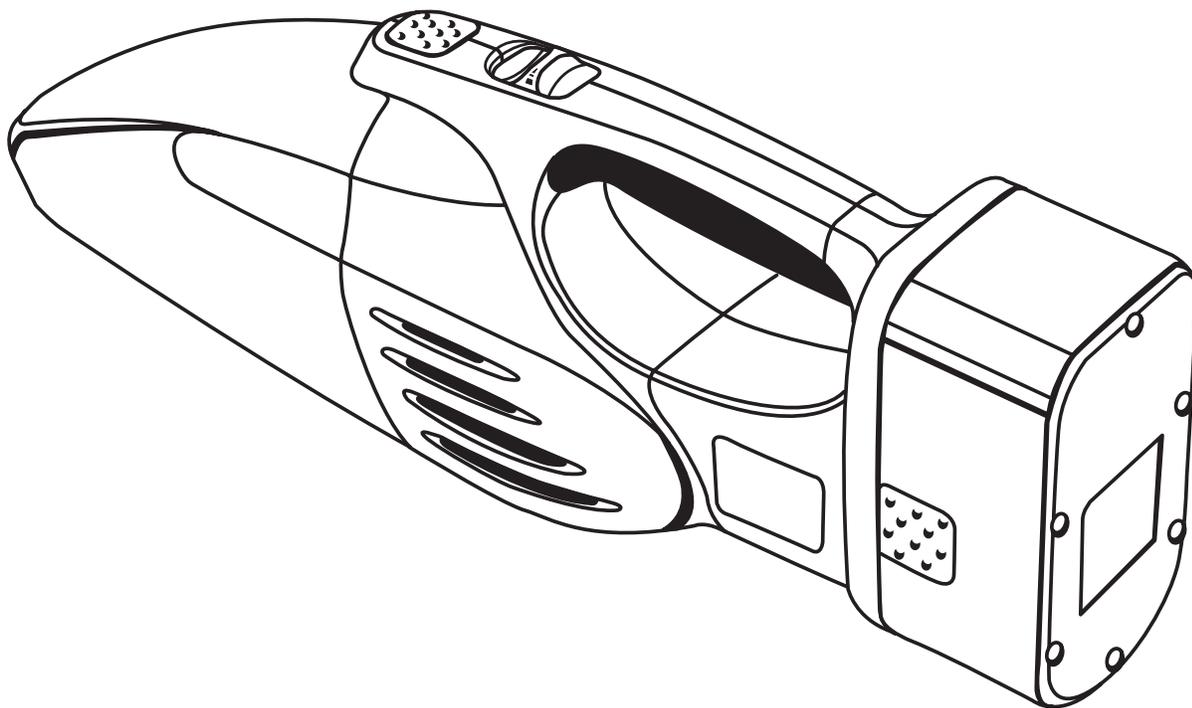


RYOBI®

OPERATOR'S MANUAL TUFF SUCKER™ 18 Volt Cordless Hand Vac Model No. VC180

For Wet and Dry Vacuuming



Your new TUFF SUCKER™ wet / dry vac has been engineered and manufactured to Ryobi's high standard for dependability, ease of operation, and operator safety. Properly cared for, it will give you years of rugged, trouble-free performance.

▲ CAUTION: Carefully read through this entire operator's manual before using your new hand vac.

Pay close attention to the Rules for Safe Operation, Warnings, and Cautions. If you use your hand vac properly and only for what it is intended, you will enjoy years of safe, reliable service.

Thank you for buying a Ryobi TUFF SUCKER™ wet / dry hand vac.

SAVE THIS MANUAL FOR FUTURE REFERENCE

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INTRODUCTION

The TUFF SUCKER™ wet / dry vac is an 18-volt hand vacuum that allows for easy clean up. For your convenience, this new hand vac can be used for dry and wet vacuuming. Your hand vac comes with a removable battery pack and charger to keep the hand vac charged and ready to use.

WARNING:

Do not attempt to operate this tool until you have read thoroughly and understand completely all instructions, safety rules, etc. contained in this manual. Failure to comply can result in accidents involving fire, electric shock, or serious personal injury. Save operator's manual and review frequently for continuing safe operation, and instructing others who may use this tool.



Look for this symbol to point out important safety precautions. It means attention!!! Your safety is involved.

IMPORTANT SAFETY INSTRUCTIONS

WHEN USING AN ELECTRICAL APPLIANCE, BASIC PRECAUTIONS SHOULD ALWAYS BE FOLLOWED, INCLUDING THE FOLLOWING:

 WARNING: TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY:

WARNING:

Electric Shock could occur if charged outdoors or on wet surfaces.

WARNING:

Read and understand all instructions before using. Failure to follow all instructions listed below, may result in electric shock, fire and/or serious personal injury.

SAVE THESE INSTRUCTIONS

- **Do not** allow children to operate hand vac or play with hand vac as a toy. Close attention is necessary when used near children.
- This hand vac is intended for indoor use only and can be used for wet pick-up.
- Use this hand vac **ONLY** for its intended use as described in this manual. Use only the attachments recommended in this manual.

IMPORTANT SAFETY INSTRUCTIONS

- **Do not** use charger with damaged cord or plug. If hand vac is not working properly, has been dropped, damaged, left outdoors, or dropped into water, return to your nearest Ryobi Authorized Service Center.
- Do not abuse cord. Never carry charger or base by the cord or yank to disconnect from electrical outlet. Grasp charger, not the cord, and pull to unplug. Do not allow cord to hang over edge of table or counter or to touch hot surfaces.
- **Do not** use an extension cord unless absolutely necessary. Plug charger directly into electrical outlet.
- **Do not** handle charger or hand vac with wet hands.
- **Do not** use hand vac outdoors.
- **Do not** put any objects in ventilation openings. Do not use with any opening blocked: keep openings free of dust, lint, hair, and anything that may reduce air flow.
- Keep hair, loose clothing, fingers, and all parts of the body away from openings and moving parts.
- Keep exhaust away from face, eyes, and hair during use.
- **NEVER** vacuum materials such as hot coals, cigarette butts, matches, etc.
- **Do not** use without dust bowl and filter in place.
- **Turn off all controls before** unplugging from or plugging into an electrical outlet for charging.
- Use extra care when using on stairs.
- **Do not** use to pick up flammable or combustible liquids such as gasoline or use in areas where such liquids may be present.
- **Do not** use to pick up hard objects such as nails, screws, coins, etc. Damage or injury could result.
- This hand vac does not have to be plugged into an electrical outlet, therefore it is always in operating condition. Be aware of possible hazards when using your hand vac or when changing accessories.
- **USE ONLY THE CHARGER PROVIDED WITH YOUR HAND VAC.** Do not substitute any other charger. Use of another charger could cause batteries to explode causing possible serious injury.
- **DO NOT PLACE HAND VAC NEAR FIRE OR HEAT.** The batteries inside the hand vac may explode.
- **DO NOT CHARGE HAND VAC IN A DAMP OR WET LOCATION.** Do not use charger outdoors.
- Your hand vac should be charged in a location where the temperature is more than 50°F but less than 100°F.
- **Under extreme usage or temperature conditions, battery leakage may occur. If liquid comes in contact with skin, wash immediately with soap and water, then neutralize with lemon juice or vinegar. If liquid gets into your eyes, flush them with clean water for at least 10 minutes, then seek immediate medical attention.** Following this rule will reduce the risk of serious personal injury.
- **Do not abuse the cord. Never use the cord to carry** the charger. Keep cord away from heat, oil, sharp edges, or moving parts. Replace damaged cords **immediately**. Damaged cords may create a fire.
- **A battery operated tool with integral batteries or a separate battery pack must be recharged only with the specified charger for the battery.** A charger that may be suitable for one type of battery may create a risk of fire when used with another battery. Use battery only with charger listed.
BATTERY 1322401 or 130224007
CHARGER 1423701
- **Use battery operated tool only with specifically designated battery pack.** Use of any other batteries may create a risk of fire. Use only with battery pack listed.

WARNING:

Batteries vent hydrogen gas and can explode in the presence of a source of ignition, such as a pilot light. To reduce the risk of serious personal injury, never use any cordless product in the presence of open flame. An exploded battery can propel debris and chemical. If exposed, flush with water immediately.

Service

- **Tool service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified personnel could result in a risk of injury.
- **When servicing a tool, use only identical replacement parts. Follow instructions in the Maintenance section of this manual.** Use of unauthorized parts or failure to follow Maintenance Instructions may create a risk of electric shock or injury.

WARNING:

To reduce the risk of electric shock, use indoors only.

IMPORTANT SAFETY INSTRUCTIONS

WARNING:

A damaged battery is subject to explosion. To avoid serious personal injury, properly dispose of a damaged battery.

- **Save these instructions. This manual contains important safety and operating instructions for your cordless hand vac and charger.** Following this rule will reduce the risk of electric shock, fire, or serious personal injury.
- **Before using battery charger, read all instructions and cautionary markings in this manual, on battery charger, and product using battery charger.** Following this rule will reduce the risk of electric shock, fire, or serious personal injury.

WARNING:

To reduce risk of injury, charge only nickel-cadmium rechargeable batteries. Other types of batteries may burst causing personal injury and damage. Following this rule will reduce the risk of electric shock, fire, or serious personal injury.

- **Do not expose charger to rain or snow.** Following this rule will reduce the risk of electric shock, fire, or serious personal injury.
- **Use of an attachment not recommended or sold by the charger manufacturer may result in a risk of fire, electric shock, or injury to persons.** Following this rule will reduce the risk of electric shock, fire, or serious personal injury.
- **To reduce risk of damage to charger body and cord, pull by charger plug rather than cord when disconnecting charger.** Following this rule will reduce the risk of serious personal injury.
- **Make sure cord is located so that it will not be stepped on, tripped over, or otherwise subjected to damage or stress.** Following this rule will reduce the risk of serious personal injury.
- **An extension cord should not be used unless absolutely necessary.** Use of improper extension cord could result in a risk of fire and electric shock. If extension cord must be used, make sure:
 - a. That pins on plug of extension cord are the same number, size and shape as those of plug on charger.

- b. That extension cord is properly wired and in good electrical condition; and
- c. That wire size is large enough for AC ampere rating of charger as specified below:

Cord Length (Feet)	25'	50'	100'
Cord Size (AWG)	16	16	16

Note: AWG = American Wire Gauge

- **Do not operate charger with a damaged cord or plug. If damaged, have replaced immediately by a qualified serviceman.** Following this rule will reduce the risk of electric shock, fire, or serious personal injury.
- **Do not operate charger if it has received a sharp blow, been dropped, or otherwise damaged in any way; take it to a qualified serviceman.** Following this rule will reduce the risk of electric shock, fire, or serious personal injury.
- **Do not disassemble charger; take it to a qualified serviceman when service or repair is required. Incorrect reassembly may result in a risk of electric shock or fire.** Following this rule will reduce the risk of electric shock, fire, or serious personal injury.
- **To reduce the risk of electric shock, unplug charger from outlet before attempting any maintenance or cleaning. Turning off controls will not reduce this risk.** Following this rule will reduce the risk of electric shock, fire, or serious personal injury.
- **Do not use charger outdoors.** Following this rule will reduce the risk of electric shock, fire, or serious personal injury.
- **Disconnect charger from power supply when not in use.** Following this rule will reduce the risk of electric shock, fire, or serious personal injury.

DANGER:

Risk of electric shock. Do not touch uninsulated portion of output connector or uninsulated battery terminal.

- **Save these instructions. Refer to them frequently and use them to instruct others who may use this tool. If you loan someone this tool, loan them these instructions also.** Following this rule will reduce the risk of electric shock, fire, or serious personal injury.

SAVE THESE INSTRUCTIONS

SYMBOLS

Important: Some of the following symbols may be used on your tool. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to operate the tool better and safer.

SYMBOL	NAME	EXPLANATION
V	Volts	Voltage
A	Amperes	Current
Hz	Hertz	Frequency (cycles per second)
W	Watt	Power
min	Minutes	Time
	Alternating Current	Type or a characteristic of current
	Direct Current	Type or a characteristic of current
n_0	No Load Speed	Rotational speed, at no load
	Class II Construction	Designates Double Insulated Construction tools
.../min	Revolutions or Reciprocation Per Minute	Revolutions, strokes, surface speed, orbits etc. per minute
	Safety Alert Symbol	Indicates danger, warning or caution. It means attention!!! Your safety is involved.
	Wet Conditions Alert	Do not expose to rain or use in damp locations.
	Full Line Indicator	Do not let liquid fill past this line.

The purpose of safety symbols is to attract your attention to possible dangers. The safety symbols, and the explanations with them, deserve your careful attention and understanding. The safety warnings do not by themselves eliminate any danger. The instructions or warnings they give are not substitutes for proper accident prevention measures.

SYMBOL MEANING



DANGER: Failure to obey a safety warning will result in serious injury to yourself or to others. Always follow the safety precautions to reduce the risk of fire, electric shock and personal injury.



WARNING: Failure to obey a safety warning can result in serious injury to yourself or to others. Always follow the safety precautions to reduce the risk of fire, electric shock and personal injury.



CAUTION: Failure to obey a safety warning may result in property damage or personal injury to yourself or to others. Always follow the safety precautions to reduce the risk of fire, electric shock and personal injury.

NOTE: Advises you of information or instructions vital to the operation or maintenance of the equipment.

SAVE THESE INSTRUCTIONS

FEATURES

KNOW YOUR HAND VAC

See Figure 1.

Before attempting to use your hand vac, familiarize yourself with all operating features and safety requirements.

⚠ WARNING:

Carefully read through this entire operator's manual before using your new hand vac. Pay close attention to the Important Safety Instructions, Warnings and Cautions. If you use your hand vac properly and only for what it is intended, you will enjoy years of safe, reliable service.

Your hand vac has been shipped completely assembled. Inspect it carefully to make sure no breakage or damage has occurred during shipping. If any parts are damaged or missing, contact your nearest Ryobi Authorized Service Center. Included with your hand vac should be one battery pack, charger, crevice tool, brush attachment, squeegee attachment, filter, and this operator's manual.

⚠ WARNING:

If any parts are missing, do not operate your hand vac until the missing parts are replaced. Failure to do so could result in possible serious personal injury.

SWITCH

Your hand vac is equipped with a conveniently located **ON/OFF** switch on top of the handle. This enables you to turn the hand vac on and off while still holding the handle.

BRUSH ATTACHMENT

The brush attachment allows you to vacuum upholstery, drapes, etc.

CREVICE TOOL

The crevice tool allows you to vacuum in tight places.

SQUEEGEE ATTACHMENT

The squeegee attachment is a convenient tool to use for wet pick-up. It helps collect the liquid and allows the hand vac to lift spills more efficiently.

⚠ WARNING:

Do not allow familiarity with your hand vac to make you careless. Remember that a careless fraction of a second is sufficient to inflict severe injury.

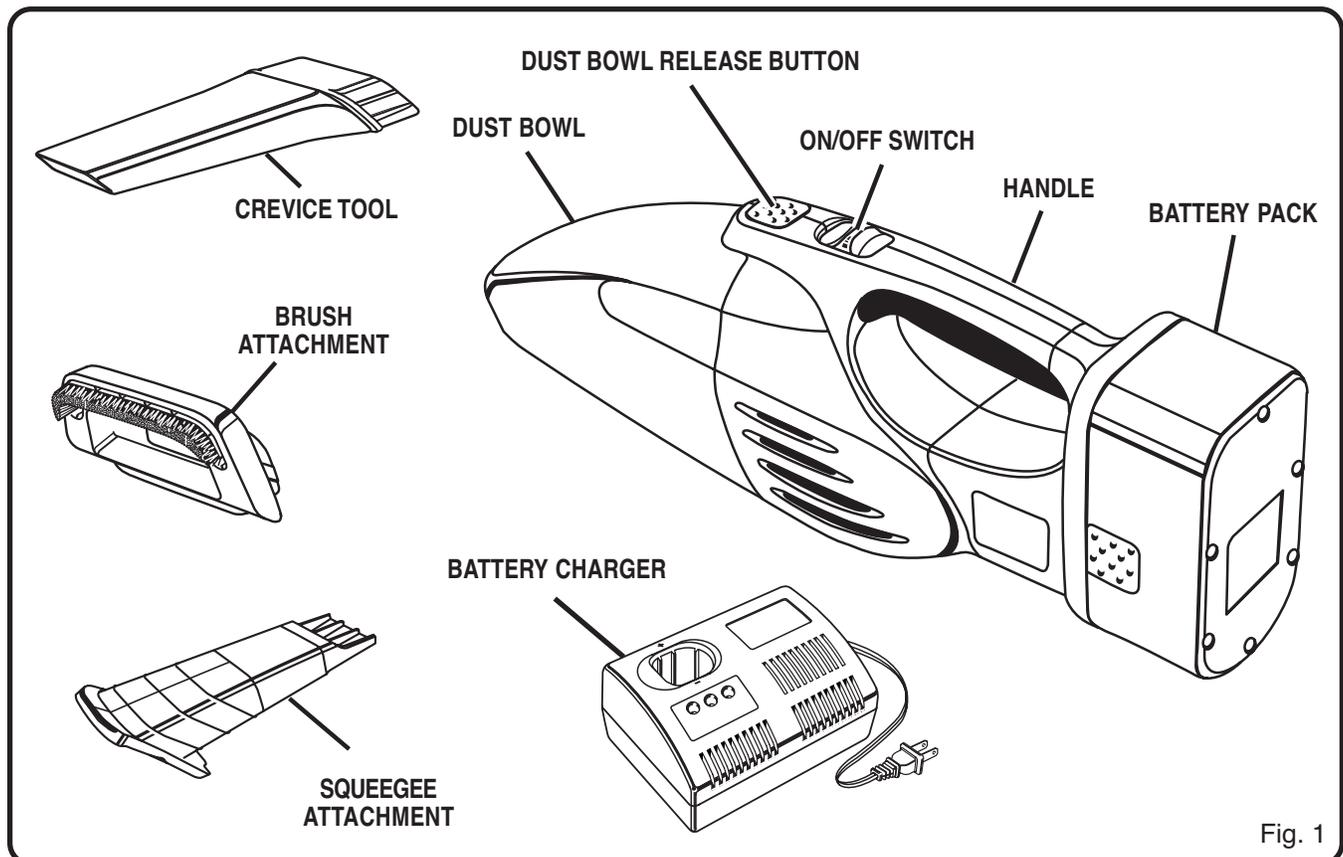


Fig. 1

FEATURES

PRODUCT SPECIFICATIONS:

HANDVAC

Motor
Switch

VC180
18 Volt, DC
On/Off

CHARGER BATTERY

Charger Rating
Charger Voltage
Charger Rate

Item No. 1423701
Item No. 1322401, 130224007
or 130256001

120V, 60 Hz, AC Only
18 Volt
1 Hour

OPERATION

⚠ WARNING:

If any parts are missing, do not operate unit until the missing parts are replaced. Failure to do so could result in possible serious personal injury.

LED FUNCTION OF CHARGER

See Figure 2.

LED WILL BE LIGHTED TO INDICATE STATUS OF CHARGER AND BATTERY PACK:

- Red LED lighted = Fast Charging Mode
- Green LED lighted = Fully Charged Battery Pack
- Yellow and Green LED Lighted = Control Charge or Defective Battery Pack.

CHARGING YOUR HAND VAC

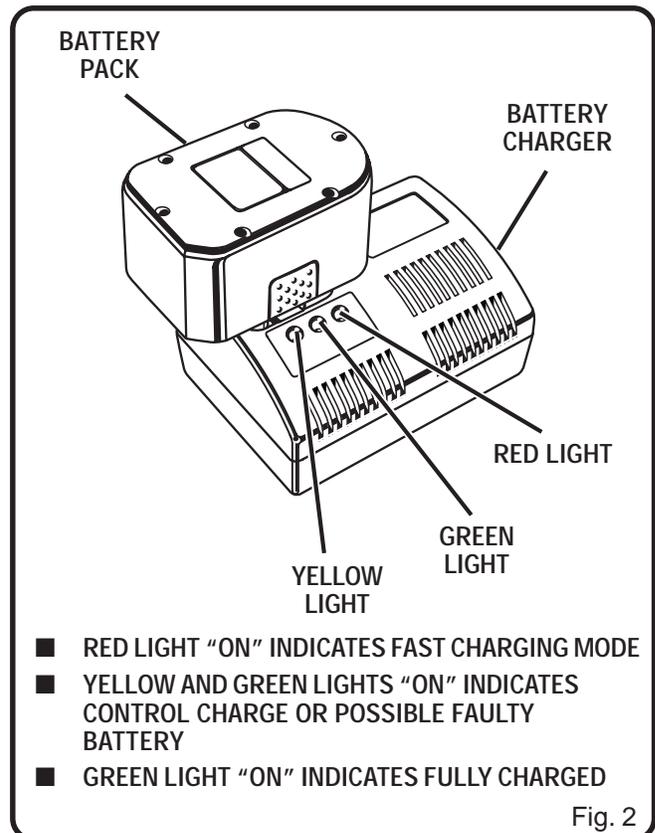
The battery pack for your hand vac has been shipped in a low charge condition to prevent possible problems. Therefore, you should charge it prior to use.

Note: Batteries will not reach full charge the first time they are charged. Allow several cycles (vacuuming followed by recharging) for them to fully charge.

TO CHARGE

- Charge battery pack only with the charger provided.
- **Make sure power supply is normal house voltage, 120 volts, 60 Hz, AC only.**
- Connect charger to power supply.
- Place battery pack in charger. See Figure 3. Align raised rib on battery pack with groove in charger.
- Press down on battery pack to be sure contacts on battery pack engage properly with contacts in charger. When properly connected, red light will turn on.

- Normally, the yellow and green lights on the charger will come on. This indicates charger is in control charge mode and should switch to fast charge mode within 5 minutes. When charger is in fast charge mode the red light will come on. If after a period of 15 minutes the yellow and green lights remain on, remove the battery pack, wait 1 minute and reinsert battery pack in charger. If the yellow and green lights continue to remain on an additional 15 minutes, the battery pack is damaged and will not accept charge.
- When your battery pack becomes fully charged, the red light will turn off and the green light will turn on.



OPERATION

- After normal usage, 1 hour of charge time is required to be fully charged. A minimum charge time of 1 to 1-1/2 hours is required to recharge a completely discharged tool.
- The battery pack will become slightly warm to the touch while charging. This is normal and does not indicate a problem.
- **DO NOT** place charger in an area of extreme heat or cold. It will work best at temperatures above 50°F and below 100°F.

IMPORTANT INFORMATION FOR RE-CHARGING HOT BATTERIES

When using your hand vac continuously, the batteries in your battery pack will become hot. You should let a hot battery pack cool down for approximately 30 minutes before attempting to recharge.

NOTE: This situation only occurs when continuous use of your hand vac causes the batteries to become hot. It does not occur under normal circumstances. Refer to “**Charging Your Hand Vac**” for normal recharging of batteries. If the charger/charging assembly does not charge your battery pack under normal circumstances, return **both** the battery pack and charger/charging assembly to your nearest **Ryobi Authorized Service Center** for electrical check.

TO INSTALL BATTERY PACK

See Figure 3.

- Place the battery pack in your hand vac. Align raised rib on battery pack with groove in hand vac's battery port.
- Make sure the latches on each side of the battery pack snap in place and that battery pack is secured in hand vac before beginning operation.

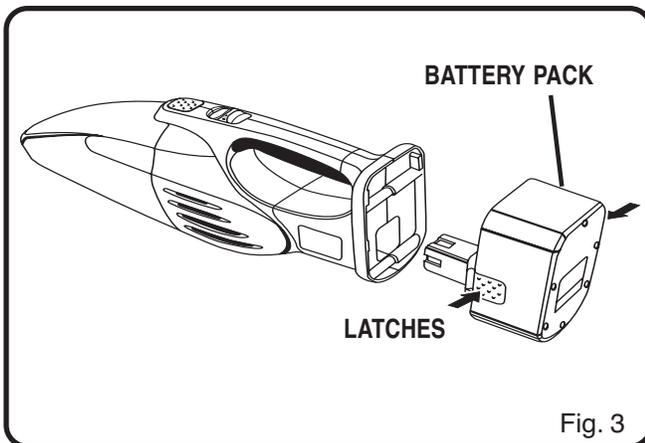


Fig. 3

TO REMOVE BATTERY PACK

See Figure 3.

- Locate latches on side of battery pack and depress both sides to release the battery pack from the hand Vac.

⚠ CAUTION:

When placing battery pack in your hand vac, be sure raised rib on battery pack aligns with groove in hand vac's battery port and latches snap in place properly. Improper assembly of battery pack can cause damage to internal components.

ON/OFF SWITCH

See Figure 4.

Follow these steps to turn the vacuum on and off.

- To turn the vacuum on: Slide switch toward the front of the vacuum.
- To turn the vacuum off: Slide switch toward the back of the vacuum.

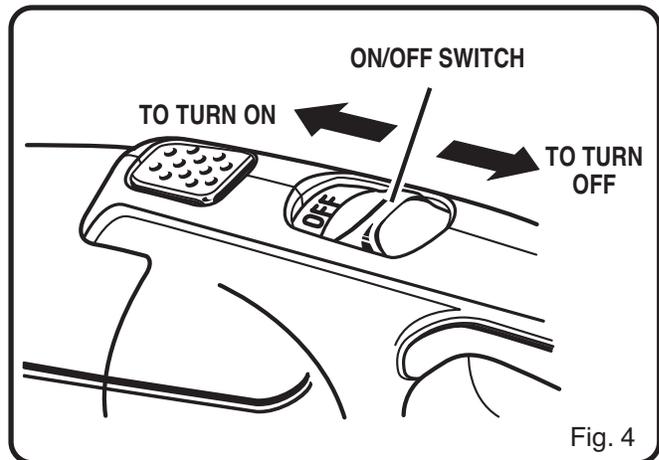


Fig. 4

OPERATION

CLEANING YOUR HAND VAC

See Figures 5, 6 and 7.

⚠ WARNING:

Never use your hand vac without the dust bowl, filter, and filter rack properly in place.

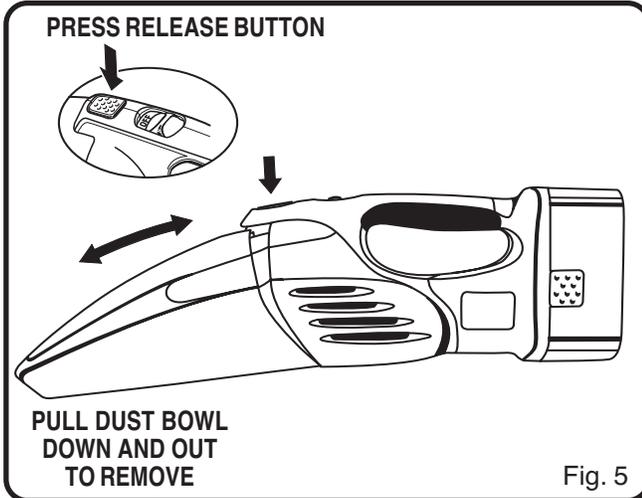
The dust bowl should be checked, emptied and cleaned periodically to obtain maximum dust collection.

TO REMOVE DUST BOWL

See Figure 5.

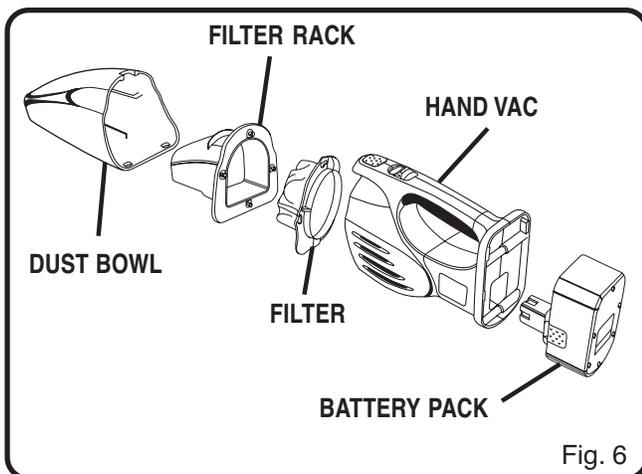
- Depress the release button located on top of hand vac. Pull dust bowl down and out as shown to separate from motor housing.

NOTE: Do not tilt or tip the hand vac back with liquids in the dust bowl.

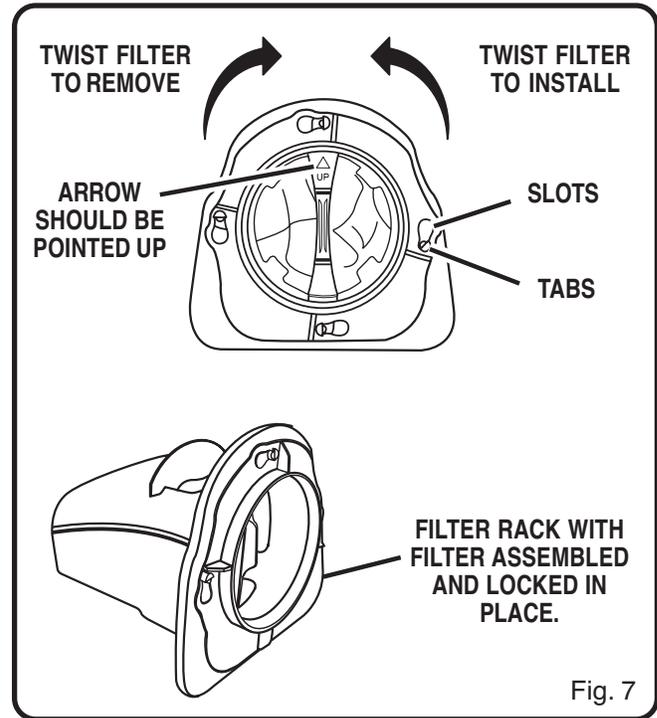


TO REMOVE AND CLEAN FILTER

- Remove the assembled filter rack and filter by pulling them out of the dust bowl. **NOTE:** The filter is locked in place in the filter rack. See Figure 6.



- Twist the filter to unlock from the filter rack tabs and remove the filter. See Figure 7.



- Shake or lightly brush any dust or dirt off filter.
- Empty the filter, filter rack, and dust bowl; wash if necessary. Before reattaching to the hand vac, make sure all pieces are completely dry.

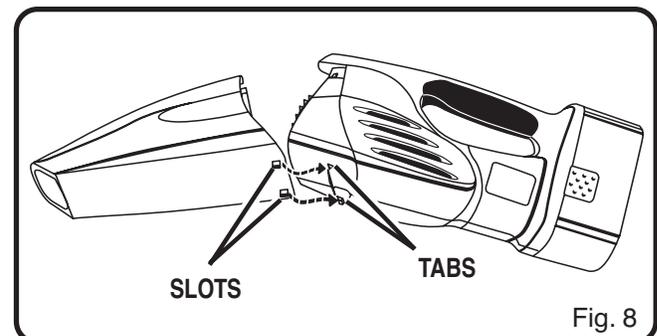
TO REPLACE FILTER

- Place the filter in the filter rack ensuring the slots in the filter are aligned with the tabs on the filter rack. When assembled correctly, the arrow shown on the filter should be pointed up. Twist the filter to lock in place. See Figure 7.
- Place the assembled filter rack and filter into the dust bowl.

TO REATTACH DUST BOWL

See Figure 8.

- Position the two sections as shown. Align slots on bottom of dust bowl with tabs on bottom of motor housing then snap the two sections together.



OPERATION

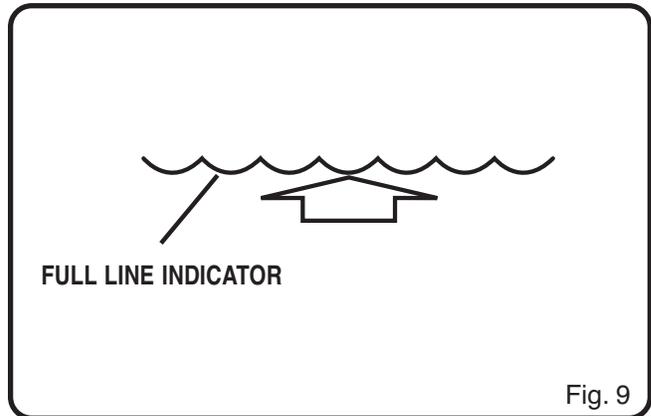
FULL LINE INDICATOR

See Figure 9.

The full line icon shown on the dust bowl of your hand vac should be used as an indicator when vacuuming liquids. This full line indicates the maximum level for liquids within the dust bowl. The hand vac should never be filled past the full line; empty the dust bowl often to avoid this situation.

Do not tilt the hand vac with liquids in the dust bowl.

Never use the hand vac to pick up flammable or combustible liquids such as gasoline; the motor could ignite.



ACCESSORIES

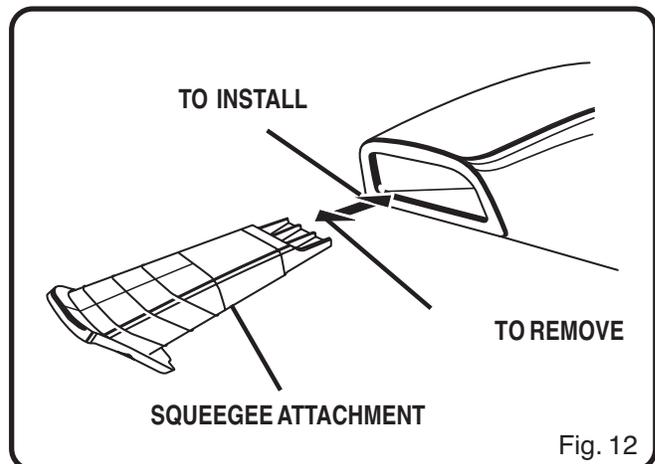
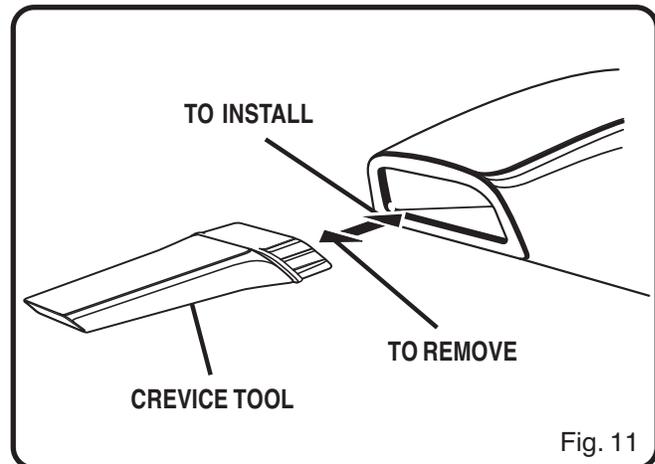
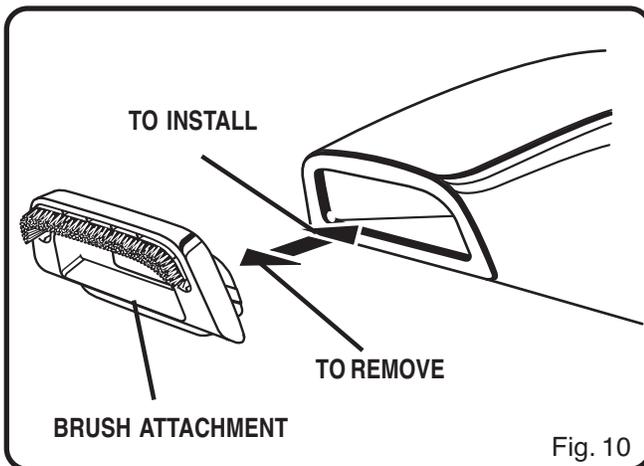
ADDING ATTACHMENTS

See Figures 10, 11 and 12.

The brush attachment, crevice tool and squeegee attachment have been provided with your hand vac. These attachments can be easily snapped into place on your hand vac.

Follow these steps to add attachments.

- Turn off the vacuum.
- Insert attachment into front end of vacuum, snapping it into place.



⚠ WARNING:

The use of attachments or accessories not listed can be hazardous.

MAINTENANCE

⚠ WARNING:

When servicing use only identical Ryobi replacement parts. Use of any other parts may create a hazard or cause product damage.

Avoid using solvents when cleaning plastic parts. Most plastics are susceptible to damage from various types of commercial solvents and may be damaged by their use. Use clean cloths to remove dirt, dust, oil, grease, etc.

⚠ WARNING:

Do not at any time let brake fluids, gasoline, petroleum-based products, penetrating oils, etc. come in contact with plastic parts. They contain chemicals that can damage, weaken or destroy plastic.

⚠ WARNING:

Do not attempt to modify this tool or create accessories not recommended for use with this tool. Any such alteration or modification is misuse and could result in a hazardous condition leading to possible serious personal injury.

⚠ WARNING:

Any repairs requiring disassembly should only be performed by a Ryobi Authorized Service Center. For the repair center nearest you, call **1-800-525-2579**.

BATTERIES

The battery pack for your hand vac is equipped with nickel-cadmium rechargeable batteries. Length of service from each charging will depend on the type of work you are doing.

The batteries in this tool have been designed to provide maximum trouble free life. However, like all batteries, they will eventually wear out. **Do not** disassemble battery pack and attempt to replace the batteries. Handling of these batteries, especially when wearing rings and jewelry, could result in a serious burn.

To obtain the longest possible battery life, we suggest the following:

- Store and charge your batteries in a location where the temperature is above 50°F but less than 100°F.
- Never store batteries in a discharged condition. Recharge them immediately after they are discharged.
- All batteries gradually lose their charge. The higher the temperature the quicker they lose their charge. If you store your vacuum for long periods of time without using it, recharge it every month or two. This practice will prolong battery life.

DISPOSAL OF THE EXHAUSTED BATTERY



To preserve natural resources, please recycle or dispose of properly. This product contains a nickel-cadmium battery. Must be disposed of properly. Local, state, or federal laws may prohibit disposal of Nickel-Cadmium batteries in ordinary trash.

Consult your local waste authority for information regarding available recycling and/or disposal options. For more information on battery recycling call **1-800-8BATTERY**.

BATTERY PACK PREPARATION FOR RECYCLING

⚠ WARNING:

Upon removal, cover the battery pack's terminals with heavy duty adhesive tape. Do not attempt to destroy or disassemble battery pack or remove any of its components. Also, never touch both terminals with metal objects and/or body parts as short circuit may result. Keep away from children. Failure to comply with these warnings could result in fire and/or serious injury.



OPERATOR'S MANUAL TUFF SUCKER™ 18 Volt Cordless Hand Vac Model No. VC180

For Wet and Dry Vacuuming

- **SERVICE**

Now that you have purchased your tool, should a need ever exist for repair parts or service, simply contact your nearest Ryobi Authorized Service Center. Be sure to provide all pertinent facts when you call or visit. Please call 1-800-525-2579 for your nearest Ryobi Authorized Service Center. You can also check our web site at www.ryobitools.com for a complete list of Authorized Service Centers.

- **MODEL NO. AND SERIAL NO.**

The model number of this tool will be found on a plate attached to the motor housing. Please record the model number and serial number in the space provided below.

- **HOW TO ORDER REPAIR PARTS**

WHEN ORDERING REPAIR PARTS,
ALWAYS GIVE THE FOLLOWING INFORMATION:

- MODEL NUMBER VC180
- SERIAL NUMBER _____

RYOBI TECHNOLOGIES INC.

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