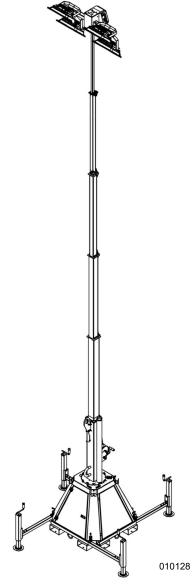


Owner's Manual

For CTF10 Light Tower



For technical assistance contact: www.generacmobileproducts.com Technical Support 1-800-926-9768

Use this page to record important information about your Generac Mobile Product

Unit Model Number	
Unit Serial Number	
Date Purchased	

Record the information found on your unit data label on this page. See **Serial Number Locations**.

When contacting a Generac Mobile Products Authorized Service Dealer (ASD) about parts and service, always supply the complete model number and serial number of the unit.

Operation and Maintenance: Proper maintenance and care of the generator ensures a minimum number of problems and keeps operating expenses at a minimum. It is the operator's responsibility to perform all safety checks, to verify that all maintenance for safe operation is performed promptly, and to have the equipment checked periodically by an ASD. Normal maintenance, service and replacement of parts are the responsibility of the owner/operator and, as such, are not considered defects in materials or workmanship within the terms of the warranty. Individual operating habits and usage may contribute to the need for additional maintenance or service.

⚠WARNINGCANCER AND REPRODUCTIVE HARM

www.P65Warnings.ca.gov.

(000393a)

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Section 1: Introduction and Safety

Introduction

Thank you for purchasing a Generac Mobile Products LLC product. This unit has been designed to provide high performance, efficient operation, and years of use when maintained properly.

The information in this manual is accurate based on products produced at the time of publication. The manufacturer reserves the right to make technical updates, corrections, and product revisions at any time without notice.

Read This Manual Thoroughly



AWARNING

Consult Manual. Read and understand manual completely before using product. Failure to completely understand manual and product could result in death or serious injury. (000100a)

If any section of the manual is not understood, contact your nearest Generac Mobile Products Authorized Service Dealer, or contact Generac Mobile Products LLC at 1-800-926-9768, or Generac Mobile Products Technical Service at 1-800-926-9768 or www.generacmobileproducts.com with any questions or concerns.

The owner is responsible for proper maintenance and safe use of the equipment. Comply with regulations the Occupational Safety and Health Administration (OSHA) has established, or with equivalent standards. Also, verify that the unit is applied, used, and maintained in accordance with the manufacturer's instructions and recommendations. Do nothing that might alter safe application/usage and render the unit in noncompliance with the aforementioned codes, standards, laws, and regulations.

Save these instructions for future reference. This manual contains important instructions for the unit that should be followed during setup, operation and maintenance of the unit and battery. ALWAYS supply this manual to any individual that will use this machine.

How to Obtain Service

When the unit requires servicing or repairs, contact a Generac Mobile Products Authorized Service Dealer (GMP ASD) for assistance. Service technicians are factory-trained and are capable of handling all service needs. For locating dealer, www.generacmobileproducts.com/parts-service/findservice. When contacting a GMP ASD about parts and service, always supply the complete model number and serial number of the unit as given on its data decal located on the unit. Record the model number and serial numbers in the spaces provided on the inside front cover of this manual.

Safety Rules

The manufacturer cannot anticipate every possible circumstance that might involve a hazard. The warnings in this manual, and on tags and decals affixed to the unit are, therefore, not all inclusive. If using a procedure, work method or operating technique that the manufacturer does not specifically recommend, verify that it is safe for others. Also make sure the procedure, work method or operating technique utilized does not render the equipment unsafe.

Throughout this publication, and on tags and decals affixed to the unit, DANGER, WARNING, CAUTION and NOTE blocks are used to alert personnel to special instructions about a particular operation that may be hazardous if performed incorrectly or carelessly. Observe them carefully. Their definitions are as follows:

ADANGER

Indicates a hazardous situation which, if not avoided, will result in death or serious injury.

(000001)

AWARNING

Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

(000002)

ACAUTION

Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

(000003)

NOTE: Notes contain additional information important to a procedure and will be found within the regular text of

These safety alerts cannot eliminate the hazards that they indicate. Common sense and strict compliance with the special instructions while performing the action or service are essential to preventing accidents.

General Hazards

AWARNING

Equipment and property damage. Do not operate unit on uneven surfaces, or areas of excessive moisture, dirt, dust or corrosive vapors. Doing so could result in death, serious injury, property and equipment damage. (000250)



AWARNING

Moving Parts. Keep clothing, hair, and appendages away from moving parts. Failure to do so could result in death or serious injury.

(000111)

WARNING

Risk of injury. Do not operate or service this machine if not fully alert. Fatigue can impair the ability to service this equipment and could result in death or serious injury. (000215)

AWARNING

Personal injury. Keep people and pets away from work area. Failure to do so could result in death or serious injury.

(000420)



AWARNING

Hot Surfaces. When operating machine, do not touch hot surfaces. Keep machine away from combustibles during use. Hot surfaces could result in severe burns or fire. (000108)

AWARNING

Personal injury. Do not operate unit during transport. Doing so could result in death, serious injury, or property damage.

(000231a)

AWARNING

Crushing hazard. Verify unit is properly secured and on level ground. An unsecured unit can suddenly roll or move, causing death or serious injury.

(000234a)

ACAUTION

Equipment Damage. Failure to perform a daily inspection could result in damage to the unit.

(000306)

Electrical Hazards



ADANGER

Electrocution. In the event of electrical accident, immediately shut power OFF and disconnect unit from source. Use non-conductive implements to free

victim from live conductor. Apply first aid and get medical help. Failure to do so will result in death or serious injury. (000354)



ADANGER

Electrocution. Water contact with a power source, if not avoided, will result in death or serious injury.

(000104)



ADANGER

Electrocution. Verify electrical system is properly grounded before applying power. Failure to do so will result in death or serious injury. (000152)



ADANGER

Electrocution. DO NOT use the unit if electrical cord is cut or worn through. Doing so will result in death or serious injury.

(000263a)



▲ DANGER

Electrocution. Do not wear jewelry while working on this equipment. Doing so will result in death or serious injury.

(000188)

Fire Safety



AWARNING

Risk of Fire. Hot surfaces could ignite combustibles, resulting in fire. Fire could result in death or serious injury.

(000110)

Operating Safety

Positioning the Unit



ADANGER

High Voltage. Verify area above unit is clear of overhead wires and obstructions. Contact with high-voltage power lines will result in death or serious injury. (000260a)

- The area immediately surrounding the unit should be dry, clean, and free of debris.
- Position and operate the unit on a firm, level surface.
- If the unit is equipped with a frame grounding stud, follow the National Electrical Code (NEC), state, and local regulations when connecting.

Starting the Unit



ADANGER

Electrocution. DO NOT use the unit if electrical cord is cut or worn through. Doing so will result in death or serious injury.

(000263a)

AWARNING

Equipment damage. Do not attempt to start or operate a unit in need of repair or scheduled maintenance. Doing so could result in serious injury, death, or equipment failure or damage. (000291)

Raising and Lowering the Mast



Electrocution. Do not set up or operate this unit if severe weather is expected.

Lightning strikes can kill or cause severe injury even if you are not touching the unit. (000296)



AWARNING

Do not set up the unit if high winds are expected. High winds can cause the unit to tip or fall, causing severe injury or machine damage.

(000594)

WARNING

Personal Injury. Stop immediately if the mast hangs up or the winch cable develops slack. Excess slack could cause the mast to collapse, resulting in personal injury or equipment damage. (000265)

- Keep area around the unit clear of people while raising and lowering the mast.
- ALWAYS lower the mast when not in use.
- The tower extends up to 32 ft (9.9 m). Verify the area above trailer is open and clear of overhead wires and obstructions.
- If for any reason any part of the mast hangs up or the winch cable develops slack while raising or lowering the tower, STOP immediately! Contact a Generac Mobile Products Authorized Service Dealer.

Service Safety

This unit uses high voltage circuits capable of causing serious injury or death. Only a qualified and licensed electrician should troubleshoot or repair problems occurring in this equipment.

- Before servicing the unit, verify the main breaker switch and circuit breakers are in the OFF position, and the shore power cord is disconnected. DO NOT perform even routine maintenance unless all electrical components are shut down.
- ALWAYS use extreme caution when servicing this unit in damp conditions. Do not service the unit if your skin or clothing is wet. Do not allow water to collect around the base of the unit.
- DO NOT wash the unit with high pressure hoses, power washers, or steam cleaners. Water may collect in the unit, causing damage to electrical parts.
- Replace all missing and hard to read decals. Decals provide important operating instructions and warn of dangers and hazards.
- Wear heavy leather gloves when handling winch cables. Never let cables slip through bare hands.
- Only use mild soap and water to clean the lens covers.
 Other chemicals may damage the lens covers.
- Make sure slings, chains, hooks, ramps, jacks and other types of lifting devices are attached securely and have enough weight-bearing capacity to lift or hold the equipment safely. Always remain aware of the position of other people around you when lifting the equipment.

Safety and Operating Decals

See *Figure 1-1* through *Figure 1-5*. This unit features numerous safety and operating decals. These decals provide important operating instructions and warn of dangers and hazards. The following diagrams illustrate decal locations and descriptions.

Replace any missing or hard-to-read decals and use care when washing or cleaning the unit. Decal part numbers can be found in the parts manual atwww.generacmobileproducts.com.

ID	Description	ID	Description
1	Forklift Pockets	8	Stopping point to prevent mast rotation
2	Help Tech - Heavy Equipment Loss Prevention Technology	9	Generac Mobile Logo
3	Read the Manual	10	Warning - Extracted Stabilizers
4	Made in Italy	11	Security pin
5	Lifting Point	12	Always: extend the outriggers and level the unit before raising the mast
6	Warning - Pinch Points	13	Maximum Wind Stability
7	Do not Step	14	Tie down point

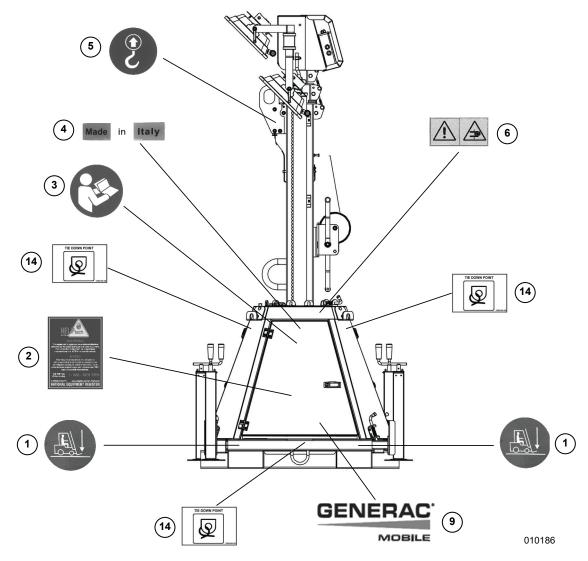


Figure 1-1. Decal Locations (1 of 5)

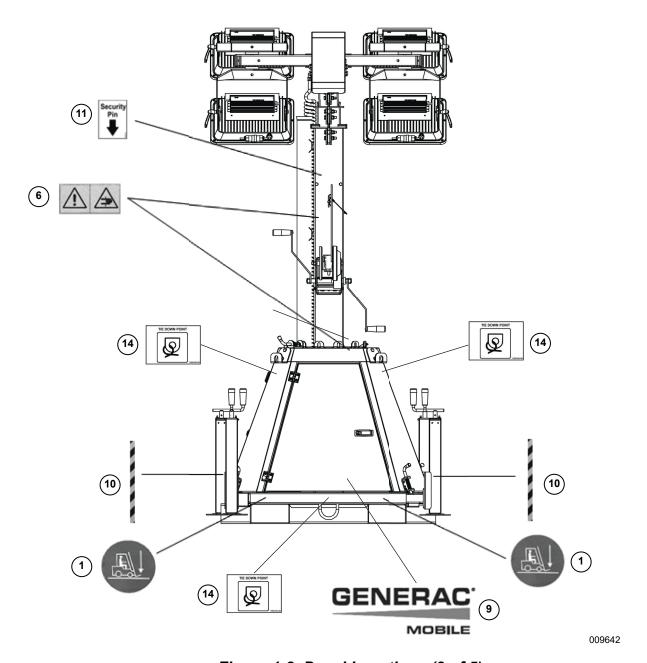


Figure 1-2. Decal Locations (2 of 5)

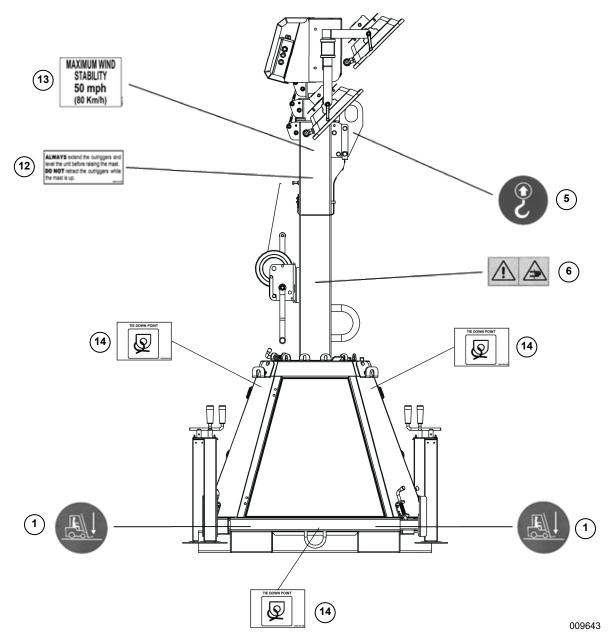


Figure 1-3. Decal Locations (3 of 5)

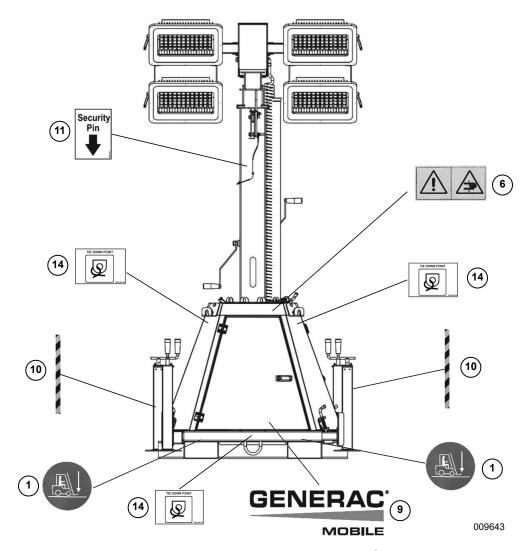


Figure 1-4. Decal Locations (4 of 5)

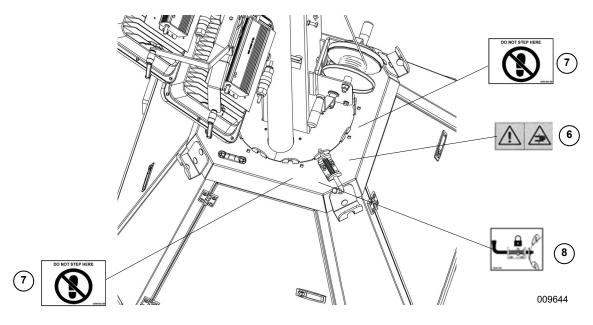


Figure 1-5. Decal Locations (4 of 4)

Introduction and Safety

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Section 2: General Information

Specifications

Description	Units	CTF-10
Lighting (LED)		
Lighting Type	-	LED
LED Driver Output	VDC	48
Total Lumen	Lm	152,000
AC Distribution		
Circuit Breaker Size	A	15/20 Main Breaker
Amperage Selection	A	15/20
120V-20 amp GFCI Receptacle	A	1
Power Selection Switch	quantity	1
120V-20 amp Twist Lock Inlet	quantity	1
120V-15 amp Inlet	quantity	1
Lighting Tower		
Raising	-	Manual
Sections	-	6
Rotation Section	degrees	340°
Electrical Coiled Cable	mm²	11G2.5
Maximum Wind Stability	mph (km/h)	50 (80)
Weight		
Weight	lbs (kg)	865 (392)
Raising and Lowering Rope		
Rope Type	-	AZ150/06ACAR

Serial Number Locations

Refer to *Figure 2-1* to locate serial number (A) and nameplate (B). Record the information from these tags so it is available if the tags are lost or damaged. When ordering parts or requesting assistance, you may be asked to provide this information.

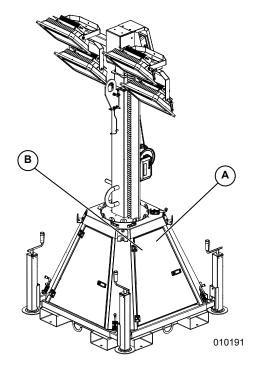


Figure 2-1. Serial Number Location

Unit Dimensions

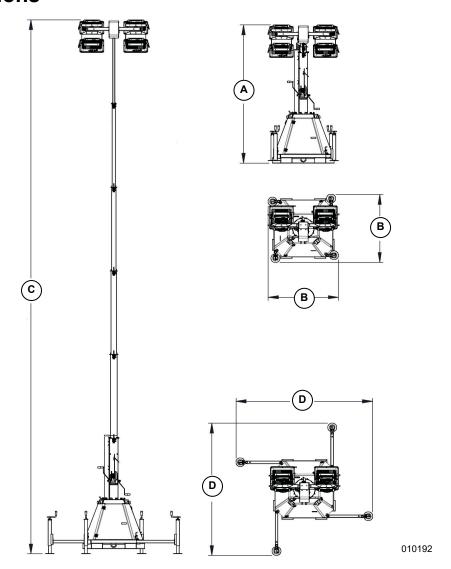


Figure 2-2. Unit Dimensions

	Α	В	С	D
CTF-10	100 in (2.54 m)	49.1 in (1.247 m)	32.5 ft (9.9 m)	99.6 in (2.5 m)

Specifications are subject to change without notice.

Component Locations

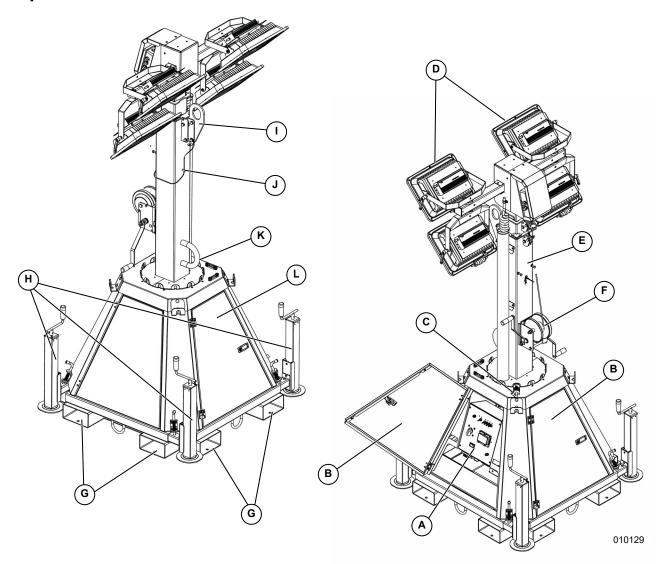


Figure 2-3. Component Locations

- A Command panel
- **B** Inspection door
- **C** Floodlights blocking rotation pin
- **D** Floodlights
- E Telescopic mast
- F Manual winch

- **G** Forklift pockets
- H Extractable stabilizers
- I Lifting hook
- J Safety pin
- K Floodlights rotation handle
- L Inspection door

NOTE: For grounding requirements, follow local, state, or National Electrical Code (NEC) guidelines.

Control Panel

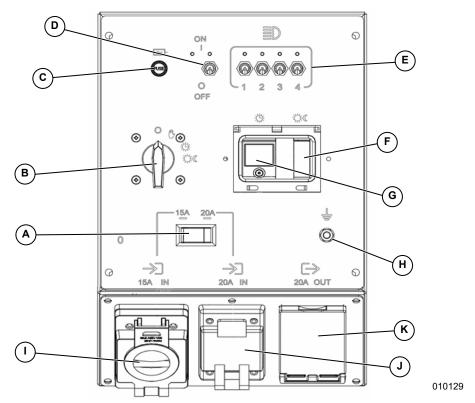


Figure 2-4. Control Panel

Control Panel Features and Functions

(A) Input power selector switch

Selects the shore power source.

- Choose the 15 A setting if the unit will be operated as a stand-alone light source.
- Choose the 20 A setting if auxiliary equipment or a second CTF10 will be connected to the unit.

(B) Off/Manual/Timer/Light Sensor Selector

Selectable modes are:

- 0: Manual OFF.
- (Manual ON.
- Timer ON. See *Timer* for more information.
- C: Light Sensor ON. See *Light Sensor* for more information.

(C) 2 A AC Fuse

Axillary circuit.

(D) Main circuit breaker

Resettable main circuit breaker for the LED lights and 120V/20A GFCI receptacle.

(E) Mast circuit breakers

Individual circuit breakers for the LED light fixtures.

(F) Light sensor intensity setting

Sets light sensor lux threshold. Used when Off/Manual/ Timer/Light Sensor selector is set to Light Sensor. See *Light Sensor* for more information.

(G) Digital timer

Sets timer schedule. Used when Off/Manual/Timer/Light Sensor selector is set to Timer. See *Timer* for more information.

(H) Electrical ground connection

Electrical grounding stud for connecting an earth ground to the unit if required.

(I) 120VAC-15A plug (shore power input)

Connection point for 120V-15A input power. Requires a NEMA 5- 15P connection.

(J) 120VAC-20A plug (shore power input)

Connection point for 120VAC-20A shore power input. Requires a NEMA L5-20P connection.

(K) 120VAC/20A GFCI convenience receptacle (5-20R)

Customer convenience receptacle for auxiliary equipment. Includes a Ground Fault Circuit Interrupter (GFCI) test and reset button. Requires a NEMA 5-20P or 5-15P connection.

Light Sensor

NOTE: To use this feature, the Off/Manual/Timer/Light Sensor selector must be set to Light Sensor.

The light sensor setting automatically switches lamps ON/OFF based on ambient lighting.

When ambient lighting drops below a user programmable lux threshold, a delay timer starts. If, after the delay time has expired, ambient lighting remains less than the threshold value, the unit will automatically start.

When ambient lighting exceeds the threshold value, the unit will shut OFF after the delay period has expired.

Setting Lux Treshold

See *Figure 2-5*. To set the lux threshold, use a screw driver to turn Lux level setting (A) to the desired value.

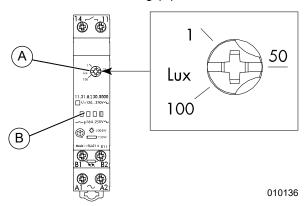


Figure 2-5. Lighting Sensor Intensity Setting

NOTE: LED (B) communicates when ambient lighting is less than or greater than the lux threshold. See *Table 1: Light Sensor LED* for more information.

Table 1 - Light Sensor LED

LED Status	Light Sensor Status
Slow blinking	Off. Ambient lux is greater than threshold setting.
Steady	On. Ambient lux is less than threshold setting

NOTE: See *Figure* **2-6**. When using the light sensor setting, verify light sensor (C) is clean and exposed to ambient light.

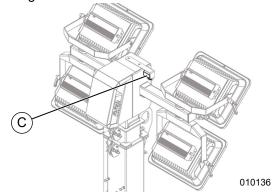


Figure 2-6. Light Sensor

Timer

NOTE: To use this feature, the Off/Manual/Timer/Light Sensor selector must be set to Timer.

The Timer setting automatically turns lamps ON and OFF at a scheduled time.

The timer can be programmed either via a Smartphone or through the digital timer located on the unit control panel.

Programming Timer via Smartphone

NOTE: Requires a smartphone equipped with Near Field Communications (NFC) technology.

To program the timer via a smartphone, download and install the FINDER® Toolbox Android™ app. This app is available on Google Play™.





Once installed, follow the on screen programming instructions.

Programming Timer via Control Panel

The digital timer allows the user to create up to 50 ON/ OFF programs. Each program schedules a time and day of week the unit will automatically turn either ON or OFF. See Figure 2-7 for digital timer controls and display

features.

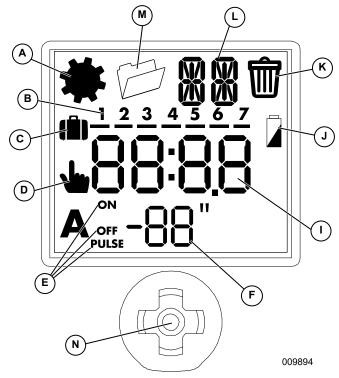


Figure 2-7. Digital Timer Controls and Features

- Α Settings menu
- В Days of the week
- C Holiday program
- D Permanent manual override activated - channel A
- Ε Channel A functions
- F Day - seconds/minutes
- ı Time, day, month, hours, minutes
- Time switch without power supply Low battery with power supply
- Cancel Κ
- L Program number
- M Program
- Ν **Joystick**

Setting the Clock

- See Figure 2-7. Press joystick (N) to enter Settings menu (A).
- Press and hold the joystick for 3 seconds to enter clock settings.
- 3. Adjust the following settings to the current day and time by moving joystick up and down to scroll through values on a page. Move the joystick to the right to advance to the next page.
 - Year
 - Day
 - Month
 - Hour
 - Minute
 - Daylight savings ON/OFF
- **4.** Move joystick right to advance to PIN OFF.
- Move joystick right to advance to END.
- Press joystick to exit settings menu.

Programming the Timer

- See Figure 2-7. Press joystick (N) to advance to Settings (A).
- 2. Press joystick to advance to Program menu (M).
- Move joystick up to select NP to create a new program and press joystick to confirm.
- Move joystick left to select Timer ON/OFF and press joystick to confirm.
- 5. Set timer to desired ON or OFF time by moving the joystick up and down to scroll through times 00:01 through 23:59.
- 6. Press joystick to commit time setting and to advance to day setting.
- Move joystick left and right to set the program day (B) then move the joystick up or down to schedule the program as an ON or OFF event.
 - Days of the week are numbered 1-7 with the week starting on Monday.
 - ·Selecting ON will turn the unit ON at the programmed time.
 - ·Selecting OFF will turn the unit OFF at the programmed time.
- **8.** Press joystick for 3 seconds to save the program.

Internal Storage

See *Figure 2-8*. Cabinet (C) can be used for storing nonflammable items, such as power cords, small equipment, or tools.

NOTE: Cabinet is not waterproof.

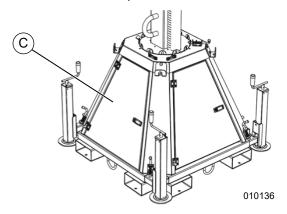


Figure 2-8. Internal Storage

Lifting and Transporting

See *Figure 2-9*. The unit is equipped with lifting eye (A) and forklift pockets (B) for lifting the unit on and off a transporting vehicle.

Lifting the Unit

NOTE: Remain aware of people and objects around the unit while preparing, maneuvering, and lifting the unit.

- 1. Verify the equipment being used to lift the unit is in good condition and has sufficient capacity. For approximate weights, see **Specifications**.
- 2. Verify the mast is completely lowered.
- **3.** Verify outriggers and jacks are fully retracted.
- 4. Close and lock access doors and control panel.
- **5.** Figure 2-9. To lift unit, use one of the following methods:
 - Attach slings, chains, or hooks directly to central lift point (A). Verify the LED fixtures will not be damaged when lifting.
 - Use a forklift. Approach forklift pockets (B) with care. Avoid approaching the unit at an angle, as this can permanently damage the forklift pockets, tires, or cabinet. Verify any obstructions are clear of the forklift tines before lifting.

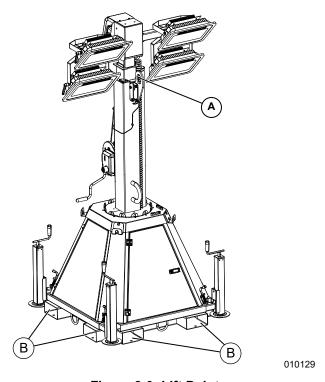


Figure 2-9. Lift Points

Tying the Unit Down

When securing the unit for transportation, verify the equipment being used to fasten the unit is in good condition and has sufficient strength to hold the unit in place during transport.

See *Figure 2-9*. Tied-down straps, ropes, or chains may be passed through forklift pockets (B) or through tie down points (C).

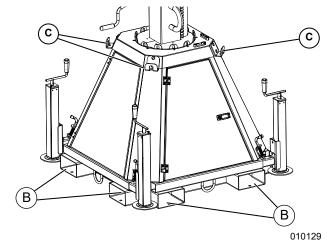


Figure 2-10. Tying the Unit Down

General Information

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Section 3: Operation

Operation Configuration Guidelines



ADANGER

Electrocution. In the event of electrical accident, immediately shut power OFF. Use non-conductive implements to free victim from live conductor. Apply first aid and get medical help. Failure to do so will result in death or serious injury. (000145)



ADANGER

Electrocution. Verify electrical system is properly grounded before applying power. Failure to do so will result in death or serious injury. (000152)



ADANGER

Electrocution. Water contact with a power source, if not avoided, will result in death or serious injury.

(000104)



▲DANGER

Asphyxiation. Do not connect any enginepowered equipment or fired air heaters to the convenience receptacle(s), even with proper ventilation. Carbon monoxide, if not avoided, will result in death or serious injury. (000353)

NOTE: For grounding requirements, follow local, state, oil and gas or petrochemical plant grounding, MSHA, OSHA, CSA, IEC, IEEE, NFPA, ABS Marine and Maritime guidelines as applicable.

Before setting up the unit, determine if the unit will operate as a standalone light tower or if export power will be required.

- If the unit will operate as a standalone light tower, connect the unit to a 120VAC-15A supply or 120VAC-20A supply using either input power plug.
- If export power is required or a second unit will be connected via the 120 V GFCI receptacle, connect the unit to a 120VAC-20A supply using the NEMA L5-20 plug.

NOTE: Shore power cords are not included with this unit and must be supplied by the end user. See *Table 3-1* for recommended cable size and length.

Table 3-1. Recommended Shore Power Cable Size and Length

Suggested Power Cables and Lengths

100 ft (30.5 m) 10/3—(L5-20P - L5-20R)

50 ft (15.2 m) 12/3—(5-15P - 5-15R)

Maximum Distance - One Unit

400 ft (121.9 m) 10/3—(L5-20P - L5-20R)

300 ft (91.4 m) 12/3—(5-15P - 5-15R)

Maximum Distance - Two Unit

300 ft (91.4 m) 10/3—(L5-20P –L5-20R) to first unit (first unit must be powered by 20A circuit)

200 ft (60.9 m) cable size 12/3 (5-15P - 5-15R) to second unit

Light Tower Setup



ADANGER

High Voltage. Verify area above unit is clear of overhead wires and obstructions. Contact with high-voltage power lines will result in death or serious injury. (000260a)

AWARNING

Equipment and property damage. Do not operate unit on uneven surfaces, or areas of excessive moisture, dirt, dust or corrosive vapors. Doing so could result in death, serious injury, property and equipment damage. (000250)

AWARNING

Personal Injury. Verify the ground is stable and will provide sure support for the stabilizers. Failure to do so could result in death, serious injury, equipment, or property damage.

(000680)

- For maximum light coverage, position unit at ground level or in a location higher than the area being illuminated.
- 2. Place unit on firm ground that is relatively flat with a less than 5° grade.

3. See *Figure 3-1*. Pull locking pins (A) on the four outriggers (B) and pull each out outrigger until the locking pin snaps into stabilizer hole (C).

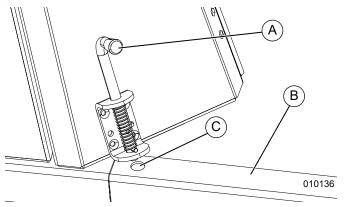


Figure 3-1. Setting up Stabilizers (1 of 2)

4. See *Figure 3-2*. Rotate each jack handle (D) clockwise to start leveling the unit, referencing spirit level (E). Adjust all four jacks by rotating their handles clockwise until the bottom of the unit no longer touches the ground.

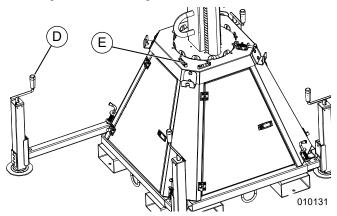


Figure 3-2. Setting up Stabilizers (2 of 2)

5. See *Figure 3-3*. Before raising the mast, adjust the LED fixtures by loosening handle (E) and aiming the LED in the desired direction. After adjusting, tighten the handle.

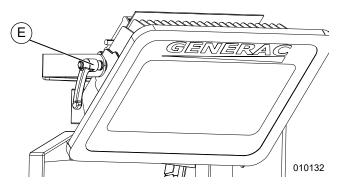


Figure 3-3. Adjusting LED Fixture

Prestart Checklist

Before starting the unit, all items in the prestart checklist must be completed. If any issues are identified, the user must not use the unit until the issue is resolved.

AWARNING

Consult Manual. Read and understand manual completely before using product. Failure to completely understand manual and product could result in death or serious injury.

(000100a)

- □ Verify all maintenance procedures are up to date. For more information, refer to General Maintenance and Winch Use, Operation and Maintenance.
- Perform a walk-around inspection. Refer to *Daily Walk-Around Inspection*.
- ☐ Verify unit is level.
- ☐ Verify unit is dry. Look for water inside or near the unit; dry if needed.
- ☐ For grounding requirements, follow any local, state, oil and gas or petrochemical plant grounding, MSHA, OSHA, CSA, IEC, IEEE, NFPA, ABS Marine and Maritime guidelines as applicable.
- ☐ Verify main breaker switch is in the OFF (O) position.
- ☐ Verify all circuit breakers are in the OFF (O) position.
- ☐ Inspect all electrical cords; repair or replace any that are cut, worn, or bare.
- ☐ Verify all winch cables are in good condition and centered on each pulley. Do not use if cables are kinked or beginning to unravel.
- ☐ Verify all covers and guards are in place and properly secured.
- ☐ If using 20 A shore power, verify convenience receptacle is functional.

Raising the Mast

AWARNING

Electrocution. Do not set up or operate this unit if severe weather is expected.

Lightning strikes can kill or cause severe injury even if you are not touching the unit. (000296)

> 50 mph

AWARNING

Do not set up the unit if high winds are expected. High winds can cause the unit to tip or fall, causing severe injury or machine damage. (000594)

WARNING

Tipping hazard. Extend the outriggers and level the unit before raising the mast. Keep the outriggers extended while the mast is up. Failure to do so could cause the unit to tip and fall and could result in death or serious injury.

(000266)



AWARNING

Personal injury. Use caution when winding winch cable. Failure to do so could result in serious injury.

(000391)

AWARNING

Machine damage. Do not extend the mast beyond the colored mark. Overextension can stretch or break electrical cables or winch cables, and may damage mast hardware. (000372)

IMPORTANT NOTE: Do not use the mast as a hoist or for any other purpose other than supporting LED fixtures.

- 1. Set up and level the unit. See Light Tower Setup
- Inspect mast cables for excessive wear or damage. Verify steel cable is properly centered on each pulley.
- 3. See *Figure 3-4*. Use winch (B) to slowly extend the mast, making sure the coiled electrical cord is extending at the top sections of the mast. STOP extending the mast when the colored mark (C) on the second mast section is visible.

IMPORTANT NOTE: Contact a Generac Mobile Products Authorized Service Dealer immediately if the mast hangs up or the winch cable develops slack.

AWARNING

Personal Injury. Stop immediately if the mast hangs up or the winch cable develops slack. Excess slack could cause the mast to collapse, resulting in personal injury or equipment damage.

(000265)

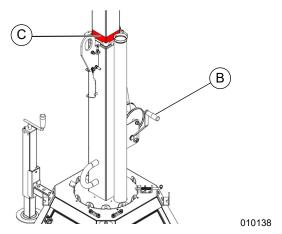


Figure 3-4. Raising Mast

4. See *Figure 3-5*. Pull mast locking pin (D) and use mast handle (E) to orientate the light in the desired direction. When finished, insert locking pin in mast guide locking flange (F).

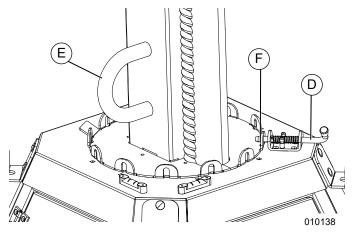


Figure 3-5. Locking Pin

5. See *Figure 3-6*. Insert safety pin (G) into mast hole (H) and secure with hairpin (I).

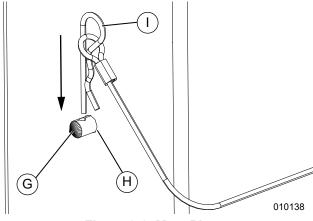


Figure 3-6. Mast Pin

Turning Unit On



ADANGER

Electrocution. DO NOT use the unit if electrical cord is cut or worn through. Doing so will result in death or serious injury.

(000263a)

NOTE: See *Control Panel* for the location of controls and power inlets.

- 1. Verify main circuit breaker and mast light circuit breakers are in the OFF position.
- If required, connect an earth ground to the electrical ground connection on the control panel. See Control Panel for more information.
- 1. Plug in any equipment or an additional light tower.
- Press the input selector power switch to select either a 15 A or 20 A power source. Switch position MUST match the connected input source. See Operation Configuration Guidelines for more information.
- 3. Connect shore power. See Table 3-1: Recommended Shore Power Cable Size and Length.
- 4. Turn main circuit breaker switch ON.
- 5. Select the desired operating mode:
 - Manual
 - Timer
 - Light Sensor
- 6. Turn each mast light circuit breaker ON.
- 7. Start auxiliary equipment.

NOTE: It may be necessary to leave some lights off if the export current exceeds 10 A.

Turning Unit Off

IMPORTANT NOTE: Contact a Generac Mobile Products Authorized Service Dealer immediately if the mast hangs up or the winch cable develops slack.

NOTE: See Control Panel for the location of controls.

Check with personnel using lights and auxiliary power supplied by the unit and let them know the power is going to be turned off. Verify the power shutdown will not create hazards by turning off equipment that may be in use (lights, tools, etc.).

- 1. Turn OFF and disconnect any auxiliary equipment.
- 2. Switch individual mast light breakers OFF.
- 3. Switch Off/Manual/Timer/Light Sensor selector to OFF (O).
- 4. Switch main circuit breaker to OFF (O) position.
- 5. Disconnect the shore power cord.

Lowering the Mast

AWARNING

Personal Injury. Stop immediately if the mast hangs up or the winch cable develops slack. Excess slack could cause the mast to collapse, resulting in personal injury or equipment damage.

(000265)

- 1. Shut off lights. See *Turning Unit Off*.
- 2. Remove mast safety pin.
- 3. Lower the mast.
- Use the winch handle to lower the mast to its lowest position. Verify the electrical cord does not get caught in, or pinched by, the mast while it is being lowered.

IMPORTANT NOTE: Contact a Generac Mobile Products Authorized Dealer immediately if the mast hands up or the winch cable develops slack.

Section 4: Maintenance

Daily Walk-Around Inspection

ACAUTION

Equipment Damage. Failure to perform a daily inspection could result in damage to the unit.

(000306)

Perform a walk-around inspection of the unit before each use. Look for conditions that could hinder performance or safety, such as (but not limited to):

- Blocked vents
- · Loose/missing hardware
- · Loose or broken electrical connections

General Maintenance

Poorly maintained equipment can become a safety hazard. In order for equipment to operate safely and correctly over a long period of time, periodic maintenance and occasional repairs are necessary. **DO NOT** perform routine service unless all electrical components are shut OFF.

Regular maintenance will improve performance and extend engine/equipment life. Generac Mobile Products, LLC recommends all maintenance work be performed by a GMP ASD.

Preparing for Service

Before servicing the unit, follow the instructions below.

- **1.** Verify the main breaker switch and lamp switches are OFF.
- 2. Disconnect shore power from the unit.
- 3. Disconnected linked units.
- **4.** Attach a "Do Not Start" sign to the control panel. This will notify everyone that the unit is being serviced and will reduce the chance of someone inadvertently trying to start the unit.

Cleaning the Unit

ACAUTION

Equipment damage. Never spray water to clean unit. Do not introduce water into generator widings, terminals, or fuel system during the cleaning process. Doing so will result in equipment damage.

(000325a)

Always clean the unit after each use to remove dust, grease, mud, or spilled fuel or oil. Use soft, clean rags to wipe the cabinet exterior and control panel. Low-pressure compressed air (less than 40 psi [276 kPa]) can also be used to remove dust and debris from the cabinet interior.

This unit contains sensitive electronic components that can be damaged by high pressure and heat.

NOTE: Do not wash with a high pressure hose or power washer. Water may enter the cabinet and collect in the generator windings or other electrical parts, causing damage.

Inspecting the Unit

- If the unit is stored outside, check for water inside the cabinet before each use. If wet, dry the unit thoroughly before starting.
- Inspect condition of electrical cords. DO NOT use the unit if insulation is cut or worn through.
- Verify winch cables are in good condition and centered on each pulley. DO NOT use a cable that is kinked or starting to unravel.

Basic Maintenance Schedule

Use *Table 4-1* and *Table 4-2* as guides for regular maintenance intervals. For additional guidance, contact a Generac Mobile Products Authorized Dealer.

Table 4-1. Basic Maintenance Guide

Item	Daily
Inspect Light Tower Winch For Proper Operation	•
Check All Electrical Connections	•

Winch Use, Operation and Maintenance

Prior to Use

- Inspect winch cable and replace if damaged.
- Check mounting hardware for proper tightness and tighten if necessary.
- Gears, ratchet pivot point and shaft bushings must be kept lubricated with a thin film of oil or grease.

Operation

Raising the Mast:

- The cable must be securely fastened to the winch drum
- Always be sure the cable is undamaged. Contact Generac Mobile Products to order a replacement cable if necessary.
- 3. Rotate handle according to the specified direction to lift. The ratchet MUST make a loud clicking sound while winding the cable.

Lowering the Mast:

Rotate handle according to the specified direction to lower. No clicking will be heard while lowering the mast because the automatic brake system is activated.

Maintenance

The following procedures should be performed at least annually:

- Lubricate winch gears and bushings. Apply a thin film of grease to the gear teeth, and oil the bushings as needed.
- Lubricate the ratchet pawl pivot point with a thin oil.

NOTE: Do not get oil or grease on the brake mechanism.

Winch Mechanical Brake

The mechanical brake generates heat when loads are lowered and the wire cable is powered out. Care must be taken to avoid overheating the mechanical brake.

Whine or chatter associated with a new mechanical brake is normal and typically disappears with use.

Overheating the mechanical brake may result in permanent damage to, or failure of, the brake. Replace any damaged brake components before resuming use of the winch.

Table 4-2. Winch Preventative Maintenance Schedule

Maintenance Activity	After First Operation	Before Each Use	Semi- Annually
Check Fasteners	*		*
Clean And Grease Brake Assembly			•
Visually Check Winch And Control	•	•	*

Lubrication

Before each use, check each jack foot for damage and remove any mud or debris. The jacks must be clean and in good operating condition to properly support the unit.

Long-Term Storage

Perform the following steps if the machine is to be stored for an extended period.

- 1. Verify all circuit breakers are OFF (O).
- 2. Verify the unit is unplugged.
- 3. Lower the mast.
- 4. Retract the outriggers and handles.
- 5. Clean the unit inside and out.
- **6.** Close and lock the storage access panels.
- Store the unit indoors, if possible, in a secure, dry location.

Perform a visual inspection of all electrical connections, LED lights, winch cables, and mast before returning the unit to service.

Section 5: Troubleshooting

Troubleshooting the Lights



ADANGER

Electrocution. Potentially lethal voltages are present in this equipment. Render the equipment safe before attempting repairs or maintenance. Failure to do so will result in death or serious injury.

(000343)

IMPORTANT NOTE: Only a qualified electrician should troubleshoot or repair electrical problems occurring in this equipment. Contact Generac Mobile Products Technical Service at 1-800-926-9768 for assistance if you have any questions, or if problems persist.

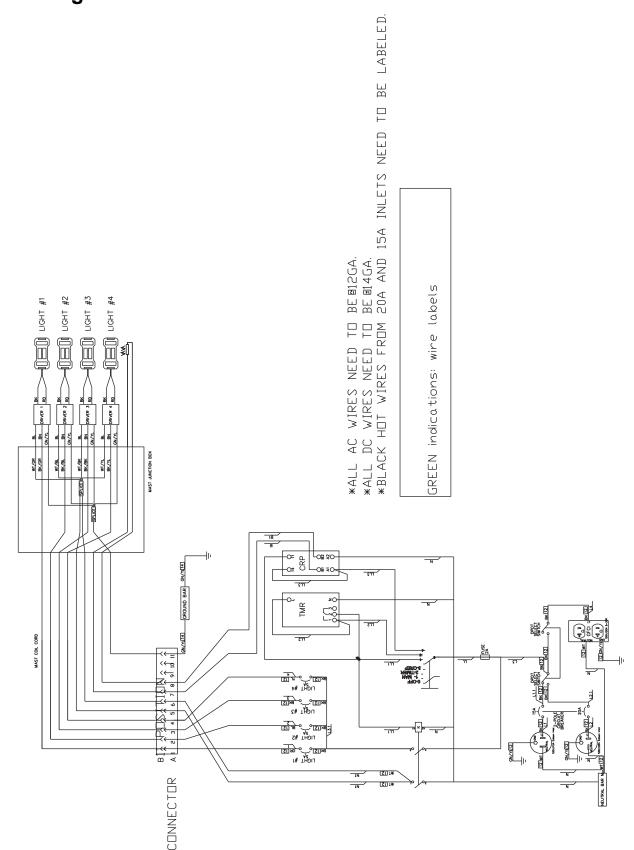
Problem	Possible Cause	Solution	
	Extension cord too long	Use an appropriately sized extension cord. See <i>Table 3-1: Recommended Shore Power Cable Size and Length</i> .	
	Faulty electrical connection	Verify no loose connections in the following: • Mast junction box • Pin connector • LED driver connectors (input/output on each driver) • Mast light circuit breakers (4) • Input power selector • Switch • Main breaker switch	
LED Mast Lights Do Not Turn On	Faulty main breaker switch	Replace main breaker switch.	
	Faulty mast light circuit breaker(s)	Replace mast light circuit breaker(s).	
	Faulty LED driver	Verify driver input voltage from input connector is 120 VAC ±10 VAC. If output voltage from LED Driver is less than 40 VDC, replace LED driver	
	Supply power breaker tripped	Reset supply power breaker.	
	Extension cord gauge too small	Use an appropriately sized extension cord. See <i>Table 3-1:</i> Recommended Shore Power Cable Size and Length.	
LED Mast Lights	LED driver overheated	Leave light off for a few minutes to reset protection, then restart lights.	
are Flashing	Voltage is too low	Verify nothing is obstructing airflow to driver. Check for accumulated dust or dirt on driver; remove using clean, dry cloth.	
Main Breaker Switch Trips when Applying Load	Connected load (through GFCI) too large	Reduce size of connected load or reduce the number of lights in use.	

Troubleshooting

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Section 6: Wiring Diagrams

AC Wiring



Wiring Diagrams

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