# **OPERATION AND PARTS MANUAL**



# GLOBUG SERIES MODELS:

**GBW (Pentapod With Lamp)**SERIAL NO. G2400001 AND ABOVE

GBS (Offset Pole With Lamp)
SERIAL NO. G2500001 AND ABOVE

**GBP (Lamp Only)**SERIAL NO. G2600001 AND ABOVE

# **GBHM (Hitch Mount Accessory) GBMP (Mounting Plate)**

Revision #1 (10/04/19)



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



THIS MANUAL MUST ACCOMPANY THE EQUIPMENT AT ALL TIMES.

# **NOTES**

# Certificate



Certificate no.

CA 72131710 01

License Holder:

LIGHT BOY CO., LTD. 2-6-14 Kurigi, Asao KAWASAKI, KANAGAWA 215-0033 JAPAN

Manufacturing Plant:

LIGHT BOY CO., LTD. 2-6-14 Kurigi, Asao KAWASAKI, KANAGAWA 215-0033 **JAPAN** 

Test report no.: USA-SS 17032848 001

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Tested to:

CAN/CSA-C22.2 No. 9.0-96 (R2011)

CAN/CSA-C22.2 No. 74-96+GI1 (R2010)

Certified Product: Portable HID luminaire, Globug Series

License Fee - Units

Model Designation:

1) GB12BW, GB12BS, GB12BP,

2) GBW, GBS, GBC, GBP

7

Rated Voltage:

AC 120V, 60Hz

Rated Power:

1) 430W 2) 1030W

Appendix: 1, 1-9

Licensed Test mark:



Date of Issue (day/mo/yr) 07/06/2013

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## NOTICE

Specifications and part numbers are subject to change without notice.

Do not operate or service the equipment before reading the entire manual. 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.

#### **SAFETY MESSAGES**

The four 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 four words: DANGER, WARNING, CAUTION or NOTICE.

#### **SAFETY SYMBOLS**



#### **DANGER**

Indicates a hazardous situation which, if not avoided, WILL result in **DEATH** or **SERIOUS INJURY**.



#### WARNING

Indicates a hazardous situation which, if not avoided, **COULD** result in **DEATH** or **SERIOUS INJURY**.



#### CAUTION

Indicates a hazardous situation which, if not avoided, **COULD** result in **MINOR** or **MODERATE INJURY**.

#### **NOTICE**

Addresses practices not related to personal injury.

Potential hazards associated with the operation of this equipment will be referenced with hazard symbols which may appear throughout this manual in conjunction with safety messages.

Symbol	Safety Hazard
	Burn hazards
*	Electric shock hazards

#### **GENERAL SAFETY**

#### CAUTION

■ **NEVER** operate this equipment without proper protective clothing, shatterproof glasses, respiratory protection, hearing protection, steel-toed boots and other protective devices required by the job or city and state regulations.











■ NEVER operate this equipment when not feeling well due to fatigue, illness or when under medication.



■ NEVER operate this equipment under the influence of drugs or alcohol.







- ALWAYS check the equipment for loosened threads or bolts before starting.
- **DO NOT** use the equipment for any purpose other than its intended purposes or applications.

#### **NOTICE**

- This equipment should only be operated by trained and qualified personnel 18 years of age and older.
- 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. Unauthorized equipment modification will void all warranties.
- NEVER use accessories or attachments that are not recommended by Multiquip for this equipment. Damage to the equipment and/or injury to user may result.
- ALWAYS know the location of the nearest fire extinguisher.



■ **ALWAYS** know the location of the nearest first aid kit.



■ 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 the case of an emergency.









#### LIGHTING SYSTEM SAFETY

# WARNING

■ NEVER disconnect any emergency or safety devices. These devices are intended for operator safety. Disconnection of these devices can cause severe injury, bodily harm or even death. Disconnection of any of these devices will void all warranties.

#### CAUTION

■ **NEVER** attempt service on a running machine.

#### **NOTICE**

- To prevent the lighting system from overturning, **NEVER** use in winds that exceed 22 mph (10 m/s).
- The lighting system should only be used in temperatures between 23° to 104°F (-5° to 40° C). Failure to comply with these operating parameters could cause the lamp to malfunction and shorten the ballast life.
- ALWAYS keep the lighting system in proper running condition.
- Fix damage to lighting system and replace any broken parts immediately.
- ALWAYS store equipment properly when it is not being used. Equipment should be stored in a clean, dry location out of the reach of children and unauthorized personnel.

#### LAMP SAFETY

# WARNING

- **NEVER** attempt to replace lamp with the power on. Always unplug the power cord from the generator or power source when changing the lamp.
- ALWAYS allow a sufficient amount of time for the lamp to cool before changing. The possibility exists of severe burns.

# CAUTION

■ NEVER use force when installing the lamp. Excessive force could cause the lamp to break, causing bodily harm.

#### **NOTICE**

- **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 lamp surface is clean and dry.
- ALWAYS replace with MQ recommended type lamp. See parts section of this manual.
- If applicable, **ALWAYS** make sure the lamp guard is installed correctly. **NEVER** deform the lamp guard.
- NEVER unplug the lamp's AC power cable during operation.
- ALWAYS have a trained technician to install and remove lamp or replace any damaged fixture wiring.

#### **BALLOON SAFETY**

#### WARNING

■ To prevent serious burns, **NEVER** touch or unzip the balloon envelope when the lamp is on.



#### CAUTION

■ ALWAYS keep the balloon away from sharp objects and excessive amounts of heat.

#### **NOTICE**

- To prevent balloon deformation, **NEVER** use lighting system 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.
- Replace balloon immediately if damaged. A damaged balloon will not inflate properly, and may become more damaged by touching the hot lamp surface.
- 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.

#### **GENERATOR SAFETY**

If using a generator to power lighting system, refer to applicable generator manual safety information section.



#### **ELECTRICAL SAFETY**

#### **DANGER**

■ Lighting system is equipped with a ground pin on the power plug. For your protection, ALWAYS complete the grounding path. **NEVER** insert the AC power plug into a 2-prong receptacle to operate lighting system.

When applying power to the lighting system, ALWAYS connect the AC power plug to a 3-prong receptacle that is grounded. The possibility exists of electrical shock, electrocution and even death if the lighting system is not grounded.

- NEVER operate lighting system 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.
- ALWAYS make sure the area above the lighting system is open and clear of overhead power lines and other obstructions. Contact with overhead power lines or other obstructions could result in equipment damage, electrical shock, electrocution and even death.





#### Power Cord/Cable Safety

#### **DANGER**

- NEVER let power cords or cables lay in water.
- NEVER use damaged or worn cables or cords. Inspect for cuts in the insulation
- **NEVER** grab or touch a live power cord or cable with wet hands. The possibility exists of electrical shock, electrocution or death.



■ Make sure power cables are securely connected. Incorrect connections may cause electrical shock and damage to the lighting system.

#### **NOTICE**

■ ALWAYS make certain that proper power or extension cord has been selected for the job. See Cable Selection Chart in this manual.

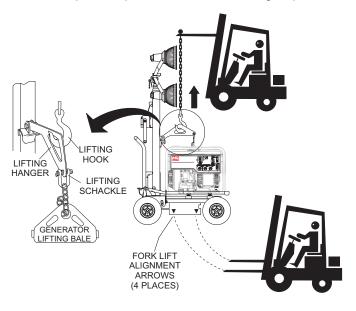
#### LOADING AND UNLOADING

#### **Cart Type - With Lifiting Hook**

If lighting system is equipped with a transport lifting hook, refer to the following safety information.

### **A** CAUTION

- Before lifting, make sure that lighting system parts are not damaged and screws are not loosened or lost.
- ALWAYS make sure crane or lifting device has been properly secured to lifting hook of the equipment.
- **NEVER** lift the equipment while lighting system is running.
- Make sure the mast is completely lowered before lifting the lighting system.
- Use adequate lifting cable (wire or rope) of sufficient strength.
- Use one point suspension hook and lift straight upwards.



- Never allow any person or animal to stand underneath the equipment while lifting.
- DO NOT lift machine to unnecessary heights.

#### **Cart Type - No Lifiting Hook**

If lighting system is not equipped with a transport lifting hook and the mast is removable, refer to the following safety information.

- Before lifting, make sure that the mast and lamp are removed as described in the manual.
- The cart can be safely lifted by two persons to the transport vehicle.

#### TRANSPORTING SAFETY

#### **NOTICE**

- When transporting the lighting system, if applicable, always place in **stow position** and place mast in its carrying case.
- ALWAYS remove balloon/lamp assembly from the mast when transporting lighting system. This will prevent damage to the bulb due to vibration.
- **NEVER** leave the balloon/lamp exposed during transport. Exposure to excess wind or rain could damage the balloon's nylon cover.
- ALWAYS place balloon inside its protective cover during transport. Be sure the cover is secured tightly around the balloon/lamp assembly.

# **SPECIFICATIONS**

	Table 1. Specifications			
Model	GBW/GBS/GBP			
Input Voltage	90-130, 170-240 VAC			
Max. Current	9.3 A @ 120 V			
Frequency	50-60 Hz Single-Phase			
Appropriate Generator	1200 Watts			
Lamp				
Lamp Type	1,000 Watt Metal Halide			
Total Luminous Flux	99,750 lm			
Standard Balloon Diameter	47.2 in (1200 mm)			
Light Coverage (360°)	150 ft (45.7 meters)			
Lamp Surface Temperature (Longitudinal)	476.6° F (247° C) max			
Lamp Surface Temperature (Transversal)	417.2° F (214° C) max			
Dimensions (L x W x H) Storage (Lamp)	7.9 x 8.7 x 27.0 in. (200 x 220 x 685 mm)			
BALLOON				
Balloon Dimensions (L x W x H)	47.2 x 47.2 x 25.6 in. (1200 x 1200 x 650 mm)			
Balloon Material	Polyester			
Balloon Heat-Resisting Temperature	320-356° F (160-180° C)			
Internal Balloon Temperature	126° F (52° C)			
Balloon Water Resistance	1500 mm H <sub>2</sub> O			
FAN MOTOR				
Fan Motor Voltage	24 VDC			
Fan Motor Current	1.2 A			
Fan Motor Pressure	0.324 kPA (0.047 psi)			
PENTAPOD (GBW only)				
Outriggers	5			
Mast - Number of Stages	3 (air shock absorbers)			
GBW Dimensions (L x W x H) Upper Working Position	54.0 x 56.7 x 84.4 to 136.8 in (1,370 x 1,440 x 2,145 to 3,475 mm)			
Dimensions (L x W x H) Storage (Pentapod)	8.7 x 8.7 x 40.0 in (220 x 220 x 1015 mm)			
Weight	57.6 lb (21.5 kg)			
OFFSET POLE (GBS Only)	, ,			
Mast - Number of Stages	2 stages (offset and straight pole)			
Dimensions (L x W x H) Upper Working Position	47.2 x 50.6 x 78.0 in (1200 x 1285 x 1980 mm)			
Dimensions (L x W x H) Storage	Straight Pole: 39.4 in (1,000 mm) Offset Pole: 26.9 x 16.7 x 2 in (683 x 425 x 52 mm)			
Weight	44.2 lb (16.5 kg)			

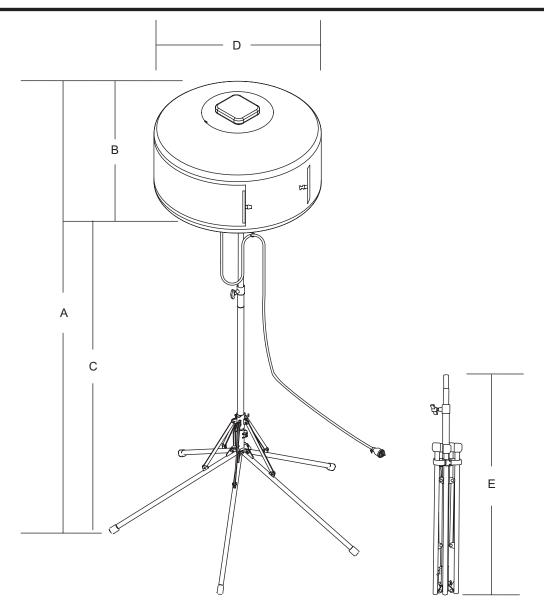


Figure 1. GBW Dimensions

Table 2. GBW Dimensions						
Reference Letter	Dimension inches (mm)					
А	Total Max. Height (with Standard Balloon)	136.8 (3,475)				
В	Standard Balloon Height	25.6 (650)				
С	Mast Height (without Balloon)	111.0 (2,820)				
D	Standard Balloon Diameter	47.2 (1,200)				
E	Mast Height (Stowed)	40.0 (1,015)				

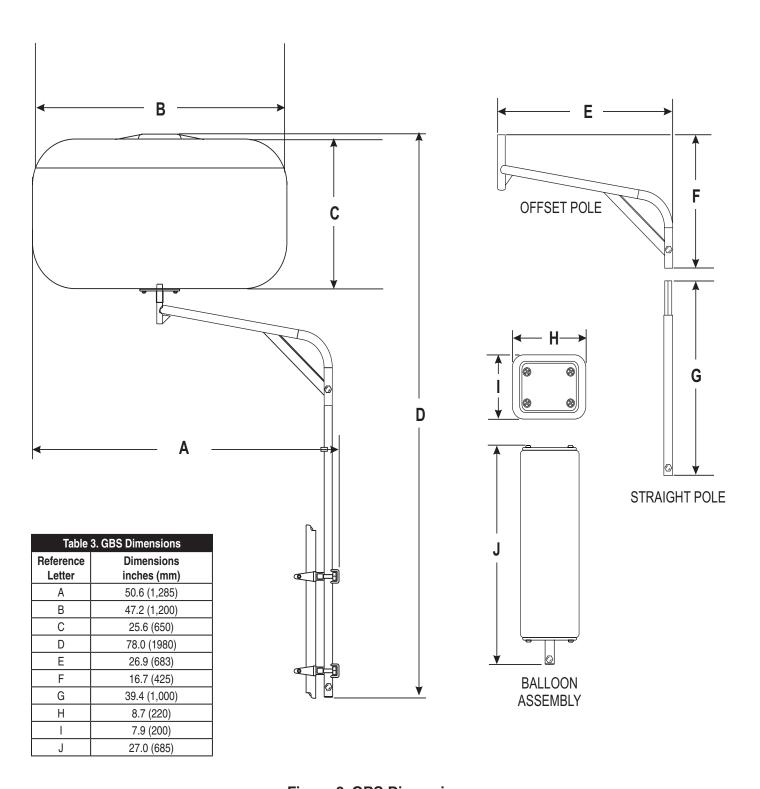


Figure 2. GBS Dimensions

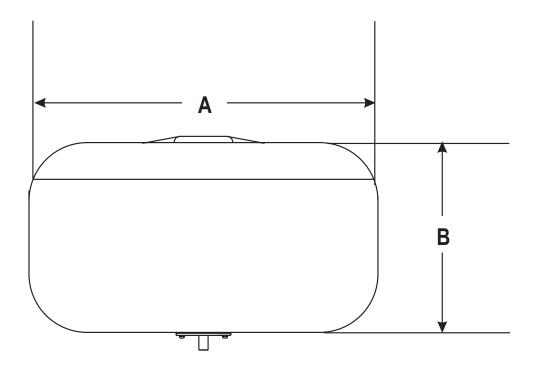
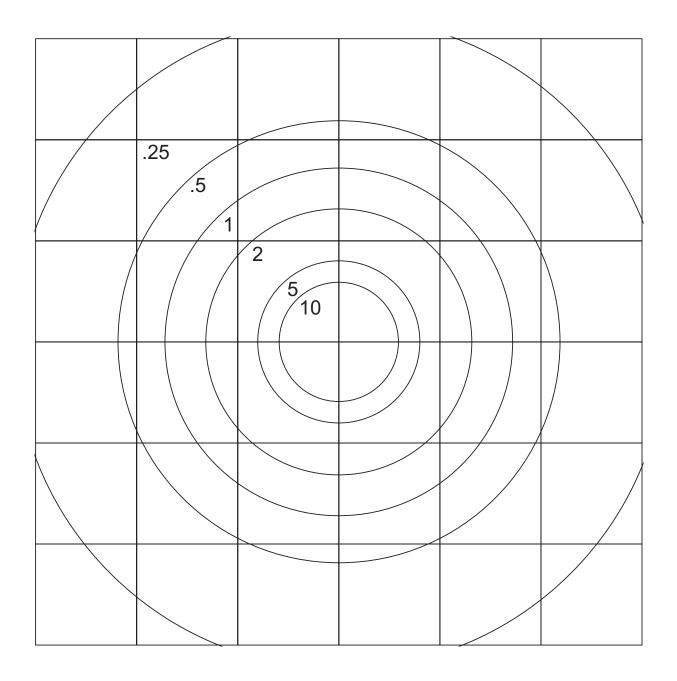


Figure 3. GBP Dimensions

Table 4. GBP Dimensions				
Reference Letter	Dimension inches (mm)			
А	47.2 (1,200)			
В	25.6 (650)			



VALUES LISTED AS FOOTCANDLES SCALE: 1 GRID = 50 FT. (15.24 METERS)

Figure 4. Illumination Range

#### GENERAL INFORMATION

The Multiquip GloBug GBW, GBS, GBP are general-purpose, portable, glare-free lighting systems intended for emergency and remote lighting needs. It is universally adaptable to all AC power supplies and accepts 50/60 Hz, 100-240 V.

The GBP (also included with the GBW and GBS) provides 360° glarefree illumination. The balloon is self-inflating and easy to install and inflate in less than 20 seconds. It uses a single 1,000 watt lamp with pure white light for maximum illumination with a light coverage of up to 150 feet. The balloon is self-inflating and easy to install and inflate in less than 20 seconds.

The GBW has a three-stage mast that extends to a height of up to 13 feet and 2 inches. The GBW has five outriggers (pentapod) for great stabilization.

The GBS is designed to be attached to an external piece of equipment such as a paver. The system is easy to assemble and includes poles and mounting brackets.

The GBHM Hitch Mount can be used to attach a GBP to a hitch on a truck.

The GBMP Plate Mount can be used to attach a GBP to a trailer.

If an extension cord is necessary to connect to a power source, refer to Table 5 to select the proper length.

Table 5. Extension Cord Gauge Selection										
Ampere	Volts	Length of Cord in Feet								
Rating	115V	25 Ft.	50 Ft.	100 Ft.	150 Ft.	200 Ft.	250 Ft.	300 Ft.	400 Ft.	500 Ft.
Range	230V	50 Ft.	100 Ft.	200 Ft.	300 Ft.	400 Ft.	500 Ft.	600 Ft.	800 Ft.	1000 Ft.
0	- 2	18	18	18	16	16	14	14	12	12
2	- 3	18	18	16	14	14	12	12	10	10
3	- 4	18	18	16	14	12	12	10	10	8
4	- 5	18	18	14	12	12	10	10	8	8
5	- 6	18	16	14	12	10	10	8	8	6
6	- 8	18	16	12	10	10	8	6	6	6
8 -	10	18	14	12	10	8	8	6	6	4
10	- 12	16	14	10	8	8	6	6	4	4
12	- 14	16	12	10	8	6	6	6	4	2
14	- 16	16	12	10	8	6	6	4	4	2
16	- 18	14	12	8	8	6	4	4	2	2
18	- 20	14	12	8	6	6	4	4	2	2

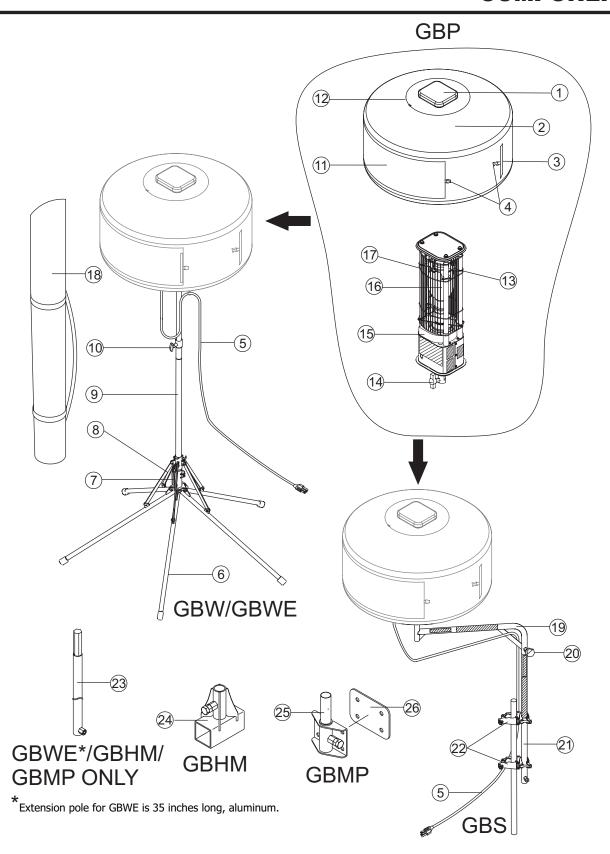


Figure 5. GBW/GBS/GBP Components

#### COMPONENTS

Figure 5 shows the location of the controls and components for the GBW Lighting System. The functions of each control is described below:

- Balloon Cover Stores balloon when GBW is not in use. Allow a sufficient amount of time for the lamp to cool down before storing balloon. Possibility exists of balloon getting burned.
- Balloon Made of heat resistant polyester, with a diameter of 47.2 inches (1,200 mm). Balloon is selfinflating and inflates in less than 20 seconds.
- 3. **Velcro** Used to easily attach optional message strip to the balloon.
- 4. **Buckle** Used to hold the balloon together when storing inside the cover.
- 5. **AC Power Cable** Connects to the AC power source (generator).
- 6. **Pentapod** Supports and holds up the GBW.
- 7. **Latch** To secure the pentapod, place the lock in the upper or lower position.
- 8. **Stay** Supports the mast against the pentapod.
- Mast This mast is comprised of three separate stages. The mast can be raised in excess of 8 feet (without balloon). When raising the mast, always be on the lookout for overhead obstructions.
- 10. **Mast Bolt** Loosen to raise mast and tighten to keep the mast in place when raised to the desired height.
- 11. **Message Strip (OPTIONAL)** A 12 x 43 inch message strip (GBBALD1) may be attached to the balloon. The message strip can be purchased separately.
- 12. **Zipper** Zips up balloon to completely close it when lamp is in place.
- 13. **Lamp Holder** Holds lamp in place. Lamp is screwed into socket.

- 14. **Lamp/Balloon Bolt** Used to tighten mast when attached to the lamp/balloon assembly.
- 15. **Fan Motor (Blower)** Inflates the balloon as soon as power is applied.
- 16. **Lamp** 1000 watt metal halide bulb with pure white light for maximum illumination.
- 17. **Lamp Guard** Protects the lamp from being hit by objects and the balloon from touching the lamp.
- 18. **Carrying Case** Use this case to store the pentapod when transporting or when not in use.
- 19. **Offset Pole** Supports lamp assembly when attached to the straight pole.
- 20. **Knob** Secures the offset pole to the straight pole when tightened.
- 21. **Straight Pole** Used in conjunction with the offset pole to support the lamp assembly.
- Clamps Used to attach the straight pole to an external support. These clamps must be tightened securely to prevent the light assembly from falling off.
- 23. **Extension Pole** Extends mast height by 35 inches. For GBHM and GBMP, 2 poles are included to support the desired balloon assembly.
- 24. **Hitch Mount Assembly** Used to attach balloon assembly to a hitch on a truck or similar vehicle.
- 25. **Plate Mount Assembly** Used to attach balloon assembly to a trailer or similar vehicle.
- 26. **Plate** Attaches directly to a trailer to hold plate mount assembly.

#### **GBW SETUP**

- Set the GBW on a firm level surface where there is enough space around the pentapod for the outriggers to be deployed.
- Remove the pentapod from the carrying case. The pentapod outriggers are secured together with a strap.
   See Figure 6. Squeeze both tabs on the buckle to unlock strap and release pentapod outriggers.

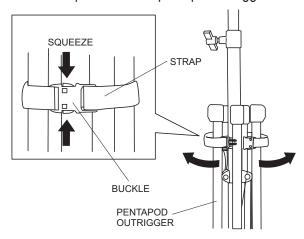


Figure 6. Releasing Pentapod Buckle

3. Lift mast up and deploy the pentapod as shown in Figure 7.

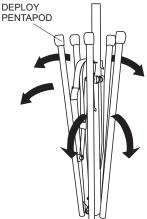


Figure 7. Deploying the Pentapod

4. With pentapod fully deployed, hook the latch to lock the pentapod in place. The latch can be hooked in the

upper or lower position. Placing the lock in the upper position will provide 1 foot (305 mm) more height. See Figure 8.

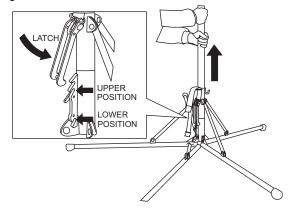


Figure 8. Securing the Pentapod

5. If desired, attach extension pole to the top of the mast as shown in Figure 9.

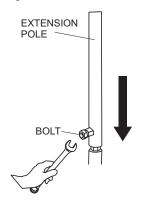


Figure 9. Attaching Extension Pole

6. To improve stability and prevent tipping of the lighting system, place sand bags on the outriggers or similar weight on the weight hook as shown in Figure 10.

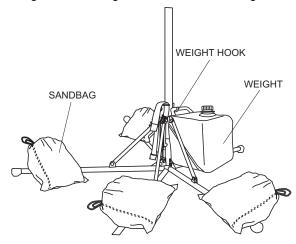


Figure 10. Sand Bags and Weight

#### **GBS SETUP**

 Attach one of the clamps that come with the GBS to the external support pole. The clamps may be attached to vertical, horizontal, or angled pole. See Figure 11.

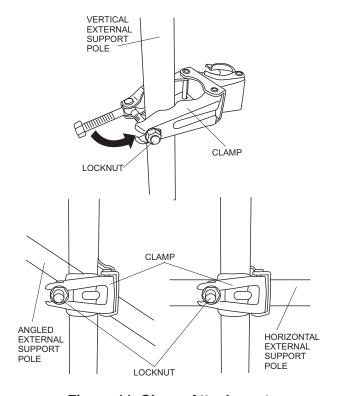


Figure 11. Clamp Attachment

- 2. Using a 19 mm wrench, tighten the locknut securely. See Figure 11.
- 3. Attach the other clamp to the external support pole about 7 inches (140 mm) lower than the previously installed clamp. See Figure 12 If using horizontal external support poles, a second pole is needed.

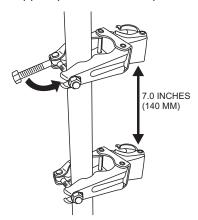


Figure 12. Distance Between Clamps

4. Attach the straight pole to the clamps. Tighten locknuts on both clamps. See Figure 13.

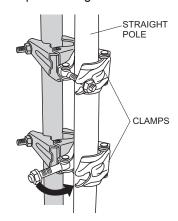


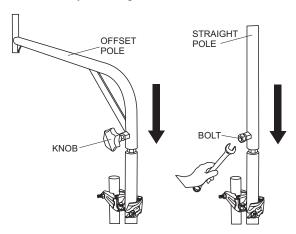
Figure 13. Straight Pole Attachment



#### **WARNING**

Always securely tighten the locknuts when assembly is used to prevent the lighting system from falling off which can cause injury or equipment damage.

5. Place the offset pole (or an optional straight pole, if desired) on top of the straight pole. Tighten knob or bolt securely. See Figure 14.



**Figure 14. Offset Pole Attachment** 



#### WARNING

Always securely tighten the knob on the offset or the bolt on the straight pole when assembly is used to prevent the lighting system from falling off which can cause injury or equipment damage.

## **BALLOON INSTALLATION (GBW/GBS)**

 Insert the balloon assembly into the mast. Tighten the T-bolt securely. See Figure 15.

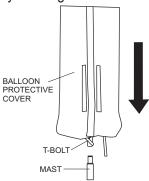


Figure 15. Installing the Balloon

2. Unsnap the three buttons on the bottom of the balloon cover and unzip the cover. See Figure 16.

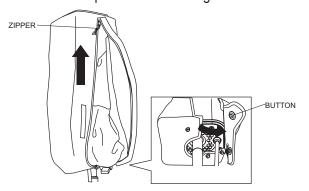


Figure 16. Unzipping Balloon Cover

Fold the balloon cover into itself and zip it up. See Figure 17.



Figure 17. Folding Balloon Cover

4. Secure the power cable by hooking it to the eyelet on the bottom of the balloon as shown in Figure 18.

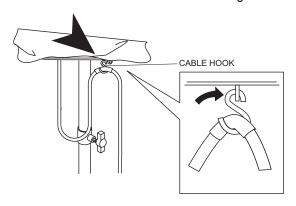


Figure 18. Securing Cable with Hook

5. Release the buckle on the belt holding the balloon together. See Figure 19.

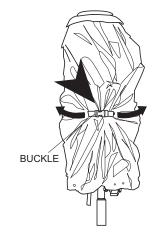


Figure 19. Releasing Buckle

#### **GBHM INSTALLATION**

The GBHM Hitch Mount can be used to attach a balloon/lamp assembly (GBP) to the hitch of a truck or similar vehicle. See Figure 20 for installation procedure.

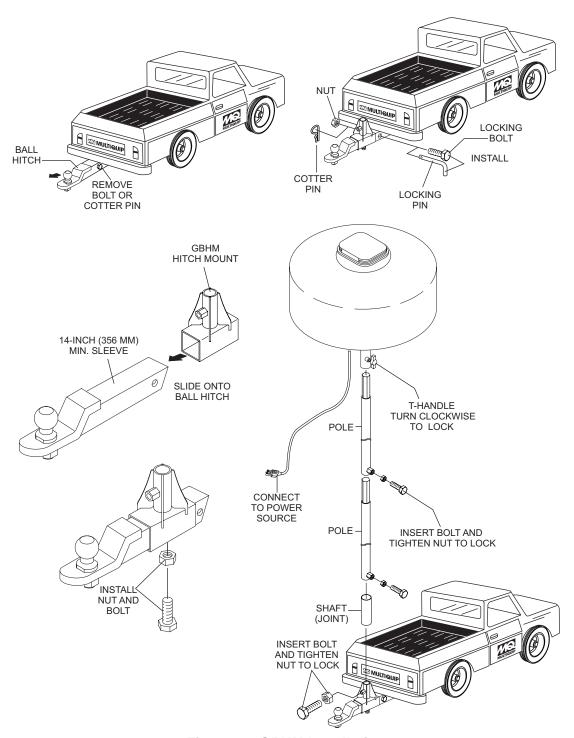


Figure 20. GBHM Installation

#### **GBMP INSTALLATION**

The GBMP Plate Mount is attached to a trailer or similar vehicle to support the balloon/lamp assembly (GBP). See Figure 21 for installation procedure.

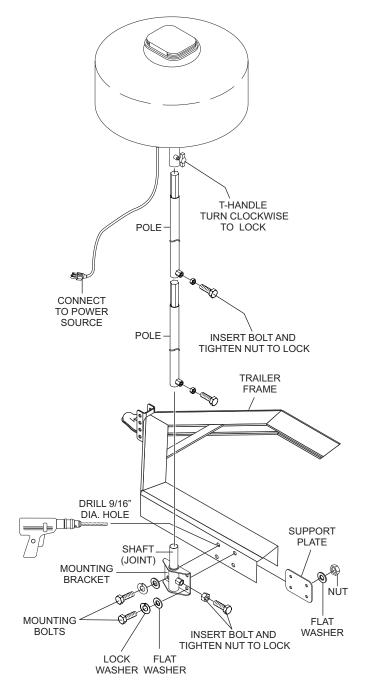


Figure 21. GBMP Installation

#### **RAISING THE MAST (GBW)**

# A

#### **DANGER**



**ALWAYS** make sure the area above the lighting system is open and clear of overhead power lines and other obstructions. Contact with overhead power lines or other obstructions could result in equipment damage, **electrical** 

shock, electrocution and even death.

## A

#### **CAUTION**

When raising or lowering the mast, keep hands and fingers clear of the mast sections to prevent hands and fingers from getting pinched.

1. Raise the second mast to the desired height and tighten the T-bolt securely. See Figure 22.

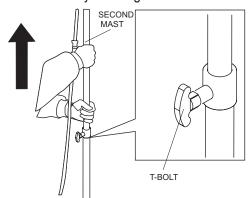


Figure 22. Raising the Second Mast

2. To raise the mast higher, raise the third mast until the lock/release tab pops out. The tab will automatically rest on the second mast. See Figure 23.

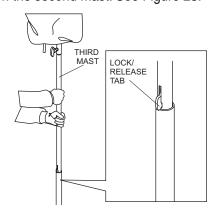


Figure 23. Raising the Third Mast

#### LOWERING THE MAST (GBW)

 Loosen the T-bolt holding the second mast and push mast all the way down. Tighten T-bolt securely. See Figure 24.

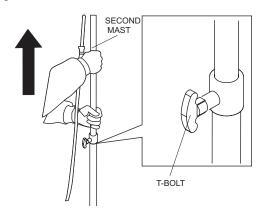


Figure 24. Lowering Second Mast

2. Push the lock/release tab on the third mast to release it and lower third mast. See Figure 25.

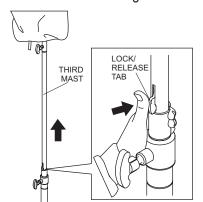


Figure 25. Lowering Third Mast

#### **APPLYING POWER**

1. Before applying power, make sure that the Power **ON/OFF** switch (Figure 26) is in the **OFF** position.

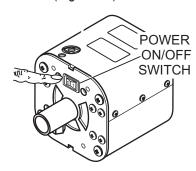


Figure 26. ON/OFF Switch

1. If using a portable generator, plug the AC power cable to the 120 VAC receptacle on the generator used. See Figure 27.

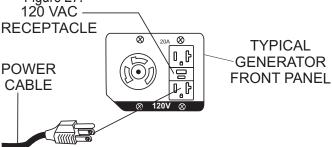


Figure 27. Connecting to Generator

- 2. Start the generator as indicated in the generator manual.
- 3. If using power source other than a portable generator, plug the AC power cord to a 120 VAC, receptacle. See Figure 28.

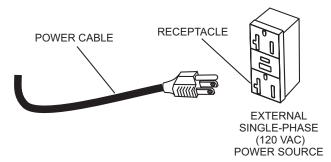


Figure 28. Connecting to 120 VAC Receptacle

4. Turn on the Power **ON/OFF** switch (Figure 26). The balloon will start to inflate and the lamp will turn on.

#### **NOTICE**

If the power cable is accidentally unplugged from the power source, wait three to five minutes before reconnecting the power. This will allow time for the fan to reset and ensure balloon will inflate properly when power is reconnected.

#### SHUTDOWN

- 1. Turn off the power switch of the generator.
- Turn off the Power **ON/OFF** switch. The balloon should start to deflate and the lamp will turn off.
- 3. Disconnect the AC power cable from the generator.

#### DIMMING/SHUTTING DOWN LAMP ONLY

1. Unzip the bottom -of the balloon. See Figure 29.

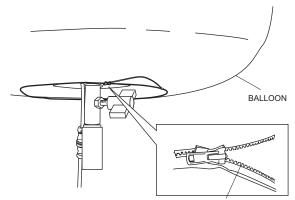


Figure 29. Unzipping Balloon

2. To dim the lamp, press the dimmer switch lightly. LED will blink red and the lamp will dim to about 75% brightness. The balloon will remain deployed.

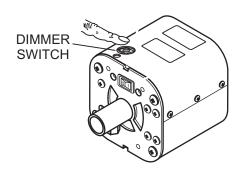


Figure 30. Dimmer Switch

3. To return to 100% brightness, press the dimmer switch again. The LED will turn off.

4. To turn off the lamp, press and hold the dimmer switch for 3 seconds. The LED will light red and the lamp will turn off. The balloon will remain deployed.

#### **NOTICE**

To turn on lamp again, after it was turned off with the dimmer switch, turn off the Power **ON/OFF** switch. Wait three to five minutes then turn the **ON/OFF** switch back on. The lamp will now light back to 100% brightness.

#### STORAGE (GBW)

#### **NOTICE**

Allow about 15 to 20 minutes for the lamp to cool down before storing the GBW. The possibility exists of the balloon getting burned if it touches a hot lamp.

- 1. Unhook the AC power cable from the eyelet at the bottom of the balloon.
- 2. Make sure the mast is completely lowered as described in **LOWERING THE MAST** section.
- 3. Lock the buckle to secure the balloon together.
- 4. Unzip the zipper on the protective cover and pull down cover over the balloon/lamp assembly.
- 5. Loosen the T-bolt on the balloon/lamp assembly and lift balloon/lamp assembly from the mast.
- 6. Lift mast while pulling up strap (Figure 31).

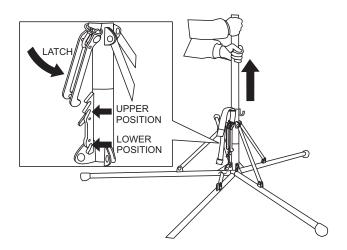


Figure 31. Unlocking the Latch

7. Continue pulling upward on the mast until all the pentapod legs are fully retracted and are stowed. See Figure 32.

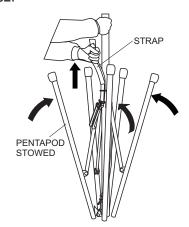


Figure 32. Stowing the Pentapod

8. Once pentapod legs are all in stow position, wrap strap around all five legs and secure by locking the buckle. See Figure 33.

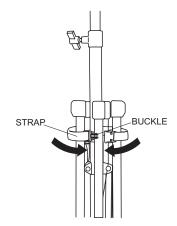


Figure 33. Locking Up Stowed Pentapod

9. Place the stowed pentapod inside the carrying case. See Figure 34.

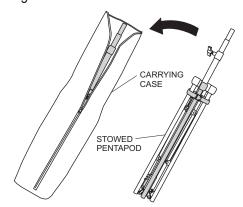


Figure 34. Storing in Carrying Case

#### REPLACING LAMP



#### **DANGER**

Never attempt to replace lamp in a wet place. The possibility exists of electric shock.



#### **WARNING**



Always allow sufficient time for the lamp to cool down before replacing. The possibility exists of severe burns if hot lamp is touched.



#### **CAUTION**

Always shutdown power source and remove balloon assembly from mast when replacing a broken lamp. Utmost care should be taken in handling broken lamp. The possibility exists of serious injury from handling a broken lamp.

1. Unzip the zipper at the bottom of the balloon and roll the balloon up to expose the lamp. See Figure 35.

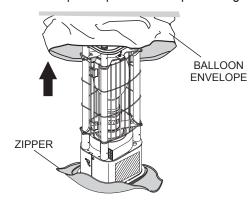


Figure 35. Exposing Balloon

2. Release the lamp guard locking tabs. See Figure 36.

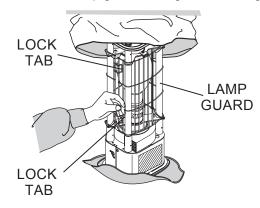


Figure 36. Removing Lamp Guard

- 3. Remove the lamp guard.
- 4. Press the tabs on the lamp holder and push up lamp holder to release it from lamp. See Figure 37.

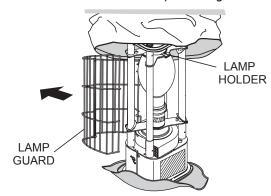


Figure 37. Lamp Holder

5. Remove the lamp from the lamp socket by turning lamp counterclockwise. See Figure 38.

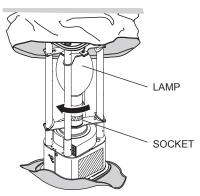


Figure 38. Removing Lamp

6. Install new lamp into socket and turn lamp in a clockwise direction until tight. See Figure 39.

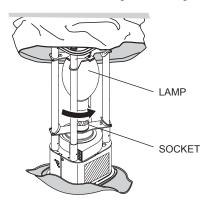


Figure 39. Installing New Lamp

#### **NOTICE**

Do not use excessive force when screwing the lamp to prevent lamp from breaking.

- 7. Secure lamp holder on top of the lamp.
- 8. Reinstall lamp guard.
- 9. Pull down balloon and zip the bottom zipper to cover lamp.

#### REPLACING BALLOON

1. Unzip the top and bottom of the balloon. See Figure 40.

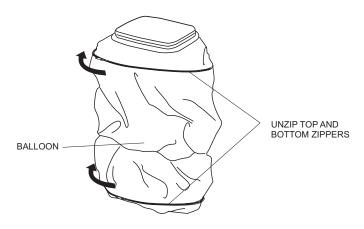


Figure 40. Unzipping Balloon

2. Slide out the old or worn balloon over the top of the lamp guard assembly. See Figure 41.



Figure 41. Removing Old Balloon

3. Slide in the new replacement balloon over the top of the lamp guard assembly. See Figure 42.

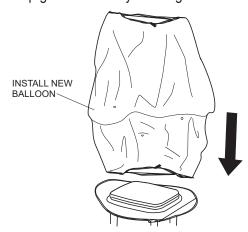


Figure 42. Replacing Balloon

4. Zip up the top and bottom of the new balloon. See Figure 43.

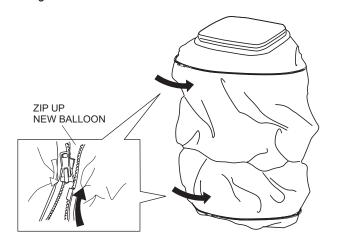


Figure 43. Zipping Up New Balloon

#### **MAINTENANCE**

#### FILTER REPLACEMENT

- 1. Remove the balloon as described in the STORAGE section.
- 2. Turn the balloon/lamp assembly upsidedown to access the filter. See Figure 44.

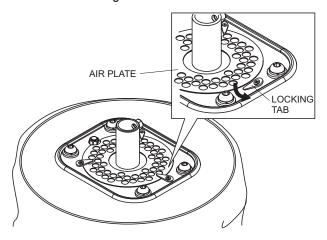


Figure 44. Accessing Filter

- 3. Turn the three locking tabs outwards to release the air plate. See Figure 44.
- 4. Remove the air plate and filter. See Figure 45.

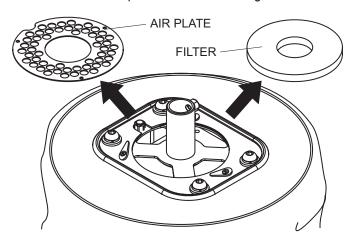


Figure 45. Filter Removal

- 5. Install a new filter and reinstall the air plate.
- 6. Turn the three locking tabs inwards to lock the air plate in place. See Figure 46.

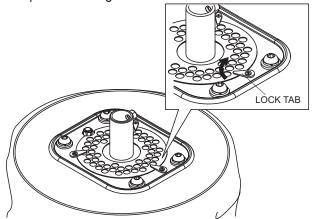
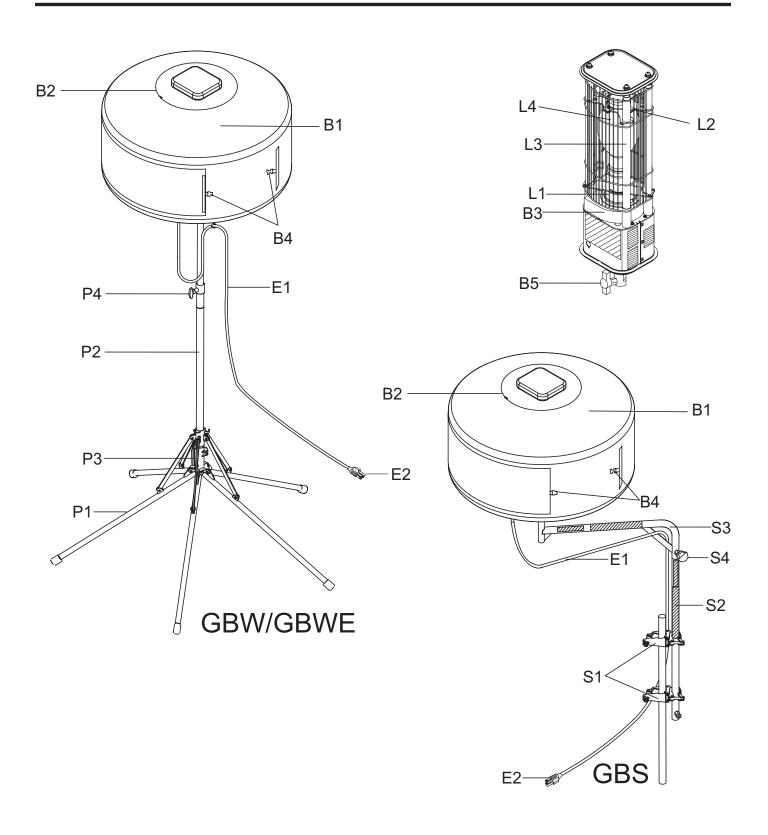


Figure 46. Locking Air Plate

# **MAINTENANCE**

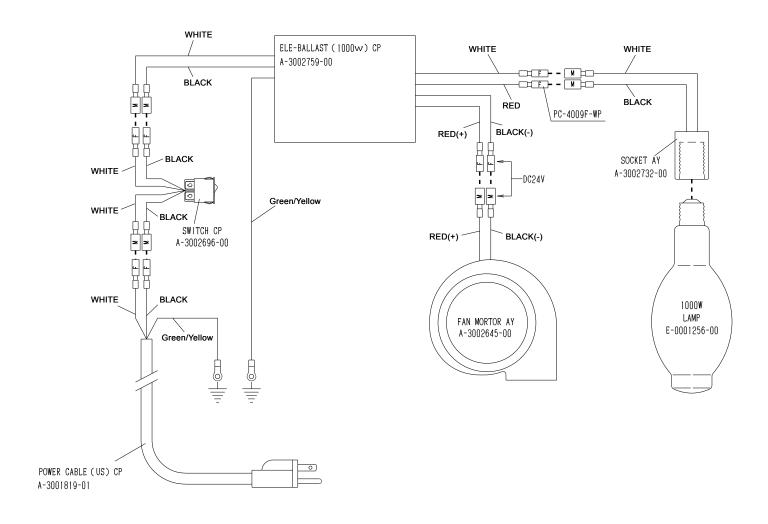
Table 6. Troubleshooting						
SYMPTOM	POSSIBLE PROBLEM	SOLUTION				
	Is plug disconnected?	Plug in correctly.				
	Is generator power switched off?	Turn on switch.				
	Is lamp loose?	Screw lamp securely into socket.				
	Is power connector disconnected or loose?	Connect disconnected connector.				
Lamp does not light.	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 5 to 10 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 and repair fan motor (blower).				
	Is balloon envelope defective?	Repair or replace balloon envelope.				



**Figure 47. Maintenance Check Points** 

# **MAINTENANCE**

Table 7. Periodic Check and Maintenance									
FIGURE PART		CHECK ITEM			SOLUTION				
	L1	Lamp	(Base)	Lamp b	ase loose?	Sc	rew in securely.	•	
Lomn	L2	Lamp	Holder	Lamp h	older loose?	Re	eplace.	#	
Lamp	L3	Pipe F	rame	Pipe Fr	ame skewed	Re	place.	&	
	L4	Lamp		Defectiv	ve lamp?	Re	place.	•	
	B1	Balloc	on (Envelope)	Defectiv	ve or dirty?	Re	place.	•	
	B2	Zippe	r	Broken	?	Re	place.	•	
Balloon	В3	Fan M	lotor (Blower)	Not wo	rking properly?	Re	epair or replace.	\$	
	B4		Broken?		Re	place.	\$		
	B5	T-handle bolt (balloon)		Broken?		Re	place.	•	
	P1	Pentapod		Damaged or Not Working Properly?		Re	place.	#	
Dentanad	P2	Mast		Damaged or Not Working Properly?		Re	place.	#	
Pentapod	P3	Latch		Damaged?		Re	place.	•	
	P4	Stopp	er	Damaged?		Re	place.	•	
Flootrio	E1	Power	cable	Defective or worn cable?		Re	place.	•	
Electric	E2	Plug		Damaged?		Re	eplace.	#	
	S1	Clamp		Damaged?		Re	eplace.	•	
S2 Straight Pole		ht Pole	Damag	ed or Skewed?	Re	eplace.	\$		
Uliset Pole	Offset Pole S3 Offset Pole		Damaged or Skewed?		Re	eplace.	\$		
	S4	Knob		Loose?		Tiç	ghten Securely.	•	
• — Check daily # — Every 20 ho		# — Every 20 ho	ours	\$ — Every 100 hours		& — Every 500 hou	ırs		



# **NOTES**

#### **EXPLANATION OF CODE IN REMARKS COLUMN**

The following section explains the different symbols and remarks used in the Parts section of this manual. Use the help numbers found on the back page of the manual if there are any questions.

#### **NOTICE**

The contents and part numbers listed in the parts section are subject to change **without notice**. Multiquip does not quarantee the availability of the parts listed.

#### SAMPLE PARTS LIST

NO.	PART NO.	PART NAME	QTY.	<u>REMARKS</u>
1	12345	BOLT	1	INCLUDES ITEMS W/%
2%		WASHER, 1/4 IN	l	NOT SOLD SEPARATELY
2%	12347	WASHER, 3/8 IN	l1	MQ-45T ONLY
3	12348	HOSE	A/R .	MAKE LOCALLY
4	12349	BEARING	1	S/N 2345B AND ABOVE

#### NO. Column

**Unique Symbols** — All items with same unique symbol (@, #, +, %, or >) in the number column belong to the same assembly or kit, which is indicated by a note in the "Remarks" column.

**Duplicate Item Numbers** — Duplicate numbers indicate multiple part numbers, which are in effect for the same general item, such as different size saw blade guards in use or a part that has been updated on newer versions of the same machine.

#### **NOTICE**

When ordering a part that has more than one item number listed, check the remarks column for help in determining the proper part to order.

#### PART NO. Column

**Numbers Used** — Part numbers can be indicated by a number, a blank entry, or TBD.

TBD (To Be Determined) is generally used to show a part that has not been assigned a formal part number at the time of publication.

A blank entry generally indicates that the item is not sold separately or is not sold by Multiquip. Other entries will be clarified in the "Remarks" Column.

#### **QTY. Column**

**Numbers Used** — Item quantity can be indicated by a number, a blank entry, or A/R.

A/R (As Required) is generally used for hoses or other parts that are sold in bulk and cut to length.

A blank entry generally indicates that the item is not sold separately. Other entries will be clarified in the "Remarks" Column.

#### **REMARKS Column**

Some of the most common notes found in the "Remarks" Column are listed below. Other additional notes needed to describe the item can also be shown

**Assembly/Kit** — All items on the parts list with the same unique symbol will be included when this item is purchased.

Indicated by:

"INCLUDES ITEMS W/(unique symbol)"

**Serial Number Break** — Used to list an effective serial number range where a particular part is used.

Indicated by:

"S/N XXXXX AND BELOW"

"S/N XXXX AND ABOVE"

"S/N XXXX TO S/N XXX"

**Specific Model Number Use** — Indicates that the part is used only with the specific model number or model number variant listed. It can also be used to show a part is NOT used on a specific model or model number variant.

Indicated by:

"XXXXX ONLY"

"NOT USED ON XXXX"

"Make/Obtain Locally" — Indicates that the part can be purchased at any hardware shop or made out of available items. Examples include battery cables, shims, and certain washers and nuts.

"Not Sold Separately" — Indicates that an item cannot be purchased as a separate item and is either part of an assembly/kit that can be purchased, or is not available for sale through Multiquip.

# **SUGGESTED SPARE PARTS**

## **GBW/GBS/GBP LIGHTING SYSTEM**

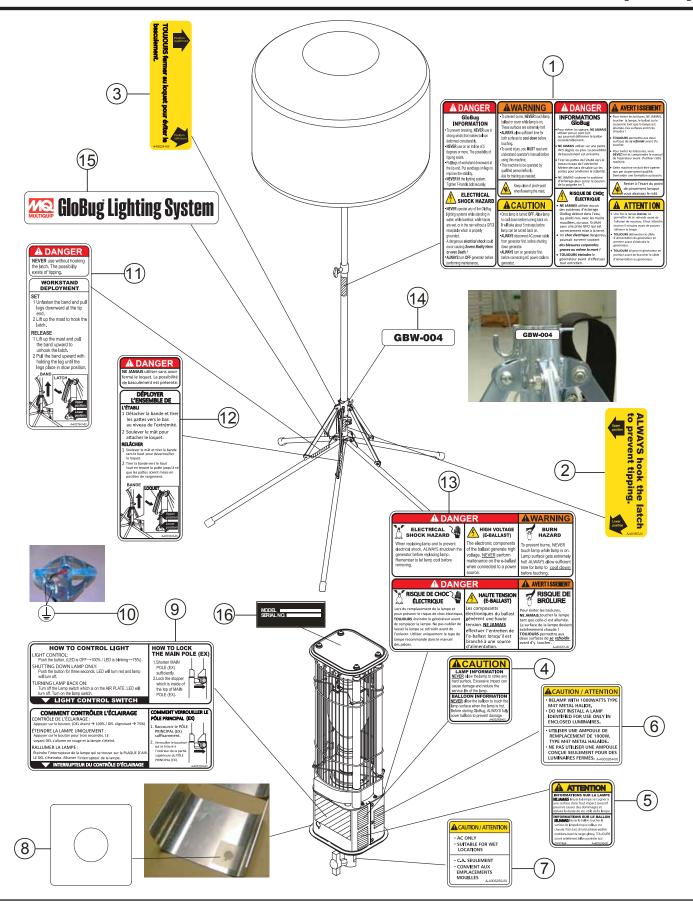
#### 1 to 3 units

Qty.	P/N	Description
2	.E000125600	LAMP .
2	.A300275900	E BALLAST ASSY
2	.A100057000	BALLOON CLOTH CP
3	.A300155100	.FILTER
1	.1654000230	BALLOON PATCH KIT

## NOTICE

Part numbers on this Suggested Spare Parts list may supersede/replace the part numbers shown in the following parts lists.

# **NAMEPLATES AND DECALS (GBW)**

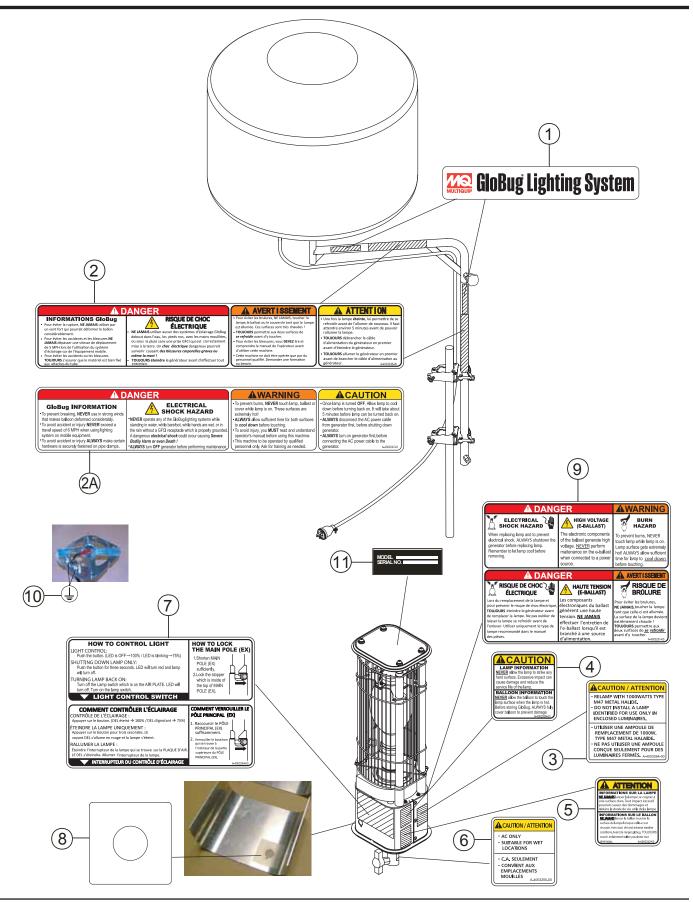


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### **NAMEPLATES AND DECALS (GBW)**

NO.	PART NO.	PART NAME	QTY.	REMARKS
1	A400324800	DECAL; GLOBUG INFORMATION	1	
2	A400166701	DECAL; LATCH, RIGHT	1	
3	A400324100	DECAL; LATCH, LEFT	1	
4	A400290900	DECAL; CAUTION, LAMP INFORMATION (ENGLISH)	1	
5	A400324200	DECAL; CAUTION, LAMP INFORMATION (FRENCH)	1	
6	A400326400	DECAL; LAMP TYPE	1	
7	A400325000	DECAL; CAUTION, AC ONLY	1	
8	A400206500	DECAL; DIMMER SWITCH	1	
9	A400324900	DECAL; LAMP OFF SWITCH	1	
10	A400084300	DECAL; GROUND	2	
11	A400194100	DECAL; DANGER, WORKSTAND DEPLOYMENT (ENGLISH)	1	
12	A400324300	DECAL; DANGER, WORKSTAND DEPLOYMENT (FRENCH)	1	
13	A400325100	DECAL, ELECTRIC SHOCK, HIGH VOLTAGE, BURN HAZ.	1	
14	A400207302	DECAL; GBW-004	1	
15	A400193300	DECAL; GLOBUG LIGHTING SYSTEM	1	
16		NAMEPLATE	1	CONTACT MQ PARTS

#### NAMEPLATES AND DECALS (GBS)

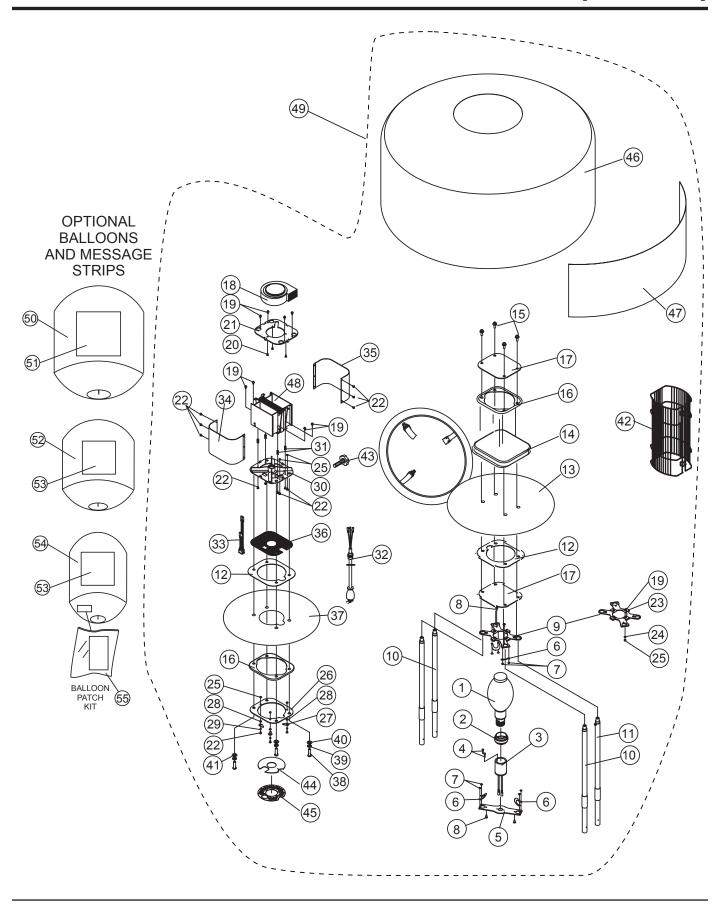


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### **NAMEPLATES AND DECALS (GBS)**

NO.	PART NO.	PART NAME	QTY.	REMARKS
1	A400193300	DECAL; GLOBUG LIGHTING SYSTEM	1	
2	A400323800	DECAL; GLOBUG INFO, ELECTRIC SHOCK(FRENCH)	1	
2A	A400204701	DECAL; GLOBUG INFO, ELECTRIC SHOCK(ENGLISH)	1	
3	A400326400	DECAL; LAMP TYPE	1	
4	A400290900	DECAL; CAUTION, LAMP INFORMATION (ENGLISH)	1	
5	A400324200	DECAL; CAUTION, LAMP INFORMATION (FRENCH)	1	
6	A400325000	DECAL; CAUTION, AC ONLY	1	
7	A400324900	DECAL; LIGHT CONTROL SWITCH	1	
8	A400206500	DECAL; DIMMER SWITCH	1	
9	A400325100	DECAL; ELECTRIC SHOCK, HIGH VOLTAGE, BURN HAZ	. 1	
10	A400084300	DECAL; GROUND	2	
11		NAMEPLATE	1 . C	ONTACT MQ PARTS DEPT.

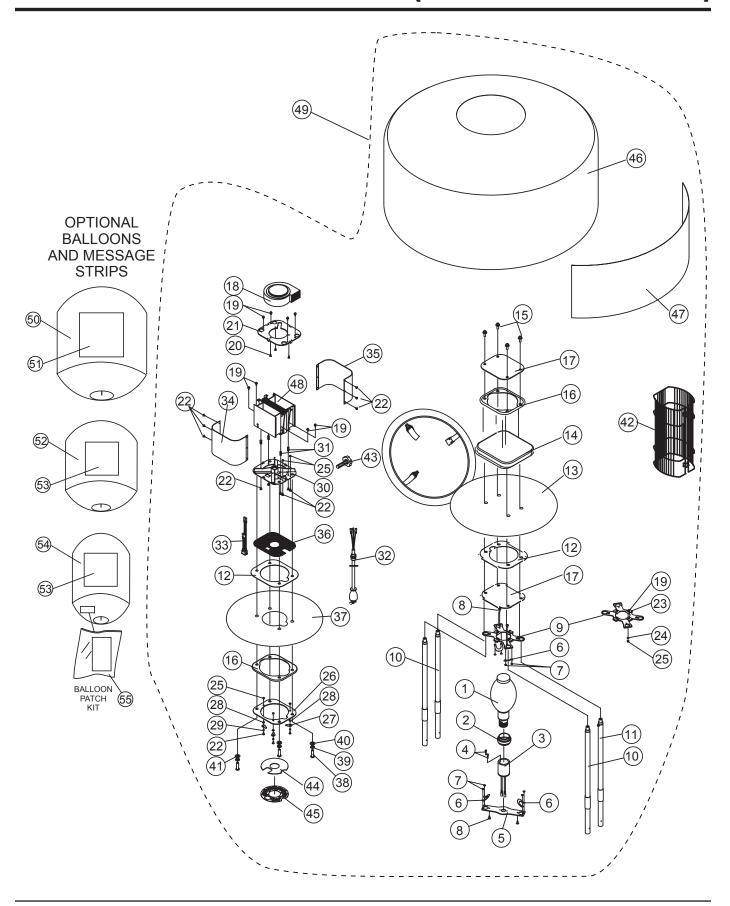
#### **BALLOON AND LAMP ASSY (GBW/GBS)**



## **BALLOON AND LAMP ASSY (GBW/GBS)**

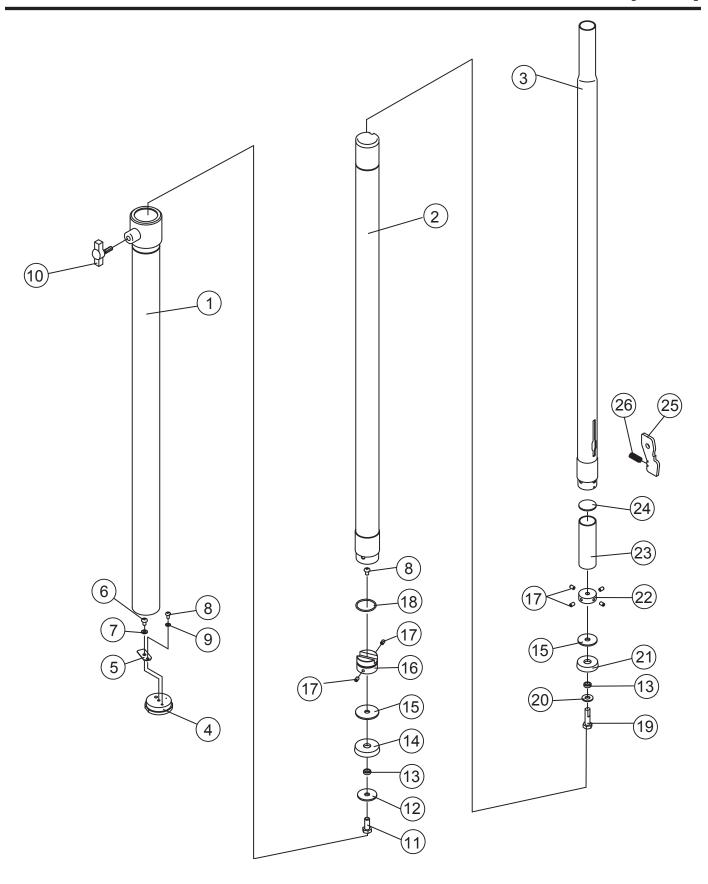
NO.	PART NO.	PART NAME	QTY.	REMARKS
1#	E000125600	LAMP MP1000	1	112.117.11.11.0
2#	E000038200	RUBBER	1	
3#	A300273200	SOCKET ASSY	1	
4#	0023304015	SCREW & WASHER, M4x15	2	
5#	A300160602	PLATE, LAMP	1	
6#	A400195200	STOPPER	4	
7#	0024304004	SCREW, M4x4	8	
8#	0023405012	SCREW, M5x12	4	
9#	A300174000	LAMP HOLDER	1	
10#	A200057703	MAIN POLE 1	3	
11#	A200061300	MAIN POLE 2	1	
12#	2214500230	SEAL, FLAT	2	
13#	A100061200	SHEET, TOP	1	
14#	A100060900	RED BALLOON COVER	1	
15#	0014808025	BUTTON SCREW AND WASHER, M8x25	4	
16#	A300162400	SEAL, PACKING	2	
17#	A300165100	PLATE, TOP	1	
18#	A300264500	FAN MOTOR ASSY	1	
19#	0023304012	SCREW AND WASHER, M4x12	12	
20#	0023204006	SCREW, M4x6	3	
21#	A300164900	PLATE, FAN	1	
22#	0024304008	SCREW, M4x8	15	
23	A400199500	PACKING, LAMP	4	
24	0043104000	WASHER, M4	4	
25#	0033104000	NUT, M4	9	
26#	A300145801	BOTTOM PLATE	1	
27#	A400030700	STOPPER, FILTER	3 3	
28#	E000119300	WAVE WASHER, M5		
29#	E000077500	SPACER	3	

#### **BALLOON AND LAMP ASSY (GBW/GBS — CONTINUED)**



### **BALLOON AND LAMP ASSY (GBW/GBS — CONTINUED)**

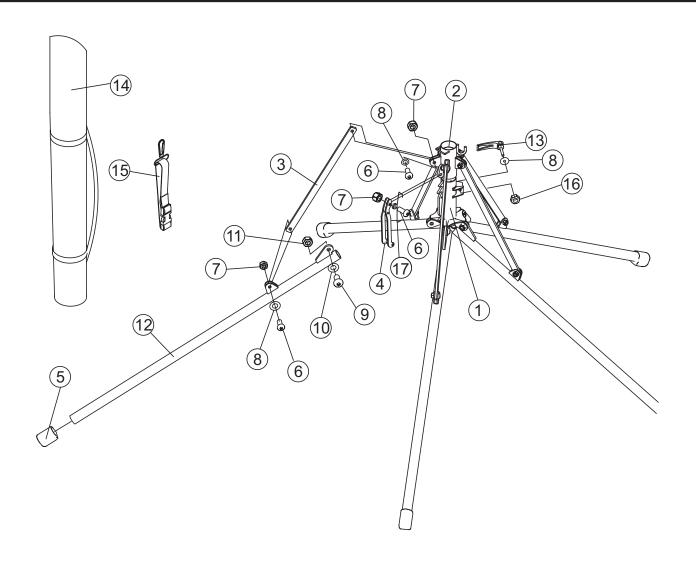
NO.	PART NO.	PART NAME	QTY.	REMARKS
30#	A200057603	FLANGE	1	
31#	E000070000	SUPPORT NUT	4	
32#	A300181901	POWER CABLE	1	
33#	A300269600	SWITCH	1	
34#	A300160003	COVER 1	1	
35#	A300160100	COVER 2	1	
36#	A300165001	PLATE, GUARD	1	
37#	A100061000	SHEET, BOTTOM	1	
38#	0014710035	BUTTON SCREW, M10x35	4	
39#	0043210000	SPRING WASHER, M10	4	
40#	2204510110	WASHER	1	
41#	0043110000	WASHER, M10	3	
42#	A100061300	LAMP GUARD	1	
43#	A400209801		1	
44#	A300174401	FILTER	1	
45#	A300175300	PLATE, AIR	1	
46#	GBB115DR	PLATE, AIR BALLOON CLOTHBLANK MESSAGE STRIP (OPTIONAL)	1	CONTACT MQ UNIT SALES
47#	GBBALD1	BLANK MESSAGE STRIP (OPTIONAL)	1	CONTACT MQ UNIT SALES
48#		E BALLAST ASSY BALLOON/LAMP ASSY	1	
49	GBP	BALLOON/LAMP ASSY		
				CONTACT MQ UNIT SALES
50	GB48 GB48BMS GB36 GB36BMS	BALLOON CLOTH (OPTIONAL)	1	CONTACT MQ UNIT SALES
51	GB48BMS	BLANK MESSAGE STRIP, 48"X48" (OPTIONA	،L)1	CONTACT MQ UNIT SALES
52	GB36	BALLOON CLOTH (OPTIONAL)	<u>1</u>	CONTACT MQ UNIT SALES
53	GB36BMS	BLANK MESSAGE STRIP, 36"X36" (OPTIONAL	_)1	CONTACT MQ UNIT SALES
54	GB36N	BALLOON CLOTH (OPTIONAL)	1	CONTACT MQ UNIT SALES
55	1654000230	BALLOON CLOTH (OPTIONAL)BLANK MESSAGE STRIP, 48"X48" (OPTIONAL) BALLOON CLOTH (OPTIONAL)BLANK MESSAGE STRIP, 36"X36" (OPTIONAL) BALLOON CLOTH (OPTIONAL)BALLOON PATCH KIT (OPTIONAL)	1	CONTACT MQ UNIT SALES



### **MAST ASSY (GBW)**

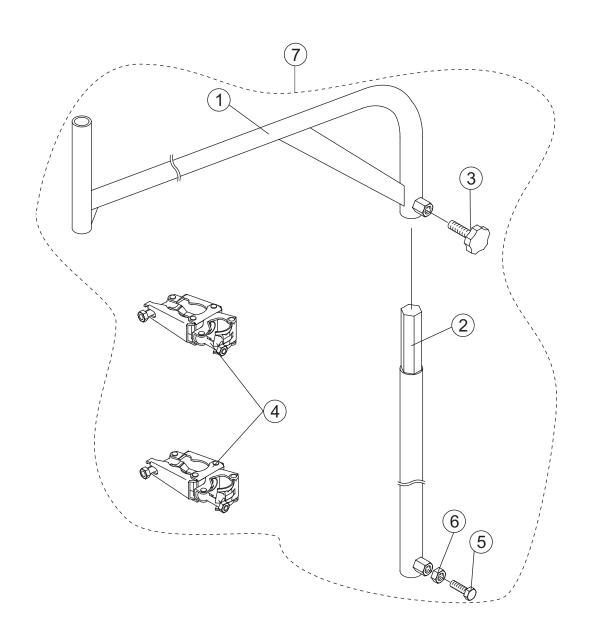
	2122116			
<u>NO.</u>	PART NO.	PART NAME	<u>QTY.</u> <u>REMARKS</u>	
1	A300175400	FIRST MAST	1	
2	A300175500	SECOND MAST	1	
3	A300175600	THIRD MAST	1	
4	A400199700	PLUG	1	
5	A400112700	LEAF VALVE	1	
6	0023104008	SCREW, M4x8	1	
7	0043104000	WASHER, M4	1	
8	0023105008	SCREW, M5x8	2	
9	0043105000	WASHER, M5	1	
10	A400187601	KNOB	2	
11	0013108020	BOLT, M8x20	1	
12	A400200500	WASHER	1	
13	A400110200	WASHER, MAST	2	
14	A400200700	RUBBER, MAST	1	
15	A400092801	WASHER	2	
16	A400200800	<b>BOTTOM PLATE</b>	1	
17	0024705008	SET SCREW, M5x8	6	
18	E000081200	O-RING	1	
19	A400202700	BOLT	1	
20	0043108000	WASHER, M8	1	
21	A400109600	RUBBER, MAST	1	
22	A400092402	BOTTOM PLATE	1	
23	A400200300	PIPE, LEVER	1	
24	A400200400	WASHER	1	
25	A400200201	LEVER, HOOK	1	
26	A400195700	SPRING, HOOK	1	
	71100100700	3. 111143, 11331	ı	

#### **PENTAPOD ASSY (GBW)**



### **PENTAPOD ASSY (GBW)**

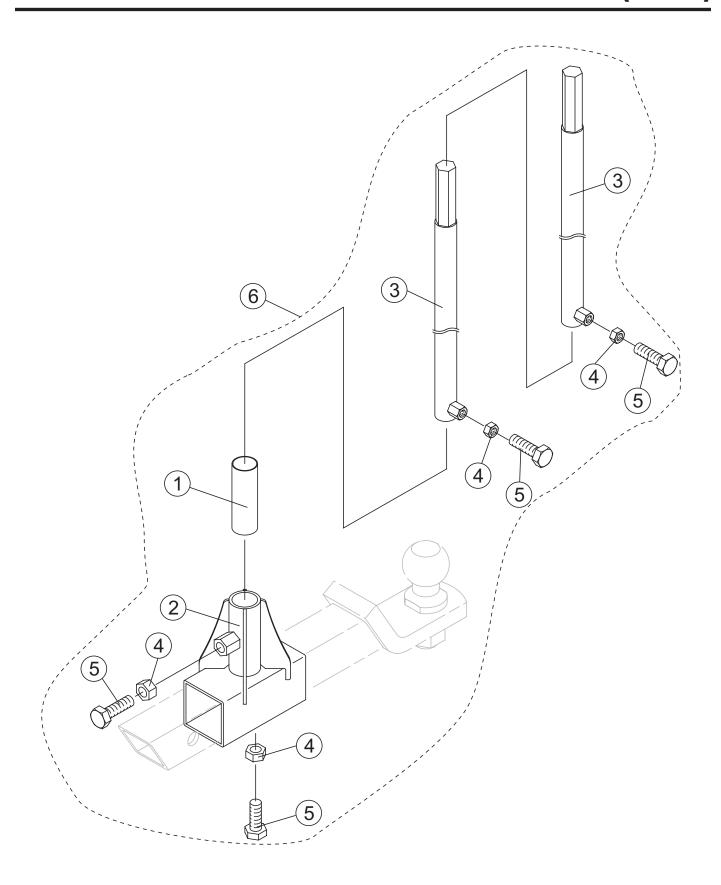
NO.	PART NO.	PART NAME	QTY.	REMARKS
1	A300180300	BASE PIPE 1	1	
2	A300178000	BASE PIPE 2	1	
3	A300113103	SUPPORT	5	
4	A300108700	SHACKLE	1	
5	1641000330	RUBBER FOOT	5	
6	0014708025	BUTTON SCREW, M8x25	11	
7	0033208000	SELF LOCK NUT, M8	11	
8	A400205901	WASHER, M8	10	
9	0014710025	BUTTON SCREW, M10x25	5	
10	0043110000	WASHER, M10	5	
11	0033210000	SELF LOCK NUT, M10	5	
12	A300171601	FOOT	5	
13	2212780310	LEVER	1	
14	A300152700	CARRYING CASE	1	
15	A300106500	STRAP	1	
16	0033206000	SELF LOCK NUT, M6	1	
17	A400205901	SPRING, SHACKLE	1	



# **POLE ASSY (GBS)**

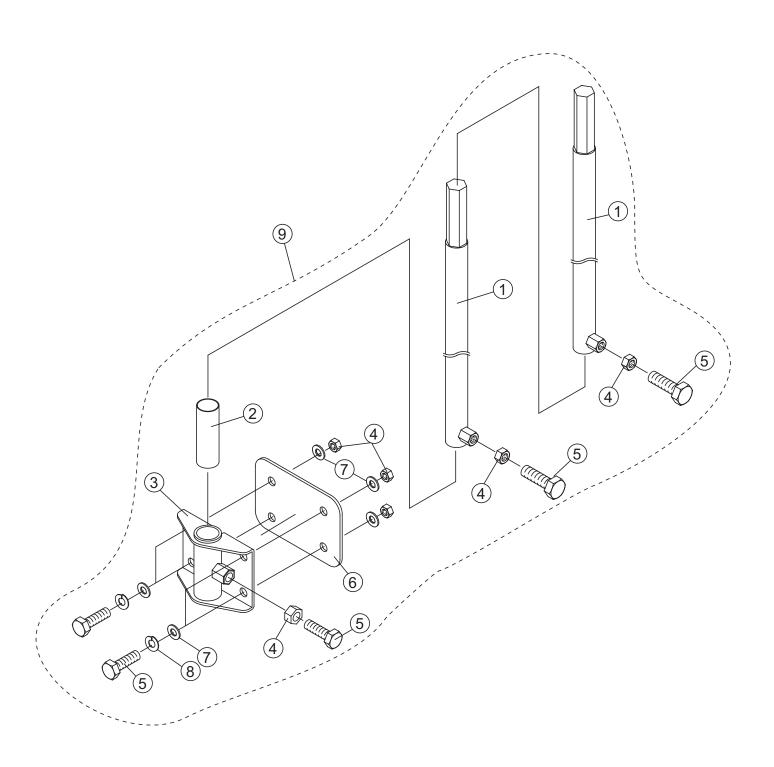
NO.	PART NO.	PART NAME	QTY.	REMARKS
1#	A200056702	OFFSET POLE	1	
2#	A300166600	POLE	1	
3#	E000077100	KNOB	1	
4#	E000093400	CLAMP	2	
5#	0013112040	BOLT, M12x40	1	
6#	0033112000	NUT, M12	1	
7	A000028100	POLE MOUNT KIT	1	INCLUDES ITEMS W/ #
				CONTACT MQ UNIT SALES

### **HITCH MOUNT ASSY (GBHM)**



### **HITCH MOUNT ASSY (GBHM)**

NO.	PART NO.	PART NAME	QTY.	<u>REMARKS</u>
1#	A300164601	SHAFT, JOINT	1	
2#	A300164501	JOINT	1	
3#	A300166600	POLE	2	
4#	0033112000	NUT, M12	4	
5#	0013112040	BOLT, M12x40	4	
6	GBHM	HITCH MOUNT	1	INCLUDES ITEMS W#
				CONTACT MQ UNIT SALES



### **PLATE MOUNT ASSY (GBMP)**

NO.	PART NO.	PART NAME	QTY. REMARKS
1#	A300166600	POLE	2
2#	A300164601	SHAFT, JOINT	1
3#	A300166000	ADAPTER	1
4#	0033112000	NUT, M12	3
5#	0013112040	BOLT, M12x40	7
6#	A400192100	PLATE, ADAPTER	1
7#	0043112000	WASHER, FLAT M12	8
8#	0043212000	WASHER, LOCK	4
9	GBMP	MOUNTING PLATE	INCLUDES ITEMS W#
			CONTACT MQ UNIT SALES

### **OPERATION AND PARTS MANUAL**

# HERE'S HOW TO GET HELP

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

#### **UNITED STATES**

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(310) 537- 3700 6141 Katella Avenue Suite 200 Cypress, CA 90630 E-MAIL: mq@multiquip.com

WEBSITE: www.multiquip.com

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Multiquip

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Multiquip (UK) Limited Head Office

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