



Operator's Manual

TZ-34/20

ANSI/CSA
North America
South America
Asia
CE

with
Maintenance
Information

Fourth Edition
Fifth Printing
Part No. 133554

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These machines comply with
ANSI A92.2 and CSA C225

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

Introduction

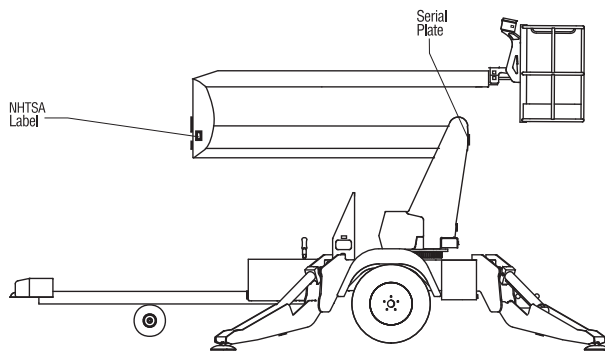
About this manual

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

This machine is intended to be used only to lift personnel, along with their tools and materials to an aerial work site.

Bulletin Distribution and Compliance

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

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

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

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

Introduction

Contacting the Manufacturer

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

Accident reporting

Questions regarding product applications and safety

Standards and regulatory compliance information

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

Transfer of Machine Ownership

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

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



Danger

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

Do Not Operate Unless:

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

1 Avoid hazardous situations.

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

- 2 Always perform a pre-operation inspection.
 - 3 Always perform function tests prior to use.
 - 4 Inspect the workplace.
 - 5 Only use the machine as it was intended.
- ☒ You read, understand and obey the manufacturer's instructions and safety rules—safety and operator's manuals and machine decals.
 - ☒ You read, understand and obey employer's safety rules and worksite regulations.
 - ☒ You read, understand and obey all applicable governmental regulations.
 - ☒ You are properly trained to safely operate the machine.

Introduction

Hazard Classification

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



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



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



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



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



Indicates information considered important, but not hazard related (e.g. messages related to property damage)


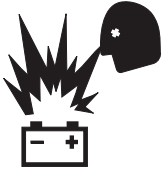



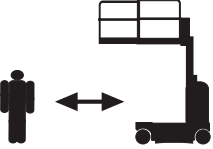
Safety Sign Maintenance

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

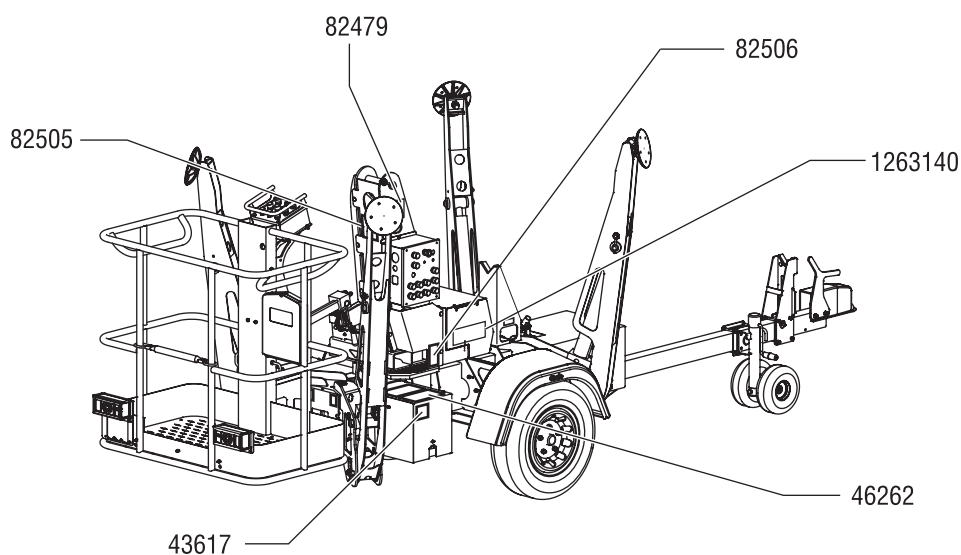
| | | | | |
|---|---|---|--|---|
|  |  |  |  |  |
| Read the operator's manual | Only trained personnel. | Fall hazard | Keep off boom. | Do not expose to water or rain. |
|  |  |  |  |  |
| Electrocution hazard/burn hazard | No smoking | Corrosive acid. | Explosion / Burn hazard | Wear protective clothing |
|  |  |  |  |  |
| 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. | | | | |

General Safety

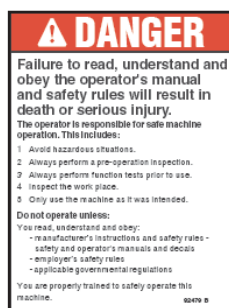
Manifold Side / Platform End TZ-34



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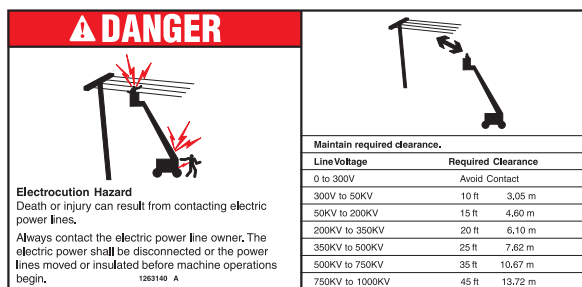
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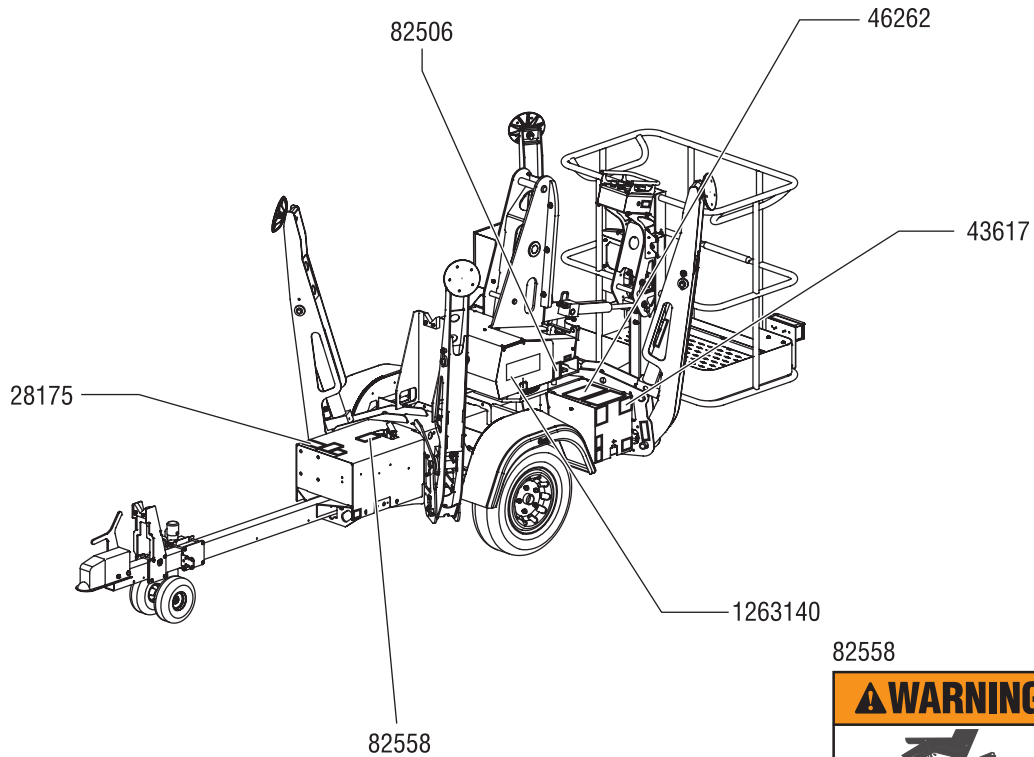


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General Safety

Hydraulic tank side / Hitch End TZ-34



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⚠ WARNING

Crushing hazard.
Lowering the outriggers or tires onto a person's foot can result in serious injury.

Keep clear of outriggers and tires before lowering.

B 90528

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⚠ WARNING

Compartment access is restricted. Contact with components under any cover may result in serious injury.

Only trained maintenance personnel should access compartments. Access by operator is only advised when performing pre-operator inspection. All compartments must remain closed and secured during operation.

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⚠ DANGER

Failure to obey the following battery and charger safety rules will cause death or serious injury.

| | | |
|--|---|--|
| Burn Hazards Batteries contain acid. Always wear protective clothing and eyewear when working with batteries. Avoid spilling or contact with battery acid. Wash skin with water and soap. Avoid contact with hot or live electric circuits. Do not expose batteries or charger to water and/or rain. | Explosion Hazards Keep sparks, flames and lighted tobacco away from batteries. Batteries emit explosive gas. Battery tray should be open during entire charging cycle. Do not contact battery terminals or cable clamps with tools that may cause sparks. Lifting Hazard Use proper lifting techniques and appropriate number of people when lifting batteries. | Electrocution Hazards Connect charger to a grounded AC 3-wire electrical outlet only. Before each use, inspect for damaged cord, cables and wires. Replace damaged items before operating. Component Damage Hazard Do not use any charger greater than 24V to charge batteries. |
|--|---|--|

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⚠ WARNING

Injection Hazard
Escaping fluid under pressure can penetrate skin, causing serious injury.

Relieve pressure before disconnecting hydraulic lines. Keep away from leaks and pin holes. Use a piece of cardboard or paper to search for leaks. Do not use hand.

Fluid injected into skin must be surgically removed within a few hours by a doctor familiar with this type of injury or gangrene will result.

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⚠ DANGER

Tip-over hazard.
Failure to replace batteries with proper weight batteries will cause death or serious injury.

Batteries are used as counterweight and are critical to machine stability. Each battery must weigh 65 pounds (29.5 kg).

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⚠ DANGER

Electrocution Hazard
Death or injury can result from contacting electric power lines.
Always contact the electric power line owner. The electric power shall be disconnected or the power lines moved or insulated before machine operations begin.

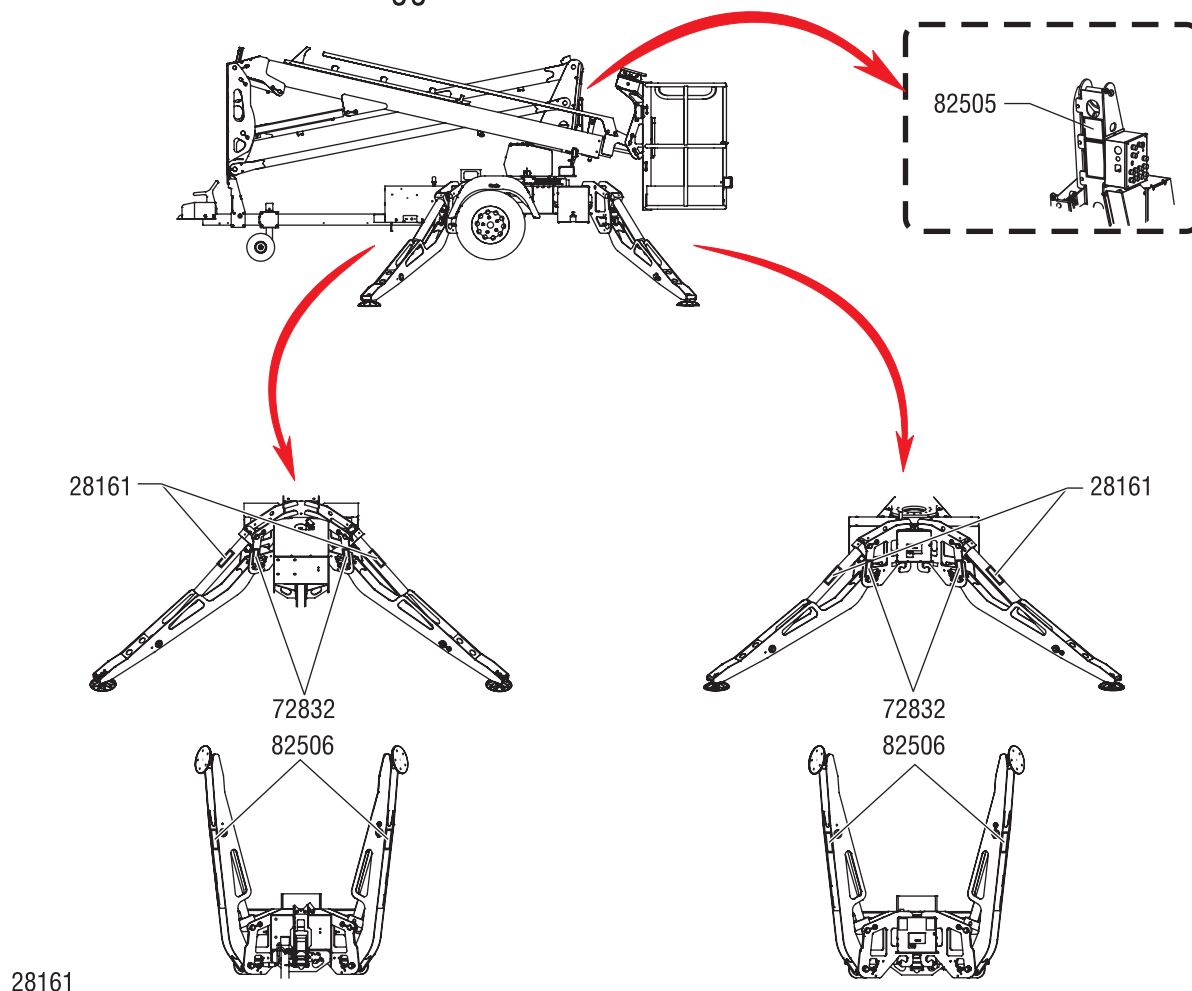
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Maintain required clearance.

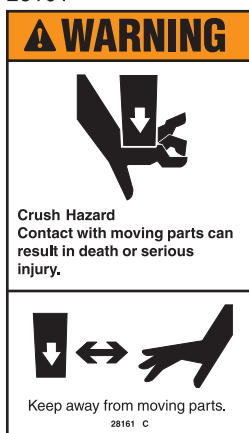
| Line Voltage | Required Clearance | |
|-----------------|--------------------|---------|
| 0 to 300V | Avoid Contact | |
| 300V to 50KV | 10 ft | 3.05 m |
| 50KV to 200KV | 15 ft | 4.60 m |
| 200KV to 350KV | 20 ft | 6.10 m |
| 350KV to 500KV | 25 ft | 7.62 m |
| 500KV to 750KV | 35 ft | 10.67 m |
| 750KV to 1000KV | 45 ft | 13.72 m |

General Safety

Front and Rear view outriggers



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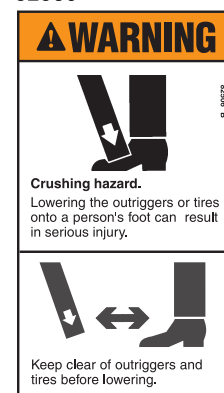
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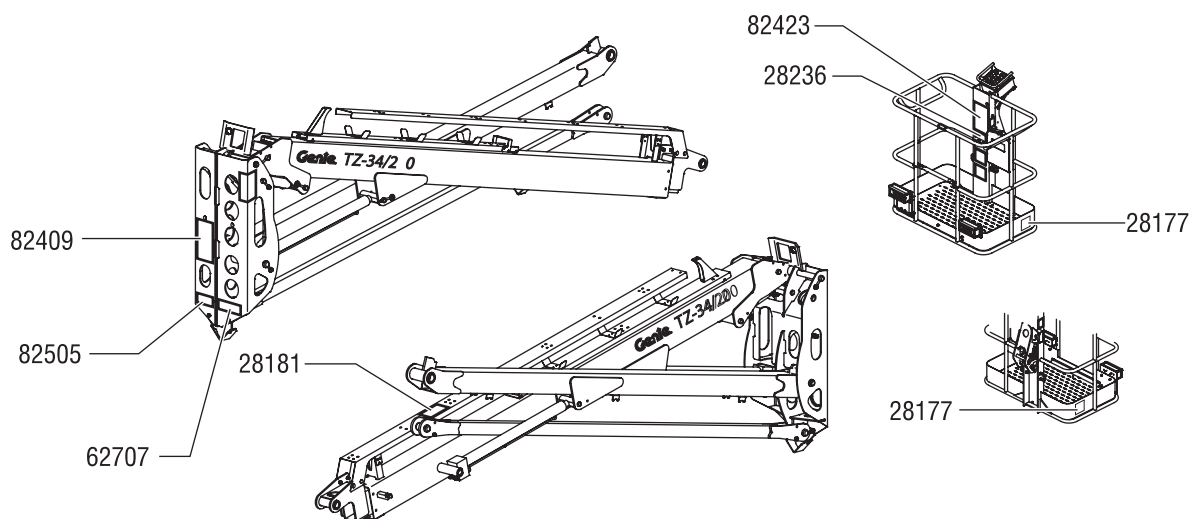


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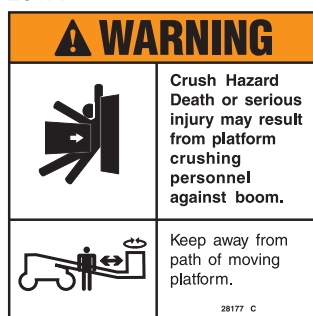


General Safety

Boom and Platform Views



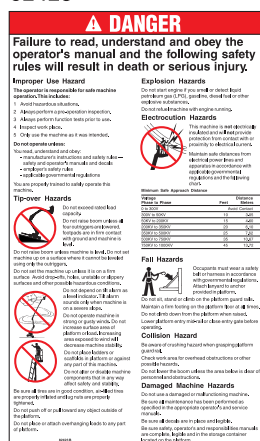
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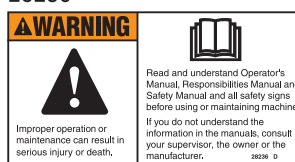
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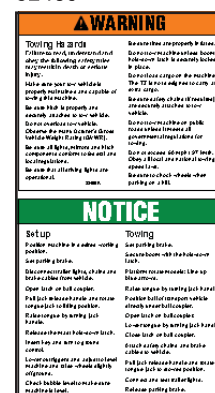
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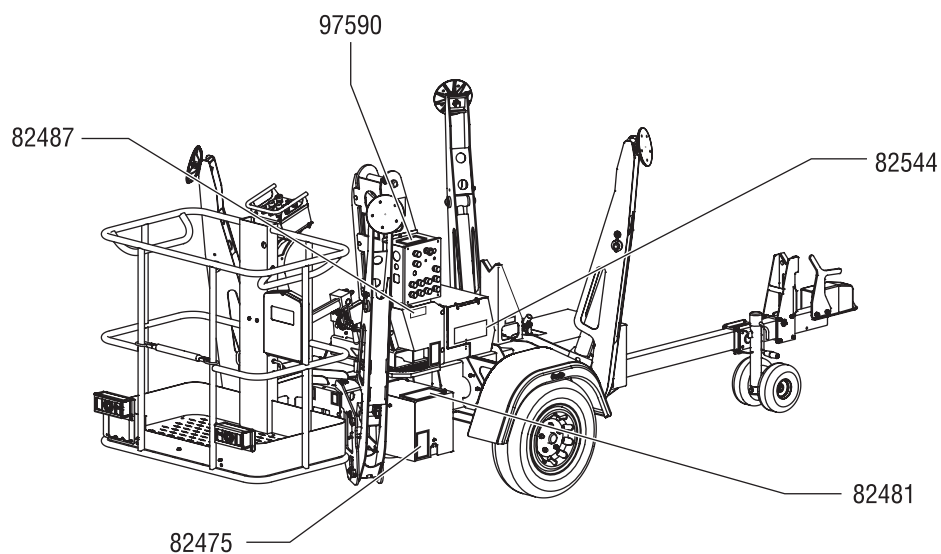


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General Safety

Manifold Side / Platform End TZ-34



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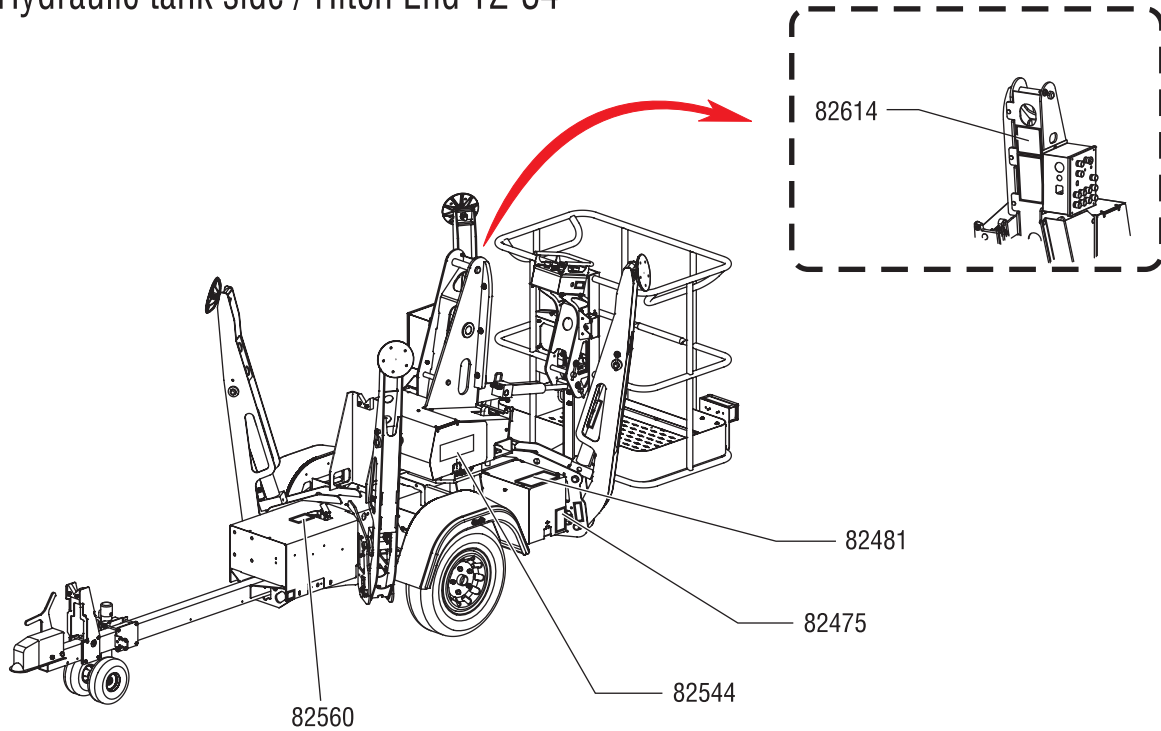


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General Safety

Hydraulic tank side / Hitch End TZ-34



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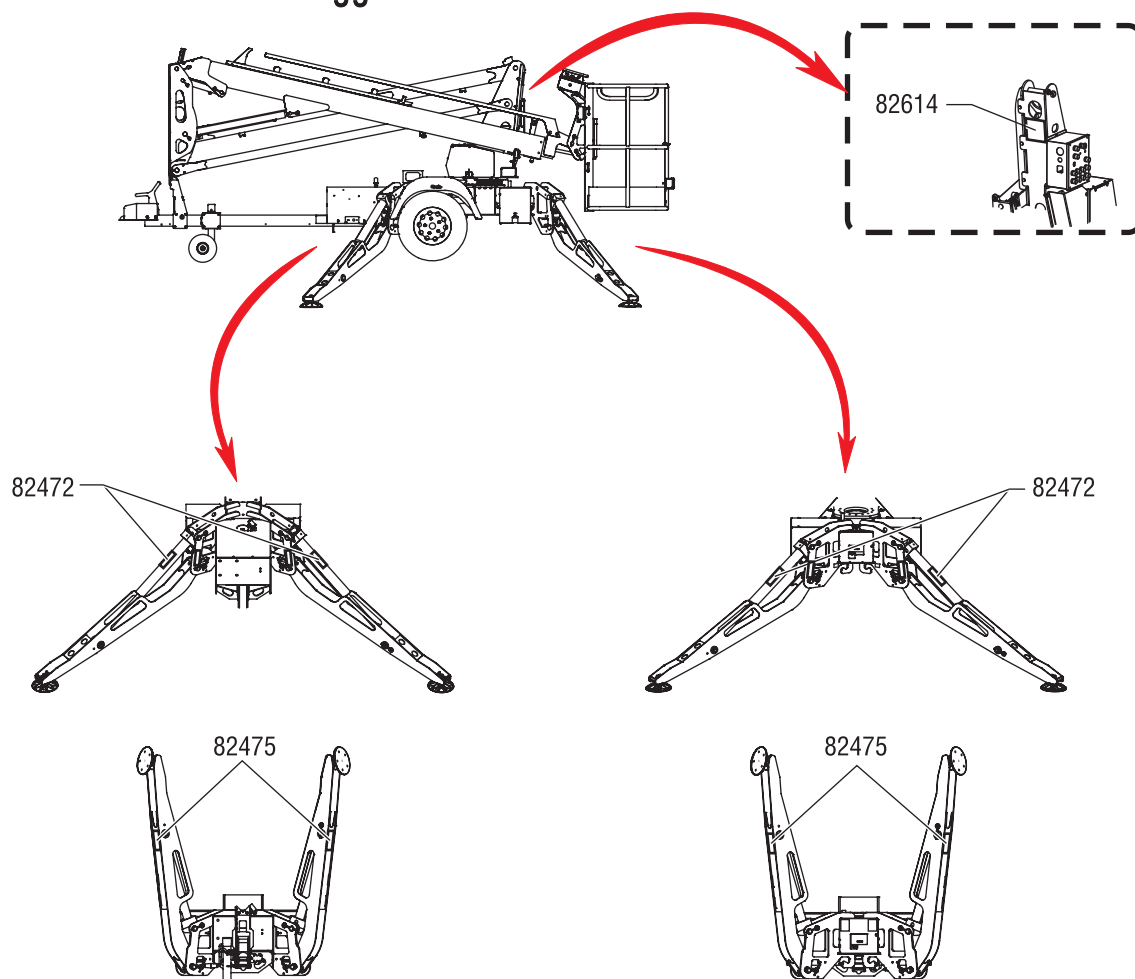


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General Safety

Front and Rear view outriggers



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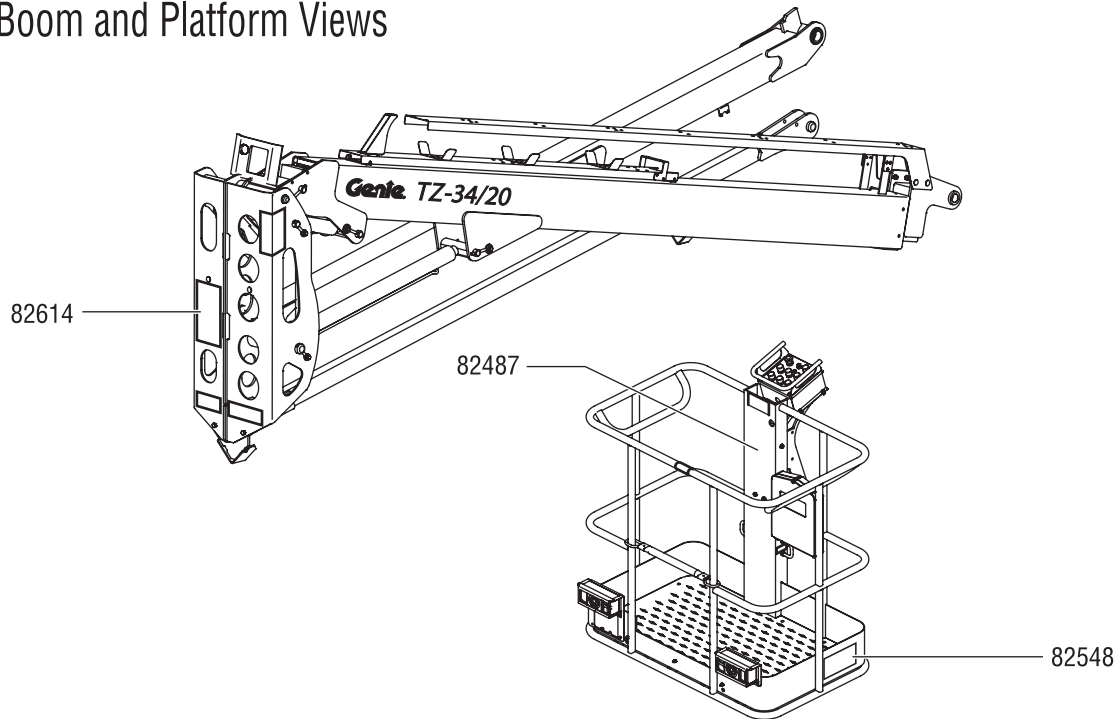


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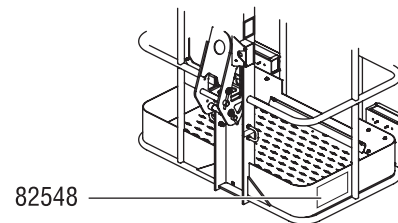


General Safety

Boom and Platform Views

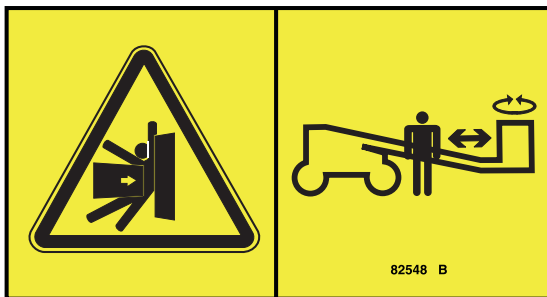


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Personal Safety

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

⚠️ Electrocuting 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.

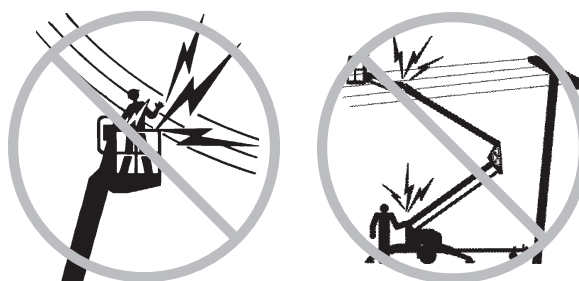
Allow for platform movement, electrical line sway or sag, and beware of strong or gusty winds.

Do not operate the machine during lightning or storms.

Do not use the machine as a ground for welding.

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.



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

⚠ Tip-over Hazards

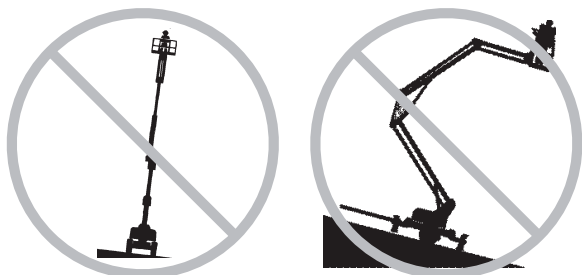
Occupants, equipment and materials shall not exceed the maximum platform capacity.

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 | 460 lbs | 209 kg |
| CE models - 1 occupant | 400 lbs | 181 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.

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.

Work Area Safety

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.

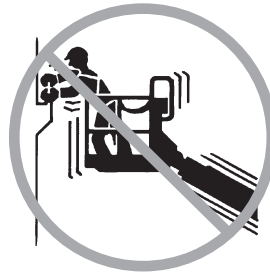
Be sure all tires are properly inflated and in good condition and lug nuts are properly tightened.

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.

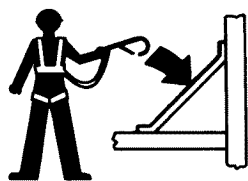
DC models: Do not use batteries that weigh less than the original equipment. Four batteries are used as counterweight and are critical to machine stability. Each battery must weigh 65 pounds / 29.5 kg.

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

⚠ Explosion and Fire Hazards

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

⚠ 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.

⚠ 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.

⚠ 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.

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.

⚠ 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.

Work Area Safety

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.

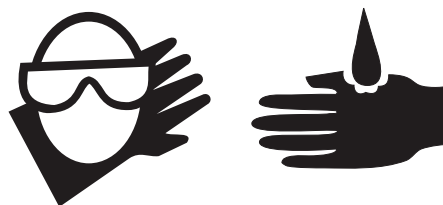
Do not exceed 60 mph / 97 km/h. Obey all local and national towing speed laws.

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

⚠ 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.

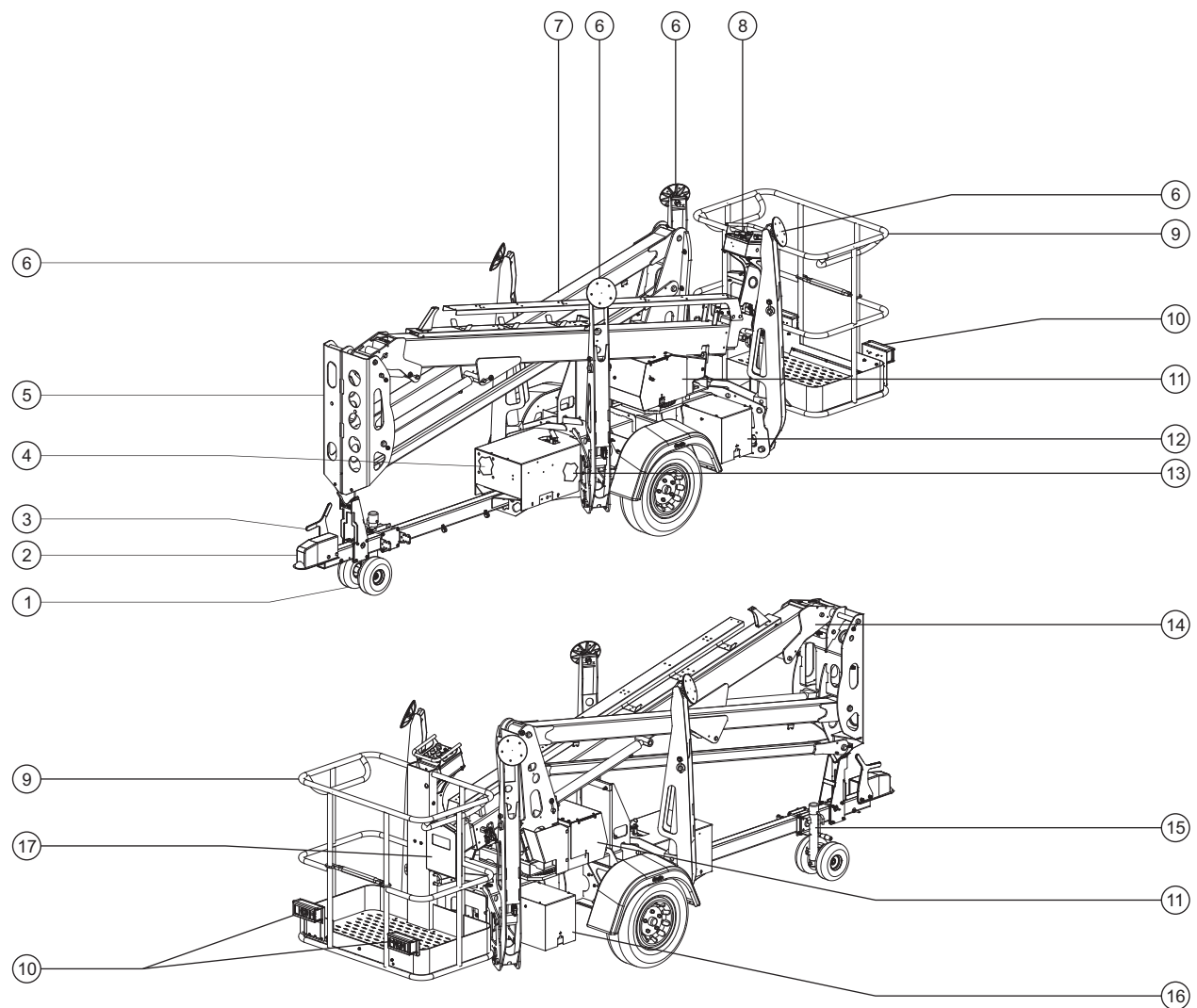
▲ Tip-over Hazard

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.

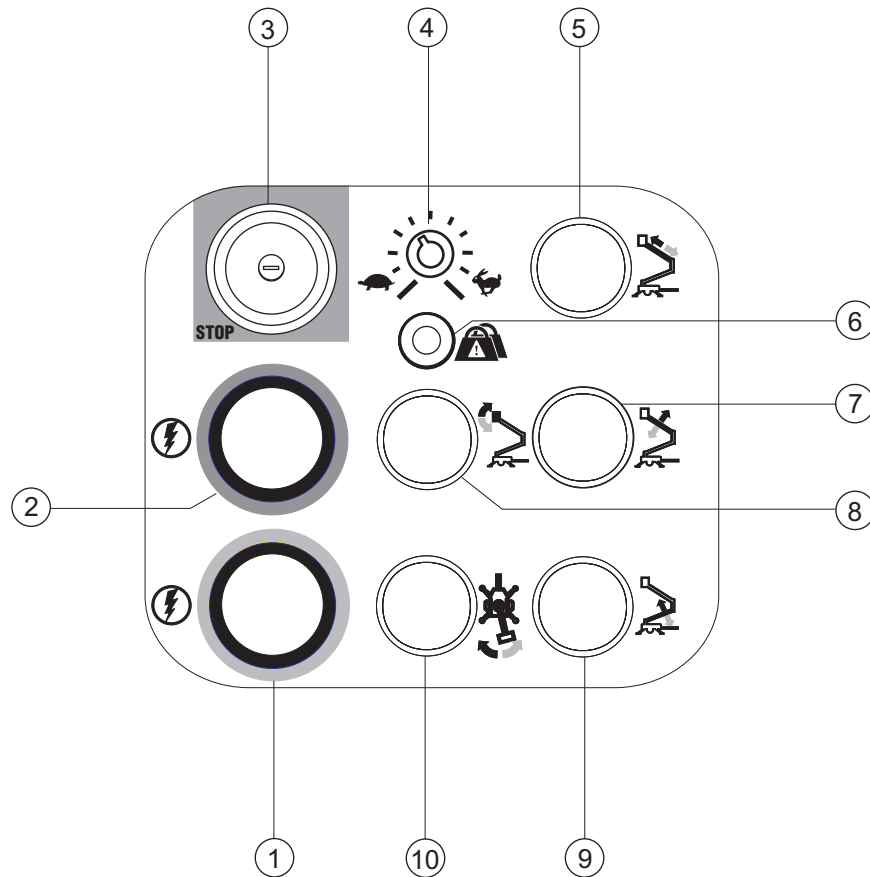
Legend



- 1 Pneumatic tongue wheels
- 2 Hitch
- 3 Tongue handle
- 4 Motor controller
- 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

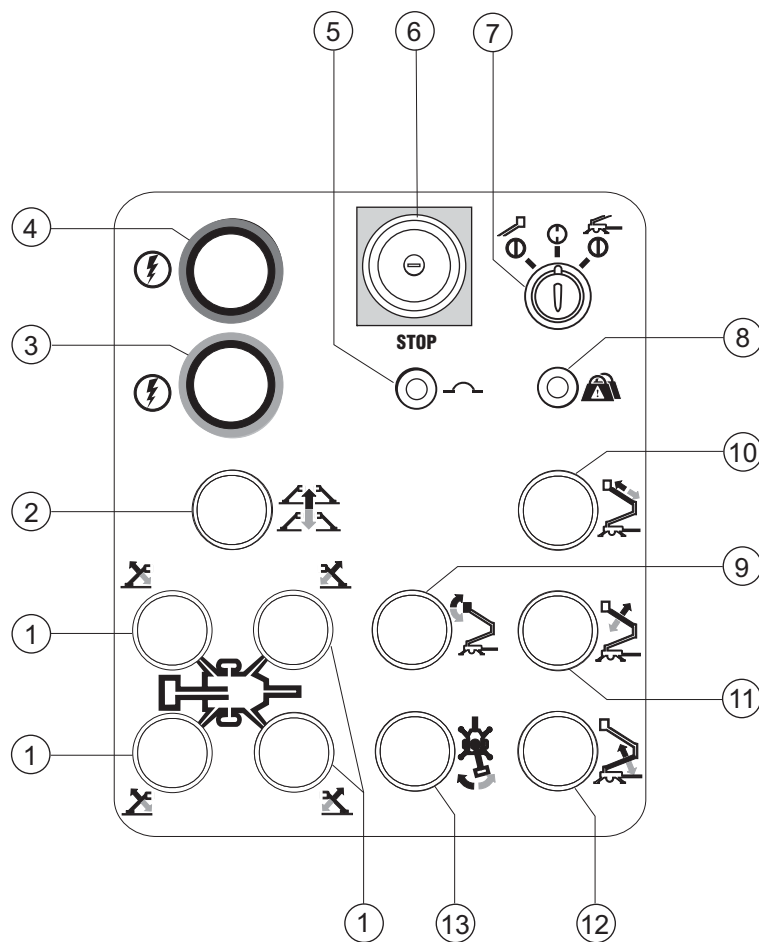
Controls



Platform Control Panel

- | | |
|---|--|
| <p>1 Function enable button for:</p> <ul style="list-style-type: none"> Platform down Primary boom down Primary boom retract Secondary boom down Turntable rotate right <p>2 Function enable button for:</p> <ul style="list-style-type: none"> Platform up Primary boom up Primary boom extend Secondary boom up Turntable rotate left | <p>3 Red Emergency Stop button</p> <p>4 Boom function speed controller</p> <p>5 Primary boom extend/retract button</p> <p>6 Platform overload indicator light (if equipped)</p> <p>7 Primary boom up/down button</p> <p>8 Platform level button</p> <p>9 Secondary boom up/down button</p> <p>10 Turntable rotate button</p> |
|---|--|

Controls



Ground Control Panel

- | | | |
|---|---|---|
| 1 Outrigger raise/lower button (individual outrigger) | 4 Function enable button for: Platform up Primary boom up Primary boom extend Secondary boom up Turntable rotate left Outrigger Raise | 8 Platform overload indicator light (if equipped) |
| 2 Outrigger auto level button | | 9 Platform level button |
| 3 Function enable button for: Platform down Primary boom down Primary boom retract Secondary boom down Turntable rotate right Outrigger lower | 5 15A breaker for controls circuit | 10 Primary boom extend/retract button |
| | 6 Red Emergency Stop button | 11 Primary boom up/down button |
| | 7 Key switch for ground/off/platform selection | 12 Secondary boom up/down button |
| | | 13 Turntable rotate button |

Inspections



Do Not Operate Unless:

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

- 1 Avoid hazardous situations.

- 2 Always perform a pre-operation inspection.**

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

- 3 Always perform function tests prior to use.
- 4 Inspect the workplace.
- 5 Only use the machine as it was intended.

Pre-operation Inspection Fundamentals

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

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

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

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

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

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

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

Inspections

Pre-operation Inspection

- ☐ Be sure that the operator's, 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.

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
- ☐ Surge brake components
- ☐ Safety chains (if required)
- ☐ Light and brake cables
- ☐ 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
- ☐ 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 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.

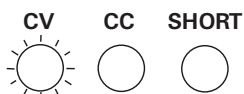
Inspections

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.

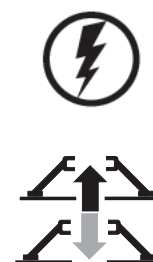


- ⊙ Result: The CV light should be on. The CC and SHORT lights should be off.

At the Ground Controls

- 10 Insert the key and turn to ground control.
- 11 Pull out the red Emergency Stop button to the on position.

- 12 **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.

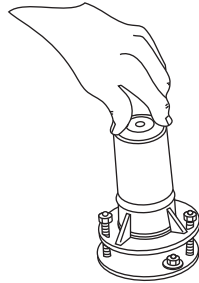
- 13 Be sure the wheels on the tongue jack are not touching the ground.

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

- 14 Raise the boom 2 feet / 60cm.
- 15 Turn the key switch to platform control.
- 16 Locate the tilt sensor next to the forklift pocket on the side of the machine opposite the ground controls.
- 17 Press down one side of the tilt sensor.
- ⊙ Result: The alarm should sound.



Test Emergency Stop

- 18 Push in the red Emergency Stop button to the off position.
- ⊙ Result: All ground and platform control functions should not operate.
- 19 Pull out the red Emergency Stop button to the on position.

Test Boom Functions and Function Enable

- 20 Do not push a function enable button. Attempt to activate each boom function button.
- ⊙ Result: All boom functions should not operate.
- 21 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.
- 22 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

- 23 Lower the boom to the stowed position.
- 24 Push and hold the blue function enable button. Push and hold one outrigger button and raise the outrigger off the ground.
- 25 Push and hold the blue function enable button and activate each boom function.
- ⊙ Result: All boom functions should not operate.
- 26 Use the leveling buttons to lower the outrigger.
- 27 Repeat this procedure for each outrigger.
- 28 Use the function enable buttons and the auto level button or the outrigger leveling buttons to make sure the machine is level.
- 29 Raise the platform approximately 2 feet / 60cm.
- 30 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

- 31 Raise the primary boom approximately 2 feet / 60cm.
- 32 Open the manifold cover on the ground controls side of the machine.
- 33 Locate the primary boom up/down valve.
- 34 Push the thumbscrew in and turn to release.
- ⊙ Result: The thumbscrew should move easily.
- 35 Pull the thumbscrew all the way out and turn.
- ⊙ Result: The thumbscrew should move easily and stay in position.
- 36 Turn the thumbscrew and release.
- 37 Push the thumbscrew all the way in and turn.
- ⊙ Result: The thumbscrew should move easily and stay in position.
- 38 Operate the hand pump on top of the power unit cover.
- ⊙ Result: The primary boom should lower.



Turntable rotate



Primary boom extend/retract



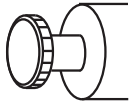
Primary boom up/down



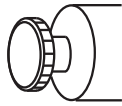
Secondary boom up/down

Inspections

- 39 Turn the thumbscrew and release.



Thumbscrew
all the way out



Normal operating
position (halfway in)



Thumbscrew
all the way in

- 40 To reset the valve, push the thumbscrew halfway in and turn.

- ⊙ Result: The thumbscrew should move easily and stay in position.

- 41 Test the remaining valves.

- ⊙ Result: Each valve thumbscrew should move easily and stay in position.

Note: Make sure to properly reset each valve. The machine will not operate unless the valves are reset.

Test Manual Operation of Turntable Rotate Brake

Note: The turntable rotation brake valve is located under the opposite side of the machine cover.

- 42 Open the manifold cover located on the roadside of the machine.

- 43 Locate the turntable rotation brake valve.



Turntable rotate
brake valve

- 44 Rotate counterclockwise and pull out until the button pops into place.

- 45 Locate the turntable rotate valve.

- 46 Perform steps 34 through 37 on the turntable rotate valve as explained in the previous test section entitled "Test Manual Operation of Functions".

- 47 Operate the hand pump on top of the power unit cover.

- ⊙ Result: Turntable should begin to rotate.

- 48 Reset the turntable rotate and turntable rotate brake valves. Machine will not function unless valves are reset.

- 49 To reset the turntable rotate brake valve, push in and rotate clockwise until button pops into place.

- 50 To reset the turntable rotate valve, push the thumbscrew halfway in and turn.

- ⊙ Result: The thumbscrew should move easily and stay in position.

- 51 Operate the hand pump on top of the power unit cover.

- ⊙ Result: Turntable should not rotate.

Inspections

At the Platform Controls

- 52 Turn the key switch to platform control.
- 53 Pull out the red Emergency Stop button to the on position.

Test Emergency Stop

- 54 Push in the red Emergency Stop button to the off position.
 - ⊙ Result: All ground and platform control functions should not operate.
- 55 Pull out the red Emergency Stop button to the on position.

Test Boom Functions and Function Enable

- 56 Do not push a function enable button. Attempt to activate each boom function button.
 - ⊙ Result: All boom functions should not operate.
- 57 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.
- 58 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



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 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

Workplace Inspection Fundamentals

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

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

Inspections


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.

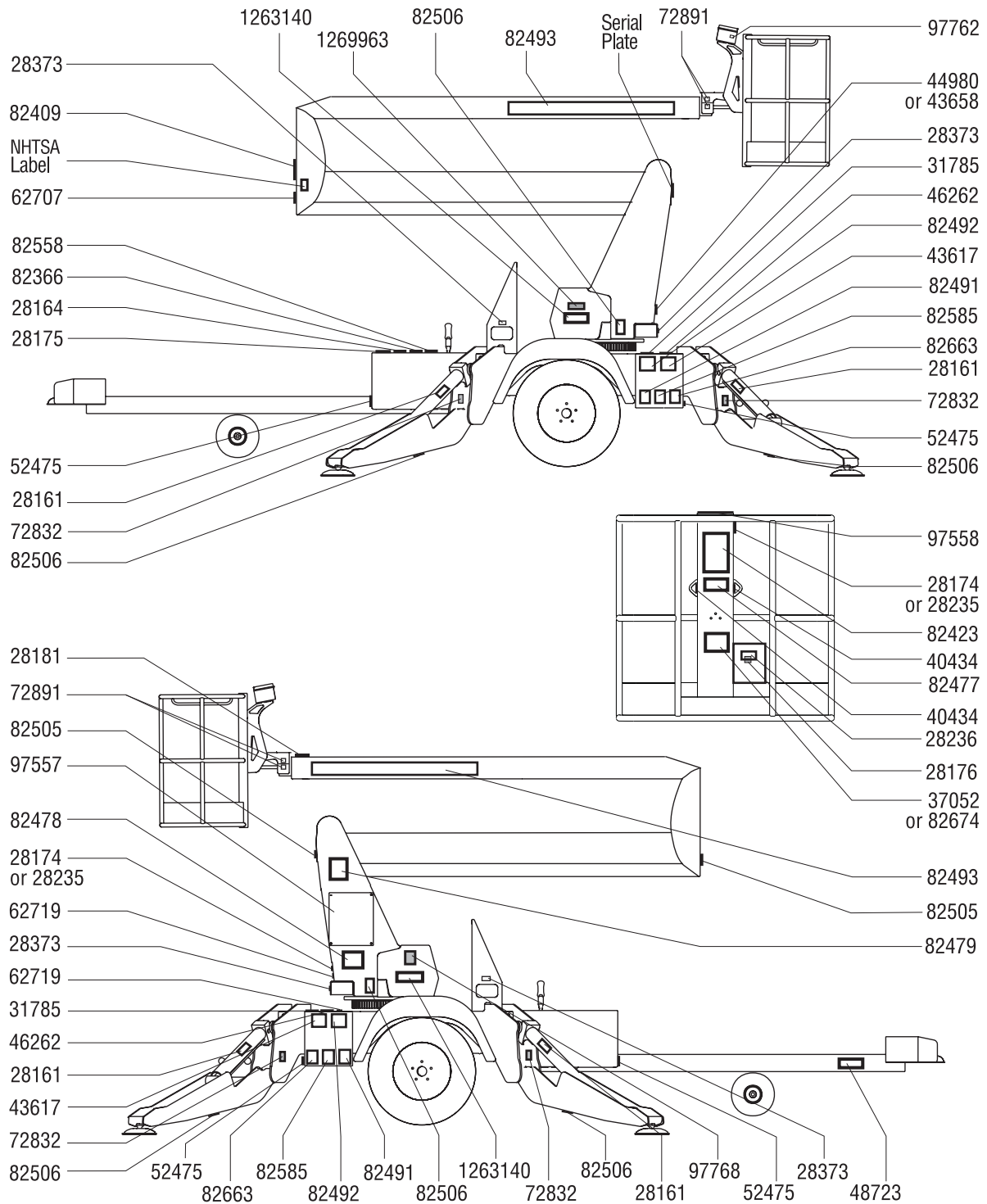
Below is a numerical list with quantities and descriptions.

| Part No. | Decal Description | Qty |
|----------|---|-----|
| 28161 | Warning – Crushing Hazard | 4 |
| 28164 | Notice - Hazardous Materials | 1 |
| 28174 | Label – Power to Platform, 230V | 2 |
| 28176 | Label – Missing Manuals | 1 |
| 28181 | Warning – No Step or Ride | 1 |
| 28235 | Label – Power to Platform, 115V | 2 |
| 28236 | Warning – Improper Operation | 1 |
| 28373 | Label - Forklift Pocket | 4 |
| 31785 | Notice - Battery Charger Operating Instr. | 2 |
| 37052 | Notice - Max Capacity, 500 lbs / 227 kg | 1 |
| 40434 | Label – Lanyard Anchorage Point | 2 |
| 43617 | Danger - Tip-over (batteries) | 2 |
| 43658 | Label – Power to Charger, 230V | 1 |
| 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 |
| 62719 | Label – Arrow | 2 |

| Part No. | Decal Description | Qty |
|----------|---|-----|
| 72832 | Danger – Do Not Alter Limit Switch | 4 |
| 72891 | Label - Blue Arrow (Platform Rotate) | 4 |
| 82366 | Label – Chevron Rando | 1 |
| 82409 | Warning - Transport Instructions | 1 |
| 82423 | Danger - General Safety, Platform | 1 |
| 82477 | Notice - Operating Instructions, Platform | 1 |
| 82478 | Notice - Operating Instructions, Ground | 1 |
| 82479 | Danger - General Safety, Ground | 1 |
| 82491 | Notice - Tire Specifications | 2 |
| 82492 | Notice - Battery Connection Diagram | 2 |
| 82493 | Cosmetic - Genie TZ-34/20 | 2 |
| 82505 | Danger - Crushing Hazard, Elevated Components | 2 |
| 82506 | Danger – Foot Crushing Hazard | 6 |
| 82558 | Warning – Skin Injection Hazard | 1 |
| 82585 | Label - Outrigger Load | 2 |
| 82663 | Label - Wheel Load | 2 |
| 82674 | Notice - Max Capacity, 460 lbs / 209 kg | 1 |
| 97557 | Ground Control Panel | 1 |
| 97558 | Platform Control Panel | 1 |
| 97762 | Label - Horn (option) | 1 |
| 97768 | Notice - Manifold Valves | 1 |
| 1259963 | Notice - Turntable Valve | 1 |
| 1263140 | Danger - Electrocution Hazard | 1 |

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

Inspections




Inspections

Inspection for Decals with Symbols

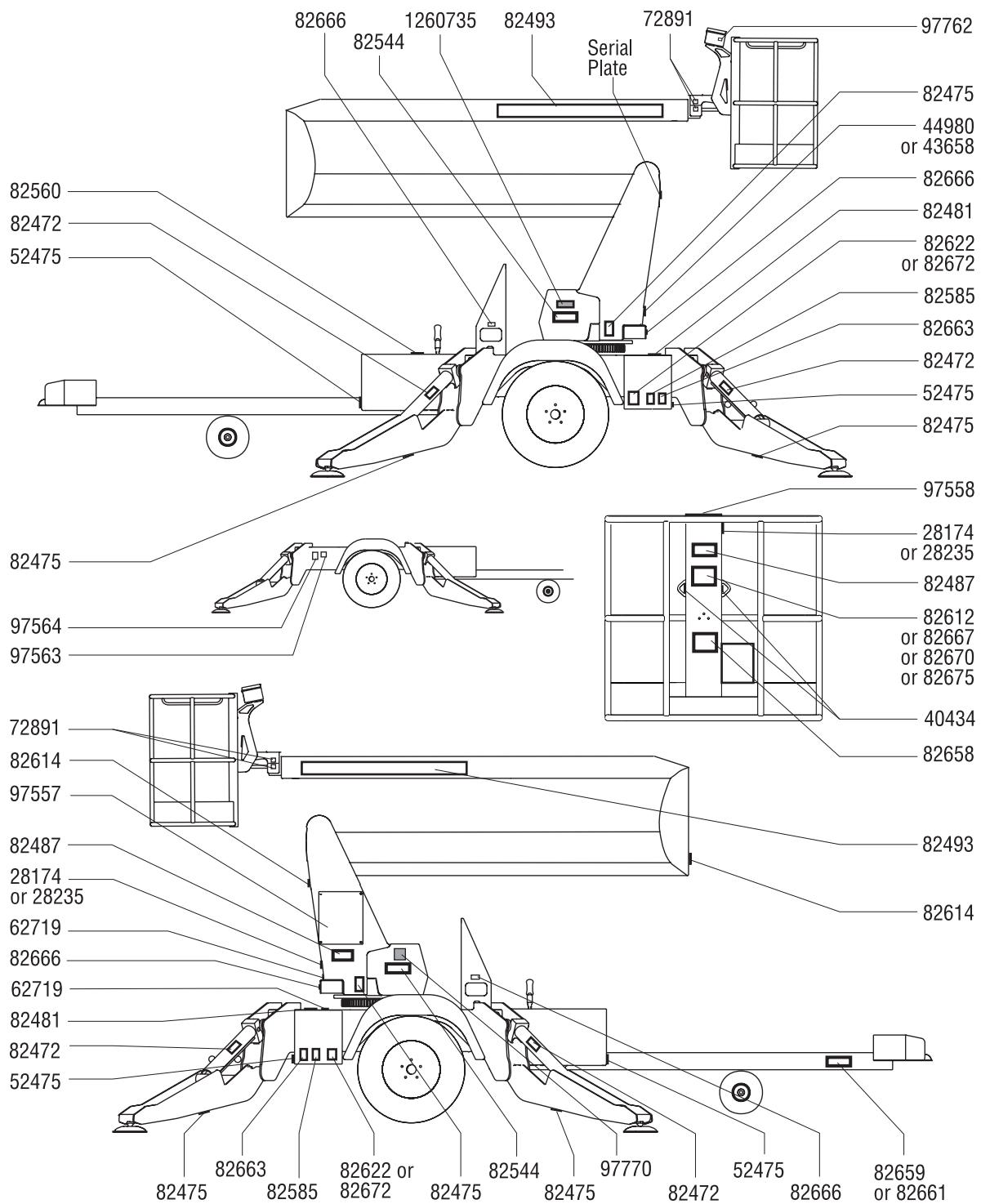
Determine whether the decals on your machine have words or symbols. Use the appropriate inspection to verify that all decals are legible and in place.

| Part No. | Decal Description | Qty |
|----------|--------------------------------------|-----|
| 28174 | Label – Power to Platform, 230V | 2 |
| 28235 | Label – Power to Platform, 115V | 2 |
| 40434 | Label – Lanyard Anchorage Point | 2 |
| 43658 | Label – Power to Charger, 230V | 1 |
| 44980 | Label – Power to Charger, 115V | 1 |
| 52475 | Label – Transport Tie-down | 4 |
| 62719 | Label – Arrow | 2 |
| 72891 | Label - Blue Arrow (Platform Rotate) | 4 |
| 82472 | Label – Crushing Hazard | 4 |
| 82475 | Label – Crushing Hazard, Outriggers | 4 |
| 82481 | Label – Battery/Charger Safety | 2 |
| 82487 | Label – Read the Manual | 2 |
| 82493 | Cosmetic - Genie TZ-34/20 | 2 |
| 82544 | Danger - Electrocution Hazard | 3 |
| 82560 | Label – Skin Injection Hazard | 1 |
| 82585 | Label - Outrigger Load | 2 |

| Part No. | Decal Description | Qty |
|----------|---|-----|
| 82612 | Danger - Maximum Capacity, 200 kg, ANSI & CSA | 1 |
| 82614 | Warning – Collision Hazard | 2 |
| 82622 | Label - Tire Pressure, ANSI & CSA | 2 |
| 82658 | Danger - Maximum Manual Force, 400 N, CE | 1 |
| 82659 | Label - Parking Brake, CE | 1 |
| 82661 | Label - Parking Brake, ANSI | 1 |
| 82663 | Label - Wheel Load | 2 |
| 82666 | Label - Forklift Pocket | 4 |
| 82667 | Danger - Maximum Capacity, 227 kg, ANSI & CSA | 1 |
| 82670 | Danger - Maximum Capacity, 181 kg, CE | 1 |
| 82672 | Label - Tire Pressure, CE | 4 |
| 82675 | Danger - Maximum Capacity, 209 kg, CE | 1 |
| 97557 | Ground Control Panel | 1 |
| 97558 | Platform Control Panel | 1 |
| 97563 | Label - Circuit Breaker, AC Models | 1 |
| 97564 | Label - AC Power Cord, AC Models | 1 |
| 97762 | Label - Horn (option) | 1 |
| 97770 | Label - Manifold Valves | 1 |
| 1260735 | Label - Turntable Valve | 1 |

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

Inspections



Operating Instructions



Do Not Operate Unless:

- ☒ You learn and practice the principles of safe machine operation contained in this operator's manual.
 - 1 Avoid hazardous situations.
 - 2 Always perform a pre-operation inspection.
 - 3 Always perform function tests prior to use.
 - 4 Inspect the workplace.
 - 5 **Only use the machine as it was intended.**

Fundamentals

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

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

Operating Instructions

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

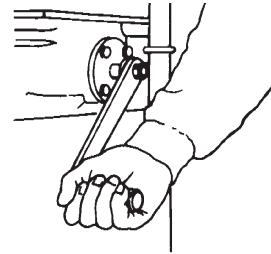
- 1 Push and hold the appropriate function enable button.
- 2 Push and hold the boom function button according to the markings on the control panel.

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.
- 3 If equipped: Rotate the platform by turning the hand crank in either a clockwise or counterclockwise direction.



Operating Instructions

Manual Operation of Functions

All boom functions can be operated with the hand pump located on top of the power unit cover.

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

There are three locked positions on each manifold valve. The center locked position is for normal machine operation. Locate the valve for the desired function. Push the thumbscrew and turn to release.

- 1 Locate the valve for the desired function. Push the thumbscrew and turn to release.
- 2 Set the valve to perform the desired action. Make sure to turn the thumbscrew until it locks in place.

Turntable rotate

Clockwise: Pull the thumbscrew all the way out and turn.

Counterclockwise: Push the thumbscrew all the way in and turn.

Turntable rotate brake

Note: Rotation brake is located under opposite side cover.

Disengage: Rotate counterclockwise and pull out until the button pops into place.
Engage: Push in and rotate clockwise until the button pops into place.



Turntable rotate



Turntable rotate brake valve

- 3 **For ANSI 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.

- 4 Push in and rotate clockwise to engage the rotate brake for normal machine operation.

Note: The machine will not operate unless the valves are properly reset.

Primary boom

Retract: Push the thumbscrew all the way in and turn.

Extend: Pull the thumbscrew all the way out and turn.

Down: Push the thumbscrew all the way in and turn.

Up: Pull the thumbscrew all the way out and turn.

Secondary boom

Down: Push the thumbscrew all the way in and turn.

Up: Pull the thumbscrew all the way out and turn.



Turntable rotate



Primary boom extend/retract



Primary boom up/down



Secondary boom up/down

Operating Instructions

- 5 **For ANSI and CSA models only -**
Operate the hand pump.

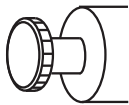
For CE models only -

Break the security tie and operate the hand pump.

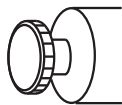
Note: If the security tie is broken or missing consult the appropriate Genie Service Manual.

- 6 Turn the thumbscrew to release.
- 7 Push the thumbscrew halfway in and turn clockwise to lock into position for normal machine operation.

Note: The machine will not operate unless the valves are properly reset.



Thumbscrew
all the way out



Normal operating
position (halfway in)



Thumbscrew
all the way in

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.

▲ 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.

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

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 on the chassis and the tongue.
- 3 Secure the hold-down latches.
- 4 Turn the key switch to the off position and remove the key to secure from unauthorized use.
- 5 DC models: Charge the batteries.

Operating Instructions

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 DC models: Charge the batteries.

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 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.
- 4 Raise the tongue by turning the jack handle.
- 5 Position the ball of the transport vehicle directly under the ball coupler.
- 6 Open the latch on the ball coupler.
- 7 Lower the tongue by turning the jack handle.
- 8 Close the latch on the ball coupler.
- 9 Attach the safety chains (if required) and the brake cables to the vehicle. Cross the chains under the hitch.
- 10 Pull the jack release handle and rotate the tongue jack to the stowed position.
- 11 Connect and test the trailer lights.
- 12 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.

Backing Up with Trailer (if equipped with hydraulic surge brake)

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.

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.

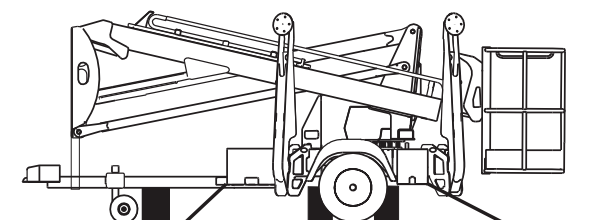
Place a block on both sides of the axle behind the wheels.

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.

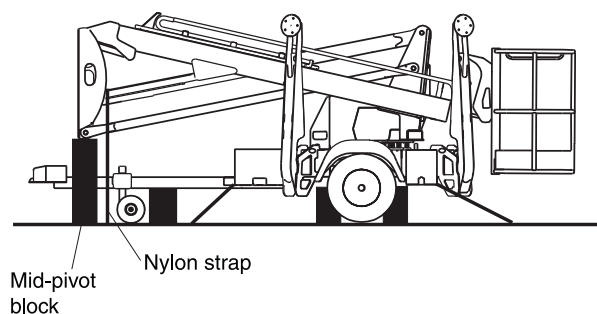


Securing the Boom

Models that are not equipped with a mast cradle at the mid-pivot must perform the following steps:

Support the secondary boom at the mid-pivot with a block placed on the floor of the truck bed, not the tongue of the machine.

Secure the boom with a nylon strap placed over the secondary boom. Do not use excessive downward force when securing the boom section.



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. Make sure the boom rests in the cradle on the chassis.

Securely latch the boom hold-down latches.

Raise all four outriggers to the stowed position.

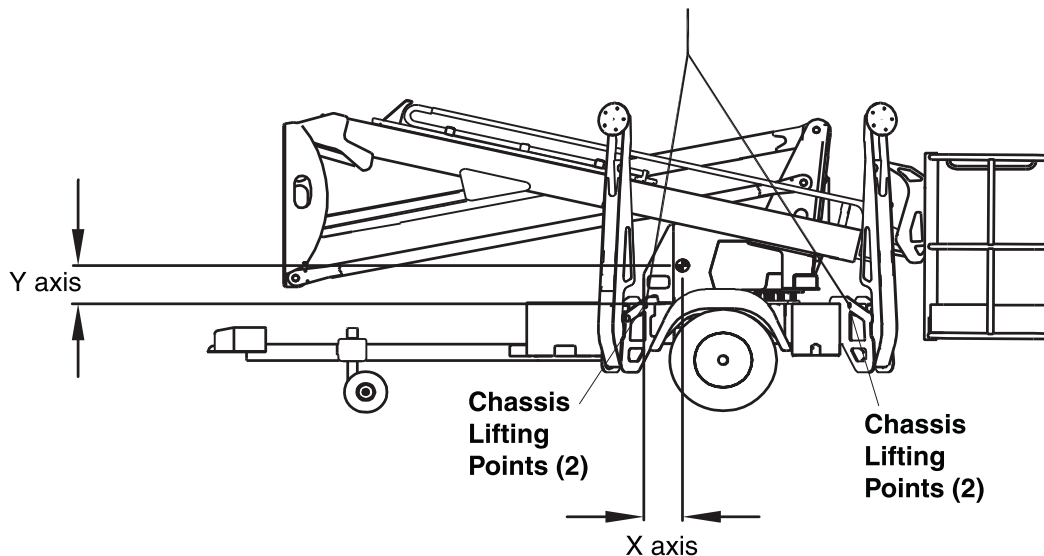
Remove all loose items on the machine.

Determine the center of gravity of your machine using the table and the picture on this page.

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.

| | X Axis | Y Axis |
|-----------------------|------------------|------------------|
| ANSI & CSA | 9.1 in / 23.1 cm | 9.4 in / 23.9 cm |
| CE | 5.2 in / 13.2 cm | 9.4 in / 22.9 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.

Maintenance



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.

Maintenance

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

| | | |
|----------------------|-------------|---------|
| Tire Size | ST205/75R14 | Load C |
| Lug nut torque | 100 ft/lbs | 135 Nm |
| Tire pressure (cold) | 50 psi | 3.4 bar |

Tire Specifications - CE

| | | |
|----------------------|-----------|---------|
| Tire Size | 185/R14 | Load C |
| Lug nut torque | 66 ft/lbs | 90 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 |
|--------------------|--|

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

TZ34

| | | |
|--|------------------|---|
| Height, working maximum | 8 ft 6 in | 12.2 m |
| Height, platform maximum | 10 ft 4 in | 10.3 m |
| Height, stowed maximum | 6 ft 9 in | 2.01 m |
| Horizontal working reach maximum from centerline of machine | 25 ft | 6.1 m |
| Outrigger footprint (w x l) | 10.8 x 11.8 ft | 3.3 x 3.6 m |
| Maximum load capacity without optional platform rotate | | |
| ANSI/CSA | 500 lbs | 227 kg |
| CE | 440 lbs | 200 kg |
| Maximum load capacity with optional platform rotate | | |
| ANSI/CSA | 461 lbs | 209 kg |
| CE - 1 occupant only | 399 lbs | 181 kg |
| Width | 4.82 ft | 1.47 m |
| Length, stowed | 16.4 ft | 5 m |
| Turntable rotation | | 359° |
| Platform rotation (option) | | 90° |
| Platform dimensions | 3.6 ft x 26.8 in | 1.1 m x 68 cm |
| Platform leveling | | self-leveling |
| Power source | | 4 Group T-105 6V 225AH Batteries OR 230V AC/50 Hz |
| AC outlet in platform | | standard |
| Tire size, ANSI & CSA models | | ST205/75 R14 Load range C |
| Tire size, CE models | | 185 R14C 102/100N |
| 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 | 300 lbs | 136 kg |
| CE | 165.4 lbs | 75 kg |
| Hydraulic pressure, maximum (boom functions) | 3500 psi | 241 bar |
| System voltage | | 24V |

Airborne noise emissions

| | |
|--|----------|
| Sound pressure level at ground workstation | < 70 dBA |
| Sound pressure level at platform workstation | < 70 dBA |

Floor loading information (ANSI & CSA)

| | | |
|---|------------|-------------------------------------|
| GVW | 3150.4 lbs | 1429 kg |
| Axle load, maximum (GVW only) | 2850.6 lbs | 1293 kg |
| Wheel load, maximum (GVW only) | 1424.8 lbs | 646.3 kg |
| Localized pressure per tire (GVW only) | 37 psi | 2.6 kg/cm ² 255 kPa |
| Localized pressure per outrigger (including rated load) | 38 psi | 2.7 kg/cm ² 268.9 kPa |
| Outrigger load, maximum (including rated load) | 1933.5 lbs | 877 kg |

Floor loading information CE

| | | |
|---|------------|--------------------------------------|
| GVW | 3238.6 lbs | 1469 kg |
| Axle load, maximum (GVW only) | 3064.4 lbs | 1390 kg |
| Wheel load, maximum (GVW only) | 1532.2 lbs | 695 kg |
| Localized pressure per tire (GVW only) | 40 psi | 2.81 kg/cm ² 275.7 kPa |
| Localized pressure per outrigger (including rated load) | 38 psi | 2.7 kg/cm ² 268.9 kPa |
| Outrigger load, maximum (including rated load) | 1944.5 lbs | 882 kg |

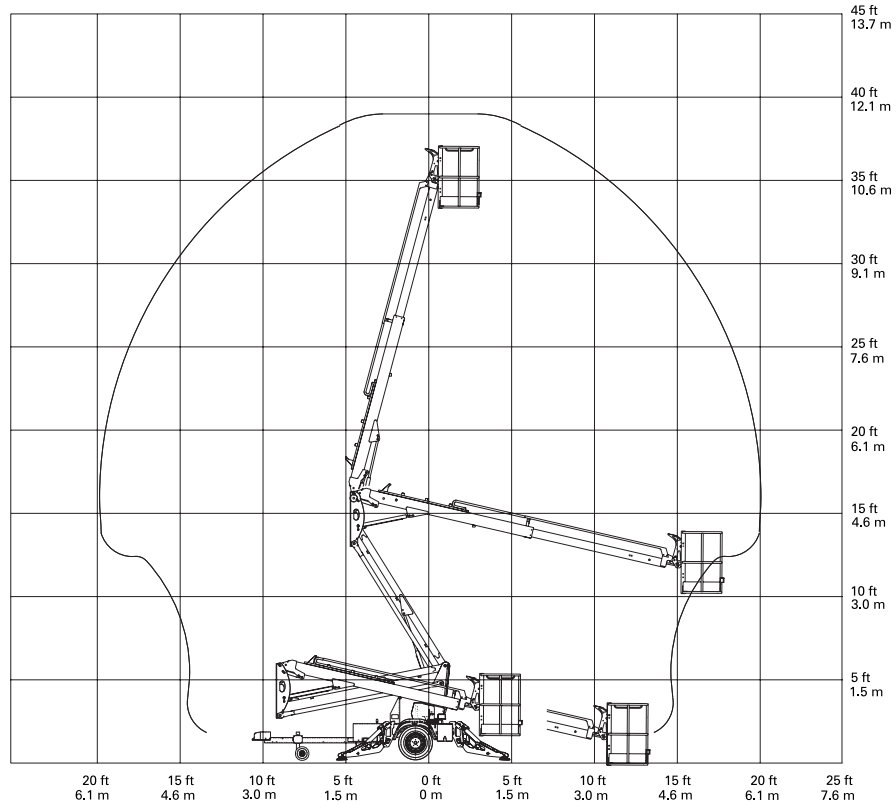
Note: Floor loading information is approximate and does not incorporate different option configurations. It should be used only with adequate safety factors.

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-34/20 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

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