



TEREX®

Operator's Manual

AL4000 *from serial number AL407-100*

AL5000 *from serial number AL507-100*

with
Maintenance
Information

First Edition
First Printing
Part No. 116416

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.


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Internet: www.terex.com

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 Rock Hill, SC 29730
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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.terex.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.

▲ DANGER

Red

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

▲ WARNING

Orange

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

▲ CAUTION

Yellow

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

NOTICE

Blue

Indicates a property damage message.

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.

General Safety - AL4000

Safety signs and locations

⚠ DANGER

CRUSH HAZARD

A falling mast can cause **Death or Serious Injury.**

Do Not release "vertical" lock pin until mast sections are **FULLY** retracted and the "telescope" lock pin is **engaged.**

Only green should be showing.

NO RED.

850091

⚠ DANGER

CRUSH HAZARD!

A falling boom can cause **Death or Serious Injury.**

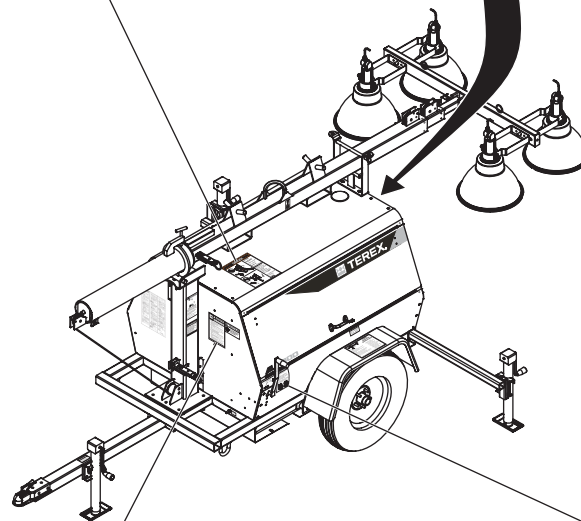
850092

⚠ DANGER

Do Not stand behind light tower.

850093

Decal part numbers 850092 & 850093 are located on the back of the light tower cabinet.



⚠ DANGER

Electrical Shock Hazard

1. Electrically ground trailer frame to earth before operating genset.
 - a. Screw all jacks firmly against ground.
 - b. For extra safety, also drive in ground rod and connect cable to grounding lug welded on trailer frame.
2. Keep light fixtures dry.
 - a. Screw caps on hand light to seal receptacles when not in use.
 - b. Do not screw light fixture into receptacle if receptacle is wet.
3. Remove or cut power out.
 - a. When raising, lowering or rotating tower, be sure to watch power cord.
 - b. If power cord gets out or crushed, replace before operating light tower.
4. Turn off genset while performing electrical work.
 - a. Turn off genset before relamping fixture.
 - b. Turn off genset before replacing ballast.
5. Take extra precautions when troubleshooting electrical problems.
 - a. Only use a voltmeter with two undervoltage pin probes rated for 600 volts.
 - b. Ground trailer frame securely with all jacks and a backup ground cable.
 - c. Inspect ground cable between genset and trailer frame.
 - d. Treat all conductors as potentially hot.
 - e. Proceed through circuits systematically, operating only one section at a time.
 - f. Before connecting ballast, turn off circuit breaker and wait 30 seconds for capacitor discharge.
 - g. If all the lights are out and all the ballasts are receiving power, suspect burned out power cable. Shut down genset and fully inspect power cable and junction box.

851860

⚠ CAUTION

THIS MACHINE IS EQUIPPED WITH AN AUTOMATIC WINCH-LOC SYSTEM.

WHEN TOWER IS COMPLETELY RETRACTED (LOWERED), THE WINCH-LOC ENGAGES, UNLESS TOWER "HORIZONTAL" LOCK-PIN IS MANUALLY RELEASED.

TO RELEASE WINCH-LOC; CRANK WINCH FORWARD ONE-HALF TURN, THEN RELEASE "HORIZONTAL" LOCK PIN.

DIS-ENGAGED

ENGAGED

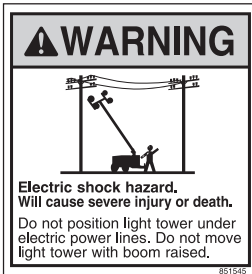
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General Safety - AL4000

Safety signs and locations



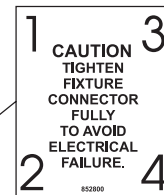
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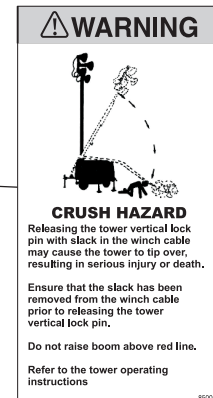
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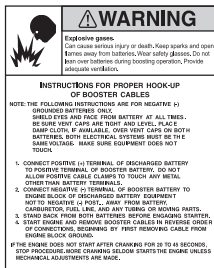
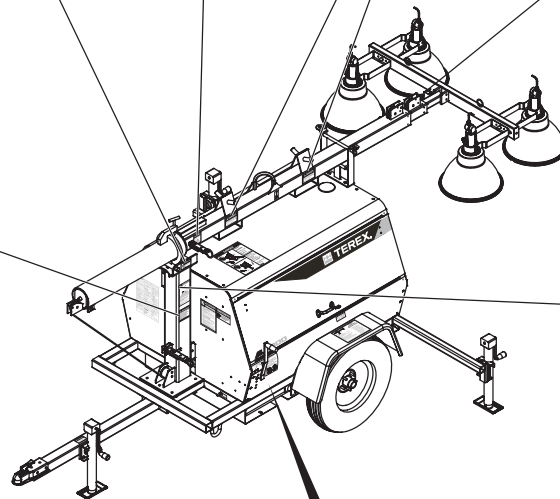
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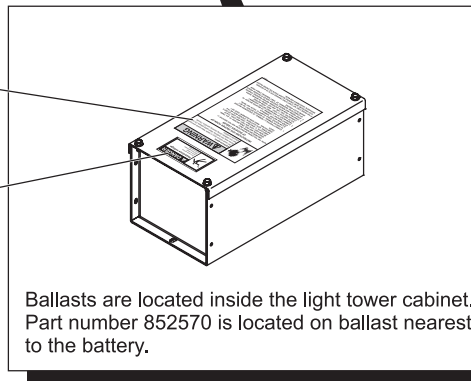
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850130



General Safety - AL5000

Safety signs and locations

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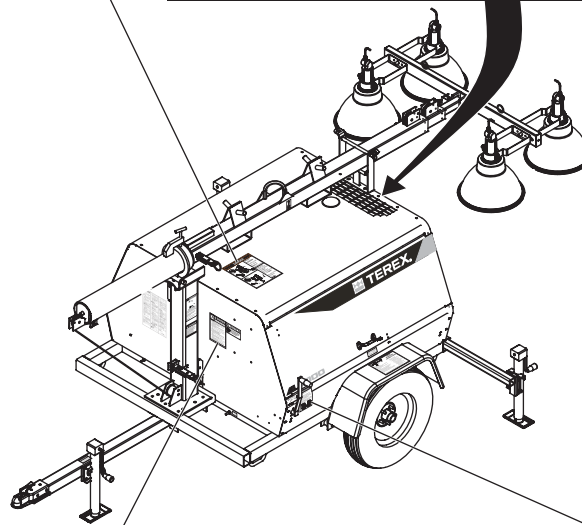
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Do Not stand behind light tower.

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Decal part numbers 850092 & 850093 are located on the back of the light tower cabinet.



⚠ DANGER

Electrical Shock Hazard

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2. Screw all jacks firmly against ground.
3. For extra safety, also drive in ground rod and connect cable to grounding lug welded on trailer frame.
4. Keep light fixtures dry.
5. Screw caps on hand light to seal receptacles when not in use.
6. Do not screw light fixture into receptacle if receptacle is wet.
7. Reverse of out power out.
 - a. When raising, lowering or rotating tower, be sure to watch power coils.
 - b. If power cord gets out or crushed, replace before operating light tower.
8. Turn off genset while performing electrical work.
9. Turn off genset before replacing ballast.
10. Take extra precautions when troubleshooting electrical problems.
 - a. Only use a voltmeter with two well-insulated pin probes rated for 400 volts.
 - b. Ground trailer frame securely with all jacks and a backup ground cable.
 - c. Inspect ground cable between genset and trailer frame.
 - d. Treat all conductors as potentially hot.
 - e. Proceed through circuits systematically, operating only one section at a time.
 - f. Before connecting ballast, turn off circuit breaker and wait 30 seconds for capacitor discharge.
 - g. If all the lights are out and all the ballasts are receiving power, suspect burned out power cable. Shut down genset and fully inspect power cable and junction box.

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DIS-ENGAGED

ENGAGED

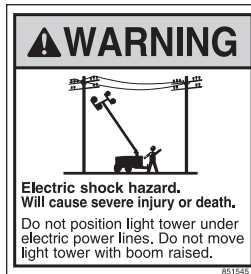
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General Safety - AL5000

Safety signs and locations



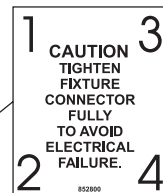
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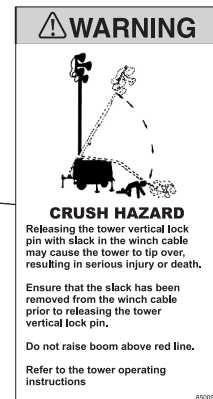
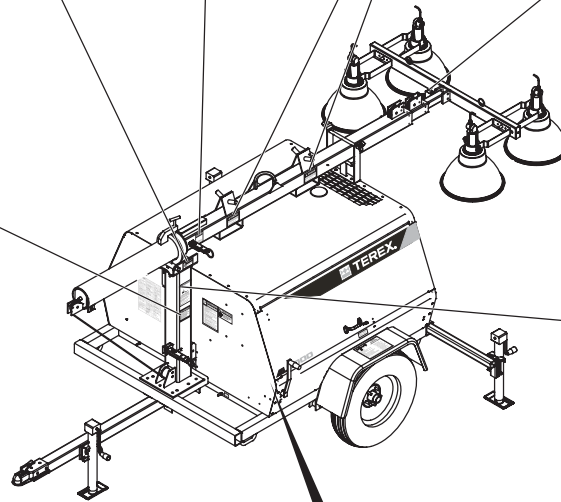
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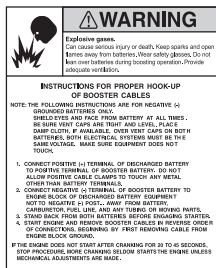
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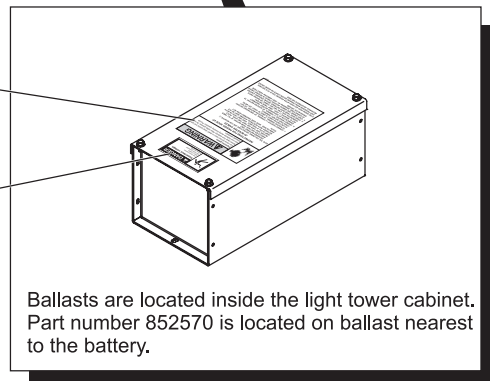
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Work Area Safety

⚠ Electrocutation 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.

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

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

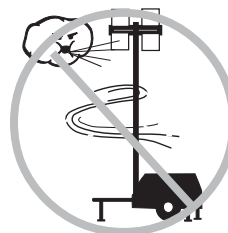
Do not raise the tower unless all outriggers are properly deployed, the foot pads are in firm contact with the ground and the machine is level.

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.



Do not raise the tower when wind speeds may exceed 62 mph / 100 km/h.

Work Area Safety

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.

⚠️ 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.

⚠ Electrocuting/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.

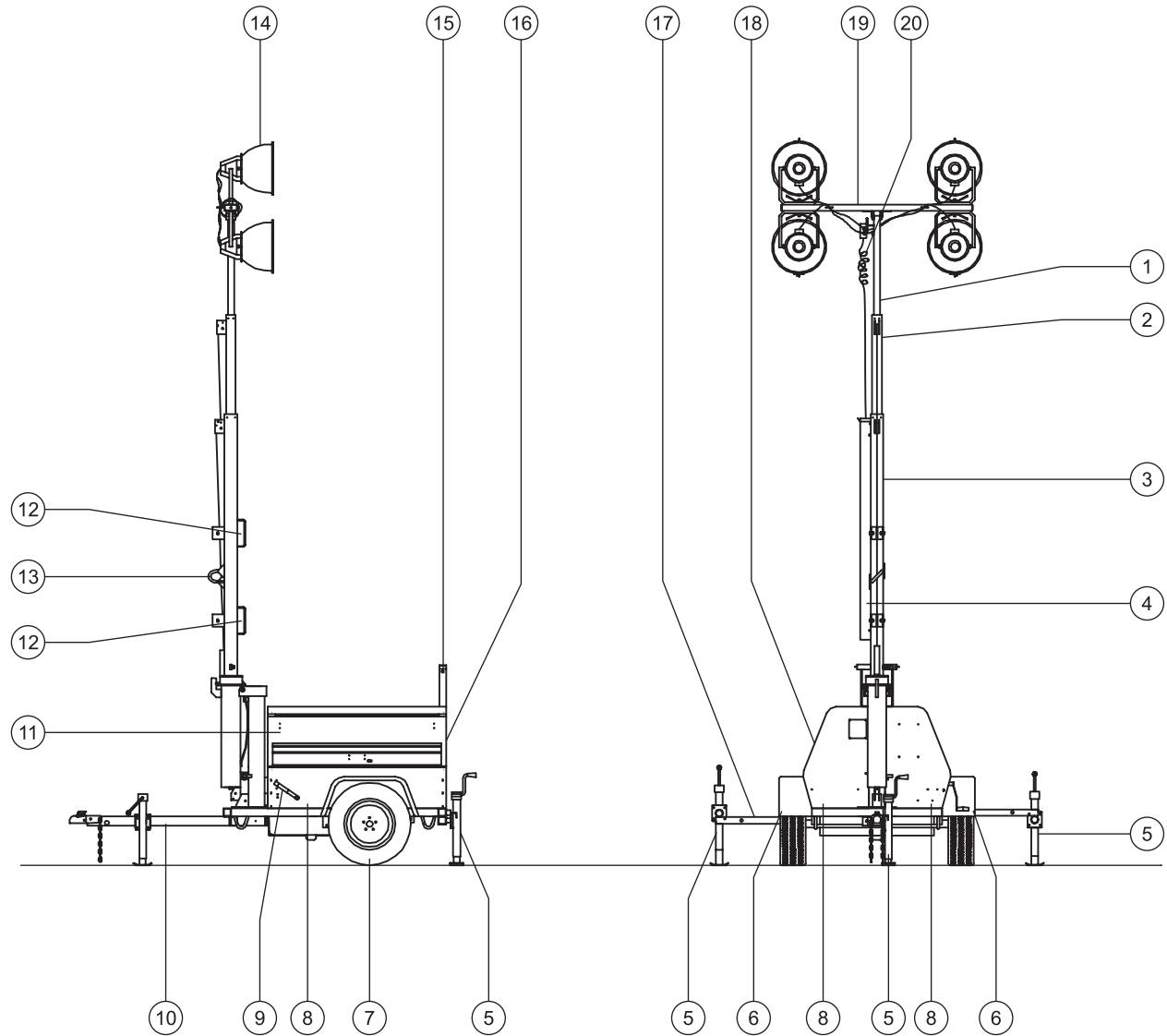
Do not tow the machine on public roads unless it meets all governmental regulations for towing.

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.

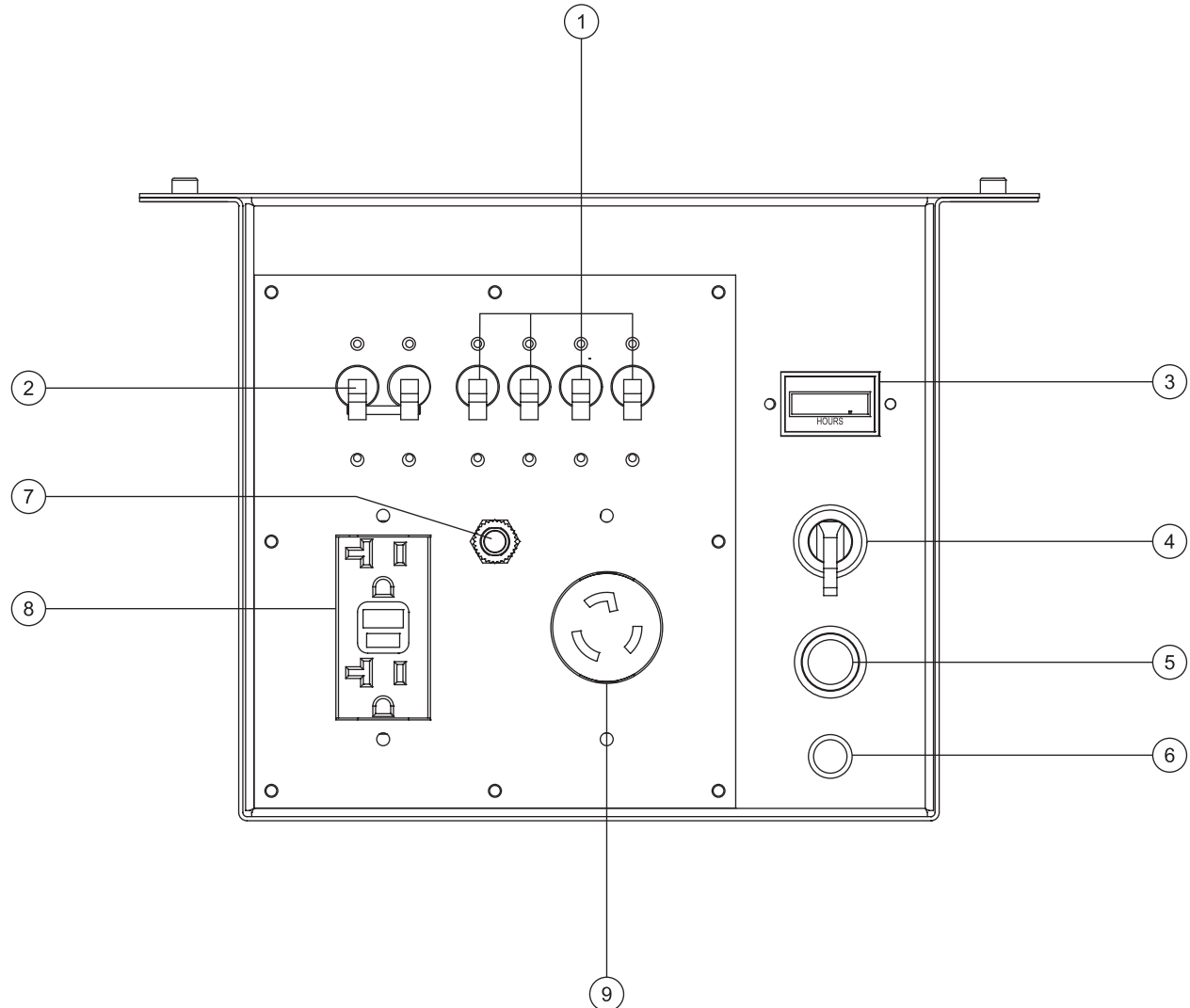
DO NOT TOW MACHINE WHEN ENGINE IS RUNNING! This can cause severe engine/ radiator damage and WILL NOT BE COVERED UNDER WARRANTY!

Legend - AL4000



- | | |
|-------------------------------------|---------------------|
| 1 Tower, 2 inch section | 11 Curb side door |
| 2 Tower, 3 inch section | 12 Forklift pockets |
| 3 Tower, 4 inch section | 13 Lifting eye |
| 4 Coil cord sleeve | 14 Lamps |
| 5 Leveling jack | 15 Travel lock pin |
| 6 Fender | 16 Muffler |
| 7 Tire | 17 Outrigger |
| 8 Ballasts (located inside cabinet) | 18 Road side door |
| 9 Tower winch | 19 Light bar |
| 10 Tongue | 20 Coil cord |

Controls - AL4000



Control Panel

- | | |
|------------------------------|------------------------------|
| 1 Light switches | 5 Engine prime button |
| 2 Main circuit breaker | 6 Alternator failure light |
| 3 Hour meter | 7 Mini breaker |
| 4 Ignition switch for engine | 8 Duplex receptacle with GFI |
| | 9 T-lock receptacle |

Controls - AL4000

Control Panel - AL4000

1 Light switches

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

2 Main circuit breaker

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

3 Hour meter

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

4 Ignition switch for engine

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

Hold the prime button down and turn the ignition switch to the start position to start the engine.

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

5 Engine prime button

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

6 Alternator failure light

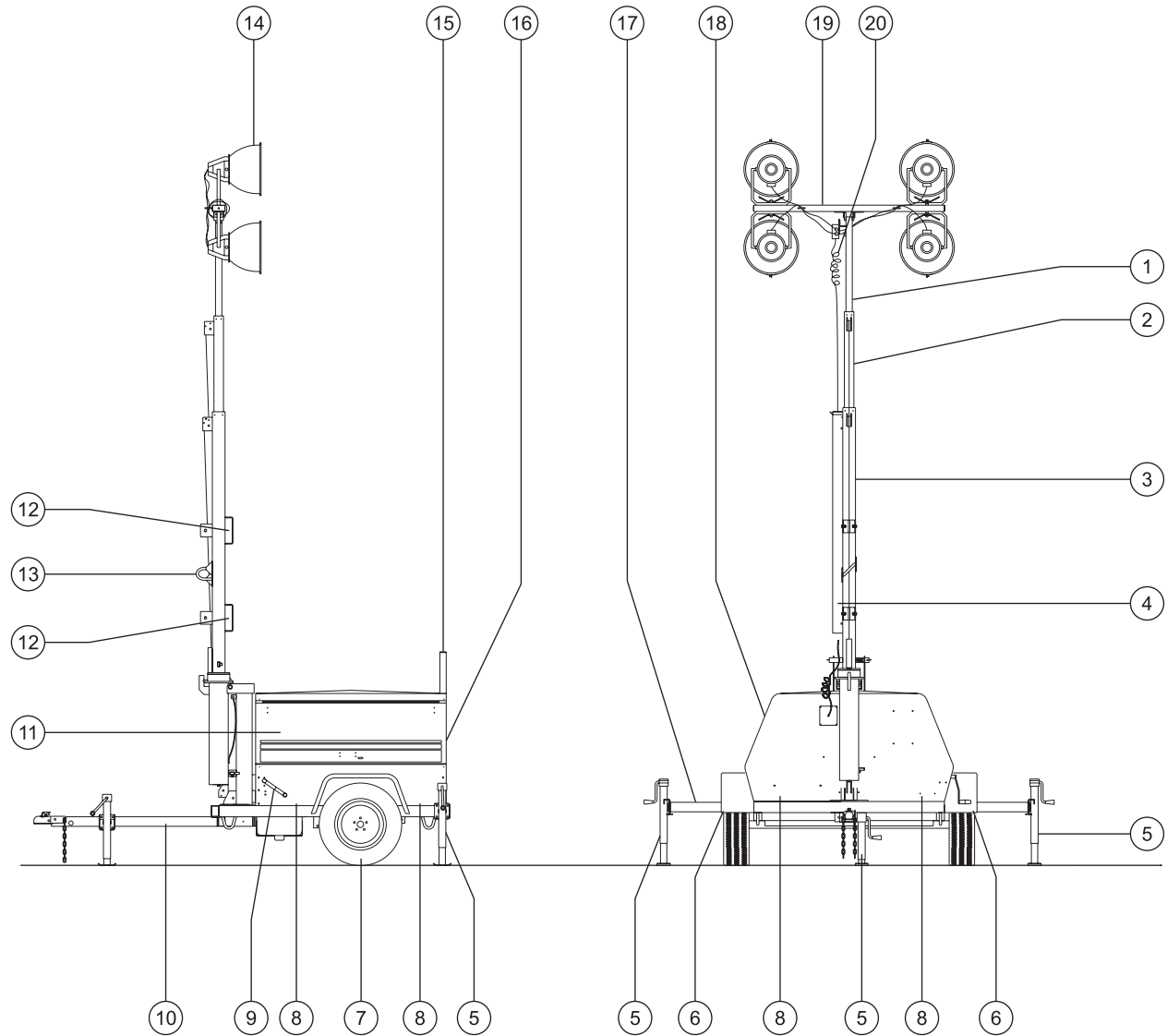
Light on indicates that the alternator isn't producing enough voltage.

7 Mini breaker

8 Duplex receptacle with GFI

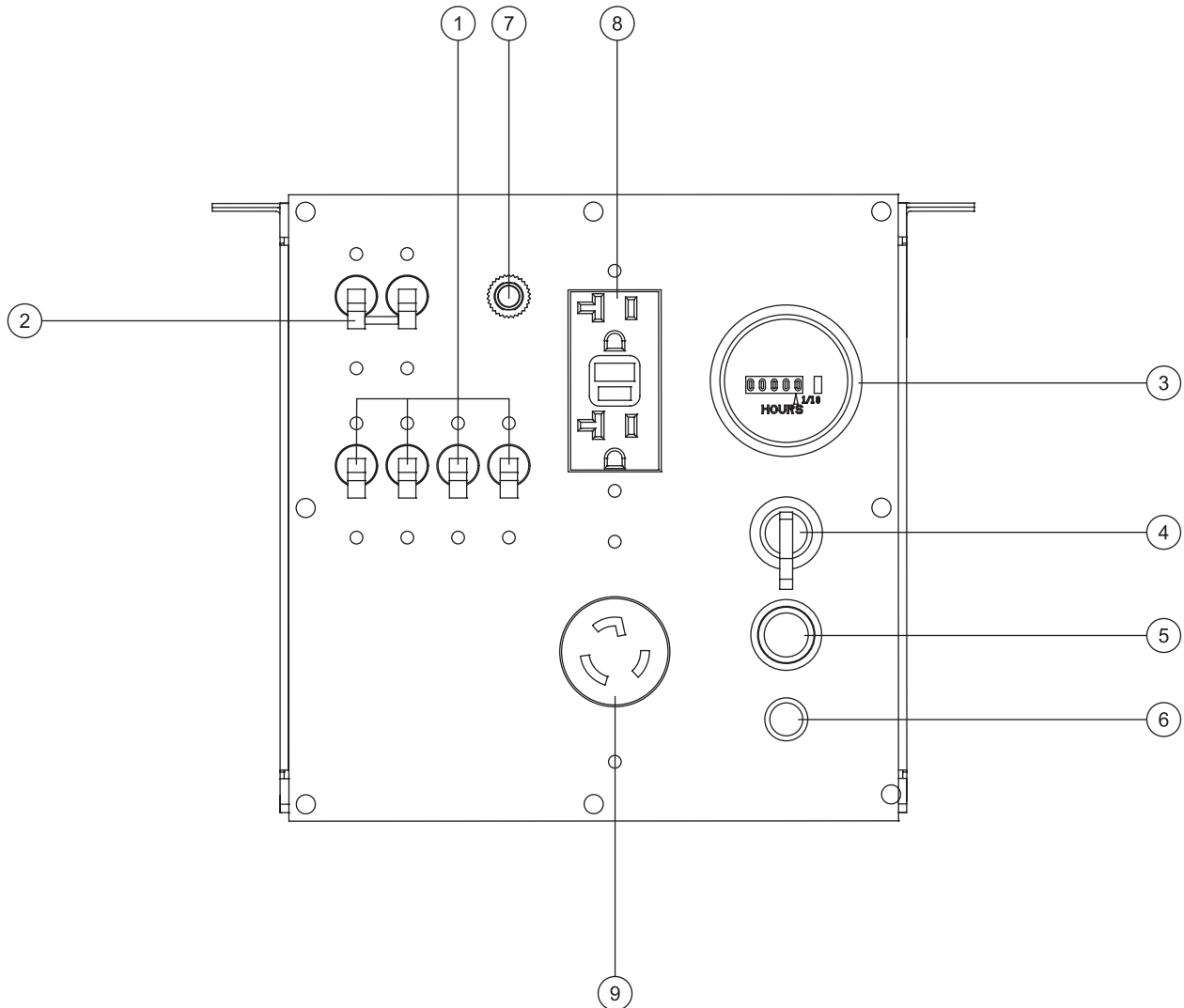
9 T-lock receptacle

Legend - AL5000



- | | |
|-------------------------------------|---------------------|
| 1 Tower, 2 inch section | 11 Curb side door |
| 2 Tower, 3 inch section | 12 Forklift pockets |
| 3 Tower, 4 inch section | 13 Lifting eye |
| 4 Coil cord sleeve | 14 Lamps |
| 5 Leveling jack | 15 Travel lock pin |
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Controls - AL5000



Control Panel

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Controls - AL5000

Control Panel - AL5000

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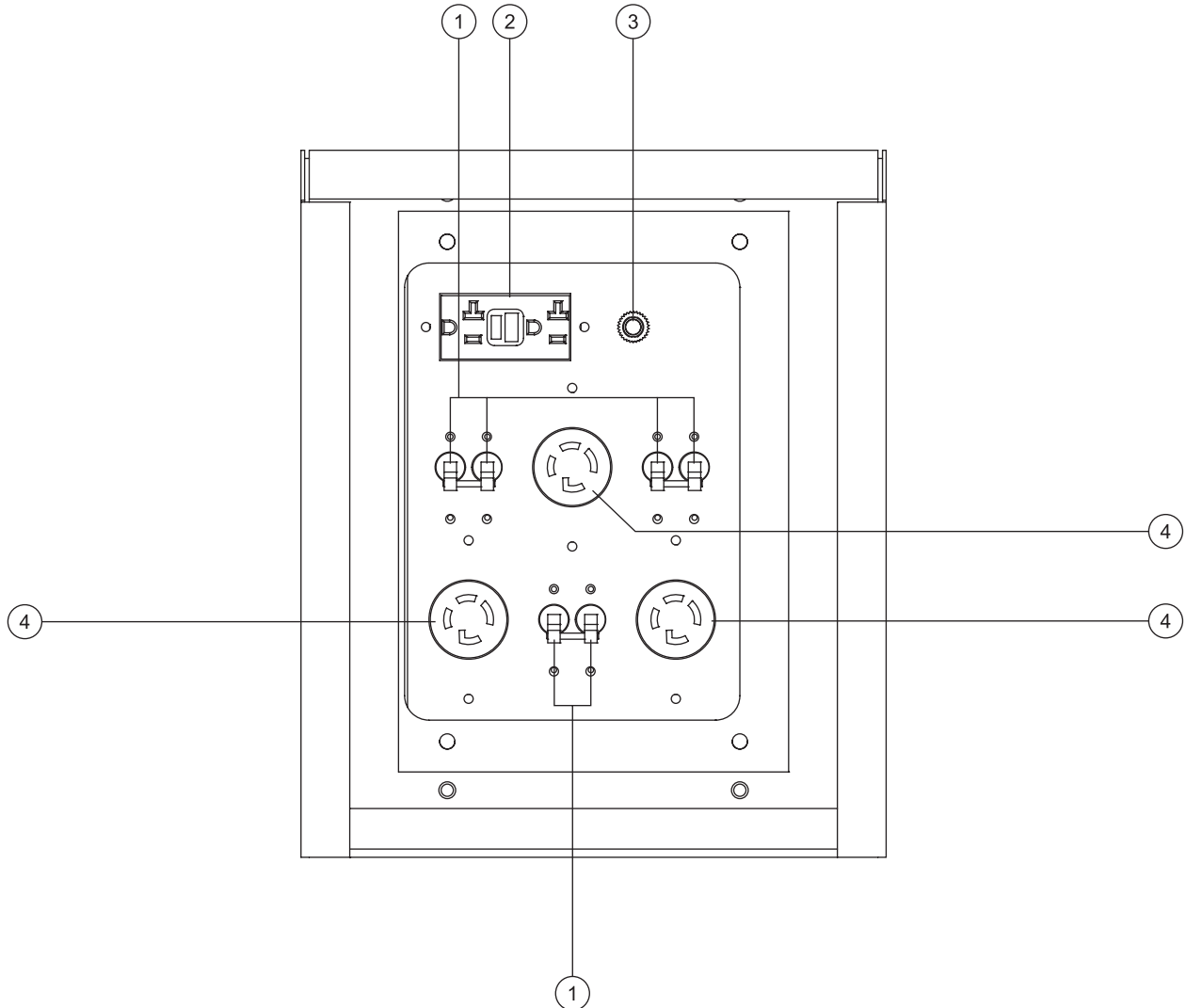
Light on indicates that the alternator isn't producing enough voltage.

7 Mini breaker

8 Duplex receptacle with GFI

9 T-lock receptacle

External Power Access - AL5000 20kW Option



External Power Access

- 1 Breakers, 2P, 30A, 240V
- 2 Receptacle, GFI 20A, 120V
- 3 Breaker, Mini 1P, 20A
- 4 Receptacle, T-Lock, 30A, 120/240V

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 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
- 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)
- Engine and related components
- Fuel tank(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.

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

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 (where equipped) on the front of the machine to make sure the machine is level.
- 9 Ground the light tower according to your local electrical code. A grounding rod is supplied inside the cabinet and grounding lug is provided on the chassis near the base of the tower.



Note: Always refer to your local electrical code.

- 10 Manually start the engine. See Operating Instructions section.

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.

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.

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

Inspections

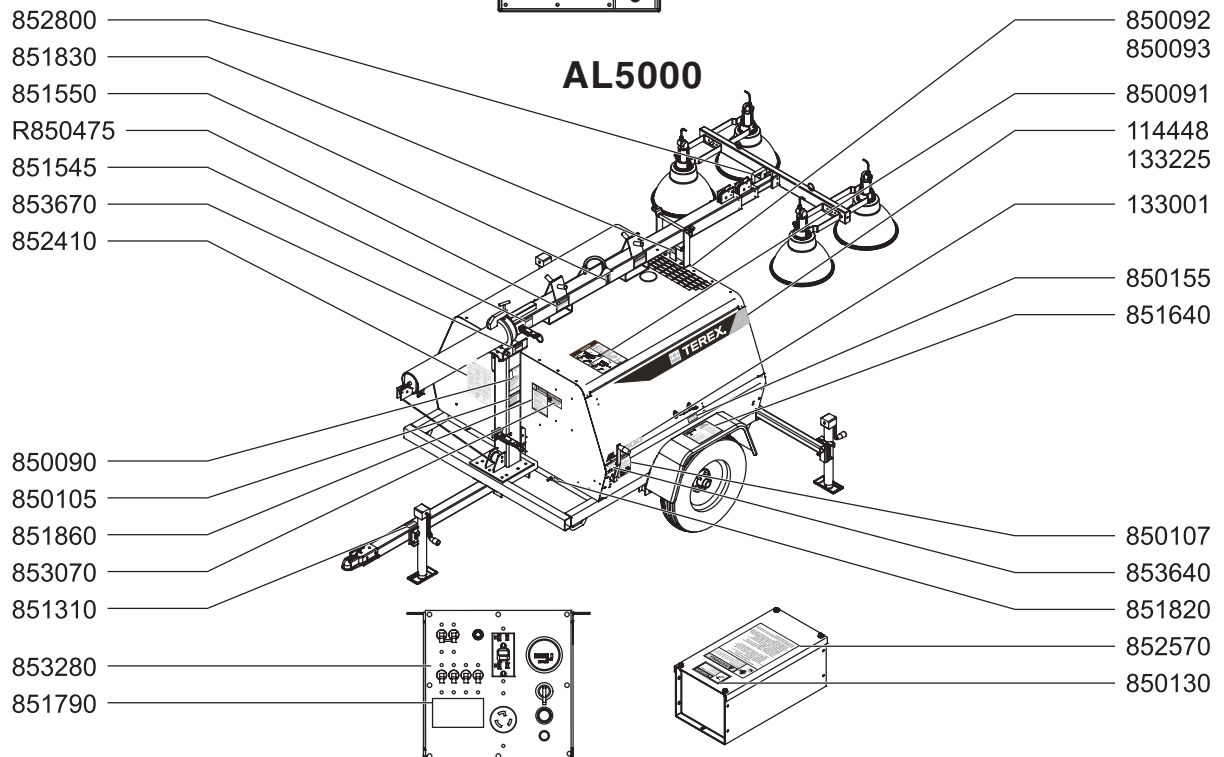
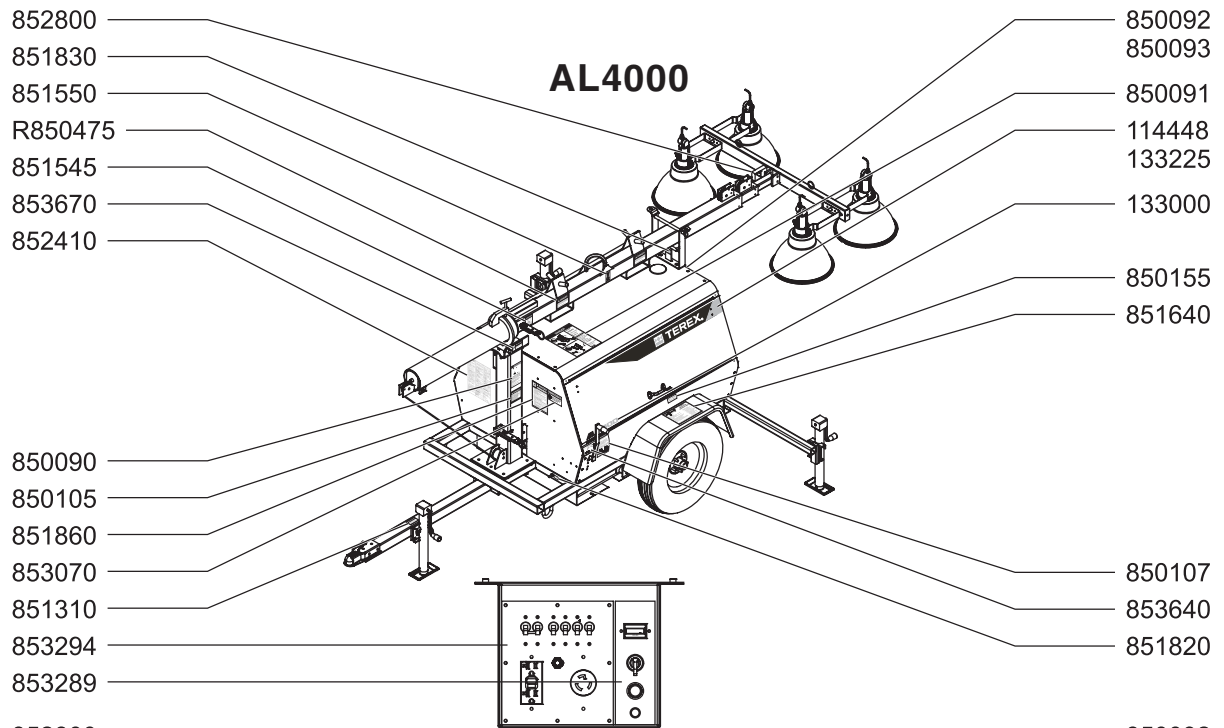
Inspection for Decals with Words

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 fuel only	1
114258	Danger - Burn hazard - No smoking	1
114431	Danger - Electrocution hazard	2
114432	Danger - Failure to read	1
114448	Cosmetic - Terex Black/Red	1
114463	Instructions - Setup and Transport	2
133000	Cosmetic - AL4000	2
133001	Cosmetic - AL5000	2
133225	Cosmetic - Terex Black/Red	1
850090	Warning - Crush hazard	1
850091	Danger - Crush hazard	1
850092	Danger - Crush hazard	1
850093	Danger - Do not stand behind tower	1
850105	Danger - Do not pull vertical lock	1
850107	Caution - Winch-lock system	1
850130	Danger - Hazardous voltage	6
850155	Label - No. 2 diesel fuel only	2
851310	Label - Attention all jacks must be	3
851545	Warning - Electric shock hazard	1
851550	Label - Lifting eye	2
851640	Label - Tower operating instructions	2
851790	Label - Attention turn lights off	1

Part No.	Description	Quantity
851820	Label - Grounding lug	1
851830	Label - Horizontal lock	1
851860	Danger - Electrical shock hazard	1
852410	Label - Operating Instructions	1
852570	Warning - Explosive gases	1
852800	Label - Caution tighten fixture connector	1
853280	Label - AL5000 Control panel	1
853289	Label - AL4000 DC control panel	1
853294	Label - AL4000 AC control panel	1
853640	Label - Attention lower/raise tower	1
853670	Warning - Crush area	1
R850475	Danger - Forks must be inserted	4

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 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.

Operating Instructions

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.

Manual Engine Start (machines with manual switch 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)

Note: Lockout the machine when auto start is turned on.

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.

Operating Instructions

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)

Note: Lockout the machine when auto start is turned on

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 Remove the tower travel lock pin from the cradle located on the rear of the cabinet.
- 2 Remove the tower locking pin from the tower base.
- 3 Using the pivot winch, raise the tower to the vertical position.
- 4 Reinsert the tower locking pin into the tower base.

Manual Operation of Lights

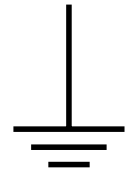
Note: The engine must be running before the lights are turned on.

- 1 Turn on the main circuit breaker switches on the control panel.
- 2 Turn on the lights using the individual light switches.
- 3 Turn the lights off by flipping 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 on the control panel inside the enclosure on the road side of the light tower cabinet.

Operating Instructions

Towing

- 1 **SHUT ENGINE OFF BEFORE MOVING THE LIGHT TOWER! Failure to do so can cause severe engine/radiator damage and WILL NOT BE COVERED UNDER WARRANTY!**
- 2 Fully retract and lower the tower.
- 3 Lower the light bar to the stowed position.
- 4 Make sure the travel lock pin is securely locked in place.
- 5 Make sure the covers are closed and secured.
- 6 Pull the spring pins on each outrigger to rotate the outrigger up and slide it into the stowed position.
- 7 Raise the tongue of the machine by turning the tongue jack handle.
- 8 Position the transport vehicle under the coupler on the tongue of the machine.
- 9 Open the latch on the coupler.
- 10 Turn the tongue jack handle to lower the tongue.
- 11 Close the latch on the coupler.
- 12 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

Fully retract and lower the tower to the stowed position.

Secure the tower for transport with the travel lock pin.

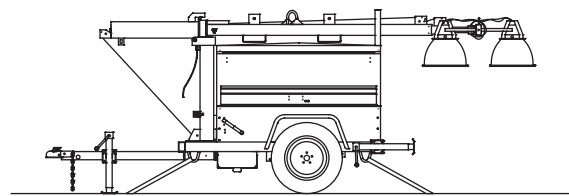
Close and secure the cabinet doors

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.



Transport and Lifting Instructions



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.

Lifting the Machine With a Crane

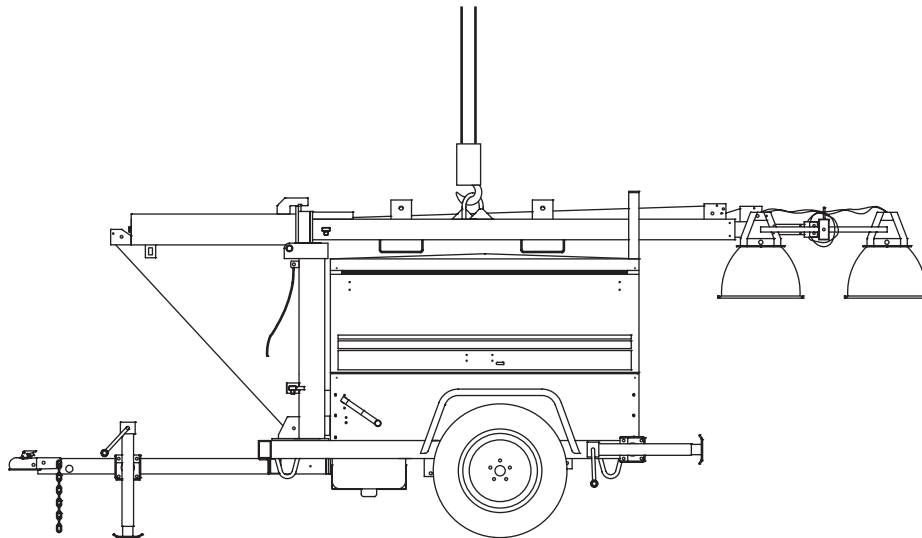
Fully lower and retract the tower.

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 lifting eye on the tower 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.

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

Kubota 13.6 HP

Perkins 14.3 HP

Isuzu 34.5 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.

 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.
- 3 Refer to Kubota Operator's Manual K683-89169 (Terex part number 893020).

Maintenance

Check the Tires and Wheels



⚠ 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.S.

Tire size		
AL4000	ST205/75R15 Load C	
AL5000	ST205/75R15 Load C	
Lug nut torque		
	80 ft/lbs	108 Nm
Tire pressure (cold)		
	50 psi	3.4 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			Total lighting wattage		
AL4000	5 ft 8 in	1.73 m	Four lights	4000 watts	
AL5000	5 ft 9 in	1.75 m	Replacement bulbs		
Length, stowed			1000 watts		
AL4000	14 ft 9 in	4.55 m	Type BT-37 Metal Halide		
AL5000	15 ft 3 in	4.65 m	Tower rotation		
Width, stowed			359 degrees, non-continuous		
AL4000	5 ft 2 in	1.56 m	Maximum towing speed	60 mph	97 km/h
AL5000	6 ft 9 in	2.04 m	Maximum wind speed rating		
Extended tower height			62 mph 100 km/		
30 ft 9.14 m					
Total Weight-no fuel					
AL4000	2050 lbs	930 kg			
AL5000	2735 lbs	1245 kg			
(Machine weights vary with option configurations. See serial label for specific machine weight.)					
Tongue weight					
AL4000	100 lbs	45 kg			
AL5000	220 lbs	100 kg			
Tire size, U.S.					
AL4000	ST205/75R15	Load C			
AL5000	ST205/75R15	Load C			
Engine type					
AL4000/5000 - 6kW	Kubota	13.6 HP			
AL4000/5000 - 8kW	Kubota	14.6 HP			
AL5000 - 20kW	Isuzu	34.5 HP			
Fuel capacity, one tank			30 gallons 114 liters		
Run time standard unit					
(30 gallon tank-Kubota D1105-Full load) 34.48 hours					
Generator					
AL4000	Marathon 6 kW, 60 Hz				
AL4000/5000	LSA37M7 8 kW, 60 Hz				
AL4000/5000	Marathon 8 kW, 60 Hz				
AL5000	Newage 20kW, 60 Hz				

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

Reporting Safety Defects

Terex Rock Hill
590 Huey Road
Rock Hill, SC 29732

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.

California Proposition 65

Warning

The exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Towing Checklist

(Use at each stop)

Before Towing

- Boom hold-down latch is securely locked in place
- Towing hitch is properly secured to tow vehicle
- Safety chains (if required) are properly attached and secure (chains are crossed below hitch)
- All lights are connected and working
- Tires are properly inflated

Before Driving

- Fasten safety restraints
- Properly adjust mirrors

On The Road

- Do not exceed 60 mph / 97 km/h. Obey all local and national towing speed laws
- Check connections and tire pressure at each stop
- Slow down for hazardous conditions
- Allow extra distance for following and passing other vehicles

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