



ANDERSON[®] Products



**SAFETY OPERATING & MAINTENANCE INSTRUCTIONS
for VERSA-CRIMP[®] Battery Pack**

**CATALOG #
VCBP6FT and VCBP63**





<u>SYMBOL</u>	<u>MEANING</u>
 DANGER	Hazard has a high level of risk.
 WARNING	Hazard has a medium level of risk.
 CAUTION	Hazard has a low level of risk.



TABLE OF CONTENTS

Safety Information 2
 Specifications - Tool..... 3
 Description3
 Specifications - Hydraulic Power Source..... 3
 Pre-Operation3
 Features and Benefits4
 Operation..... 5
 Maintenance..... 6
 Service..... 6
 Troubleshooting..... 7
 Commonly asked questions 8
 Parts Section 9
 Connector Range 10
 Battery recycling 12

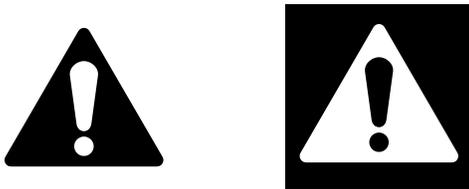
Each employer shall instruct each employee and user in the recognition and avoidance of unsafe working conditions and the laws and regulations applicable to his/her work environment to control or eliminate any hazards or other exposure to illness or injury. Reference: OSHA 29CFR 1910 etseq. (1994).

If a conflict arises between the material contained in this manual, rules of the user, his/her employer or company, and legal or industry guidelines the more stringent rules take precedence and must be followed.

Observe and follow all other safety rules and regulations for the job.

Safety is everyone’s responsibility.

SAFETY INFORMATION



The above symbols are used to call your attention to instructions concerning your personal safety. Look for these symbols; read and follow the instructions that accompany them. Failure to follow the safety information provided can lead to serious personal injury or death.

SAFETY FIRST

WARNING



The information provided in this manual is essential for the safe handling, operation, and maintenance of the ANDERSON® VCBP6FT & VCBP63. The operator must read, understand, and follow these instructions and ALL safety warnings and labels before operating this tool.

- Only use this tool in accordance with the manufacturer’s specifications. Other use of this tool may lead to serious personal injury or death.

OPERATING SAFETY PRECAUTIONS

WARNING



Tool is NOT insulated for use on or near energized conductors. Use of this tool near energized conductors may lead to electrical shock, causing severe injury or death.



Pinch point hazard. Crimp ram operates at high speed and force and can cause severe personal injury. Keep all body parts away from moving parts of the tool during operation.



Hydraulic fluid under pressure. Do NOT use any part of your body to locate a hydraulic leak. Escaping fluid under pressure can cause severe injury or death. If injury results from escaping hydraulic fluid, seek immediate medical attention to avoid serious bodily injury.



Do NOT over-reach while operating this tool. Loss of balance can cause serious personal injury or death. Move closer to work area and securely support yourself and your work. ALWAYS keep proper footing and balance.

Always clip one end of the lanyard to the safety ring on the tool and the other end to a secure point to avoid accidental drop of more than 6 feet. Failure to follow this instruction may result in personal injury or tool damage.

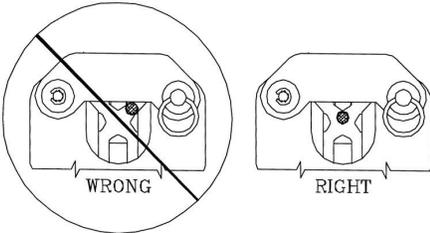


ANDERSON® Products

! WARNING



Use all appropriate personal safety equipment when handling, operating, and servicing this tool such as: safety shoes, hard hat, eye and ear protection, work gloves, and sleeves.



Certain small connectors when not properly positioned, can severely damage this tool by becoming wedged between the indenters and the tool head. See the figures above for the correct placement of the connector.

To help ensure safe operation of this tool, keep all safety labels clean and legible. Replace labels when necessary with new labels. See the PARTS SECTION of this manual for information on reordering.

SPECIFICATIONS VCBP6FT & VCBP63

Output Force	6Ton (5.4 Metric Tons)
Weight	14 lbs (6.35 kg)
Length	16.98 in (43.1 cm)
Width	2.95 in (7.5 cm)
Height	15.15 in (38.4 cm)
Operating Voltage	18 V-DC
Battery Recharge Time	< 30 mins

DESCRIPTION

The ANDERSON® VCBP6FT & VCBP63 is a battery powered crimping tool that can be operated with one hand allowing for advance, retract, and hold functions for easier tool operation. The ANDERSON® VCBP6FT & VCBP63 operates on a standard 18V Li-ion battery and comes complete with two batteries and AC battery charger.

The VCBP6FT & VCBP63 tool uses dieless technology and off-the-shelf connectors available world-wide. It will install a full range of splice and terminal connectors.

SPECIFICATIONS - HYDRAULIC POWER SOURCE

! WARNING

The internal hydraulic power source achieves high pressure during normal operation. Do NOT disassemble this tool at any time. Disassembly of this tool may result in severe personal injury or tool damage, and will void the warranty.

The hydraulic power system is located internally within the tool and is a non-field serviceable item. If you suspect that your tool is not functioning properly, please contact the HUBBELL ANDERSON® Service and Tool Repair Center at: 1-800-426-8720.

PRE-OPERATION INSTRUCTIONS

! WARNING

Read and follow all PRE-OPERATION and safety instructions provided for your VCBP6FT & VCBP63 and for the battery charger (see Charger Instruction Manual) and accessories. Failure to follow the proper operating instructions and safety information provided can lead to serious personal injury or death.

Before operating your VCBP6FT & VCBP63, carefully read and follow these PRE-OPERATION instructions to ensure your tool is in proper working condition. Read and follow the Battery Charger Instruction Manual included for operating your battery charger unit. Following these instructions, charge the battery(s).

1. With a fully charged battery installed, depress the upper trigger first to make certain that the tool ram is fully retracted.

NOTE: To maximize the crimp cycles available from a battery, ensure the battery is fully charged before operating.

2. Insert a charged battery into the tool handle. The battery will only insert in the proper orientation. The battery will snap into place securing the battery to the tool.

Please note that it is not necessary to have a battery installed in the VCBP6FT & VCBP63 in order to retract the tool ram.



FEATURES AND BENEFITS

FEATURES	BENEFITS
- True one-handed operation for advance, retract and hold function	- Easier tool operation
- Consistent output force from high speed hydraulic pump	- Reliable compression connections
- Rotatable head	- Allows installation in most positions
- Long battery life	- Increased crimps per charge
- Ergonomically balanced tool	- Eases operation and helps lessen fatigue
- Large handle grip with trigger guard	- Easier operation with gloves
- Industry standard battery and charger	- Rugged time proven design and competitive pricing
- Audible pressure "pop-off" valve	- Indicates properly completed crimps
- Two (2) "High Capacity" 18V batteries and charger	- Allows interruption free operation by charging one battery while the other is in use
- Uses 18V Li-ion battery	- Charging memory is no longer a concern
- Durable plastic carry case	- Provides superior protection and stores accessories
- 5 Year limited warranty on the tool - 1 year warranty on the batteries and the charger	- Customer satisfaction and technical support
- Dieless crimp technology	- Easier installation of many connectors



OPERATION

The VCBP6FT and VCBP63 hydraulic hand tools are ruggedly designed and simple to operate. There are no dies to change out. The tools have built in "nibs" within the head.

Two basic configurations used in VERSA-CRIMP® connectors are 1) the sleeve and 2) the open groove. The following illustrations and commentary are provided to show how the tool is operated when installing these two types of connector configurations:

CONDUCTOR PREPARATION

Strip insulation from the conductor, being careful not to nick the strands. A proper insulation stripping tool or using the "Pencil" shaving method is recommended. Thoroughly clean the conductor by wire brushing until a bright shiny surface is obtained. All oxides and foreign matter must be removed.

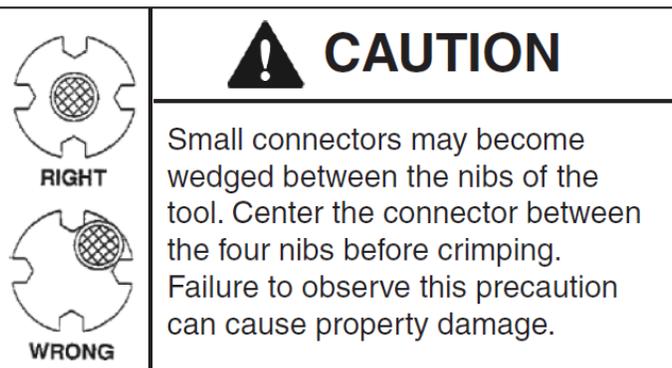
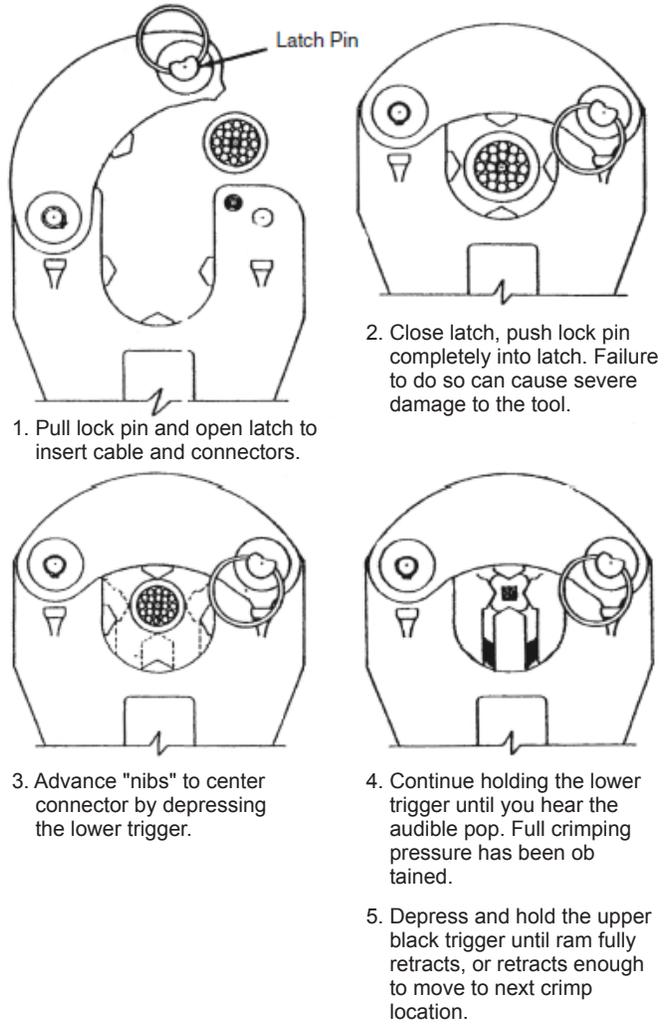
NOTE: Do not wire brush tin-plated copper conductors or tinned connectors.

WARNING: Certain small service sleeve connectors can severely damage the tool by becoming wedged between nibs of the tool head. The connector should always be centered in the tool as the nibs are slowly advanced into position about the connector.

NOTE: Do not immerse the tool in water, as it is not designed to operate under water. This is considered abuse and will void the warranty! Always use the tool lanyard provided to prevent dropping the VERSA-CRIMP® Tool.

CRIMPING INSTRUCTIONS

VCBP6FT EXAMPLE





Annually or every 10,000 crimps -

1. Return the tool to an authorized Hubbell ANDERSON® service center for inspection and maintenance check.
2. Have the oil changed out.



WARRANTY: This tool is warranted to be free of defects in materials and workmanship for a period of two (2) years from the date purchased. Warranty coverage does not apply to repairs required due to normal wear and tear. Proof of purchase date is required for all warranty claims. Obvious misuse or abuse, repairs made or attempted by others, or the use of any non-Hubbell products resulting in damage to the tool (which can be determined at a Hubbell ANDERSON® service center) voids any warranty. If inspection by a certified tool technician shows the issue is due to defective workmanship or material, ANDERSON® will repair or (at our option) replace the tool. The use of this tool in a manufacturing process renders this warranty null and void.

INSTRUCTIONS FOR RETURNING TOOLS:

Do not ship any tool to the service and repair center without first securing permission.

Call VERSA-CRIMP® Customer Service and Repair at 1-800-426-8720.

Address:

Hubbell ANDERSON® VERSA-CRIMP® Service & Tool Repair
150 Burndy Road
Littleton, NH 03561 USA

INSPECTION PROCEDURE AFTER MAINTENANCE OR OVERHAUL

1. After repairs are completed, the tool should be cycled through several crimping operations by pumping the tool up to full pressure and spill off. This may be done without actually crimping any article in the tool. Any spongy feeling of free travel while pumping indicates the probability of air in the hydraulic system and should be corrected before completing the crimping test.
2. Rotate tool head counterclockwise (facing tool head) at least ten complete revolutions and check the following:
 - a. Check for binding
 - b. Check for looseness
 - c. After ten complete head revolutions, pump tool until it spills off at full pressure and check for rapid and full retraction of crimping nibs.
3. Check for proper adjustment of release pin mechanism. Make certain that plunger will depress sufficiently to open ball valve and allow crimping nibs to fully retract.
4. Check for proper spring return of release plunger. Upon retraction of the pump handle release finger, the release plunger should return to its original position.
5. Check the full open dimension of the crimping nibs. The dimension should be 1.512" to 1.600".
6. Check the nibs fully closed. The dimension should be .222" to .252".
7. Check spring return of the pump handle when rotated and then released.



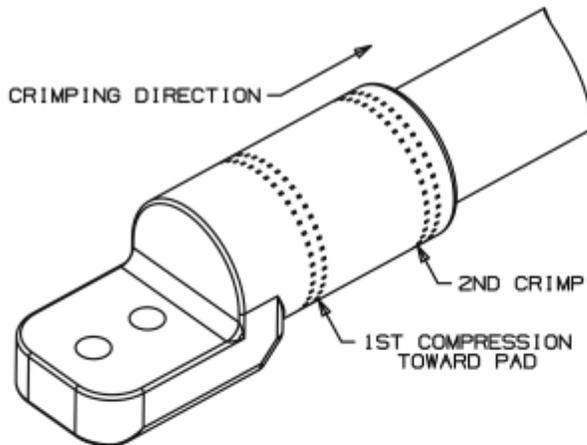
OPERATION (continued)

1. Insert cable fully into connector. Center the connector between the nibs.
2. Pump the tool to advance the nibs. Keep pumping until the pressure relief valve activates with an audible "pop" sound. This will also be felt in the handles.
3. After achieving pressure relief, turn the movable handle so as contact the pressure relief pin. The ram will return to the start position and the nibs will retract.
4. Complete the number of crimps specified by Hubbell ANDERSON® connector products.

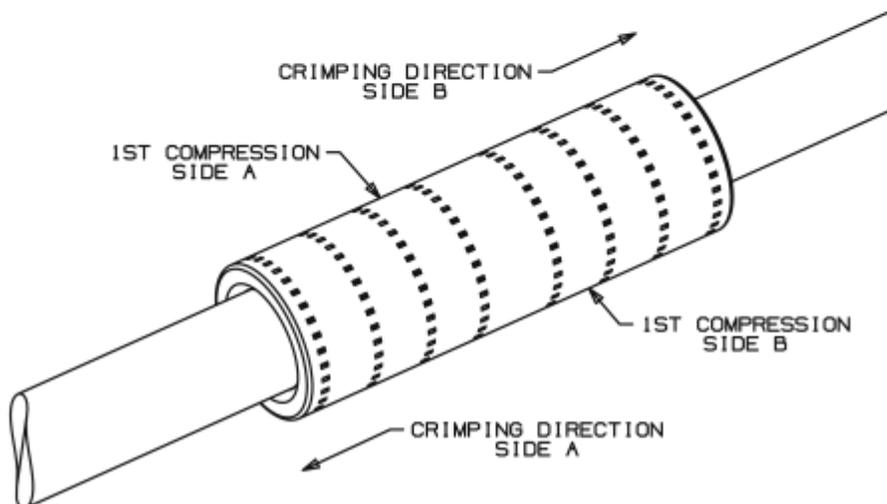
CONNECTOR/CONDUCTOR PREPARATION:

Follow all connector instructions for appropriate cable strip length and number of crimps.

TERMINALS - Start from pad end:



SPLICES - Start from either side of center and work outwards:





MAINTENANCE

PREVENTIVE MAINTENANCE

CAUTION

Failure to perform regular maintenance tasks could result in bodily injury and/or property damage.

The service life of a tool can be greatly improved with proper care and maintenance. To extend the life of your VCBP6FT & VCBP63 follow the recommended maintenance tasks outlined below.

- Remove the battery prior to cleaning tool.
- Keep the tool exterior clean at all times. Remove dirt, debris, and other foreign substances from external surfaces daily, to help prevent corrosion and damage to the tool, the ram & piston mechanism.
- Remove all surface contaminants. When surface contaminants cannot be removed with a cloth, spray head and ram piston with a general purpose cleaning solution to help loosen contaminants. Avoid getting solvents onto the plastic housing as some cleaners & solvents may damage the housing material. Using a stiff brush, never metal, remove all contaminants in and around the ram and piston area and allow solvent to drain off tool.
- Extreme care should be taken to prevent contamination from entering the hydraulic system. The hydraulic circuit is a closed system. Replacement of hydraulic fluid or topping off of hydraulic fluid by the user is **NOT** recommended.
- Inspect the tool for signs of leaks, cracks, wear or damage.
- Lightly lubricate the external ram & piston surfaces, and die buttons, with a high grade silicon lubricant.
- Wipe the tool with a clean and dry rag before placing the tool into the case.

SERVICE

WARNING

We do not recommend you attempt to service or repair any tool yourself. Tool servicing by unqualified personnel will void the warranty and may lead to serious personal injury.

Call VERSA-CRIMP® Customer Service and Repair at 1-800-426-8720.

Address:

Hubbell ANDERSON® VERSA-CRIMP® Service & Tool Repair
150 Burndy Road
Littleton, NH 03561 USA

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.

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.

IMPORTANT SAFETY INSTRUCTIONS FOR BATTERY CARTRIDGE

1. Before using battery cartridge, read all instructions and cautionary markings on (1) battery charger, (2) battery, and (3) product using battery.
2. Do not disassemble battery cartridge.
3. If operating time has become excessively shorter, stop operating immediately. It may result in a risk of overheating, possible burns and even an explosion.
4. If electrolyte gets into your eyes, rinse them out with clear water and seek medical attention right away. It may result in loss of your eyesight.
5. Do not short the battery cartridge:
 - (1) Do not touch the terminals with any conductive material.
 - (2) Avoid storing battery cartridge in a container with other metal objects such as nails, coins, etc.
 - (3) Do not expose battery cartridge to water or rain. A battery short can cause a large current flow, over heating, possible burns and even a breakdown.
6. Do not store the tool and battery cartridge in location where the temperature may reach or exceed 50°C (122°F).
7. Do not incinerate the battery cartridge even if it is severely damaged or is completely worn out. The battery cartridge can explode in a fire.
8. Be careful not to drop or strike battery.



LITHIUM ION (Li-ion) SHIPPING REGULATIONS:

The U.S. DOT enacted new regulations in 2008 that apply to shipments containing Lithium ion batteries. Whenever possible, Lithium ion batteries should be sorted from other rechargeable batteries.

Shipment of a non-Call2Recycle container of Lithium ion batteries for recycling must adhere to the following requirements, in addition to the safety requirements listed on the opposite side:

- Each individual rechargeable battery, or cell phone with battery, must be placed into a separate bag (or terminals taped) to ensure safe storage and shipping;
- Package must be marked "CONTAINS LITHIUM ION BATTERIES – FORBIDDEN FOR TRANSPORT ABOARD AIRCRAFT AND VESSEL." Lettering must be at least 0.25 inches in height;
- Package also must be marked: "DO NOT DAMAGE OR MISHANDLE PACKAGE – IF PACKAGE IS DAMAGED, BATTERIES MUST BE QUARANTINED, INSPECTED AND REPACKAGED";
- Shipping document (e.g., BOL) must indicate package contains lithium batteries and package must be quarantined, inspected and repackaged if damaged; and
- Package may not exceed 30 kg (66 pounds)

A package containing Lithium ion batteries with a gross weight of more than 30 kg (66 pounds) must be shipped as a fully-regulated Class 9 hazardous material and marked "LITHIUM BATTERY, UN 3090" and carry the Class 9 Miscellaneous hazard label. Batteries must be protected from short circuits and placed in strong outer packaging or UN specification packaging. Shipments also must be accompanied by a hazardous materials shipping paper. Shippers must be trained in accordance with the U.S.

hazardous materials regulations.

Approved Battery Recycling Location:

Hubbell ANDERSON® encourages recycling of its products whenever feasible. Recycling regulations and methods vary within North America and Hubbell ANDERSON® does not endorse any one recycling method or company. Consumers that wish to recycle Hubbell ANDERSON® products in the North America are asked to do so according to your local, state and federal regulations. Recycling resources for the United States can be found at the US EPA web site at the following link:

<http://www.epa.gov/epaoswer/non-hw/muncpl/recycle.htm>

If you wish to recycle batteries please use the above link and or contact your local RBRC recycling center. If additional information is needed please contact the Hubbell ANDERSON®, Tool Service Center

When recycling batteries you must include a bill of lading in order to comply with all applicable state and federal requirements, or the recycling center may be forced to return the shipment at your expense. If you have any questions, please contact the recycling center directly.

The EPA certified RBRC Recycling Seal indicates Hubbell ANDERSON® is voluntarily participating in a program to recycle these batteries at the end of their useful life.

The RBRC program provides a convenient alternative to placing batteries into the trash, which may be illegal in your area. Please call 1-800-8-BATTERY for more information. Hubbell ANDERSON® is committed to preserving our environment and conserving natural resources.



SAFETY GUIDELINES FOR BATTERY COLLECTION LITHIUM ION BATTERIES

- Used batteries may have a significant residual charge. It is important that they are prevented from short-circuiting. This can be done by placing the batteries separately in plastic bags or by placing non-conductive tape over the battery terminals.
- While these batteries are normally safe to handle, they do contain caustic materials that may have "vented" due to misuse during the life of the battery. If the battery appears to be "dirty" or have a white "film-like" substance around the terminal, exercise caution when handling the battery. Do not touch the dirty area. Wash your hands with soap and water if they feel itchy, and avoid touching your eyes, nose mouth.
- Do not attempt to discharge the battery by short-circuiting the terminals, consult your battery supplier for proper instructions on discharging batteries.
- Do not bite, or place the battery in your mouth or nose.
- Do not place wet batteries in a plastic bag. The trapped moisture will cause the battery to rust.



TROUBLESHOOTING

It is not recommended that the end user attempt to perform repairs on this tool, as specialized tools, training, and/or procedures may be required.

Should you have any problems or questions with your VERSA-CRIMP® hydraulic tooling, please do not hesitate to contact HUBBELL ANDERSON® VERSA-CRIMP® Service and Tool Repair by calling 1-800-426-8720

TROUBLESHOOTING GUIDE

SYMPTOM/PROBLEM	CAUSE	REMEDY
Movable "nibs" do not advance when activation trigger is pressed.	<ul style="list-style-type: none">- Battery is not charged.- Ram release lever/valve is being held open.- Pump is damaged.- Activation trigger switch failure.	<ul style="list-style-type: none">- Charge the battery according to the battery charger instruction manual provided with your tool.- Press and release the ram release lever to reset the valve.- Return to factory for repair.- Return to factory for repair.
Movable indentors do not fully extend.	<ul style="list-style-type: none">- Hydraulic system failure.	<ul style="list-style-type: none">- Return to factory for repair.
Excessive or unusual noise from tool.	<ul style="list-style-type: none">- Mechanical vibrations.- Cavitation due to cold hydraulic fluid.- Cavitation due to hot hydraulic fluid.	<ul style="list-style-type: none">- Return to factory for repair.- Allow tool to warm up before use.- Allow tool to cool before continuing use.
Oil leaks from tool.	<ul style="list-style-type: none">- Seal defect or mechanical problems.	<ul style="list-style-type: none">- Return to factory for repair.
Number of crimps per charge decreases with each battery recharge.	<ul style="list-style-type: none">- Battery is too warm due to frequent discharge/recharge cycling.	<ul style="list-style-type: none">- Allow battery to cool to room temperature before recharging.- Alternate batteries often.
Tool will not stop running after activation trigger is released.	<ul style="list-style-type: none">- Activation trigger stuck.- Switch failure.	<ul style="list-style-type: none">- Check for contaminants around the trigger switch area.- Remove battery and return tool to factory for repair.



COMMONLY ASKED QUESTIONS & ANSWERS:

1. **Q - How many crimps can I get before I need to recharge the battery?**

It is very difficult to estimate the amount of crimps you will get before recharging the battery. This will depend on many factors such as, size and type of material being crimped, how the tool is used, the weather, etc. See below for more information.

The weather - Extreme cold temperatures can reduce the battery charge by up to 60%. Keep charged batteries in a warm place, but not in your pockets, since coins and other metal parts may contact the battery terminal strips, causing a short circuit. Warm weather users will find they get more crimps/cuts per charge than users in colder climates.

The size & type of material being crimped - All Copper, Aluminum, ACSR, Steel ground rods, etc., and connectors, require different forces to compress. Diameter is also a factor in determining how many crimps you can achieve before a recharge is needed. Some cable and connector combinations being crimped may require more frequent battery recharging.

How you use the tool - If you make crimps one right after another, you will need more frequent battery recharging than if you make a few crimps and pause a moment prior to crimping again. Full retraction after each crimp is not required if you're crimping small connectors while larger connectors may require full retraction. Advancing the ram each time to approach small connectors drains the battery faster, than just retracting enough to move to the next crimp location.

The vast number of variables makes it difficult to provide exact number of crimps per charge for every possible field situation.

2. **Q - How long will the batteries last?**

Under ideal circumstances each battery could be recharged up to 2000 times before it will no longer accept a charge. This number may vary due to individual use and charging habits.

3. **Q - Can the batteries be recycled?**

YES! Once the battery no longer accepts a recharge, simply follow the recycling instruction included in this manual, for proper recycling. If your local community or company has a recycling program, you may choose to contact them for instructions in recycling. Always properly dispose of spent batteries by following the manufacturers recommended recycling procedures. (See "BATTERY RECYCLING" section for details)

4. **Q - How do I know when I've properly completed a crimp?**

The VCBP6FT & VCBP63 produces an audible pop when the crimp has been properly completed.

5. **Q - Does the tool require a charged battery in order to retract the ram?**

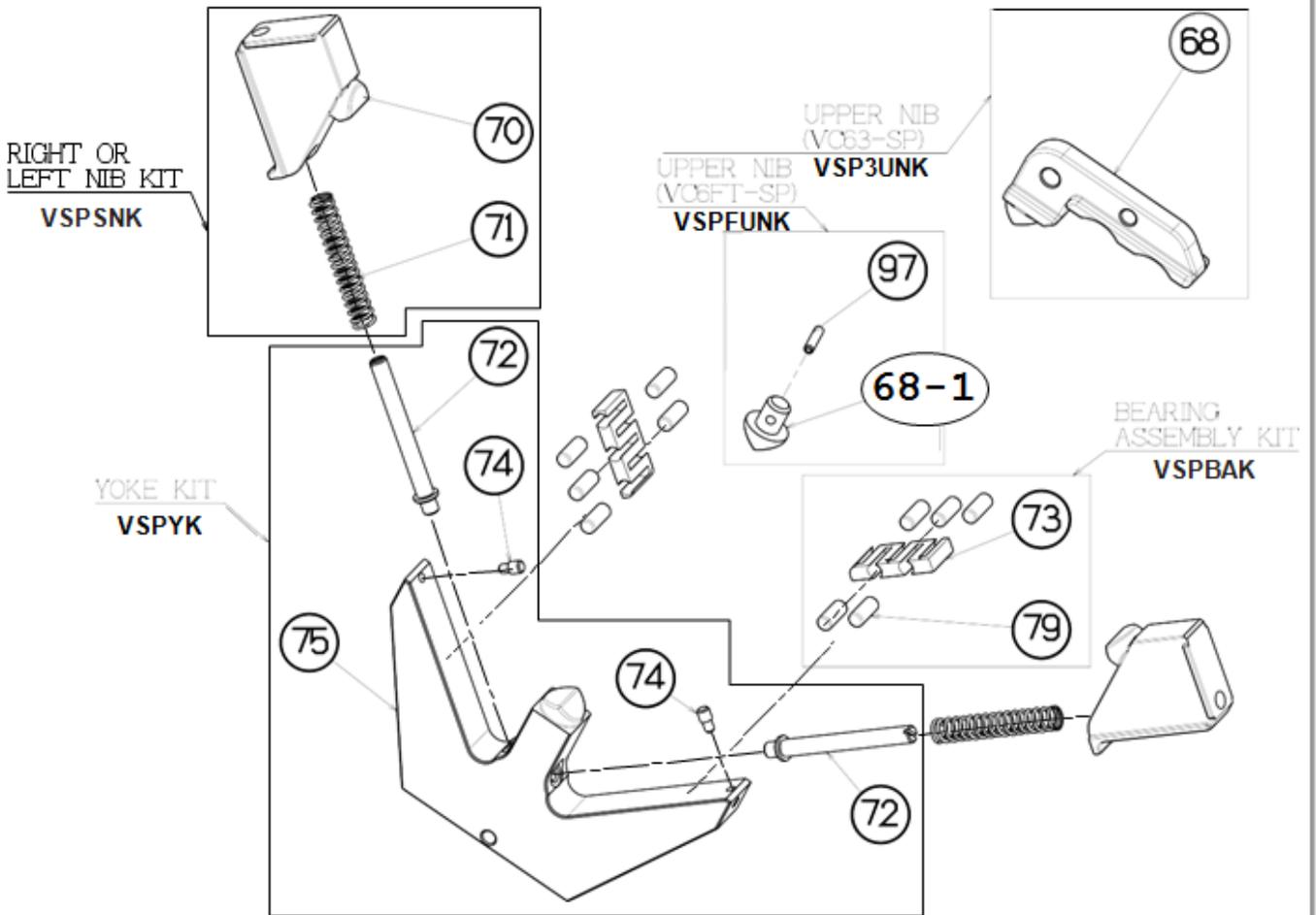
NO, the VCBP6FT & VCBP63 utilizes a mechanical retraction mechanism which allows the ram to retract without the battery.

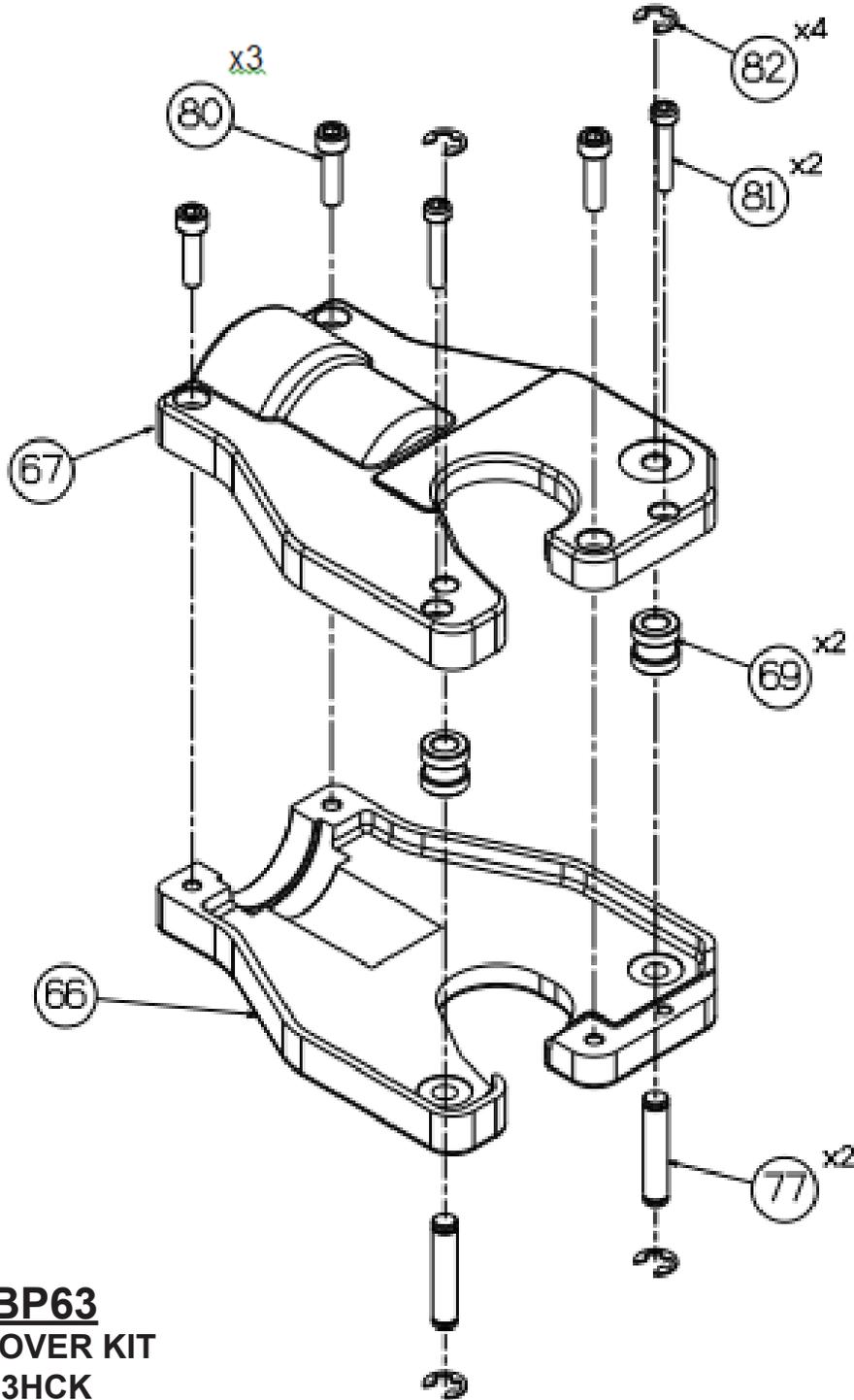
Tips for maintaining maximum battery life

1. Charge the battery cartridge before completely discharged.
Always stop tool operation and charge the battery cartridge when you notice less tool power.
2. Never recharge a fully charged battery cartridge.
Overcharging shortens the battery service life.
3. Charge the battery cartridge with room temperature at C -10° C - 40° C (50° F - 104° F). Let a hot battery cartridge cool down before charging it.
4. Charge the Lithium-ion battery cartridge when you do not use it for more than six months.

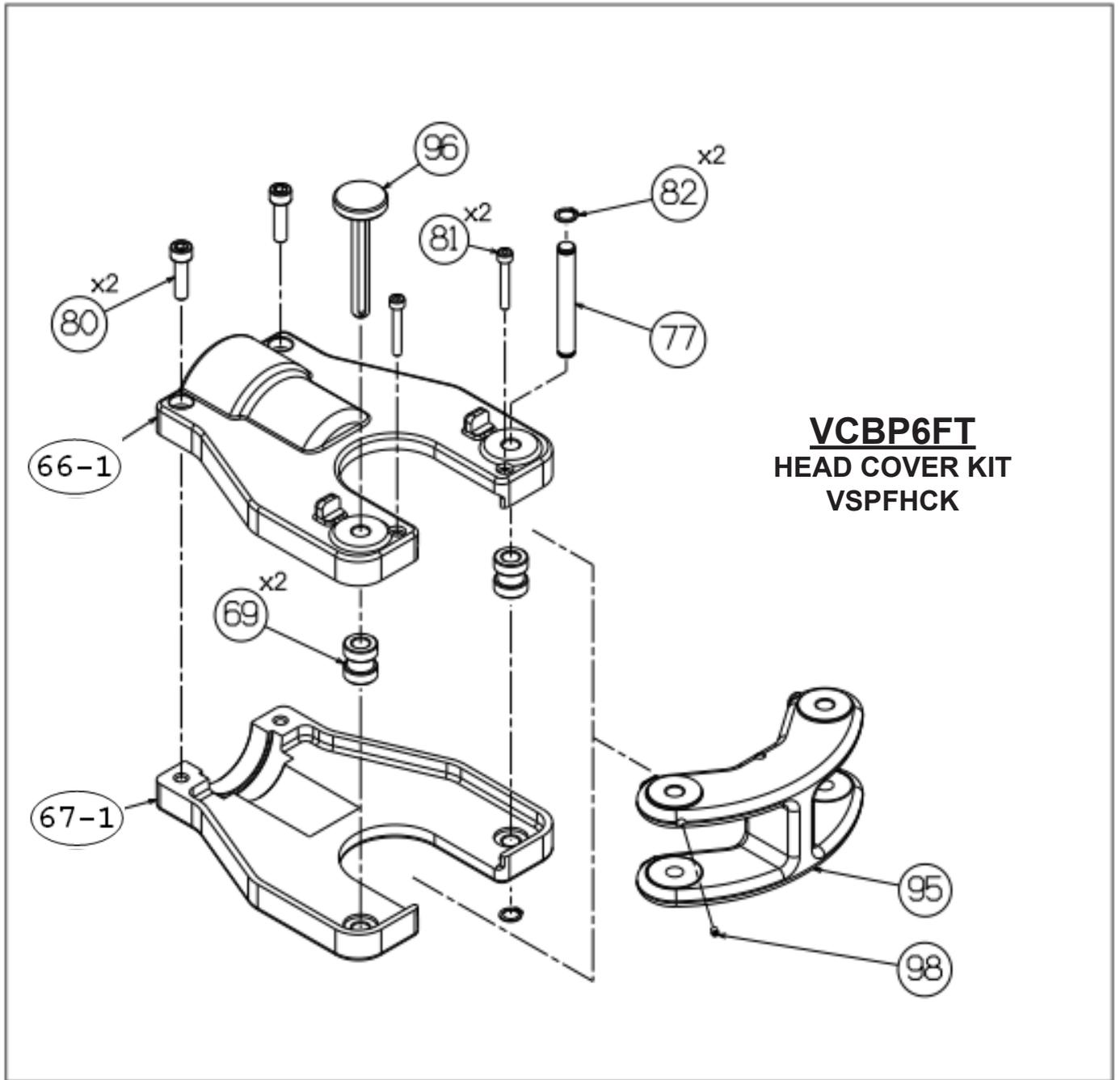


NIB & YOKE KITS





VCBP63
HEAD COVER KIT
VSP3HCK




KIT TABLE REFERENCE

KIT NUMBER	KIT DESCRIPTION	Image Part Number	Description	Quantity Assembly
VSPSNK	Right or Left Nib Kit	70	Side Jaw	1
		71	Side Jaw Spring	1
VSPBAK	Bearing Assembly Kit	73	Bearing Retainers	1
		79	Roller Bearing D5-L12	5
VSPYK	Yoke Kit	72	Spring Pin	2
		74	Bearing Stop	2
		75	Cam Yoke	1
VSPFUNK	Upper Nib for VCBP6FT	68	Fixed Nib	1
		97	Pin D3-I14	1
VSP3UNK	Upper Nib for VCNB63	68	Fixed Nib	1
VSPFHCK	VCHB6FT Head Cover Kit	66-1	Cover Half A	1
		67-1	Cover Half B	1
		69	Pivot Roller Bearing	2
		77	Pivot Pin	1
		80	Socket Head Screw M6-L28	2
		81	Socket Head Screw M4-L28	2
		82	E Type Snap Ring D8	2
		95	Latch	1
		96	Latch Pin	1
		98	Headless Inner Hex Screw M3-L8	1
VSP3HCK	VCHB63 Head Cover Kit	66	Cover Half A	1
		67	Cover Half B	1
		69	Pivot Roller Bearing	2
		77	Pivot Pin	2
		80	Socket Head Screw M6-L28	3
		81	Socket Head Screw M4-L28	2
		82	E Type Snap Ring D8	4



PARTS SECTION

CAT #	DESCRIPTION
PT10037335	Warning Label Tool
VCB6OMI	Safety Operation Maintenance Manual
PAT10036045	Tool Retention Lanyard
PATCHGRLI	120V AC Battery Charger
BAT18VLI	Extra Battery
PT30014448	LABEL, CASE VCBP63
PT30014450	LABEL, CASE VCBP6FT
PT30014452	LABEL, HOUSING VCBP63 LEFT
PT30014454	LABEL, HOUSING VCBP63 RIGHT
PT30014456	LABEL, HOUSING VCBP6FT LEFT
PT30014458	LABEL, HOUSING VCBP6FT RIGHT
PT30014460	LABEL, HEAD VCBP63
PT30014462	LABEL, HEAD VCBP6FT





ANDERSON[®] Products



ANDERSON[®]
VERSA-CRIMP[®] TOOLS

Web: www.hubbellpowersystems.com