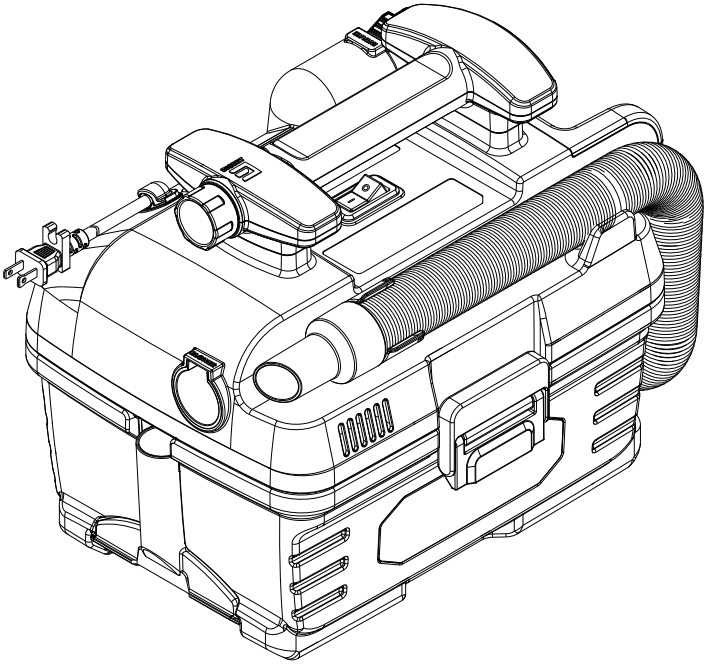
HERCULES®

Owner's Manual & Safety Instructions

Model HC023B



20V/120V 2 Gallon Wet/Dry Portable Vacuum with HEPA Filter

Battery and Charger sold separately.

⚠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 1-800-444-3353 as soon as possible. Reference 56789.

IMPORTANT SAFETY INSTRUCTIONS

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

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 use outdoors or on wet surfaces.
3. Do not allow to be used as a toy. Close attention is necessary when used by or near children.
4. Use only as described in this manual. Use only manufacturer's recommended attachments.
5. 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.
6. Do not handle appliance with wet hands.
7. 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.
8. Keep hair, loose clothing, fingers, and all parts of body away from openings and moving parts.
9. Turn off all controls before removing Battery Pack.
10. Use extra care when cleaning on stairs.
11. Do not use to pick up flammable or combustible liquids, such as gasoline, or use in areas where they may be present.
12. **Do not pick up anything that is burning or smoking, such as cigarettes, matches, or hot ashes.**
13. **Do not use without dust bag and/or filters in place.**
14. FOR HOUSEHOLD USE ONLY.
15. 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.
16. Maintain labels and nameplates on the appliance. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
17. 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.
18. 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.
19. **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 140°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.

20. **Lithium Battery Safety Warnings**



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

a. **Keep Battery Pack dry.**

b. **DO NOT DO ANY OF THE FOLLOWING TO THE BATTERY PACK:**
- **Open,**
- **Drop,**
- **Short-circuit,**
- **Puncture,**
- **Incinerate, or**
- **Expose to temperatures greater than 140°F.**

c. Charge Battery Pack only according to its Charger's instructions.

d. Inspect Battery Pack before every use; do not use or charge if damaged.

e. **Li-Ion BATTERY MUST BE RECYCLED OR DISPOSED OF PROPERLY.**

SAVE THESE INSTRUCTIONS

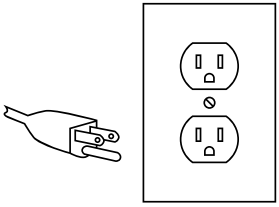
GROUNDING

⚠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 tool. Never remove the grounding prong from the plug. Do not use the tool 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.

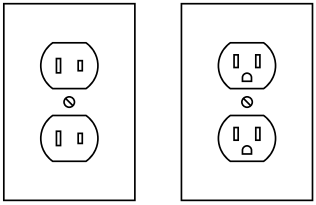
Grounded Tools: Tools with Three Prong Plugs



3-Prong Plug and Outlet

1. Tools marked with "Grounding Required" have a three wire cord and three prong grounding plug. The plug must be connected to a properly grounded outlet. If the tool should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user, reducing the risk of electric shock. **(See 3-Prong Plug and Outlet.)**
2. The grounding prong in the plug is connected through the green wire inside the cord to the grounding system in the tool. The green wire in the cord must be the only wire connected to the tool's grounding system and must never be attached to an electrically "live" terminal. **(See 3-Prong Plug and Outlet.)**
3. The tool must be plugged into an appropriate outlet, properly installed and grounded in accordance with all codes and ordinances. The plug and outlet should look like those in the preceding illustration. **(See 3-Prong Plug and Outlet.)**

Double Insulated Tools: Tools with Two Prong Plugs



Outlets for 2-Prong Plug

1. Tools marked “Double Insulated” do not require grounding. They have a special double insulation system which satisfies OSHA requirements and complies with the applicable standards of Underwriters Laboratories, Inc., the Canadian Standard Association, and the National Electrical Code.
2. Double insulated tools may be used in either of the 120 volt outlets shown in the preceding illustration. **(See Outlets for 2-Prong Plug.)**

Extension Cords

Note: Extension cords must not be used with this item’s Charger.

1. ***Grounded*** tools require a three wire extension cord. ***Double Insulated*** tools can use either a two or three wire extension cord.
2. As the distance from the supply outlet increases, you must use a heavier gauge extension cord. Using extension cords with inadequately sized wire causes a serious drop in voltage, resulting in loss of power and possible tool damage. **(See Table A.)**
3. The smaller the gauge number of the wire, the greater the capacity of the cord. For example, a 14 gauge cord can carry a higher current than a 16 gauge cord. **(See Table A.)**
4. When using more than one extension cord to make up the total length, make sure each cord contains at least the minimum wire size required. **(See Table A.)**
5. If you are using one extension cord for more than one tool, add the nameplate amperes and use the sum to determine the required minimum cord size. **(See Table A.)**
6. If you are using an extension cord outdoors, make sure it is marked with the suffix “W-A” (“W” in Canada) to indicate it is acceptable for outdoor use.
7. Make sure the extension cord is properly wired and in good electrical condition. Always replace a damaged extension cord or have it repaired by a qualified electrician before using it.
8. Protect the extension cords from sharp objects, excessive heat, and damp or wet areas.

TABLE A: RECOMMENDED MINIMUM WIRE GAUGE FOR EXTENSION CORDS* (120/240 VOLT)

NAMEPLATE AMPERES (at full load)	EXTENSION CORD LENGTH				
	25´	50´	75´	100´	150´
0 – 2.0	18	18	18	18	16
2.1 – 3.4	18	18	18	16	14
3.5 – 5.0	18	18	16	14	12
5.1 – 7.0	18	16	14	12	12
7.1 – 12.0	18	14	12	10	-
12.1 – 16.0	14	12	10	-	-
16.1 – 20.0	12	10	-	-	-

*** Based on limiting the line voltage drop to five volts at 150% of the rated amperes.**

Symbology

	Double Insulated
V	Volts
~	Alternating Current
A	Amperes
n_0 xxxx/min.	No Load Revolutions per Minute (RPM)
	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 Hearing Loss. Wear hearing protection.
	WARNING marking concerning Risk of Fire. Do not cover Charger ventilation ducts. Keep flammable objects away. Charge on fireproof surface only.
	WARNING marking concerning Risk of Electric Shock. Properly connect power cord to appropriate outlet. Properly connect Charger’s power cord to appropriate outlet.

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.**

SPECIFICATIONS

Battery Type	Hercules 20V Li-ion (sold separately)
Input Power	120VAC / 3.2A / 60Hz

SETUP - BEFORE USE:

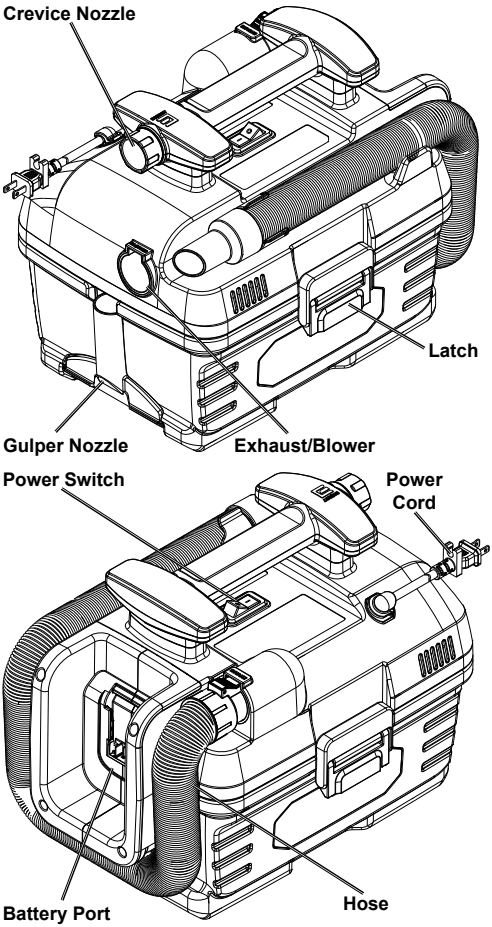
Read the ENTIRE IMPORTANT SAFETY INFORMATION section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

⚠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.

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

Functions



Charging Battery Pack

Refer to Charger's manual for instructions.

OPERATING INSTRUCTIONS

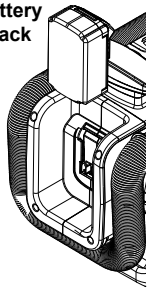
Read the ENTIRE IMPORTANT SAFETY INFORMATION section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

Vacuum Operation

⚠WARNING

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:
Turn the Power Switch off, remove the Battery Pack, and unplug the Power Cord.

1. Make sure the Filter is properly installed and the Motor Housing assembly is correctly latched in place on top of the Tank.
2. Plug the Power Cord in or install the Battery Pack. Using gentle force, slide the Battery Pack into Motor Housing so that the Battery Lock Button latches it in place.



3. Attach the desired accessory to the end of Hose.
4. Turn on the Vacuum by turning the Power Switch on.
5. To prevent accidents, turn the Power Switch off, remove Battery Pack, and unplug the Power Cord after use.
6. Release both Latches and lift Motor Housing assembly off of the Tank. Empty the Tank.

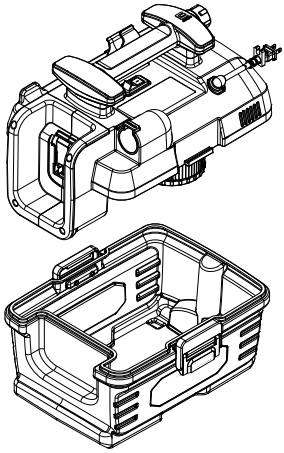


Figure A

7. Replace the Motor Housing assembly and close both Latches. Clean external surfaces of the tool with clean and dry cloth. Store the tool indoors out of children's reach.
8. WHEN WET VACUUMING:
9. 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.
10. Remove Filter before wet vacuuming.
11. IMPORTANT! Leave a gap at the tip of the nozzle opening to allow air inflow. Do not immerse the nozzle completely in liquid.
12. When the Motor sound becomes higher in pitch, the Tank is full and the float is closing off the motor intake.
13. IMMEDIATELY:
    a. DRY YOUR HANDS AND FEET,
    b. turn the Vacuum OFF,
    c. remove Battery Pack and unplug the Power Cord,
    d. empty the Tank.

Blower Operation

1. **CAUTION! To prevent injury: Confirm that the Filter is in place before using this item as a Blower.**
2. The Hose can be disconnected from the Vacuum port and connected to the Blower port instead to enable use as a Blower.

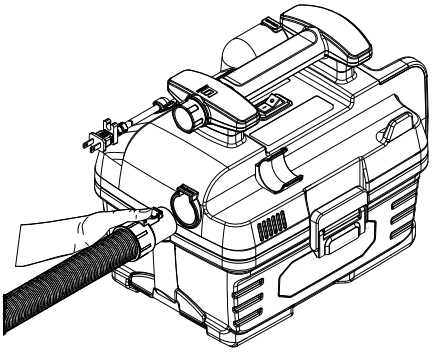


Figure B

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, disconnect the Battery Pack, and unplug the Power Cord 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

1. **BEFORE EACH USE,** inspect the general condition of the appliance. Check for:
   - 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.
2. Only use an undamaged filter. Replace a damaged filter immediately.
3. **AFTER USE,** wipe external surfaces of the appliance with clean cloth.
   a. Use a moist cloth to clean the vacuum cleaner's housing.
   b. Use a dry cloth to clean battery contacts.
4. Store in an indoor dry area out of reach of children.
5. All parts are permanently lubricated. Do not use additional lubrication.
6. **AFTER EACH USE, e**mpty and clean the Tank.
7. **Li-Ion BATTERY MUST BE RECYCLED OR DISPOSED OF PROPERLY.**
   Do not short, incinerate or open battery.

Removing Battery Pack

Press down on the Battery Lock Button and pull Battery Pack out.

Cleaning Filter

To ensure proper operation, clean the Filter regularly. Damaged Filters should be replaced. Disconnect Battery Pack and Power Cord before opening or cleaning Vacuum.

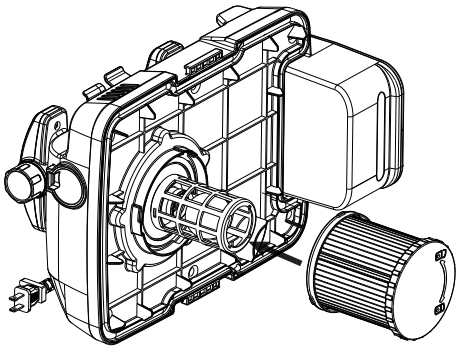


Figure C

1. Release both Latches and lift Motor Housing assembly off of the Tank. Empty the Tank.
2. Twist and remove the Filter from the Motor Housing assembly.
3. Clean Filter with a soft brush.
4. Replace the Filter on the Motor Housing assembly and twist it in place.
5. Replace the Motor Housing assembly and close both Latches. Clean external surfaces of the tool with clean and dry cloth. Store the tool indoors out of children's reach.

Troubleshooting

Problem	Possible Causes	Likely Solutions
Tool will not start.	1. Cord not connected.	1. Check that cord is plugged in.
	2. No power at outlet.	2. Check power at outlet. If outlet is unpowered, turn off tool and check circuit breaker. If breaker is tripped, make sure circuit is right capacity for tool and circuit has no other loads.
	3. Tool's thermal reset breaker tripped (if equipped).	3. Turn off tool and allow to cool. Press reset button on tool.
	4. Battery Pack not properly connected.	4. Remove Battery Pack to make sure there are no obstructions and the battery contacts are clean. Reinsert the Battery Pack according to its shape (it should only fit one way) and press firmly until the Battery Pack locks in place.
	5. Tank not locked to Motor Housing.	5. Make sure Tank is securely latched to the Motor Housing assembly.
	6. Switch not fully in ON position.	6. Push the On/Off switch fully to the On position.
	7. Battery Pack not properly charged.	7. Make sure the Charger is connected and operating properly. Give enough time for Battery Pack to recharge properly.
	8. Battery Pack burnt-out.	8. Dispose of old Battery Pack properly or recycle. Replace Battery Pack.
	9. Internal damage or wear. (Motor or Switch, for example.)	9. Have technician service tool.
Tool operates slowly.	1. Forcing tool to work too fast.	1. Allow tool to work at its own rate.
	2. Extension cord too long or cord diameter too small.	2. Eliminate use of extension cord. If an extension cord is needed, use one with the proper diameter for its length and load.
	3. Low charge on Battery Pack.	3. Recharge Battery Pack.
	4. Dirty Filter.	4. Clean Filter and Tank.
Performance decreases over time.	Motor worn or damaged.	Have qualified technician replace motor.

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

Problem	Possible Causes	Likely Solutions
Excessive noise or rattling.	Internal damage or wear. (Motor or bearings, for example.)	Have technician service tool.
Low suction.	1. Dirty Filter. 2. Extension cord too long or cord diameter too small. 3. Low charge on Battery Pack.	1. Clean Filter and Tank. 2. Eliminate use of extension cord. If an extension cord is needed, use one with the proper diameter for its length and load. 3. Recharge Battery Pack.
Turns itself off.	1. Dirty Filter. 2. Extension cord too long or cord diameter too small. 3. Damaged Battery Pack. 4. Blocked Motor Housing vents. 5. Damaged Motor.	1. Clean Filter and Tank. 2. Eliminate use of extension cord. If an extension cord is needed, use one with the proper diameter for its length and load. 3. Dispose of old Battery Pack properly or recycle. Replace Battery Pack. 4. Using a dry clean cloth, wipe Motor Housing vents clean. 5. Have technician service tool.
Overheating.	1. Forcing tool to work too fast. 2. Blocked Motor Housing vents. 3. Clogged Filter.	1. Allow tool to work at its own rate. 2. Using a dry clean cloth, wipe Motor Housing vents clean. 3. Clean Filter and Tank.

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

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.

PART LIST AND DIAGRAM

Parts List

Part	Description	Qty
1	PCBA	1
2	Cable Ties	1
3	Rear Cover (Left)	1
4	Rear Cover (Right)	1
5	Switch	1
6	Handle Top	1
7	Handle Bottom	1
8	Crevice tool	1
9	Hose Clamp	1
10	Strain Relief Bushing	1
11	Power Cable	1
12	Top Cover	1
13	Intake Pipe	1
14	Damping sheath	4
15	DC Motor	1
16	Seal Intake	1
17	Motor Flange	1
18	Impeller	1
19	Baffle	1
20	Lid	1
21	Baffle Seal	1

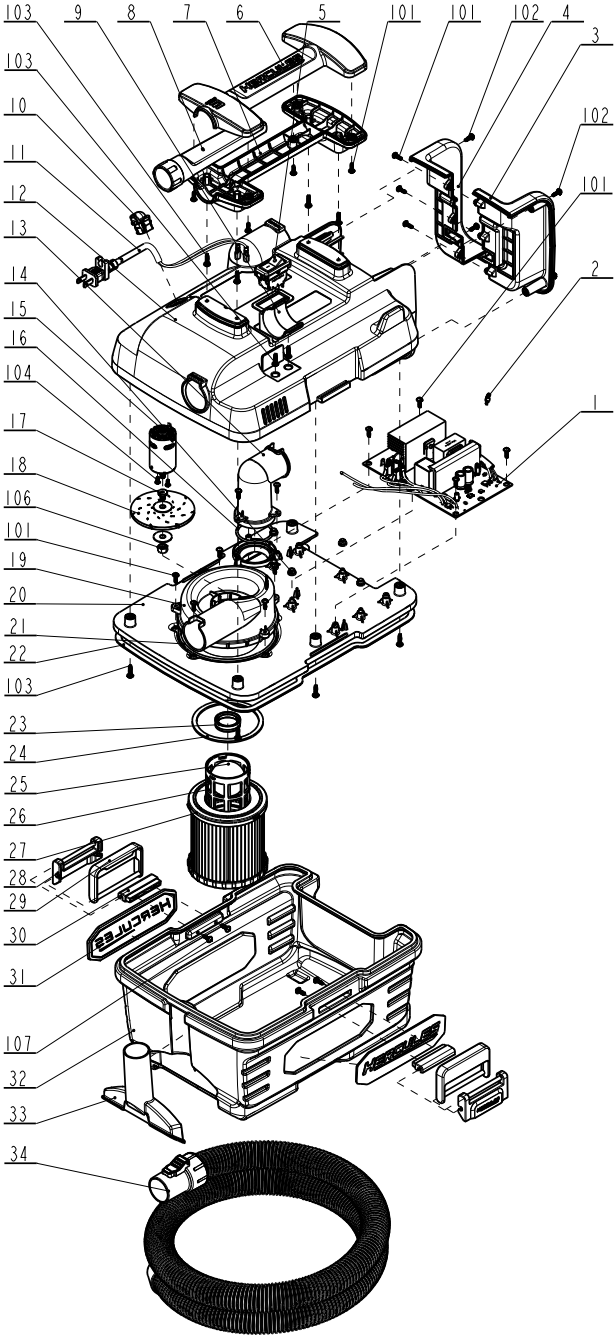
Part	Description	Qty
22	Seal Lid	1
23	Seal Float	1
24	Seal Filter	1
25	Float	1
26	Filter Cage	1
27	Cartridge Filter	1
28	Latch Bottom	2
29	Latch Top	2
30	Latch Retainer	2
31	Logo Pad	2
32	Tank	1
33	Gulper Nozzle	1
34	Hose	1
101	Screw ST3.5×12F	20
102	Screw ST3.5×12F	4
103	Screw ST3.9×16F	12
104	Screw M3×8	2
105	Washer 8	2
106	Nut M6	1
107	Screw ST3.9×12F	4

Record Product's Date Code Here:_____

Note: If product has no Date Code, 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. Specify UPC 792363567893 when ordering parts.

Assembly Diagram



5-YEAR LIMITED WARRANTY

This Hercules tool is warranted to the original purchaser to be free from defects in materials and workmanship for a period of five (5) years beginning on the date of purchase. This warranty does not cover battery packs and battery chargers, which are covered under separate warranties. To obtain warranty service, visit your local Harbor Freight retail store. Warranty registration is not required. The product or part must be returned to us with proof of purchase (e.g. in-store receipt or packing slip/invoice) and may require shipment by purchaser to a service center at purchaser's expense. If our inspection verifies a covered defect in materials or workmanship during the warranty period, we will, at our option, repair or replace the defective product. We will return repaired products within a reasonable time at our expense, but if we determine that there is no defect, or that the defect resulted from causes not within the scope of our warranty, then we will return the product to you if you pay return shipping costs.

This warranty does not cover any failure or damage that we determine is due directly or indirectly to normal wear and tear, misuse, use not for the intended purpose or not in accordance with the product manual, abuse, accident, rental, modification or alteration, unauthorized repair, improper installation, neglect, lack of maintenance, or any other failure not arising from defective materials or workmanship. Fraudulent returns or claims will be denied. The repair or replacement described in this warranty shall be your sole and exclusive remedy. THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS WARRANTIES, WRITTEN OR ORAL, AND ANY IMPLIED WARRANTIES ARE DISCLAIMED TO THE EXTENT PERMITTED BY LAW AND OTHERWISE LIMITED TO THE DURATION OF THE EXPRESS WARRANTY HEREIN. HARBOR FREIGHT SHALL NOT BE LIABLE UNDER ANY CIRCUMSTANCES FOR ANY INCIDENTAL, INDIRECT, SPECIAL, CONSEQUENTIAL, OR PUNITIVE DAMAGES OR COSTS ARISING FROM THIS WARRANTY OR THE USE OF THIS PRODUCT. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THESE LIMITATIONS MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

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For technical questions, please call 1-800-444-3353

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