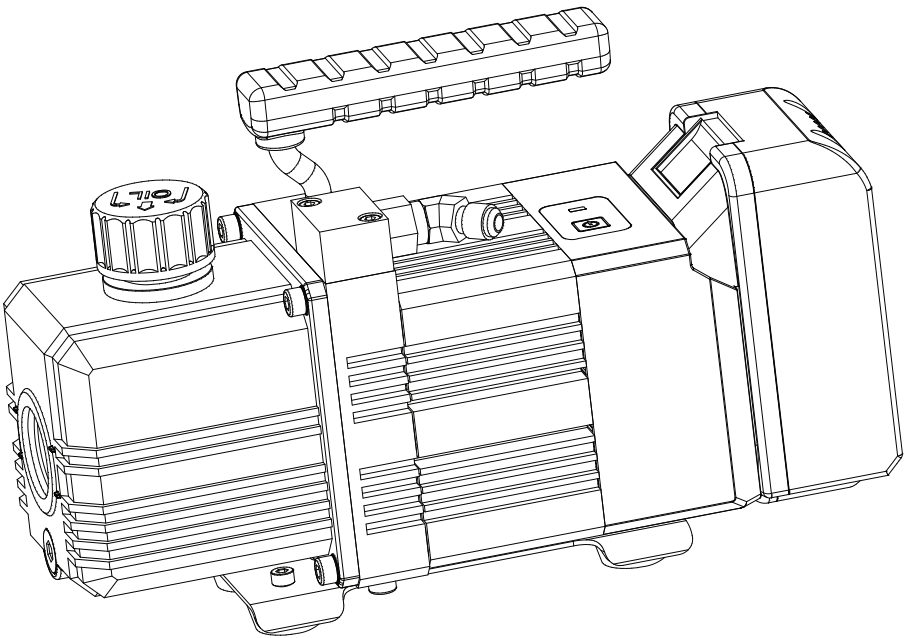




# Cordless Vacuum Pump Operator's Manual

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**WARNING:**

Carefully review and understand all INSTRUCTIONS prior to operating this device. Failure to follow the safety rules and other basic safety precautions may result in serious personal injury. Keep these instructions in a safe place and accessible so that they can be reviewed as required. Keep these instructions to assist in future servicing needs.

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## WARNING

1. DO NOT operate this pump without properly closing all connections. The pump should not be used if the inlet is in contact with the atmosphere. Running the pump for over 3 minutes while inlet exposed will result in damage to the pump and system.
2. The operational ambient temperature of this product is 41°F-104°F (5°C-40°C).
3. Please use only the lithium-ion batteries provided with the product or specified by the company. Usage of any other battery product will void the warranty of this product. Company is not liable for any issues or damages that result from improper battery usage.
4. Do not use this product to extract gases containing corrosive properties, water vapor and dust.
5. Do not allow liquids or particles in the pumped container to enter the pump body.
6. Do not obstruct the exhaust outlet while pump is in operation.

## USING RANGE

Lithium-Ion battery single stage vacuum pump is suitable for creating a vacuum by removing gas from sealed container. Suitable for small refrigerant maintenance (refrigerant including CFC, HCFC and HFC, such as R12/R22/R32/R134A/1234YF, etc.), household vacuum packaging/food preservation, convenient gas analysis, vacuum environment simulation teaching, small negative pressure experiment and other extraction operations.

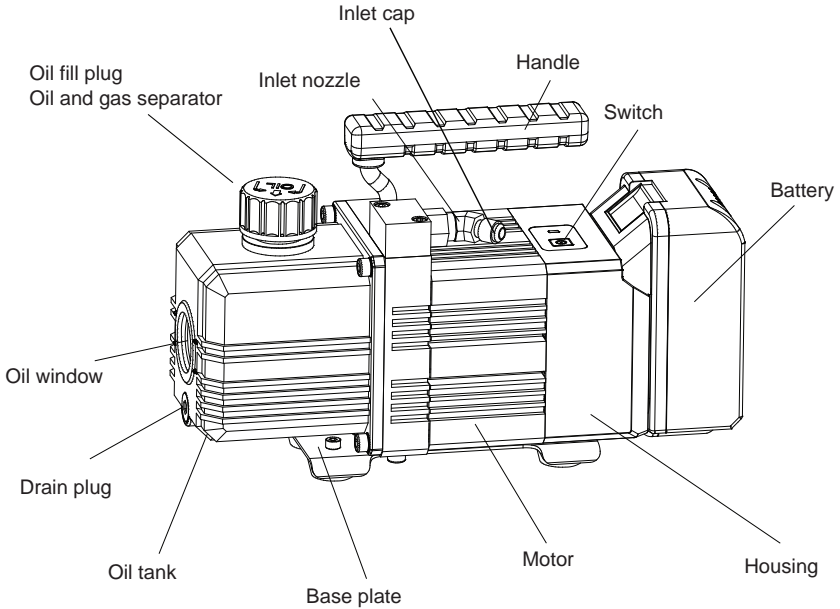
## CHARACTERISTICS

1. Integrated cylinder block design, high precision machining center.
2. Mandatory oil intake system to ensure the reliability of various operating conditions.
3. Independent power supply running of a 20V lithium-Ion battery
4. High efficiency brushless motor.
5. Sparkless motor design

## TECHNICAL SPECIFICATIONS

Tool	Model	GUT129
	Rated Voltage	20V DC
	Power	1/3HP
	Flow Rate	3CFM
	Ultimate Vacuum	10Pa
	Oil Capacity	180ml
	Oil Grade	100# Vacuum pump oil
	Inlet Port	1/4" SAE
	Weight	2.7kg
Battery	Voltage	20V DC
	Capacity	4.0Ah
	Type	Li-ion battery
Charger	Continue working time per charge	60min
	Input Voltage	100-240V AC
	Input Frequency	50/60Hz
	Output Current	1.5A

# MAIN COMPONENTS



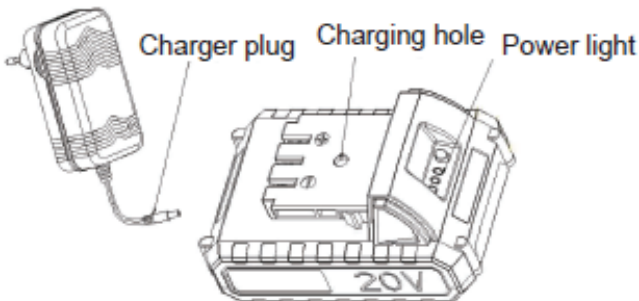
# OPERATION

## Charging procedure



The battery pack is not fully charged at the factory. Please charge fully before usage

1. Be sure that the charger you use is the one certified by the product vendor. A charger is provided with every product.
2. Connect the charger plug into the charging contact on the battery pack.
3. Plug the charger into any suitable outlet.
4. Let the battery pack charge initially for the green light is twinkled. When all the LED indicator lights are all green, the battery pack is fully charged.



**For optimal battery performance, it is recommended that the batteries be recharged after each use.**

## **⚠ WARNING**

Fire Hazard. Disconnect charger from the wall outlet first before disconnecting the charger from the battery.

### **Important Charging Notes**

1. Your tool's battery was shipped from the factory partially charged. Before attaching the battery and using your product, please fully charge the battery first.
2. CAUTION: To reduce the risk of damage to the batteries, NEVER charge them in an ambient temperature below 40°F (4.5°C) or above 105°F (40.5°C). Also, NEVER charge them if the battery temperature is below 40°F (4.5°C) or above 105°F (40.5°C). Longest life and best performance occurs when batteries are charged with air temperature of approximately 75°F (24°C). NOTE: The battery will not charge if the tool temperature is below approximately 32°F (0°C) or above 113°F (45°C).
3. While charging, the charger may hum and become warm to touch. This is a normal phenomenon and does not indicate a problem.
4. If the batteries do not charge properly.
  - (1) Check current at the outlet by plugging in a lamp or other appliance.
  - (2) Check to see if receptacle is connected to a light switch which turns power on/.
  - (3) Move charger and battery to a area where the ambient air temperature is in the range of 40°F (4.5°C) to 105°F (+40.5°C).
  - (4) If the receptacle and temperature are OK, and you do not get proper charging, take or send the tool and charger to your local service center.
5. DO NOT CONTINUE using product with its batteries in a depleted condition. Recharge discharged batteries promptly.
6. To maximize battery life:
  - (1) Do not fully discharge batteries.
  - (2) Fully recharge batteries after each use.
  - (3) Store tool in a location where the surrounding air temperature is approximately 40°F-75°F (4.5°C - 24°C).
  - (4) Disconnect charger from battery after charge is complete. WARNING: Fire Hazard. When disconnecting the charger from the battery, be sure to unplug the charger from the outlet first, and then disconnect the charger cord from the battery.

### **Preparation before using the pump**

1. Check the oil level in the oil window to ensure that the oil amount is normal. Replenish oil as needed. Do not operate pump if oil level is low.
2. Check that the battery is charged. If the power is low, it needs to be charged before using the pump.
3. Check the appearance of pump body. It should be free from damage or other abnormal conditions. Aside from normal wear and tear.
4. Operate the pump only on a horizontal, flat, and stable surface.

Note: When the pump is running, the oil level should maintain between the upper and lower oil level indicators in the oil window. Operating pump with low oil level will reduce the performance of the pump and even cause damage. Too high oil level will easily cause excessive oil mist.

### **Safety warning**

1. To avoid personal injury, please read carefully and follow the instructions in the operating manual.

2. Please wear goggles and take necessary safety measures when working with refrigerant.
3. Do not contact the refrigerant directly.
4. The pump will become heated when in operation. Please do not touch the oil tank or motor casing during operation.

**Pump operating instructions**

1. When using the vacuum pump, first remove the inlet cap, connect the pumped container.
2. Check that all connections are seated firmly and in proper alignment to prevent loosening or leakage during operation.
3. Turn on the start switch and carry out normal work.
4. When done, close the switch, and remove the connection pipe.
5. Reattach the inlet cap to prevent foreign matter or dust from entering the pump chamber.
6. After the lithium-ion battery of the vacuum pump is fully charged, this single-stage pump can work continuously for 60 minutes under normal working conditions. The lithium-ion battery can be replaced to increase the working time

**TROUBLE SHOOTING**

Problem	Cause	Remedy
Fault Low Vacuum Pressure	1. Insufficient oil	Add oil to center line of oil mark
	2. Pump oil emulsification. not clean	Replace with new oil
	3. The pump inlet port is blocked or insufficient oil supply	Clean oil inlet port and filter screen
	4. Pump connection pipe container leakage	Check connecting pipe containers to prevent leakage
	5. Improper pump selection	Check the size of the pumped container and recalibrate the pump
Oil leakage	1. Oil seal is damaged	Replace the oil seal
	2. The connection of oil tank is loose or damaged	Tighten the screw and replace the O-ring
Oil injection	1. Too much oil	Drain oil to oil level line
	2. Excessive ventilation when the inlet pressure is too high for a long time	Select the appropriate large pumping speed pump
Starting difficulty	1. Oil temperature is too low	The air inlet opens the atmosphere, starts the motor intermittently or heats the pump oil
	2. Motor or power supply failure	Check the repair
	3. Foreign matter falls into the pump	Check to eliminate
	4. Insufficient voltage	Charge or replace the lithium battery
	5. Overload protection	Remove the lithium battery, rule out the cause and restart

## **MAINTENANCE AND STORAGE**

1. Keep the pump clean to prevent foreign material from entering the pump chamber.
2. Maintain the oil level. It is strictly prohibited to run this product without oil.
3. Pay attention to the oil cleaning, if the pump oil becomes dirty, cloudy, if there is water or other volatile substances and affect the limit vacuum, should be replaced. When replacing the pump oil, first open the air inlet and open the pump for 1 minute, so that the residual oil in the pump chamber is forced to flow out, close the switch, take off the lithium-ion battery, open the oil drain plug, put the waste oil into a suitable container, and dispose it properly, install the oil drain plug, unscrew the oil fill plug, add new vacuum pump oil, and install the oil fill plug.
4. Please use the vacuum pump oil provided or approved by the company to avoid affecting the ultimate vacuum degree.
5. When storing the pump, be sure that the inlet cap is properly attached, remove the lithium battery, and pack the vacuum pump to keep it dust free.
6. DO not disassembly or attempt to repair the pump on your own. Any such actions will automatically void the warranty. All repairs must be conducted by a qualified repair service specialist.

## **WARRANTY**

The warranty period starts from the purchase date, and the warranty does not cover product problems caused by not operating in accordance with the specifications of this manual. Except for wearing parts, the whole machine is guaranteed for 1 year.



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