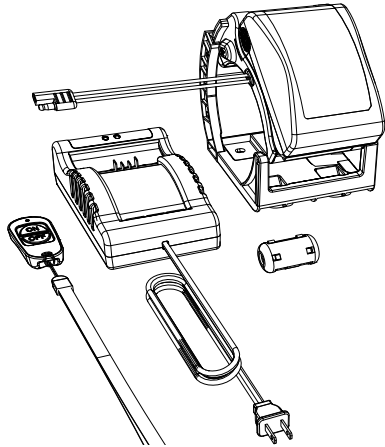


INSTRUCTION MANUAL



VOLT EDGE

20V, 5A Lithium Battery Kit (5281506)

Instruction Manual for Volt Edge 20V max* Li-ion Battery Charger

* Maximum initial battery pack voltage (measured without a workload) is 20 volts. Measured under workload, nominal voltage is 18 volts.

The label on your product may include the following symbols.

V volts

A Amperes

Hz Hertz


Ah Amp hours

— Direct Current


 Safety Alert Symbol

Wh Watt Hours

~ Alternating Current

 Read Owner's Manual

Important Safety Instructions - Save These Instructions.

 Recycle Battery
Li-ion

Danger: To reduce the risk of fire or electric shock, Carefully follow these instructions.

Warning: Before using, read and follow all instructions and cautionary markings on charger, battery pack and product using battery pack.

Warning: To reduce the risk of injury, basic safety precautions should always be followed including:

- Do not incinerate the battery pack, even if it is severely damaged or is completely worn out. The battery pack can explode in a fire. Toxic fumes and materials are created when the battery packs are burned.
- Do not charge or use battery in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Inserting or removing the battery from the charger may ignite the dust or fumes.
- If battery contents come into contact with the skin, immediately wash area with mild soap and water. If battery liquid gets into the eye, rinse water over the open eye for 15 minutes or until irritation ceases.
- Contents of opened battery cells may cause respiratory irritation. Provide fresh air. If symptoms persist, seek medical attention.

Warning: To reduce the risk of injury, basic safety precautions should always be followed including:

- Charge battery packs only in Volt Edge 20V max Lithium-ion compatible chargers.
- Do not store or charge the battery pack in locations where the temperature may reach above 95°F (35°C) or below 40°F (4°C).
- Do not use the battery pack in locations where the temperature may reach above 120°F (49°C) or below -4°F (-20°C).

Retain a copy of receipt for your Fimco Product.
As it will be required to validate any warranty service. Volt Edge products are warranted against manufacturer or workmanship defects for One (1) year from date of purchase for home owner usage and 90 days for commercial usage.



WARNING: To reduce the risk of injury, the user must read and understand the operator's manual before using this product.



WARNING: Cancer and Reproductive Harm
www.P65Warnings.ca.gov



www.fimcoindustries.com

1000 FIMCO Lane, P.O. Box 1700, North Sioux City, SD 57049
Toll Free Phone: 800-831-0027 : Toll Free Fax: 800-494-0440

[5195300

(01/20)]

Warning:

Never attempt to open the battery pack for any reason. If the battery pack case is cracked or damaged, do not insert into charger or other Volt Edge products. Do not crush, drop or damage battery pack. Do not use battery pack or charger that has received a sharp blow, been dropped, run over or damaged in any way. Damaged battery packs should be taken to a lithium battery recycling center.

Warning:

Fire hazard. Do not store or carry battery so that metal objects can contact exposed battery terminals. Transporting batteries can possibly cause fires, if the battery terminals inadvertently come in contact with conductive materials.

Warning:

Shock hazard. Do not allow any liquid to get inside charger.

Warning:

Burn hazard. To reduce the risk of injury, charge only designated Volt Edge 20Vmax batteries. Other types of batteries may burst, causing personal injury and damage.

Caution:

Under certain conditions, with the charger plugged into the power supply, the charger can be shorted by foreign material. Foreign materials of a conductive nature, such as, but not limited to, steel wool, aluminum foil or any buildup of metallic particles should be kept away from charger cavities. Always unplug the charger from the power supply when there is no battery pack in the cavity. Unplug charger before attempting to clean.

Warning:

- Do not attempt to charge the battery pack with any chargers, other than the ones in this manual. The charger and battery pack are specifically designed to work together.
- The chargers are not intended for any uses other than charging designated Volt Edge 20Vmax Lithium-ion batteries. Any other uses may result in risk of fire, electric shock or electrocution.
- Be sure voltage selector is in correct voltage position before plugging in.
- For use in the U.S.A., the voltage selector switch must be placed in the 120 volt position. For use in countries, other than the U.S.A., the voltage selector may need to be placed in other than the 120 volt position. Confirm the voltage available at each country location before using this product.
- Do not expose charger to rain or snow.
- Pull by plug, rather than cord when disconnecting charger. This will reduce the risk of damage to electric plug and cord.
- If the shape of the plug does not fit the power outlet, use an attachment plug adaptor of the proper configuration for the power outlet.
- Make sure that cord is located so that it will not be stepped on, tripped over or otherwise subjected to damage or stress.
- Do not use an extension cord, unless it is necessary. Use of improper extension cord could result in risk of fire, electric shock or electrocution.
- Do not operate charger with damaged cord or plug.
- Do not operate charger if it has received a sharp blow, been dropped or otherwise damaged in any way.
- Do not disassemble the charger.
- Disconnect the charger from the outlet before attempting any cleaning. This will reduce the risk of electric shock. Removing the battery pack will not reduce this risk.
- The charger is designed to operate on standard household electric power (120V). Do not attempt to use it on any other voltage.
- The power unit is intended to be correctly oriented in a vertical or floor mount position.

Declaration of Conformity:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1) This device may not cause harmful interference.
- 2) This device must accept any interference received, including interference that may cause undesired operation.

This device complies with:

- Appendix Y to Subpart B of Part 430-Uniform Test Method for Measuring the Energy Consumption of Battery Chargers. DOE energy conservation standards specified in the Code of Federal Regulations at 10 CFR 430.32(z).
- This device complies with CEC, Section 1605.1(w) of energy efficiency standards for federally regulated battery chargers of California Code of Regulations.
- This device complies with NRCAN(EEV), CSA-C381.2-17 May 2017 and Canada's Energy Efficiency Regulations.
- This device complies with cETLus certification based on Conforms to UL STD.1310 Certified to CSA STD.CC22 NO.223.

Storage Recommendations:

- The best storage place is one that is cool and dry, away from direct sunlight and excess heat or cold.
- Long storage will not harm the battery pack or charger.
- Do not store a battery connected to a charger

Charging Instructions:

The battery pack is not fully charged out of the carton. Before using the battery pack and charger, read the safety instructions below. Then follow charging procedure.

Charging Procedure

1. Plug the charger into an appropriate outlet before inserting battery pack. The green LED will flash once indicating charger is ready to use.
2. Insert the battery pack into the charger.
3. The green LED will flash indicating the battery is being charged.



4. The completion of charger is indicated by the green LED remaining on continuously. The pack is fully charged and may be used at this time or left on the charger.
 - a. Recharge discharged batteries as soon as possible after use or battery life may be greatly diminished. For longest battery life, do not discharge batteries fully. It is recommended that the batteries be recharged after each use.



5. If the battery remains on the charger for more than 2 hours after charging is complete, the green LED will slowly blink.



Charger Diagnostics:

This charger is designed to detect certain problems that can arise with the battery packs or the power source. Problems are indicated by the red and green LEDs.



Temperature Delay

When the charger detects a battery that is excessively hot or excessively cold, it automatically starts a Temperature Delay, suspending charging until the battery temperature returns to acceptable temperatures. The red LED will flash indicating the battery is outside the required temperature range and not charging. Once the temperature is within the required range, charging will begin.



Broken Battery

The charger can detect a weak or damaged battery. The red and green LED will alternate flashing. If you see this warning, do not continue to charge the battery and remove the battery from the charger.

Leaving the battery in the charger:

The charger and battery pack can be left connected with the green LED indicating the charger is maintaining the battery continuously. The charger will keep the battery pack fresh and fully charged.

Important charging notes:

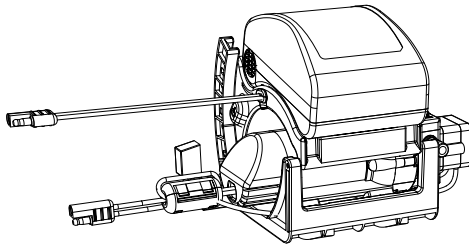
1. Longest life and best performance can be obtained if the battery pack is charged with the air temperature is between 50°F (10°C) and 80°F (26°C).
2. The charger and battery pack may become warm to the touch while charging. This is normal and does not indicate a problem. Ensure the vents are not blocked to allow cooling.
3. The battery pack should be recharged when it no longer powers the equipment. Do not continue to attempt using the battery if low power is indicated. You may recharge a partially discharged battery pack without damaging the battery pack.
4. Do not freeze or submerge the charger in water or any other liquid.

Warning:

Shock Hazard. Do not allow any liquid to get inside the charger. Never attempt to open the battery pack for any reason. If the plastic housing of the battery pack breaks for cracks, return to a recycling center and replace the charger.

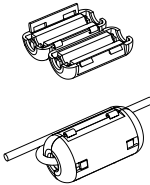
The receiver is designed to power all High-Flo 12V pumps. The receiver will output 12V DC and is limited to 15A max. current.

To install the receiver, the pump will be removed. The base plate and adjustable support will be placed under the pump and screwed down with the longer screws supplied in the kit. The receiver has already been pinned to the base plate, but it can be removed to make screw installation easier by sliding the pin out. Then the receiver is slid into the adjustable support bracket. It will click into the first position, sized for the Pro Series pumps and the 4.5 pump. The second position is for the 2.4 pump and the third position is for the 1.2 pump. The tabs will have to be pressed with a small flat blade screwdriver to adjust the position or remove the receiver from the base.



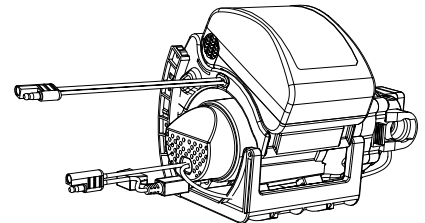
1.2 GPM Pump Configuration:

Place pump on base plate and screw down to tank or frame, using the (4) #10-24 x 3/4" screws. Click the receiver into the third position of the adjustable support.



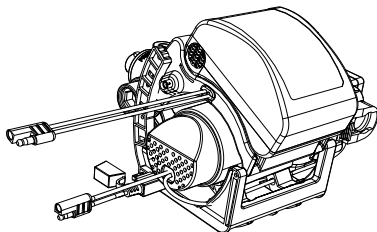
Clamp On Ferrite Ring Magnet

For 1.2 GPM Pump or any pump with remote problems. The magnet should be installed on the black wire as close to the pump as possible. Wire should be looped around the magnet so the wire runs twice through the inside before snapping it shut. Black wire can be gently pulled from the pump to provide enough wire to loop the magnet twice.



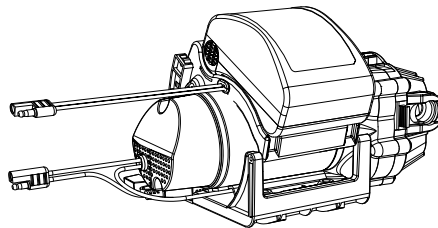
2.4 GPM Pump Configuration:

Place pump on base plate and screw down to tank or frame, using the (4) #10-24 x 3/4" screws. Click the receiver into the second position of the adjustable support.



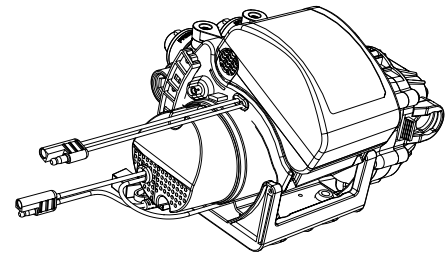
2.4 GPM Pump w/Manifold Configuration:

Place pump on base plate and screw down to tank or frame, using the (3) #10-24 x 3/4" and (1) #10-24 x 1" screws. The 1" screw goes through the manifold support bracket. Click the receiver into the second position of the adjustable support.



4.5 GPM & Pro Series Pumps Configuration:

Place pump on base plate and screw down to tank or frame, using the (4) #10-24 x 1-1/4" screws. Click the receiver into the first position of the adjustable support.



4.5 GPM & Pro Series Pumps w/Manifold Configuration:

Place pump on base plate and screw down to tank or frame, using the (3) #10-24 x 1-1/4" and (1) #10-24 x 1-1/2" screws. The 1-1/2" screw goes through the manifold support bracket. Click the receiver into the first position of the adjustable support.

Operating Procedure:

1. Charge the battery following the charging procedure.
2. Ensure all fasteners are tight and pump connections are secure.
3. Install the battery ensuring the base is connected and it is fully seated.
4. Press the power button and confirm the green LED turns on. Signaling the power is on.



5. Test the remote by pressing the OFF button on the remote and both green and red receiver LEDs will turn on. Signaling the power output is off while the power is on.
6. Press the ON button on the remote. The red LED will turn off and power output will return.
7. Press the power button again to turn the receiver off.
8. Connect the receiver 2-pin connector to the pump.
9. Press the power button to turn the receiver on and the pump will run.
10. When spraying is complete press the power button to turn off the receiver.
11. Recharge the battery to properly maintain the battery pack.

Receiver Diagnostics:

The receiver is designed to detect certain problems that can arise with the battery packs or the pump. Problems are indicated by the red and green LEDs.



Battery Life



When the battery is approaching fully discharged, the green LED will begin to flash. When the battery is fully discharged, power will stop being supplied to the pump and the green LED will continue flashing. Power off the receiver and charge the battery.



Protection Mode

When the receiver identifies a problem with the pump, the power output will stop and the red LED will flash and the green LED will remain illuminated. The red LED will blink in cycles to identify the problem. Press the power button turning the receiver off to reset the system. Wait 30 seconds and press the power button to resume operation.

- | | |
|-------------------------------|--|
| Red LED flashing two times: | Open circuit protection. The receiver power is on without powering consumption. |
| Red LED flashing three times: | Incorrect voltage. Voltage being supplied to the receiver is outside the range. |
| Red LED flashing four times: | High current protection. The pump has drawn current above the limit. |
| Red LED flashing ten times: | Temperature protection. The system has measured the temperature to be outside safe operating temperatures. |

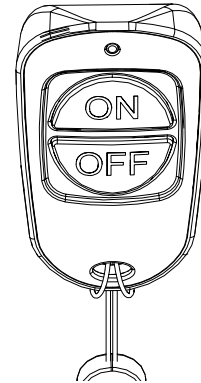
Remote Button Identification:

The small LED at the top of remote turns red when transmitting.

The red LED is also the pairing button.

The 'ON' button will only turn on the Volt Edge Receiver.

The 'OFF' button will only turn off the Volt Edge Receiver.



Pairing Procedure:

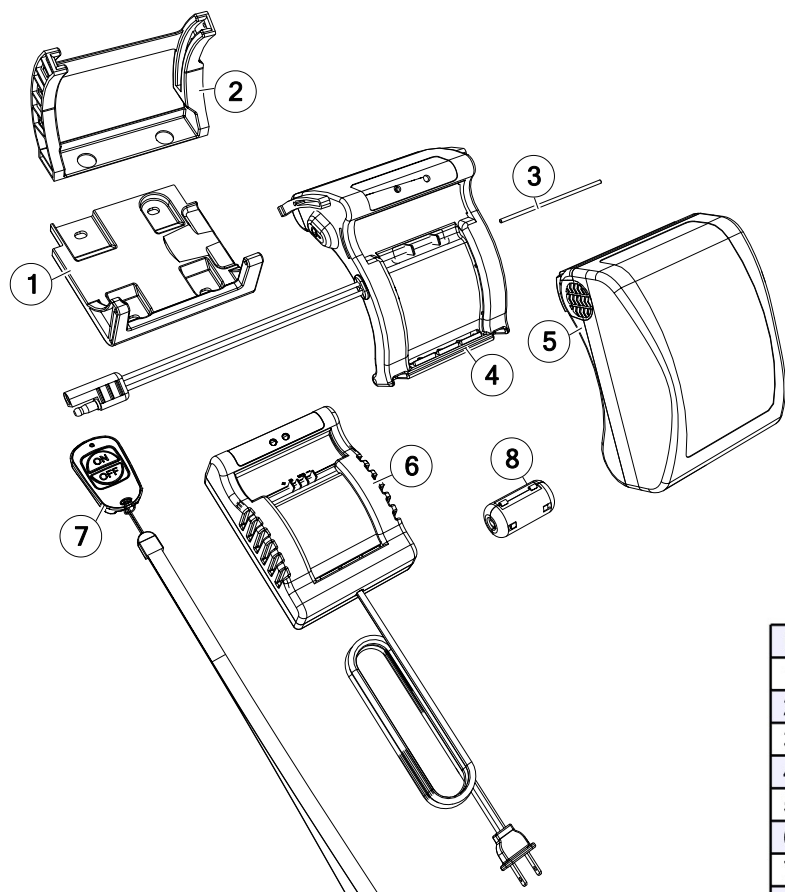
1. Ensure the receiver power cord is not connected.
2. Install a charged battery pack into the receiver.
3. Power ON the Volt Edge receiver. Within 15 seconds press and hold the pairing button for 5 seconds. The green LED on the receiver will quickly turn off and back on when pairing is successful.
4. Power OFF the Volt Edge receiver.
5. Power ON the Volt Edge receiver and press the OFF and then ON button to confirm pairing is successful.

Storage Recommendations:

- The best storage place is one that is cool and dry, away from direct sunlight and excess heat, cold or moisture.

Remote Capabilities:

- The remote can control the receiver up to 50 feet away. Obstructions and radio interference can reduce the effective distance.
- A remote can be paired to multiple receivers at one time.
- A receiver can only be paired to one remote at a time.
- A receiver/remote relationship can only be separated by pairing with another remote.



Exploded View/Parts List 20V, 5A Lithium Battery Kit (5281506)

Ref. #	Part #	Description	Qty
1	5058222	20V Receiver Base Plate	1
2	5058223	20V Receiver Adjustable Support	1
3	5058224	SS Receiver Pin 3mm X 108mm	1
4	5164285	20V Battery Receiver 15A	1
5	5164275	20V 5AH Lithium Battery Pack	1
6	5164281	20V 1A Lithium Battery Charger	1
7	5164291	Wireless Remote	1
8	5051173	Clamp On Ferrite Ring	1

TROUBLESHOOTING

Problem	Possible Cause	Possible Solution
Battery will not charge	Charger not plugged in	Plug charger into a working outlet. Check outlet with another device.
	Temperature is too hot or too cold	Move charger and battery to a climate-controlled environment and wait for the product to reach room temperature.
	Battery pack not inserted into charger	Remove battery pack and re-install battery pack. Ensure the bottom edge of the battery is seated first, then push the clips in.
Remote does not control the receiver	Remote battery is discharged	Replace the battery with CR2032 size button cell battery.
	Receiver is not on	The green light must be illuminated on the receiver for the remote to control it.
	Remote is not paired with receiver	Follow the Pairing Instructions to pair a remote and receiver.
	Radio Interference	Move the receiver and remote away from the electronic interference.
Receiver does not power pump & green LED is off	Battery not connected	Remove battery pack and carefully reinstall.
	Battery discharged	Remove battery, charge and reinstall.
Receiver does not power pump & green LED is on	Bad electrical connection	Follow wires from receiver to plug. Disconnect and reconnect 2-pin plug.
	Pump fuse is blown	Check fuse on pump wire and replace if necessary.

FCC WARNING:

Please note that changes or modifications of this product is not expressly approved by the party responsible for compliance, could void the user's authority to operate the equipment.

FCC STATEMENT:

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- ◇ Reorient or relocate the receiving antenna.
- ◇ Increase the separation between the equipment and receiver.
- ◇ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- ◇ Consult the dealer or an experienced radio/TV technician for help.

Declaration of Conformity:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1) This device may not cause harmful interference.
- 2) This device must accept any interference received, including interference that may cause undesired operation.

Warranty

LIMITED WARRANTY FOR NEW FIMCO EQUIPMENT

WHO MAY USE THIS LIMITED WARRANTY. This limited warranty (the "Limited Warranty") is provided by Fimco to the original purchaser ("you") of the Equipment (as defined below) from Fimco or one of Fimco's authorized dealers. This Limited Warranty does not apply to any subsequent owner or other transferee of the Equipment. THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

WHAT THIS LIMITED WARRANTY COVERS AND FOR HOW LONG. Fimco warrants that any new Equipment will be free from defects in material and workmanship for a period of **one (1) years** (homeowner), **90 days** (commercial user), after delivery of the Equipment to you (the "Warranty Period"). The Warranty Period is not extended if Fimco repairs or replaces the Equipment.

WHAT IS NOT COVERED BY THIS LIMITED WARRANTY. This Limited Warranty does not apply to: (1) used Equipment; (2) any Equipment that has been altered, changed, repaired or treated since its delivery to you, other than by Fimco or its authorized dealers; (3) damage or depreciation due to normal wear and tear; (4) defects or damage due to failure to follow Fimco's operator's manual, specifications or other written instructions, or improper storage, operation, maintenance, application or installation of parts; (5) defects or damage due to misuse, accident or neglect, "acts of God" or other events beyond Fimco's reasonable control; (6) accessories, attachments, tools or parts that were not manufactured by Fimco, whether or not sold or operated with the Equipment; or (7) rubber parts, such as tires, hoses and grommets.

HOW TO OBTAIN WARRANTY SERVICE. To obtain warranty service under this Limited Warranty, you must (1) provide written notice to Fimco of the defect during the Warranty Period and within **thirty (30) days** after the defect becomes apparent or the repair becomes necessary, at the following address: Fimco, 1000 Fimco Lane, North Sioux City, SD 57049; and (2) make the Equipment available to Fimco or an authorized dealer within a reasonable period of time. For more information about this Limited Warranty, please call: **800-831-0027**

WHAT REMEDIES ARE AVAILABLE UNDER THIS LIMITED WARRANTY. If the conditions set forth above are fulfilled and the Equipment or any part thereof is found to be defective, Fimco shall, at its own cost, and at its option, either repair or replace the defective Equipment or part. Fimco will pay for shipping and handling fees to return the repaired or replacement Equipment or part to you.

LIMITATION OF IMPLIED WARRANTIES AND OTHER REMEDIES. THE REMEDIES DESCRIBED ABOVE ARE YOUR SOLE AND EXCLUSIVE REMEDIES, AND FIMCO'S SOLE LIABILITY, FOR ANY BREACH OF THIS LIMITED WARRANTY. TO THE EXTENT APPLICABLE, ANY IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL BE LIMITED IN DURATION TO THE WARRANTY PERIOD, AND THE REMEDIES AVAILABLE FOR BREACH THEREOF SHALL BE LIMITED TO THE REMEDIES AVAILABLE UNDER THIS EXPRESS LIMITED WARRANTY. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. IN NO EVENT SHALL FIMCO'S LIABILITY UNDER THIS LIMITED WARRANTY EXCEED THE ACTUAL AMOUNT PAID BY YOU FOR THE DEFECTIVE EQUIPMENT, NOR SHALL FIMCO BE LIABLE, UNDER ANY CIRCUMSTANCES, FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL OR PUNITIVE DAMAGES OR LOSSES, WHETHER DIRECT OR INDIRECT. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.