Port | 1/4"SAE | |

| Model | F2R | F3R | F4R | F5R |
|------------------|-----------------------------|----------|--------------|----------|
| Voltage | 230V~/50-60Hz or 115V~/60Hz | | | |
| Ultimate Vacuum | 150 microns | | | |
| Flow Rate (Max.) | 5CFM | 7CFM | 9CFM | 11CFM |
| | 142L/min | 198L/min | 255L/min | 312L/min |
| Oil Capacity | 580ml | 560ml | 690ml | 670ml |
| Weight | 5.5Kg | 5.7Kg | 8.5Kg | 8.7Kg |
| Dimensions | 339x130x225 | | 410x150x250 | |
| Input Port | 1/4"&3/8"SAE | | 1/4"&3/8"SAE | |

3.2.2 Dual stage new refrigerant vacuum pump

| Model | 2F0 | 2F1 |
|------------------|-----------------------------|---------|
| Voltage | 230V~/50-60Hz or 115V~/60Hz | |
| Ultimate Vacuum | 15 microns | |
| Flow Rate (Max.) | 1.5CFM | 2.5CFM |
| | 42L/min | 71L/min |
| Oil Capacity | 280ml | 280ml |
| Weight | 4.7Kg | 4.7Kg |
| Dimensions | 309x113x198 | |
| Input Port | 1/4"SAE | |

| Model | 2F0R | 2F1R | 2F1.5R | 2F2R | 2F3R | 2F4R | 2F5R |
|------------------|-----------------------------|---------|--------------|----------|--------------|----------|----------|
| Voltage | 230V~/50-60Hz or 115V~/60Hz | | | | | | |
| Ultimate Vacuum | 15 microns | | | | | | |
| Flow Rate (Max.) | 1.5CFM | 2.5CFM | 3CFM | 5CFM | 7CFM | 9CFM | 11CFM |
| | 42L/min | 71L/min | 85L/min | 142L/min | 198L/min | 255L/min | 312L/min |
| Oil Capacity | 280ml | 280ml | 480ml | 450ml | 520ml | 500ml | 480ml |
| Weight | 4.2Kg | 4.2Kg | 6.2Kg | 6.5Kg | 9.8Kg | 10Kg | 10.2Kg |
| Dimensions | 309x113x198 | | 339x130x225 | | 410x150x250 | | |
| Input Port | 1/4"SAE | | 1/4"&3/8"SAE | | 1/4"&3/8"SAE | | |

3.2.3 Cordless vacuum pump

| Model | F1B | 2F0B | 2F0BR | 2F1B | 2F1BR | F2BR | 2F2BR |
|-------------------------|-------------|------------|---------|---------|-------------|----------|----------|
| Voltage | DC18V-5.0Ah | | | | | | |
| Standard Battery holder | AEG/RIDGID | | | | | | |
| Ultimate Vacuum | 150 microns | 15 microns | | | | | |
| Flow Rate (Max.) | 1.5CFM | 1.5CFM | 1.5CFM | 2.5CFM | 2.5CFM | 5CFM | 5CFM |
| | 42L/min | 42L/min | 42L/min | 71L/min | 71L/min | 142L/min | 142L/min |
| Oil Capacity | 370ml | 280ml | 280ml | 280ml | 280ml | 580ml | 450ml |
| Weight | 5.0Kg | 5.5Kg | 5.0Kg | 5.5Kg | 5.0Kg | 6.5Kg | 7.5Kg |
| Dimensions | 358x113x198 | | | | 388x130x225 | | |

⚠️ REMARK

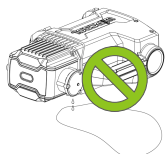
1. Model No. has **R** means Non sparking design, suitable for equipment using new and old refrigerant (such as R12, R22, R134a, R410A...). It is also suitable for the equipment using lower flammability and explosibility refrigerant (such as R32, R290a, R1234yf...)

(F2R, F2BR, F3R, F4R, F5R, 2F0R, 2F0BR, 2F1R, 2F1BR, 2F1.5R, 2F2R, 2F2BR, 2F3R, 2F4R, 2F5R)

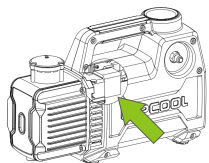
2. Model No. doesn't have **R** are suitable for equipment using new and old refrigerant (such as R12, R22, R134a, R410A...). But it is prohibited using on the equipment using lower flammability and explosibility refrigerant (such as R32, R290a, R1234yf...)

(F1, F1B, F1.5, F2, F3, 2F0, 2F0B, 2F1, 2F1B, 2F1.5, 2F2)

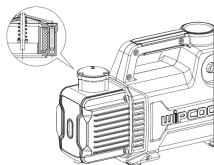
3.3 Product Features



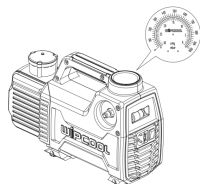
Anti oil leakage design



Built-in solenoid valve



Special anti-injection design



Top-set vacuum meter

4. Operating Procedure

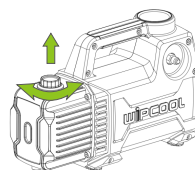
4.1 Check before Operation

Please check before use whether the products and accessories are in good condition and there is no vacuum oil leakage in the packing box.

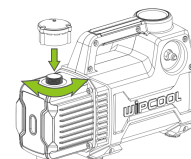
⚠ Note

This product has been filled with vacuum oil and no need to fill before use.

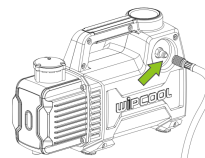
4.2 Method of Application



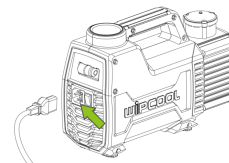
1. Please unscrew the leak-proof cover and remove it.



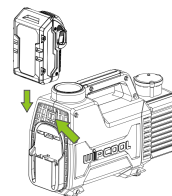
2. Find the exhaust fitting in packing box and screw it in.



3. Please connect the refrigeration equipment that needs vacuuming.



4. Please switch in the power supply and turn on the switch.



4. If cordless vacuum pump, please find the battery in the packing box and insert it into the back seat, then turn on the switch.

5. Maintenance

- Please pay attention to the oil level before each use. If the oil level is low, please add in time.
- If the vacuum pump oil is found to be blackened or abnormally floating, please change the oil in time.
- When changing oil, please unscrew the oil drain bolt under the oil tank, release oil and tighten the bolt, then unscrew the exhaust fitting again. Slowly pour the oil in, turn on the machine and observe that the oil level is stable in the middle of the oil level line, then turn back the exhaust fitting. (Due to the built-in anti-side oil leakage device, the oil filling speed may be affected, please add slowly)

6. Troubleshooting

| Problem | Cause | Action |
|-------------------|---|--|
| Low vacuum degree | 1.Vacuum oil not enough | Add oil to middle level |
| | 2. Pump oil emulsified, not clean | Change new vacuum oil |
| | 3. The oil inlet is blocked or oil supply not enough | Clean the oil inlet and filter screen |
| | 4. Leakage of vacuum pipe or container | Check leakage in pipes and containers and repair |
| | 5. Pump model is not suitable | Check the size of the container to be pumped and select a matching vacuum pump |
| | 6. Long period use, the parts are worn, the spacing is increased, or the pipeline in the pump leaks | Repair or replace a new vacuum pump |
| | 7. There are impurities on the sealing surface of the exhaust fitting | Check and remove impurities |
| Oil Leakage | 1.Oil seal wear | Replace the new oil seal |
| | 2.Loose or damage of oil tank connection | Tighten screws or replace O - rings |

| | | |
|---------------------------------------|----------------------------------|--|
| Pump hard to start | 1.The oil temperature is too low | Connect the air inlet to the atmosphere, start the motor continuously to heat pump oil |
| | 2.Motor or power problems | Check and repair |
| | 3.Impurities enter into the pump | Check and remove impurities |
| Pump unable to start or stop suddenly | 1.Fuse blown | Check and replace |
| | 2.Motor or power problems | Check and repair |