

OPERATION & PARTS MANUAL



GloBug Solo MODEL GB114BW LIGHTING SYSTEM

Revision #1 (02/14/05)

**THIS MANUAL MUST ACCOMPANY
THE EQUIPMENT AT ALL TIMES.**

HERE'S HOW TO GET HELP

PLEASE HAVE THE MODEL AND SERIAL
NUMBER *ON-HAND* WHEN CALLING

MULTIQUIP CORPORATE OFFICE

18910 Wilmington Ave.
Carson, CA 90746
Email: mq@multiquip.com
Internet: www.multiquip.com

800-421-1244
FAX: 310-537-3927

PARTS DEPARTMENT

800-427-1244
310-537-3700

FAX: 800-672-7877
FAX: 310-637-3284

MAYCO PARTS

800-306-2926
310-537-3700

FAX: 800-672-7877
FAX: 310-637-3284

SERVICE DEPARTMENT

800-478-1244
310-537-3700

FAX: 310-537-4259

TECHNICAL ASSISTANCE

800-478-1244

FAX: 310-631-5032

WARRANTY DEPARTMENT

800-421-1244, EXT. 279
310-537-3700, EXT. 279

FAX: 310-537-1173

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This manual MUST accompany the equipment at all times. This manual is considered a permanent part of the equipment and should remain with the unit if resold.

The information and specifications included in this publication were in effect at the time of approval for printing. Illustrations are based on the *GloBug Solo Lighting System*. Multiquip Inc. reserves the right to discontinue or change specifications, design or the information published in this publication at any time without notice and without incurring any obligations.

To find the latest revision of this
publication, visit our website at:
www.multiquip.com



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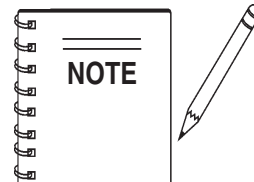
MQ GLOBUG SOLO LIGHTING SYSTEM

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***Specification and part number
are subject to change without
notice.***

PARTS ORDERING PROCEDURES

When ordering parts, please supply the following information:

- ☐ Dealer account number
- ☐ Dealer name and address
- ☐ Shipping address (if different than billing address)
- ☐ Return fax number
- ☐ Applicable model number
- ☐ Quantity, part number and description of each part
- ☐ Specify preferred method of shipment:
 - ✓ FedEx or UPS Ground
 - ✓ FedEx or UPS Second Day or Third Day
 - ✓ FedEx or UPS Next Day
 - ✓ Federal Express Priority One
 - ✓ DHL
 - ✓ Truck

Note: Unless otherwise indicated by customer, all orders are treated as "Standard Orders", and will ship within 24 hours. We will make every effort to ship "Air Shipments" the same day that the order is received, if prior to 2PM west coast time. "Stock Orders" must be so noted on fax or web forms.



Here's how to get help...

Please have the model and serial number on hand when calling.

MULTIQUIP CORPORATE OFFICE

18910 Wilmington Ave. 800-421-1244
 Carson, CA 90746 FAX: 310-537-3927
 Email: mq@multiquip.com
 Internet: www.multiquip.com

PARTS DEPARTMENT

800-427-1244 FAX: 800-672-7877
 310-537-3700 FAX: 310-637-3284

MAYCO PARTS

800-306-2926 FAX: 800-672-7877
 310-537-3700 FAX: 310-637-3284

SERVICE DEPARTMENT

800-421-1244 FAX: 310-537-4259
 310-537-3700

TECHNICAL ASSISTANCE

800-478-1244 FAX: 310-631-5032

WARRANTY DEPARTMENT

800-421-1244, EXT. 279 FAX: 310-537-1173
 310-537-3700, EXT. 279

Place Your Parts Order Via Web or Fax For Even More Savings!

(Domestic USA Dealers Only)

Extra Discounts!

All parts orders which include complete part numbers and are received by our automated web parts order system, or by fax qualify for the following extra discounts:

Ordered via	Standard orders	Stock orders (\$750 list and above)
Fax	3%	10%
Web	5%	10%

Special freight allowances when you order 10 or more line items via Web or Fax! **

FedEx Ground Service **at no charge for freight**

No other allowances on freight shipped by any other carrier.

****Common nuts, bolts and washers (all items under \$1.00 list price) do not count towards the 10+ line items.**

NOTE: DISCOUNTS ARE SUBJECT TO CHANGE



MULTIQUIP INC.
 18910 WILMINGTON AVENUE
 POST OFFICE BOX 6254
 CARSON, CALIFORNIA 90749
 310-537-3700 • 800-421-1244
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 E-MAIL: mq@multiquip.com
 INTERNET: www.multiquip.com

Direct TOLL-FREE access to our Parts Department:

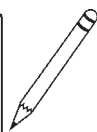
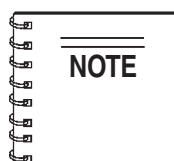
Toll-free nationwide — 800-427-1244

Toll-free FAX — 800-6-PARTS-7 (800/672-7877)

GLOBUG SOLO LIGHTING SYSTEM — SAFETY MESSAGE ALERT SYMBOLS

FOR YOUR SAFETY AND THE SAFETY OF OTHERS!

Safety precautions should be followed at all times when operating this equipment. Failure to read and understand the Safety Messages and Operating Instructions could result in injury to yourself and others.



This Owner's Manual has been developed to provide complete instructions for the safe and efficient operation of the **MQ GloBug Solo Lighting System**.

Before using this Lighting System, ensure that the operating individual has read and understands all instructions in this manual.

SAFETY MESSAGE ALERT SYMBOLS

The three (3) Safety Messages shown below will inform you about potential hazards that could injure you or others. The Safety Messages specifically address the level of exposure to the operator, and are preceded by one of three words: **DANGER**, **WARNING**, or **CAUTION**.

DANGER

You **WILL** be **KILLED** or **SERIOUSLY** injured if you **DO NOT** follow directions.

WARNING

You **CAN** be **KILLED** or **SERIOUSLY** injured if you **DO NOT** follow directions.

CAUTION

You **CAN** be **INJURED** if you **DO NOT** follow directions.

Potential hazards associated with the **GloBug Solo Lighting System** operation will be referenced with Hazard Symbols which appear throughout this manual, and will be referenced in conjunction with Safety Message Alert Symbols.

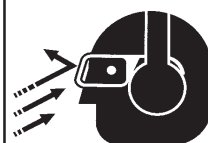
HAZARD SYMBOLS

CAUTION - Rotating Parts

NEVER operate equipment with covers, or guards removed. Keep fingers, hands, hair and clothing away from all moving parts to prevent injury.



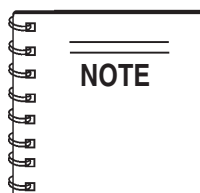
CAUTION - Sight and Hearing Hazards



ALWAYS wear approved eye and hearing protection.

CAUTION - Equipment Damage Messages

Other important messages are provided throughout this manual to help prevent damage to your lighting system, other property, or the surrounding environment.



This lighting system, other property, or the surrounding environment could be damaged if you **do not** follow instructions.

GLOBUG SOLO LIGHTING SYSTEM — RULES FOR SAFE OPERATION

WARNING - READ THIS MANUAL

Failure to follow instructions in this manual may lead to **Serious Injury** or even **Death**. This equipment is to be operated by trained and qualified personnel only! This equipment is for industrial use only.

The following safety guidelines should always be used when operating the GloBug Solo Lighting System.

The following safety guidelines should always be used when operating the GloBug Solo Lighting System:

GENERAL SAFETY

- **DO NOT** operate or service this equipment before reading this entire manual.
- This equipment should not be operated by persons under 18 years of age.
- **NEVER** operate this equipment without proper protective clothing, shatterproof glasses, steel-toed boots and other protective devices required by the job.



- **NEVER** operate this equipment when not feeling well due to fatigue, illness or taking medicine.
- **NEVER** operate this equipment under the influence of **drugs** or **alcohol**.



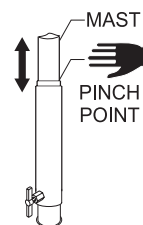
- Whenever necessary, replace nameplate, operation and safety decals when they become difficult read.
- Manufacturer does not assume responsibility for any accident due to equipment modifications.
- **NEVER** use accessories or attachments, which are not recommended by Multiquip for this equipment. Damage to the equipment and/or injury to user may result.



- **ALWAYS** make sure that the GloBug Solo is secure on firm level ground so that it cannot slide or shift around, endangering workers. Also keep the immediate area free of bystanders.
- **ALWAYS** keep area behind GloBug Solo clear of people while raising and lowering mast.
- To prevent the GloBug Solo from overturning, **NEVER** use in winds that exceed 22 mph (10m/s).
- To prevent the GloBug Solo from rolling, **ALWAYS** place the GloBug Solo on a firm flat surface. Surface slant should not exceed 5 degrees.
- The GloBug Solo should only be used in temperatures between 23°-104° Fahrenheit (-5° to 40° Celsius). Failure to comply with these operating parameters could cause the lamp to malfunction and shorten the ballast life.
- **NEVER** use the GloBug Solo in **rain, snow** or areas of high humidity that could generate electrical storms.

MAST SAFETY

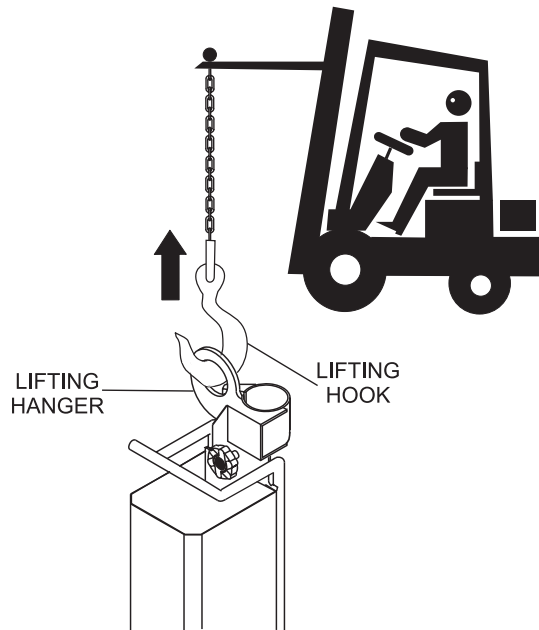
- When raising or lowering the mast, keep hands and fingers clear of the various mast sections, this will prevent hands and fingers from getting pinched.
- When raising the mast and to prevent tipping, **ALWAYS** **deploy outriggers**.
- **CHECK** the mast and winch cables for wear. If any problem occurs when lower or raising the mast **STOP** immediately! Contact a trained MQ technician for assistance.
- **NEVER** pivot or retract mast while unit is operating.
- **NEVER** use the GloBug Solo mast as a crane. **DO NOT** lift anything with the mast.
- **NEVER** attach anything to the GloBug Solo mast.
- **ALWAYS** lower the mast when not in use, or if high winds or electrical storms are expected in the area.



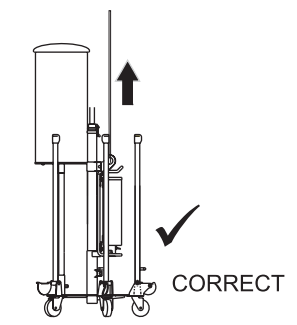
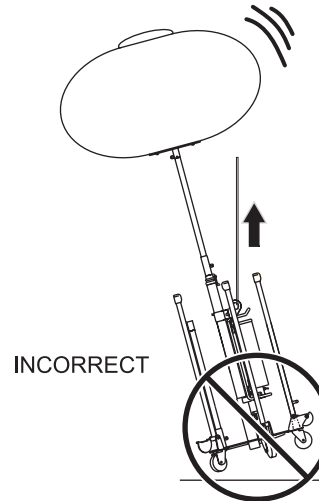
GLOBUG SOLO LIGHTING SYSTEM — RULES FOR SAFE OPERATION

LIFTING/TRANSPORTING THE GLOBUG SOLO

- **ALWAYS** use the lifting hanger, when lifting of the GloBug Solo is required.



- Use a crane, forklift or suitable lifting device of adequate lifting capability when the lifting of the GloBug Solo is required.
- Make sure the mast is completely lowered before lifting the GloBug Solo.
- When the GloBug Solo is lifted from its correct lifting point, it should lift straight up (not tilted). **DO NOT** attempt to lift the GloBug Solo if its position is tilted.



GLOBUG SOLO LIGHTING SYSTEM — RULES FOR SAFE OPERATION

- When transporting the GloBug Solo over **smooth roads**, place mast in **stow position**. Tighten the T-Handle Bolt Lock firmly to secure the balloon to the mast before transporting. This will prevent the balloon/light assembly from falling down or being damaged during transport.
- When transporting the GloBug Solo over **rough terrain**, remove the balloon/lamp assembly from the mast. To prevent damage to the bulb, place balloon/lamp assembly in a protective foam-lined container. Tie down the protective container to prevent movement. Place GloBug Solo in back of pick-up truck, lock caster wheels, and tie down securely to prevent movement.
- **NEVER** leave the balloon/lamp exposed during transport. Exposure to excess wind or rain could damage the balloon's nylon cover.
- **ALWAYS** place the balloon inside its protective cover during transport. Be sure the cover is secured tightly around the balloon/lamp assembly.

LAMP SAFETY AND CARE

- **NEVER** leave any grease or oil residue on lamp surface when replacing or removing lamp. This can create hot spots, reducing the service life of the lamp.
- **ALWAYS** make sure the lamp surface is clean and dry.
- **ALWAYS** replace with MQ recommended type lamp. See parts section of this manual.
- **NEVER** use force when installing a lamp. Excessive force could cause the lamp to break causing bodily harm.
- **ALWAYS** make sure the lamp holder (spring loaded) is securely affixed to the top of the lamp. This will prevent the lamp from touching (breakage) the lamp guard or pipe frame.
- **ALWAYS** make sure the lamp guard is installed correctly. **NEVER** deform the lamp guard.
- **NEVER** attempt to replace lamp with the power on. Always unplug the power cord from the generator when changing the lamp.
- **NEVER** unplug the lamp's AC power cable during operation.
- **ALWAYS** allow a sufficient amount of time for the lamp to **cool** before changing. The possibility exists of severe burns.
- **ALWAYS** have a **trained technician** to install and remove lamp, or replace any damaged fixture wiring.

BALLOON SAFETY AND CARE

- To prevent serious burns, **NEVER** touch or unzip the balloon envelope when the lamp is on.
- To prevent the balloon from deformation, **NEVER** use GloBug Solo in strong winds.
- **DO NOT** place the balloon inside its protective cover until the lamp has had a sufficient amount of time to cool down. This will prevent the balloon's nylon cover from being burned (touching the lamp surface).
- **ALWAYS** place the balloon inside its protective cover after each use. This will prolong the life of the balloon material, keeping it protected from harsh environmental elements.
- **DO NOT** use a damaged balloon. Replace balloon immediately if damaged. In addition, a damaged balloon will not inflate properly, and may become more damaged by touching the hot lamp surface.
- **ALWAYS** keep the balloon away from sharp objects and excessive amounts of heat (**fire!**).
- **DO NOT** use excessive force when zipping and unzipping the balloon. Be gentle with the zipper mechanism. If the zipper is broken the balloon will become unusable.



DANGER - GloBug Solo High Danger Areas

The DANGER items listed below and on the next page are considered **High DANGER** areas and should be adhered to. Failing to understand these areas could result in **Bodily Harm, Electrical Shock, Electrocution**, and even **Death!** *Please pay close attention when operating the GloBug Solo.*



DANGER - Grounding the GloBug Solo for Operation

The GloBug Solo lighting system is equipped with a **ground terminal** for your protection. **ALWAYS** complete the **grounding path** from the lighting system to an external grounding source.



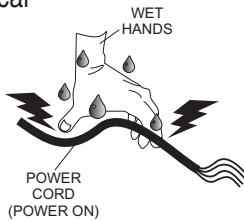
ALWAYS make certain the GloBug Solo is well grounded and securely fastened to a good earth ground (ground rod). The possibility exists of **Electrical Shock, Electrocution, and even Death** if the GloBug Solo is not grounded.

GLOBUG SOLO LIGHTING SYSTEM — RULES FOR SAFE OPERATION

! DANGER - GloBug Solo Electric Shock Hazards

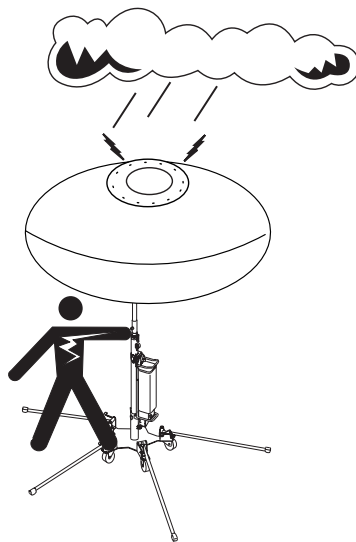
ALWAYS keep electrical cords in good condition. Worn, bare or frayed wiring can cause electrical shock, thus causing ***Bodily Harm or even Death.***

NEVER grab or touch a live power cord with wet hands, the possibility exists of ***Electrical Shock, Electrocutation, and even Death!***



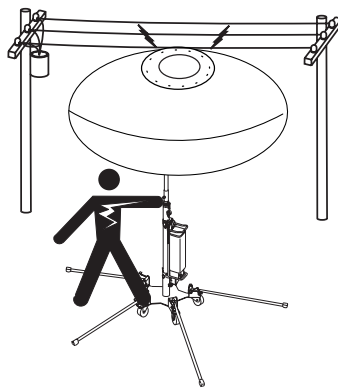
! DANGER - GloBug Solo Electric Shock Hazards

NEVER operate the GloBug Solo or handle any electrical equipment while standing in water, while barefoot, while hands are wet, or in the rain. A dangerous ***electrical shock*** could occur causing ***Severe Bodily Harm or even Death.***



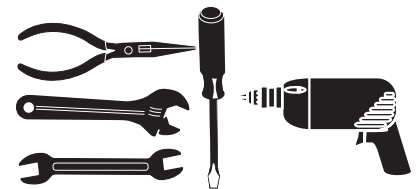
! DANGER - GloBug Solo Overhead Obstructions

ALWAYS make sure the area above GloBug Solo is open and clear of overhead power lines and other obstructions. The tower extends in excess of 16 ft. (5 meters). Contact with overhead power lines or other obstructions could result in equipment damage, ***Serious Injury or Death!***



Maintenance Safety

- **NEVER** lubricate components or attempt service on a running GloBug Solo.
- **ALWAYS** allow the GloBug Solo a proper amount of time to cool before servicing.
- Keep the GloBug Solo in proper running condition.
- Fix damage to the GloBug Solo immediately and always replace broken parts.
- **ALWAYS** use the required tool for the job application. Using damaged or worn tools or using tools inappropriate for the required application is very dangerous, and may cause damage to the machine and service personnel. Make sure to use the appropriate tool for the specific job.

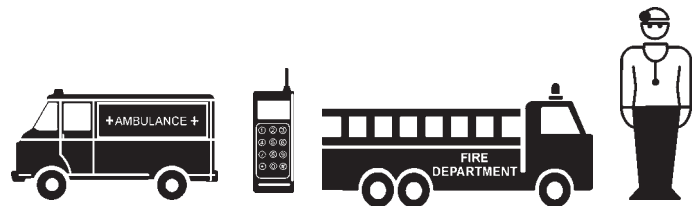


Emergencies

- **ALWAYS** know the location of the nearest ***fire extinguisher.***
- **ALWAYS** know the location of the nearest ***first aid kit.***



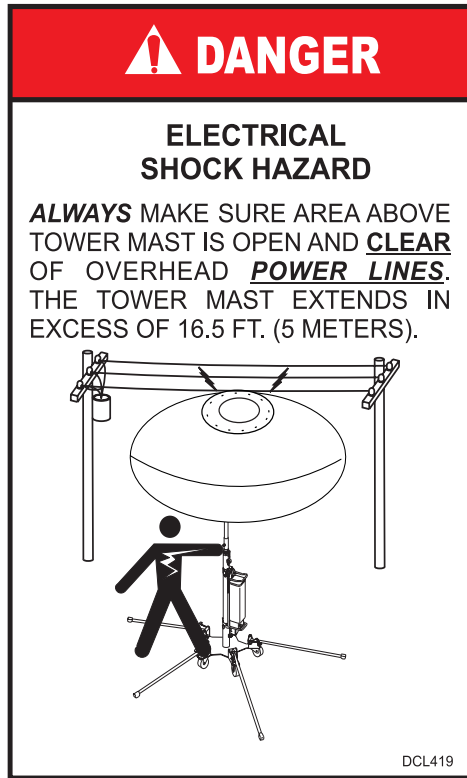
- In emergencies ***always*** know the location of the nearest phone or ***keep a phone on the job site.*** Also know the phone numbers of the nearest ***ambulance, doctor*** and ***fire department.*** This information will be invaluable in case of an emergency.



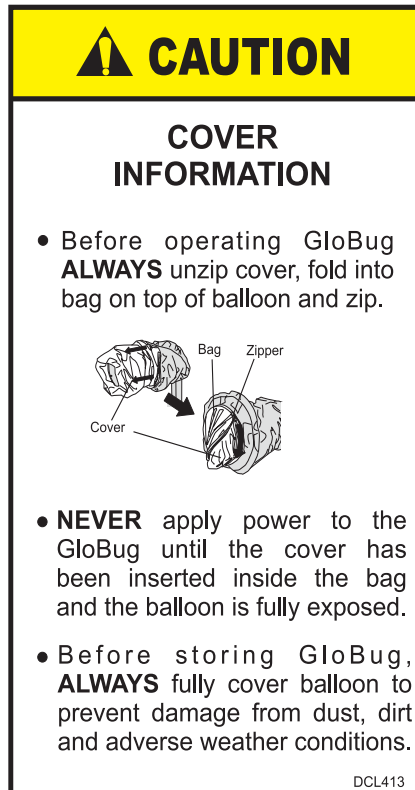
GLOBUG SOLO LIGHTING SYSTEM — OPERATION AND SAFETY DECALS

Machine Safety Decals

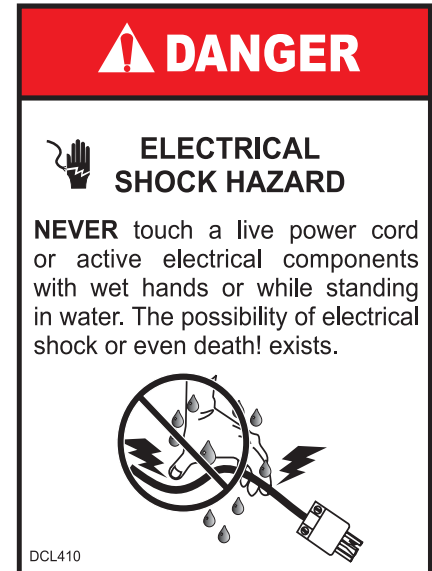
The GloBug Solo is equipped with a number of safety decals, Figures 1A through 1C. These decals are provided for operator safety and maintenance information. The illustrations below and on the next page show these decals as they appear on the machine. Should any of these decals become unreadable, replacements can be obtained from your dealer.



P/N DCL419



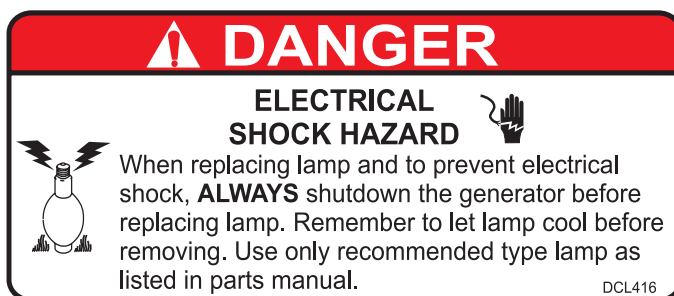
P/N DCL413



P/N DCL410



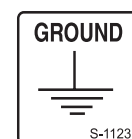
P/N DCL427



P/N DCL416



P/N DCL418



P/N 0800628504

Figure 1A. Operation and Safety Decals

GLOBUG SOLO LIGHTING SYSTEM — OPERATION AND SAFETY DECALS

⚠ DANGER

**GloBug
INFORMATION**

- To prevent tipping, **NEVER** use in winds that exceed 22 mph (10 m/sec).
- **NEVER** use on an incline of 5 degrees or more. The possibility of tipping exists.
- **NEVER** use in rain or wet conditions. The possibility of electrocution exists.
- **ALWAYS** set caster wheels to prevent moving.
- When moving is required, lower mast fully.
- When raising mast, **ALWAYS** deploy outriggers to prevent tipping.
- **ALWAYS** turn **OFF** generator before performing maintenance.

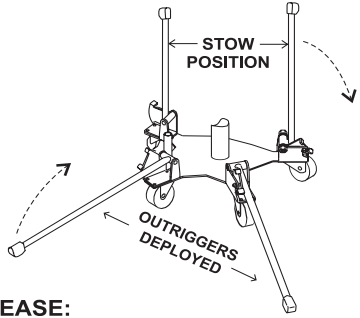
DCL423

P/N DCL423

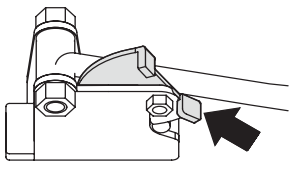
⚠ WARNING

**OUTRIGGER
DEPLOYMENT**

SETTING:
Pull outrigger downward at the tip end until it locks in place.



RELEASE:
To unlock outrigger, push down on the counter-weight lever indicated by arrow. Grab hold of outrigger pull upward and place in stow position.



DCL421

P/N DCL421

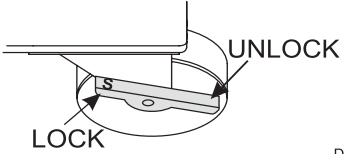
⚠ CAUTION

**CASTER WHEELS
INFORMATION**

To prevent the GloBug from moving, **ALWAYS** lock the three sets of caster wheels.

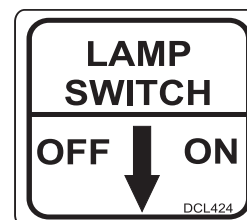
LOCK:
To lock the caster wheel, step on caster lever marked with the letter "S".

UNLOCK:
Step on the opposite end of the caster lever to unlock the wheel.



DCL422

P/N DCL422



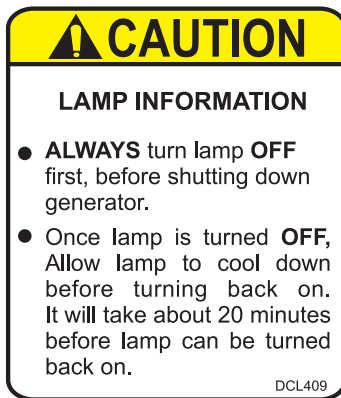
P/N DCL424



P/N DCL429

Figure 1B. Operation and Safety Decals (Continued)

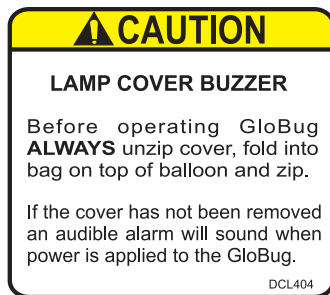
GLOBUG SOLO LIGHTING SYSTEM — OPERATION AND SAFETY DECALS



P/N DCL409



P/N DCL415



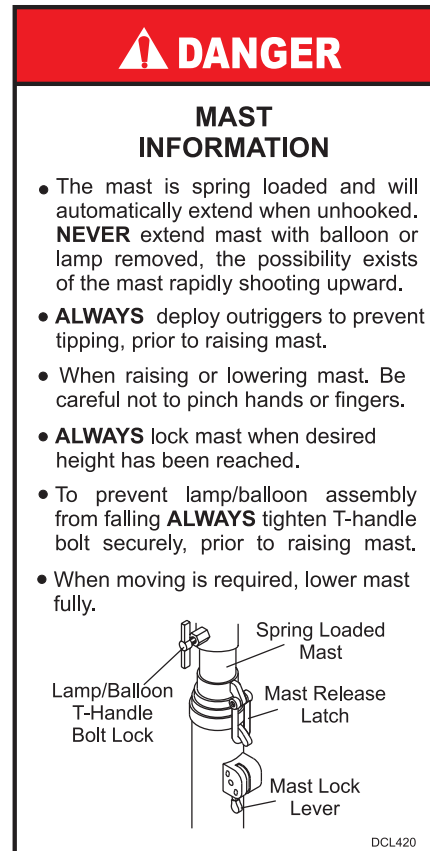
P/N DCL404



CONTACT
MQ PARTS DEPT.



P/N DCL417



P/N DCL420



P/N 35137

Figure 1C. Operation and Safety Decals (Continued)

[illegible]

GLOBUG SOLO LIGHTING SYSTEM — SPECIFICATIONS

Table 1. Specifications

GloBug Solo	
Model	GB114BW
Input Voltage	120 VAC
Frequency	60 Hz Single-Phase
Max. Current	9.5 Amps
Wind Stability with Generator	65 mph (80.46 kph)
Weight	130 lbs. (59 kg)
Lamp	
Lamp Type	(1)1000 Watt Metal Halide
Lumens	112,000
Light Coverage (360°)	150 ft. (45.72 meters)
Surface Temperature (Longitudinal)	476.6°F (247°C) Max.
Surface Temperature (Transversal)	417.2°F (214°C) Max.
Fan Motor	
Balloon Fan Motor	115 VAC, 60 Hz
Max. Current	.360 Amps
Pressure	31.26 PSI (215.6 kPA)
Balloon	
Diameter	3.9 ft. (1.1 meters)
Material	Heat Resistant Nylon
Heat Resisting Temperature	320° ~ 356°F (160° ~ 180°C)
Melting Temperature	500°F (260°C)
Internal Temperature of Balloon	126°F (52°C) Average
Water Resistance	1,500 mm H ₂ O
Mast	
Number of Stages	3 (4 with extension pole)
Maximum Height	16.5 feet (5 meters)
Dimensions	See Figure 2, Table 2

GLOBUG SOLO LIGHTING SYSTEM — DIMENSIONS

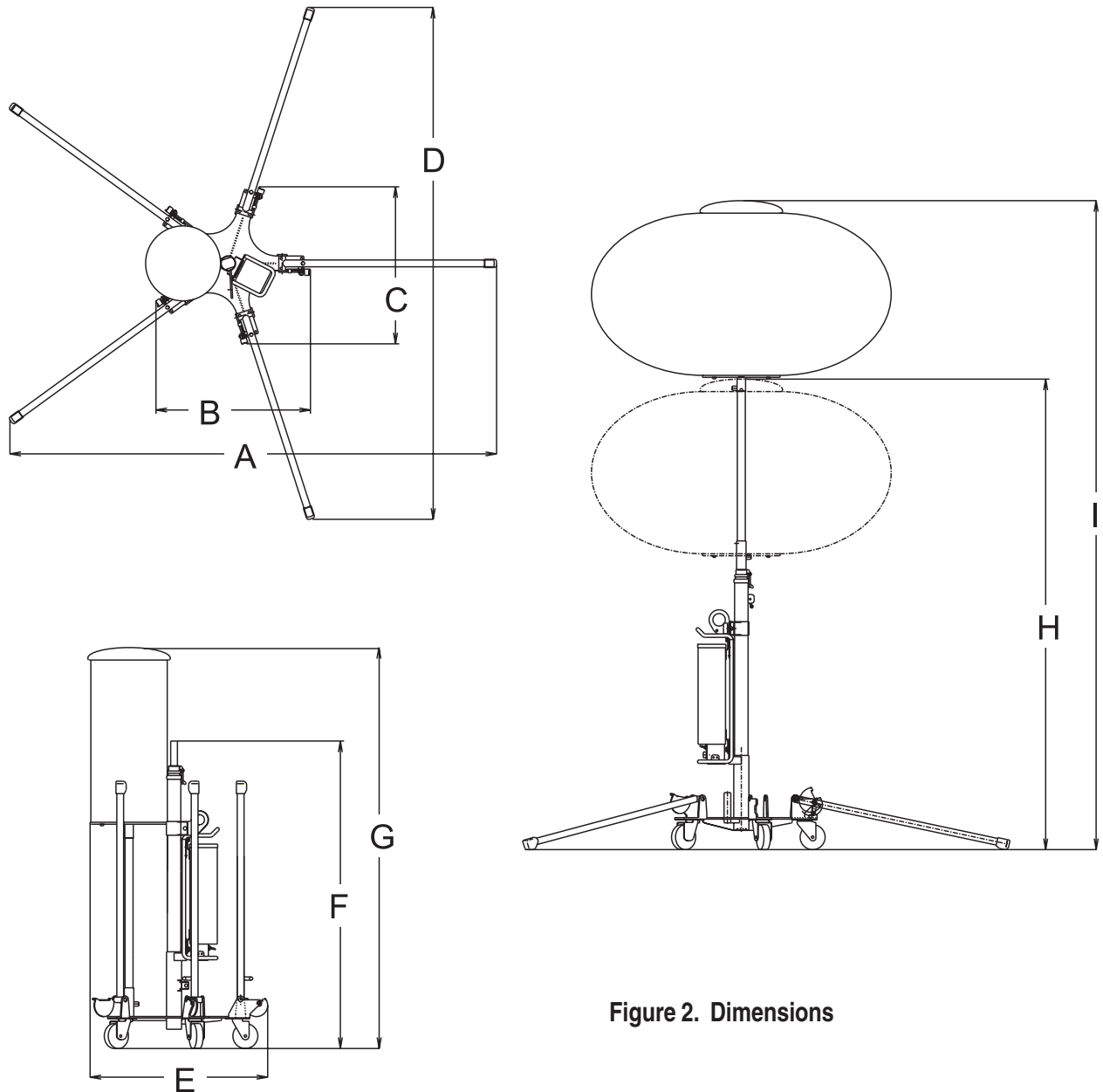


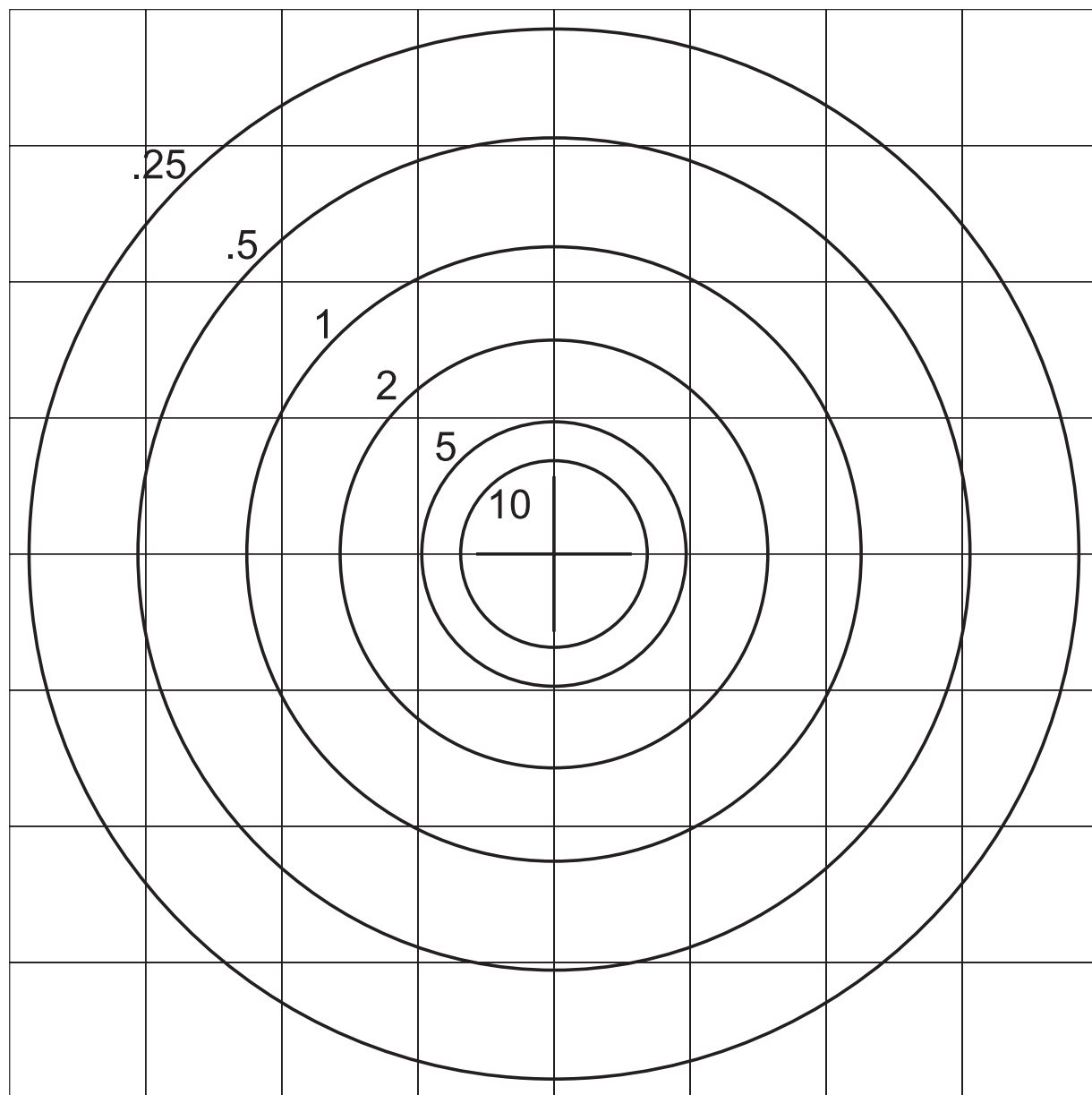
Figure 2. Dimensions

TABLE 2. DIMENSIONS

Reference Letter	Dimension ft. (mm.)	Reference Letter	Dimension ft. (mm.)
A	6.33 ft. (1,929 mm.)	F	4.0 ft. (1,219 mm.)
B	2 ft. (609 mm.)	G	5.25 ft. (1,600 mm.)
C	2 ft. (609 mm.)	H	6.08-10.9 ft. (1,853-3,322 mm.)
D	8.66 ft. (2,640 mm.)	I	8.33-12.75 ft. - (2,539-3886 mm.)
E	2.33 ft. (710 mm.)		

GLOBUG SOLO LIGHTING SYSTEM — FLOODLIGHT FOOTCANDLE PLOT

Based on 360° glare-free coverage.



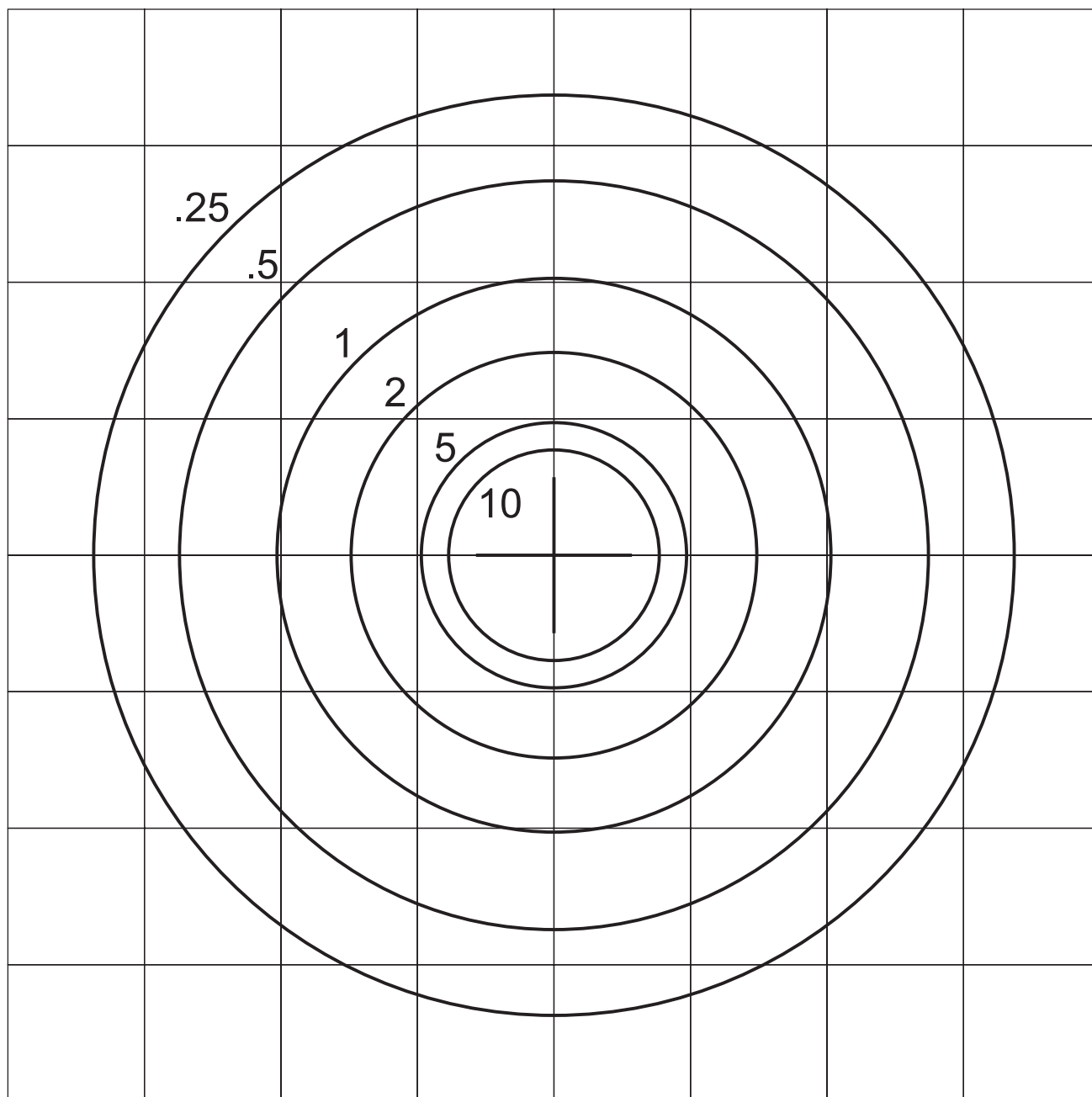
Values listed as footcandles

Scale: .5 IN. = 20 ft.

Figure 3. Floodlight Footcandle Plot (Bal120-Standard)

GLOBUG SOLO LIGHTING SYSTEM — FLOODLIGHT FOOTCANDLE PLOT

Based on 360° glare-free coverage.



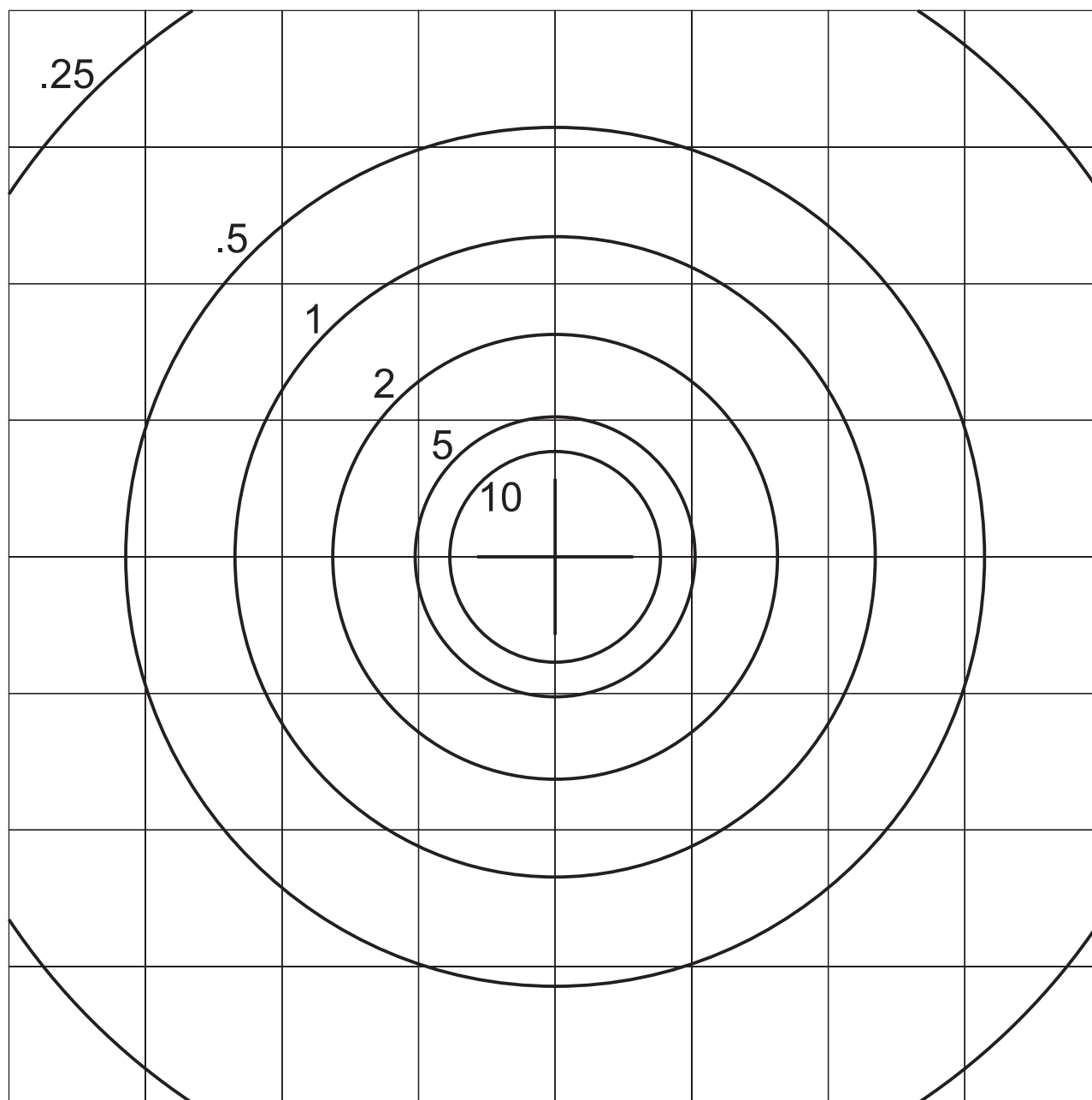
Values listed as footcandles

Scale: .5 IN. = 20 ft.

Figure 4. Floodlight Footcandle Plot (BAL120R-Reflector)

GLOBUG SOLO LIGHTING SYSTEM — FLOODLIGHT FOOTCANDLE PLOT

360 degree coverage



Values listed as footcandles

Scale: .5 IN. = 20 ft.

Figure 5. Floodlight Footcandle Plot (BAL115D-Drum Shaped)

GLOBUG SOLO LIGHTING SYSTEM — GENERAL INFORMATION

The Multiquip GloBug Solo Lighting System is a general purpose floodlight tower intended for emergency and remote lighting conditions. Power requirements for running the GloBug Solo are 120 VAC, 60 Hz @ 9.5 amps. The GloBug Solo can be plugged into a standard 120 VAC wall receptacle.

The lighting system of Multiquip's GloBug Solo is comprised of one "Metal Halide" 1000-watt lamp. This lamp has an output of 112,000 lumens. Typical lighting coverage is in excess 150 ft. (45.72 meters) in a 360 degree pattern.

Located on the side of the mast is a weather-resistant ballast box that contains the ballast for starting the lamp. The lamp is activated by an ON/OFF switch located at the base of the ballast.

For ease of service or transport, the lamp is equipped with a quick-disconnect connector that allows the lamp fixture to be removed quickly. This feature is extremely useful during transport of the GloBug Solo over rough terrain. It is always best to remove the lamp and pack it safely so it will not be damaged.

Balloon Envelopes

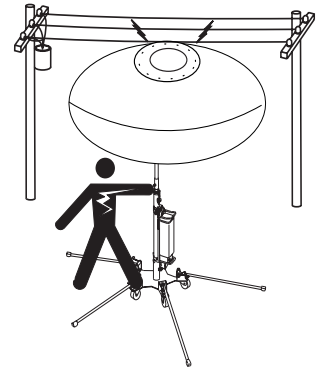
The GloBug Solo can be configured with a variety of balloon envelopes (canopy). Please contact the MQ sales department for the balloon of your choice. The GloBug Solo, Model GB114BW comes with the standard balloon (BAL-120).

The lighting system can be raised vertically in excess of 16.5 feet (5 meters). Outriggers must always be deployed prior to raising the mast.



DANGER - GloBug Solo Overhead Obstructions

ALWAYS make sure the area above GloBug Solo is open and clear of overhead power lines and other obstructions. The tower extends in excess of 16.5 ft. (5 meters). Contact with overhead power lines or other obstructions could result in equipment damage, **Serious Injury or Death!**



Alarm Buzzer

The GloBug Solo is equipped with a "Balloon Alarm" feature. This alarm will sound if the lamp is on and the balloon attempts to make contact with the **hot!** surface of the lamp. This alarm is intended to inform the operator that a potential burn hazard exists between the lamp surface and the balloon material.

Always allow the lamp to cool down before removing the AC power from the GloBug Solo. In the event the balloon begins to deflate during normal operation, immediately place the GloBug Solo's ON/OFF switch in the OFF position.

GLOBUG SOLO LIGHTING SYSTEM — COMPONENTS

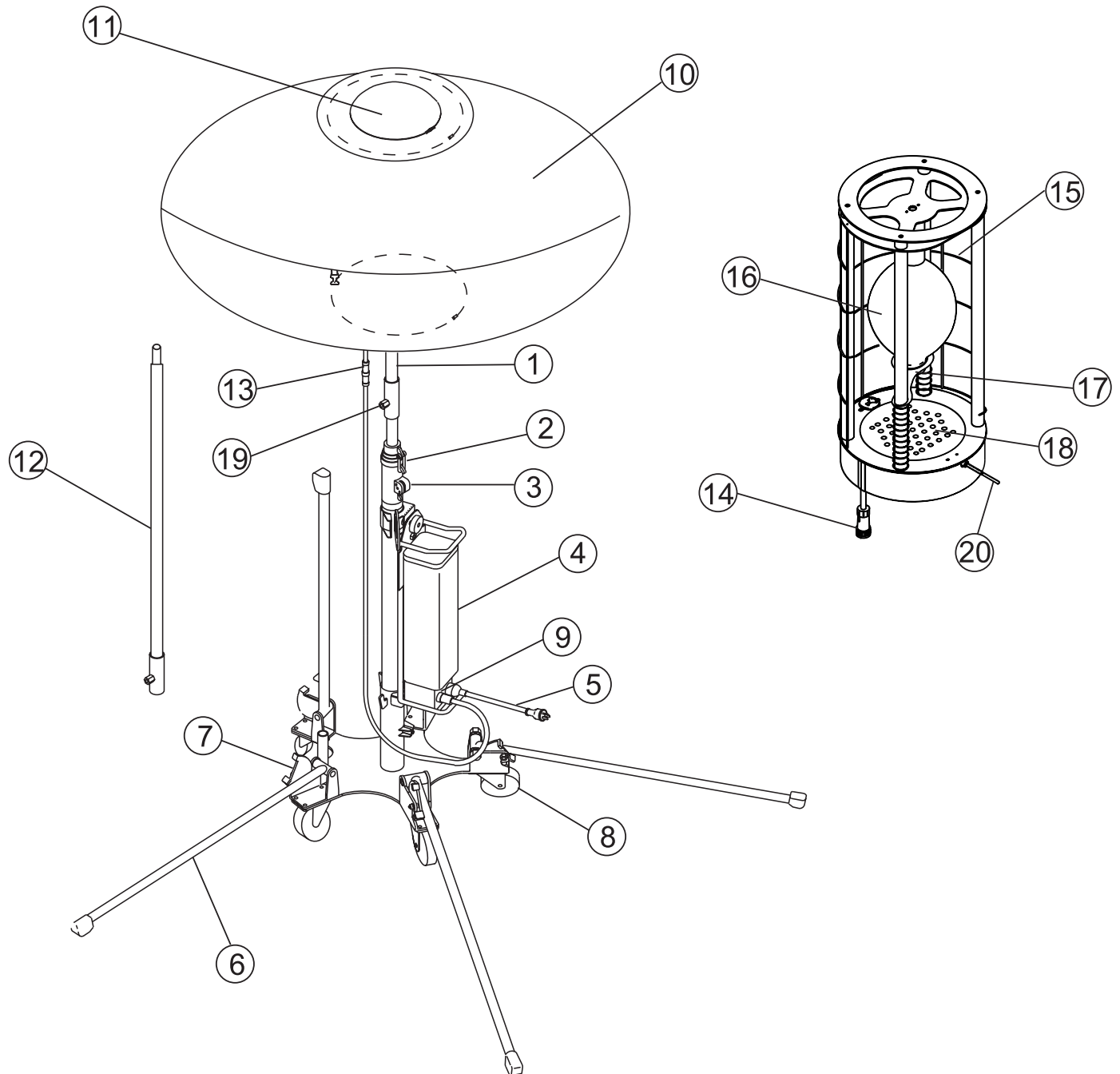


Figure 6. Major Components

GLOBUG SOLO LIGHTING SYSTEM — COMPONENTS

Figure 6 shows the location of the controls and components for the GloBug Solo Lighting System. The function of each control is described below:

1. **Mast** – This mast is comprised of three separate stages (four - with extension pole). The mast can be raised in excess of 16.5 ft. (5 meters). When raising the mast, always be on the lookout for overhead obstructions. Never adjust the mast with the balloon off to prevent mast from shooting up and causing injury.
2. **Mast Release Latch** – Use this latch to raise the mast by pushing down the mast and then releasing the latch. Always be on the lookout for overhead obstructions. Keep immediate area free of bystanders and debris when raising the mast.
3. **Mast Lock Lever** – Use this lock to keep mast in place after the mast height has been adjusted.
4. **Ballast** – Provides the necessary electronics to light the lamp.
5. **AC Power Cable** – Connect this cable to a 120 VAC, 60 Hz power source.
6. **Outriggers** – **ALWAYS** deploy the outriggers when raising the mast.
7. **Counter-Weight Lever** – Locks the outriggers in place when they are deployed.
8. **Wheels** – The GloBug Solo uses 5 caster wheels. To prevent the Globug Solo from moving, always lock 3 caster wheels.
9. **ON/OFF Switch** – Place this switch in the **ON** position to turn on the lamp. To turn off the lamp place in the **OFF** position. Please wait for approximately 10 minutes before attempting to turn the lamp back on.
10. **Balloon** – This balloon is made of heat-resistant nylon, with a diameter of 3.9 ft. (1,150 mm). The balloon shall be inflated to a pressure of 31.26 psi (215.6 kPA).
11. **Balloon Cover** – Covers the balloon when not in use. Allow a sufficient amount of time for the lamp to cool down before covering balloon. Possibility exists of balloon getting burned.
12. **Extension Pole** – extends the height of the mast when needed.
13. **Lamp Power Cable (Ballast)** – Connect this quick-disconnect cable plug (ballast-side) to the balloon lamp power cable plug.
14. **Lamp Power Cable (Balloon)** – Connect this quick-disconnect cable plug (balloon-side) to the ballast lamp power cable plug.
15. **Lamp Guard** – This guard (cage) protects the lamp from being hit by objects.
16. **Lamp** – 1000 watt metal-halide type lamp. Replace only with MQ recommended type lamp. Always allow a sufficient amount of time for the lamp to **cool down** before changing.
17. **Lamp Holder** – Screw lamp into this holder. If lamp becomes difficult to screw into holder or holder is damaged, replace holder.
18. **Fan Motor (Blower)** – This electric motor is responsible for inflating the balloon. It will supply a pressure of 31.26 psi (215.6 kPA). Please note that the balloon will begin to inflate as soon as power is applied to the GloBug Solo. The OFF/ON switch **does not** control the electric fan motor.
19. **T-Handle Bolt Lock** – Always tighten this lock to hold the lamp/balloon securely in place before raising mast.
20. **Balloon Alarm Buzzer** – Will sound during normal operation if the balloon attempts to make contact with the lamp's **hot!** surface. If this condition occurs, immediately place the GloBug Solo's ON/OFF switch in the OFF position.

GLOBUG SOLO LIGHTING SYSTEM — PRE-SETUP

CAUTION - READ MANUAL

Please read this entire manual carefully before attempting to operate the GloBug Solo. Failure to read this manual could cause damage to the GloBug Solo and serious injury to the operator.



GloBug Solo Setup

1. Place the GloBug Solo on a ***firm level surface*** so that it will not slide or turn over. Make sure there is enough space around the GloBug Solo for the outriggers to be deployed.
2. Lock the three caster wheels (two wheels have no locks) by stepping on the red end (S) of the caster lever (Figure 7).

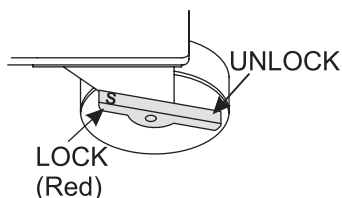


Figure 7. Locking Caster Wheels

3. Pull outriggers downward at the ends until they lock in place in the ground (Figure 8).

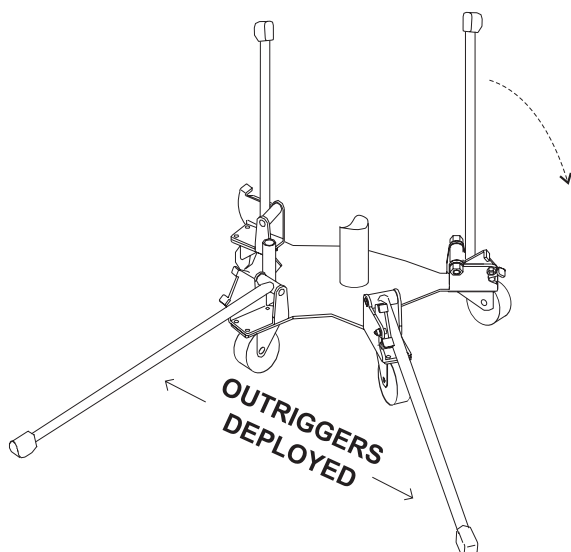


Figure 8. Outriggers (Deployed Position)

4. Expose the balloon by pulling down on the velcro tabs and unzipping the protective cover as shown in Figure 9. Next, fold the protective cover into itself and zip.

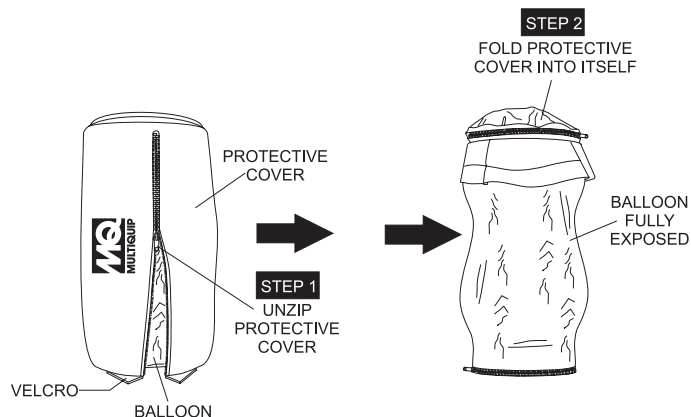


Figure 9. Exposing the Balloon.

5. Before raising the mast, make sure the T-Handle Bolt Lock (Figure 10) is securely tightened. This will prevent the balloon/lamp assembly from falling off. In addition make sure that the lamp power cable (balloon) is connected to the lamp power cable (ballast).
6. Push down the mast and unhook the Mast Release Latch (Figure 10). Extend the mast to the desired height.

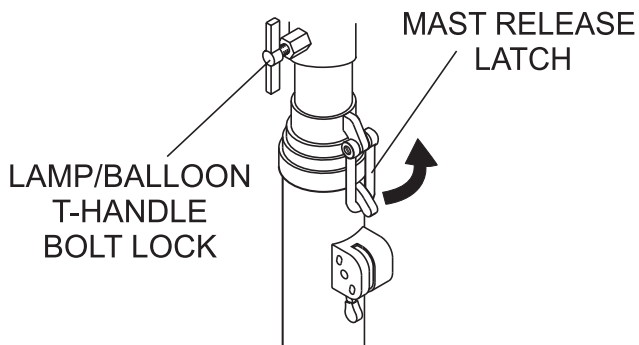


Figure 10. T-Handle Bolt Lock and Mast Release Latch

! DANGER SPRING LOADED MAST

The mast is spring loaded and will automatically extend when unhooked. **NEVER** extend the mast with balloon or lamp removed. The possibility exists of the mast rapidly shooting upward.

GLOBUG SOLO LIGHTING SYSTEM — PRE-SETUP

CAUTION - MAST PINCH POINT

When raising or lowering the mast, keep hands and fingers clear of the various mast sections. This will prevent hands and fingers from getting pinched (Figure 11).

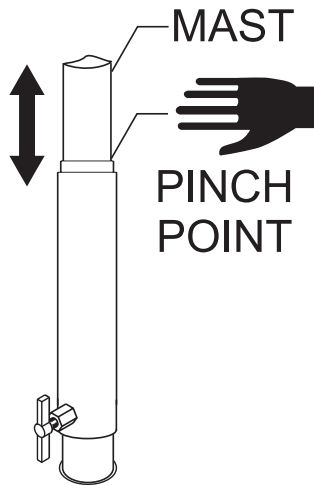


Figure 11. Pinch Point

7. When the desired height is achieved, lock the mast in place with the Mast Lock Lever (Figure 12).

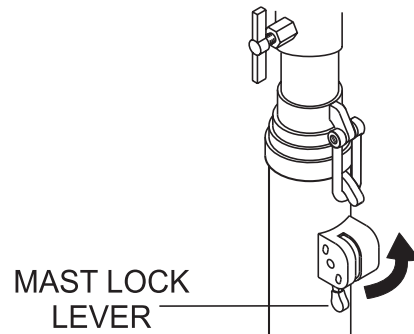


Figure 12. Mast Lock Lever

DANGER SPRING LOADED MAST

NEVER lock the Mast Lock Lever with balloon or lamp removed. The possibility exists of the mast rapidly shooting upward.

NEVER release the latch with balloon or lamp removed. Make sure latch is hooked before balloon or lamp is removed.

GLOBUG SOLO LIGHTING SYSTEM — OPERATION

DANGER - HIGH VOLTAGE POWER LINES

When raising mast, **ALWAYS** be on the lookout for overhead obstructions such as high voltage power lines. The possibility exists of electrocution, even death! if the GloBug Solo comes in contact with **high voltage power lines**.



Applying Power

1. Make sure the power ON/OFF switch (Figure 13) located near the bottom of the ballast is in the **OFF** position.

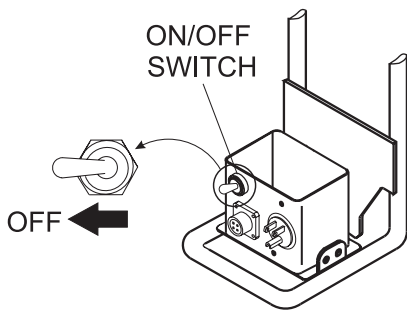


Figure 13. Power OFF/ON Switch (OFF Position)

2. The GloBug Solo has a power requirement of 120 VAC, 60 Hz @ 9.5 amps. Connect the GloBug Solo's AC power cord to a 120 VAC power receptacle (Figure 14).

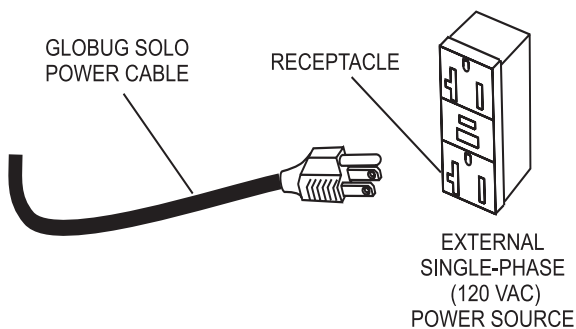


Figure 14. 120 VAC Receptacle

4. Notice that the balloon envelope will begin to deploy as soon as power is applied. This function **is not** controlled by the power ON/OFF switch.
5. Wait until the balloon is fully deployed before attempting to turn on the lamp. The possibility exists of the balloon getting burned (touching the lamp).
6. If the balloon is fully deployed, place the GloBug Solo's ON/OFF switch in the **ON** position (Figure 15).

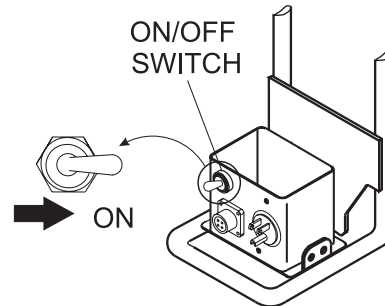


Figure 15. Power OFF/ON Switch (ON Position)

7. The lamp should now be on. If the lamp is not on, check all connections and repeat steps 1 through 6. If the lamp still does not come on, contact the MQ service department.

Shutdown

1. Place the power ON/OFF switch (Figure 16) in the **OFF** position.

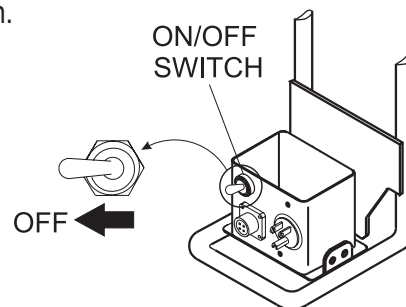


Figure 16. Power OFF/ON Switch (OFF Position)

CAUTION - LAMP COOL DOWN

Allow a sufficient amount of time (15-20 minutes) for the lamp (Figure 17) to **cool down** before disconnecting power cable from power receptacle. The possibility exists of the balloon getting burned (touching the lamp).

2. Disconnect the GloBug Solo's AC power cable from the power receptacle. The balloon should begin to deflate.

GLOBUG SOLO LIGHTING SYSTEM — SHUTDOWN

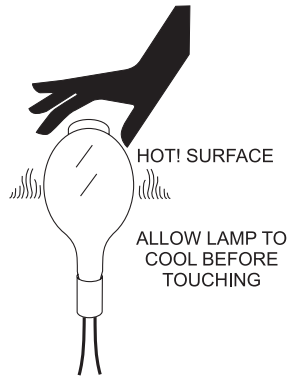


Figure 17. Hot Lamp Surface

3. Push down the mast and unhook the Mast Release Latch (Figure 10). **Fully lower** the mast. Extend the mast to the desired height.
4. When the mast is fully lowered, lock the mast in place with the Mast Lock Lever (Figure 12).
6. Unzip the protective cover as shown in Figure 18, and place cover over balloon/lamp assembly. Fully zip protective cover and fold velcro tabs in place.

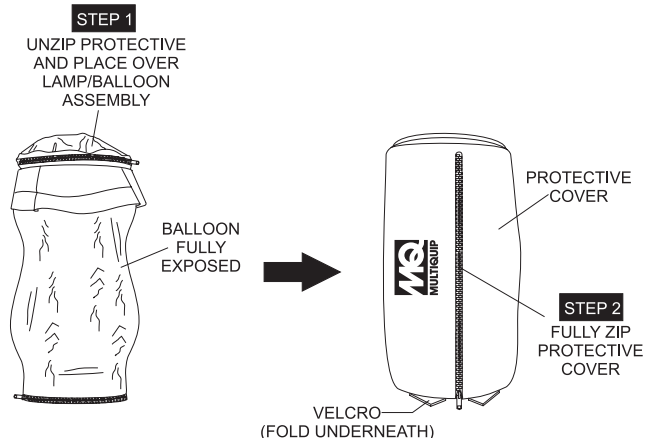


Figure 18. Covering the Lamp/Balloon Assembly

7. To unlock outriggers, push downward on the counterweight lever indicated by arrow (Figure 19). Grab hold of outrigger, pull upward, and place in stow position (Figure 20).

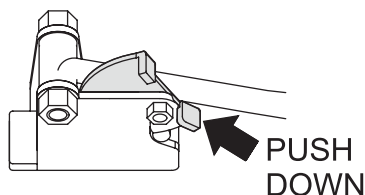


Figure 19. Outriggers (Released)

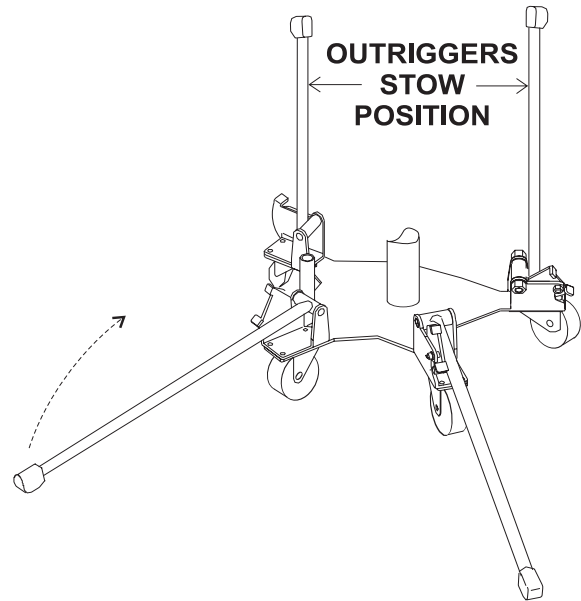


Figure 20. Outriggers (Stow Position)

7. Wrap the AC power cable and lamp power cable around the ballast frame.
8. Step on the blue end of the caster lever (Figure 21) on the three caster wheels to unlock them. The GloBug Solo can now be moved.

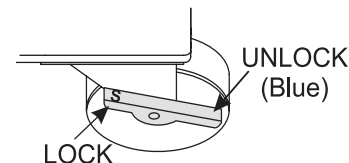


Figure 21. Unlocking Caster Wheels

Storage

1. Wipe and dirt or foreign matter that may have accumulated on the GloBug Solo during operation. Use a mild detergent to clean the unit. **DO NOT** spray with water.
2. Avoid storing the GloBug Solo in areas that can be exposed to rain, harsh elements, and high humidity.
3. Place the GloBug Solo in a clean dry location away from dirt and debris.

GLOBUG SOLO LIGHTING SYSTEM — MAINTENANCE

CAUTION - READ SAFETY GUIDELINES

Before performing any maintenance procedures, be sure to **READ** the lamp, balloon, and general safety guidelines in this manual. Failure to **read** and **understand** these safety guidelines could cause severe equipment damage and bodily harm.



CAUTION - BALLOON ZIPPER SAFETY

DO NOT use excessive force when zipping or unzipping the balloon. The possibility exists of the zipper tearing, which would make the balloon unusable.



Removing the Lamp/Balloon Assembly

1. Loosen the T-Handle Bolt Lock (Figure 22) that secures the lamp to the mast.

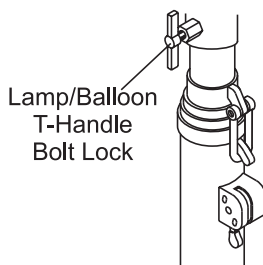


Figure 22. Loosening the Balloon/Lamp

3. Disconnect the lamp power cable (Figure 6) and slide the balloon/lamp forward from the mast adapter stand. Place lamp/balloon assembly on a suitable work bench that is free of dirt, and sharp objects that could damage the balloon.

Removing the Lamp

1. Expose the balloon (Figure 23) by pulling down on the velcro tabs and unzip the protective cover as shown in Figure 19. Next, fold the protective cover into itself and zip.

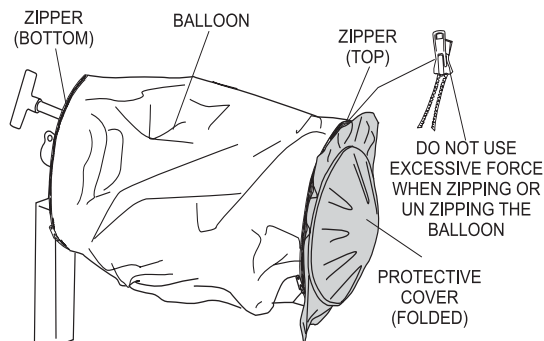


Figure 23. Exposing the Balloon

2. Unzip the zipper (Figure 23) at the bottom of the balloon and roll the balloon envelope upwards to expose the lamp (Figure 24). Remove the lamp guard to gain access to the lamp. **DO NOT** use excessive force when unzipping the balloon.

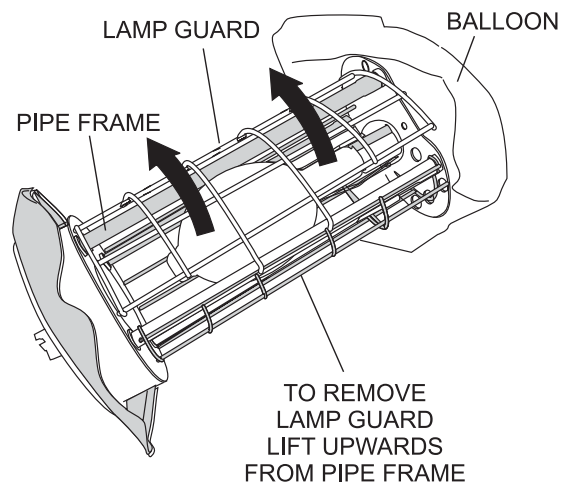


Figure 24. Removing the Lamp Guard

3. Push down and hold the lamp holder (spring loaded) away from the lamp (Figure 25). Unscrew the lamp (turn counterclockwise) from the lamp socket.

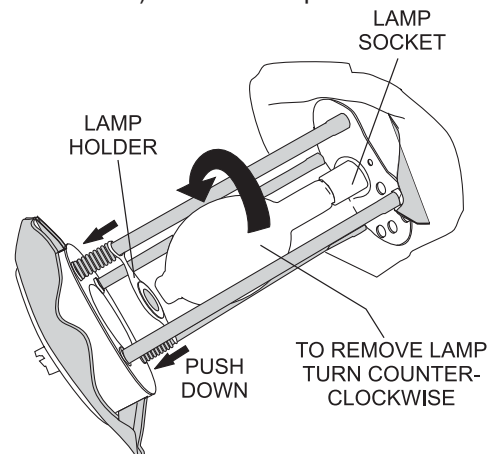


Figure 25. Removing the Lamp

GLOBUG SOLO LIGHTING SYSTEM — MAINTENANCE

Installing a New Lamp

1. When installing a new lamp (Figure 26) use only MQ recommended type lamp. See parts section of this manual. Failure to use correct type lamp could adversely affect lighting capability and may cause damage to the equipment.
2. Push down and hold the lamp holder (spring loaded) away from the lamp. Screw the lamp (turn clockwise) into the lamp socket. Gently place the lamp holder firmly over the top of the lamp. This will prevent the lamp from touching the lamp guard or pipe frame.

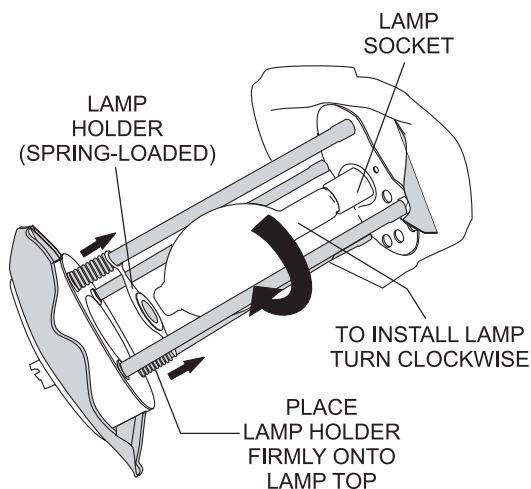


Figure 26. Installing the Lamp

Re-Installing the Lamp/Balloon Assembly

1. Reinstall the lamp guard (Figure 27). Be careful not to install the lamp guard in the wrong direction.

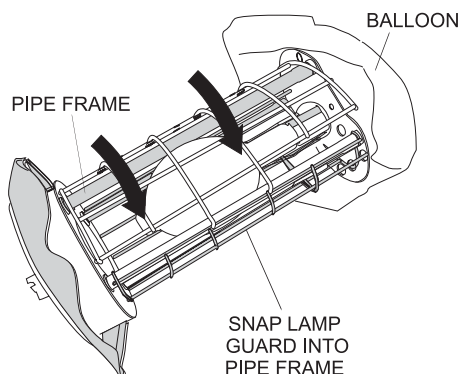


Figure 27. Installing the Lamp Guard

2. Zip up the zipper at the bottom (Figure 24) of the balloon and pull down the balloon envelope to cover the lamp.
3. Place the lamp/balloon assembly back onto the mast.
4. Tighten the T-Handle Bolt Lock to secure the lamp to the mast.
5. Reinstall the protective cover over the balloon/lamp assembly. Be sure to fold the velcro tabs.
6. Reconnect the power cables.

Replacing the Balloon

1. Follow the procedures as outlined in the "Removing the Balloon Lamp" assembly section.
2. Unzip the zipper at the bottom and top of the balloon. Slide the balloon over the top of the lamp guard as shown in Figure 28.

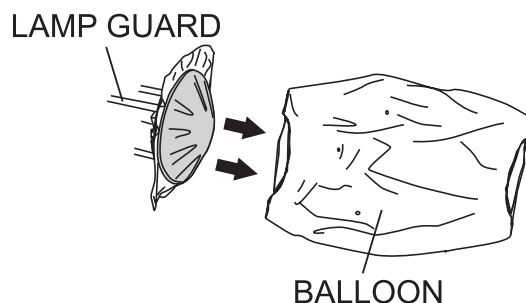


Figure 28. Removing the Balloon

3. Slide the new balloon over the top of the lamp guard as shown in Figure 29. Zip up the zipper at the bottom and top of the balloon.

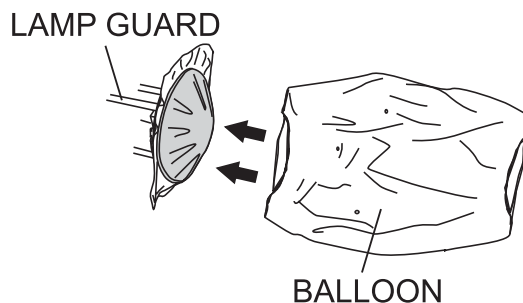


Figure 29. Removing the Balloon

GLOBUG SOLO LIGHTING SYSTEM — MAINTENANCE

Ballast Box Removal

! WARNING - HOT SURFACE (BALLAST)

Dangerous conditions exist inside the ballast compartment. Please use extreme caution when performing maintenance on the ballast box. **NEVER** touch the ballast or ballast cover while the lamp is on. These components generate an extreme amount of heat, which makes their surfaces very **hot!** **ALWAYS** allow the ballast box and cover surface to cool down before servicing.



! DANGER - HIGH VOLTAGE (BALLAST)

The electronic components of the ballast generate high voltage conditions. These conditions can be **lethal and cause bodily harm, even death**. When performing maintenance or troubleshooting, have only experience personnel work on the ballast.



2. Disconnect the AC power cable and Lamp Power Cable from the ballast (Figure 31).

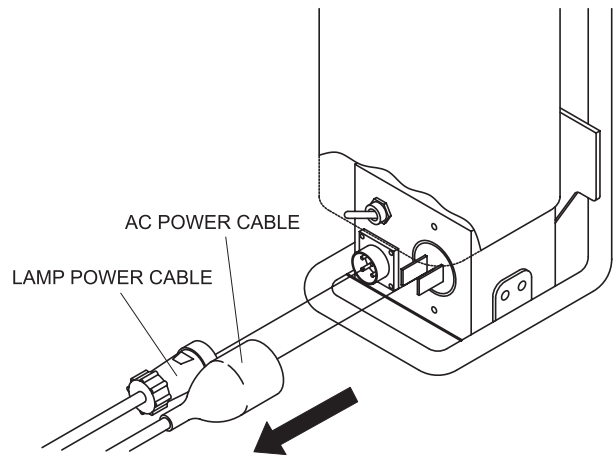


Figure 31. Cable Disconnection

1. Remove cable clamp from the hook located under the balloon (Figure 30).

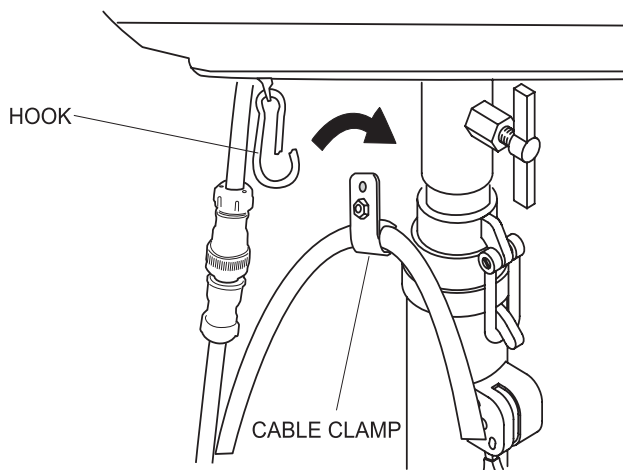


Figure 30. Cable Clamp

3. Unscrew and remove the knob bolt that attaches the ballast to the mast (Figure 32).
4. Unhook the bottom of the ballast from the slot on the mast and detach the ballast from the mast.

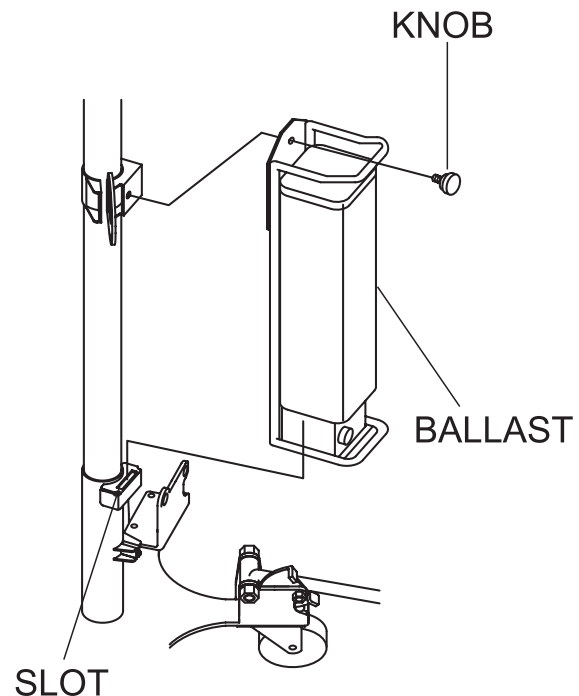


Figure 32. Ballast Removal

GLOBUG SOLO LIGHTING SYSTEM — MAINTENANCE

Filter Replacement

WARNING - HOT SURFACE (LAMP FRAME)

DO NOT replace filter immediately, allow a sufficient amount of time for the lamp assembly to cool down before changing filter.



1. Remove the balloon as described in the "Removing the Lamp/Balloon" section.
2. Disconnect the lamp power cable (Figure 6).
3. Rotate the balloon/lamp base assembly so that the filter is facing upwards. See Figure 30.

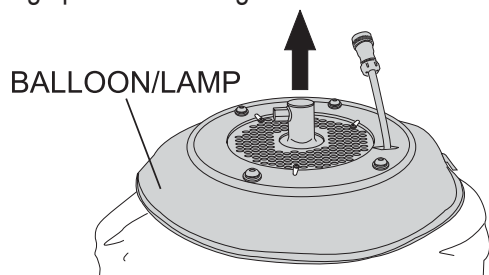


Figure 30. Balloon/Lamp Placement

4. Turn the three locking tabs (Figure 31) inward to release the plate. Remove plate and filter.

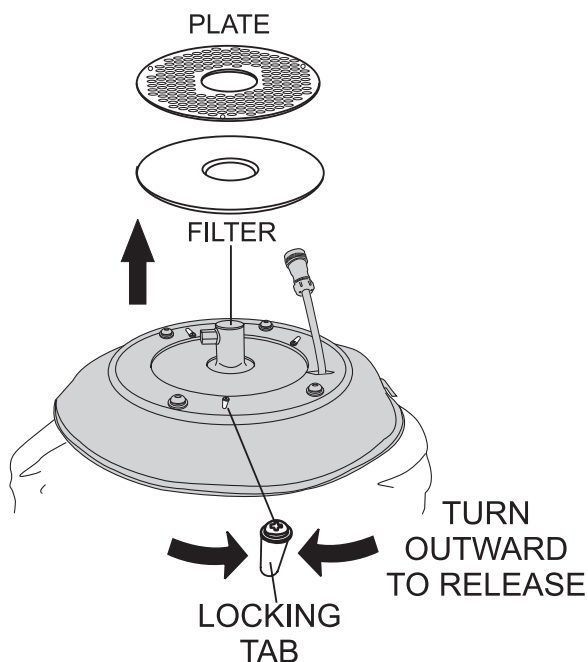


Figure 31. Filter Removal

5. Install a new filter over the brace as shown in Figure 32. Be sure to align the **cut of the filter** over the brace.

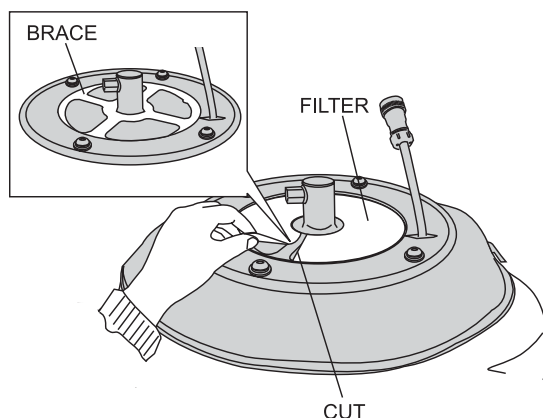


Figure 32. Filter Placement

CAUTION - FILTER ALIGNMENT

When placing the filter element, always align the cut of the filter on top of the brace. This will keep the filter from being dislodged and getting damaged.

6. Turn the three retaining tabs (Figure 33) outward so that they touch the lamp base.

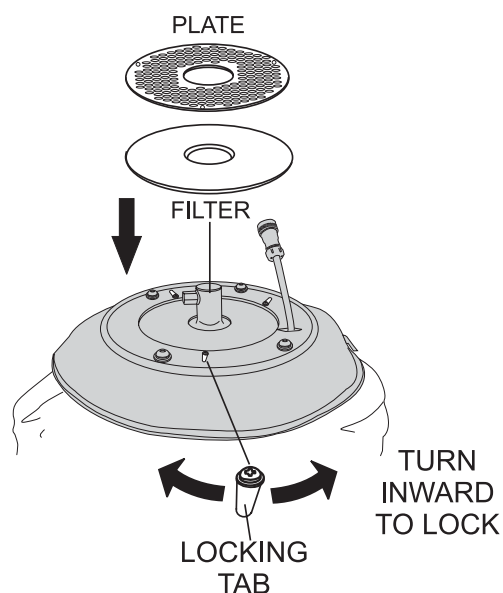
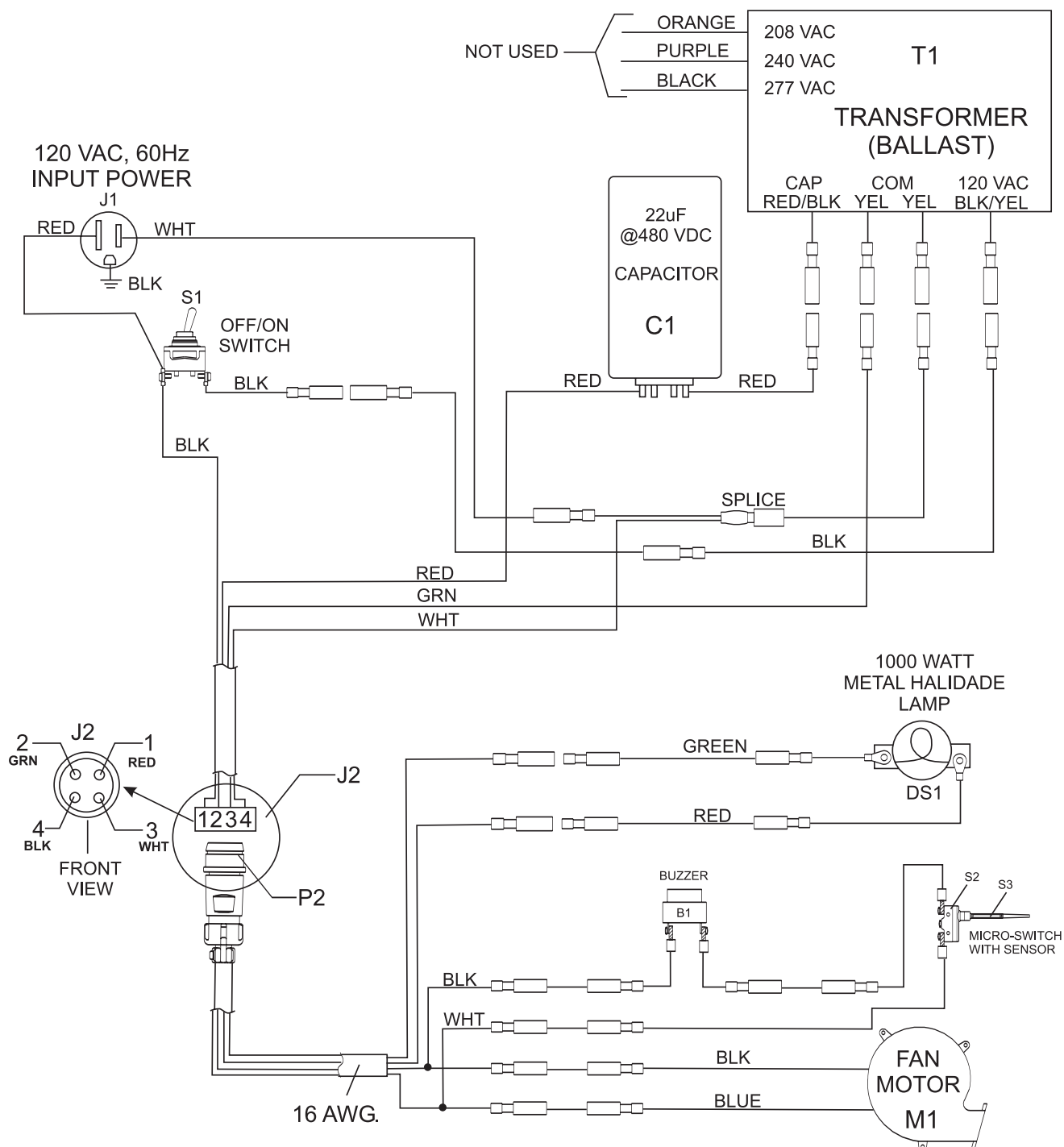


Figure 33. Filter/Plate Install

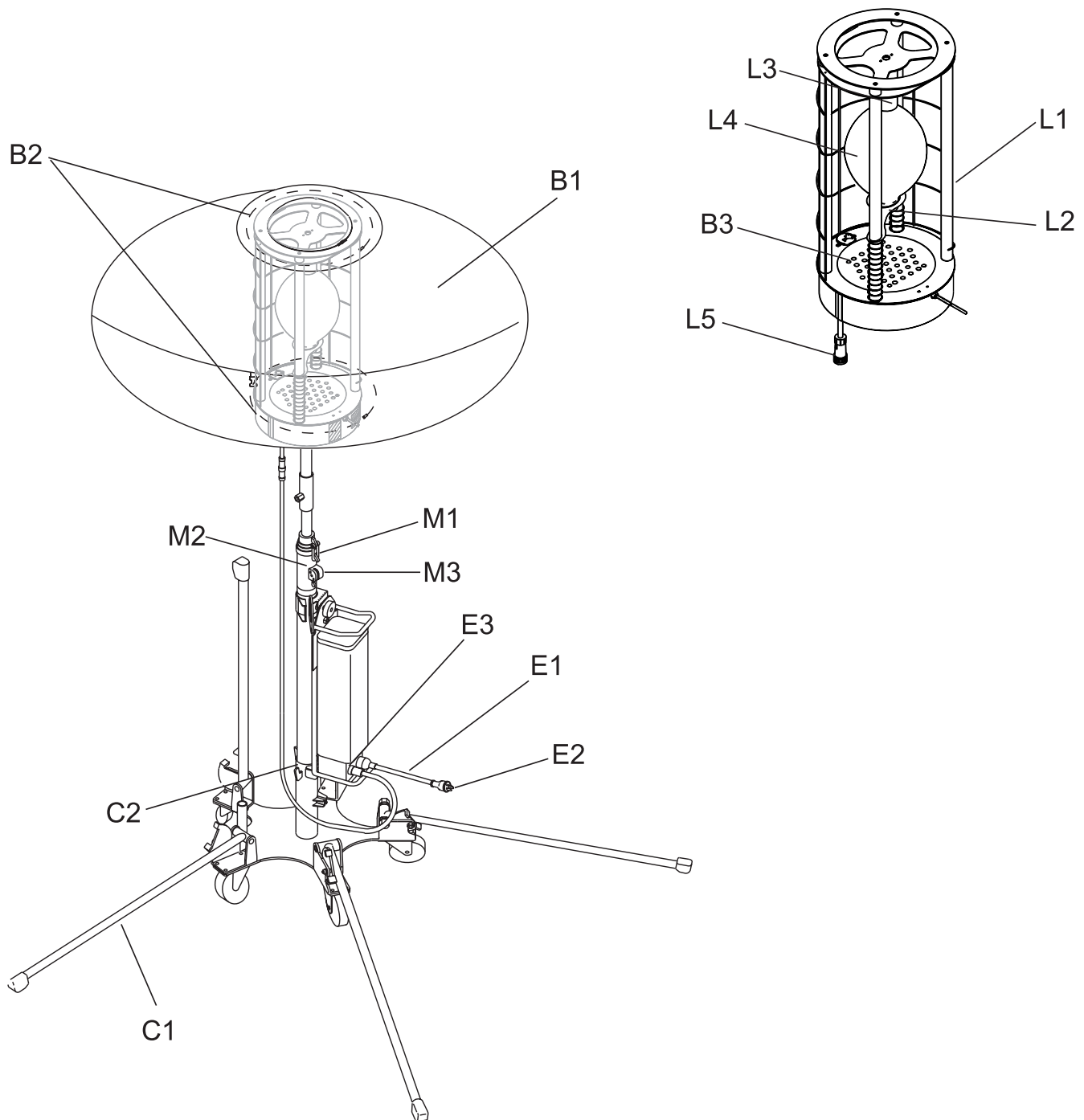
GLOBUG SOLO LIGHTING SYSTEM — MAINTENANCE (WIRING DIAGRAM)



REFERENCE DESIGNATIONS					
REF. DESC.	DESCRIPTION	PART NUMBER	REF. DESC.	DESCRIPTION	PART NUMBER
J1	Power Receptacle Assy.	A400035800	M1	Fan Motor Assy.	A300033500
J2	Lamp Fan Cable Assy. (Input)	2203501310	B1	Buzzer Alarm Balloon	E000010500
P2	Lamp Fan Cable Assy. (Output)	2203500110	S1	Micro-Switch	1406000610
DS1	1000 Watt Metal Halide Lamp	E000009800	S2	Micro-Switch	Z15GNJ55B
C1	22 uf Capacitor @ 480 VDC	A300033800	S3	Sensor Balloon	1400150210
T1	Ballast (Transformer)	A300033800			

[illegible]

GLOBUG SOLO LIGHTING SYSTEM — MAINTENANCE



GLOBUG SOLO LIGHTING SYSTEM — MAINTENANCE

For a prolonged life cycle an extended quality follow the recommended GloBug Solo service guidelines as referenced in Table 3.

TABLE 3. PERIODIC CHECK AND MAINTENANCE

FIGURE		PART	CHECK ITEM	SOLUTION	
Lamp	L1	Frame Pipe	Frame pipe skewed?	Replace.	❖
	L2	Lamp Holder	Lamp holder loose?	Tighten or replace.	❖
	L3	Lamp (Base)	Lamp base loose?	Screw in securely.	❖
	L4	Lamp	Defective lamp?	Replace.	❖
	L5	Cable/Connector	Cable disconnected or loose?	Connect securely.	■
Balloon	B1	Balloon (Envelope)	Defective or dirty?	Replace.	❖
	B2	Zipper	Broken?	Replace.	❖
	B3	Fan Motor (Blower)	Not working properly?	Repair or replace.	❖
Mast	M1	Mast Release Latch	Bolt loose?	Tighten securely.	■
	M2	Mast Pole	Damaged?	Replace.	❖
	M3	Mast Lock Lever	Not working properly?	Repair.	▲
Caster	C1	Outrigger	Not moving smoothly?	Spray grease.	●
	C2	Pole Socket	Not securely clamped?	Clamp securely.	❖
Electric	E1	Power Cable	Defective or worn cable?	Replace.	❖
	E2	Plug	Damaged?	Replace.	❖
	E3	Lamp Switch	Not working properly?	Replace.	❖
❖ - Daily Check ■ - Every 20 Hours ● - Every 100 hours ▲ - Every 500 hours					

GLOBUG SOLO LIGHTING SYSTEM —TROUBLESHOOTING (LAMPS)

Practically all breakdowns can be prevented by proper handling and maintenance inspections, but in the event of a breakdown, please take a remedial action following the diagnosis based on the Lamp Troubleshooting (Table 4) information shown below.

If the problem cannot be remedied, please leave the unit just as it is and consult or company's service department.

TABLE 4. LAMP TROUBLESHOOTING

SYMPTOM	POSSIBLE PROBLEM	SOLUTION
Lamp does not light.	Is plug disconnected?	Plug in correctly.
	Is lamp power switched off?	Turn on switch.
	Is lamp loose?	Screw lamp securely into socket.
	Is contactor disconnected or loose?	Connect disconnected contactor.
	Are any other electric appliances (other than light tower) plugged into power source?	Unplug all other appliances.
	Is model of lamp incompatible?	Use genuine MQ lamp.
	Is lamp not cool enough to light again? (Interval of 20 to 30 minutes is required before turning on lamp again)	Wait for lamp to cool down.
Lamp only lights for a short time.	Is ambient temperature too high (more than 104 °F (40 °C)?	Move lamp where there is proper ventilation.
Balloon does not inflate.	Is fan motor (blower) not working properly?	Check or repair fan motor (blower).
	Is balloon envelope defective?	Repair or replace balloon envelope.

GLOBUG SOLO LIGHTING SYSTEM —TROUBLESHOOTING (MAST)

Practically all breakdowns can be prevented by proper handling and maintenance inspections, but in the event of a breakdown, please take a remedial action following the diagnosis based on the Mast Troubleshooting (Table 5) information shown below.

If the problem cannot be remedied, please leave the unit just as it is and consult or company's service department.

TABLE 5. MAST TROUBLESHOOTING

SYMPTOM	POSSIBLE PROBLEM	SOLUTION
Mast cannot be raised.	Is Mast Lock Lever locked?	Release Mast Lock Lever.
The mast cannot be lowered.	Is Mast Lock Lever locked?	Release Mast Lock Lever.

EXPLANATION OF CODE IN REMARKS COLUMN

How to read the marks and remarks used in this parts book.

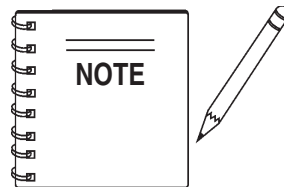
Items Found In the “Remarks” Column

Serial Numbers-Where indicated, this indicates a serial number range (inclusive) where a particular part is used.

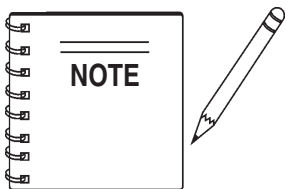
Model Number-Where indicated, this shows that the corresponding part is utilized only with this specific model number or model number variant.

Items Found In the “Items Number” Column

All parts with same symbol in the number column, *, #, +, %, or >, belong to the same assembly or kit.



If more than one of the same reference number is listed, the last one listed indicates newest (or latest) part available.



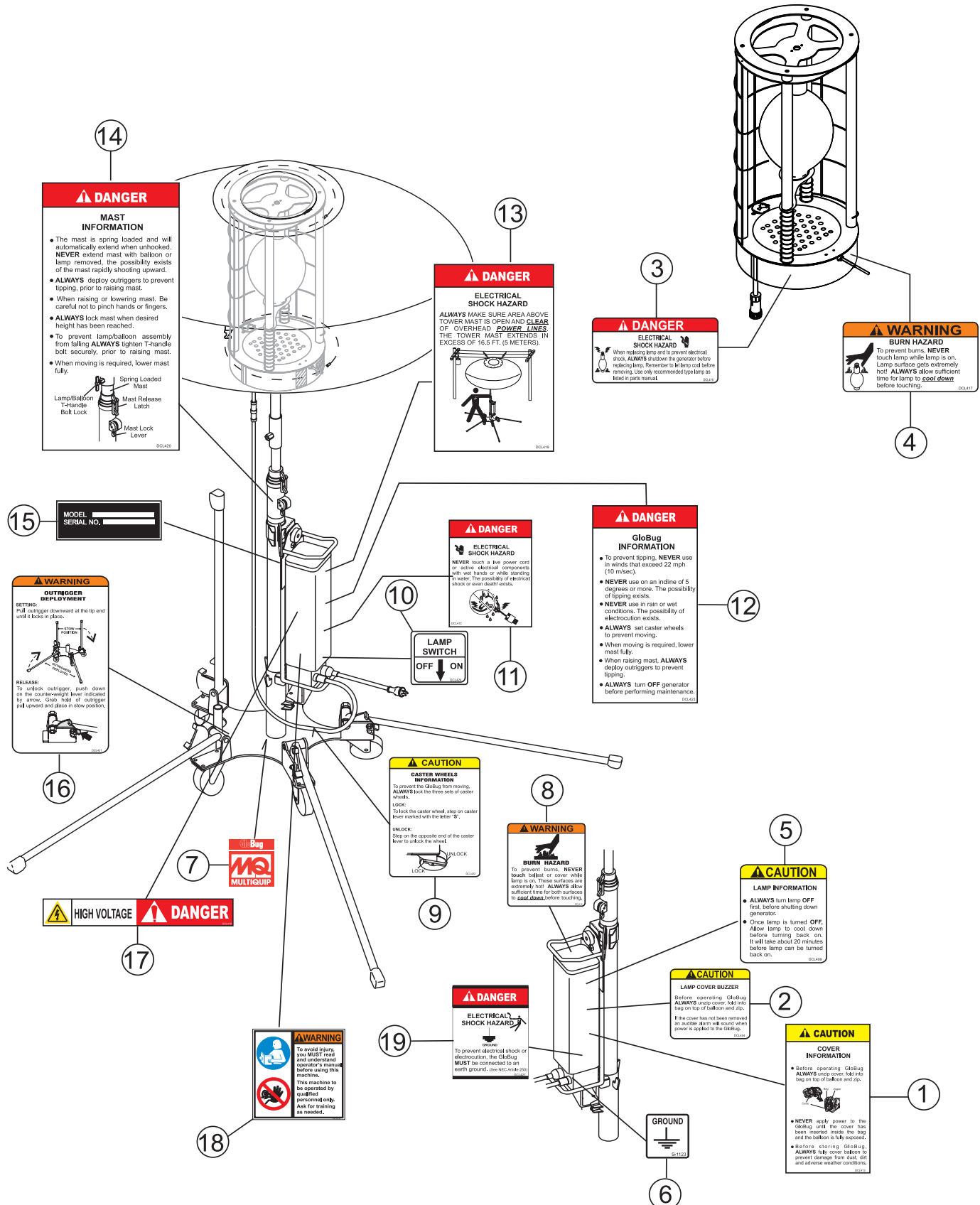
The contents of this parts catalog are subject to change without notice.

GLOBUG SOLO LIGHTING SYSTEM — SPARE PARTS

GloBug Solo LIGHTING SYSTEM **1 TO 3 UNITS**

<u>Qty.</u>	<u>P/N</u>	<u>Description</u>
2	E000009800	BULB
2	A300033800	BALLAST/TRANSFORMER
2	A300038400	24 μ F CAPACITOR, @480 VDC
2	1800001200	BALLOON CLOTH

GLOBUG SOLO LIGHTING SYSTEM — NAMEPLATE AND DECALS



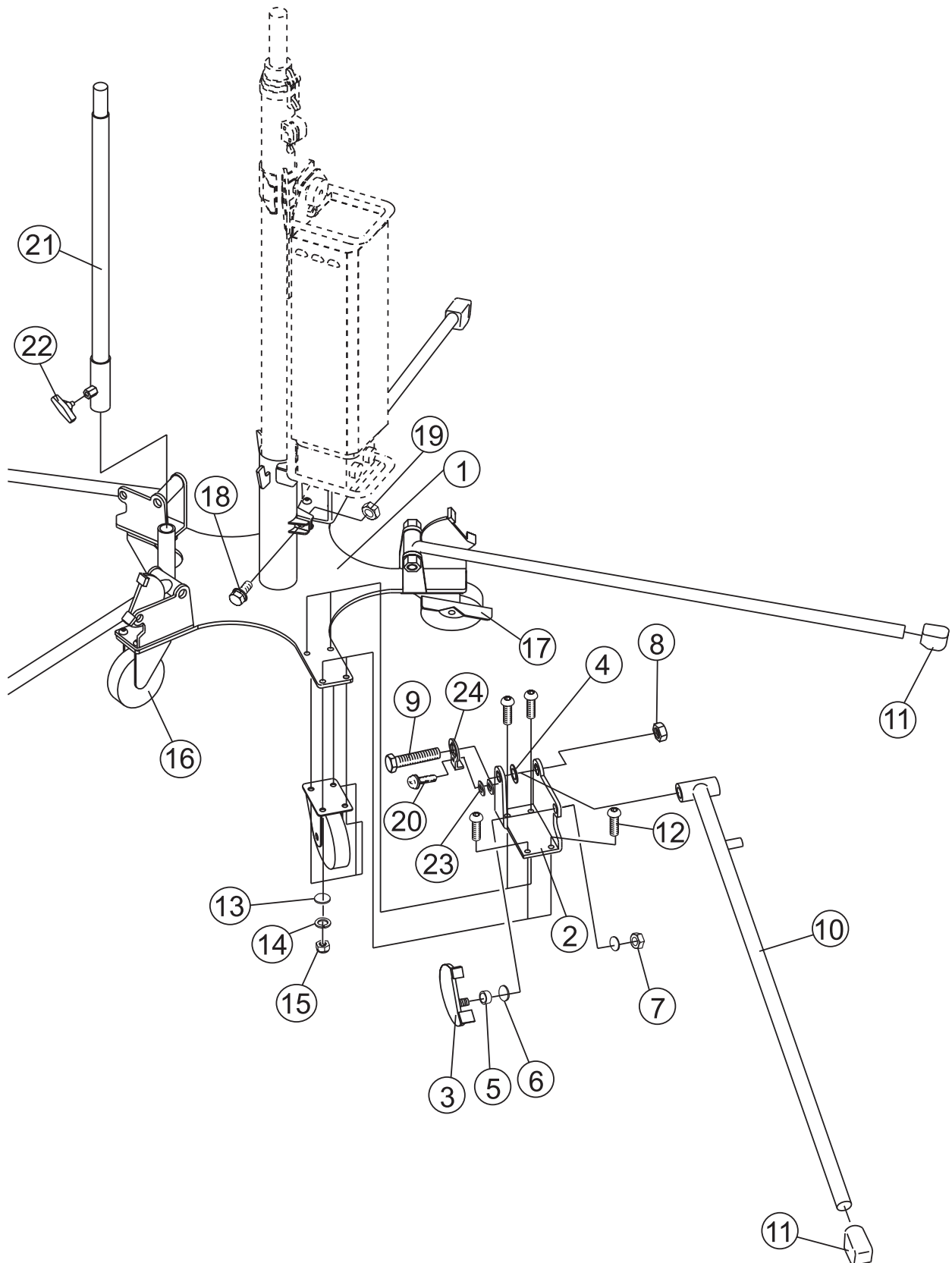
GLOBUG SOLO LIGHTING SYSTEM — NAMEPLATE AND DECALS

NAMEPLATE AND DECALS.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	DCL413	DECAL; CAUTION COVER INFORMATION	1	
2	DCL404	DECAL; CAUTION LAMP COVER BUZZER	1	
3	DCL416	DECAL; DANGER, ELECTRICAL SHOCK HAZ.	1	
4	DCL417	DECAL; WARNING, BURN HAZARD (LAMP)	1	
5	DCL409	DECAL; CAUTION, LAMP INFORMATION	1	
6	0800628504	DECAL; GROUND	1	
7	DCL429	DECAL; GLOBUG MQ LOGO	1	
8	DCL415	DECAL; BURN HAZARD (BALLAST)	1	
9	DCL422	DECAL: CASTER WHEELS INFORMATION	1	
10	DCL424	DECAL: LAMP SWITCH ON/OFF	1	
11	DCL410	DECAL; DANGER, ELECTRICAL SHOCK (CORDS)	1	
12	DCL423	DECAL; DANGER, GLOBUG INFORMATION	1	
13	DCL419	DECAL; DANGER, ELECTRICAL SHOCK HAZARD	1	
14	DCL420	DECAL: DANGER, MAST INFORMATION	1	
15		NAMEPLATE	1	 CONTACT MQ PARTS DEPT.
16	DCL421	DECAL; WARNING, OUTRIGGER DEPLOYMENT	1	
17	DCL418	DECAL; DANGER, HIGH VOLTAGE	1	
18	35137	DECAL; WARNING, READ MANUAL	1	
19	DCL427	DECAL; DANGER, ELECTRICALSHOCK HAZARD	1	

GLOBUG SOLO LIGHTING SYSTEM — BASE ASSY.

BASE ASSY.



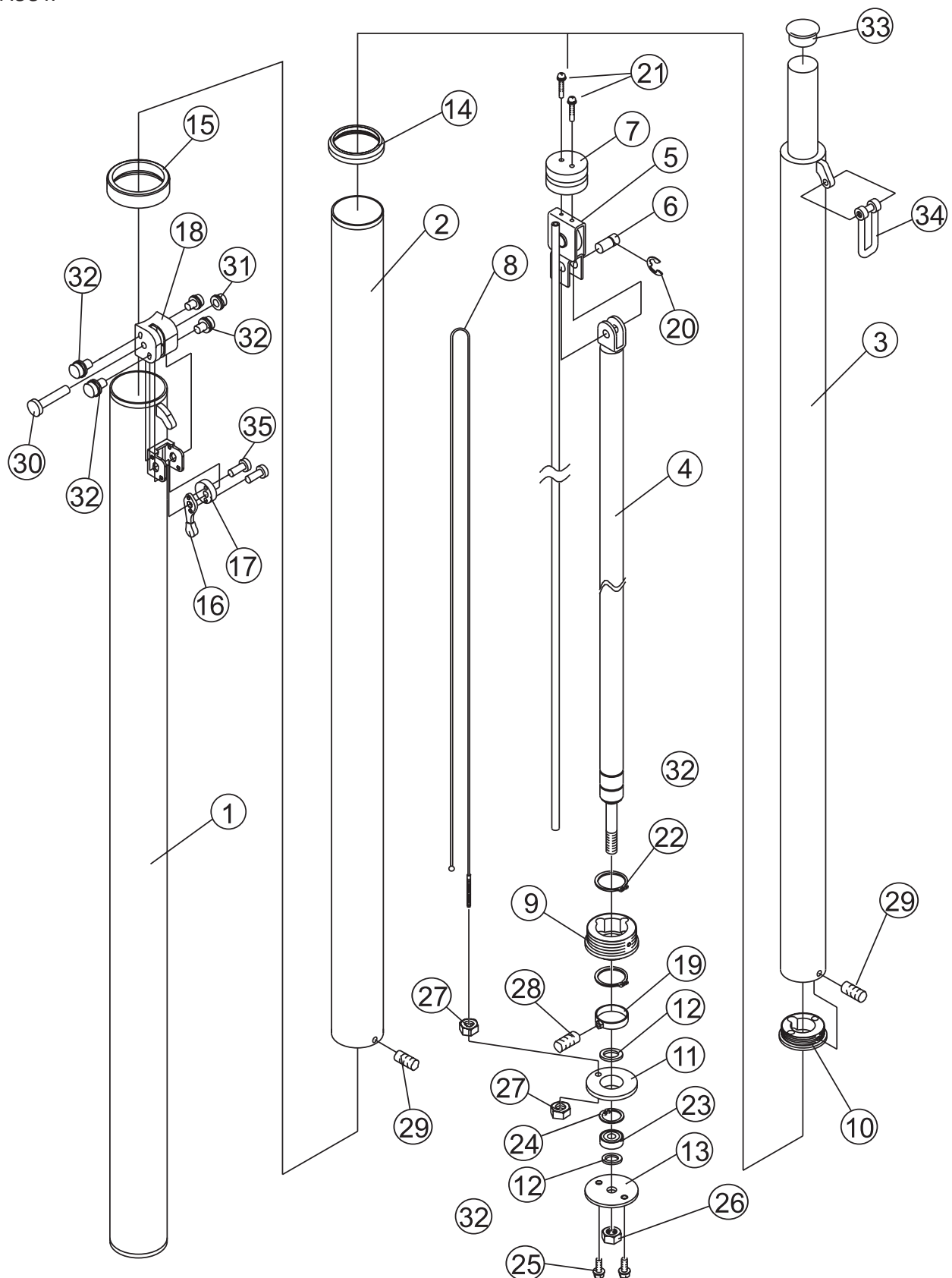
GLOBUG SOLO LIGHTING SYSTEM — BASE ASSY.

BASE ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	A100012300	BASE	1	
2	A200017800	BRACKET (OUT,R)	5	
3	2031320213	WEIGHT (OUT,R) L	5	
4	A400038700	WASHER	5	
5	1501100430	SPACER	5	
6	0040110000	WASHER (M10)	10	
7	0030210000	SELF LOCK NUT (M10)	5	
8	0030216000	SELF LOCK NUT (M16)	5	
9	0010116090	BOLT (M16x90)	5	
10	A300033100	OUTRIGGER	5	
11	1641000330	RUBBER (OUT,R)	5	
12	0011708025	BUTTON SCREW (M8x25)	20	
13	0040108000	WASHER (M8)	20	
14	0040208000	SPRING WASHER (M8)	20	
15	0030108000	NUT (M8)	20	
16	E000008800	CASTER	2	
17	E000008900	CASTER (STOPPER)	3	
18	0010510030	BOLT & WASHER (M10x30)	1	
19	0030110000	NUT (M10)	1	
20	0010506020	BOLT & WASHER (M6x20)	5	
21	A300030900	EXTENSION POLE	1	
22	2202751110	KNOB LEVER	1	
23	0040106000	WASHER (M6)	10	
24	A400037800	STOPPER PLATE	1	

GLOBUG SOLO LIGHTING SYSTEM—MAST ASSY.

MAST ASSY.



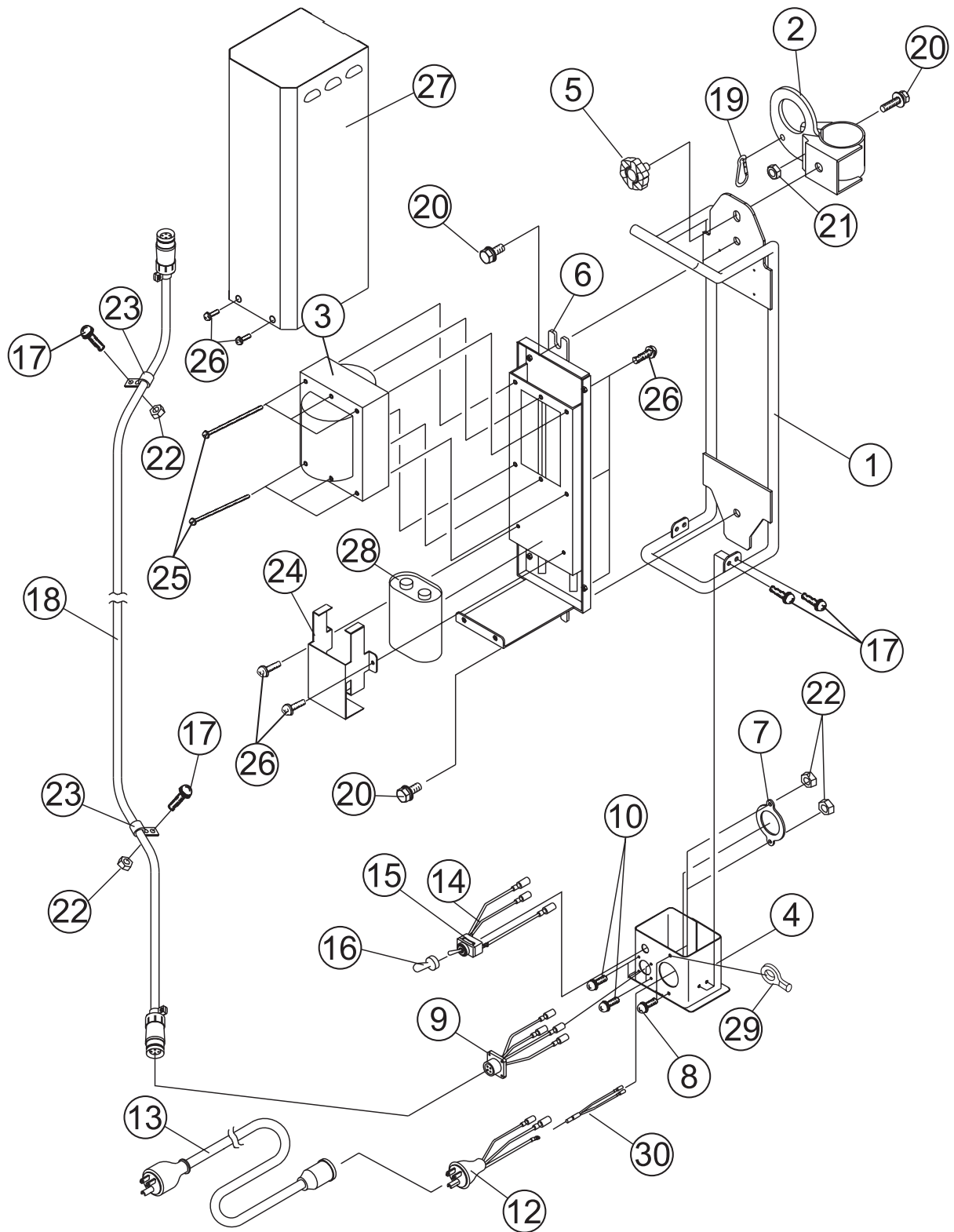
GLOBUG SOLO LIGHTING SYSTEM — MAST ASSY.

MAST ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	A200014300	POLE 1	1	
2	A300027701	POLE 2	1	
3	A300027800	POLE 3	1	
4	1020000200	GAS SPRING	1	
5	A300027900	BRACKET (PULLEY)	1	
6	A400032100	PIN (GAS SPRING)	1	
7	A400032000	SLIDER (GAS SPRING)	1	
8	A400034300	WIRE	1	
9	A400031801	BLIND PLUG 2	1	
10	A400031901	BLIND PLUG 3	1	
11	A400032200	BEARING HOLDER	1	
12	A400035500	WASHER	2	
13	A400035600	BRACKET (GAS SPRING)	1	
14	A400031601	NUT 1	1	
15	A400031701	NUT 2	1	
16	A400030500	LEVER (CHOKE)	1	
17	A400022801	PLATE (CHOKE)	1	
18	A400030600	COVER (CHOKE)	1	
19	A400033700	RING (CHOKE)	1	
20	0040608010	E-CLIP	1	
21	0020304030	SCREW & WASHER (M4x30)	2	
22	0040722000	SNAP RING (OUTER)	2	
23	E000009200	BALL BEARING	1	
24	0040822000	SNAP RING (INNER)	1	
25	0010806008	FLANGE BOLT (M6x8)	2	
26	0030208000	SELF LOCK NUT (M8)	1	
27	0030105000	NUT (M5)	2	
28	0021804010	SETSCREW (M4x10)	1	
29	0021804008	SETSCREW (M4x8)	2	
30	0020106035	SCREW (M6x35)	2	
31	0030306000	CAP NUT (M6)	1	
32	0020304008	SCREW & WASHER (M4x8)	4	
33	E000007200	HOLE PLUG	1	
34	E000008700	LONG SHACKLE	1	
35	0020104010	SCREW (M4x10)	2	

GLOBUG SOLO LIGHTING SYSTEM — BALLAST ASSY.

BALLAST ASSY.



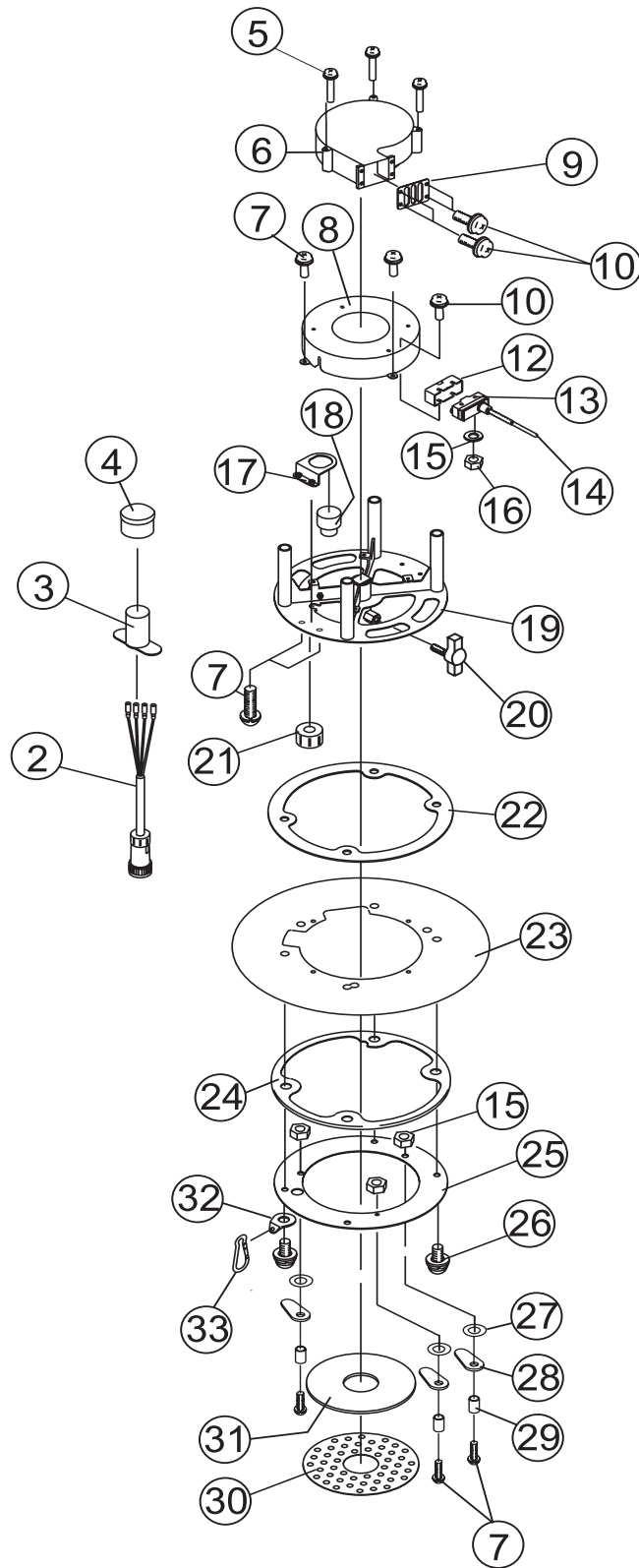
GLOBUG SOLO LIGHTING SYSTEM — BALLAST ASSY.

BALLAST ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	A100010202	FRAME	1	
2	A100010601	HOLDER (BALLAST)	1	
3	A300033800	BALLAST (TRANSFORMER) CP	1	
4	A200016900	CASE (WIRE)	1	
5	E000009100	SCREW	1	
6	A200018100	CASE (BALLAST) 1 CP	1	
7	A400035200	HOLDER (PLUG)	1	
8	0020104015	SCREW & WASHER (M4x15)	2	
9	A400037600	CABLE (LAMP) CP	1	
10	0020503012	SCREW & WASHER (M3x12)	4	
11	A400038200	CABLE (JOINT)	1	
12	A400035800	PLUG CP	1	
13	A300034700	CABLE (MAIN) CP	1	
14	A400037500	SWITCH ASSY.....	1	INCLUDES ITEM W/*
15*	1406000610	TOGGLE SWITCH	1	
16	1406000730	RUBBER CAP	1	
17	0020104008	SCREW & WASHER (M4x8)	4	
18	A300034800	CABLE (LAMP) CP	1	
19	2204510260	SNAP HOOK	1	
20	0010510025	BOLT & WASHER (M10x25)	3	
21	0030110000	NUT (M10)	1	
22	0030104000	NUT (M4)	4	
23	A400034100	CLAMP	2	
24	A200018200	HOLDER	1	
25	0020505090	SCREW & WASHER (M5x90)	6	
26	0020504012	SCREW & WASHER (M4x12)	10	
27	A100013500	CASE (BALLAST) 2 CP	1	
28	A300038400	CAPACITOR, 24 μ F @ 480 VDC	1	
29	E000013500	GROUNDING TERMINAL	1	

GLOBUG SOLO LIGHTING SYSTEM — FAN BLOWER/LAMP BASE ASSY.

FAN BLOWER/LAMP BASE ASSY.



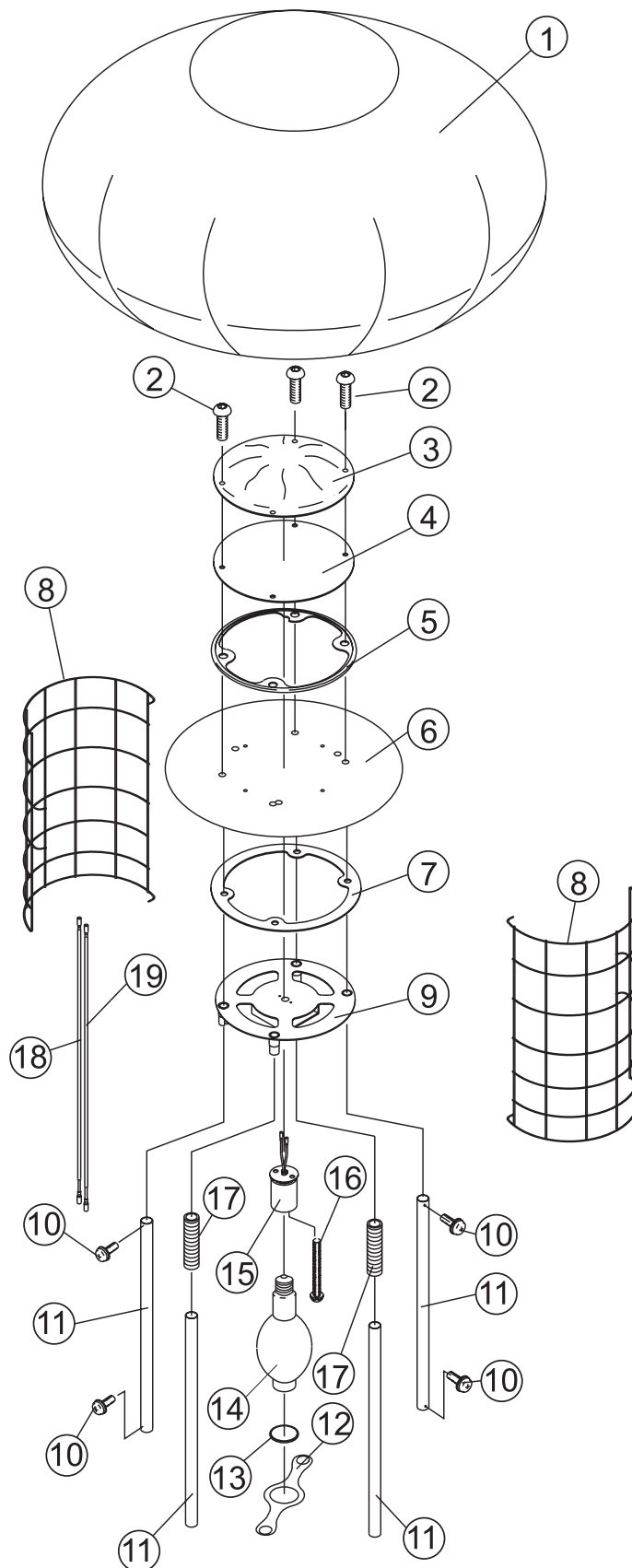
GLOBUG SOLO LIGHTING SYSTEM — FAN BLOWER/LAMP BASE ASSY.

FAN BLOWER/LAMP BASE ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
2	A300033600	CABLE 1 (BALLOON) CP	1	
3	A400038900	COVER (WIRE)	1	
4	E000011900	COVER	1	
5	0020305050	SCREW & WASHER (M5x60)	3	
6	A300033500	FAN MOTOR CP	1	
7	0020404008	SCREW (M4x8)	9	
8	A200017702	FAN SUPPORT	1	
9	A400037400	GUARD (FAN)	1	
10	0020405008	SCREW (M5x8)	4	
11	0020204030	SCREW (M4x30)	2	
12	1400150310	MICRO SWITCH COVER	1	
13	1400150210	MICRO SWITCH	1	
14	1400150410	MICRO SWITCH CAP (SENSOR)	1	
15	0040104000	WASHER (M4)	2	
16	0030104000	NUT (M4)	5	
17	E000010500	BUZZER	1	
18	A400038600	BRACKET (BUZZER)	1	
19	A100013301	FLANGE	1	
20	E000004300	T-HANDLE KNOB	1	
21	E000010400	CABLE CLAMP	1	
22	2204500130	SEAL (NORMAL)	1	
23	1800001100	SHEET (BOTTOM)	1	
24	2204500230	PACKING	1	
25	A300034400	PLATE (BOTTOM)	1	
26	0011808025	BUTTON SCREW & WASHER (M8x25)	8	
27	E000009700	WAVE WASHER (M5)	3	
28	A400030700	STOPPER (FILTER) CP	3	
29	E000009900	SPACER	3	
30	A200018000	PLATE (AIR)	1	
31	A400038300	FILTER 200 (AIR)	1	
32	2204510110	WASHER	1	
33	2204510260	SNAP HOOK	1	

GLOBUG SOLO LIGHTING SYSTEM — BALLOON/LAMP GUARD ASSY.

BALLOON/LAMP GUARD ASSY.



GLOBUG SOLO LIGHTING SYSTEM — BALLOON/LAMP GUARD ASSY.

BALLOON/LAMP GUARD ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	1800001200	BALLOON CLOTH CP	1	
2	0011808025	BUTTON SCREW & WASHER (M8 X 25)	8	
3	A100013400	PRIMARY COVER	1	
4	2204220130	PLATE (CAP)	1	
5	2204500230	PACKING	1	
6	1800001000	SHEET (TOP)	1	
7	2204500130	SEAL NORMAL (TOP)	1	
8	A100010800	LAMP GUARD	2	
9	A300026900	PLATE (LAMP)	1	
10	0021404008	SCREW & WASHER (M4x8)	16	
11	2204400131	FRAME PIPE	4	
12	A300032700	PLATE (LAMP HOLDER)	1	
13	2204231730	RUBBER (LAMP)	1	
14	E000009800	LAMP	1	
15	E000009601	SOCKET ASSY	1	
16	0020304020	SCREW & WASHER (M4x20)	2	
17	2204231530	SPRING (LAMP)	2	
18	A400038400	CABLE (LAMP) 1 R CP	1	
19	A400038500	CABLE (LAMP) 1 G CP	1	

PAYMENT TERMS

Terms of payment for parts are net 10 days.

FREIGHT POLICY

All parts orders will be shipped collect or prepaid with the charges added to the invoice. All shipments are F.O.B. point of origin. Multiquip's responsibility ceases when a signed manifest has been obtained from the carrier, and any claim for shortage or damage must be settled between the consignee and the carrier.

MINIMUM ORDER

The minimum charge for orders from Multiquip is \$15.00 net. Customers will be asked for instructions regarding handling of orders not meeting this requirement.

RETURNED GOODS POLICY

Return shipments will be accepted and credit will be allowed, subject to the following provisions:

1. A Returned Material Authorization must be approved by Multiquip prior to shipment.
2. To obtain a Return Material Authorization, a list must be provided to Multiquip Parts Sales that defines item numbers, quantities, and descriptions of the items to be returned.
 - a. The parts numbers and descriptions must match the current parts price list.
 - b. The list must be typed or computer generated.
 - c. The list must state the reason(s) for the return.
 - d. The list must reference the sales order(s) or invoice(s) under which the items were originally purchased.
 - e. The list must include the name and phone number of the person requesting the RMA.
3. A copy of the Return Material Authorization must accompany the return shipment.
4. Freight is at the sender's expense. All parts must be returned freight prepaid to Multiquip's designated receiving point.

5. Parts must be in new and resalable condition, in the original Multiquip package (if any), and with Multiquip part numbers clearly marked.
6. The following items are not returnable:
 - a. Obsolete parts. (If an item is in the price book and shows as being replaced by another item, it is obsolete.)
 - b. Any parts with a limited shelf life (such as gaskets, seals, "O" rings, and other rubber parts) that were purchased more than six months prior to the return date.
 - c. Any line item with an extended dealer net price of less than \$5.00.
 - d. Special order items.
 - e. Electrical components.
 - f. Paint, chemicals, and lubricants.
 - g. Decals and paper products.
 - h. Items purchased in kits.
7. The sender will be notified of any material received that is not acceptable.
8. Such material will be held for five working days from notification, pending instructions. If a reply is not received within five days, the material will be returned to the sender at his expense.
9. Credit on returned parts will be issued at dealer net price at time of the original purchase, less a 15% restocking charge.
10. In cases where an item is accepted, for which the original purchase document can not be determined, the price will be based on the list price that was effective twelve months prior to the RMA date.
11. Credit issued will be applied to future purchases only.

PRICING AND REBATES

Prices are subject to change without prior notice. Price changes are effective on a specific date and all orders received on or after that date will be billed at the revised price. Rebates for price declines and added charges for price increases will not be made for stock on hand at the time of any price change.

Multiquip reserves the right to quote and sell direct to Government agencies, and to Original Equipment Manufacturer accounts who use our products as integral parts of their own products.

SPECIAL EXPEDITING SERVICE

A \$35.00 surcharge will be added to the invoice for special handling including bus shipments, insured parcel post or in cases where Multiquip must personally deliver the parts to the carrier.

LIMITATIONS OF SELLER'S LIABILITY

Multiquip shall not be liable hereunder for damages in excess of the purchase price of the item with respect to which damages are claimed, and in no event shall Multiquip be liable for loss of profit or good will or for any other special, consequential or incidental damages.

LIMITATION OF WARRANTIES

No warranties, express or implied, are made in connection with the sale of parts or trade accessories nor as to any engine not manufactured by Multiquip. Such warranties made in connection with the sale of new, complete units are made exclusively by a statement of warranty packaged with such units, and Multiquip neither assumes nor authorizes any person to assume for it any other obligation or liability whatever in connection with the sale of its products. Apart from such written statement of warranty, there are no warranties, express, implied or statutory, which extend beyond the description of the products on the face hereof.

[illegible]

OPERATION & PARTS MANUAL

HERE'S HOW TO GET HELP

PLEASE HAVE THE MODEL AND SERIAL
NUMBER *ON-HAND* WHEN CALLING

MULTIQUIP CORPORATE OFFICE

18910 Wilmington Ave.
Carson, CA 90746

800-421-1244
FAX: 310-537-3927

PARTS DEPARTMENT

800-427-1244
310-537-3700

FAX: 800-672-7877
FAX: 310-637-3284

MAYCO PARTS

800-306-2926
310-537-3700

FAX: 800-672-7877
FAX: 310-637-3284

SERVICE DEPARTMENT

800-478-1244
310-537-3700

FAX: 310-537-4259

TECHNICAL ASSISTANCE

800-478-1244

FAX: 310-631-5032

WARRANTY DEPARTMENT

800-421-1244, EXT. 279
310-537-3700, EXT. 279

FAX: 310-537-1173

Your Local Dealer is:



MULTIQUIP INC.

18910 WILMINGTON AVE.
CARSON, CALIFORNIA 90746
800-421-1244 • 310-537-3700
FAX: 310-537-3927

E-mail: mq@multiquip.com
Internet: multiquip.com

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