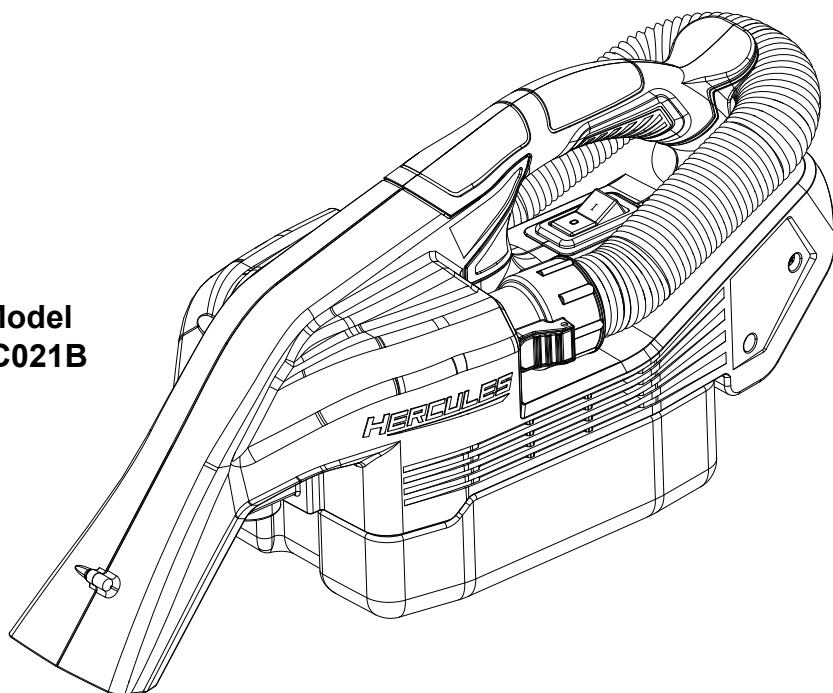




Owner's Manual & Safety Instructions

20b

**Model
HC021B**



Battery and Charger Sold Separately

20V 1/2 Gallon HEPA Wet/Dry Portable Vacuum

⚠WARNING: To prevent serious injury, User must read and understand Owner's Manual. SAVE THIS MANUAL.

When unpacking, make sure that the product is intact and undamaged.
If any parts are missing or broken, please call 1-888-866-5797
as soon as possible. Reference 56828.

INSTRUCTIONS PERTAINING TO A RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS

IMPORTANT SAFETY INSTRUCTIONS

When using an electrical appliance, basic precautions should always be followed, including the following:

READ ALL INSTRUCTIONS BEFORE USING THIS APPLIANCE

⚠ WARNING

To reduce the risk of fire, electric shock, or injury:

1. **Do not leave appliance when Battery Pack is connected.** *Remove Battery Pack when not in use and before servicing.*
2. **Do not allow to be used as a toy.** *Close attention is necessary when used by or near children.*
3. **Use only as described in this manual.** *Use only manufacturer's recommended attachments.*
4. **Do not use with damaged Battery Pack.** *If appliance is not working as it should, has been dropped, damaged, left outdoors, or dropped into water, return it to a service center.*
5. **Do not handle appliance with wet hands.**
6. **Do not put any object into openings.** *Do not use with any opening blocked; keep free of dust, lint, hair, and anything that may reduce air flow.*
7. **Keep hair, loose clothing, fingers, and all parts of body away from openings and moving parts.**
8. **Turn off all controls before removing Battery Pack.**
9. **Use extra care when cleaning on stairs.**
10. **Do not use to pick up flammable or combustible liquids, such as gasoline, or use in areas where they may be present.**
11. **Do not pick up anything that is burning or smoking, such as cigarettes, matches, or hot ashes.**
12. **Do not use without dust bag and/or filters in place.**
13. **FOR HOUSEHOLD USE ONLY.**
14. **Dry your hands and feet before touching plug or switch.**
15. **Do not continue to use the vacuum when the tank is full of liquid.**
16. **Do not use to pick up water from containers, i.e., sinks, tubs, barrels, etc.**
17. **Stay alert, watch what you are doing and use common sense when operating an appliance.** *Do not use an appliance while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating appliances may result in serious personal injury.*
18. **Maintain labels and nameplates** on the appliance. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
19. **People with pacemakers should consult their physician(s) before use.** *Electromagnetic fields in close proximity to heart pacemaker could cause pacemaker interference or pacemaker failure.*
20. **The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur.** *It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.*
21. **Battery appliance use and care**
 - a. **Prevent unintentional starting.** *Ensure the switch is in the off-position before connecting to battery pack, picking up or carrying the appliance. Carrying the appliance with your finger on the switch or energizing appliance that have the switch on invites accidents.*
 - b. **Recharge only with the charger specified by the manufacturer.** *A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.*
 - c. **Use appliances only with specifically designated battery packs.** *Use of any other battery packs may create a risk of injury and fire.*
 - d. **When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another.** *Shorting the battery terminals together may cause burns or a fire.*
 - e. **Under abusive conditions, liquid may be ejected from the battery; avoid contact.** *If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.*
 - f. **Do not use a battery pack or appliance that is damaged or modified.** *Damaged or modified batteries may exhibit unpredictable behavior resulting in fire, explosion or risk of injury.*

- g. **Do not expose a battery pack or appliance to fire or excessive temperature.** *Exposure to fire or temperature above 265°F may cause explosion.*
- h. **Follow all charging instructions and do not charge the battery pack or appliance outside of the temperature range specified in the instructions.** *Charging improperly or at temperatures outside of the specified range may damage the battery and increase the risk of fire.*
- i. **Have servicing performed by a qualified repair person using only identical replacement parts.** *This will ensure that the safety of the product is maintained.*
- j. **Do not modify or attempt to repair the appliance or the battery pack except as indicated in the instructions for use and care.**



k. The battery Charger gets hot during use. The Charger's heat can build up to unsafe levels and create a fire hazard if it does not receive adequate ventilation, due to an electrical fault, or if it is used in a hot environment. Do not place the Charger on a flammable surface. Do not obstruct any vents on the Charger. **Especially avoid placing the Charger on carpets and rugs; they are not only flammable, but they also obstruct vents under the Charger.** Place the Charger on a stable, solid, nonflammable surface (such as a stable metal workbench or concrete floor) at least 1 foot away from all flammable objects, such as drapes or walls. Keep a fire extinguisher and a smoke detector in the area. Frequently monitor the Charger and Battery Pack while charging.

Lithium Battery Safety Warnings



LITHIUM BATTERIES STORE A LARGE AMOUNT OF ENERGY AND WILL VENT FIRE OR EXPLODE IF MISTREATED:

1. **Keep Battery Pack dry.**
2. **DO NOT DO ANY OF THE FOLLOWING TO THE BATTERY PACK:**
 - a. **Open,**
 - b. **Drop,**
 - c. **Short-circuit,**
 - d. **Puncture,**
 - e. **Incinerate, or**
 - f. **Expose to temperatures greater than 265°F.**
 - g. **Charge Battery Pack only according to its Charger's instructions.**
3. **Inspect Battery Pack before every use; do not use or charge if damaged. Li-Ion BATTERY MUST BE RECYCLED OR DISPOSED OF PROPERLY.**



SAVE THESE INSTRUCTIONS

GROUNDING

⚠ WARNING



TO PREVENT ELECTRIC SHOCK AND DEATH FROM INCORRECT GROUNDING: Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. Do not modify the power cord plug provided with the charger. Do not use the charger if the power cord or plug is damaged. If damaged, have it repaired by a service facility before use. If the plug will not fit the outlet, have a proper outlet installed by a qualified electrician.

Extension Cords

Extension cords must not be used with this item's Charger.

Symbology

V	Volts
	Direct Current
A	Amperes
	WARNING marking concerning Risk of Eye Injury. Wear ANSI-approved safety goggles with side shields.
	Read the manual before set-up and/or use.
	WARNING marking concerning Risk of Fire. Do not cover Charger ventilation ducts. Charge on fireproof surface only.
	WARNING marking concerning Risk of Explosion. Do not puncture, short, or open battery packs and do not charge damaged battery packs.
	WARNING marking concerning Risk of Electric Shock. Properly connect Charger's power cord to appropriate outlet.

SPECIFICATIONS

Battery Type	Hercules 20V Li-ion (sold separately)
Tank Capacity	1/2 Gallon

Warning Symbols and Definitions

! This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

! DANGER Indicates a hazardous situation which, if not avoided, will result in death or serious injury.

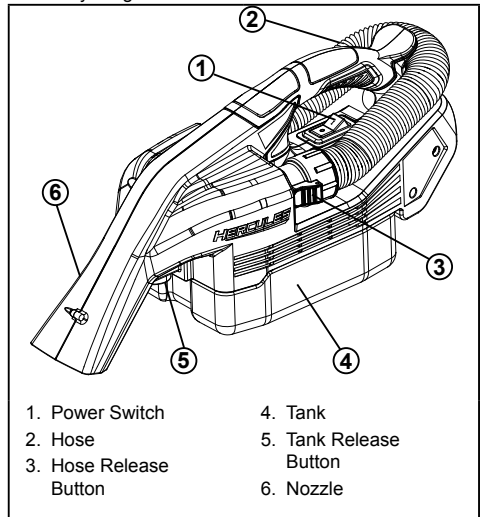
! WARNING Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

! CAUTION Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE Addresses practices not related to personal injury.

Functional Description

Note: For additional information regarding the parts listed in the following pages, refer to the Assembly Diagram near the end of this manual.



OPERATING INSTRUCTIONS



Read the ENTIRE IMPORTANT SAFETY INFORMATION section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

Tool Set Up

⚠ WARNING

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:

Turn the Switch off and remove the Battery Pack.

Battery Charging

Charge battery (sold separately) after unpacking and before using this tool. Follow instructions included with battery charger (sold separately)

General Operation

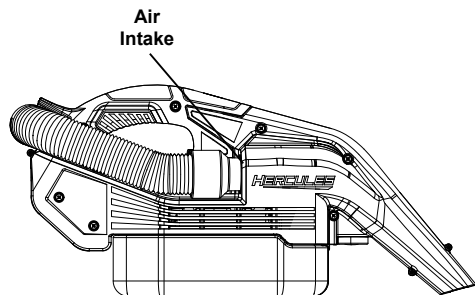
NOTICE: Air travels from the Nozzle through the hose on the right and empties into the tank on the left.

Leave hose connected to tank during use.

Do not operate vacuum without the filter in place.

1. Turn Power Switch off, then insert a fully charged Battery Pack, making sure that it clicks into place securely.
2. To use Hose, remove it from air intake. When finished, install Hose securely into air intake.

NOTICE: TANK MUST BE SECURELY CLOSED OR VACUUM WILL NOT OPERATE PROPERLY.



3. Turn Power Switch ON.

4. **WHEN WET VACUUMING:**

CAUTION! TO PREVENT INJURY FROM ELECTRIC SHOCK: Dry your hands and feet before touching switch.

Do not continue to use the vacuum when the tank is full of liquid.

IMPORTANT! Leave a gap at the tip of the nozzle opening to allow air inflow. Do not immerse the nozzle completely in liquid.

When the Motor sound becomes higher in pitch, the Tank is full. **THIS VACUUM IS NOT EQUIPPED WITH A FLOAT, WATER MAY ENTER MOTOR UNLESS VACUUM IS TURNED OFF.**

IMMEDIATELY:

- a. **DRY YOUR HANDS AND FEET,**
 - b. turn the Vacuum OFF,
 - c. remove Battery Pack,
 - d. empty the Tank.
5. To prevent accidents, **DRY YOUR HANDS AND FEET,** turn off the appliance and remove Battery Pack after use. Empty and clean Tank, dry Tank, clean Filter (**see Cleaning Filter on page 6**), then store the appliance indoors out of children's reach.

Record Product's Serial Number Here: _____

Note: If product has no serial number, record month and year of purchase instead.

Note: Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.

USER-MAINTENANCE AND STORAGE



Procedures not specifically explained in this manual must be performed only by a qualified technician.

WARNING

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:

Turn the Power Switch of the appliance off and remove Battery Pack before performing any procedure in this section.

TO PREVENT SERIOUS INJURY FROM APPLIANCE FAILURE:

Do not use damaged equipment.

If abnormal noise or vibration occurs, have the problem corrected before further use.

Cleaning, Maintenance, and Lubrication

- BEFORE EACH USE**, inspect the general condition of the appliance. Check for:
 - leaking, swollen, or cracked battery pack
 - loose hardware,
 - misalignment or binding of moving parts,
 - cracked or broken parts,
 - clogged ventilation holes,
 - dirty filter,
 - damaged electrical wiring, and
 - any other condition that may affect its safe operation.

- AFTER USE**, wipe external surfaces of the appliance with clean cloth, empty and clean Tank, dry Tank, clean Filter, then store the appliance indoors out of children's reach. Store in an indoor dry area out of reach of children.
- All parts are permanently lubricated. Do not use additional lubrication.
- Li-Ion BATTERY MUST BE RECYCLED OR DISPOSED OF PROPERLY.**
Do not short, incinerate or open battery.

Cleaning Filter

To ensure proper operation, clean the Filter after every use. Torn Filter should be replaced:

- Turn vacuum over, press Tank Release Button and remove Tank.
- Remove Filter.
- For dry vacuuming:
 - Tap or shake Filter into a waste can.
 - If needed, flush with plain water. **Allow the Filter to dry for at least 24 hours before replacing.**
- For wet vacuuming, if needed, flush with plain water. **Allow the Filter to dry for at least 24 hours before replacing.**



WARNING! Installing a wet Filter will increase the risk of electric shock and may damage the vacuum.

- Replace Filter and Tank.

NOTICE: TANK MUST BE SECURELY CLOSED OR VACUUM WILL NOT OPERATE PROPERLY.

Troubleshooting

Problem	Possible Causes	Likely Solutions
Tool will not start.	<ol style="list-style-type: none"> Battery Pack not properly connected. Battery Pack not properly charged. Battery Pack burnt-out. Internal damage or wear. (Motor or Switch, for example.) 	<ol style="list-style-type: none"> Remove Battery Pack to make sure there are no obstructions and the battery contacts are clean. Reinsert the Battery Pack. Charge Battery. Dispose of old Battery Pack properly or recycle. Replace Battery Pack. Have technician service tool.
Low suction.	<ol style="list-style-type: none"> Dirty Filter. Hose clogged. Low charge on Battery Pack. 	<ol style="list-style-type: none"> Clean Filter. Remove Hose, remove obstruction, replace Hose. Recharge Battery Pack.
Overheats.	<ol style="list-style-type: none"> Blocked Motor Housing vents. Dirty Filter. 	<ol style="list-style-type: none"> Using a dry clean cloth, wipe Motor Housing vents clean. Clean Filter.



Follow all safety precautions whenever diagnosing or servicing the tool. Disconnect Battery Pack before service.

PART LIST AND DIAGRAM

PLEASE READ THE FOLLOWING CAREFULLY

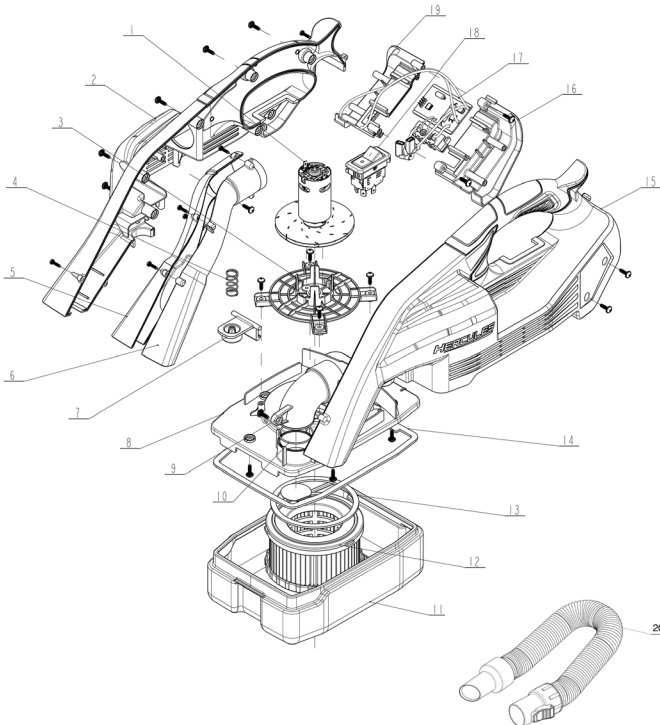
THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT, OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

Parts List

Part	Description	Qty
1	DC Motor	1
2	Left Housing	1
3	Motor Retainer	1
4	Spring	1
5	Left Side Intake Pipe	1
6	Right Side Intake Pipe	1
7	Button	1
8	Filter Housing	1
9	Intake Elbow	1
10	Intake Seal	1

Part	Description	Qty
11	Tank	1
12	Filter	1
13	Filter Seal	1
14	Gasket	1
15	Right Housing	1
16	Right Rear Housing	1
17	PCBA	1
18	Power Switch	1
19	Left Rear Housing	1
20	Hose	1

Assembly Diagram



LIMITED 90 DAY WARRANTY

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

**Visit our website at: <http://www.harborfreight.com>
Email our technical support at: productsupport@harborfreight.com
For technical questions, please call 1-888-866-5797**

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HERCULES

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