Genie®
A TEREX BRAND

Operator's Manual

AL6-6000
AL6-9000

AUS
Australia

with
Maintenance
Information

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These machines comply with the Motor Vehicles Standard Act 1989

Introduction

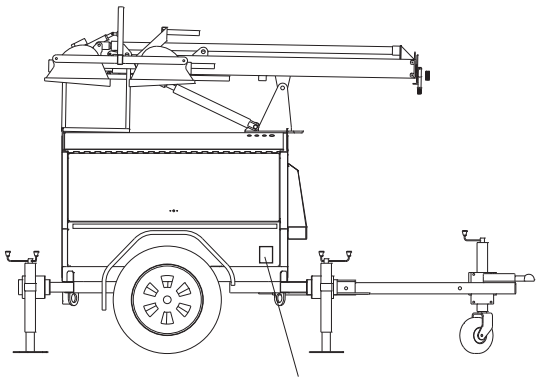
About this manual

Genie appreciates your choice of our machine for your application. Our number one priority is user safety, which is best achieved by our joint efforts. This book is an operation and daily maintenance manual for the user or operator of a Genie machine.

This manual should be considered a permanent part of your machine and should remain with the machine at all times. If you have any questions, contact Genie.

Product Identification

The machine serial number is located on the serial label.



Intended Use

This machine is intended to be used only to provide lighting and electrical power to a work site.

Bulletin Distribution and Compliance

Safety of product users is of paramount importance to Genie. Various bulletins are used by Genie to communicate important safety and product information to dealers and machine owners.

The information contained in the bulletins is tied to specific machines using the machine model and serial number.

Distribution of bulletins is based on the most current owner on record along with their associated dealer, so it is important to register your machine and keep your contact information up to date.

To ensure safety of personnel and the reliable continued operation of your machine, be sure to comply with the action indicated in a respective bulletin.

Introduction

Contacting the Manufacturer

At times it may be necessary to contact Genie. When you do, be ready to supply the model number and serial number of your machine, along with your name and contact information. At minimum, Genie should be contacted for:

Accident reporting

Questions regarding product applications and safety

Standards and regulatory compliance information

Current owner updates, such as changes in machine ownership or changes in your contact information. See Transfer of Ownership, below.

Transfer of Machine Ownership

Taking a few minutes to update owner information will ensure that you receive important safety, maintenance and operating information that applies to your machine.

Please register your machine by visiting us on the web at www.genieindustries.com.au or by calling us toll free at 1800 788 633.

Introduction



Danger

Failure to obey the instructions and safety rules in this manual will result in death or serious injury.

Do Not Operate Unless:

☑ You learn and practice the principles of safe machine operation contained in this operator's manual.

1 Avoid hazardous situations.

Know and understand the safety rules before going on to the next section.

2 Always perform a pre-operation inspection.

3 Always perform function tests prior to use.

4 Inspect the workplace.

5 Only use the machine as it was intended.

☑ You read, understand and obey the manufacturer's instructions and safety rules—safety and operator's manuals and machine decals.

☑ You read, understand and obey employer's safety rules and worksite regulations.

☑ You read, understand and obey all applicable governmental regulations.

☑ You are properly trained to safely operate the machine.

Introduction

Hazard Classification

Decals on this machine use symbols, color coding and signal words to identify the following:



Safety alert symbol—used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

⚠ 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.

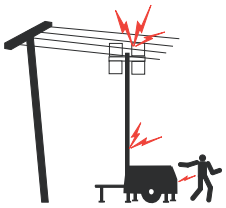
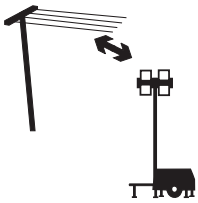
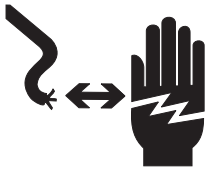
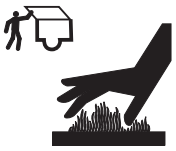
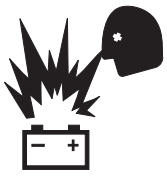
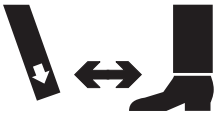
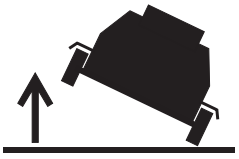
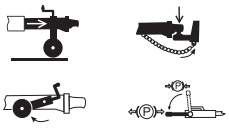
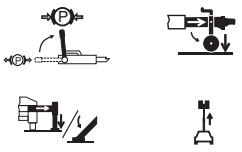
⚠ CAUTION Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE Indicates a property damage message.

Safety Sign Maintenance

Replace any missing or damaged safety signs. Keep operator safety in mind at all times. Use mild soap and water to clean safety signs. Do not use solvent-based cleaners because they may damage the safety sign material.

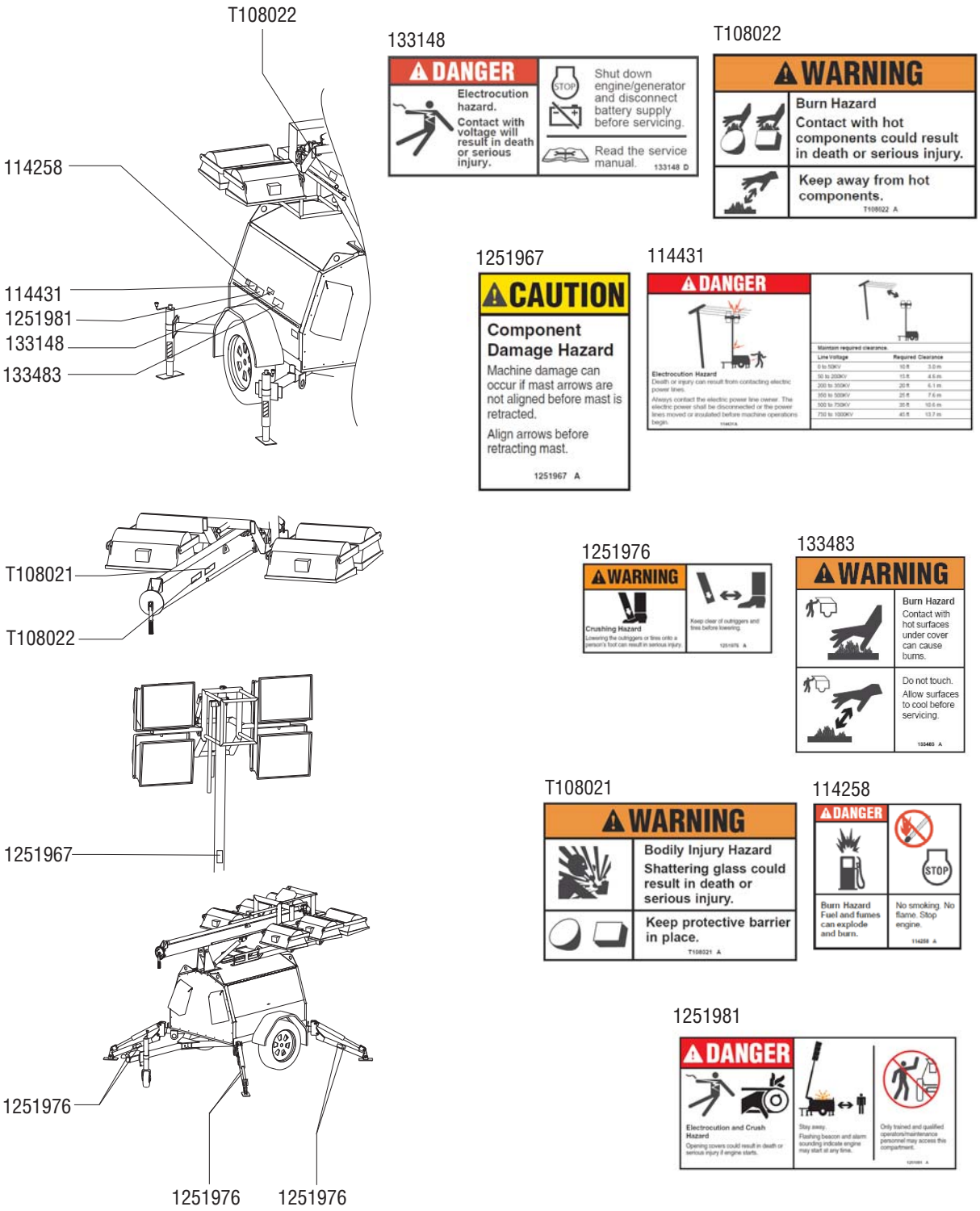
Symbol and Hazard Pictorials Definitions

 Read the operator's manual	 Electrocution hazard	 Stop engine	 Earth ground	 Electrocution hazard
 Maintain required clearance	 Explosion / Burn hazard	 Disconnect battery Read the service manual	 Keep away from moving parts	 Keep away from moving parts
 Burn hazard	 Stay clear of hot exhaust	 Burn hazard	 Explosion / Burn hazard	 Corrosive acid.
 Crush hazard	 Keep clear of outriggers and tires	 No smoking	 No flame	 No flame
 Tip-over hazard	 Towing instructions	 Tip-over hazard	 Raising tower instructions	 Tie-down point

Symbol and Hazard Pictorials Definitions

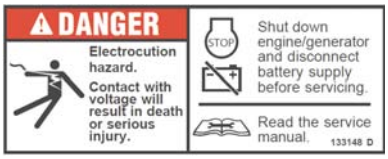
 Burn hazard, hot components	 Stay clear of hot surfaces under cover	 Carbon Monoxide hazard	 Wear protective clothing	 Shattering glass hazard
 Lifting point				

General Safety



General Safety

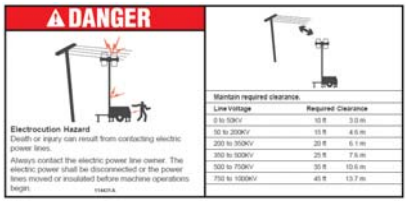
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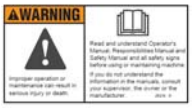
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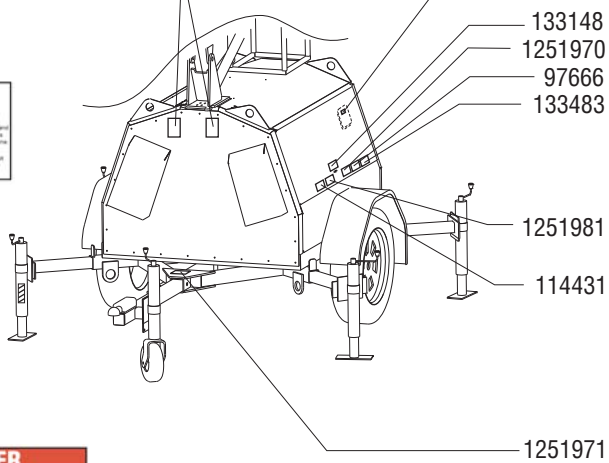
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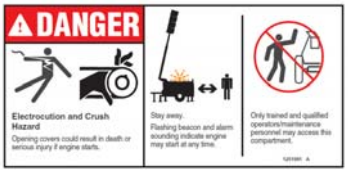
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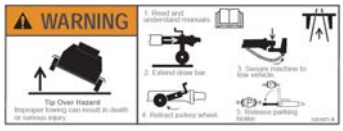
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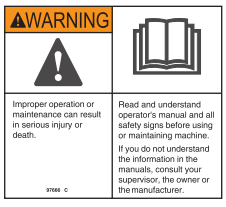
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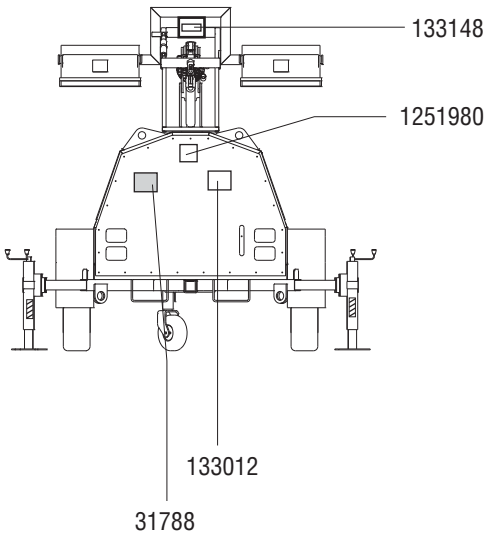


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Work Area Safety

⚠ Electrocution Hazards

This machine is not electrically insulated and will not provide protection from contact with or proximity to electrical current.

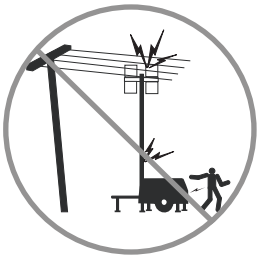
Obey all local and governmental regulations regarding required clearance from electrical power lines. At a minimum, the required clearance contained in the chart below must be followed.

Line Voltage	Required Clearance
0 to 50KV	3.05 m
50 to 200KV	4.60 m
200 to 350KV	6.10 m
350 to 500KV	7.62 m
500 to 750KV	10.67 m
750 to 1000KV	13.72 m

Allow for mast movement, electrical line sway or sag, and beware of strong or gusty winds.

Do not operate the machine during lightning or storms.

Do not use the machine as a ground for welding.



Keep away from the machine if it contacts energized power lines. Personnel must not touch or operate the machine until energized power lines are shut off.

Do not connect wires directly to the generator. Connect auxiliary equipment only to the power outlets provided.

Do not perform service or replace the lamps with the engine/generator running or the battery connected.

This machine should be grounded in accordance with all local electrical codes. Consult the local electrical codes or authority having jurisdiction in the area where the machine will be used for specific requirements.

There is a permanent conductor between the generator (static winding) and the frame.

⚠ Explosion and Fire Hazards

Do not start the engine if you smell or detect liquid petroleum gas (LPG), gasoline, diesel fuel or other explosive substances.



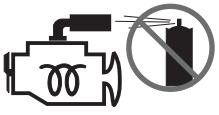
Do not refuel the machine with the engine running.

Do not refuel the machine while it is hot. Allow to cool for several minutes before refueling.

Do not spill fuel inside the engine compartment.

Refuel the machine and charge the battery only in an open, well-ventilated area away from sparks, flames and lighted tobacco.

Do not operate the machine in hazardous locations or locations where potentially flammable or explosive gases or particles may be present.



Do not spray ether into engines equipped with glow plugs.

Work Area Safety

⚠ Tip-over Hazards



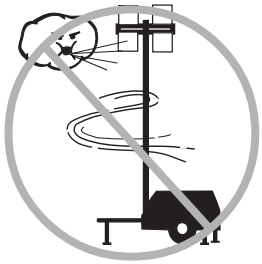
Do not raise the mast unless all outriggers are properly deployed, the foot pads are in firm contact with the ground and the machine is level.

Do not set the machine up on a surface where it cannot be leveled using only the leveling jacks.

Do not hang objects from the lights or the mast.

Do not use the mast to raise material or personnel.

Do not move the machine unless the mast is lowered to the horizontal position.



Do not raise the mast when wind speeds may exceed 62 mph / 100 km/h. Do not alter or disable machine components that in any way affect safety and stability.

Do not alter or disable machine components that in any way affect safety and stability.

Do not adjust or stow the outriggers when the mast is raised.

Be sure the tires are in good condition and the lug nuts tightened.



Do not place ladders or scaffolds against any part of the machine.

Do not use the machine on a moving or mobile surface or vehicle.

⚠ Crushing Hazard



Do not lower the mast unless the area below is clear of personnel and obstructions.

Keep hands and fingers away from any potential pinch points.

Keep clear of moving outriggers.

Work Area Safety

⚠ Collision Hazards

Check the work area for overhead obstructions or other possible hazards.

The machine must be on a level surface before releasing the parking brake.

Do not attempt to manually move a machine unless it is on a firm, level surface. Use the parking brake to control the speed of the machine while pushing it.

⚠ Burn Hazards



Do not touch the lamp fixtures while they are turned on. Turn the lamps off and allow them to cool before touching.

Do not touch hot parts of the engine or tailpipe, Use protective gloves when handling hot parts.

⚠ Bodily Injury Hazard

Do not use the machine indoors unless properly ventilated.

Do not breathe exhaust fumes.

Do not work on this equipment when mentally or physically fatigued.

Do not work on this equipment when under the influence of drugs or alcohol.

Stay clear of belts and fan when engine is running.

Do not use the machine if the protective barrier on any of the lamps is broken or punctured. Metal halide lamps produce shortwave ultra-violet radiation and can cause serious skin burns or eye inflammation if the protective barrier is not in place.

Do not use where people will remain close to the lamps for more than a few minutes unless adequate shielding or other safety precautions are used.

Stay clear of moving mast.

Use proper lifting techniques when lifting and positioning the tongue of the machine.

Always replace the protective lamp cover after replacing the lamp bulbs.

Work Area Safety

⚠ Fall Hazards

Do not climb or stand on any part of the light tower.

⚠ Traffic Hazards

Stand clear of traffic when starting or checking the unit along the road.

⚠ Damaged Machine Hazards

Do not use a damaged or malfunctioning machine.

Do not use a machine with a worn, frayed, kinked or damaged cable.

Conduct a thorough pre-operation inspection of the machine and test all functions before each work shift. Immediately tag and remove from service a damaged or malfunctioning machine.

Be sure all maintenance has been performed as specified in this manual and the appropriate Terex service manual.

Be sure the operator's manual is complete, legible and in the storage container located on the machine.

Be sure all decals are in place and legible.

Do not modify or alter the light tower without the prior written permission of the manufacturer.

⚠ Component Damage Hazards

Do not turn the lights on unless the engine is running. Always turn the lights off before shutting down the engine.

Do not tow the light tower while the lamps are hot. Hot lamps will break if moved.

Do not replace lamp bulbs with any bulbs other than those specified on the machine and in this manual.

Note: Lamp bulbs contain mercury (Hg). Dispose of lamp bulbs according to local, state and federal laws.

Do not extend the mast when both red lines are visible on mast.

Do not retract a raised mast while the mast retaining pin is engaged.

Be sure lamp fixture connections are properly tightened before turning lights on.

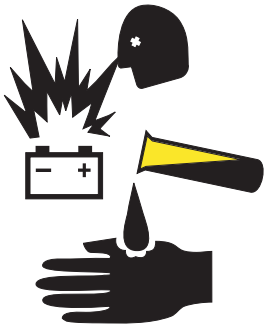
Align tower arrows before retracting mast.

Connect and secure travel lock turnbuckle before towing or picking with a crane.

Work Area Safety

⚠ Battery Safety

Burn Hazards



Batteries contain acid. Always wear protective clothing and eye wear when working with batteries.

Avoid spilling or contacting battery acid. Neutralize battery acid spills with baking soda and water.

Do not use any battery charger greater than 12V to charge the battery.

Do not remove the vent caps from the battery when charging.

Do not expose the batteries or the charger to water or rain during charging.

Explosion Hazards



Keep sparks, flames and lighted tobacco away from batteries. Batteries emit explosive gas.

Do not contact the battery terminals or the cable clamps with tools that may cause sparks.

Electrocution/Burn Hazards

Avoid contact with electrical terminals.

Inspect the power cord for damage prior to each use.

Replace any damaged cord before operating.

Do not allow the power cord to become caught or crushed while raising, lowering or rotating the mast.

Avoid electrical shock from contact with battery terminals. Remove all rings, watches and other jewelry.

Lifting Hazard

Use the appropriate number of people and proper lifting techniques when lifting batteries.

Work Area Safety

⚠ Towing Hazards

Read, understand and obey all of your tow vehicle manufacturer's recommendations, warnings and instructions before towing this machine.

Do not tow the machine unless all outriggers have been retracted and stowed and the drawbar has been extended and secured.

Do not overload your tow vehicle.

Do not load cargo on the machine. The light tower is not designed to carry any extra cargo.

Be sure the tow coupling is securely attached to the tow vehicle.

Be sure the safety chains are securely attached to the tow vehicle.

Be sure that all driving lights are operational.

Be sure all hitch components, lights and mirrors and methods of attaching the trailer to the tow vehicle conform to local, state and federal regulations.

Do not tow the machine on public roads unless it meets all governmental regulations for towing.

Do not exceed 100 km/h. Obey all local and national towing speed laws.

Be sure to set the parking brake when parking on a hill.

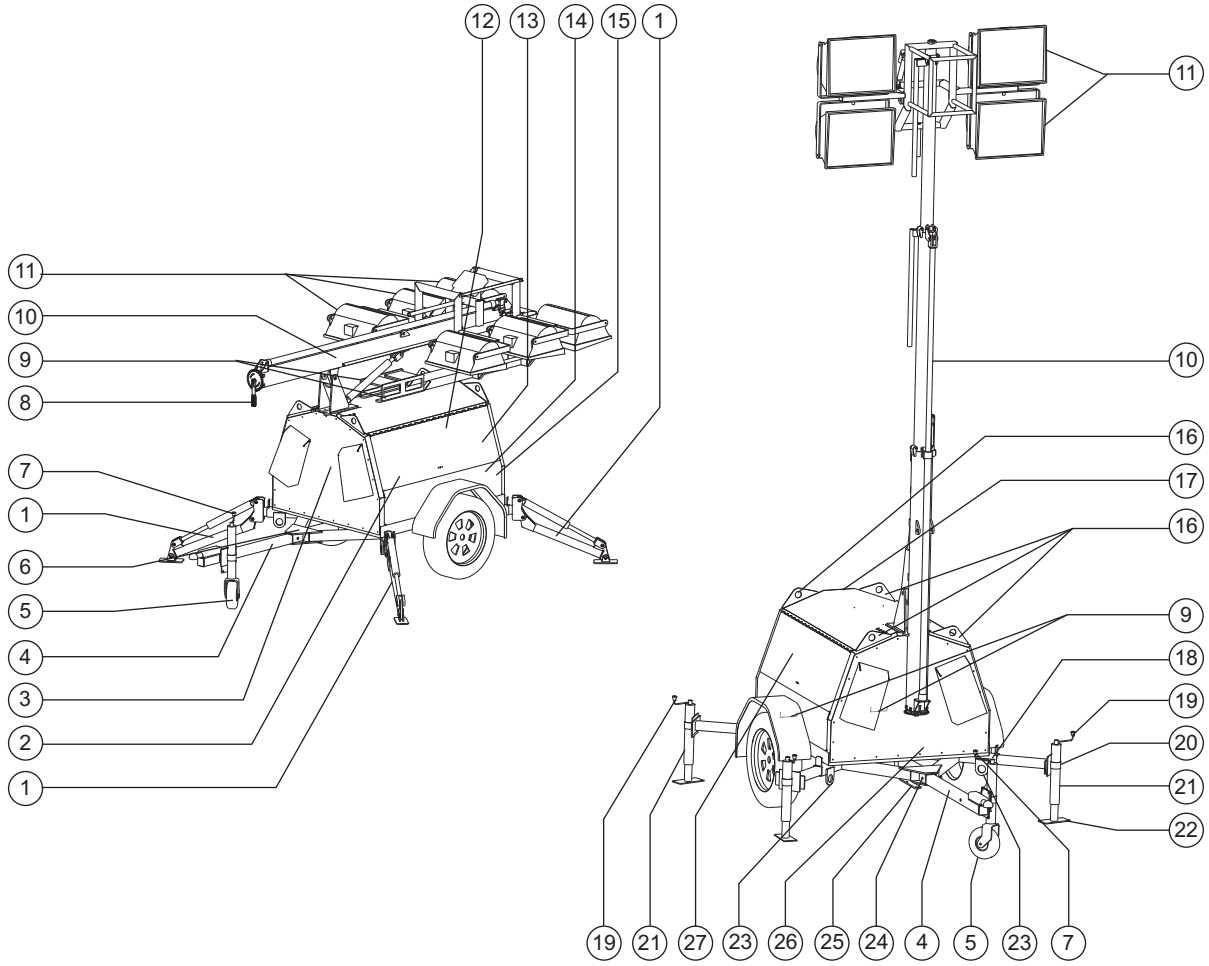
Use extreme care and slow speeds while towing across uneven terrain, debris, holes or drop-offs.

Note: Do not tow the machine when the engine is running. This can cause severe engine/radiator damage and will not be covered under warranty.

Lockout After Each Use

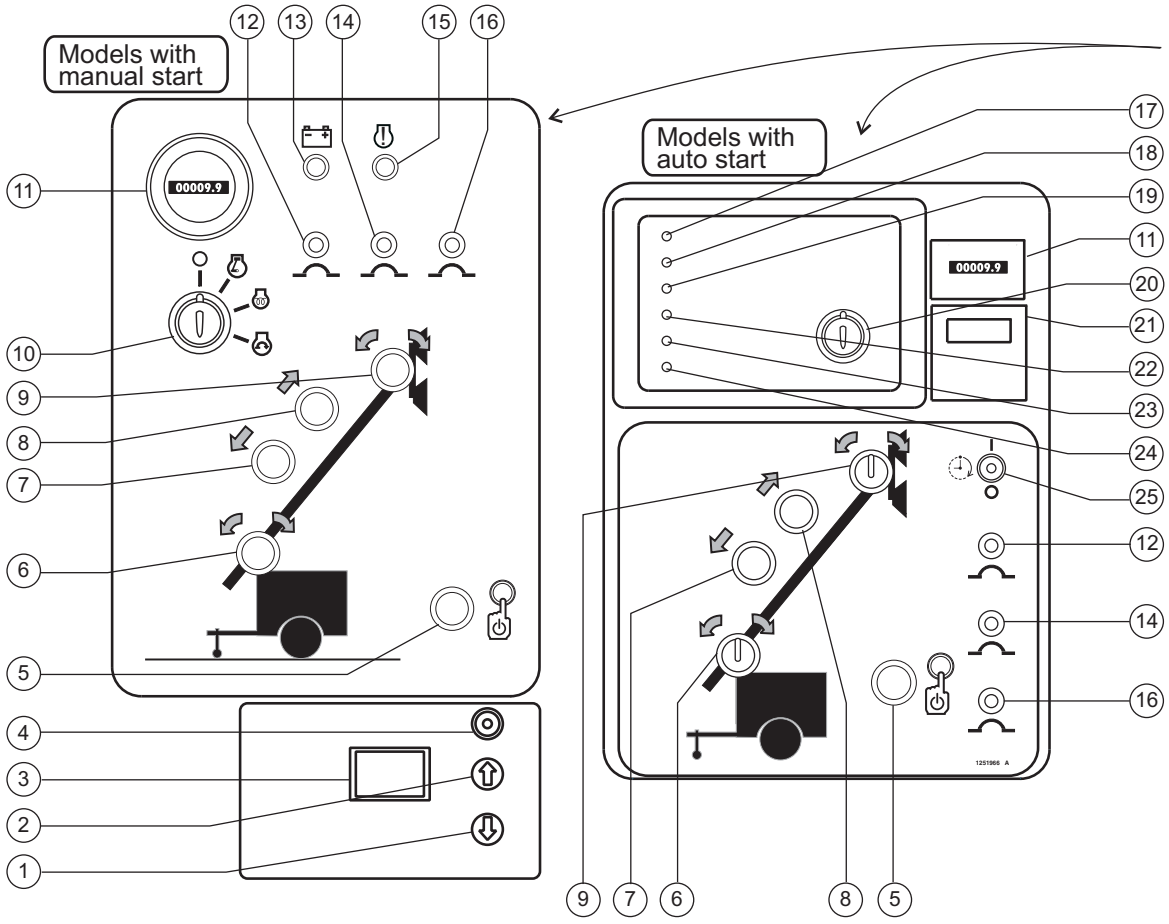
When leaving the machine unattended, secure from unauthorized use. Unauthorized personnel may attempt to operate the machine without proper instruction, creating an unsafe condition.

Legend



1 Hydraulic outrigger
2 Control panel (located inside cabinet)
3 MEN point (located inside cabinet)
4 Drawbar with tow coupling
5 Jockey wheel
6 Bubble level
7 Jockey wheel handle
8 Tower rotation handle
9 Forklift pockets
10 Mast
11 Lights
12 Curbside door
13 Manual storage container
14 Battery isolator
15 Starter isolator
16 Lifting eye
17 Travel lock turnbuckle
18 Outrigger spring pin
19 Outrigger jack handle
20 Outrigger lock handle
21 Outrigger
22 Outrigger footpad
23 Transport tie-down
24 Drawbar lock pin
25 Parking brake
26 Grounding lug (if equipped)
27 Roadside door

Controls



1 Timer down button

Push the timer down button to set the timer preset run time.

2 Timer up button

Push the timer up button to set the timer preset run time.

3 Timer digital display

Displays the preset run time in hours.

4 Timer on/off switch

Move the timer on/off switch to the right to turn on the timer. Turn the switch to the left to turn off the timer.

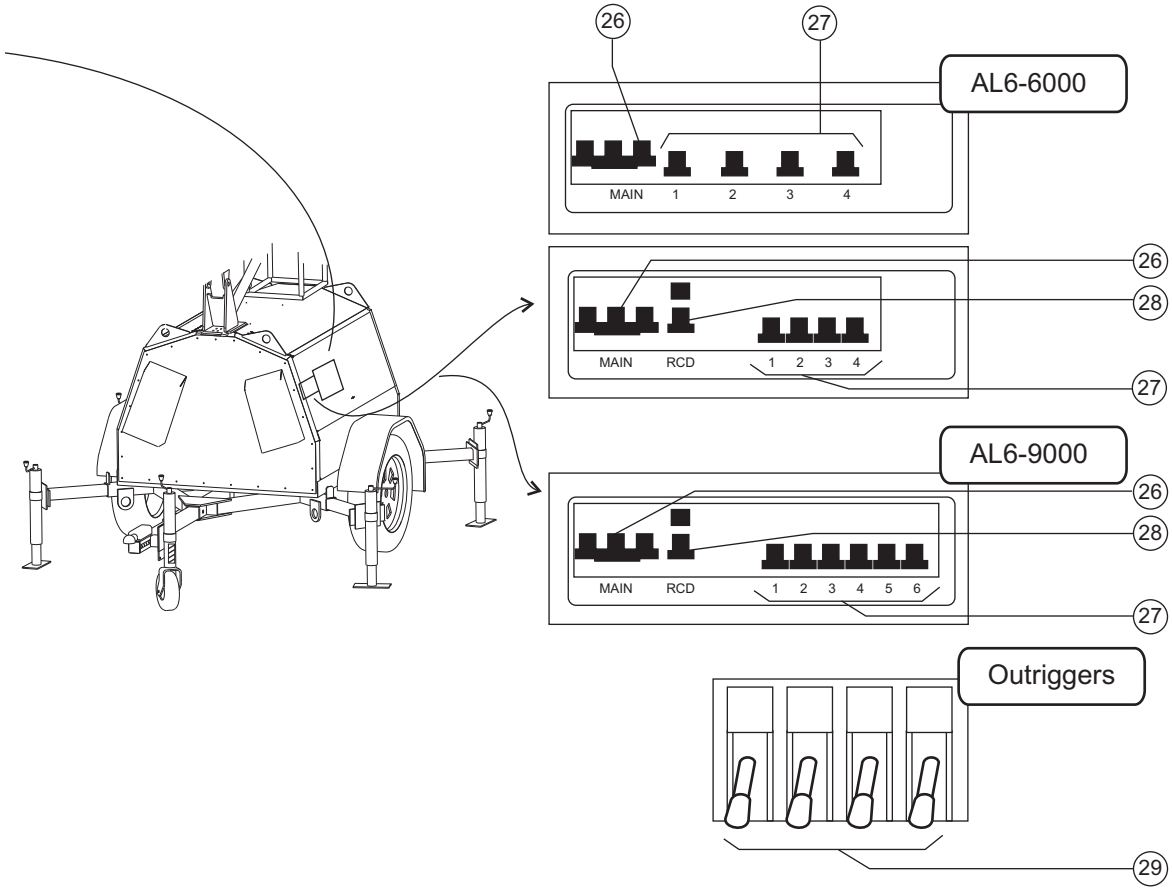
5 Function enable button

Push and hold the function enable button to enable the functions on the ground controls to operate.

6 Hydraulic tower raise/lower switch

Rotate the switch to the left and the tower will raise. Rotate the switch to the right and the tower will lower.

Controls



7 Hydraulic tower retract button

Push the button and the tower will retract.

8 Hydraulic tower extend button

Push the button and the tower will extend.

9 Light bar raise/lower switch

Rotate the switch to the right and the light bar will lower. Rotate the switch to the left and the light bar will raise.

10 Ignition key switch for engine

Turn the key switch to the glow plug position and hold for 5 seconds to pre-heat the glow plug.

Turn the key switch to the start position to start the engine. Release the key switch once the engine starts.

Turn the key switch to the off position to turn the engine off.

11 Hour meter

The hour meter displays the number of hours the machine has operated.

Controls

12 30A breaker for control electrical circuits

13 Alternator failure light

Light on indicates that the engine's DC alternator isn't producing enough voltage.

14 15A breaker for engine control electrical circuits

15 Engine shutdown indicator light

Light on indicates that engine has shutdown due to low oil pressure, low coolant level, high coolant temperature or low fuel level.

16 15A breaker for hydraulic control electrical circuits

17 Glow plug indicator light

Light on indicates the glow plugs are on.

18 Engine shutdown indicator light

Flashing light (when oil pressure, coolant temperature, alternator failure and engine overspeed lights are off) indicates that engine start sequence has failed or engine has shut down due to low coolant level or low fuel level. Light also flashes when oil pressure, coolant temperature, alternator failure and engine overspeed lights flash.

19 Oil pressure light

20 Ignition key switch for engine

Turn the key switch to the I (run) position before setting timer to automatically start and stop the engine at a preset time.

Turn the key switch to the II (start) position and hold to manually start the engine. Glow plugs will be activated for 8 seconds and then engine will start. Release key switch once engine has started and key switch will return to I (run) position.

Turn the key switch to the O (off) position to turn the engine off.

21 Timer

The timer is used to automatically start the engine and turn on the lights at a preset time.

22 Coolant temperature indicator light

23 Alternator failure light

24 Engine overspeed indicator light

25 Timer switch

The timer is used to automatically stop the engine and turn off the lights at a preset time.

Move the switch to the right to reset and turn on the timer. Move the switch to the left to turn off the timer.

26 Main circuit breaker

Move the main circuit breaker switch up on the control panel before turning the individual light switches on.

27 Light switches

Move each light switch up to turn on the indicated light. Move each light switch down to turn off the indicated light.

28 Residual current circuit breaker

Move the residual current circuit breaker switch up before turning the individual light switches on.

29 Outrigger control handles

Move the outrigger control handle up to raise an individual outrigger. Move the control handle down to lower an individual outrigger.

Inspections



Do Not Operate Unless:

☑ You learn and practice the principles of safe machine operation contained in this operator's manual.

1 Avoid hazardous situations.

2 Always perform a pre-operation inspection.

Know and understand the pre-operation inspection before going on to the next section.

3 Always perform function tests prior to use.

4 Inspect the workplace.

5 Only use the machine as it was intended.

Pre-operation Inspection Fundamentals

It is the responsibility of the operator to perform a pre-operation inspection and routine maintenance.

The pre-operation inspection is a visual inspection performed by the operator prior to each work shift. The inspection is designed to discover if anything is apparently wrong with a machine before the operator performs the function tests.

The pre-operation inspection also serves to determine if routine maintenance procedures are required. Only routine maintenance items specified in this manual may be performed by the operator.

Refer to the list on the next page and check each of the items.

If damage or any unauthorized variation from factory delivered condition is discovered, the machine must be tagged and removed from service.

Repairs to the machine may only be made by a qualified service technician, according to the manufacturer's specifications. After repairs are completed, the operator must perform a pre-operation inspection again before going on to the function tests.

Scheduled maintenance inspections shall be performed by qualified service technicians, according to the manufacturer's specifications and the requirements listed in the responsibilities manual.

Inspections

Pre-operation Inspection

- ❑ Be sure that the operator's manual is complete, legible and in the storage container located on the machine.
- ❑ Be sure that all decals are legible and in place. See Inspections section.
- ❑ Check for engine oil leaks and proper fluid level. Add oil if needed. See Maintenance section.
- ❑ Check for engine coolant leaks and proper coolant level. Add coolant if necessary. See Maintenance section.
- ❑ Check for battery fluid leaks and proper fluid level. Add distilled water if needed. See Maintenance section.
- ❑ Check for proper tire pressure and lug nut torque. Add air to tires if needed. See Maintenance section.

Check the following components or areas for damage, improperly installed or missing parts and unauthorized modifications:

- ❑ Electrical components, wiring and electrical cables
- ❑ Mast components
- ❑ Latches and pins
- ❑ Tires and wheels
- ❑ Jockey wheel
- ❑ Parking brake
- ❑ Trailer lights and reflectors
- ❑ Outriggers, leveling jacks and foot pads, if equipped
- ❑ Hydraulic outriggers, cylinders and foot pads
- ❑ Nuts, bolts and other fasteners
- ❑ Lamp fixtures, connections and bulbs
- ❑ Safety chains
- ❑ Engine and related components
- ❑ Fuel tanks
- ❑ Generator

Check entire machine for:

- ❑ Cracks in welds or structural components
- ❑ Dents or damage to machine
- ❑ Excessive rust, corrosion or oxidation

- ❑ Be sure that all structural and other critical components are present and all associated fasteners and pins are in place and properly tightened.
- ❑ Be sure the that the battery is in place and properly connected.
- ❑ After you complete your inspection, be sure that all compartment covers are in place and latched.

Inspections



Do Not Operate Unless:

☑ You learn and practice the principles of safe machine operation contained in this operator's manual.

1 Avoid hazardous situations.

2 Always perform a pre-operation inspection.

3 Always perform function tests prior to use.

Know and understand the function tests before going on to the next section.

4 Inspect the workplace.

5 Only use the machine as it was intended.

Function Test Fundamentals

The function tests are designed to discover any malfunctions before the machine is put into service. The operator must follow the step-by-step instructions to test all machine functions.

A malfunctioning machine must never be used. If malfunctions are discovered, the machine must be tagged and removed from service. Repairs to the machine may only be made by a qualified service technician, according to the manufacturer's specifications.

After repairs are completed, the operator must perform a pre-operation inspection and function tests again before putting the machine into service.

Inspections

Function Tests

Setup

1 Position the light tower at the desired work site.

2 Apply the park brake.

3 Disconnect the trailer lights and safety chains.

4 Pull the lock handle on the jockey wheel to rotate the jockey wheel into vertical position and then release lock handle.

5 Turn the jockey wheel handle to lower the jockey wheel to ground.

6 Press the latch on the tow coupling handle, pull the handle to unlock the tow coupling and release the latch so that the tow coupling is held in the unlocked position.

7 Turn the jockey wheel handle to raise the tow coupling off the machine enough to clear the tow vehicle. Drive the tow vehicle clear of the machine.

8 Press the latch on the tow coupling handle and release the handle to lock the tow coupling.

9 Turn the battery isolator switch to the on position.

10 Turn the starter isolator switch to the on position.

Manual outrigger models

11 Release the spring pin on the front and back manual outriggers and slide each outrigger out until the spring pin locks. Pull the lock handle on the outrigger jack to rotate the outrigger jack into vertical position and then release the lock handle.

12 Turn the outrigger jack handles to level the machine. Level the machine using only the outrigger jacks. Proceed to step 15.

Note: The outriggers are not designed to lift the tires of the unit off the ground.

Inspections

Hydraulic outrigger models

13 Push and hold the function enable button. Push each hydraulic outrigger lever down to lower the hydraulic outriggers. Simultaneously lower both rear outriggers and then lower both front outriggers.

14 Adjust the hydraulic outriggers to level the machine. Level the machine using only the hydraulic outriggers.

Note: The hydraulic outriggers are not designed to lift the tires of the unit off the ground.

15 Check the bubble level on the front of the machine to make sure the machine is level.

If the drawbar is extended, the drawbar lock pin is inserted through the chassis and the drawbar and the retaining pin is inserted. Proceed to step 21.

16 Turn the jockey wheel handle to raise the jockey wheel just off ground.

17 Remove the retaining pin from the drawbar lock pin and remove the drawbar lock pin from the chassis.

18 Pull the tow coupling handle to extend the drawbar.

19 Insert the drawbar lock pin through the chassis and the drawbar.

20 Insert the retaining pin in the drawbar lock pin.

21 Turn the jockey wheel handle to lower the jockey wheel to the ground.

22 Drive the grounding rod (if equipped) into the ground and connect it to the grounding lug on the chassis near the base of the tower.

Note: This machine should be grounded in accordance with all local electrical codes. Consult the local electrical codes or authority having jurisdiction in the area where the machine will be used for specific requirements.

23 Turn the travel lock turnbuckle to loosen it, disengage from mast and swing away.

Test Emergency Stop

24 Manually start the engine. See Operating Instructions section.

25 Push in the red Emergency Stop button.

⊙ Result: The engine should shut off.

26 Test each tower and light function.

⊙ Result: All functions should not operate.

Test the Pre-start Alarm and Beacon (if equipped with auto start)

27 Pull out the red Emergency Stop button to the on position.

28 Start the engine.

⊙ Result: The pre-start alarm should sound and the beacon should turn on for 8 seconds before engine starts.

Inspections

Test the Hydraulic Outrigger Functions (if equipped)

29 Make sure the engine is running

30 Do not push the function enable button. Attempt to activate each hydraulic outrigger lever on the tower control panel.

⊙ Result: All hydraulic outrigger functions should not operate.

31 Push and hold the function enable button and move each hydraulic outrigger lever according to the markings on the tower control panel.

⊙ Result: All hydraulic outrigger functions should operate.

32 Push and hold the function enable button. Rotate the tower raise/lower switch to the left and raise the tower to vertical position.

33 Push and hold the function enable button. Push the tower extend button and extend tower 100 mm (4 inch).

34 Push and hold the function enable button and move each hydraulic outrigger lever according to the markings on the tower control panel.

⊙ Result: All hydraulic outrigger functions should not operate.

35 Fully retract and lower the tower.

Test the Tower Functions

36 Do not push the function enable button. Attempt to activate each switch or button on the tower control panel.

⊙ Result: All tower functions should not operate.

37 Push and hold the function enable button. Push the tower extend and retract buttons.

⊙ Result: Tower extend and retract functions should not operate.

38 Push and hold the function enable button. Rotate the tower raise/lower switch to the left and raise the tower to vertical position.

⊙ Result: Tower raise function should operate.

39 Push and hold the function enable button. Push the tower extend button and extend tower 100 mm (4 inch).

⊙ Result: Tower extend function should operate.

40 Do not push the function enable button. Attempt to activate each switch or button on the tower control panel.

⊙ Result: All tower functions should not operate.

41 Push and hold the function enable button. Rotate the tower raise/lower switch to the right.

⊙ Result: Tower lower function should not operate.

42 Fully extend the tower.

43 Push and hold the function enable button and move light bar raise/lower switch according to the markings on the tower control panel.

⊙ Result: Light bar raise and lower functions should operate.

Inspections

44 Return the light bar to the horizontal travel position.

45 Pull the tower rotation lock up until the spring pin unlocks and push the tower rotation handle in each direction.

⊙ Result: The tower should rotate smoothly, free of hesitation or binding in each direction.

46 Rotate the tower until the arrows on the tower and the light bar are aligned. Release the tower rotation lock and make sure spring pin locks.

47 Push and hold the function enable button. Push the tower retract button and fully retract the tower.

⊙ Result: Tower retract function should operate.

48 Push and hold the function enable button. Rotate the tower raise/lower switch to the right.

⊙ Result: Tower lower function should operate.

Test the Lights

Note: Make sure the engine is running.

49 Raise and fully extend the tower

50 Turn on the main circuit breaker and residual current circuit breaker (if equipped) switches.

51 Turn on the light switches.

⊙ Result: All lights should come on.

Note: Lights may take up to 20 minutes to reach full intensity. If the lights are already hot from being operated, they will require 20-30 minutes to cool before they will come on again.

Inspections



Do Not Operate Unless:

☑ You learn and practice the principles of safe machine operation contained in this operator's manual.

1 Avoid hazardous situations.

2 Always perform a pre-operation inspection.

3 Always perform function tests prior to use.

4 Inspect the workplace.

Know and understand the workplace inspection before going on to the next section.

5 Only use the machine as it was intended.

Workplace Inspection Fundamentals

The workplace inspection helps the operator determine if the workplace is suitable for safe machine operation. It should be performed by the operator prior to moving the machine to the workplace.

It is the operator's responsibility to read and remember the workplace hazards, then watch for and avoid them while moving, setting up and operating the machine.

Inspections

Workplace Inspection Checklist

Be aware of and avoid the following hazardous situations:

- ❑ drop-offs or holes
- ❑ bumps, floor obstructions or debris
- ❑ sloped surfaces
- ❑ unstable or slippery surfaces
- ❑ overhead obstructions and high voltage conductors
- ❑ hazardous locations
- ❑ inadequate surface support to withstand all load forces imposed by the machine
- ❑ wind and weather conditions
- ❑ the presence of unauthorized personnel
- ❑ other possible unsafe conditions

Inspections

Decal Inspection

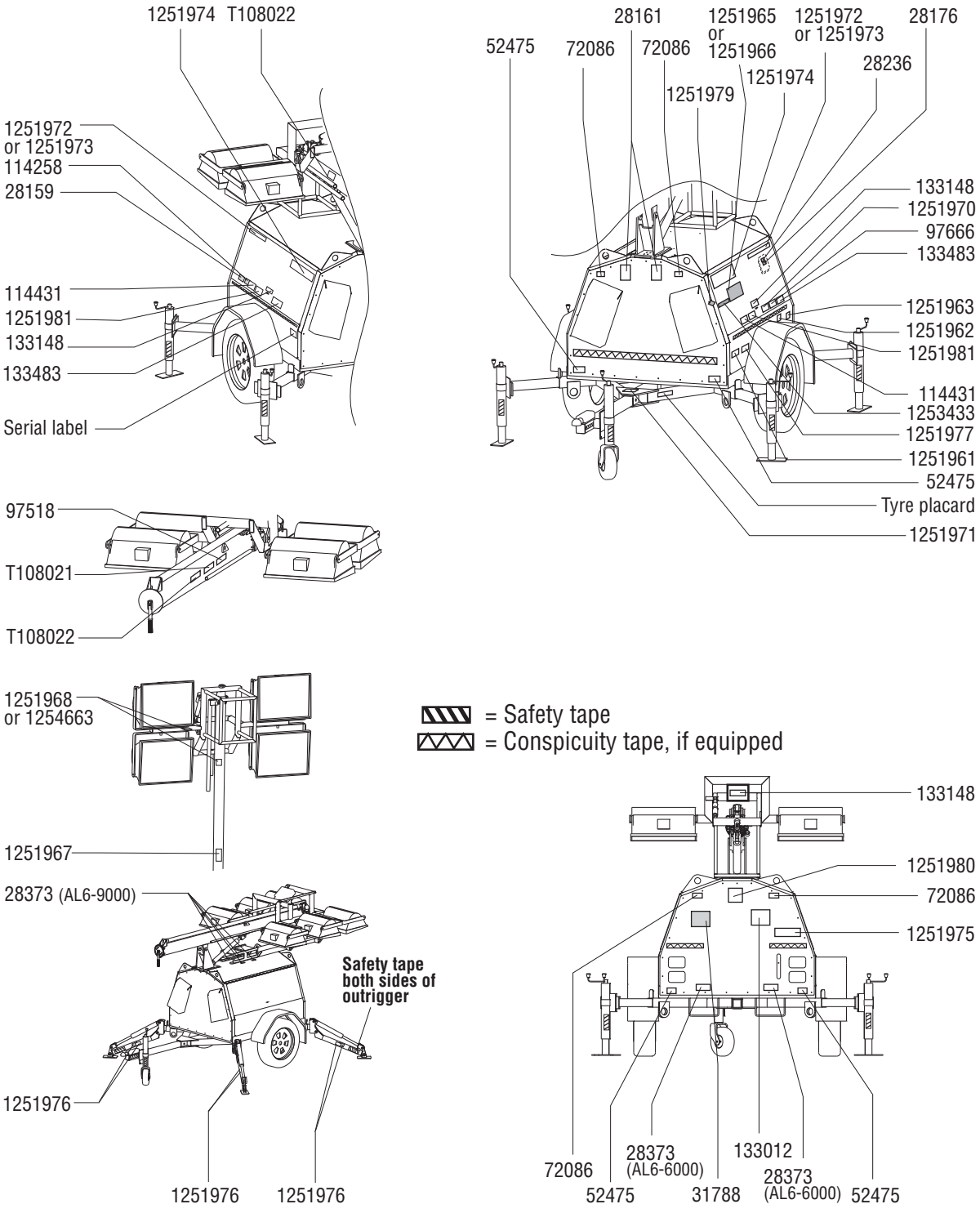
Use the pictures on the next page to verify that all decals are legible and in place.

Below is a numerical list with quantities and descriptions.

Part No.	Decal Description	Qty
28159	Label – Diesel	1
28161	Warning – Crushing Hazard	2
28176	Label – Missing Manuals	1
28236	Warning – Improper Operation	1
28373	Label – Forklift Pocket, AL6-6000	2
28373	Label – Forklift Pocket, AL6-9000	4
31788	Danger – Explosion/Burn Hazard	1
52475	Label – Transport Tie-down	4
72086	Label – Lifting Point	4
97518	Instruction – Lamp Disposal	1
97666	Warning – Improper Operation	1
114258	Danger – Explosion Hazard	1
114431	Danger – Electrocution hazard	2
133012	Danger – Burn/Carbon Monoxide Hazard	1
133148	Danger – Electrocution hazard	3
133483	Warning – Burn Hazard	2
1251961	Label – Tire Specifications	1
1251962	Label – Battery Isolator	1
1251963	Label – Starter Isolator	1
1251965	Control Panel – Key Switch Start	1
1251966	Control Panel – Auto-start	1
1251967	Caution – Component Damage, Align Arrows	1
1251968	Label – Alignment Arrows	2
1251970	Warning – Tip-over Hazard, Outriggers	1
1251971	Warning – Tip-over Hazard, Towing	1
1251972	Cosmetic – AL6-6000	2
1251973	Cosmetic – AL6-9000	2
1251974	Cosmetic – Genie Logo, 150 mm	2
1251975	Cosmetic – Genie Logo, 65 mm	1
1251976	Warning – Crushing Hazard	8
1251977	Label – Transport Diagram	1
1251979	Label – MEN Point	1
1251980	Caution – Component Damage, Transport Lock	1
1251981	Danger – Auto-start Hazard	2
1253433	Label – Outrigger Levers	1
1254663	Label – Alignment Arrows, Black	2
T108021	Warning – Bodily Injury Hazard	1
T108022	Warning – Burn hazard	2

Shading indicates decal is hidden from view, i.e. under covers

Inspections



Operating Instructions



Do Not Operate Unless:

☑ You learn and practice the principles of safe machine operation contained in this operator's manual.

1 Avoid hazardous situations.

2 Always perform a pre-operation inspection.

3 Always perform function tests prior to use.

4 Inspect the workplace.

5 Only use the machine as it was intended.

Fundamentals

The Operating Instructions section provides instructions for each aspect of machine operation. It is the operator's responsibility to follow all the safety rules and instructions in the operator's, safety and responsibilities manuals.

Only trained and authorized personnel should be permitted to operate a machine. If more than one operator is expected to use a machine at different times in the same work shift, they must all be qualified operators and are all expected to follow all safety rules and instructions in the operator's, safety and responsibilities manuals. That means every new operator should perform a pre-operation inspection, function tests, and a workplace inspection before using the machine.

Operating Instructions

Setup

1 Make sure the machine is set up according to the Setup procedure in the Function Tests section.

Manual outrigger models

To deploy manual outriggers:

1 Release the spring pin on the front and back manual outriggers and slide each outrigger out until the spring pin locks. Pull the lock handle on the outrigger jack to rotate the outrigger jack into vertical position and then release the lock handle.

2 Turn the outrigger jack handles to level the machine. Level the machine using only the outrigger jacks.

Note: The manual outriggers are not designed to lift the tires of the unit off the ground.

To retract and stow manual outriggers:

1 Turn the outrigger jack handles to retract the outrigger jacks. Pull the lock handle on the outrigger jack to rotate the outrigger jack into the vertical travel position with the jack foot up and then release lock handle.

2 Release the spring pin on the front and back manual outriggers and slide each manual outrigger into the retracted travel position until the spring pin locks.

Hydraulic outrigger models

Note: Make sure the engine is running.

To deploy hydraulic outriggers:

1 Push and hold the function enable button. Push each hydraulic outrigger lever down to lower the hydraulic outriggers. Simultaneously lower both rear outriggers and then lower both front outriggers.

2 Adjust the hydraulic outriggers to level the machine. Level the machine using only the hydraulic outriggers.

Note: The hydraulic outriggers are not designed to lift the tires of the unit off the ground.

To retract and stow hydraulic outriggers:

1 Push and hold the function enable button. Push each hydraulic outrigger lever up to raise the hydraulic outriggers to the travel position. Simultaneously raise both front outriggers and then raise both rear outriggers.

Start the Engine - Manual Engine Start (manual key switch start option)

Note: The main circuit breaker, the residual current circuit breaker (if equipped) and the light switches must be off before starting the engine.

1 Pull out the red Emergency Stop button on the left hand side panel of the light tower cabinet.

2 Turn the key switch to the glow position and hold for 5 seconds.

3 Turn the key switch to the start position.

Operating Instructions

Start the Engine - Manual Engine Start (auto start option)

Note: The main circuit breaker and the light switches must be off before starting the engine.

1 Pull out the red Emergency Stop button on the left hand side panel of the light tower cabinet.

2 Turn the key switch to the II (start) position and hold to start the engine. Continue to hold the key switch in II (start) position for about 1 second after the engine has started.

Note: The pre-start alarm will sound, the beacon will turn on and there will be a delay of about 8 seconds before the engine starts.

Operating Instructions

Timer (machines with manual key switch start)

The timer is used to automatically stop the engine and turn off the lights after a preset run time.

1 Start the engine.

2 Move the timer on/off switch to the right.

3 Push the up button or down button to adjust the run time (in hours) shown on the digital display.

The run time can be adjusted again while engine is running. The timer can be turned off by moving the timer on/off switch to the left and set again by moving the switch to the right. Alternating flashing zeros indicates that the preset run time has elapsed.

Timed Engine Start (auto start option)

The timer is used to automatically start the engine and turn on the lights at a preset time and then stop the engine at a preset time.

To set current day and time on timer:

1 Push and hold the Clock button and push the Day button to change the day shown at the top of the display.

2 Push and hold the Clock button and push the Hour and the Minute buttons to set the time.

Note: All times are set using 12 hour time format.

Operating Instructions

To program the timer:

1 Push the Program button and **1on** will appear at the bottom left of the display; **1on** refers to the start time of the first start/stop cycle.

2 Push the Day button to select the day(s) that the first start/stop cycle will begin.

Note: Days can be selected individually or as a group (i.e. weekdays, weekend or 7 days).

3 Push the Hour and the Minute buttons to set the start time for the first start/stop cycle.

4 Push the Program button and **1off** will appear at the bottom left of the display; **1off** refers to the stop time of the first start/stop cycle.

5 Push the Day button to select the day(s) that the first start/stop cycle will end.

6 Push the Hour and the Minute buttons to set the stop time for the first start/stop cycle.

7 Repeat step 1 to step 6 to program up to 6 start/stop cycles.

8 Push the Clock button to exit program mode.

Note: Push the R button to reset the timer and clear all start/stop cycles. Push the Reset Recall button while editing a start/stop cycle to reset the set time (four dashes will appear on display) and push the Reset Recall button again to recall previously set time.

To enable engine automatic start/stop cycle:

1 Turn the key switch to the I (run) position.

2 Move the timer on/off switch down to the on position.

3 Push the On/Off/Auto button on the timer to select Auto mode. A bar will appear at the bottom of the display above the Auto label.

Note: The pre-start alarm will sound, the beacon will turn on and there will be a delay of about 8 seconds before the engine starts. When the engine is running, the red (Out) light on the timer will turn on.

To avoid running down the battery, move the timer on/off switch down to the off position when not in use.

Operation of Tower

1 Make sure the engine is running.

Note: Operating the tower with the engine off will run down the battery.

2 Push and hold the function enable button.

3 Move the appropriate switch or push the appropriate button according to the markings on the control panel to raise and lower the tower, extend and retract the tower, and tilt the light bar up and down.

Note: Make sure that the tower is raised and fully extended before rotating tower

4 Pull the tower rotation lock up until the spring pin unlocks and push the tower rotation handle to adjust the position of light bar. Release the tower rotation lock and make sure spring pin locks.

Operating Instructions

Manual Operation of Lights

Note: The engine must be running before the lights are turned on.

1 Turn on the main circuit breaker and residual current circuit breaker (if equipped) switches on the control panel.

2 Turn on the lights using the individual light switches. Each switch turns on one of the lights.

3 Turn the lights off by turning the individual light switches to the off position. Make sure the lights are turned off before shutting down the engine.

Shutdown of Tower

Note: Make sure the engine is running.

1 Turn off the light, main circuit breaker and residual current circuit breaker (if equipped) switches.

2 Return the light bar to the horizontal travel position.

3 Rotate the tower until the arrows on the tower and the light bar are aligned. Release the tower rotation lock and make sure spring pin locks.

4 Fully retract and lower the tower.

5 Engage travel lock turnbuckle in mast and turn to tighten.

6 Disconnect the grounding rod (if equipped) and store in the light tower cabinet.

7 Make sure that the drawbar is extended, the drawbar lock pin is inserted through the chassis and the drawbar, and the retaining pin is inserted.

8 Retract and stow the outriggers.

9 Shut off the engine

10 Turn the battery isolator switch to the off position.

11 Turn the starter isolator switch to the off position.

Operating Instructions

Towing

Make sure the machine is shut down according to the Shutdown of Tower procedure in the Operating Instructions section.

1 Press the latch on the tow coupling handle, pull the handle to unlock the tow coupling and release the latch so that the tow coupling is held in the unlocked position.

2 Turn the jockey wheel handle to raise the tow coupling of the machine enough to clear the tow vehicle and position the tow ball of the tow vehicle under the tow coupling.

3 Turn the jockey wheel handle to lower the tow coupling onto the tow ball.

4 Press the latch on the tow coupling handle and release the handle to lock the tow coupling.

5 Attach the safety chains.

6 Connect and test the trailer lights.

7 Turn the jockey wheel handle to retract the jockey wheel. Pull the lock handle on the jockey wheel to rotate the jockey wheel into the horizontal travel position and then release the lock handle.

8 Release the parking brake and swing the lock bar away.

9 Make sure that the reverse latch on the tow coupling is only engaged while reversing machine.

10 Close and secure the cabinet doors.

11 Inspect the entire machine for loose or unsecured items.

After Each Use

Select a safe parking location—firm level surface, clear of obstruction and traffic. Retract and lower mast and stow outriggers before moving machine.

Remove the key or lock cabinet door.

Transport and Lifting Instructions



Observe and Obey:

- ☑ Terex Corporation provides this securement information as a recommendation. Drivers are solely responsible for making sure machines are properly secured and the correct trailer is selected pursuant to US Department of Transportation regulations, other localized regulations, and their company policy.
- ☑ Terex customers needing to containerize any Terex product should source a qualified freight forwarder with expertise in preparing, loading and securing construction and lifting equipment for international shipment.
- ☑ The transport vehicle must be parked on a level surface.
- ☑ The transport vehicle must be secured to prevent rolling while the machine is being loaded.
- ☑ Be sure the vehicle capacity, loading surfaces and chains or straps are sufficient to withstand the machine weight. See the serial label for the machine weight.
- ☑ Common sense and planning must be applied to control the movement of the machine when lifting it with a crane or forklift.

Securing to Truck or Trailer for Transit

Make sure the machine is shut down according to the Shutdown of Tower procedure in the Operating Instructions section.

1 Deploy the outriggers and level the machine.

2 Check the bubble level on the front of the machine to make sure the machine is level.

3 Turn the jockey wheel handle to raise the jockey wheel just off ground.

4 Remove the retaining pin from the drawbar lock pin and remove the drawbar lock pin from the chassis.

5 Push the tow coupling handle to retract the drawbar.

6 Insert the drawbar lock pin through the chassis and the drawbar.

7 Insert the retaining pin in the drawbar lock pin.

8 Retract and stow the outriggers.

9 Lift the machine onto the truck or trailer. Use a crane or a fork lift.

10 If using a crane, refer to Lifting the Machine With a Crane procedure in the Transport section.

11 If using a fork lift:

AL6-6000: use the fork pockets below the rear panel.
AL6-9000: use the fork pockets above the cabinet.

12 Use the four tie-down points for anchoring down to the transport surface.

13 Use a minimum of four chains or straps to secure the light tower.

Transport and Lifting Instructions

Manual outrigger models

14 Pull the lock handle on the outrigger jack to rotate the outrigger jack into the vertical position and then release the lock handle.

15 Turn the outrigger jack handles to lower the outrigger jacks to the transport surface. Proceed to step 17.

Note: The outriggers are not designed to lift the tires of the unit off the transport surface.

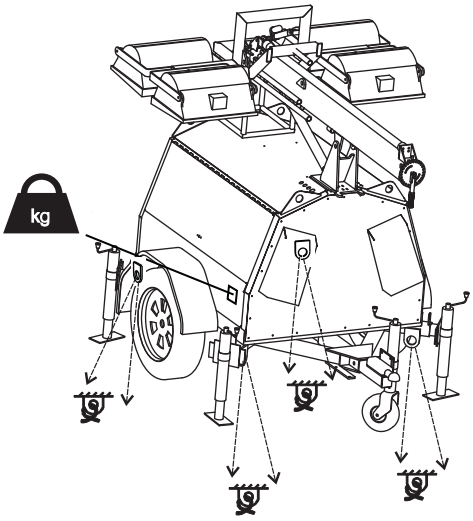
Hydraulic outrigger models

16 Proceed to step 17.

17 Close and secure the cabinet doors.

18 Inspect the entire machine for loose or unsecured items.

19 Adjust the rigging to prevent damage to the chains or straps.



Transport and Lifting Instructions

Observe and Obey:

☑ Only qualified riggers should rig the machine.

☑ Only certified crane operators should lift the machine and only in accordance with the applicable crane regulations.

☑ Be sure the crane capacity, loading surfaces and straps or lines are sufficient to withstand the machine weight. See the serial label for the machine weight.

Lifting the Machine with a Crane

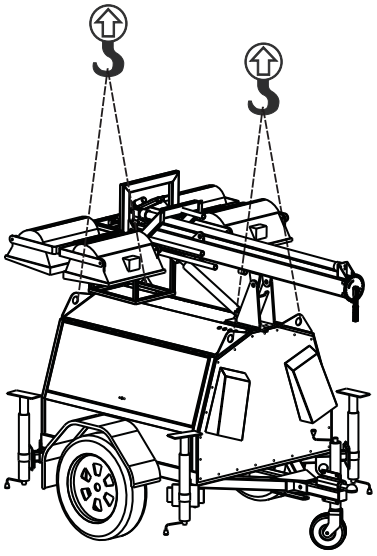
1 Fully retract and lower the mast to the stowed position.

2 Secure the mast for transport with the travel lock turnbuckle.

3 Fully retract, raise and lock all outriggers.

4 Close and secure the cabinet doors.

5 Use the lifting eyes on the mast to lift the machine.



Maintenance



Observe and Obey:

☑ Only routine maintenance items specified in this manual shall be performed by the operator.

☑ Scheduled maintenance inspections shall be completed by qualified service technicians, according to the manufacturer's specifications and the requirements specified in the responsibilities manual.

☑ Use only Terex approved replacement parts.

Maintenance Symbols Legend

The following symbols have been used in this manual to help communicate the intent of the instructions. When one or more of the symbols appear at the beginning of a maintenance procedure, it conveys the meaning below.



Indicates that tools will be required to perform this procedure.



Indicates that new parts will be required to perform this procedure.

Check the Engine Oil Level



Maintaining the proper engine oil level is essential to good engine performance and service life. Operating the machine with an improper oil level can damage engine components.

Note: Check the oil level with the engine off.

1 Check the oil level dipstick. Add oil as needed.

Kubota D1403 Engine	
Oil type	10W-30
Kubota D1703 Engine	
Oil type	10W-30

Maintenance

Check the Engine Coolant Level



Maintaining the engine coolant at the proper level is essential to engine service life. Improper coolant level will affect the engine's cooling capability and damage engine components. Daily checks will allow the inspector to identify changes in coolant level that might indicate cooling system problems.

⚠ Burn hazard. Beware of hot engine parts and coolant. Contact with hot engine parts and/or coolant may cause severe burns.

Note: Do not remove the radiator cap.

1 Check the fluid level in the coolant recovery tank. Add fluid as needed.

⊙ Result: The fluid level should be at the FULL mark.

Refer to Kubota Operator's Manual 97897-01090.

Check the Batteries



Proper battery condition is essential to good machine performance and operational safety. Improper fluid levels or damaged cables and connections can result in component damage and hazardous conditions.

⚠ Electrocution hazard. Contact with hot or live circuits may result in death or serious injury. Remove all rings, watches and other jewelry.

⚠ Bodily injury hazard. Batteries contain acid. Avoid spilling or contacting battery acid. Neutralize battery acid spills with baking soda and water.

1 Put on protective clothing and eye wear.

2 Be sure that the battery cable connections are tight and free of corrosion.

3 Be sure that the battery hold-down brackets are in place and secure.

Note: Adding terminal protectors and a corrosion preventative sealant will help eliminate the corrosion on the battery terminals and cables.

Maintenance

Check the Tire Pressure



⚠ Bodily injury hazard. An over-inflated tire can explode and may cause death or serious injury.

⚠ Collision hazard. An excessively worn tire can cause poor handling and continued use could result in tire failure.

⚠ Tip-over hazard. Do not use temporary flat tire repair products.

Maintaining the tires and wheels in good condition is essential to safe operation and good performance. Tire and/or wheel failure could result in a machine tip-over. Component damage may also result if problems are not discovered and repaired in a timely fashion.

1 Check the tire surface and sidewalls for cuts, cracks, punctures and uneven or excessive tread wear. Replace the tire if uneven or excessive tread wear is found.

2 Check each wheel for damage, bends and cracks. Replace the wheel if any damage is found.

Note: Tires and wheels must be replaced with tires and wheels of the specifications listed.

3 Check each tire with an air pressure gauge. Add air as needed.

4 Check the torque of each lug nut.

Tire Specifications		
Tire Size	6.50R16LT	108/107L
Lug nut torque	103 ft/lbs	140 Nm
Tire pressure (cold)	54 psi	375 kPa

Scheduled Maintenance

Maintenance performed quarterly, annually and every two years must be completed by a person trained and qualified to perform maintenance on this machine according to the procedures found in the service manual for this machine.

Machines that have been out of service for more than three months must receive the quarterly inspection before they are put back into service.

Specifications

AL6-6000	
Height, stowed	2.30 m
Length, stowed, drawbar extended	3.25 m
Length, stowed, drawbar retracted	2.50 m
Width, stowed	1.80 m
Extended mast height	8.40 m
Total weight, with fuel	1480 kg
(Machine weights vary with option configurations. See serial label for specific machine weight.)	
Tongue weight	100 kg
Tire size	6.50R16LT 108/107L
Engine type	Kubota D1403
Fuel capacity	160 liters
Run time	70 hours
Generator	Mecc Alte 13.5 kVA, 400 VAC 50 Hz
Total lighting wattage	6000 watts
Replacement lamps	1000 watts MW1500T7/DE Metal Halide
Tower rotation	346 degrees non-continuous
Maximum towing speed	100 km/h
Maximum wind speed	100 km/h

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AL6-9000	
Height, stowed	2.30 m
Length, stowed, drawbar extended	4.30 m
Length, stowed, drawbar retracted	3.55 m
Width, stowed	1.80 m
Extended mast height	9.45 m
Total weight, with fuel	1630 kg
(Machine weights vary with option configurations. See serial label for specific machine weight.)	
Tongue weight	100 kg
Tire size	6.50R16LT 108/107L
Engine type	Kubota D1703
Fuel capacity	160 liters
Run time	50 hours
Generator	Mecc Alte 13.5 kVA, 400 VAC 50 Hz
Total lighting wattage	9000 watts
Replacement lamps	1000 watts MW1500T7/DE Metal Halide
Tower rotation	346 degrees non-continuous
Maximum towing speed	100 km/h
Maximum wind speed	100 km/h

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