

# Operator's Manual

# **AL8000 HT**

with Maintenance Information

First Edition
First Printing
Part No. 114426

# Discount Equipment

Discount-Equipment.com is your online resource for commercial and industrial quality parts and equipment sales.

## Locations:

Florida (West Palm Beach): 561-964-4949

Outside Florida TOLL FREE: 877-690-3101

Need parts? Check out our website at www.discount-equipment.com

## Can't find what you need?

Click on this link: <a href="http://www.discount-equipment.com/category/5443-parts/">http://www.discount-equipment.com/category/5443-parts/</a> and fill out the request form.

Please have the machine model and serial number available in order to help us get you the correct parts. One of our experienced staff members will get back to you with a quote for the right part that your machine needs.

We sell worldwide for the brands: Genie, Terex, JLG, MultiQuip, Mayco, Toro/Stone, Diamond Products, Magnum, Airman, Mustang, Power Blanket, Nifty Lift, Atlas Copco, Chicago Pneumatic, Allmand Brothers, Essick, Miller Spreader, Skyjack, Lull, Skytrak, Tsurumi, Husquvarna/Target, Whiteman-Concrete/Mortar, Stow-Concrete/Mortar, Baldor, Wacker, Sakai, Snorkel, Upright, Mi-T-M, Sullair, Neal, Basic, Dynapac, MBW, Weber, Bartell, Bennar Newman, Haulotte, Ditch Runner, Blaw-Knox, Himoinsa, Best, Buddy, Crown, Edco, Wyco, Bomag, Laymor, Terremite, Barreto, EZ Trench, Takeuchi, Basic, Bil-Jax, Curtis, Gehl, Heli, Honda, ICS/PowerGrit, Puckett, Waldon, ASV, IHI, Partner, Imer, Clipper, MMD, Koshin, Rice, Gorman Rupp, CH&E, Cat Pumps, Comet, General Pump, Giant, AMida, Coleman, NAC, Gradall, Square Shooter, Kent, Stanley, Tamco, Toku, Hatz, Kohler, Robin, Wisconsin, Northrock, Oztec, Toker TK, Rol-Air, Small Line, Wanco, Yanmar



## **Important**

Read, understand and obey these safety rules and operating instructions before operating this machine. Only trained and authorized personnel shall be permitted to operate this 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, call Terex.

## www.discount-equipment.com

## **Contents**

	Page
Introduction	
Symbol and Hazard Pictorials Definitions	3
General Safety	4
Work Area Safety	9
Legend	12
Controls	13
Inspections	17
Operating Instructions	26
Transport and Lifting Instructions	30
Maintenance	
Specifications	34
Reporting Safety Defects	35

Copyright © 2007 by Terex

Terex Light Construction Division 590 Huey Road Rock Hill, SC 29730

First Edition: First Printing, August 2007

Printed on recycled paper

Printed in U.S.A.

## Introduction

## **Owners, Users and Operators:**

Terex appreciates your choice of our machine for your application. Our number one priority is user safety, which is best achieved by our joint efforts. We feel that you make a major contribution to safety if you, as the equipment users and operators:

- 1 **Comply** with employer, job site and governmental rules.
- 2 Read, understand and follow the instructions in this and other manuals supplied with this machine.
- 3 Use good safe work practices in a commonsense way.
- 4 Only have trained/certified operators, directed by informed and knowledgeable supervision, running the machine.

If there is anything in this manual that is not clear or which you believe should be added, please contact us.

Internet: www.genielift.com e-mail: techpub@genieind.com



## 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**

Terex uses symbols, color coding and signal words to identify the following:



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

**ADANGER** 

Red

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

**AWARNING**Orange

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

**ACAUTION**Yellow

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

NOTICE

Blue

Indicates a hazardous situation which, if not avoided, could result in property damage.

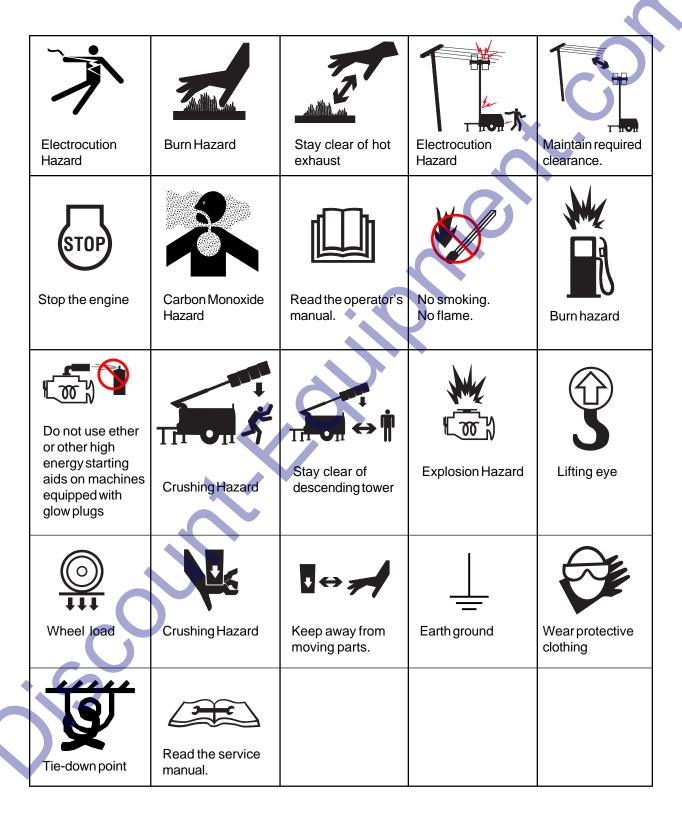
## Intended Use

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

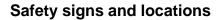
## Safety Sign Maintenance

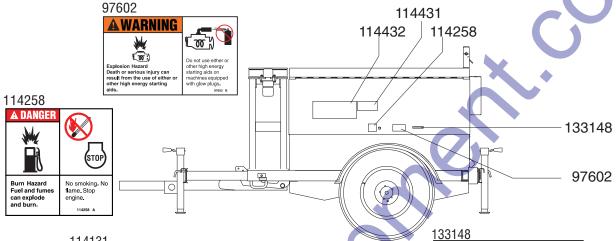
Replace any missing or damaged safety signs. Keep operator safety in mind at all times. Use mild soap and water to clean safety signs. Do not use solvent-based cleaners because they may damage the safety sign material.

## Symbol and Hazard Pictorials Definitions



## **General Safety**





114131



Electrocution Hazard
Death or injury can result from contacting electric power lines.

Always contact the electric power line owner. The electric power shall be disconnected or the power lines moved or insulated before machine operations







Electrocution hazard. Contact with voltage will result in death or serious injury.



Shut down engine/generator before servicing. Read the service manual.

114132

Failure to read, understand and obey the operator's manual and the following safety rules could result in death or serious injury.

#### Improper Use Hazard The operator is responsible for safe machine operation. This includes:

- Avoid hazardous situations.
- 2 Always perform a pre-operation inspection
- Always perform function tests prior to use.
   Inspect the work place. Only use the machine as it was intended.
- Do not operate unless:
- You read, understand and obey:

   manufacturer's instructions and safety rules safety and operator's manuals and decals

   employer's safety rules

   applicable governmental regulations

You are properly trained to safely operate this

#### **Explosion and Fire Hazards**

Do not start the engine if you smell or detect diesel fuel or other explosive substances.

Do not refuel with the engine running. Refuel machine and charge battery only in an open well-ventilated area away from sparks, flames and lighted topacco.

On not operate 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

#### **Electrocution Hazards**

Machine is not electrically insulated and will not provide protection from contact with or proximity to electrically charged power lines.



Do not connect wires directly to the generator. Connect auxiliary equipment only to the power outlets provided. Do not raise light tower near any overhead power lines.

Maintain required clearances from electrical power lines and apparatus in accordance with applicable governmental regulations and the following chart.

Line Voltage	Require Clearan	d ce
0 to 50KV	10 ft	3.0 m
50 to 200KV	15 ft	4.6 m
200 to 350KV	20 ft	6.1 m
350 to 500KV	25 ft	7.6 m
500 to 750KV	35 ft	10.6 n
750 to 1000KV	45 ft	12.7 n

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

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

Do not operate during lightning or storms Do not use machine as a ground for welding. Do not use installine as a ground not wearing. Machine should be grounded in accordance with all local electrical codes. Consult local electrical codes or Authority Having Jurisdiction in the area where machine will be used for specific requirements.

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

#### **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 use a damaged or malfunctioning machine.

Do not tow light tower when lamps are hot. Hot lamps will break if moved. Be sure all decals are legible and in place.

#### Tip-over Hazards

Do not raise tower unless all outriggers are properly deployed, foot pads are in firm contact with ground and machine is level. Do not set machine up where it cannot be leveled using only the leveling jacks.

Do not hang any objects from lights or tower.

Do not raise or extend tower when wind speed may exceed 62 mph / 100 km/h Do not move machine while tower is raised.

Do not adjust or stow outriggers while tower is raised. Do not place ladders or scaffolds against machine.

Do not use tower to raise material or personnel. Do not alter or disable machine components that affect stability or safety.

#### Collision Hazard

Check work area for overhead obstructions or hazards.

#### **Burn Hazard**

Do not touch lamp fixtures when lights are turned on. Turn lamps off and allow to cool before touching.

#### Crushing Hazards

Do not lower tower unless area is clear of personnel and obstructions.

Keep hands away from potential pinch points.

## Towing Hazards

Do not tow machine unless tower is fully retracted and lowered.

Do not tow machine unless travel lock is

Do not tow machine unless travel lock is securely in place.

Do not tow machine unless all outriggers have been retracted and stowed.

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

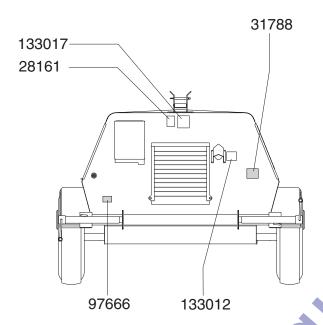
Be sure safety chains (if required) are securely

attached to the tow vehicle. Be sure that all driving lights are operational. Be sure all lights, mirrors and hitch components conform to federal and local regulations.

Do not tow on public roads unless the machine meets all governmental regulations for towing. Do not exceed maximum towing speed: 60 mph. 97 km/h.

## **General Safety**

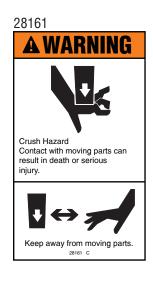
## Safety signs and locations









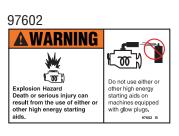




133016

## **General Safety**

## Safety signs and locations



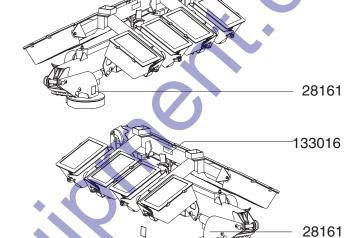


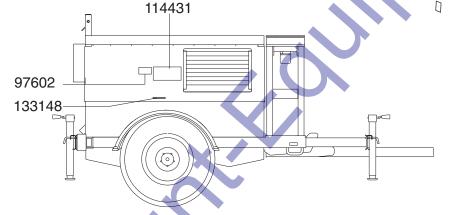


Electrocution hazard. Contact with voltage will result in death or serious injury.



Shut down engine/generator before replacing lamps. Read the operator's manual.









Electrocution hazard. Contact with voltage will result in death or serious injury.



Shut down engine/generator before servicing. Read the service manual.



## **AWARNING**



Crush Hazard Contact with moving parts can result in death or serious



Keep away from moving parts.

#### 114131

## DANGER



Electrocution Hazard

Death or injury can result from contacting electric power lines.

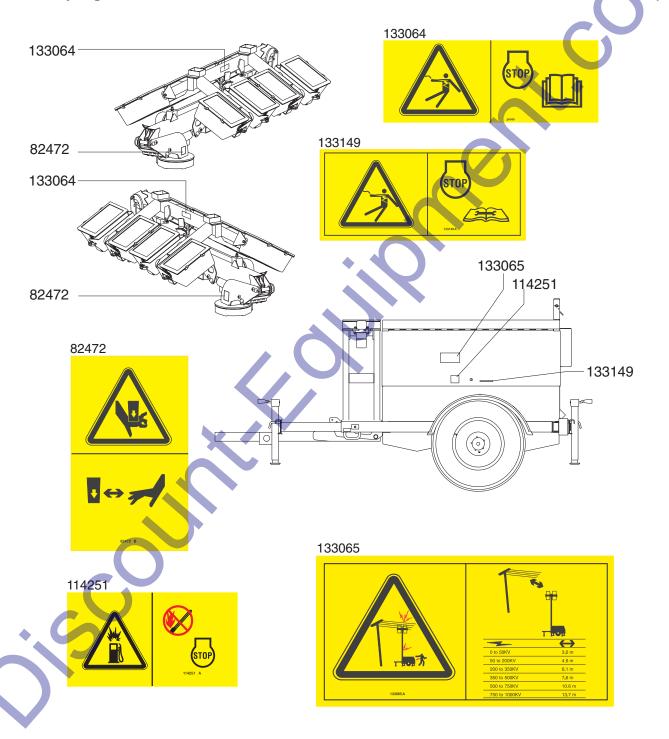
Always contact the electric power line owner. The electric power shall be disconnected or the power lines moved or insulated before machine operations 114431 A



Maintain required clearance.		
Line Voltage	Required	Clearance
0 to 50KV	10 ft	3.0 m
50 to 200KV	15 ft	4.6 m
200 to 350KV	20 ft	6.1 m
350 to 500KV	25 ft	7.6 m
500 to 750KV	35 ft	10.6 m
750 to 1000KV	45 ft	13.7 m

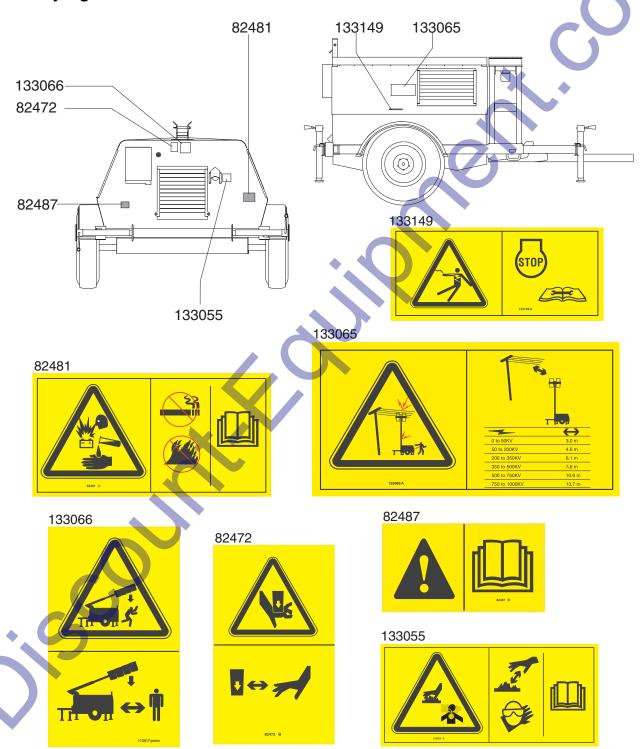
## **General Safety**

## Safety signs and locations



## **General Safety**

## Safety signs and locations



## Work Area Safety

#### **Electrocution Hazards**

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

Maintain required clearances from electrical power lines and apparatus in accordance with applicable governmental regulations and the following chart.

Required	Clearance
10 ft	3.0 m
15 ft	4.6 m
20 ft	6.1 m
25 ft	7.6 m
35 ft	10.6 m
45 ft	13.7 m
	15 ft 20 ft 25 ft 35 ft

Allow for tower movement and 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 power lines are shut off.

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

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

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.

## **Explosion and Fire Hazards**

Do not start the engine if you smell or detect diesel fuel or other explosive substances.

Do not refuel the machine with the engine running.

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.



## Tip-over Hazards

Do not raise the tower 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 any objects from the lights or the tower.

Do not use the tower to raise material or personnel.

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



## **Work Area Safety**



Do not raise the tower 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 adjust or stow the outriggers when the tower is raised.



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 Hazards



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

Keep hands and fingers away from any potential pinch points.

## 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 Hazards

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.

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.

Stay clear of the moving tower.

## A Fall Hazards

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

## ▲ Damaged Machine Hazards

Do not use a damaged or malfunctioning machine.

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

Be sure all decals are legible and in place.

## Component Damage Hazard

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.

## 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.

## Explosion Hazard



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

#### **Electrocution/Burn Hazards**

Avoid contact with electrical terminals.

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

#### Lockout

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

## **▲** 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 the tower is lowered to the horizontal position and the travel lock is secured.

Do not overload your tow vehicle. Check the manufacturer's Gross Vehicle Weight Rating (GVWR). To obtain the gross vehicle weight, add the tongue weight of the trailer to the vehicle weight (including vehicle, passengers and cargo).

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

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

Be sure the safety chains (if required) are securely attached to the tow vehicle.

Be sure that all driving lights are operational.

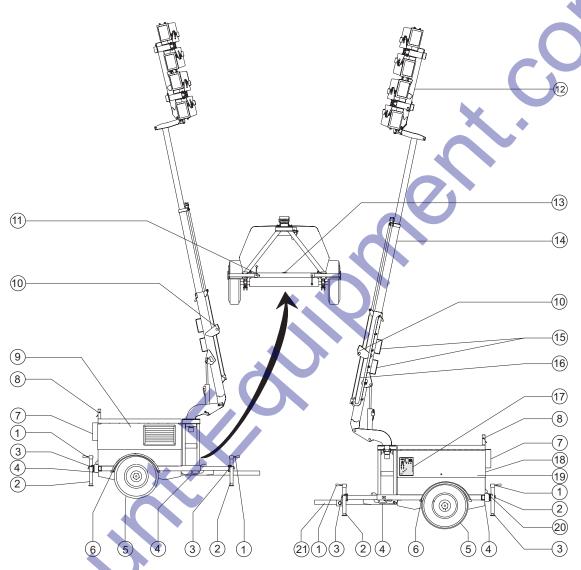
Be sure all hitch components, lights and mirrors and methods of attaching the trailer to the tow vehicle conform to local, state and federal regulations.

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

Do not exceed 60 mph / 97 km/h. Obey all local and national towing speed laws.

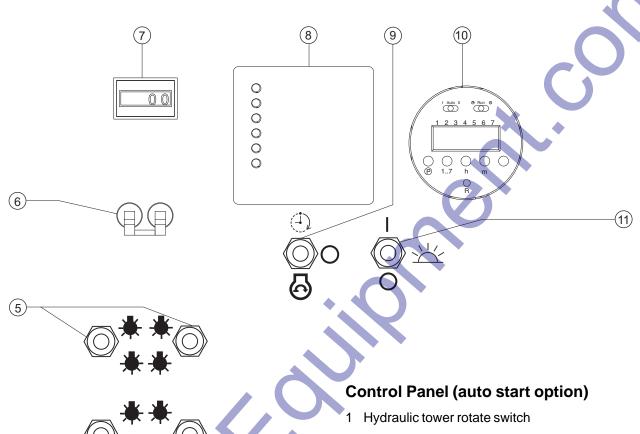
Be sure to chock the wheels when parking on a hill.

## Legend



- 1 Outrigger jack handle
- 2 Outrigger
- 3 Outrigger spring pin
- 4 Transporttie-down
- 5 Tire
- 6 Fender
- 7 Electrical outlet panel (if equipped)
- 8 Travel lock pin
- 9 Curbside door
- 10 Lifting eye
- 11 Grounding lug

- 12 Light bar
- 13 Bubble level
- 14 Tower
- 15 Forklift pockets
- 16 Cable track
- 17 Control panel (under roadside door)
- 18 Red Emergency Stop button (if equipped)
- 19 Roadside door
- 20 Exhaust pipe
- 21 Tongue



2 Hydraulic tower raise/lower switch

#### **Control Panel (auto start option)**

1 Hydraulic tower rotate switch

Move the switch to the right and the tower will rotate to the right. Move switch to the left and the tower will rotate to the left.

2 Hydraulic tower raise/lower switch

Move the switch up and the tower will raise. Move switch down and the tower will lower.

3 Hydraulic tower extend/retract switch

Move the switch to the right and the tower will extend. Move switch to the left and the tower will retract.

4 Light bar raise/lower switch

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

5 Light switches

Move each switch to turn on the indicated light. Machines equipped with 4 lights: Each switch turns on one light.

Machines equipped with 8 lights: Each switch turns on two lights at a time.

6 Main circuit breaker

Flip the main circuit breaker switch on before turning the individual light switches on.

7 Hourmeter

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

8 Auto start control module/status indicator

Lights indicate failure or faults with the autostart system. Refer to the appropriate service manual.

9 Engine start switch

Move the switch to the timed start position before setting the timer or engaging the photocell switch.

Move the switch to the engine start position and the engine will start after a 30-second delay.

Move the switch to the off position and the engine will be off.

10 Timer

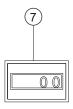
The timer is used to automatically start the engine and turn on the lights at a preset time.

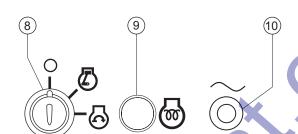
11 Photocell on/off switch

When the photocell is turned on, the lights will go on at dusk and go off at daylight. The engine will start prior to the lights going on.

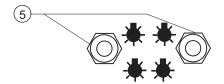
Move the switch up to turn the photocell on.

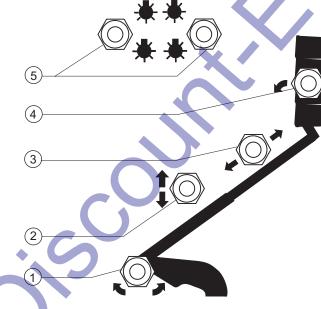
Move the switch down to turn the photocell off.











## **Control Panel (manual start option)**

- 1 Hydraulic tower rotate switch
- 2 Hydraulic tower raise/lower switch
- 3 Hydraulic tower extend/retract switch
- 4 Light bar raise/lower switch
- 5 Light switches
- 6 Main circuit breaker
- 7 Hourmeter
- 8 Ignition key switch for engine start
- 9 Engine prime button
- 10 Alternator failure light

#### **Control Panel (manual start option)**

1 Hydraulic tower rotate switch

Move the switch to the right and the tower will rotate to the right. Move the switch to the left and the tower will rotate to the left.

2 Hydraulic tower raise/lower switch

Move the switch up and the tower will raise. Move switch down and the tower will lower.

3 Hydraulic tower extend/retract switch

Move the switch to the right and the tower will extend. Move switch to the left and the tower will retract.

4 Light bar raise/lower switch

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

5 Light switches

Move each switch to turn on the indicated light(s).

Machines equipped with 4 lights: Each switch turns on one light.

Machines equipped with 8 lights: Each switch turns on two lights at a time.

6 Main circuit breaker

Flip the main circuit breaker switch on before turning the individual light switches on.

7 Hourmeter

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

8 Ignition key switch for engine

Turn the key switch to the run position and hold the engine prime button down to prime the engine.

Hold the prime button down and turn the key switch to the start position to start the engine. Turn the key switch to the off position to turn the engine off.

9 Engine prime button

With the key switch in the run position, press and hold the prime button for 15 seconds before starting the engine.

10 Alternator failure light

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



## **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. manual.

## **Pre-operation Inspection**

	leg	sure that the operator's manual is complete, gible and in the storage container located on a machine.
		sure that all decals are legible and in place. e Inspections section.
		eck for engine oil leaks and proper fluid level. Id oil if needed. See Maintenance section.
	СО	eck for engine coolant leaks and proper olant level. Add coolant if necessary. See aintenance section.
	lev	eck for battery fluid leaks and proper fluid rel. Add distilled water if needed. See aintenance section.
	tor	eck for proper tire pressure and lug nut que. Add air to tires if needed. See aintenance section.
da	ma	the following components or areas for ge, improperly installed or missing parts and horized modifications:
		Electrical components, wiring and electrical cables
		Tower components
		Latches and pins
		Tires and wheels
		Trailer lights and reflectors
		Outriggers, leveling jacks and foot pads
		Nuts, bolts and other fasteners
		Lamp fixtures and bulbs
		Safety chains (if required)
	9	Engine and related components
		Fueltank(s)
		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 that the battery is in place and properly

connected.



## **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.

## Setup

- 1 Position the light tower at the desired work site.
- 2 Chock the wheels.
- 3 Disconnect the trailer lights and safety chains.
- 4 Pull the release pin on the tongue jack and rotate into place.
- 5 Turn the jack handle to lower the foot pad and raise the tongue of the machine enough to clear the tow vehicle.
- 6 Release the spring pin on the front and back outriggers and slide each outrigger out until the spring pin engages. Rotate the outriggers into position.
- 7 Turn the outrigger jack handles to level the machine and raise the wheels off the ground. Level the machine using only the leveling jacks.
- 8 Check the bubble level on the front of the machine to make sure the machine is level.
- 9 Drive the grounding rod into the ground and connect to the grounding lug on the chassis near the base of the tower.
- 10 Manually start the engine. See Operating Instructions section.

# Test Emergency Stop (if equipped)

- 11 Push in the red Emergency Stop button.
- Result: The engine should shut off.
- 12 Test each tower and light function.
- Result: All functions should not operate.
- 13 Pull out the red Emergency Stop button to the on position.
- 14 Start the engine.

## **Test the Tower Operation**

- 15 Move each toggle switch according to the markings on the tower control panel.
- Result: All tower functions should operate.

## **Test the Lights**

Note: Make sure the engine is running.

- 16 Turn on the main circuit breaker switch.
- 17 Turn on the light switches.
- Result: All lights should come on.

Note: If the lights are already hot from being operated, they will require 5-10 minutes to cool before they will come on again.



## **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.

## **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.

## **Workplace Inspection**

Be aware of and avoid the following hazardous situations:

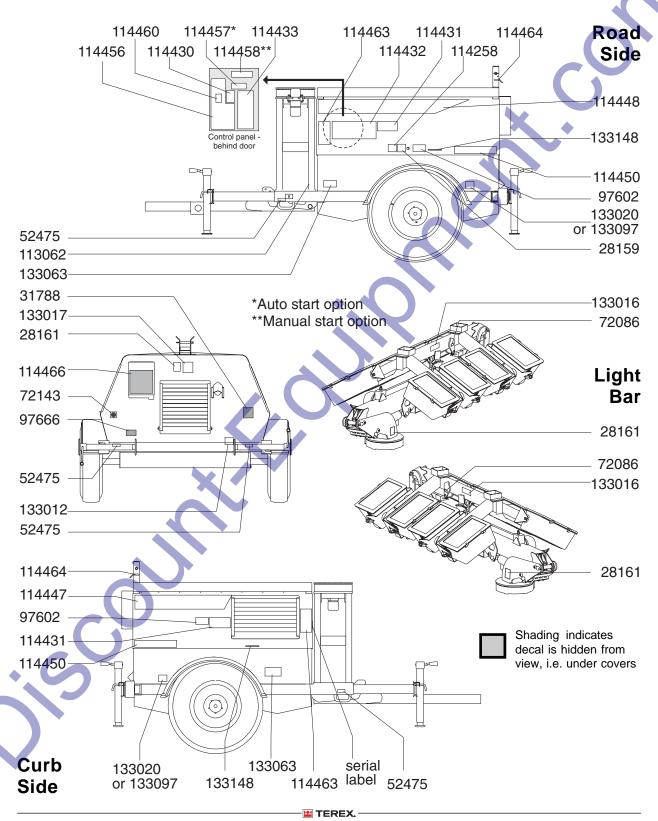
- · drop-offs or holes
- bumps, floor obstructions or debris
- sloped surfaces
- unstable or slippery surfaces
- overhead obstructions and high voltage conductors
- hazardous locations
- inadequate surface support to withstand all load forces imposed by the machine
- wind and weather conditions
- the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

## Inspection for Decals with Words

Determine whether the decals on your machine have words or symbols. Use the appropriate inspection to verify that all decals are legible and in place.

Part No.	Description	Quantity
28159	Label - Diesel	1
28161	Warning - Crushing Hazard	3
31788	Danger - Battery Safety	1
52475	Label - Tie-down Point	4
72086	Label - Lifting Eye	2
72143	Label - Emergency Stop	1
97602	Warning - Explosion Hazard, Ether	2
97666	Warning - Improper Use Hazard	1
114258	Danger - No Smoking	1
114430	Notice - Turn Off Lights	1
114431	Danger - Electrocution Hazard	2
114432	Danger - General Safety	1
114433	Instructions - Operating Instructions	1
114447	Cosmetic - Terex, 33 in	1
114448	Cosmetic - Terex, 50 in	1
114450	Cosmetic - AL8000 HT	2
114456	Control Panel, Hydraulic Tower	1
114457	Control Panel, Auto Engine Start	1
114458	Control Panel, Manual Engine Start	1
114460	Label - Lights (Patch)	1
114463	Instructions - Setup and Transport	2
114464	Label - Travel Lock	2

Part No.	Description	Quantity
114466	Receptacle Panel (option)	1
133012	Danger - Carbon Monoxide Hazard	1
133016	Danger - Hazardous Voltage, Lights	3 2
133020	Label - Tire Specifications, U.S.	2
133017	Warning - Crushing Hazard, Tower	1
133062	Label - Grounding Lug	1
133063	Label - Transport Tie-down Diagran	n 2
133097	Label - Tire Specifications, Australia	2
133148	Danger - Hazardous Voltage	2

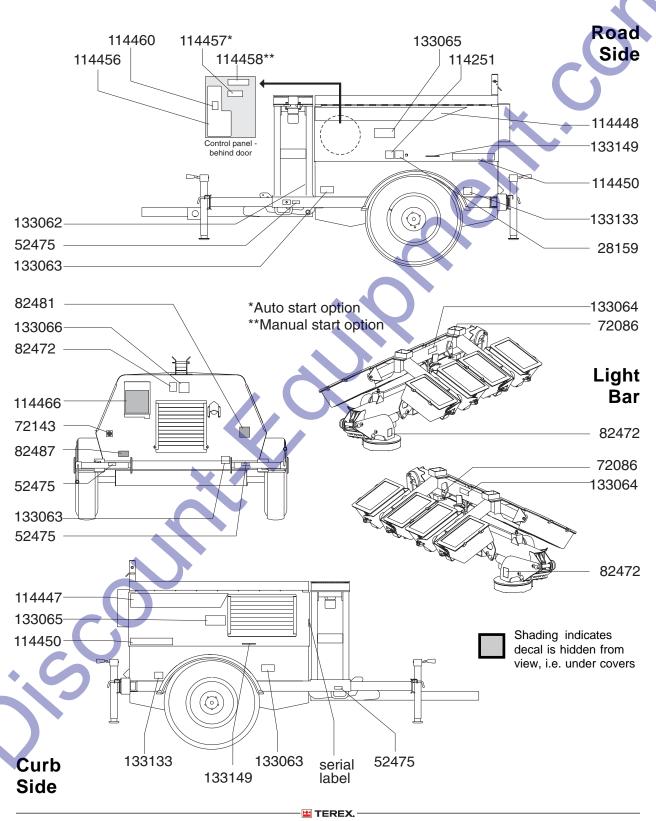


# **Inspection for Decals with Symbols**

Determine whether the decals on your machine have words or symbols. Use the appropriate inspection to verify that all decals are legible and in place.

Part No.	Description Q	uantity
28159	Label - Diesel	1
52475	Label - Tie-down Point	4
72086	Label - Lifting Eye	2
72143	Label - Emergency Stop	1
82472	Label - Crushing Hazard	3
82481	Label - Battery Safety	1
82487	Label - Improper Use Hazard	1
114251	Label - No Smoking	1
114447	Cosmetic - Terex, 33 in	1
114448	Cosmetic - Terex, 50 in	1
114450	Cosmetic - AL8000 HT	2
114456	Control Panel, Hydraulic Tower	1
114457	Control Panel, Auto Engine Start	1
114458	Control Panel, Manual Engine Start	1

Part No.	Description	Quantity
114460	Label - Lights (Patch)	1
114466	Receptacle Panel (option)	1
133055	Label - Carbon Monoxide Hazard	1
133062	Label - Grounding Lug	1
133064	Label - Hazardous Voltage, Lights	2
133063	Label - Transport Tie-down	2
133065	Label - Electrocution Hazard	2
133066	Label - Crushing Hazard, Tower	1
133133	Label - Tire Pressure	2
133149	Label - Hazardous Voltage	2





## **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 manual.

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.

## Setup

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

## Start the Engine

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

Note: If the machine is equipped with dual fuel tanks, there must be fuel in both tanks in order to start the engine.

**If equipped:** Pull out the red Emergency Stop button on the back panel of the light tower cabinet.

# Manual Engine Start (machines with manual key swith start)

- 1 Move the ignition switch to the run position.
- 2 Press and hold the prime button for 15 seconds.
- 3 While holding down the prime button, move the ignition switch to engine start.

# Manual Engine Start (machines with auto start option)

1 Move the toggle switch to the manual engine start position.

Note: There will be a delay of about 30 seconds before the engine starts.

# Timed Engine Start (machines with auto start option)

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

1 Move the engine start switch to timed start.



- 2 On the timer, move the mode switch (upper left switch) to AUTO and the set switch (upper right switch) to RUN.
- 3 Using the tip of a pencil or pen, press the Reset button (R). A blinking display will show 0:00 for the time and an arrow under the day 7 (for Sunday).
- 4 Move the set switch to the left (clock icon) to set the present day and time.
- 5 A default time of AM 12:00 will appear on the display screen.
- 6 Press the day button (1..7) repeatedly until the arrow points to the actual day of the week.
- 7 Press the hour button (h) repeatedly until the actual hour of the day is displayed.
- 8 Press the minute button (m) repeatedly until the minute of the present hour is displayed.
- 9 Move the Set switch to the program position (P) to set the desired stop and start time. A default time of AM 12:00 will appear. A small 1 will appear to the right of the time with a lamp symbol above it.
- 10 Use the day, hour and minute buttons to set the timer to the desired start day and time.
- 11 Press the program button (P) to set the timer for the desired shut-off time. AM 12:00 will appear in the display with a small 2 to the right. The lamp symbol will not appear above the 2.
- 12 Use the day, hour and minute buttons to set the timer to the desired shut-off day and time.
- 13 Move the set switch to RUN.

#### Photocell (machines with auto start option)

When the photocell is turned on, the lights will go on at dusk and go off at daylight. The engine will automatically start prior to the lights going on.

When the photocell option is in use and the photocell has detected a low enough light level to start the light tower, the engine running light on the LED panel will flash for 30 seconds before the engine starts.

To turn on the photocell:



- 1 Move the engine start switch to timed start.
- 2 Move the photocell switch to on.



## **Operation of Tower**

1 Make sure the engine is running.

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

2 Move the appropriate toggle switch according to the markings on the control panel to rotate the tower, raise and lower the tower, extend and retract the tower, and raise and lower the light har.

## Manual Operation of Lights

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

- 1 Turn on the main circuit breaker switches on the control panel.
- 2 Turn on the lights using the individual light switches.

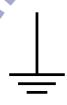
Models with four lights: Each switch turns on one of the lights.

Models with eight lights: Each switch turns on two of the lights at one time.

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.

## Grounding

A grounding rod is located inside the door on the road side of the machine.



Drive the rod into the ground and connect it to the grounding lug located on the chassis near the base of the tower.

## **Electrical Outlets (if equipped)**

Electrical outlets are located behind the panel on the rear of the light tower cabinet.

## **Towing**

- 1 Fully retract and lower the tower.
- 2 Lower the light bar to the stowed position.
- 3 Make sure the travel lock pin is securely locked in place.
- 4 Make sure the covers are closed and secured.
- 5 Pull the spring pins on each outrigger to rotate the outrigger up and slide it into the stowed position.
- 6 Raise the tongue of the machine by turning the tongue jack handle.
- 7 Position the transport vehicle under the coupler on the tongue of the machine.
- 8 Open the latch on the coupler.
- 7 Turn the tongue jack handle to lower the tongue.
- 9 Close the latch on the coupler.
- 10 Rotate the tongue jack to the stowed position and secure with the lock pin.
- 11 Attach the safety chains (if required).
- 12 Connect and test the trailer lights.

## **Towing Information**

Driving a vehicle/trailer combination is different from driving a vehicle alone.

Inspect all connections at each stop.

All tires must be properly inflated. Do not overinflate the tires. Tire pressures go up during driving. Checking the tire pressure when the tires are warm will give you an inaccurate pressure reading.

Increase the distance between your vehicle and the vehicle in front of you to twice the normal following distance when towing a trailer. Allow more following distance in adverse weather.

Slow down for downgrades and shift your transmission into a lower gear.

Slow down for curves, hazardous road conditions, freeway exits, and when driving in adverse weather.

Heavy winds, excessive speed, load shifting or passing vehicles can cause a trailer to sway while driving. If this occurs, do not brake, speed up or turn the steering wheel. Turning the steering wheel or applying the brakes can cause the vehicle and trailer to jackknife. Let up on the gas pedal and keep the steering wheel straight.

If the vehicle and/or trailer travels off the paved road, hold the steering wheel firmly and let up on the gas pedal. Do not apply the brakes. Do not turn sharply. Slow down to under 25 mph / 40 km/h. Gradually turn the steering wheel to get back on the road. Proceed with caution when entering traffic.

When passing other vehicles, be sure to leave enough room for the extra length of the trailer. You will need to go much farther beyond the passed vehicle before you can return to your lane.

Avoid jerky or sudden movements when turning.

## **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

Lower the light bar to the stowed position.

Fully retract and lower the tower to the stowed position.

Secure the tower for transport with the travel lock pin.

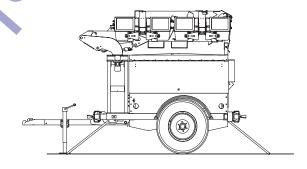
Close and secure the cabinet doors

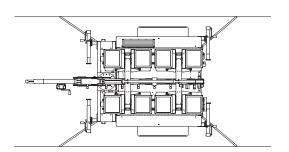
Inspect the entire machine for loose or unsecured items.

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

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

Adjust the rigging to prevent damage to the chains.







## Observe and Obey:

- ☑ Only qualified riggers should rig and lift the machine.
- ☑ Be sure the crane capacity, loading surfaces and straps or lines are sufficient to withstand the machine weight. See the serial plate for the machine weight.

## Transport and Lifting Instructions

## Lifting the Machine With a Crane

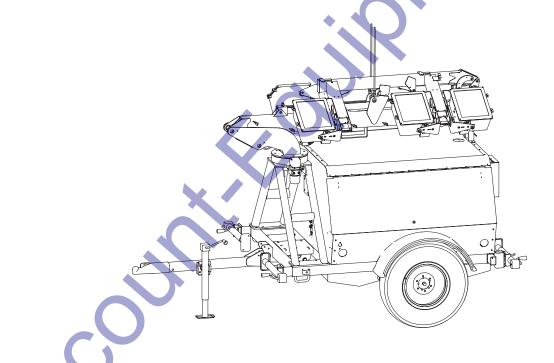
Fully lower and retract the tower.

Make sure the travel lock is securely locked in place.

Close and secure the cabinet doors.

Inspect the entire machine for loose or unsecured items.

Use the two lifting eyes on the tower to lift the machine. Attach a lifting hook to each lifting eye.



#### **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.

- 1 Check the oil level with the engine off.
- 2 Check the oil level dipstick. Add oil if needed.

Kubota 13.6 HP

Oil viscosity requirements See engine manual

# 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.

A 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.
- 2 Add fluid as needed.

#### **Maintenance**

## **Check the Tires and Wheels**





A 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 and add air as needed.
- 4 Check the torque of each lug nut.

Tire Specifications, U	J.S.	
Tire size	ST205/75	R15 Load C
Lug nut torque	80 ft/lbs	108 Nm
Tire pressure (cold)	50 psi	3.4 bar
Tire Specifications,	Australia	
Tire size	7.5R16	C 112/110L
Lug nut torque	80 ft/lbs	108 Nm
Tire pressure (cold)	75 psi	5.2 bar

## **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**

Height, stowed	7 ft 10 in
	2.4 m
Length, stowed	8 ft 2 in
	2.5 m
Width, stowed	6 ft 8 in
	2.0 m
Extended tower height	28 ft
	8.5 m
Weight	3162 lbs
(Machine weights vary with optio	
configurations. See serial label for	or
specific machine weight.)	
Maximum tongue weight	350 lb
	159 kg
Tire size, U.S.	ST205/75R15
	Load C
Tire size, Australia	7.5R16 C 112/110L
Engine type	Kubota 13.6 HP
Fuel capacity, one tank	30 gallons
Fuel capacity, one tank	30 gallons 114 liters
Fuel capacity, one tank  Fuel capacity, two tanks	114 liters 60 gallons
	114 liters
Fuel capacity, two tanks  Run time (full load with one full full	114 liters 60 gallons 227 liters uel tank) 60 hours
Fuel capacity, two tanks	114 liters 60 gallons 227 liters uel tank) 60 hours
Fuel capacity, two tanks  Run time (full load with one full full	114 liters 60 gallons 227 liters uel tank) 60 hours
Fuel capacity, two tanks  Run time (full load with one full full load with two full load with load with two full load with lo	114 liters 60 gallons 227 liters uel tank) 60 hours 120 hours
Fuel capacity, two tanks  Run time (full load with one full full load with two full load with load with two full load with lo	114 liters 60 gallons 227 liters uel tank) 60 hours 120 hours LSA37M7
Fuel capacity, two tanks  Run time (full load with one full full load with two full full full load with one full full full load with one full full full full load with one full full full full full full full ful	114 liters 60 gallons 227 liters  uel tank) 60 hours 120 hours LSA37M7 8 kW, 60 Hz  8000 watts
Fuel capacity, two tanks  Run time (full load with one full full load with two full full load with two full full Generator  Total lighting wattage	114 liters 60 gallons 227 liters  uel tank) 60 hours 120 hours LSA37M7 8 kW, 60 Hz
Fuel capacity, two tanks  Run time (full load with one full for Run time (full load with two full for Generator  Total lighting wattage Eight lights Four lights  Replacement bulbs	114 liters 60 gallons 227 liters  4000 watts 4000 watts 1000 watts
Fuel capacity, two tanks  Run time (full load with one full for Run time (full load with two full for Generator  Total lighting wattage Eight lights Four lights  Replacement bulbs	114 liters 60 gallons 227 liters  uel tank) 60 hours 120 hours LSA37M7 8 kW, 60 Hz  8000 watts 4000 watts
Fuel capacity, two tanks  Run time (full load with one full for Run time (full load with two full for Generator  Total lighting wattage Eight lights Four lights  Replacement bulbs	114 liters 60 gallons 227 liters  4000 watts 4000 watts 1000 watts
Fuel capacity, two tanks  Run time (full load with one full for Run time (full load with two full for Generator  Total lighting wattage Eight lights Four lights  Replacement bulbs	114 liters 60 gallons 227 liters  del tank) 60 hours 120 hours LSA37M7 8 kW, 60 Hz  8000 watts 4000 watts 4000 watts 1000 watts 4000 watts
Fuel capacity, two tanks  Run time (full load with one full for Run time (full load with two full for Generator  Total lighting wattage Eight lights Four lights  Replacement bulbs	114 liters 60 gallons 227 liters  del tank) 60 hours 120 hours LSA37M7 8 kW, 60 Hz  8000 watts 4000 watts 4000 watts 4000 watts 4000 watts 4000 watts 4000 degrees,
Fuel capacity, two tanks  Run time (full load with one full for Run time (full load with two full for Generator  Total lighting wattage Eight lights Four lights  Replacement bulbs  Ty  Tower rotation	114 liters 60 gallons 227 liters 227 liters 60 hours 120 hours 120 hours LSA37M7 8 kW, 60 Hz  8000 watts 4000 watts 4000 watts 700 BT-37 Metal Halide 360 degrees, non-continuous
Fuel capacity, two tanks  Run time (full load with one full for Run time (full load with two full for Generator  Total lighting wattage Eight lights Four lights  Replacement bulbs  Ty  Tower rotation  Maximum towing speed	114 liters 60 gallons 227 liters 227 liters 60 hours 120 hours 120 hours 120 hours 8000 watts 4000 watts 4000 watts 4000 watts 4000 watts 4000 degrees, non-continuous 60 mph 97 km/h
Fuel capacity, two tanks  Run time (full load with one full for Run time (full load with two full for Generator  Total lighting wattage Eight lights Four lights  Replacement bulbs  Ty  Tower rotation	114 liters 60 gallons 227 liters  del tank) 60 hours 120 hours 120 hours LSA37M7 8 kW, 60 Hz  8000 watts 4000 watts 4000 watts 4000 watts 4000 watts 4000 degrees, non-continuous 60 mph

Continuous improvement of our products is a Genie policy. Product specifications are subject to change without notice or obligation.

## **Reporting Safety Defects**

## **Reporting Safety Defects**

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to Genie Industries.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in any individual problems between you, your dealer or Genie Industries.

To contact NHTSA you may either call the Auto Safety Hotline toll-free at 1-800-424-9393 (366-0123 in Washington DC area) or write to:

NHTSA U.S. Department of Transportation 400 7th Street SW, (NSA-11) Washington DC 20590

You can also obtain information about motor vehicle safety from the Hotline.

