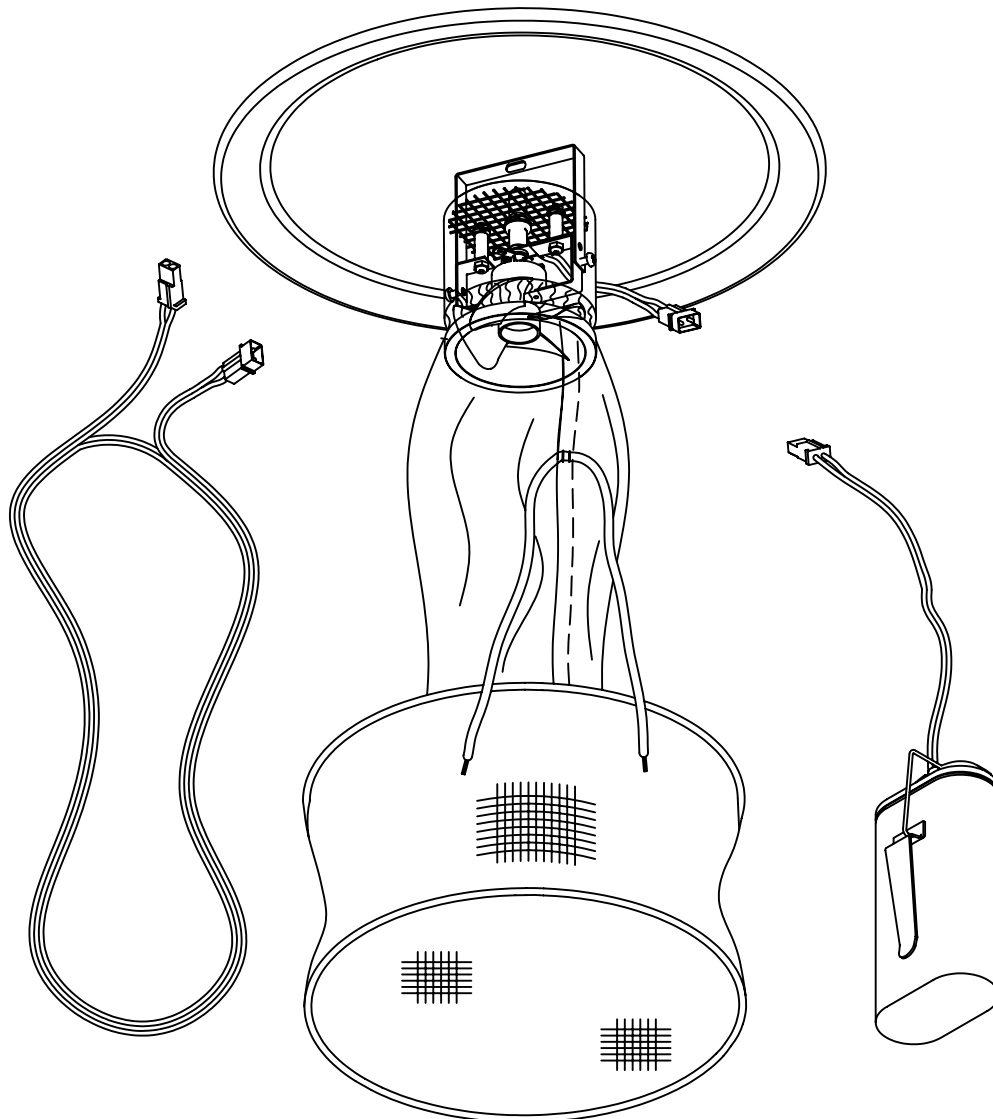


CURTIS DYNA-FOG[®] Ltd.

"Innovators of Spraying and Fogging Technology Since 1947"

www.dynafog.com



CDC MOSQUITO LIGHT TRAP MODEL 2505

**OPERATING INSTRUCTIONS
AND PARTS LISTING**

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DYNA-FOG CDC UV MOSQUITO LIGHT TRAP MODEL 2505

Specifications

| | |
|---|-------------------------------------|
| Power Supply..... | 6 volts DC |
| Current Draw..... | 300 ma (nom.) |
| Motor Speed..... | 2500 RPM |
| Fan | 3 In. (7.6 cm)/4 blades |
| Light Bulb..... | # 44, # 47 Or # 503 |
| Weight of Light Trap..... | 1.55 lbs. (.70 kg) |
| Weight of Battery Holder and extension wire assembly..... | .5 Lb (.22 Kg) |
| Weight of optional 12 AH/6V Battery Assembly | 4.75 Lb (2.16 Kg) |
| Weight of optional 110 AC/6VDC Battery Charger | 0.95 Lb (0.43 Kg) |
| Shipping Weight | (1) unit/carton = 4.0 Lb (1.82 kg) |
| Shipping Dimensions: | |
| one unit/carton = 15.5" (39.4cm) x15.5" (39.4cm) x 6.6" (16.8 cm) | |
| Outer pack, Six units/carton = 16" (40.6 cm) x 16" (40.6 cm) x 44" (111.7 cm) | |

Operating Principle

Modern pest management requires surveillance data in order to plan control work. Field surveys are the foundation of an effective program. Data on the mosquitoes with the greatest potential to adversely affect public health and comfort, including data on mosquito density and distribution, are essential in order to plan and conduct effective control measures.

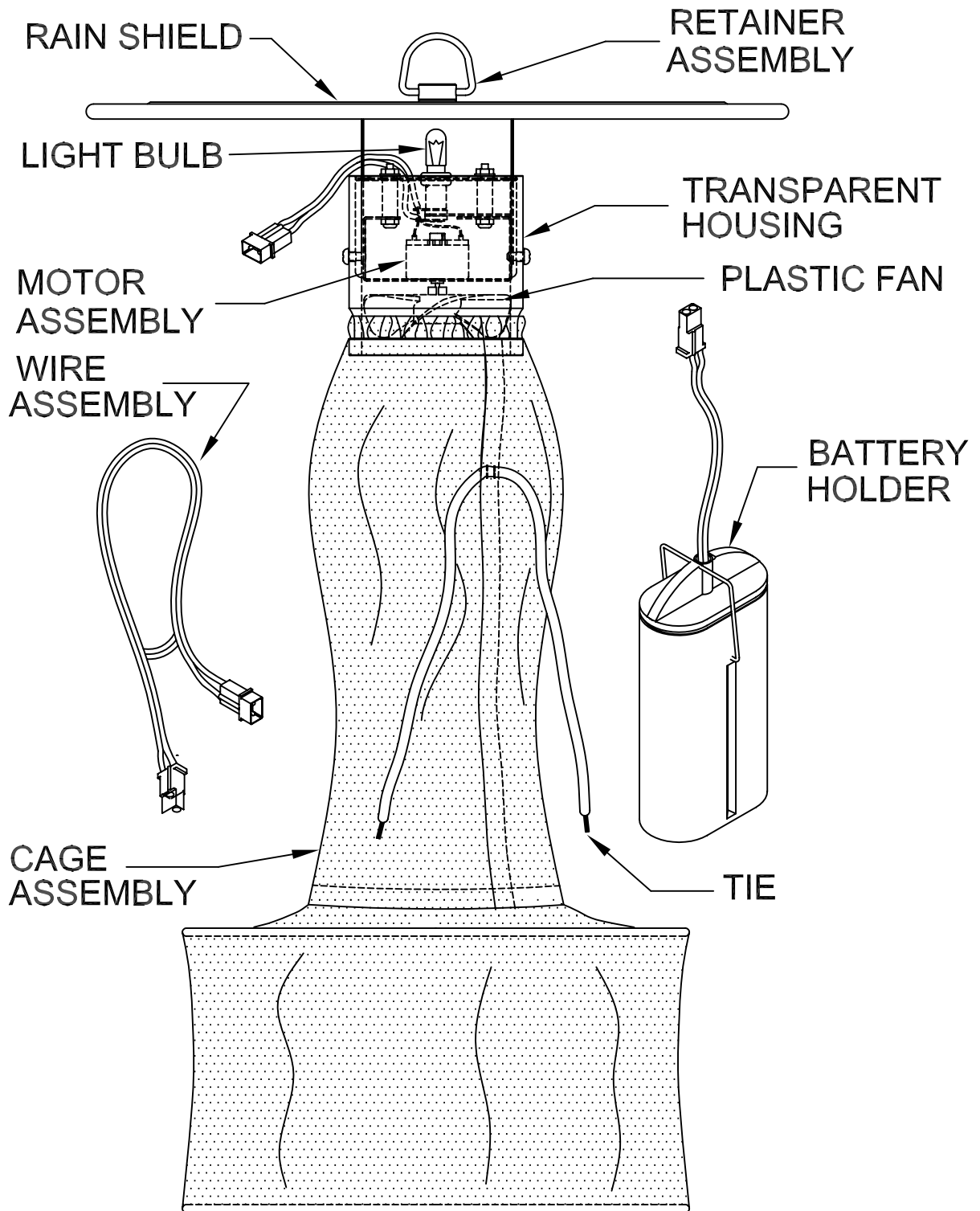
Light traps are an easy, relatively low cost way to obtain an index of the number of mosquitoes in an area. This light trap was designed to be an efficient means for collecting samples of adult mosquitoes. Once collected, the mosquitoes can then be identified and counted to provide a statistical representation of the population density and type of species in any given area. Collecting a sample of mosquitoes using this light trap can provide invaluable information necessary for evaluation and control of the mosquito population.

Once analyzed, this information can be used to:

- Accurately determine the best times and areas to spray using "Curtis Dyna-Fog" type aerosol sprayers or foggers;
- Provide information on how well the spray pattern is penetrating target areas
- Identify disease carrying species and the potential for vector born diseases in the area
- Determine species resistance to different insecticides
- Evaluate the effectiveness of a spraying program

With the addition of carbon dioxide as an attractant in the form of dry ice, the CDC trap becomes a powerful surveillance tool. The CO₂ baited CDC trap samples a wider range of mosquito species and increases the numbers of mosquitoes captured.

CDC MOSQUITO LIGHT TRAP MODEL 2505



MAJOR COMPONENTS DIAGRAM

Placement of the Light Trap

For the Light Trap to operate effectively it must be placed in the proper location. In general, best results will be achieved if the trap is placed in areas of higher humidity. These areas will usually have more foliage and cover. Also, locating the trap a few yards into the edge of woods and near marshes, swamps and streams yield excellent results.

Select a remote location (at least 50 feet away from any structures if possible). Avoid placing a trap near any other light sources or open fields as they may detract from its effectiveness. The height at which the trap is suspended can influence the species composition of the collection. Normally, traps are hung 5-6 ft off the ground. This height is satisfactory for the majority of species encountered in routine. (Note: If it is important that the collected mosquitoes remain alive, care should be taken to avoid placing the trap where it will be in direct sunlight.)

The number of traps needed for an area depends upon the amount of accuracy desired. The more traps that are placed, the greater the statistical accuracy. Typically, several traps will be located in known areas of activity. If the location does not produce the expected number of mosquitoes, relocate the trap. Field trials show that relocating traps distances of only 25 feet (7.62 m) can significantly change the amount of mosquitoes collected.

NOTE: FOLLOW THE SPECIFIC INSTRUCTION FROM THE SCIENTIFIC/TECHNICAL PERSONNEL IN YOUR VECTOR CONTROL PROGRAM AND/OR MOSQUITO CONTROL DISTRICT.

Operating the Light Trap

NOTE: To yield the most accurate results, the trap should be operated for five consecutive nights.

When connected the light trap to a 6 volt DC power source, the trap will begin operating fan and light. Both fan and light will remain ON until disconnected from power source (or the batteries charge is drained), regardless of the day light or darkness of the environment around.

Past experience has shown that using a pheromone such as Octenol and/or placing a 2" (5.08 cm) cube of dry ice in an ice bucket suspended directly above the trap will increase the number of mosquitoes collected. Also, collection peak periods fluctuate on a 4 week cycle with the light and dark phases of the moon.

Field trials have shown that the best collection times are during the dark phases of the moon and on overcast nights.

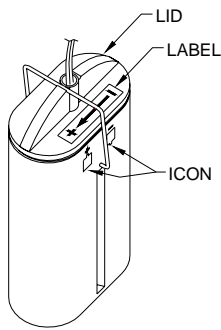
The Light trap model 2505 requires 300 ma (nominal) to operate at 6.0-6.3 volts DC. The trap is designed to be powered by a nominal voltage of 6 volts DC.

This may be in the form of 4 "D" size alkaline batteries which will allow operation of the trap for temporary periods of time which will vary depending on the light bulb used before the batteries will need to be replaced. If 4 "D" size batteries are used, is recommended to make daily collection of the samples taken for the trap, and make any required maintenance to the batteries, if required. Another power

source that can be used is a rechargeable 6 volt battery such as a sealed lead acid which will give extended operation depending on the capacity rating (usually expressed in amp hours) of the battery used, before it will need to be recharged. The maximum run time for a fully-charged and new battery can be estimated by dividing the Amp-Hr rating of the battery by the current consumption of the trap. See in this manual the section related to the optional Dyna-Fog 6 V DC Sealed Lead Acid Battery.

Be sure to observe that the batteries are installed and connected with the proper polarity to assure proper operation and prevent damage to the trap.

As DC current is unidirectional, wire leads are coded: the ribbed wire goes to the (+) and the smooth wire goes to the (-) polarity. The plastic housing of the connectors are also coded, side of the tab goes to the (+) polarity.



CORRECT LID



INCORRECT LID

IMPORTANT

See the **ICONS** on top of the battery case for installing batteries in proper direction. When installing battery lid, orient it so that (+) **LABEL** is on the same side as the (+) symbol of the **ICON** molded in the case.

Orienting the lid in the wrong direction will prevent the unit from operating properly.

Recommended Light Bulb types are:

| Bulb Type | Voltage | Current | MSCP |
|-----------|-----------|---------|------|
| # 503 | 5.1 Volts | 150 ma | .6 |
| # 47 | 6.3 Volts | 150 ma | .5 |
| # 44 | 6.3 Volts | 250 ma | .9 |

MSCP = Mean Spherical Candlepower. Higher MSCP means brighter light.

The Light Trap model 2505 is supplied with the Light Bulb # 44.

Troubleshooting Tips

| Problem | Possible Cause | Corrective Action |
|-----------------------|--|---|
| Unit will not operate | Battery wires connected backwards at battery | Check wires at battery |
| | Weak battery | Recharge Battery |
| | Poor wiring connections | Ensure all wiring connections are tight |
| Lamp doesn't work | Burnt out Lamp or Lamp is loose | If necessary, replace with Lamp specified |

Technical Details of Dyna-Fog 6 V DC Sealed Lead Acid Batteries

Sealed Construction - SLA batteries unique construction and sealing technique guarantee that no electrolyte leakage can occur from the terminals or case of any battery. This feature insures safe, efficient operation of SLA battery in any position.

Electrolyte Suspension System - All SLA batteries utilize an electrolyte suspension system consisting of a glass fiber separator material. This suspension system allows maximum life and service.

Gas Generation - Batteries have a unique design that effectively controls generation of gas and allows recombination within the battery over 99% of gas generated during normal usage.

Maintenance Free Operation - During the expected five years float service life of SLA batteries, there is no need to check the specific gravity of the electrolyte, or add water. In fact, there is no provision for these maintenance functions.

Low Pressure Venting System - SLA batteries are equipped with a safe, low pressure venting system, which operates at 7 psi to 10 psi, designed to release excess gas and reseal automatically in the event that gas pressure rises to a level above the normal rate.

Cyclic Service Life - Depending upon the average depth of discharge, over 1,000 discharge/ recharge cycles can be expected from batteries

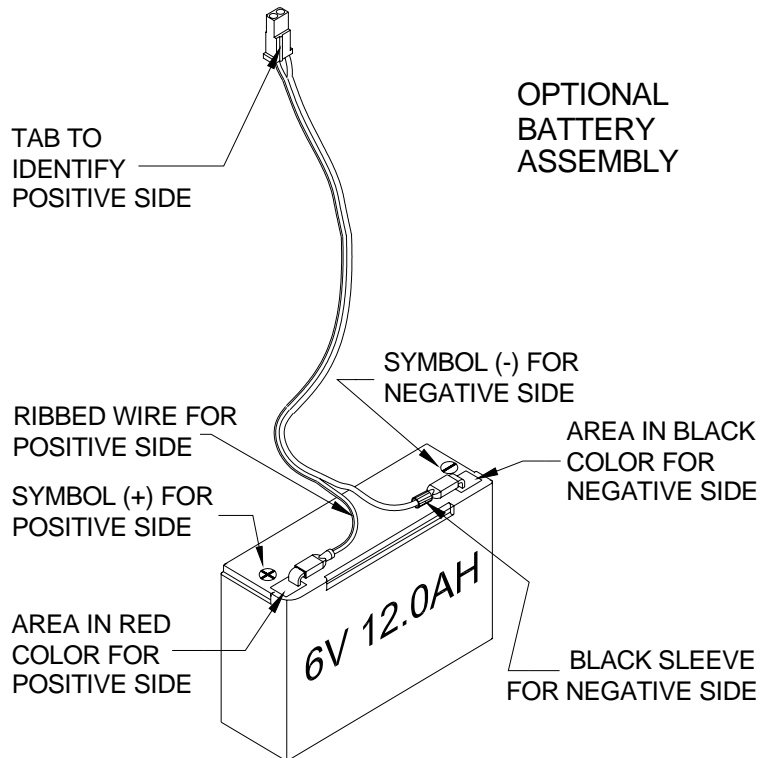
Low Self Discharge - At room temperature, its self-discharge rate of SLA batteries is approximately 3% of rated capacity per month.

Operating Temperature Range - SLA batteries may be used over a broad range of ambient temperatures.

Optional Sealed Lead Acid Battery Available – Allows extended operation where traps cannot be maintained on a daily basis. Contact Curtis Dyna-Fog for more information.

Dyna-Fog offers an optional power source that can be used, a rechargeable 6 volt 12 Amp-Hour battery, which allows longer operation time of the Light trap between charging periods.

Be sure to observe that the battery is installed and connected with the proper polarity to assure proper operation and prevent damage to the trap.

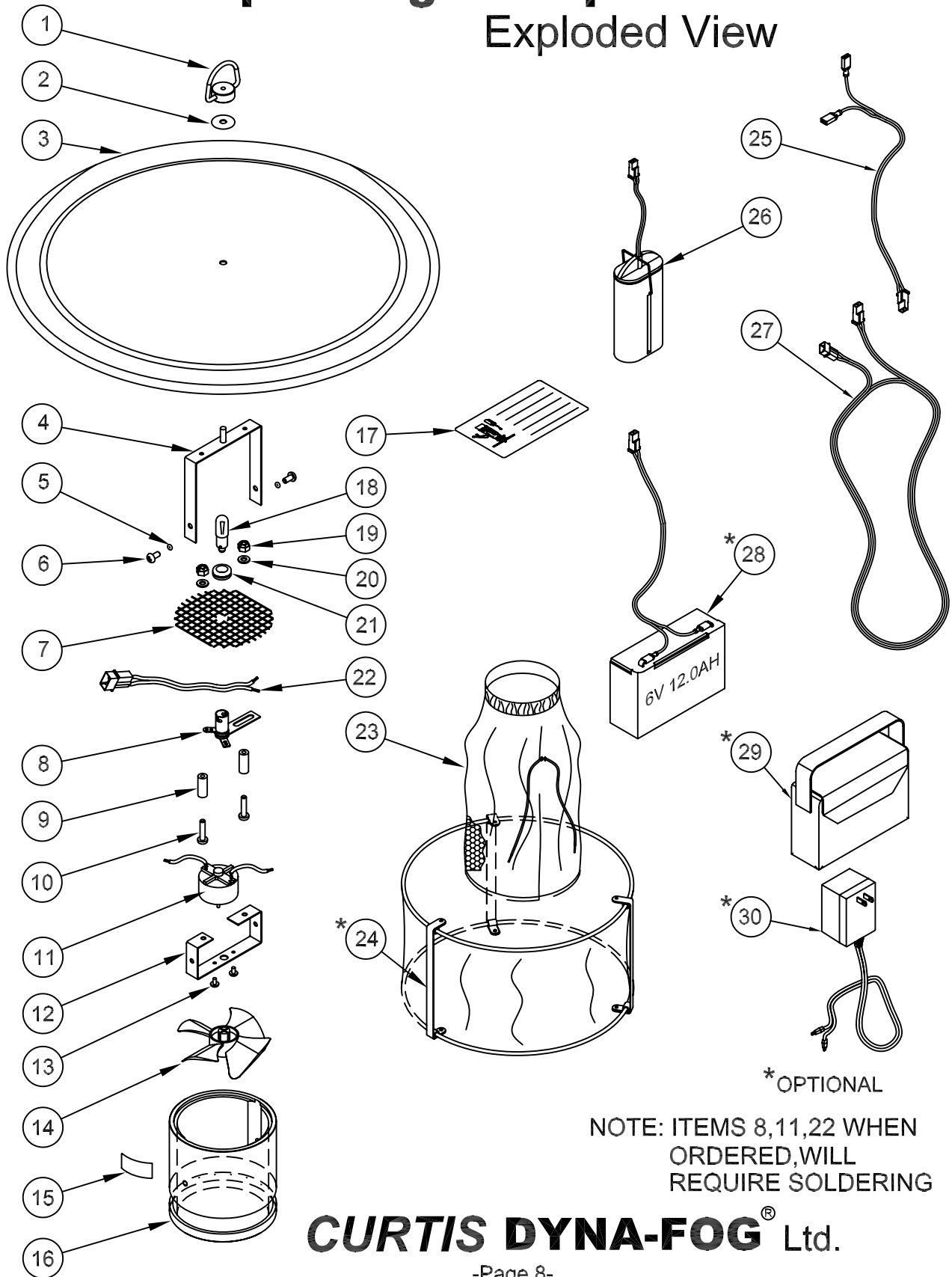


CAUTION

As DC current is unidirectional, wire leads are coded: the ribbed wire goes to the (+) and the smooth wire goes to the (-) polarity. The plastic housing of the connectors are also coded, the tab goes to the (+) polarity. Orienting the wires in the wrong direction will prevent the unit from operating properly.

Mosquito Light Trap Model 2505

Exploded View



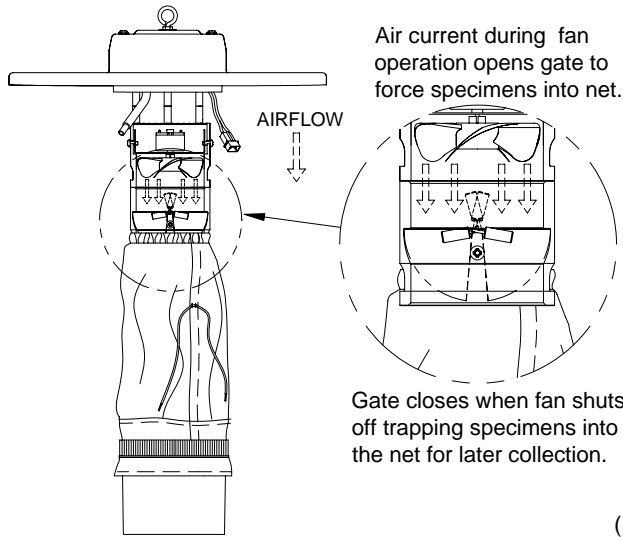
CURTIS DYNA-FOG[®] Ltd.

Mosquito Light Trap Model 2505

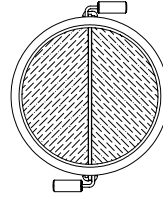
Parts List

| ITEM | QTY | P/N | DESCRIPTION |
|------|-----|---------|--------------------------------|
| 1 | 1 | 25044 | RETAINER AY.,RING |
| 2 | 1 | 25032 | WASHER,RUBBER |
| 3 | 1 | 25010-1 | SHIELD,RAIN (DRILLED) |
| 4 | 1 | 25224 | BRACKET AY. |
| 5 | 2 | 10000-7 | O-RING |
| 6 | 2 | 65227 | SCREW,8-32x1/2,PHCR,SSTL |
| 7 | 1 | 25160-1 | SCREEN,MESH 4 |
| 8 | 1 | 25052 | MOUNT,LAMP,7-12G |
| 9 | 2 | 25059 | SPACER,NYLON,#6,.75 LENGTH |
| 10 | 2 | 25225 | SCREW 6-32x1",PHCR,SS |
| 11 | 1 | 25054 | MOTOR,D.C. 6 VOLT |
| 12 | 1 | 25222 | BRACKET,MOTOR,"G" SHAPE |
| 13 | 2 | 25225 | SCREW 6-32x1",PHCR,SS |
| 14 | 1 | 25055-1 | FAN (4 BLADE) CW 2.86" |
| 15 | 1 | 25101-6 | LABEL,LIGHT TRAP,CDC MINIATURE |
| 16 | 1 | 25220 | HOUSING,LIGHT TRAP W/O PCB |
| 17 | 1 | 25009 | LABEL,ID,LIGHT TRAP,MOD. 2504 |
| 18 | 1 | 25171 | BULB,#44,MOD.2504 |
| 19 | 2 | 65244 | NUT,#6,HEX,SSTL |
| 20 | 2 | 65233 | WASHER,FLAT,#8,SS |
| 21 | 1 | 25179 | GROMMET,.35 I.D. |
| 22 | 1 | 25173 | WIRE AY.,POWER |
| 23 | 1 | 25092 | CAGE AY.,CATCHING |
| 24 | 3 | 25106 | SPREADER AY.,(NET) |
| 25 | 1 | 25123 | WIRING HARNESS AY.,LIGHT TRAP |
| 26 | 1 | 25011 | HOLDER AY.,BATTERY |
| 27 | 1 | 25109 | WIRING AY. |
| 28 | 1 | 25121 | BATTERY AY.,6V 12AH |
| 29 | 1 | 39092 | BAG,BATTERY |
| 30 | 1 | 25126 | BATTERY CHARGER AY. |

OPTIONAL SELF CLOSING LIGHT TRAP GATE P/N 25115

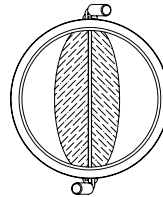


CLOSED GATES



(FAN IS NOT OPERATING)

PARTIAL OPEN GATES

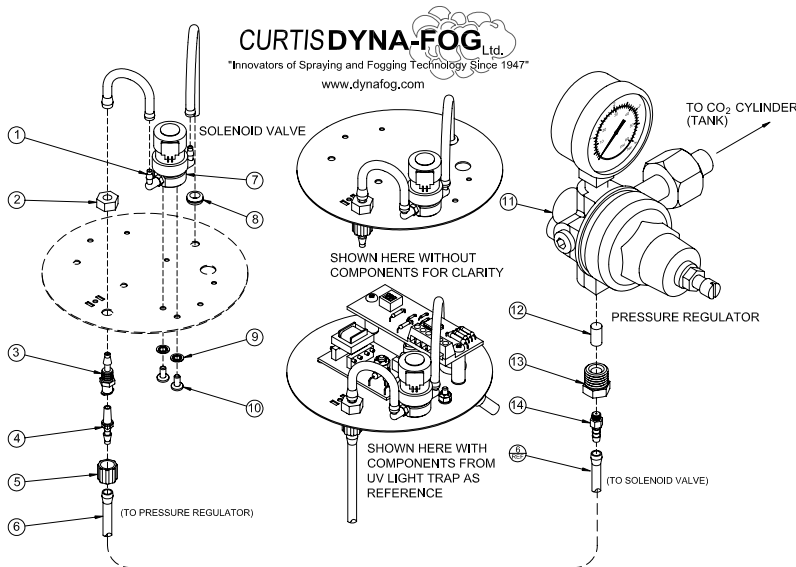


(NORMAL OPERATING POSITION)

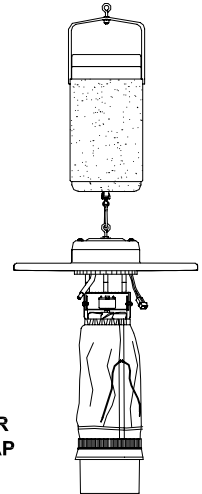
Utilizing the optional self-closing gates promotes battery conservation and allows longer time periods of unattended and uncollected light trap specimens without specimen escape.

CURTIS DYNA-FOG self closing gate can be used on any light trap, including the competitors.

After installing self-closing gate, for trap with electronic switch, you can set the function switch to position number 3 for battery conservation.



CO₂ (DRY ICE) CONTAINER FOR MOSQUITO LIGHT TRAP P/N 25129



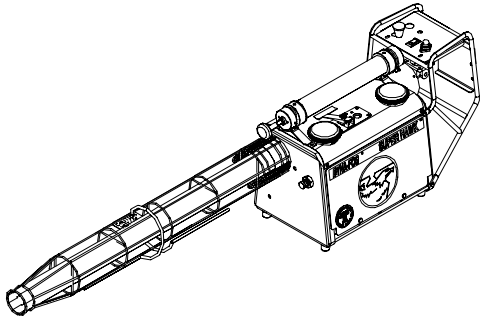
OPTIONAL CO₂ (GAS) KIT P/N 25140 FOR LIGHT TRAP

OTHER DYNA-FOG LIGHT TRAPS

| P/N | MODEL | DESCRIPTION |
|---------|-------|---------------------------------------|
| 25200 | 2502 | COMMERCIAL W/BATTERY HOLDER |
| 25200-1 | 2501 | COMMERCIAL W/LOCAL BATTERY HOLDER |
| 25086 | 2500 | CDC MINIATURE (W/KILLING JAR) |
| 25086-2 | 2504 | CDC MINIATURE, BRIGHT LIGHT, W/SWITCH |
| 25086-3 | 2503 | CDC MINIATURE, UV LAMP, W/SWITCH |
| 25086-4 | 2505 | CDC MINIATURE WITHOUT PCB |

A WIDE VARIETY OF OPTIONAL ITEMS ARE AVAILABLE

DYNA-FOG® Offers a complete and wide assortment of aerosol generator systems.



PULSE-JET POWERED THERMAL FOGGERS:

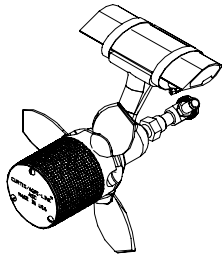
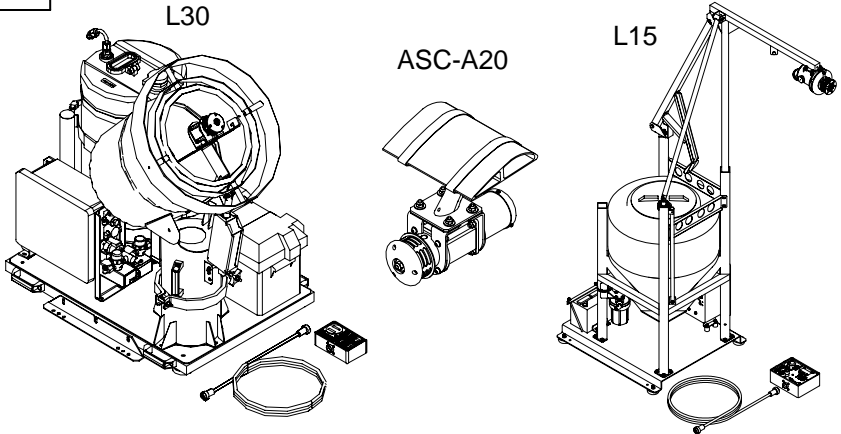
From 0-120 GPH (0-453 LPH) output. Our complete line include different models like the Superhawk, Golden Eagle, Trailblazer, Patriot, Blackhawk, Mister III, Mister Max, SilverCloud and Model 1200. Portable or Truck mounted machines. Different models are available for Oil base or Water base formulations.

ELECTRIC ROTARY ATOMIZERS:

DYNA-JET L30: State of the Art, Electric Rotary Atomizer ULV Aerosol Generator. 12 VDC, Light Weight, Truck mounted Machine with FMI pump. Optional Radar Syncroflow.

DYNA-JET L15: Drift Sprayer for migratory pest control like Locust. Flow Rate from 0 to 2000 ml/min. Optional Radar Syncroflow.

ASC-A20: State of the Art, Electric Rotary Atomizer, for use on Fixed Wing and Rotary Wing aircraft.

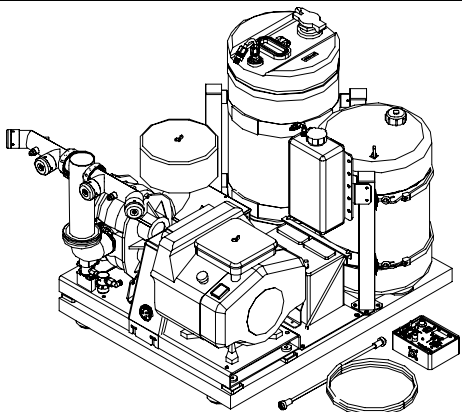
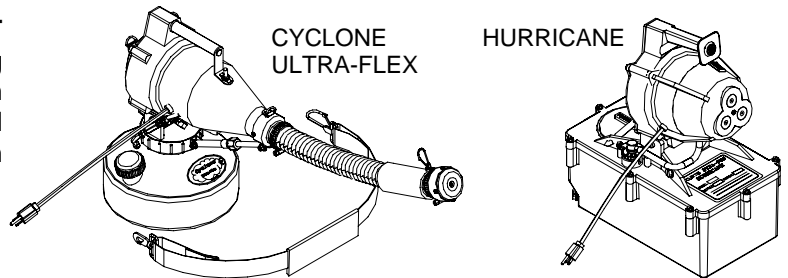


WIND DRIVEN ROTARY ATOMIZERS:

The ASC-A10 is a wind driven atomizer designed for Fixed Wing aircraft. The rotational speed of the atomizer controls the droplet size and can be adjusted by changing the angle of the blades. Also available is the ASC-A10H for Rotary Wing application. No other Rotary atomizer for aircraft can handle the amount of Flow rate as the ASC Atomizer.

Several accessories are available to meet your requirements. Also available in 12 or 24 VDC, see rotary atomizer above (Model ASC-A20).

ELECTRIC HAND-HELD ULV/MIST GENERATORS: Full line of electric cold fog applicators with 1 Gal (3.8 L) tank, available in 115 and 230 VAC. An Electric Thermal version is available. For bigger Formulation capacity, larger tanks are available.



COMBUSTION ENGINE DRIVEN ULV AEROSOL GENERATORS:

Truck mounted Units powered by 8, 9, 11 or 18 HP four cycle, OHV Gasoline Engine. Diesel version available. One, two or four nozzles. Optional full remote control of boom functions (rotation of turntable and angle of nozzles).

Diversity of pumping systems, Gear, Piston and Diaphragm. Pressurized system available for overseas market.

Optional Radar Syncroflow.

40 cc Two cycle portable machines also available.

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