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REPORT

on

FLASHLIGHTS AND LANTERNS,
FOR USE IN HAZARDOUS LOCATIONS

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Torrance, CA

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DESCRIPTION

PRODUCT COVERED:

USL- Flashlights, Model Super SabreLite 2000 for use in Class I, Division 1, Groups C and D; and Class II, Division 2, Groups F and G; Model SabreLite LED 2020 for use in Class I, Division 1, Groups C and D; and Class II, Division 1, Groups F and G Hazardous Locations.

GENERAL:

The flashlights noted above are not provided with lamp disconnect mechanisms.

ENGINEERING CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

USL, indicates investigation to United States Standard UL 783, Sixth Edition.

MARKING:

The following marking is molded on the external surface of each flashlight case:

1. The manufacturer's name or file number.
2. Catalog number.
3. Designation of the hazardous locations as shown in "Product Covered".
4. The designation of the lamp bulb to be used and the number, type and size of batteries to be employed.
5. Temperature Code T3C for Model Super SabreLite and T3A for Model SabreLite LED.
6. The word "WARNING" and the following or equivalent statement:
"Risk of ignition - Do not open in a hazardous area."

ASSEMBLY AND CONSTRUCTION DETAILS:

The general assemblies of the devices are shown on Figs. 1, 2, and 3. Certain other subassemblies are shown on additional illustrations. All dimensions are approximate unless otherwise stated.

Assembled devices are shown in Figs. 1 and 3.

FLASHLIGHT MODEL SUPER SABRELITE 2000 - FIG. 1 (N97-15461)

Figure 1 shows a picture of the device fully assembled. For use with three size "C" dry cell alkaline batteries and Cat. No. 2004-UL or Cat. No. 1423 Carley Xenon lamp module.

FLASHLIGHT MODEL SUPER SABRELITE 2000 - FIG. 2

1. Shroud - ABS, shape and dimensions as shown in ILL. 2.

Alternate - Thermoplastic rubber, material name Rimflex, Compound No. A/AG38B manufactured by Rimpact International Inc. Shape and dimensions as shown in ILL. 2A.

Alternate - Thermoplastic rubber, material name Rimflex, Type A/OM55TPE manufactured by Rimpact International Inc.
2. Lens - GE Lexan HF110. A 1.25 in. deep cup with minimum thickness of not less than 0.12 in. and an internal diameter of 1.53 in. Lens fits into shroud with snap in motion. See ILL. 3.

Alternate - Same as above except GE Lexan HF1130.
3. Lamp Module - Cat. No. 2004-UL, machined aluminum reflector with Xenon bulb rated 3.7 V, 0.74 A, secured in the reflector with ceramic Saeveisen No. 8 cement. Lamp module comes fully assembled from vendor, manufactured by Carley Lamp Inc. See ILL. 4.

*Alternate - Cat. No. 1423, stamped aluminum reflector with Cat. No. 1192 Xenon bulb rated 3.7 V, 0.78 A, manufactured by Carley Lamp Inc. See ILL. 4A.
4. O-Ring- Ethylene Propylene, fits onto the neck of the body in a groove. See ILL. 5.
5. Battery Retainer - 302 Stainless steel. Shape and dimensions as shown. See ILL. 6.
6. Spring (Battery Contact) - 302 Stainless steel. Spot welded to the battery retainer. See ILL. 7.

Alternate Spring Clip (Battery Contact) - Stainless steel, spot welded to the battery retainer. Shape and dimension as shown in ILL. 7A.
7. Foam Pad - Uniroyal ethafoam, placed around the battery contact spring. See ILL. 8.

Alternate - 2AFR Polyethylene, attached to the bottom, on the outside battery chamber. See ILL. 8A.
8. Body - ABS. Shape and dimension as shown in ILL. 9.
9. Clip - Same material as body, attached to the body by a stainless steel spring clip and pin. Shape and dimensions are as shown in illustrations 10-12.

10. Battery Chamber - (Optional) - H.D. polyethylene battery tray, attached to the battery retainer. See ILL. 13 for more details.

FLASHLIGHT MODEL SABRELITE LED 2020 - FIG. 3

General - Model SabreLite LED 2020 is identical to the Model Super SabreLite 2000 except for the items that are listed below. The Model SabreLite LED 2020 also uses the same size "C" batteries as the Model Super SabreLite 2000, but it uses an LED module instead of the incandescent lamp module.

1. LED Module - Part No. 2024 manufactured by IMS rated 4.8 V, 0.35 A. Consists of a reflector with a battery contact connected to one end. The other end has a metal strip that has the LED held in place in the middle of it. The flashlight works by having the LED shine into the reflector and have the reflected light emitted out of the lens. See ILL. 14
2. Transition Piece - ABS, Part No. 1230-p RIMPAC International Co. One end screws onto the body and the lens screws onto the other end. Shape and dimensions are shown in ILL. 15.
3. Lens - Polycarbonate, R/C (QMFZ2) GE Lexan 143R-112. A 1.05 in. deep cup with a minimum thickness of 0.12 in. and an internal diameter of 2.12 in. that tapers down to 1.98 in. Screws onto the transition piece.
4. Shroud - ABS, Part No. 1230-p RIMPAC International Co. Fits over the lens. Shape and dimensions as shown in ILL. 16.