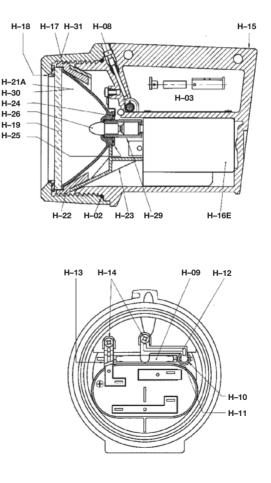


# **'Wolflite' Safety Handlamp H-251 Mk1 & Mk2 Operation & Maintenance Instructions**

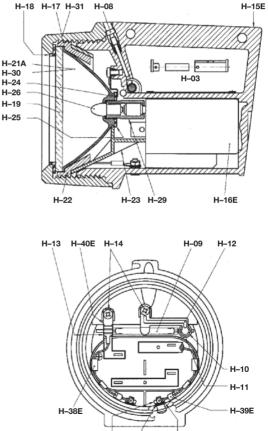
Wolflite Safety Handlamp H-251 Mk1





# **'Wolflite' Safety Handlamp H-251 Mk1 & Mk2 Operation & Maintenance Instructions**

Wolflite Safety Handlamp H-251 Mk2



H-36E H-37E A-87

# **'Wolflite' H-251 Rechargeable Safety Handlamp Range Operation & Maintenance Instructions**

# Certification

EX EExesIIT3

Certificate: BASEEFA Ex 81142



Certificate: 86/00097

## Use of Wolflite Handlamps in Hazardous Areas

- The **H-251 Mk1/Mk2** Handlamps are certified for use in potentially explosive gases and vapours. Applicable standards: EN50014:1977, EN50019:1977, SFA 3009:1972.
- Ingress protection level for H-251 Mk1: IP66, to EN60529:1992 for H-251 Mk2: IP54 to EN60529:1992.
- Users are advised to consult EN IEC 60079 for guidance on the selection, use, inspection and maintenance of products for use in potentially explosive atmospheres, or national equivalent.
- The lamp must not be opened or fitted with replacement parts in a hazardous area. Lamp chargers must be kept and operated in non hazardous areas and in clean and dry conditions; a damaged lamp should be carefully examined for its continued safety. If in doubt, it should be withdrawn from use and returned to the manufacturer for repair.
- The 'Wolflite' Handlamp may constitute a static hazard and should be cleaned only with a damp cloth.
- Heavily soiled lamps must not be immersed in water or exposed to high pressure water jets for cleaning.
- Maintenance and repair must be carried out by a competent technician/electrician familiar with Certified Electrical Apparatus and in accordance with these maintenance instructions, using factory supplied spare parts only.
- Handlamp operating ambient in Hazardous Areas: -20°C to +40°C

#### Before Use

Charge battery before first use. To prevent accidental discharge of the battery in transit, the switch is locked in the OFF position.

#### To Lock/Unlock the Lamp

The stainless steel lock screw in front of the handle interlocks with the operating switch. Screw anti-clockwise to lock the lamp enclosure and release the operating switch. The lock key provided must be kept in a non-hazardous area.

# WARNING: The Lock Screw bush can be dislodged if overtightened. Switch 'OFF' before screwing the Lock Screw down.

#### To Operate and Dismantle the Switch

The switch operates transversely, as indicated on the approval label. It consists of a magnet, a plastic housing and a cap. To replace, the old cap is prised off and the housing removed. The new switch housing/magnet is fitted to the body before the cap is 'snapped' in place.

#### To Open the Lamp

Unlock as above, unscrew the lens ring from the body to gain access to all internal parts.

#### To Replace the Bulb

The bulb (3.6 Volts, 1.0 Amp) is retained by the screwed centre contact at the back of the reflector.

#### To Replace the Glass Disc and/or Reflector

The toughened glass disc and reflector are secured in the lens ring by the reflector retaining ring. The battery retainer is 'snap' fitted in the lens ring, remove before unscrewing the reflector retaining ring. All parts must be cleaned and the rubber washer centralised before re-assembly. A key is available for fastening/unfastening this assembly.

#### To Replace Fuse and/or Reed Switch

The fuse contact must be removed to replace the fuse. To replace the reed switch, the battery contact and fuse contact must be removed.

#### To Replace the Battery for the H-251 Mk2

The positive and negative diode leads are disconnected from their respective terminals and the battery pack is removed from the body cavity.

# The Battery

A Sealed lead acid cell system (4Volt, 5 amp hour) is used in all 'Wolflite' Safety Handlamps. A minimum of four hours continuous output is provided for an average of 500 recharging cycles. A common battery pack is used for the H-251 Mk1 and H-251 Mk2. For optimum performance and safety please observe the following:

• Charge before first use.

Note: Dangerous Goods Regulations Hazardous Materials Regulations

**Restricted Articles Regulations** 

- Avoid deep discharge.
- Recharge immediately when flat.
- Recharge every six months when stored.

The US Dept. of Transport, IATA, and CAA declare these batteries are "not regulated".

 Warning:
 Do not short-circuit or incinerate
 Do not cut, crush or puncture

 Do not recharge other than from Wolf Chargers
 Dispose of only via licensed disposal agency

## Charging 'Wolflite' H-251 Mk1 Battery

To remove the battery for charging remove the lens ring (see "To Open the Lamp"). The battery removal tab is visible and can be used to aid extraction. WHILE THE BATTERY IS ON CHARGE THE LENS RING MUST BE REPLACED TO PREVENT DUST ENTERING THE LAMP ENCLOSURE. If available, a spare charged battery can be fitted.

The Battery is charged in a fully automatic charging unit. Indicators show when a battery has been fully charged. AFTER USE, RE-CHARGE AS SOON AS POSSIBLE.

### Charger Unit C-251 for H-251 Mk1

Before connecting to the mains ensure the correct voltage is selected and the battery is in the charger, the indicators will show the state of battery charge and charger mode. 90% capacity is achieved in 4/5 hours.

## Charging 'Wolflite' Handlamp H-251 Mk2

The battery is charged **within the lamp body.** The H-251 Mk2 Handlamp switch must be in the 'OFF' position when on charge. Indicators show the state of charge of the battery. Red only indicates the Lamp has not made correct contact, the Lamp must be pushed firmly until latched in position.

#### Lamp Chargers for H-251 Mk2

Two types of Lamp Chargers are available – HIGH VOLTAGE and LOW VOLTAGE, to suit fixed or mobile applications. The chargers are 'CE' marked as compliant with Low Voltage and EMC Directives.

Wolflite Charger C-251HV is for mains AC input voltages of 200-240 volts at 50-60 Hz (Off-shore platform voltages of 254 volts at 60 Hz), user switchable to 100-120 volts at 50-60 Hz. Failure to select the correct voltage may cause damage. Charger achieves 90% recharge in 6/7 hours. Only fit manufacturer's specified fuse. Chargers are fitted with Approved plugs, refer to sales literature for details.

**Wolflite Charger C-251LV** is suitable for use from DC supplies of 12 to 32 volts. A full recharge from a 12 volt supply takes 20/24 hours, but from a 24 volt supply 10/12 hours. The two-core flex is red, positive red with black tracer, negative.

Both chargers are fully automatic, stepping to a safe trickle charge level after the main charge is completed.

#### Standby continuous long-term charging

On continuous charge a 'detailed' inspection of the handlamp should be carried out every 12 months, in accordance with IEC 60079-17. Particular attention should be given to evidence of terminal corrosion and resultant acid droplets that might begin to occur after 3-5 years on standby charge. If such evidence occurs, the battery should be replaced in accordance with these instructions.

A regime of charger switching may extend battery life to up to 10 years, the cycle suggested is: 2 weeks ON, 2-3 months OFF, etc. Self discharge over the 2-3 months 'OFF' period will not be significant.

NOTE: A fully discharged battery must be charged immediately to avoid damage.

The charger contacts are of low voltage output and short circuit protected.

Charger operating ambient: +10°C to +25°C.

#### WARNING: THE WOLFLITE CHARGERS ARE DESIGNED FOR CHARGING WOLFLITE HANDLAMPS ONLY – NO OTHER BATTERIES OR BATTERY OPERATED DEVICES ARE TO BE USED.

Only charge in well ventilated area. Charger can be used free standing or fixed using four lugs provided. The supply cord can only be replaced by authorised agent/distributor.

The Wolf Safety Lamp Co. Ltd. have a policy of continuous product review and improvement, and changes in design details whether permitted as Variations of Approvals or otherwise may be made without prior notice.

# Spare Parts List for 'Wolflite' Safety Handlamp H-251 Mk1 & Mk2

Description	H-251 Mk1	H-251 Mk2
'O' ring seal	H-02	-
Magnet switch complete	H-03	H-03
Lock screw	H-08	H-08
Reed switch	H-09	H-09
Fuse for HV Charger (F1.25A Ceramic)	H-10	H-10
Sleeve for fuse holder	H-11	H-11
Fuse contact	H-12	H-12
Battery contact	H-13	H-13
Screw for contacts	H-14	H-14
Body complete	H-15	H-15E
Battery pack	H-16E	H-16E
Lens ring	H-17	H-17
Rubber washer for glass disc	H-18	H-18
Glass disc	H-19	H-19
Reflector	H-21A	H-21A
Reflector retaining ring	H-22	H-22
Battery retainer	H-23	H-23
Reflector distance piece	H-24	H-24
Bulb socket	H-25	H-25
Bulb 3.6v 1.0A Krypton (4 hrs.)	H-26	H-26
Bulb 4.8v 0.5A Krypton (8 hrs.)	H-26K	H-26K
Centre contact complete	H-29	H-29
Reflector c/w bulb and fittings	H-30	H-30
Lens ring complete	H-31	H-31
Hexagon lock key 4 mm	H-33	H-33
Key for reflector retaining ring	H-34	H-34
Lanyard (clip on type)	H-35SB	H-35SB
Nut for contact stud	-	H-36E
Spring washer for nut	-	H-37E
Diode lead (positive)	-	H-38E
Diode lead (negative)	-	H-39E
Terminal tab	-	H-40E
Support washer	-	A-87
Handlamp wall holder	H-58	H-58

## **WOLF SAFETY LAMP COMPANY**

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