MINERS LAMP
OPERATION GUIDELINES

KEEPING THE FLAME OF HOPE® BURNING BRIGHTLY

LAW ENFORCEMENT TORCH RUN
FOR SPECIAL OLYMPICS
MINERS LAMP OPERATION GUIDELINES

• This presentation is for the benefit of all LETR Torch Runners and Miners Lamp Operators and is based on the official Miner’s Lamp utilized by LETR, the Eccles Protector Lamp.

• This presentation will cover:
  • History
  • Fuel
  • Maintenance
  • Video Demonstrations
  • Miners Lamp Supplier
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• History

• The Davy lamp is a safety lamp for use in flammable atmospheres, invented in 1815 by Sir Humphry Davy.

• It was created for use in coal mines, to reduce the danger of explosions due to the presence of methane and other flammable gases, called firedamp or minedamp.
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• Fuel

• The lamp uses standard lamp oil which is paraffin based.

• The composition may vary slightly by manufacturer but generally the lamp oil is 98-99% liquid paraffin.

• Do not use Coleman’s Camping Fuel, that is used in the torch bowl, in the Miners Lamp.
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• Fuel

• Most popular and easy to purchase Miners Lamp fuels are Zippo Lighter Fluid or Ronsonol Lighter Fluid.

• Both fluids can be purchased at most smoke shops, Walmart and Amazon.

• Or Google a store near you.
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• Maintenance;

• The Miners Lamp vessel takes between 150-200 milliliters of fuel.

• Completely full and on a very low flame, the lamp may stay lit for up to 24 hours. However, plan for the lamp to need refueling every 12 hours.

• The miner’s lamp will need to be re-wicked every 3-5 days.

• The flame begins to flicker when a new wick is needed.
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• Maintenance;

  • The Lamp wick is ignited by removing the aperture bung from the glass and inserting a lit taper near the wick.

  • Once lit the aperture bung is inserted to isolate the combustion chamber from room conditions, stabilize the combustion process and prevent suppression of the flame by draughts.
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• Maintenance;

  Flame does not need to be any higher than as shown in photograph

To adjust flame height turn the regulator thumbscrew at the base of lamp.
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• Maintenance;

Lamp disassembled for maintenance and cleaning
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• YouTube Video Demonstrations;

  • There are video demonstrations of re-wicking and refueling. These can be viewed at:
    
    • [http://www.youtube.com/watch?v=ScRi-s4SvR8](http://www.youtube.com/watch?v=ScRi-s4SvR8)
    
    • [http://www.youtube.com/watch?v=WHP9437ualE](http://www.youtube.com/watch?v=WHP9437ualE)
    
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• Miners Lamp Supplier

  • PROTECTOR LAMP, United Kingdom.

  • Protector Lamp have been making miners flame safety lamps in Eccles, UK since 1873. The GR6S Garforth miner’s lamp is the approved method of checking for firedamp in all UK coal mines. Also known as the Eccles Lamp. Like all miners lamps they are based on the Davy Lamp principle. Distributors of ATEX miners cap lamps and head torches. Their Olympic Torch Relay Lamps have carried the flame for most Olympic and other torch relays over the last 30 years.

  • Website: www.protectorlamp.co.uk.
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