



Cap Lamp Lighting Systems

[Featuring NEW Luminator™
and Luminator™ Plus
Low Maintenance-Long Life Batteries]

DESCRIPTION

The state-of-the-art Ultralight™ Cap Lamp System has the brightest prefocused spotlight available (tungsten halogen) and provides exceptionally brilliant illumination of the work site. The unit is available with a long-life Luminator battery and a variety of battery charging equipment available.

FEATURES

- A complete, low-maintenance, high-performance personal lighting system for use in underground mines and other applications
- Long-life, low-maintenance Luminator battery with charging equipment
- Compatible with all MSA charging systems
- New, lower wattage bulb requires less drain on battery and provides more reserve power when needed

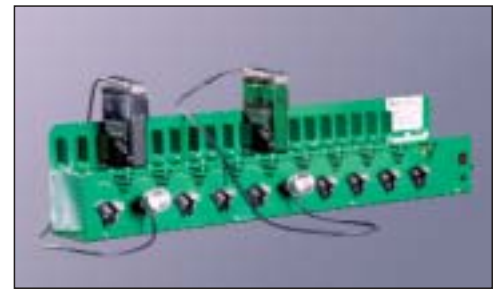
ULTRALIGHT™ CAP LAMP SYSTEM

The two-inch diameter, state-of-the-art Ultralight Cap Lamp headpiece is made of high-impact polycarbonate and consists of only five major parts:

- A one-piece polycarbonate bezel/lens (glass-laminated lens optional)
- A computer-designed, prefocused bulb/reflector assembly, featuring a high output, tungsten-halogen bulb, accurately positioned in the focal point of the reflector to assure a good spot
- A plug-in tungsten-halogen bulb emergency escape light
- A main housing with a printed circuit board for bulb and battery cable connections
- A three-position switch

A wire spring keeps the bulb/ reflector assembly properly resting against the lens to reduce vibration and mechanical shock.

The prefocused bulb/reflector assembly eliminates the need for a focusing mechanism. Both the on/off switch and the charging contact are located in the headpiece housing. With only four major parts, inventory, replacement stocks and downtime are minimized.



Power Builder 10-Unit Charging Station

The new tungsten-halogen bulb provides a white, bright light, achieved with little battery power consumption, because tungsten-halogen bulbs are extremely efficient. In fact, more light output is achieved without reduction in bulb life. The light is also softer to miner's eyes.

In addition, the light output is more consistent, providing 85 to 95% of its initial light output, even at 70% of life expectancy. The bulb has a 1.0 amp rating at 4 volts. This lower amperage allows for longer cap lamp use between charges.

The prefocused bulb/reflector assembly efficiently concentrates over 90% of the light into a highly concentrated beam for exceptionally bright illumination of the work site.

ULTRALIGHT™ SPECIFICATIONS

Operating voltage: 4.2 to 3.8

Operating Time: Up to 16 hours

Battery Dimensions: 7-1/4" x 5-1/4" x 1-1/2"

Weight: 4 lb 12 oz

Light Intensity: @ 10 feet (using standard bulb with fully charged battery) = 1450 LUX

Bulb Amperage: 1.0 (nominal)

Ordering Information

Part No.	Description
817171	Ultralight Cap Lamp, with acid-filled Luminator battery (13 AH)
817169	Ultralight Cap Lamp, with acid-filled Luminator battery (13 AH) and remote power takeoff adapter
817172	Ultralight Cap Lamp, with acid-filled Luminator Plus battery (16 AH)
817170	Ultralight Cap Lamp, with acid-filled Luminator Plus battery (16 AH) and remote power takeoff adapter
484820	Ultralight Headpiece, cable and cover assembly (no battery)
813230	Ultralight Headpiece, cable and cover assembly (no battery), with remote power takeoff adapter

MINESPOT LUMINATOR BATTERY

The MineSpot Luminator Batteries are assembled as a complete sealed unit that requires nothing more than routine charging and periodic watering. The battery case is impact-resistant polycarbonate with reinforced bottom corners and molded-in belt loops. The Luminator Battery was designed for low maintenance and long life. Watering is required only every 4–6 weeks. MSA offers a choice of batteries: either a 13 Ampere Hour (AH) for normal work shifts or a 16 AH for longer work shifts. The MineSpot Luminator Battery must be charged after each use.

Ordering Information

Part No.	Description
817177	MineSpot Luminator battery (13 AH), with acid, for Ultralight and ML-2
817178	MineSpot Luminator Plus battery (16 AH), with acid, for Ultralight and ML-2
817179	MineSpot Luminator battery (13 AH), dry, international shipments only
817180	MineSpot Luminator Plus battery (16 AH), dry, international shipments only
817182	Clips (2 required) for Luminator battery



Single-unit Power Builder batteries (AC & DC)



Power Builder 10-Unit Charging Stations are stackable. Front only and back-to back.

MINESPOT CHARGING EQUIPMENT

Charging the battery is accomplished through negative and positive connections in the cap headpiece. The user simply places the battery on the battery shelf, places the headpiece onto the charging keyway and turns the headpiece clockwise.

Power Builder™ Charger Stations

MSA offers a variety of charging stations, including a single-unit both AC and DC, a 5-unit, and a 10-unit station. The 5 and 10-unit chargers can be tabletop mounted, wall mounted, or stacked to convert it into a multi-station charger for up to 60 stations. The Power Builder Charger uses a microprocessor control that is efficient and never needs recalibration. It uses constant current and constant potential charging. No adjustments are required. LED colored lights let you know the condition of the battery at all times. No rectifier is required. The charger is self-contained. All AC chargers can run on 110 or 220 current.

Ordering Information

Part No.	Description
10002436	Power Builder single-unit, AC
10002437	Power Builder single-unit, DC
10002439	Power Builder 10-unit
10002460	Power Builder 5-unit
10002462	Circuit Board Module, replacement
10002464	Transformer, replacement
10002465	Leg Assembly Kit (up to 60-station)

SPARE PARTS AND ACCESSORIES

Cap Lamp Spare Parts and Accessories for Ultralight Unit:

Part No.	Description
480374	Bulb/Reflector
476705	Bezel/Lens
484688	Cable Assembly
637035	Secondary Bulb
491869	Bezel with glass laminated lens

Cap Lamp Spare Parts and Accessories for ML-2 Unit:

Part No.	Description
64254	Bulb
454055	Cable Assembly
89925	Reflector
96685	Bezel
89933	Lens
89932	Lens Gasket

Cap Lamp Spare Parts and Accessories for Both Units:

Part No.	Description
491870	Swivel Adapter
91522	Comfo-Cap® (white), with lamp bracket and cord holder
803100	Battery Pouch, nylon (fits MSA and Koehler)
804655	Battery Pouch with velcro strap
801581	Remote Adapter with battery top (see photo on back)
809925	Cover for Remote

Charging Equipment Spare Parts and Accessories

Part No.	Description
69422	Filler Watering Device for single cap lamp
10026386	Hand-held Watering Device (500 ml)
454016	Resistor Assembly for old standard charging racks
454142	Charging Meter for old standard charging racks
457561	Charging Module for old modular rack

Adapters for Koehler (Wheat) Cap Lamps and Charging Equipment

Using these adapters will permit you to charge an MSA ML-2 or MSA Ultralight Cap Lamp on Koehler (Wheat) equipment.

Part No.	Description
486310	20-shelf adapter for use with 60-station racks. Converts one complete shelf of 20.
491116	Single-unit adapter for use with Wheat single-unit slide-on (Mark II) or turnkey (Mark V) chargers

CAUTION: Do not mix cap lamp components from different manufacturers for use in applications where MSHA approval is required.



Remote Adapter #801581

NOTE: The ML-2 Cap Lamp Assembly has been discontinued; however spare parts remain available.

APPROVALS AND STANDARDS

Both the ML-2 and Ultralight Cap Lamps have Mine Safety and Health Administration Certifications (MSHA certification) for use in an atmosphere of methane and air only.

SERVICES AND REPAIRS

For service on all MSA lighting Equipment, call 1-800-MSA-2222 or your local MSA distributor.



Cover for Remote Adapter #809925

Note: This Bulletin contains only a general description of the products shown. While uses and performance capabilities are described, under no circumstances shall the products be used by untrained or unqualified individuals and not until the product instructions including any warnings or cautions provided have been thoroughly read and understood. Only they contain the complete and detailed information concerning proper use and care of these products.



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