Genie
A TEREX BRAND

Operator's Manual

Serial Number Range

TZ™50

from TZ50J-2900 to TZ50J-4255

from TZ50F-5000

ANSI/CSA
North America
South America
Asia

CE

with
Maintenance
Information

Original Instructions
Fourth Edition
Third Printing
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These machines comply with ANSI A92.2 and CSA C225

CE Complies with EC Directive 2006/42/EC
See EC Declaration of Conformity

Introduction

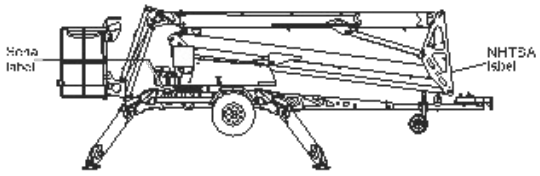
About this manual

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

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

Product Identification

The machine serial number is located on the serial label.



Intended Use and Familiarization Guide

The intended use of this machine is to lift personnel, including tools, and materials to an aerial work site. Before operating the machine, it's the operator's responsibility to read and understand this familiarization guide.

- ☑ Each person must be trained to operate a Mobile Elevating Work Platform (MEWP).
- ☑ Familiarization with the MEWP must be given to each person who is authorized, competent and trained.
- ☑ Only trained and authorized personnel should be permitted to operate the machine.
- ☑ The operator is responsible to read, understand, and obey the manufacturer's instructions and safety rules provided in the Operator's Manual.
- ☑ The Operator's Manual is located in the manual storage container, at the platform.
- ☑ For specific product applications, see **Contacting The Manufacturer**.

Introduction

Bulletin Distribution and Compliance

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

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

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

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

Contacting the Manufacturer

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

Accident reporting

Questions regarding product applications and safety

Standards and regulatory compliance information

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

Transfer of Machine Ownership

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

Please register your machine by visiting us on the web at www.genielift.com or by calling us toll free at 1-800-536-1800.

Introduction



Danger

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

Do Not Operate Unless:

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

1 Avoid hazardous situations.

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

2 Always perform a pre-operation inspection.

3 Always perform function tests prior to use.

4 Inspect the workplace.

5 Only use the machine as it was intended.

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

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

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

☑ You are properly trained to safely operate the machine.

Hazard Classification

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



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

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

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

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

NOTICE Indicates a property damage message.

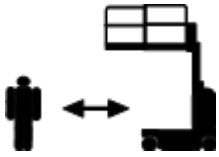
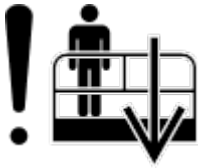
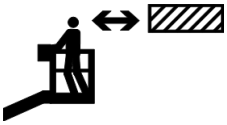
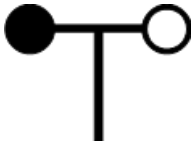
Safety Sign Maintenance

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

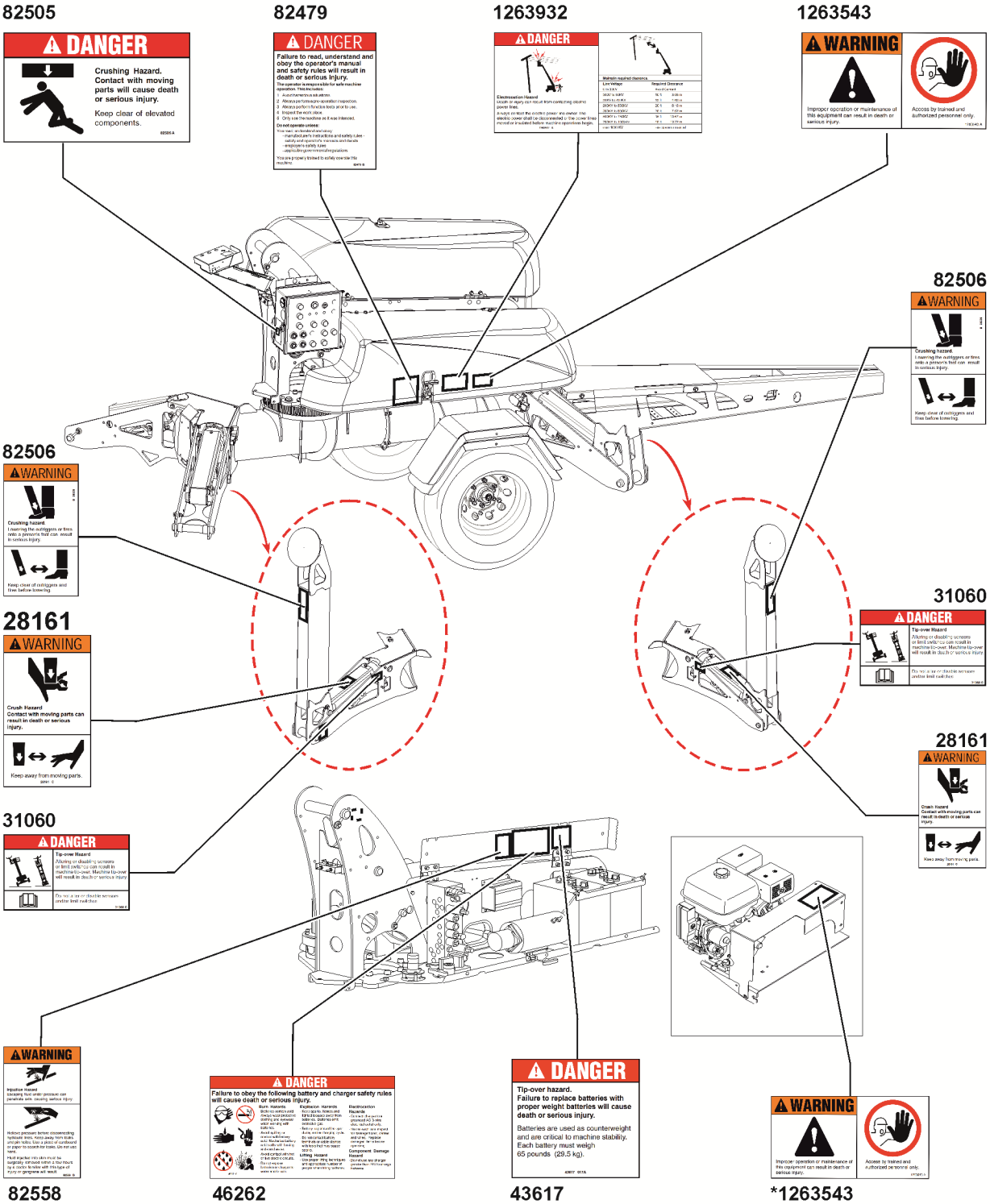
Symbol and Hazard Pictorials Definitions

 Read the operator's manual	 Access by trained and authorized personnel only	 Fall hazard	 Keep off boom.	 Do not expose to water or rain.
 Electrocution hazard/burn hazard	 No smoking	 Corrosive acid.	 Explosion / Burn hazard	 Wear protective clothing
 Crushing hazard	 Stay clear of moving platform.	 Crushing hazard	 Keep away from moving parts	 Crushing hazard
 Electrocution hazard	 Maintain required clearance	 Injection hazard	 Do not check for hydraulic leaks with hands.	 Tip-over hazard

Symbol and Hazard Pictorials Definitions

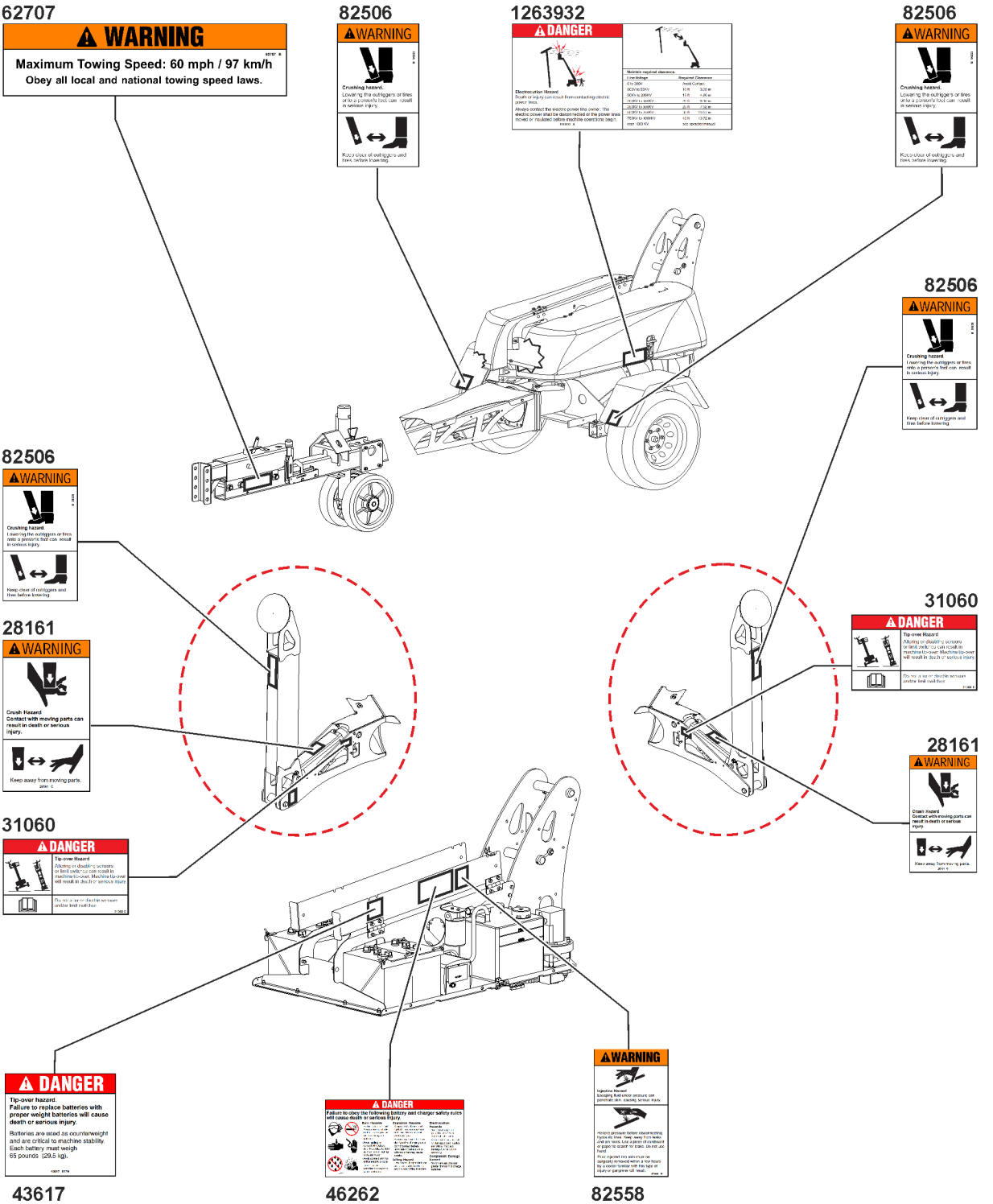
 Corrosive acid.	 Explosion hazard	 Crushing hazard	 No flame	 Crushing hazard
 Stay clear of moving machinery.	 Lanyard anchorage points	 Auxiliary lowering	 Voltage rating for power to platform	 Support the platform or boom during maintenance
 Collision hazard	 Collision hazard	 Wheel load	 Wind speed	

General Safety

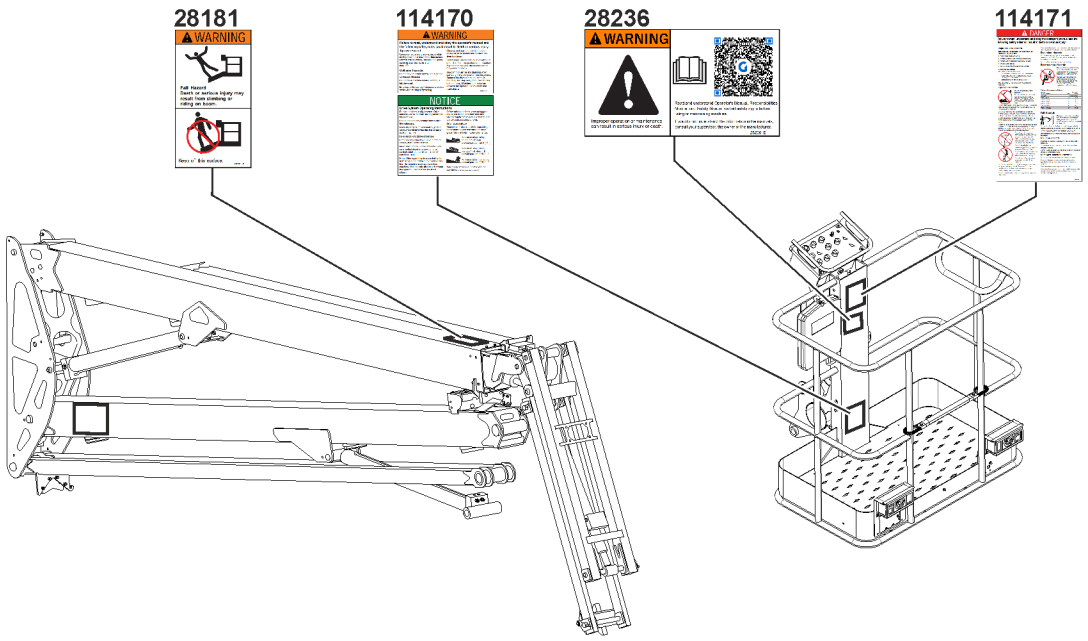


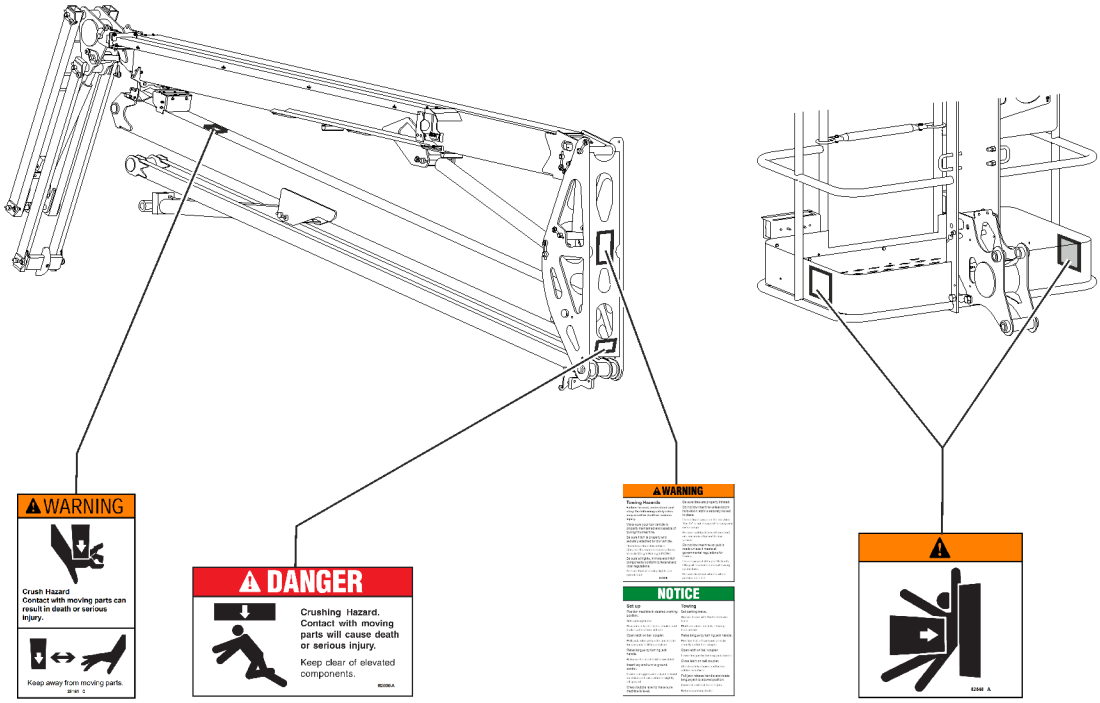
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General Safety



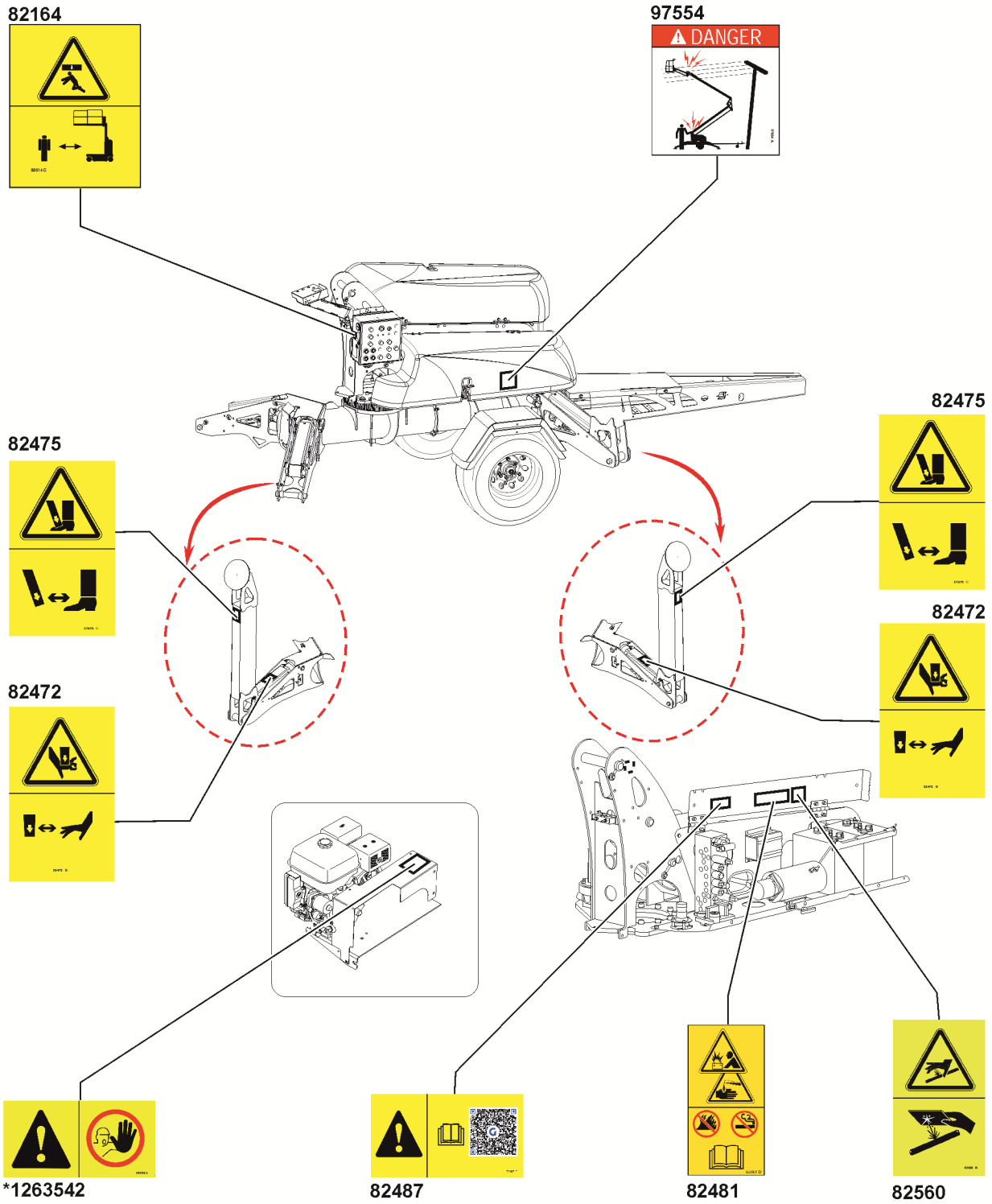
General Safety



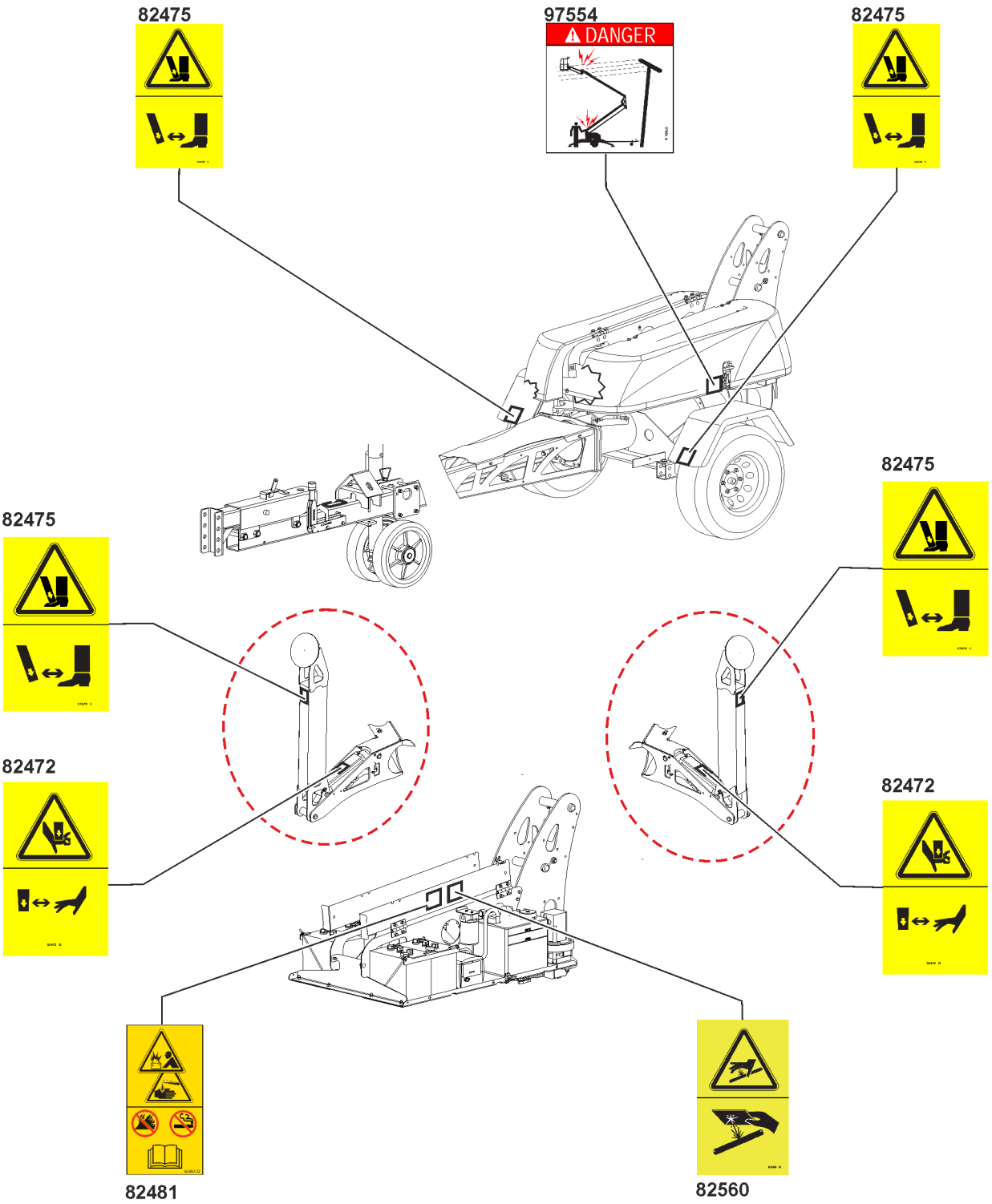


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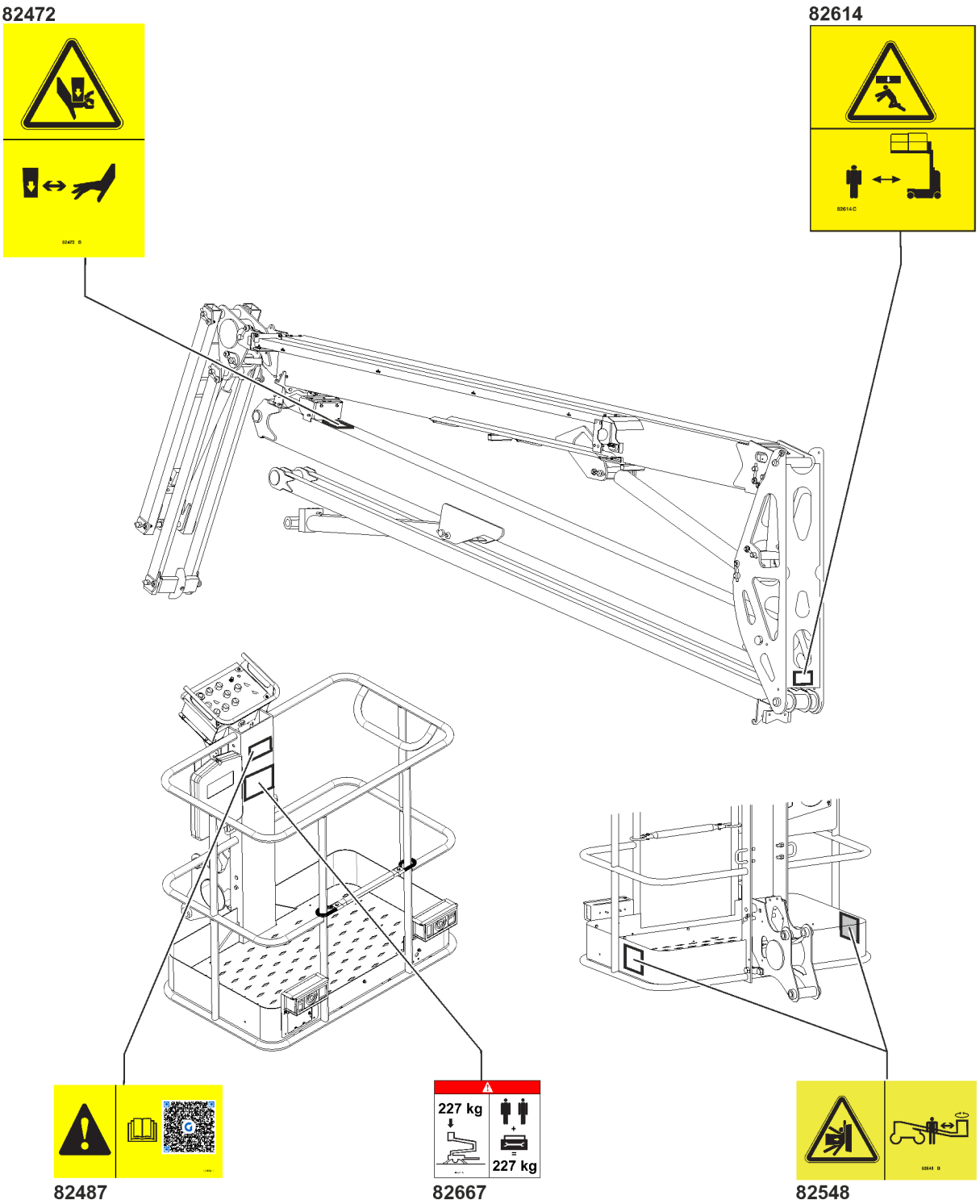
General Safety



General Safety



General Safety



Personal Safety

Personal Fall Protection

Personal fall protection equipment (PFPE) is required when operating this machine.

Occupants must wear a safety belt or harness in accordance with governmental regulations. Attach the lanyard to the anchor provided in the platform.

Operators must comply with employer, job site and governmental rules regarding the use of personal protective equipment.

All PFPE must comply with applicable governmental regulations, and must be inspected and used in accordance with the PFPE manufacturer’s instructions.

Work Area Safety

⚠ Electrocution Hazards

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

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

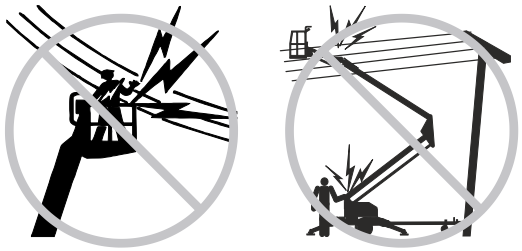
Line Voltage	Required Clearance	
0 to 50KV	10 ft	3.05 m
>50 to 200KV	15 ft	4.60 m
>200 to 350KV	20 ft	6.10 m
>350 to 500KV	25 ft	7.62 m
>500 to 750KV	35 ft	10.67 m
>750 to 1000KV	45 ft	13.72 m
over 1000KV		see below

For power lines over 1000kV, the minimum clearance distance must be established by the utility owner or operator or by a registered professional engineer who is a qualified person with respect to electrical power transmission and distribution.

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

Do not operate the machine during lightning or storms.

Do not use the machine as a ground for welding.



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

Do not operate an AC powered machine or a DC battery charger unless using a 3-wire grounded extension cord connected to a grounded AC circuit. Do not alter or disable 3-wire grounded plugs.

Work Area Safety

⚠ Explosion and Fire Hazards

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

Models with engines: Do not refuel the machine with the engine running.

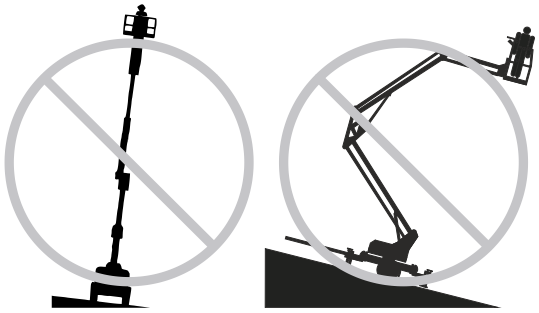
Refuel the machine and charge the battery only in an open, well-ventilated area away from sparks, flames and lighted tobacco.

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

⚠ Tip-over Hazards

Occupants, equipment and materials shall not exceed the maximum platform capacity.

Maximum platform capacity without optional platform rotate		
ANSI/CSA models - 2 occupants	500 lbs	227 kg
CE models - 2 occupants	440 lbs	200 kg
Maximum platform capacity with optional platform rotate		
ANSI/CSA models - 2 occupants	500 lbs	227 kg
CE models - 2 occupant	440 lbs	200 kg



Do not raise the boom unless the machine is level. Do not set the machine up on a surface where it cannot be leveled using only the outriggers.

Do not raise the boom unless all four outriggers are lowered, the footpads are in firm contact with the ground and the machine is level.

Do not set the machine up unless it is on a firm surface. Avoid drop-offs, holes, unstable or slippery surfaces and other possible hazardous conditions.

Do not move the machine when the boom is raised.

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

Do not depend on the tilt alarm as a level indicator. The tilt alarm sounds in the platform only when the machine is on a severe slope.

When the tilt alarm sounds, immediately lower the boom and adjust the outriggers to level the machine.

Do not alter or disable the limit switches.

Work Area Safety

Do not raise the boom when wind speeds may exceed 28 mph / 12.5 m/s. If wind speeds exceed 28 mph / 12.5 m/s when the boom is raised, lower the boom and do not continue to operate the machine.



Do not operate the machine in strong or gusty winds. Do not increase the surface area of the platform or the load. Increasing the area exposed to the wind will decrease machine stability.

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

Do not replace items critical to machine stability with items of different weight or specification.

Do not modify or alter an aerial work platform without prior written permission from the manufacturer. Mounting attachments for holding tools or other materials onto the platform, toe boards or guard rail system can increase the weight in the platform and the surface area of the platform or the load.

Do not transport tools and materials unless they are evenly distributed and can be safely handled by person(s) in the platform.

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

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

Be sure all tires are properly inflated and in good condition and lug nuts are properly tightened.

Do not use the platform as a crane.

Do not place loads outside the platform perimeter.

Do not place or attach overhanging loads to any part of the platform.

Maximum allowable manual force –	CE 90 lbs	400 N



Do not push off or pull toward any object outside of the platform.

Do not push the machine or other objects with the boom.

Do not use the platform controls to free a platform that is caught, snagged or otherwise prevented from normal motion by an adjacent structure. All personnel must be removed from the platform before attempting to free the platform using the ground controls.

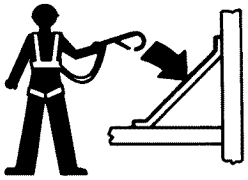
DC models: Do not use batteries that weigh less than the original equipment. Four batteries are used as counterweight and are critical to machine stability. Each battery must weigh 65 pounds / 29.5 kg.

Do not contact adjacent structures with the boom.

Do not tie the boom or platform to adjacent structures.

Work Area Safety

⚠ Fall Hazards



Occupants must wear a safety belt or harness in accordance with governmental regulations. Attach the lanyard to the anchor provided in the platform.

Do not sit, stand, or climb on the platform guard rails. Maintain a firm footing on the platform floor at all times.

Do not climb down from the platform when raised.

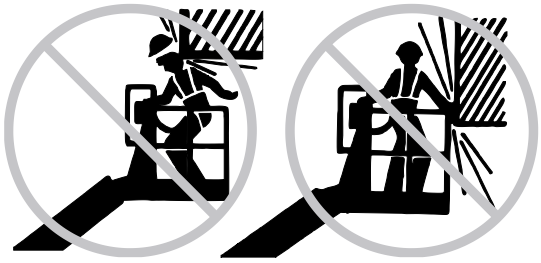
Keep the platform floor clear of debris.

Lower the platform entry mid-rail or close the entry gate before operating.

⚠ Collision Hazards

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

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



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

Be aware of crushing hazards when grasping the platform guard rail.

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

Be aware of the boom position and tailswing when rotating the turntable.

Operators must comply with employer, job site, and governmental rules regarding use of personal protective equipment.

Do not operate a boom in the path of any crane unless the controls of the crane have been locked out and/or precautions have been taken to prevent any potential collision.

No stunt driving or horseplay while operating a machine.

Work Area Safety

⚠ Bodily Injury Hazard

Do not operate the machine with a hydraulic oil or air leak. An air leak or hydraulic leak can penetrate and/or burn skin.

Models with engines: When the engine is running, operate the machine in a well-ventilated area to avoid carbon monoxide poisoning.

Improper contact with components under any cover will cause serious injury. Only trained maintenance personnel should access compartments. Access by the operator is only advised when performing a pre-operation inspection. All compartments must remain closed and secured during operation.

⚠ Damaged Machine Hazards

Do not use a damaged or malfunctioning machine.

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

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

Be sure all decals are in place and legible.

Be sure the operator's, safety and responsibilities manuals are complete, legible and in the storage container located on the platform.

⚠ Component Damage Hazards

Do not use the machine as a ground for welding.

Do not fully lower the booms unless the booms are aligned with the tongue. The primary boom must be lowered into the chassis cradle.

⚠ Battery Safety - DC Models

⚠ 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 Hazards



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

The covers should remain open during the entire charging cycle.

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

Work Area Safety

⚠ Component Damage Hazard

Do not use any battery charger greater than 24V to charge the batteries.

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

⚠ Electrocution Hazard



Connect the battery charger to a grounded, AC 3-wire electrical outlet only.

Inspect daily for damaged cords, cables and wires. Replace damaged items before operating.

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

⚠ Tip-over Hazard

Do not use batteries that weigh less than the original equipment. Batteries are used as counterweight and are critical to machine stability. Each battery must weigh 65 lbs / 29.5 kg.

⚠ Lifting Hazard

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

⚠ Towing Hazards

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

Make sure your tow vehicle is properly maintained and capable of towing this machine.

Be sure the hitch is properly and securely attached to your tow vehicle.

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).

Be sure all lights, mirrors and hitch components conform to federal and local regulations.

Be sure that all driving lights are operational.

Be sure the tires are properly inflated.

Do not tow the machine unless the boom is lowered into both cradles and the hold-down latches are securely locked in place. There is a mast cradle on the chassis and a mid-pivot cradle on the tongue of the machine.

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

Be sure the safety chains (if required) are securely attached to the tow vehicle. Cross the chains under the hitch. This will create a cradle to catch the tongue of the trailer if it becomes disconnected from the tow vehicle.

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 of the trailer when parking on a hill.

Work Area Safety

Lockout After Each Use

1 Select a safe parking location—firm level surface, clear of obstruction and traffic.

2 Rotate the turntable so that the platform is opposite the tongue of the machine.

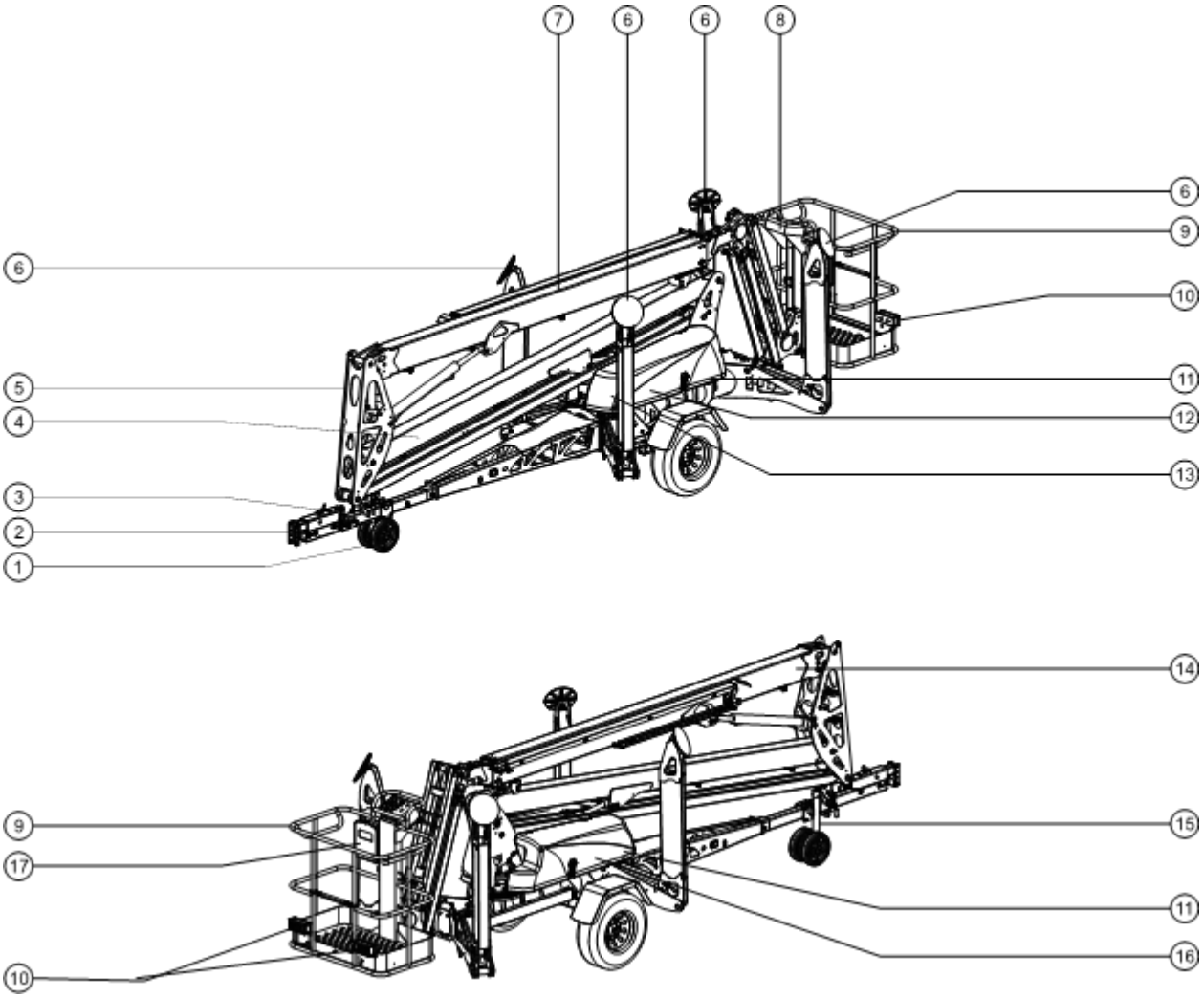
3 Lower the boom into the mast cradles.

4 Secure the boom with the hold-down latches.

5 Turn the key switch to the off position and remove the key to secure from unauthorized use.

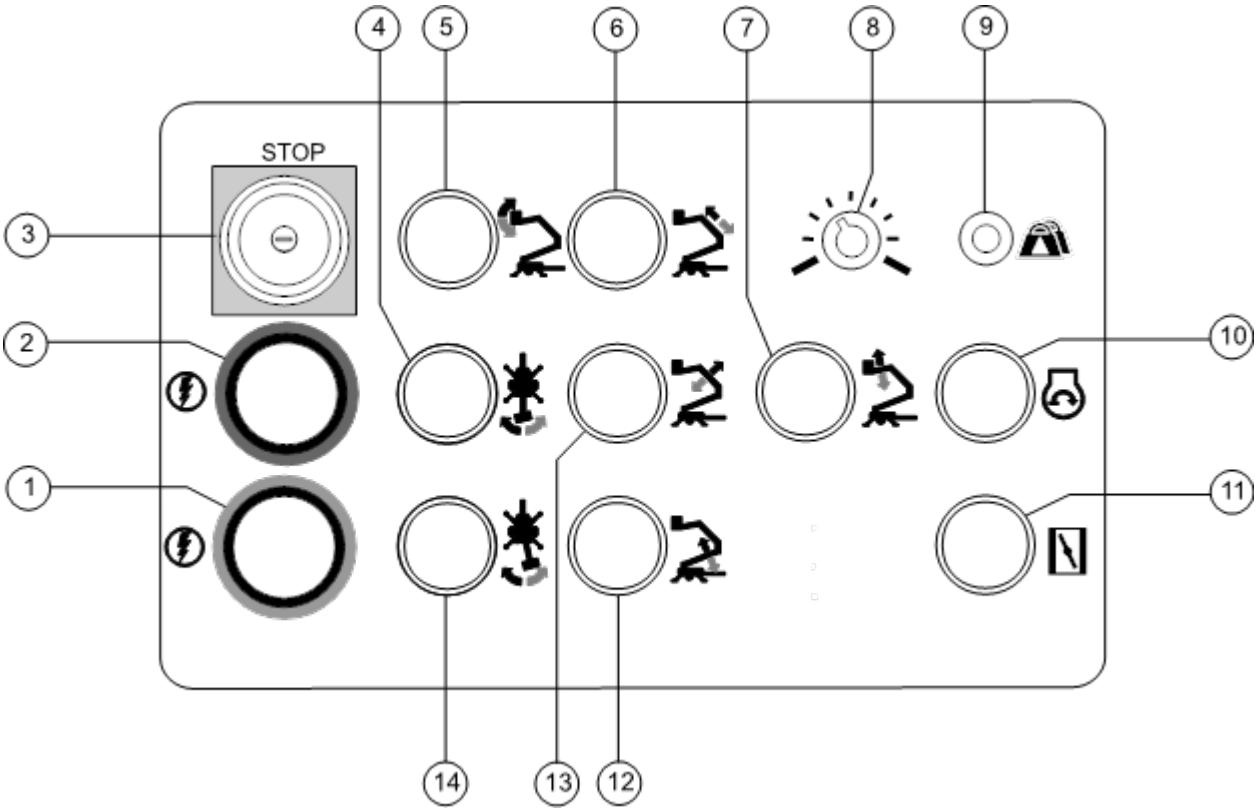
6 Chock the wheels.

Legend



1 Pneumatic tongue wheels
2 Hitch
3 Parking brake
4 Secondary boom
5 Pivot assembly
6 Outrigger
7 Secondary boom
8 Platform controls
9 Platform
10 Tail lights
11 Turntable assembly
12 Battery box - roadside
13 Hydraulic power unit
14 Primary boom
15 Leveling jack
16 Battery box - curbside
17 Manual storage container

Controls



Platform Control Panel

1 Function enable button (yellow) for:

Platform down
Primary boom down
Primary boom retract
Secondary boom down
Jib boom down
Turntable rotate right
Platform rotate right (if equipped)

2 Function enable button (blue) for:

Platform up
Primary boom up
Primary boom extend
Secondary boom up
Jib boom up
Turntable rotate left
Platform rotate left (if equipped)

3 Red Emergency Stop button

Push in the red Emergency Stop button to the off position to stop all functions and turn the engine off. Pull out the red Emergency Stop button to the on position to operate the machine.

4 Platform rotate button (if equipped)

Push and hold the blue function enable button. Press the platform rotate button and the platform will rotate to the left.

Push and hold the yellow function enable button. Press the platform rotate button and the platform will rotate to the right.

Controls

5 Platform level button

Push and hold the blue function enable button. Press the platform level button and the level of the platform will raise.

Push and hold the yellow function enable button. Press the platform level button and the level of the platform will lower.

6 Primary boom extend/retract button

Push and hold the blue function enable button. Press the primary boom extend/retract button and the primary boom will extend.

Push and hold the yellow function enable button. Press the primary boom extend/retract button and the primary boom will retract.

7 Jib boom up/down button

Push and hold the blue function enable button. Press the jib boom up/down button and the jib boom will raise.

Push and hold the yellow function enable button. Press the jib boom up/down button and the jib boom will lower.

8 Boom function speed controller

Turn the dial to increase or decrease the speed of the machine functions.

9 Platform overload indicator light (If equipped)

Light on indicates platform is overloaded and no functions will operate.

Remove weight from the platform to resume machine operation or have a person on the ground turn the key switch to ground control and proceed to lower the platform.

Note: An alarm will sound at the platform when an overload condition occurs and will stop sounding when weight is removed from the platform.

10 Engine start button (if equipped)

Push the engine start button and the engine will start.

11 Engine choke button (if equipped)

In cold conditions, hold the choke button and then start the engine.

12 Secondary boom up/down button

Push and hold the blue function enable button. Press the secondary boom up/down button and the secondary boom will raise.

Push and hold the yellow function enable button. Press the secondary boom up/down button and the secondary boom will lower.

13 Primary boom up/down button

Push and hold the blue function enable button. Press the primary boom up/down button and the primary boom will raise.

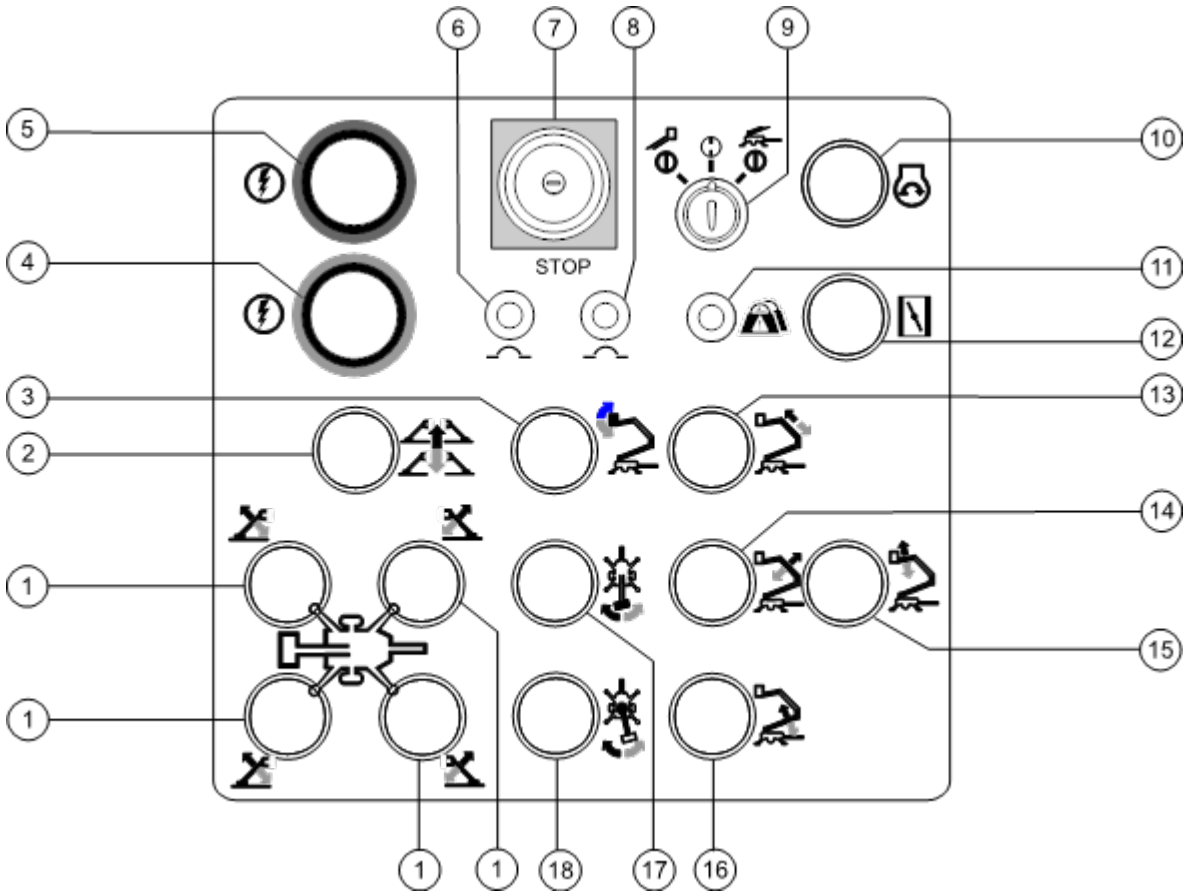
Push and hold the yellow function enable button. Press the primary boom up/down button and the primary boom will lower.

14 Turntable rotate button

Push and hold the blue function enable button. Press the turntable rotate button and the turntable will rotate to the left.

Push and hold the yellow function enable button. Press the turntable rotate button and the turntable will rotate to the right.

Controls



Ground Control Panel

1 Outrigger raise/lower button (individual outrigger)

Push and hold the blue function enable button. Press the outrigger raise/lower button and the level of an individual outrigger will raise.

Push and hold the yellow function enable button. Press the outrigger raise/lower button and the level of an individual outrigger will lower.

2 Outrigger auto level button

Press this button to activate the auto level function.

3 Platform level button

Push and hold the blue function enable button. Press the platform level button and the level of the platform will raise.

Push and hold the yellow function enable button. Press the platform level button and the level of the platform will lower.

4 Function enable button (yellow) for:

Platform down
Primary boom down
Primary boom retract
Secondary boom down
Jib boom down
Turntable rotate right
Platform rotate right
Outrigger lower

Controls

5 Function enable button (blue) for:

Platform up
Primary boom up
Primary boom extend
Secondary boom up
Jib boom up
Turntable rotate left
Platform rotate left
Outrigger Raise

6 15A breaker for controls circuit

7 Red Emergency Stop button

Push in the red Emergency Stop button to the off position to stop all functions and turn the engine off. Pull out the red Emergency Stop button to the on position to operate the machine.

8 15 amp breaker for engine controls (if equipped)

9 Key switch for platform/off/ground selection

Turn the key switch to the platform position and the platform controls will operate. Turn the key switch to the off position and the machine will be off. Turn the key switch to the ground position and the ground controls will operate.

10 Engine start button (if equipped)

Push the engine start button and the engine will start.

11 Platform overload indicator light (If equipped)

Light on indicates platform is overloaded and no functions will operate.

Remove weight from the platform to resume machine operation or have a person on the ground turn the key switch to ground control and proceed to lower the platform.

Note: An alarm will sound at the platform when an overload condition occurs and will stop sounding when weight is removed from the platform.

12 Engine choke button (if equipped)

In cold conditions, hold the choke button and then start the engine.

13 Primary boom extend/retract button

Push and hold the blue function enable button. Press the primary boom extend/retract button and the primary boom will extend.

Push and hold the yellow function enable button. Press the primary boom extend/retract button and the primary boom will retract.

14 Primary boom up/down button

Push and hold the blue function enable button. Press the primary boom up/down button and the primary boom will raise.

Push and hold the yellow function enable button. Press the primary boom up/down button and the primary boom will lower.

15 Jib boom up/down button

Push and hold the blue function enable button. Press the jib boom up/down button and the jib boom will raise.

Push and hold the yellow function enable button. Press the jib boom up/down button and the jib boom will lower.

16 Secondary boom up/down button

Push and hold the blue function enable button. Press the secondary boom up/down button and the secondary boom will raise.

Push and hold the yellow function enable button. Press the secondary boom up/down button and the secondary boom will lower.

17 Platform rotate button (if equipped)

Push and hold the blue function enable button. Press the platform rotate button and the platform will rotate to the left.

Push and hold the yellow function enable button. Press the platform rotate button and the platform will rotate to the right.

18 Turntable rotate button

Push and hold the blue function enable button. Press the turntable rotate button and the turntable will rotate to the left.

Push and hold the yellow function enable button. Press the turntable rotate button and the turntable will rotate to the right.

Inspections



Do Not Operate Unless:

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

1 Avoid hazardous situations.

2 Always perform a pre-operation inspection.

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

3 Always perform function tests prior to use.

4 Inspect the workplace.

5 Only use the machine as it was intended.

Pre-operation Inspection Fundamentals

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

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

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

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

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

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

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

Obey all local and governmental regulations regarding examinations and tests.

Inspections

Pre-operation Inspection

- ❑ Be sure that the operator's, safety and responsibilities manuals are complete, legible and in the storage container located in the platform.
- ❑ Be sure that all decals are legible and in place. See Inspections section.
- ❑ Check for hydraulic oil leaks and proper oil level. Add oil if needed. See Maintenance section.
- ❑ DC models: 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.
- ❑ Models with engines: Check for engine oil leaks and proper fluid level. Add oil 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
- ❑ Hydraulic power unit, reservoir, hoses, fittings, cylinders and manifolds
- ❑ Boom components and wear pads
- ❑ Tires and wheels
- ❑ Trailer lights and reflectors
- ❑ Parking brake components
- ❑ Outriggers and foot pads
- ❑ Limit switches and alarms
- ❑ Nuts, bolts and other fasteners
- ❑ Platform entry mid-rail or gate
- ❑ Platform ladder (if equipped)
- ❑ Surge brake components
- ❑ Safety chains (if required)
- ❑ Light and brake cables
- ❑ Engine and related components (if equipped)
- ❑ Mechanical brake components (if equipped)
- ❑ Axle components
- ❑ Beacons and alarms (if equipped)
- ❑ Lanyard anchorage points
- ❑ Be sure the Manual Pump Handle for the Hydraulic Pump is stowed in place.

Check entire machine for:

- ❑ Cracks in welds or structural components
- ❑ Dents or damage to machine

- ❑ Verify 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 batteries are in place and properly connected.
- ❑ Models equipped with hydraulic surge brake systems: Check the hydraulic oil level in the surge brake. Check for leaks.
- ❑ After you complete your inspection, be sure that all compartment covers are in place and latched.

Inspections



Do Not Operate Unless:

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

1 Avoid hazardous situations.

2 Always perform a pre-operation inspection.

3 Always perform function tests prior to use.

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

4 Inspect the workplace.

5 Only use the machine as it was intended.

Function Test Fundamentals

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

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

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

Function Tests

Setup

1 Position the machine at the desired work site.

2 Set the parking brake.

3 Disconnect the trailer lights, safety chains and brake cables from the vehicle.

4 Open the latch on the ball coupler.

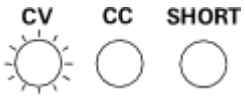
5 Pull the jack release handle and rotate the tongue jack to the lifting position.

6 Raise the tongue by turning the jack handle.

7 Be sure the boom hold-down latches are unlatched.

8 Connect to the appropriate power source:
DC models: Connect the battery packs.
AC models: Connect to a grounded 15A AC power supply.

9 AC models: Check the power panel at the end of the chassis behind the platform.



⊙ Result: The CV light should be on. The CC and SHORT lights should be off.

Test the Parking Brake

10 Release the parking brake.

11 Push the machine from the tongue until the road tires begin to move.

12 Set the parking brake.

13 Push the machine again.

⊙ Result: The road tires should not move.

At the Ground Controls

14 Insert the key and turn to ground control.

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

⊙ Result: The beacon (if equipped) should flash.

16 **Auto level:** Push and hold the yellow function enable button. Push and hold the auto level button. The outriggers will lower and adjust to level the machine and raise the wheels off the ground. Level the machine using only the outriggers. Use the bubble level to make sure the machine is level.





Manual level: Push and hold the yellow function enable button. Push and hold each outrigger button to lower the outriggers. Adjust the outriggers to level the machine and raise the wheels off the ground. Level the machine using only the outriggers. Use the bubble level to make sure the machine is level.

17 Be sure the wheels on the tongue jack are not touching the ground.

Note: If the wheels on the tongue jack are touching the ground, crank the tongue jack up until the wheels are no longer on the ground.

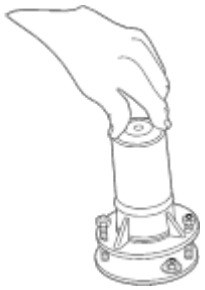
Inspections

Test the Tilt Sensor

18 Raise the boom 2 feet / 60cm.

19 Turn the key switch to platform control.

20 Locate the tilt sensor next to the forklift pocket on the side of the machine opposite the ground controls.



21 Press down one side of the tilt sensor.

⊙ Result: The alarm should sound.

22 Lower the boom.

Test Emergency Stop

23 Push in the red Emergency Stop button to the off position.

⊙ Result: All ground and platform control functions should not operate.

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

Test Boom Functions and Function Enable

25 Do not push a function enable button. Attempt to activate each boom function button.

⊙ Result: All boom functions should not operate.

26 Push and hold the blue function enable button. Activate each boom function button.

⊙ Result: Primary boom up, primary boom extend, secondary boom up, platform level up and turntable rotate right should all function.

27 Push and hold the yellow function enable button. Activate each boom function button.

⊙ Result: Primary boom down, primary boom retract, secondary boom down, platform level down and turntable rotate left should all function.

Inspections

Test Outrigger Interlock

28 Lower the boom to the stowed position.

29 Push and hold the blue function enable button. Push and hold one outrigger button and raise the outrigger off the ground.

30 Push and hold the blue function enable button and activate each boom function.

⊙ Result: All boom functions should not operate.

31 Use the leveling buttons to lower the outrigger.

32 Repeat this procedure for each outrigger.

33 Use the function enable buttons and the auto level button or the outrigger leveling buttons to make sure the machine is level.

34 Raise the platform approximately 2 feet / 60cm.

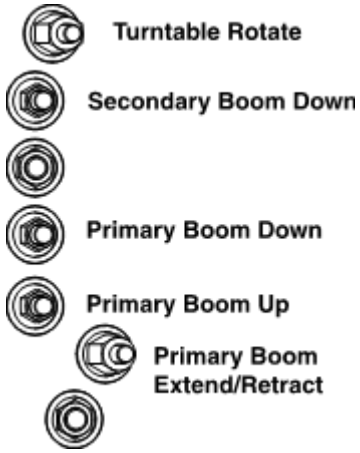
35 Push and hold the blue function enable button and attempt to raise each outrigger off the ground.

⊙ Result: The outriggers should not raise.

Test Manual Operation of Functions

Manifold valves are located under the cover on the ground controls side of the machine.

Machine functions can be operated with the hand pump located on the manifold.



36 Open the valve of the desired function.

Turntable rotate right: Push in and hold.
Turntable rotate left: Pull out and hold.

Platform extend: Push in and hold.
Platform retract: Pull out and hold.

Secondary boom down and primary boom up/down: Push in and turn counterclockwise until the button pops into place.

37 Operate the hand pump.

38 Reset the valve. The machine will not function unless the valves are reset.

Turntable rotate and platform extend/retract: Let go.

Secondary boom down and primary boom up/down: Push in and turn clockwise until the button pops into place.

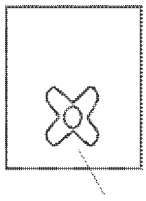
Inspections

Manual Operation of Jib (Australian models only)

The jib boom lowering manifold is located on the primary extension boom.

39 Turn the jib manifold knob counterclockwise to lower the jib.

40 To reset, turn the knob clockwise as far as it will go.



Jib manifold knob

At the Platform Controls

41 Turn the key switch to platform control.

42 Pull out the platform red Emergency Stop button to the on position.

Test Emergency Stop

43 Push in the platform red Emergency Stop button to the off position.

⊙ Result: All platform control functions should not operate.

44 Pull out the platform red Emergency Stop button to the on position.

Test Boom Functions and Function Enable

45 Do not push a function enable button. Attempt to activate each boom function button.

⊙ Result: All boom functions should not operate.

46 Push and hold the blue function enable button. Activate each boom function button.

⊙ Result: Primary boom up, primary boom extend, secondary boom up, platform level up and turntable rotate right should all function.

47 Push and hold the yellow function enable button. Activate each boom function button.

⊙ Result: Primary boom down, primary boom retract, secondary boom down, platform level down and turntable rotate left should all function.

Test Drive and Brake System (if equipped)

ANSI, CSA and Australian models: Perform this test from the platform or the ground, using the drive control box located next to the platform.

CE models: Perform this test from the platform or the ground, using the drive control box mounted next to the ground controls.

Note: When operating the drive control system from the ground, remove the drive control box from its mounting and step away from the machine. Maintain safe distances between the operator, the machine and fixed objects.

48 Fully retract and lower the platform.

49 Manually engage the drive wheels by pulling the drive wheel lever toward the tire on each side of the machine.

50 Release the parking brake on the tongue.

51 **ANSI, CSA and Australian models:** At the drive control box mounted next to the platform controls, press and hold the blue function enable button and raise the outriggers.

CE models: At the ground controls, press and hold the blue function enable button and raise the outriggers.

52 Press and hold the function enable button on the drive control handle.

53 Slowly move the drive control handle in the direction that one of the blue arrows points until the machine begins to move, then return the handle to the center position.

⊙ Result: The machine should move in the direction that the blue arrow points, then come to an abrupt stop.

54 Repeat this procedure for each blue arrow.

55 Slowly move the drive control handle in the direction that one of the yellow arrows points until the machine begins to move, then return the handle to the center position.

⊙ Result: The machine should move in the direction that the yellow arrow points, then come to an abrupt stop.

56 Repeat this procedure for each yellow arrow.

Note: The brakes must be able to hold the machine on any slope it is able to climb.

Inspections



Do Not Operate Unless:

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

1 Avoid hazardous situations.

2 Always perform a pre-operation inspection.

3 Always perform function tests prior to use.

4 Inspect the workplace.

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

5 Only use the machine as it was intended.

Workplace Inspection Fundamentals

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

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

Workplace Inspection Checklist

Be aware of and avoid the following hazardous situations:

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

Inspections

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.

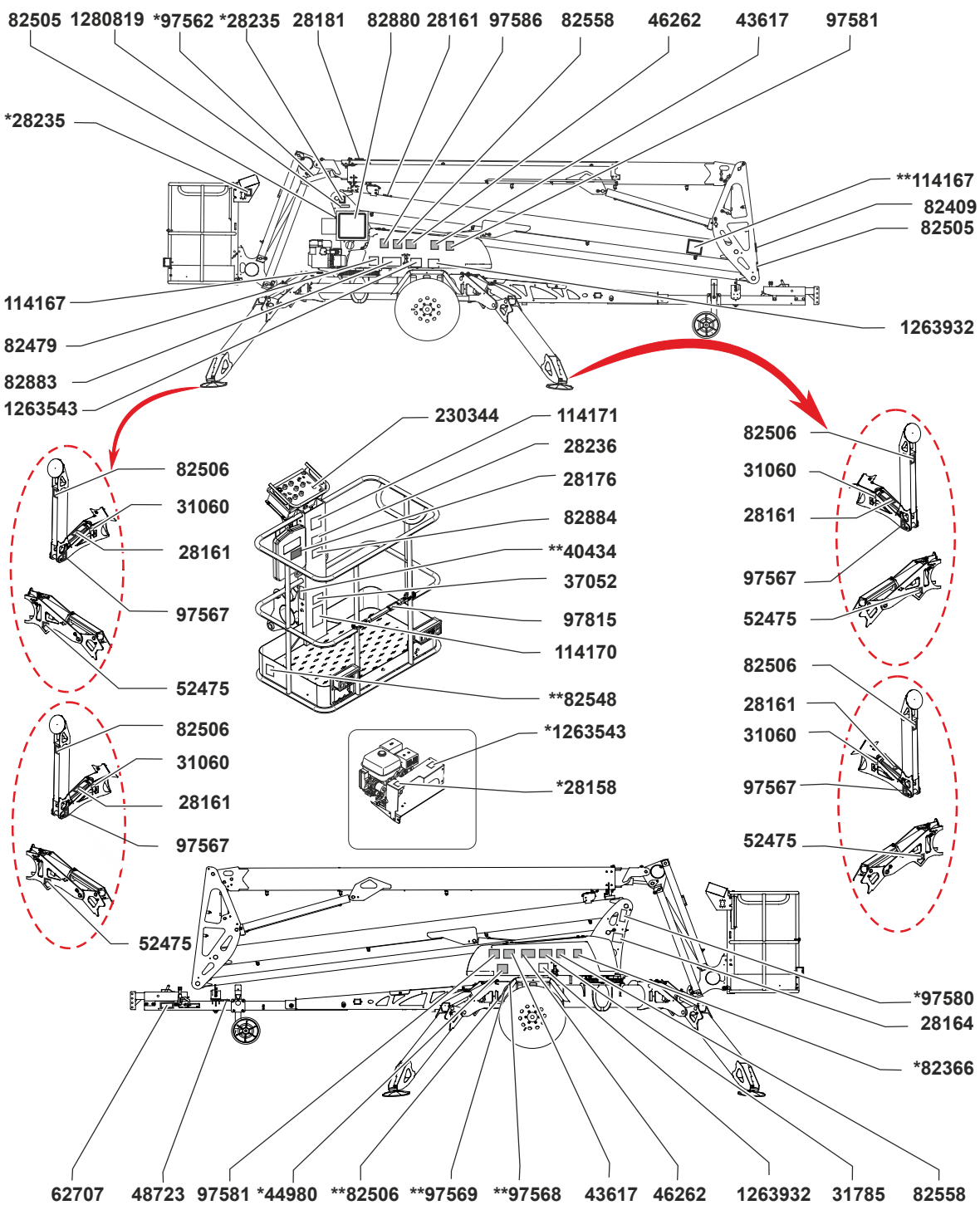
Below is a numerical list with quantities and descriptions.

Part No.	Decal Description	Qty
28158	Label – Unleaded	1
28161	Warning – Crushing Hazard	5
28164	Notice – Hazardous Materials	1
28176	Label – Missing Manuals	1
28181	Warning – No Step or Ride	1
28235	Label – Power to Platform, 115V	2
28236	Warning – Improper Operation	1
31060	Danger – Tip-over Hazard, Limit Switch	4
31785	Notice – Battery Charger Operating Instr.	1
37052	Notice - Max Capacity, 500 lbs/227 kg	1
40434	Label – Lanyard Anchorage Point	2
43617	Danger - Tip-over (batteries)	2
44980	Label – Power to Charger, 115V	1
46262	Danger - Battery/Charger Safety	2
48723	Label - Parking Brake	1
52475	Label – Transport Tie-down	4
62707	Warning - Towing Hazard	1
82366	Label – Chevron Rando	1
82409	Warning - Transport Instructions	1
82479	Danger - General Safety, Ground	1
82505	Danger - Crushing Hazard, Elevated Components	2
82506	Danger – Foot Crushing Hazard	6
82548	Label – Platform Rotate	1
82558	Warning – Skin Injection Hazard	2
82880	Ground Control Panel	1
82883	Notice - Operating Instructions, Ground	1
82884	Notice - Operating Instructions, Platform	1
97562	Drive Control Panel (option)	1
97567	Label - Outrigger Load	4
97568	Label - Wheel Load	2
97569	Notice - Tire Specifications	2
97580	Notice - Engine Specifications (models with engines)	1
97581	Notice - Battery Connection Diagram	2
97586	Notice - Manifold Valves	1
97815	Label – Lower Mid-rail	1
114167	Label – Transport Diagram	3
114170	Warning/Notice - Drive System Operation (option)	1
114171	Danger - General Safety, Platform	1
230344	Platform Control Panel	1
1263543	Warning – Compartment Access	2
1263932	Danger – Electrocution Hazard	2
1280819	Label – Warning, Prop 65	1

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

* These decals are model, option or configuration specific.

Inspections



Inspections

Inspection for Decals with Symbols

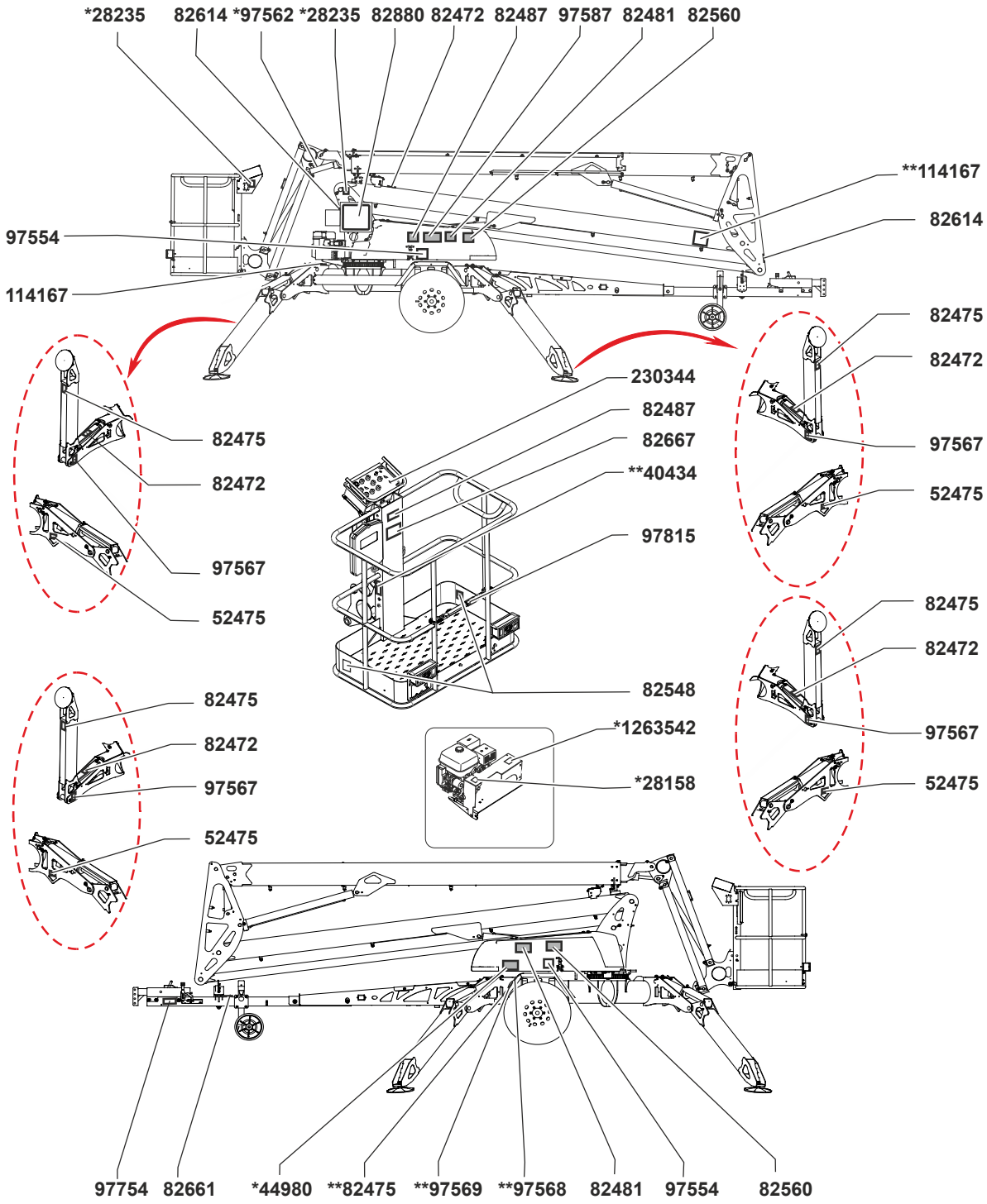
Determine whether the decals on your machine have words or symbols. Use the appropriate inspection to verify that all decals are legible and in place.

Part No.	Decal Description	Qty
28158	Label – Unleaded	1
28235	Label – Power to Platform, 115V	2
40434	Label – Lanyard Anchorage Point	2
44980	Label – Power to Charger, 115V	1
52475	Label – Transport Tie-down	4
82472	Label – Crushing Hazard	5
82475	Label – Crushing Hazard, Outriggers	6
82481	Label – Battery/Charger Safety	2
82487	Label – Read the Manual	2
82548	Label – Platform Rotate	2
82560	Label – Skin Injection Hazard	2
82614	Warning – Collision Hazard	2
82661	Label - Parking Brake, ANSI	1
82667	Danger - Maximum Capacity, 227 kg, ANSI & CSA	1
82880	Ground Control Panel	1
97554	Danger - Electrocution Hazard	2
97562	Drive Control Panel (option)	1
97567	Label - Outrigger Load	4
97568	Label - Wheel Load	2
97569	Notice - Tire Specifications	2
97587	Label - Manifold Valves	1
97754	Label - Drawbar Certificate, CE	1
97815	Label – Lower Mid-rail	1
114167	Label – Transport Diagram	3
230344	Platform Control Panel	1
1263543	Warning – Compartment Access	1

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

* These decals are model, option or configuration specific.

Inspections



Operating Instructions



Do Not Operate Unless:

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

1 Avoid hazardous situations.

2 Always perform a pre-operation inspection.

3 Always perform function tests prior to use.

4 Inspect the workplace.

5 Only use the machine as it was intended.

Fundamentals

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

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

Operating Instructions

Setup for Operation

1 Position the machine below the desired work area.

2 Set the parking brake.

3 Disconnect the trailer lights, safety chains and brake cables from the vehicle.

4 Open the latch on the ball coupler.

5 Pull the jack release handle and rotate the tongue jack to the lifting position.

6 Raise the tongue by turning the jack handle.

7 Be sure the boom hold-down latches are unlatched.

8 Be sure the batteries are connected.

Emergency Stop

Push in the red Emergency Stop button to the off position at the ground controls or the platform controls to stop all functions.

Repair any function that operates when either red Emergency Stop button is pushed in.

Selecting and operating the ground controls will override the platform red Emergency Stop button.

Operation from Ground

1 Turn the key switch to ground control.

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

3 Press and hold the yellow function enable button. Press and hold the auto level button or the individual outrigger buttons to lower the outriggers and level the machine.



4 Check the bubble level to make sure the machine is level.

To Position Platform

1 Push and hold the appropriate function enable button.

2 Push and hold the boom function button according to the markings on the control panel.

Operation from Platform

1 Turn the key switch to ground control.

2 Pull out both ground and platform red Emergency Stop buttons to the on position.

To Position Platform

1 Push and hold the appropriate function enable button.

2 Push and hold the boom function button according to the markings on the control panel.

Operating Instructions

Starting the Engine (if equipped)

The machine can be operated with or without the engine running.

1 At the ground controls, turn the key switch to the desired position.

2 Be sure both ground and platform control red Emergency Stop buttons are pulled out to the on position.

3 Be sure the key switch on the engine is turned to the ON position.

4 Press the engine start button.

If the engine fails to start after 15 seconds of cranking, determine the cause and repair any malfunction. Wait 60 seconds before trying to start again.



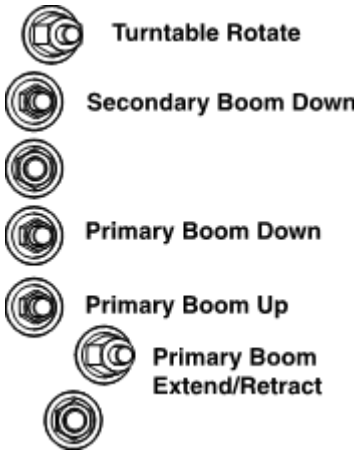
In cold conditions, hold the choke button and then start the engine.



Manual Operation of Functions

Manifold valves are located under the cover on the ground controls side of the machine.

Machine functions can be operated with the hand pump located on the manifold.



1 Open the valve of the desired function.

Turntable rotate right: Push in and hold.
Turntable rotate left: Pull out and hold.

Platform extend: Push in and hold.
Platform retract: Pull out and hold.

Secondary boom down and primary boom up/down: Push in and turn counterclockwise until the button pops into place.

2 **For ANSI, AUS and CSA models only -**
Operate the hand pump.

For CE models only -
Break the security tie and operate the hand pump.

Note: If the security tie is broken or missing, consult the appropriate Genie Service Manual.

3 Reset the valve. The machine will not function unless the valves are reset.

Turntable rotate and platform extend/retract: Let go.

Secondary boom down and primary boom up/down: Push in and turn clockwise until the button pops into place.

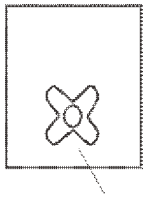
Operating Instructions

Manual Operation of Jib (Australian models only)

The jib boom lowering manifold is located on the primary extension boom.

1 Turn the jib manifold knob counterclockwise to lower the jib.

2 To reset, turn the knob clockwise as far as it will go.



Jib manifold knob

Platform Overload Indicator Light (if equipped)



Light flashing indicates the platform is overloaded and no functions will operate.

Remove weight from the platform until the light goes off.

Optional Drive System Operation

1 Be sure the platform is fully lowered. The drive function will not operate unless the platform is fully lowered.

2 Manually engage the drive wheels by pulling the drive wheel lever toward the tire on each side of the machine.

3 Release the parking brake on the tongue.

ANSI, CSA and Australian models: Operate the drive system from the platform using the drive control box mounted next to the platform. Press and hold the blue function enable button. Press and hold the auto level button to raise the outriggers.

Note: The drive system control box can be detached from the machine and used while standing on the ground. Remove the drive control box from its mounting and step away from the machine to drive.

CE models: At the ground controls, press and hold the blue function enable button. Press and hold the auto level button or the individual outrigger buttons to raise the outriggers. Operate the drive controls from the ground using the control box mounted next to the ground controls. Remove the drive control box from its mounting and step away from the machine to drive.

1 Press and hold the function enable button on the drive control handle.

2 Move the drive control handle off center. Use the color-coded direction arrows on the control panel to determine the direction of machine travel.

3 Before raising the platform, lower the outriggers and adjust to level the machine and raise the wheels off the ground.

Note: Use the bubble level to make sure the machine is level.

Operating Instructions

⚠ Driving on a slope

Determine the uphill, downhill and side slope ratings for the machine and determine the slope grade.



Maximum slope rating, tongue/hitch uphill, stowed position : 20% (11°)



Maximum slope rating, tongue/hitch downhill, stowed position: 20% (11°)



Maximum side slope rating, stowed position: 20% (11°)

Note: Slope rating is subject to ground conditions with one person in the platform and adequate traction. Additional platform weight may reduce slope rating.

To determine the slope grade:

Measure the slope with a digital inclinometer OR use the following procedure.

You will need:

- carpenter’s level
- straight piece of wood, at least 3 feet / 1 m long
- tape measure

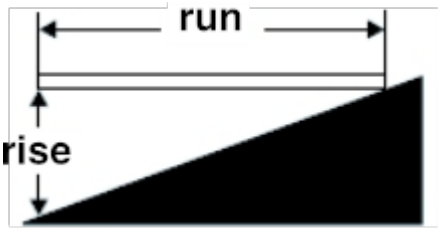
Lay the piece of wood on the slope.

At the downhill end, lay the level on the top edge of the piece of wood and lift the end until the piece of wood is level.

While holding the piece of wood level, measure the vertical distance from the bottom of the piece of wood to the ground.

Divide the tape measure distance (rise) by the length of the piece of wood (run) and multiply by 100.

Example:



Piece of wood = 144 inches (3.6 m)

Run = 144 inches (3.6 m)

Rise = 12 inches (0.3 m)

12 in ÷ 144 in = 0.083 x 100 = 8.3% grade
0.3 m ÷ 3.6 m = 0.083 x 100 = 8.3% grade

If the slope exceeds the maximum uphill, downhill or side slope rating, then the machine must be winched or transported by the tow vehicle up or down the slope. See Transport and Lifting Instructions section.

Operating Instructions



Battery and Charger Instructions

Observe and Obey:

☑ Do not use an external charger or booster battery.

☑ Charge the battery in a well ventilated area.

☑ Use the proper AC input voltage for charging as indicated on the charger.

☑ Use only a Genie authorized battery and charger.

To Charge Battery

1 Be sure the batteries are connected before charging the batteries.

2 Open the battery box covers. The covers should remain open for the entire charging cycle.

3 Remove the battery vent caps and check the battery acid level. If necessary, add only enough distilled water to cover the plates. Do not overfill prior to the charge cycle.

4 Replace the battery vent caps.

5 Connect the battery charger to a grounded AC circuit.

6 The charger will indicate when the battery is fully charged.

7 Check the battery acid level when the charging cycle is complete. Replenish with distilled water to the bottom of the fill tube. Do not overfill.

Dry Battery Filling and Charging Instructions

1 Remove the battery vent caps and permanently remove the plastic seal from the battery vent openings.

2 Fill each cell with battery acid (electrolyte) until the level is sufficient to cover the plates.

Do not fill to maximum level until the battery charge cycle is complete. Overfilling can cause the battery acid to overflow during charging. Neutralize battery acid spills with baking soda and water.

3 Install the battery vent caps.

4 Charge the battery.

5 Check the battery acid level when the charging cycle is complete. Replenish with distilled water to the bottom of the fill tube. Do not overfill.

Operating Instructions

Backing Up with Hydraulic Surge Brake (ANSI, CSA and Australian models)

If your machine is equipped with a hydraulic surge brake, the system must be released before backing up.

Consult the surge brake system manual for specific instructions on each surge brake.

Be sure that the machine is returned to towing or operating configuration when finished.

Moving Machine Without a Tow Vehicle

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

Towing

1 Set the parking brake.

2 Secure the boom with the hold-down latches.

3 Verify jib boom is fully lowered and platform is level.

4 Models with Platform Rotate: Make sure the platform is in the center position. If the platform is off center, the taillights may not be visible on the road.

5 Raise the tongue by turning the jack handle.

6 Position the ball of the transport vehicle directly under the ball coupler.

7 Open the latch on the ball coupler.

8 Lower the tongue by turning the jack handle.

9 Close the latch on the ball coupler.

10 Attach the safety chains (if required) and the brake cables to the vehicle. Cross the chains under the hitch.

11 Pull the jack release handle and rotate the tongue jack to the stowed position.

12 Connect and test the trailer lights.

13 Release the parking brake.

Operating Instructions

Towing Information

Driving a vehicle that is pulling a trailer is different from driving a vehicle alone. Read the following instructions carefully.

Use the checklist on the back cover of this manual before towing and while on the road. Inspect all connections at each stop.

All tires must be properly inflated. Find the recommended cold tire pressures on the tire sidewall or trailer decal. Do not over inflate 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.

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.

When turning with a trailer, avoid jerky or sudden movements.

Heavy winds, excessive speed, load shifting or passing vehicles can cause the 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.

Storage

1 Make sure the boom is properly stowed and the hold-down latches are secured.

2 Raise and stow the outriggers.

3 Select a safe parking location—firm level surface, clear of obstructions and traffic.

4 Turn the key switch to the off position and remove the key to secure from unauthorized use.

5 Chock the wheels.

6 Charge the batteries (if necessary).

After Each Use

1 Rotate the turntable so that the platform is opposite the tongue of the machine.

2 Lower the boom into the mast cradles.

3 Secure the boom with the hold-down latches.

4 Turn the key switch to the off position and remove the key to secure from unauthorized use.

5 Charge the batteries (if necessary).

Transport and Lifting Instructions

Observe and Obey:

- ☑ Genie 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.
- ☑ 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. Genie lifts are very heavy relative to their size. See the serial label for the machine weight.

Securing to Truck or Trailer for Transit

Fully lower and retract the boom. Make sure the boom and mid-pivot rest securely in the mast cradles.

Securely latch the boom hold-down latches.

Raise all four outriggers to the stowed position.

Always chock the machine wheels in preparation for transport.

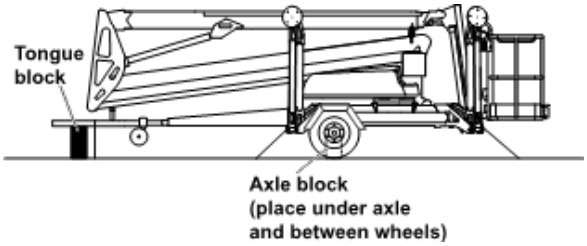
Turn the key switch to the off position and remove the key before transporting.

Inspect the entire machine for loose or unsecured items.

Securing the Chassis

Place a block under the tongue.

Secure a strap over the tongue of the machine.



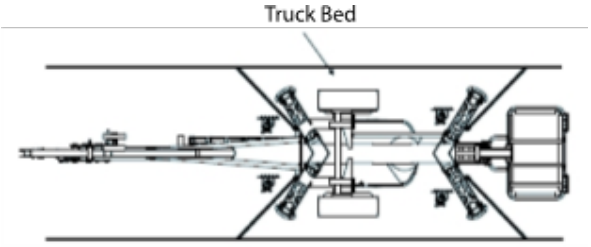
Place a block underneath the axle behind the wheels.

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

Use chains or straps of ample load capacity.

Use a minimum of 4 chains to secure the chassis.

Adjust the rigging to prevent damage to the chains.



Transport and Lifting Instructions

Observe and Obey:

- ☑ Only qualified riggers should rig the machine.
- ☑ Only certified crane operators should lift the machine and only in accordance with the applicable crane regulations.
- ☑ Be sure the crane capacity, loading surfaces and straps or lines are sufficient to withstand the machine weight. See the serial label for the machine weight.

Lifting the Machine with a Crane or Forklift

Fully lower and retract the boom.

Securely latch the boom hold-down latches.

Raise all four outriggers to the stowed position.

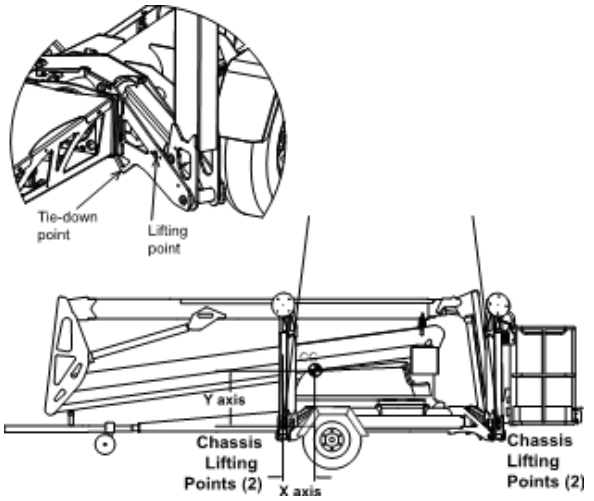
Remove all loose items on the machine.

Determine the center of gravity of your machine using the table and pictures on this page. Measure from one of the lifting points on the tongue end of the machine.

Attach the rigging only to the designated lifting points on the machine. There are four lifting points on the chassis.

Adjust the rigging to prevent damage to the machine and to keep the machine level.

Center of Gravity Table	X Axis	Y Axis
ANSI & CSA	13.4 in 34 cm	16. 1 in 41 cm
CE	12.2 in 31 cm	16.1 in 41 cm



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.

☑ Dispose of material in accordance with governmental regulations.

☑ Use only Genie 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 Batteries - DC Models



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

NOTICE This procedure does not need to be performed on machines with sealed or maintenance-free batteries.

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

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

1 Put on protective clothing and eye wear.

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

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

4 Remove the battery vent caps.

5 Check the battery acid level of each battery. If needed, replenish with distilled water to the bottom of the battery fill tube. Do not overfill.

6 Install the vent caps.

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

Check the Tires and Wheels



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

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

⚠WARNING 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.

⊙ Result: Replace the tire if uneven or excessive tread wear is found.

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

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

⊙ Result: Replace the wheel if any damage is found.

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

4 Check the torque of each lug nut.

Tire Specifications - ANSI/CSA and Australia		
Tire Size	ST225/75R15	Load D
Lug nut torque (dry)	80 ft/lbs	108 Nm
Tire pressure (cold)	65 psi	4.5 bar
Tire Specifications - CE		
Tire Size	215/70R14	Load C
Lug nut torque (dry)	192 ft/lbs	260 Nm
Tire pressure (cold)	65 psi	4.5 bar

Maintenance

Check the Hydraulic Oil Level

Maintaining the hydraulic oil at the proper level is essential to machine operation. Improper hydraulic oil levels can damage hydraulic components. Daily checks allow the inspector to identify changes in oil level that might indicate the presence of hydraulic system problems.

1 Be sure the boom is in the stowed position and the outriggers are raised.

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

⊙ Result: The hydraulic oil level should be visible in the middle of the sight gauge.

Hydraulic oil specifications	
Hydraulic oil type	Chevron Rykon Premium MV equivalent

Check the Engine Oil Level

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

Note: Check the oil level with the engine off.

1 Check the oil level dipstick.

⊙ Result: The hydraulic oil level should be visible in the middle of the sight gauge.

2 If the oil is low, fill to the edge of the filler hole.

Honda GX160K1 oil viscosity requirements	
-4° to 100°F / -20° to 38°C 10W-30	10W-30
Below 30°F / 0°C 5W-30	5W-30
Above 50°F / 10°C 30W	30W
Engine oil should have properties of API classification SJ.	

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.

Obey all local and governmental regulations regarding the disposal and decommissioning of the machine at the end of its lifetime. Refer to the appropriate Genie service manual for additional information.

Specifications

TZ50		
Height, working maximum	55 ft 5.4 in	16.9 m
Height, platform maximum	49 ft 6.4 in	15.1 m
Height, stowed maximum	6 ft 6.74 in	2 m
Horizontal working reach maximum from centerline of machine	29 ft 2.4 in	8.9 m
Outrigger footprint (w x l)	14.4 x 14.4 ft	4.37 x 4.37 m
Maximum load capacity without optional platform rotate		
ANSI/CSA	500 lbs	227 kg
CE	485 lbs	200 kg
Maximum load capacity with optional platform rotate		
ANSI/CSA	461 lbs	209 kg
CE - 1 occupant only	399 lbs	181 kg
Maximum wind speed	28 mph	12.5 m/s
Width	5.51 ft	1.68 m
Length, stowed	21.98 ft	6.7 m
Turntable rotation		359°
Platform rotation (option)		160°
Platform dimensions	3.6 ft x 27.8 in	1.1 m x 68 cm
Platform leveling		self-leveling
AC outlet in platform		standard
Tire size, ANSI & CSA models		ST225/75 R15 Load range D
Tire size, CE models		ST215/70 R14 Load range C
Vibration value does not exceed 8.2 ft/s^2 or 2.5 m/s^2		
Highest root mean square value of weighted acceleration to which the whole body is subjected does not exceed 1.6 ft/s^2 or 0.5 m/s^2.		
Ground clearance	10 in	25.4 cm
Weight (Machine weights vary with option configurations)		See Serial Plate
Maximum towing speed	60 mph	97 km/h
Maximum tongue weight		
ANSI & CSA	445.3 lbs	202 kg
CE	231.5 lbs	105 kg
Hydraulic pressure, maximum (boom functions)	3000 psi	207 bar
System voltage		24V
Ambient operating temperature		-20° F (-29° C) to 120° F (49° C)

Airborne noise emissions	
Sound pressure level at ground workstation	< 89 dBA
Sound pressure level at platform workstation	< 89 dBA
Guaranteed sound power level	< 105 dBA

Power source	
Models without drive option	4 Group T-105 6V DC 225AH Batteries with optional Honda GX160K1 Gas Engine
Models with drive option	4 Group T-145 6V DC 244AH Batteries with optional Honda GX160K1 Gas Engine

Floor Loading Information (ANSI / CSA / Australia)		
Tire load maximum (without rated load)	2132 lbs	967 kg
Outrigger load, maximum (including rated load)	2835.2 lbs	1286 kg
Tire contact pressure (without rated load)	50 psi	3.5 kg/cm^2 347 kPa
Outrigger contact pressure (including rated load)	29 psi	2.0 kg/cm^2 197 kPa
Occupied floor pressure (without rated load)	1.20 psi	846 kg/m^2 8.30 kPa
Occupied floor pressure (including rated load)	.18 psi	127 kg/m^2 1.25 kPa

Floor Loading Information (CE)		
Tire load maximum (without rated load)	2281.8 lbs	1035 kg
Outrigger load, maximum (including rated load)	2835.2 lbs	1286 kg
Tire contact pressure (without rated load)	54 psi	3.8 kg/cm^2 375 kPa
Outrigger contact pressure (including rated load)	29 psi	2.0kg/cm^2 197 kPa
Occupied floor pressure (without rated load)	1.4 psi	1002 kg/m^2 9.83 kPa
Occupied floor pressure (including rated load)	0.2 psi	127 kg/m^2 1.25 kPa

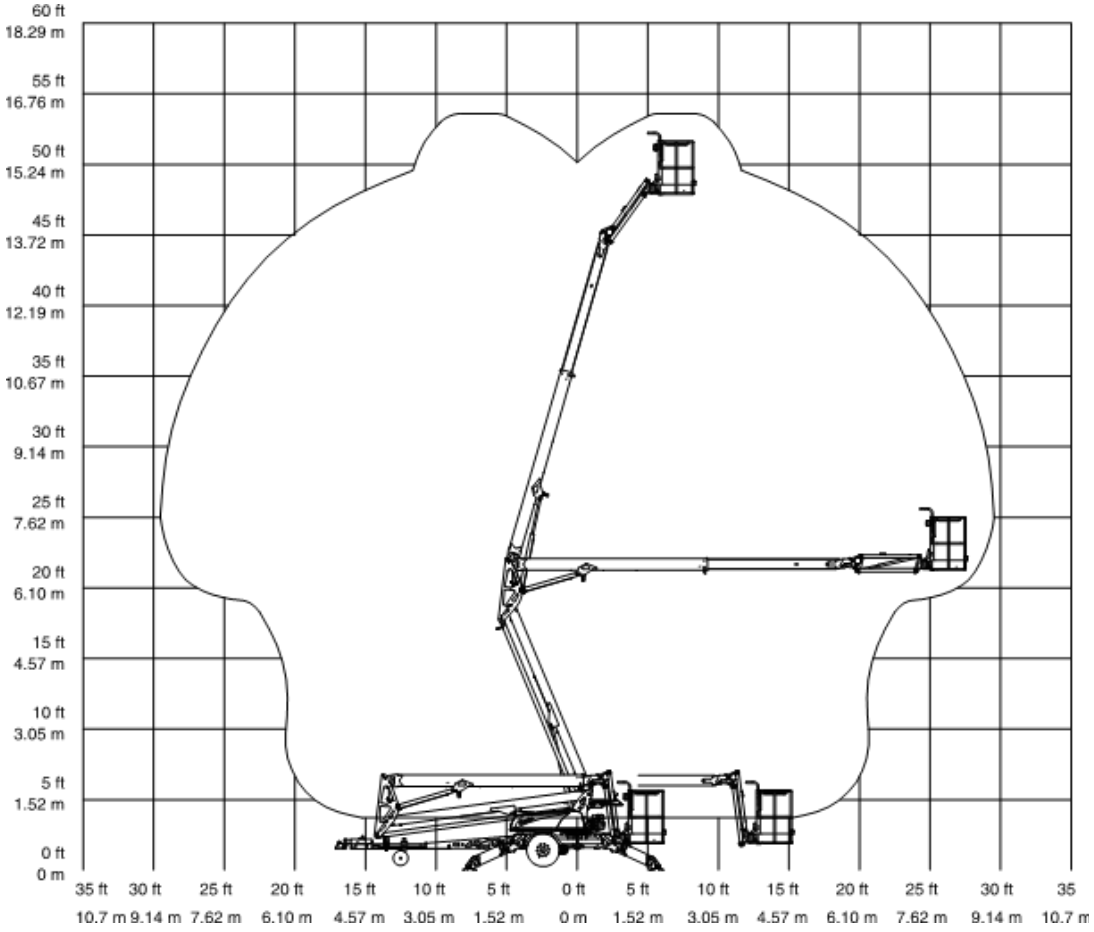
Note: Floor loading information is approximate and does not incorporate different option configurations. It should be used only with adequate safety factors.

Note: Unit is not equipped with a material handling attachment.

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

Specifications

TZ-50 Range of Motion Chart



Reporting Safety Defects

Genie
18340 NE 76th Street
PO Box 97030
Redmond, WA 98073-9730

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.

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.

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

This machine and its service parts contain or emit chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm. Engine exhaust, many parts and systems, fluids, and some component wear by-products contain or emit these chemicals

www.genielift.com

Distributed By:

Towing Checklist (Use at each stop)

Before Towing

- All covers are closed and jacks, outriggers, and boom are locked and secured in the travel position.
- Towing hitch is properly secured to tow vehicle
- Safety chains 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