

## OPERATING INSTRUCTIONS FOR STREAMLIGHT VULCAN®

## SAFETY

- A. Before using your Vulcan and charger read all instructions in this manual and all cautionary markings on the unit.
- B. WARNING: Never leave your Vulcan with its lamp face against any surface, including skin, while in operation. The resultant heat build-up can cause a fire or burns.
- C. IMPORTANT: Careful observation of the LED's serves as an important warning of possible charge circuit malfunction, which may cause battery overcharging, the green LED should turn "on" steadily and the red LED should turn off completely within twelve (12) hours of charging time. If the red LED stays on past this time remove the light from service and return it immediately to the Streamlight factory at 30 Eagleville Road, Eagleville, PA 19403 for free evaluation and repair. In extremely rare circumstances an overcharged battery may release a flammable hydrogen gas mixture. In the unlikely event that this mixture should ignite, bodily harm could result.
- D.The Vulcan should not be switched on and off during charging unless only the green LED is lighted. Recycle the battery responsibly when no longer serviceable. DO NOT INCINERATE THE BATTERY, EVEN IF IT IS SEVERELY DAMAGED OR COMPLETELY WORN OUT. The battery could explode in a fire. Handle the battery carefully and never allow it to short circuit. A shorted battery can easily start a fire.
- E. The Vulcan is approved for use in hazardous locations. You are responsible for the proper application of this product in a properly defined location. DO NOT charge in potentially hazardous areas.

## **OPERATION**

The Vulcan is available in two (2) basic models: the single filament and the dual filament safety back-up model. Both come with convenient recharging racks, either AC/DC or vehicle mount that store light conveniently and do not require Vulcan disassembly for charging. The battery is rated at a nominal 4.5 amperehours and is capable of being recharged up to 500 times.

To release the light from the rack push the black bar down, slide the light forward and lift up. The on/off switch is underneath the handle. Turn it in either direction for "on" or in the dual filament model, rotation of the switch to the right

# **STREAMLIGHT**

selects one filament, to the left, the other. Slide the switch lock, located on the front of the handle, down to prevent accidental activation. The strap attachment clips on the handle. Store down in a retracted position when not in use. "O" Rings in the facecap ensure that Vulcan is waterproof to 100 feet. To maintain waterproofness, lubricate both "O" Rings with silicone grease and keep facecap tight.

## CHARGING AND CHARGE RACKS

Charge your Vulcan overnight before its first use. Charging will occur only when the lamp is off. The battery should be charged as soon as possible after use to ensure maximum service life. The batteries should never be "exercised" in an attempt to erase "memory," which never occurs with lead-acid batteries. a pair of charging indicators are on the charging rack. The red LED means that the light is charging. The green LED means it is fully charged and ready for use. It is important to understand that a battery can take only minutes to a maximum of twelve (12) hours to fully charge, depending on the battery's residual charge and other factors. When fully charged the red LED should turn "off" completely and the green LED should turn "on" steadily.

The charge rack is designed to hold the Vulcan in virtually any position. Three (3) self-tapping #8 x 1 1/2" screws are included to mount the charger; use 1/8" holes. Two types of racks are available. The AC/DC charge rack can use three (3) interchangeable power cords: P/N: 22051 12V DC cord with cigarette lighter plug (DC1); P/N 22311 120V AC cord and P/N 21725 230V AC cord. The vehicle mounted direct wire rack has a tinned and striped cord and is meant for permanent installation in a vehicle.

## VEHICLE INSTALLATION

**WARNING:** A shorted auto battery can easily start a fire. Use the proper insulated connectors and be sure that your installation is fused with a 2 amp slow blow fuse. If you are not comfortable with this type of work have the Vulcan charger installed by a skilled professional. Never attempt to directly wire this rack to a 110 volt AC power source. It is intended for 12-15 volts.

If the vehicle is used daily connect the charge rack directly to the battery or an unswitched terminal on the vehicle fuse block. Route the wires from the mounted charger base to the 12 volt power source. The positive lead has a colored trace and should be connected to the side of a fuseholder which is dead when the fuse is removed. The untraced lead is negative and may be connected to any convenient chassis ground.

After a complete discharge, charging a single Vulcan will consume six (6) ampere-hours (Ah) from a vehicle battery in the first 12 hours and one Ah each 24 hours thereafter. If the vehicle stands unused and the Vulcan is wired directly to the vehicle battery it will eventually drain the battery.

If the vehicle is not used daily wire the Vulcan to the switched side of the ignition. The drawback to this is that while the vehicle battery does not get drained during periods of inactivity, the Vulcan might never receive a full charge. If the above is not practical, equip the vehicle with a supplemental trickle charger which is connected to AC power when the vehicle is standing. The advantages to this setup are that your vehicle battery will always be topped up, other power accessories can be added to the electrical system and you may obtain longer vehicle battery life.

## LAMP REPLACEMENT

**CAUTION:** The inner bulb operates at a high temperature and is pressurized. Allow to cool and wear safety glasses before handling. Two types of bulbs are used in the Vulcan par 36 lamp assembly: a halogen bi-pin and a xenon dual filament. The wattage and voltage is embossed on the single filament bi-pin bulb. The standard dual filament is a 6 watt bulb with a blue base. Check to see if you are installing the desired replacement.

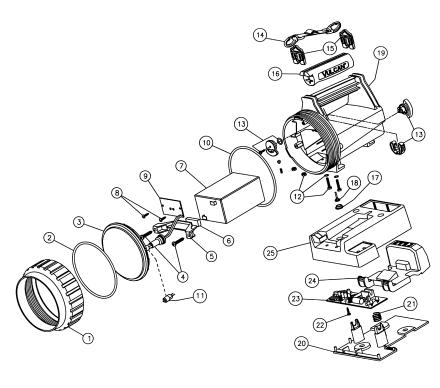
- Remove lens ring and lamp assembly from the lantern. Do not pull on the wires.
- 2. Remove white threaded lamp socket at the back of the assembly and pull the old bulb straight out from the socket.
- 3. Replace with new bulb by aligning its bi-pins with holes in socket and seating firmly. Use a clean cloth or tissue when handling bulb.
- 4. Wipe any fingerprints off the new bulb and thread socket into reflector assembly. Socket can be screwed in or out, as required, to provide optimal focus. Reinstall assembly.

## BATTERY REPLACEMENT

Remove the threaded facecap and lens assembly. Remove the two (2) screws that retain the battery clamp and the two (2) wires and spade lug terminals on the top of the battery. Connect the red wire to the positive (+) tab of the battery and the black wire to the negative (-) tab. Reversing these connections will damage the Vulcan. Replace the battery clamp, lamp, and facecap. Keep the facecap tight for maximum waterproofness.

# Replacement Parts

Replacement Parts			
Item	Quantity	Part No.	Description
1	1	440002	Face Cap
2	1	440003	O-Ring, Face Cap
3	1	450070	Reflector/Lens Assembly
4	2	440023	Screw, Battery Clamp
5	1	440005	Clamp, Battery
6	1	440006	Pad, Battery Clamp
7	1	44007	Battery
8	2	440020	Screw, PCB
9	1	440008	PCB Assembly, standard
		440027	PCB Assembly, Dual Filament
10	1	440004	O-Ring, Body
11	1	45901	Bulb, 8W Bi-Pin
		44912	Bulb, 6W Dual Filament
12	1	44009	Kit, Contact Screw
13	1	44012	Kit, Switch
	1	44013	Kit, Switch (New Style)
14	1	45232	Strap Assembly, Shoulder
15	2	440018	Clip, Shoulder Strap
	1	400262	D-Ring (New Style)
16	1	440019	Handle \
	1	440219	Handle (New Style)
17	1	440015	Plug, Valve
18	1	130018	Valve
19	1	440001	Body, Yellow
	1	440001-1	Body, Orange
	1	440001-6	Body, Green
20	1	440102	Cover, Charge Rack, Yellow
	1	440102-1	Cover, Charge Rack, Orange
	1	440102-6	Cover, Charge Rack, Green
21	1	450022	Spring, Latch Release
22	1	900047	Screw, 4 - 24 x 1/2 Phillips
23	1	440115	PCB Standard
		440114	PCB, Vehicle Mount
24	1	440106	Latch, Charger
25	1	440101	Housing, Charger, Yellow
	1	440101-1	Housing, Charger, Orange
	1	440101-6	Housing, Charger, Green
Not Show	n		J. J.
.101 011011		22211	Cord 120V AC Chargo
	1	22311	Cord, 120V AC Charge
	1	21725	Cord, 230V AC Charge
	1	22051	Cord, 12V DC Charge
	1	440040	Body/Handle Assy, Yellow
	1	440040-1	Body/Handle Assy, Orange
	1	440040-6	Body/Handle Assy, Green











## **MANUFACTURER**

Streamlight, Inc.

30 Eagleville Road / Eagleville, PA USA 19403-3996

(610) 631-0600 / (800) 523-7488 / Fax (610) 631-0712 / Fax (800) 220-7007 / www.streamlight.com

**IMPORTANT** – Be sure to use genuine **Streamlight** replacement parts.

**WARRANTY REGISTRATION:** To register the warranty on your Streamlight, complete the card enclosed and mail to Streamlight, Inc., within ten (10) days of purchase. When returning product for warranty repairs, please provide receipt or other proof of purchase.

**PRODUCT USE:** The Streamlights are intended for use as high intensity, heavy duty, rechargeable, portable light sources. Use of the Streamlights for any purpose other than light sources is specifically discouraged by the manufacturer.



The rechargeable battery contained in this product is recyclable. At the end of its useful life, under various country and state laws, it may be illegal to dispose of this battery in the municipal solid waste stream. Check with your local solid waste officials for details in your area for recycling options or proper disposal.

## WARRANTY Streamlight Vulcan®

Streamlight makes no express warranties other than those expressly provided herein. Streamlight does not make, and hereby expressly disclaims, any implied warranties, including warranties of merchantability of filness for a particular purpose, except to the extent that implied warranties may not be disclaimed under applicable law. To the extent any such implied warranties may not be disclaimed under applicable law, the duration of such implied warranties shall be limited to the minimum period required by applicable law. Streamlight's responsibility under all warranties, both expressed and implied, shall be limited to the repair, replacement or refund of the purchase price of any products covered by such warranty. Streamlight shall, in no event, be liable for any other damages, including consequential or incidental damages. Some jurisdictions my not allow the waiver of or limitations on the scope or duration of implied or expressed warranties or on the exclusion of consequential or incidental damages, in which case the above waivers, limitations or exclusion may not apply to you.

## Money Back Guarantee

Your Vulcan system is unconditionally guaranteed to perform to your satisfaction or your money will be refunded. Return your Vulcan to the seller (shipping charges prepaid) within ten (10) days of purchase, along with receipt or any proof of purchase for full refund.

## Warranty Registration Card

Complete and return Warranty Registration Card within ten (10) days of purchase to register your warranty. Retain your receipt or any proof of purchase. Failure to return the Warranty Card and receipt or proof of purchase as required will invalidate the warranty and service coverages described herein.

## One Year Warranty

Your Vulcan system, including battery, case, and chargers, but excluding lamp, is warranted for a period of one (1) year from the date of purchase. Should your Vulcan fail to operate, return it (shipping charges prepaid) to the factory or Authorized Service Center at the address listed with these instructions along with receipt or any proof of purchase. Streamlight will repair or replace the defective parts without cost and return the unit to you (shipping charges prepaid within the Continental USA), or at Streamlight's option, if permitted by law, Streamlight will refund your purchase price.

## **Switch Warranty**

The switch of your Vulcan is guaranteed for life. In any country or jurisdiction where specific limitations are placed on lifetime warranties Streamlight will honor a 10-year limited warranty. Should the switch fail to operate, return the Vulcan (shipping charges prepaid) to the factory or Authorized Service Center at the address listed with these instructions, along with your receipt or any proof of purchase. If you have owned your Vulcan for more than one (1) year include \$5.00 for handling. Streamlight will repair or replace the switch without cost and return the unit to you (shipping charges prepaid within the Continental USA)

# Limitations on Warranty and Service Coverage

- Warranty is invalid if, in Streamlight's sole opinion, there has been tampering, alteration, abuse, misuse, or failure to follow proper care and maintenance procedures.
- This warranty shall not extend to repairs by anyone other than Streamlight or other than service facilities designated by Streamlight.
- 3. This warranty is limited to the original user-purchaser as such appears on the Warranty Registration Card.

Should your Streamlight fail to operate, contact the closest Authorized Service Center or the factory directly at (610) 631-0600 or (800) 523-7488.

Serial #	Date of Purchase
This warranty gives you specific legal rights and	d you may also have other rights.

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