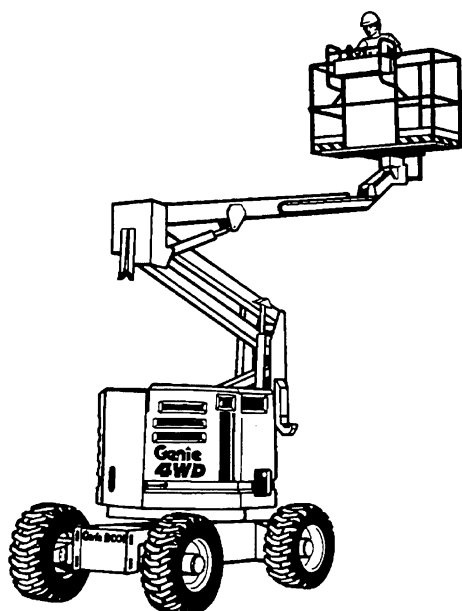


Genie Industries



Genie® Z-45/22

Operator's Manual



Fourth Edition, Third Printing
Part No. 43636



Genie® Z-45/22

Important

Read, understand and obey these safety rules and operating instructions before operating this machine. Only trained and authorized personnel shall be permitted to operate this machine. This manual should be considered a permanent part of your machine and should remain with the machine at all times. If you have any questions, call Genie Industries.

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Genie Industries

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These machines comply with
ANSI/SIA 92.5-1992.

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Safety Rules



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 above principle 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 work place.
- 5 Only use the machine as it was intended.

- ☒ You read, understand and obey:

Manufacturer's instructions and safety rules—safety and operator's manuals and machine decals

employer's safety rules and worksite regulations

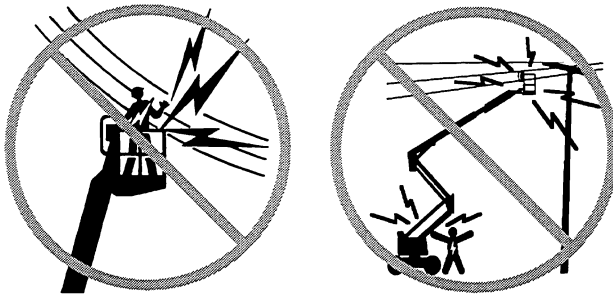
applicable governmental regulations

- ☒ **You** are properly trained to safely operate the machine.

SAFETY RULES

Electrocution Hazards

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



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

Voltage Phase to Phase Distance	Minimum Safe Approach	
	Feet	Meters
0 to 300V	Avoid Contact	
300V to 50KV	10	3.1
50KV to 200KV	15	4.6
200KV to 350KV	20	6.1
350KV to 500KV	25	7.6
500KV to 750KV	35	10.7
750KV to 1000KV	45	13.7

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

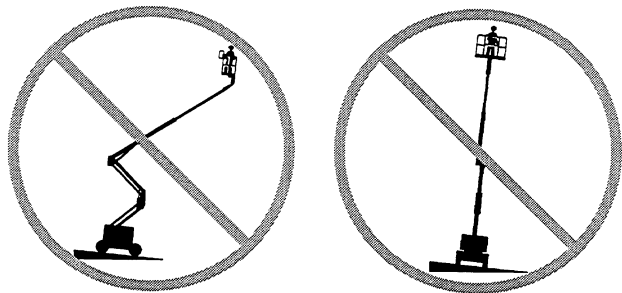
Keep away from the machine if it contacts energized power lines. Personnel on the ground or in the platform must not touch or operate the machine until energized power lines are shut off.

Do not use the machine as a ground for welding.

Tip-over Hazards

Occupants and equipment shall not exceed the maximum platform capacity.

Maximum platform capacity	500 lbs	227 kg
Maximum occupants	2	



Do not raise or extend the boom unless the machine is on a firm, level surface.

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

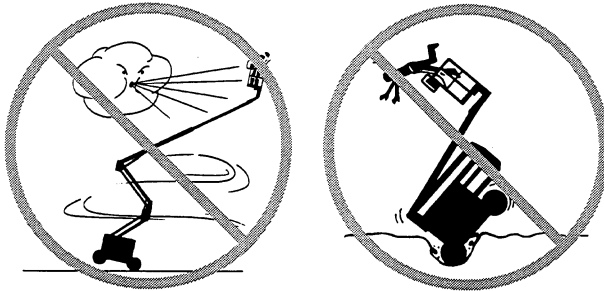
If tilt alarm sounds:

Do not extend, rotate or raise boom above horizontal. Move machine to a firm, level surface before raising platform. If tilt alarm sounds when platform is raised, use extreme caution to retract boom and lower platform. Do not rotate boom while lowering. Move machine to a firm, level surface before raising platform.

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.

SAFETY RULES

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.



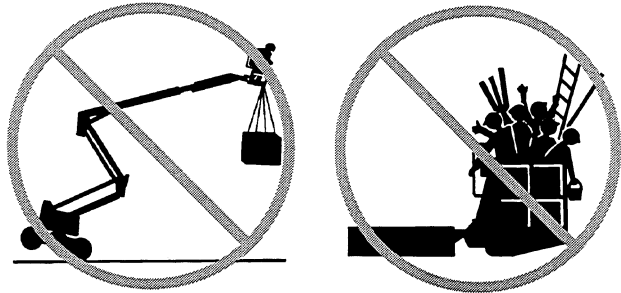
Use extreme care and slow speeds while driving the machine in stowed position across uneven terrain, debris, unstable or slippery surfaces and near holes and drop-offs.

Do not drive the machine on or near uneven terrain, unstable surfaces or other hazardous conditions with the boom raised or extended.

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

Maximum allowable side force - ANSI & CSA	150 lbs 667 N
Maximum allowable side force - CE	90 lbs 400 N

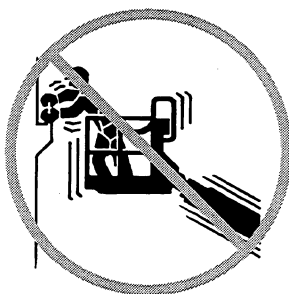
Do not place or attach overhanging loads to any part of this machine.



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

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

Be sure all tires are in good condition, air-filled tires are properly inflated and lug nuts are properly tightened.



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. Mounting attachments for holding tools or other materials onto the platform, toeboards or guard rail system can increase the weight in the platform and the surface area of the platform or the load.

SAFETY RULES

Fall Hazards

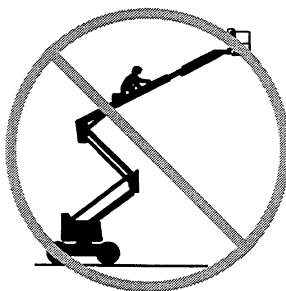
Occupants must wear a safety belt or harness in accordance with governmental regulations. Attach lanyard to anchor provided in platform.

It is recommended that operators wear an approved hard hat when operating the machine.

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.

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.

Collision Hazards

Be aware of limited sight distance and blind spots when driving or operating.

Be aware of boom position when rotating turntable.

Check work area for overhead obstructions or other possible hazards.



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

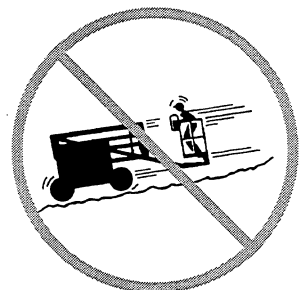


Observe and use color-coded direction arrows on the platform controls and drive chassis for drive and steer functions.

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



Limit travel speed according to condition of ground surface, congestion, slope, location of personnel, and any other factors which may cause collision.



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.

SAFETY RULES

Component Damage Hazards

Do not use any battery or charger greater than 12V to jump-start the engine.

Do not use machine as a ground for welding.

Be sure hydraulic shutoff valves (located by hydraulic tank) are open before starting engine.

Explosion and Fire Hazards

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

Do not refuel machine with engine running.

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

Always operate machine in a well-ventilated area to avoid carbon monoxide poisoning.

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

Battery Safety

Burn Hazards

Battery contains acid. Always wear protective clothing and eyewear when working with batteries.

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

Explosion Hazard

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

Electrocution Hazard

Avoid contact with electrical terminals.

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 *Genie Z-45/22 Service Manual*.

Be sure all decals are in place and legible.

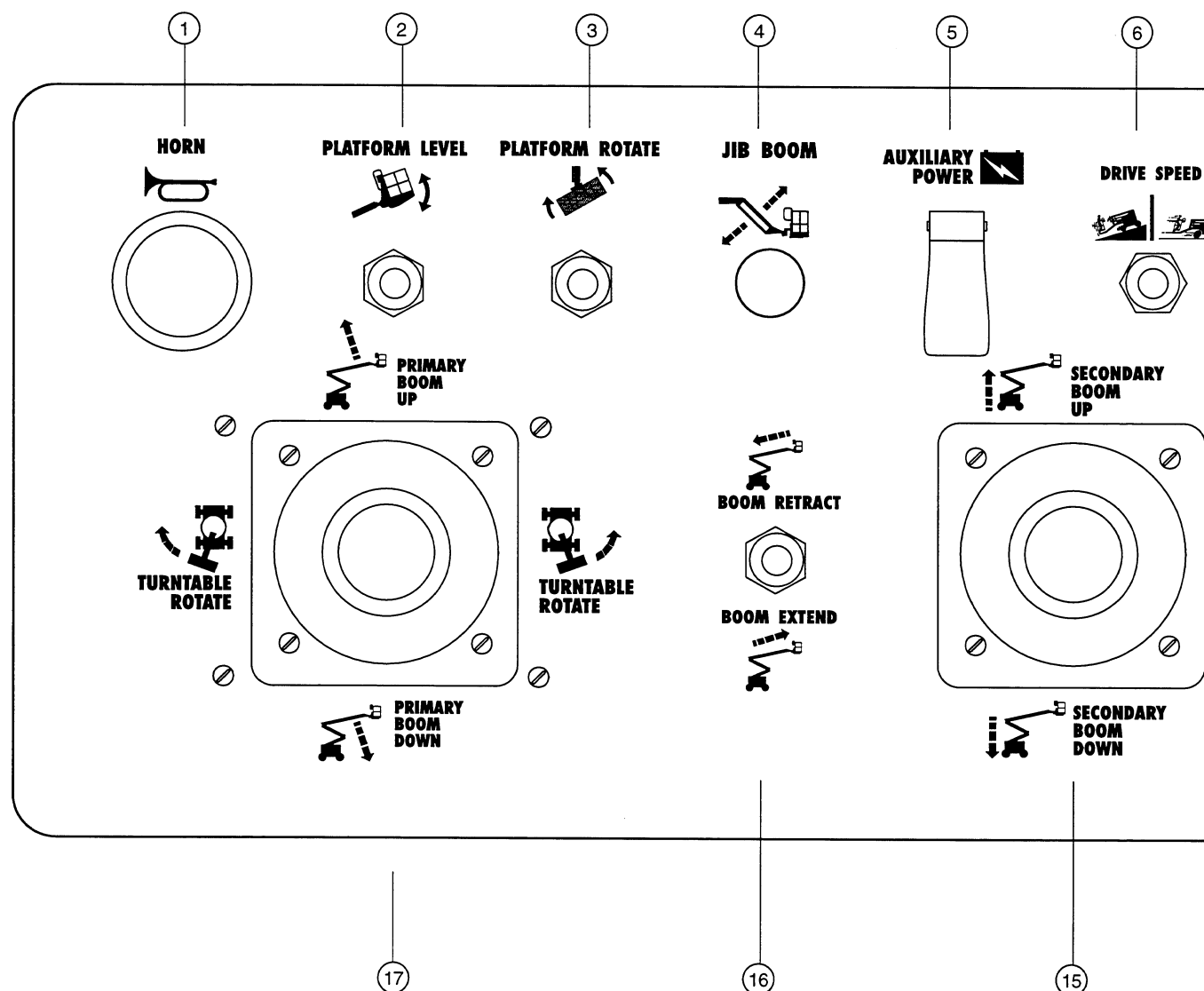
Be sure safety and operator's manuals are complete, legible and in the storage container located on the platform.

Decal Legend

Genie product decals use color coding and signal words to identify the following:

▲ DANGER	Red—used to indicate the presence of a hazard that will cause death or serious injury.
▲ WARNING	Orange—used to indicate the presence of a hazard that may cause death or serious injury.
▲ CAUTION	Yellow—used to indicate the presence of a hazard that will or may cause serious injury or damage to the machine.
NOTICE	Green—used to indicate operation or maintenance information.

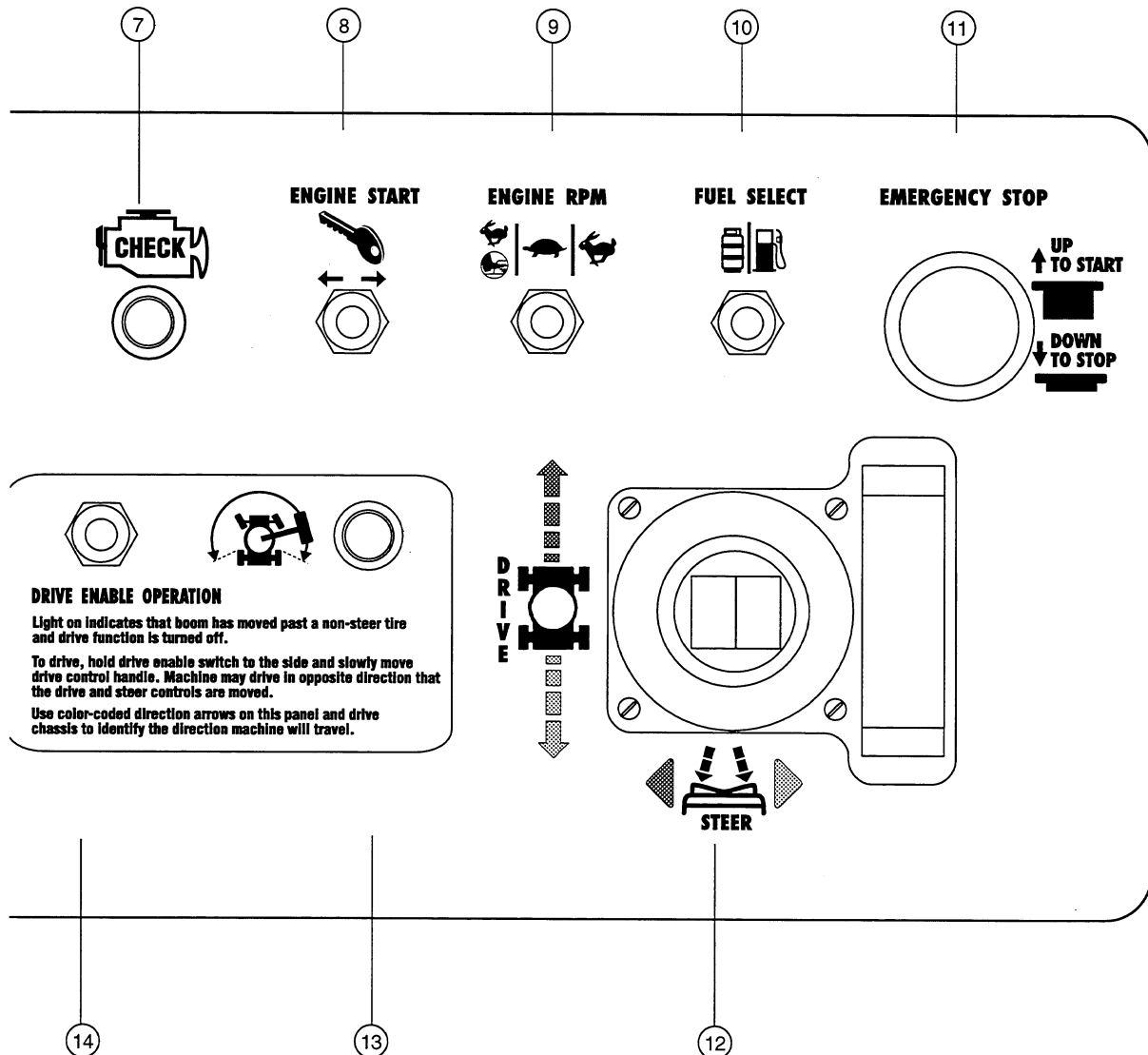
Controls



Platform Control Panel

- | | |
|---|--|
| 1 Service horn button | 7 Check engine light |
| 2 Platform level switch | 8 Engine start switch |
| 3 Platform rotate switch | 9 Engine idle (rpm) select switch |
| 4 Jib boom not available on this model
(used for optional equipment) | <ul style="list-style-type: none"> · Rabbit & Foot Switch: foot switch activated high idle · Turtle: low idle · Rabbit: high idle |
| 5 Auxiliary power switch with cover | |
| 6 Drive speed select switch | |

CONTROLS



10 Gasoline/LPG models: Gasoline/LPG select switch
Deutz Diesel models: Glow plug switch (option)

11 Emergency Stop button

12 Proportional control handle for drive function and thumb rocker for steer function

13 Drive enable indicator light

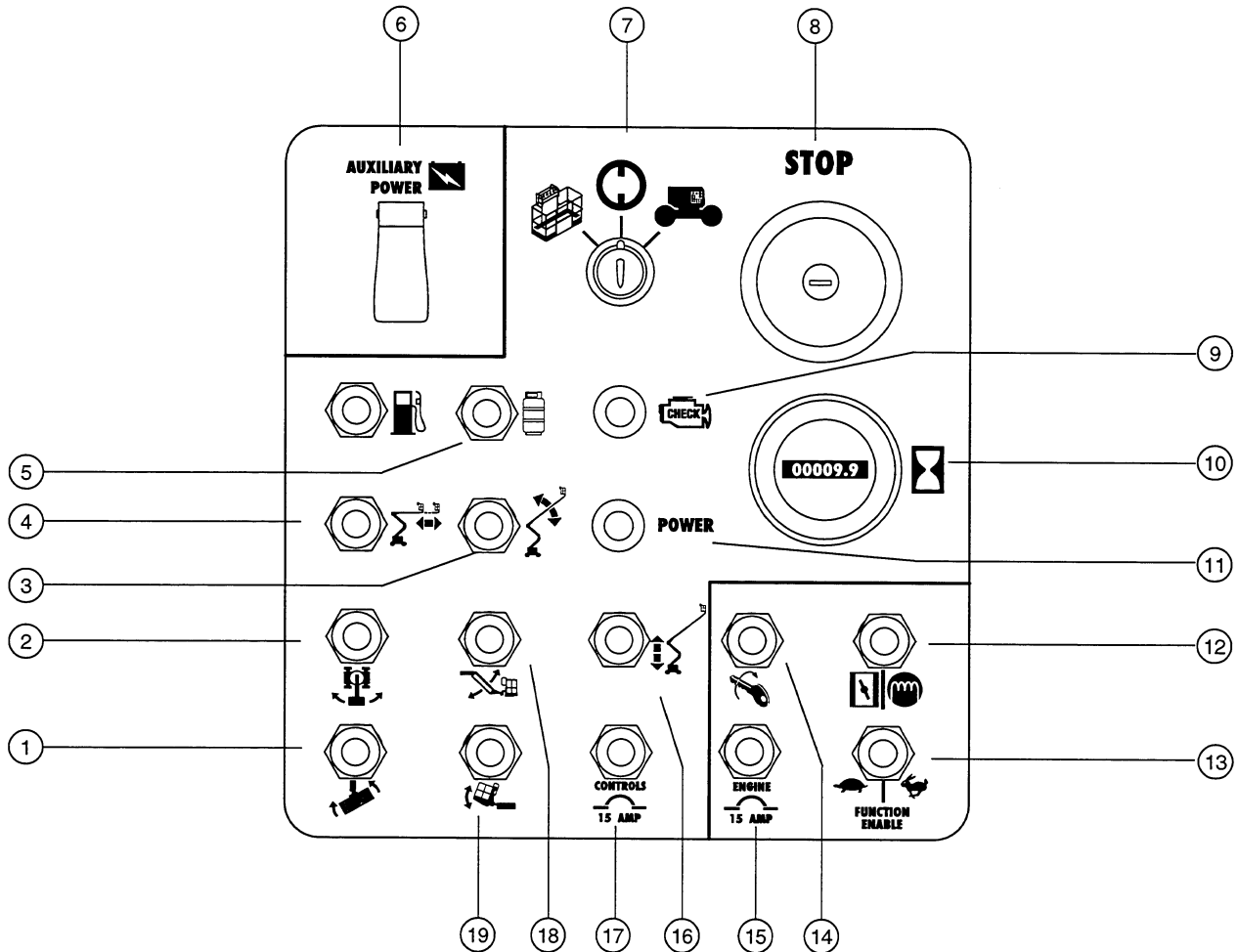
14 Drive enable switch

15 Proportional control handle for secondary boom up/down function

16 Primary boom extend/retract switch

17 Dual axis proportional control handle for primary boom up/down and turntable rotate left/right functions

CONTROLS

**Ground Control Panel**

- | | |
|---|--|
| 1 Platform rotate switch | 11 Power light |
| 2 Turntable rotate switch | 12 Gasoline/LPG models: Choke switch
Deutz Diesel models: Glow plug switch (option) |
| 3 Primary boom up/down switch | 13 Function enable switch |
| 4 Primary boom extend/retract switch | 14 Engine start switch |
| 5 Fuel select switch - gasoline/LPG models | 15 15A breaker for engine electrical circuits |
| 6 Auxiliary power switch with cover | 16 Secondary boom up/down switch |
| 7 Keyswitch for platform/off/ground selection | 17 15A breaker for control electrical circuits |
| 8 Emergency Stop button | 18 Jib boom not available on this model |
| 9 Check engine light | 19 Platform level switch |
| 10 Hour meter | |

Pre-operation Inspection



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 above principles before going on to the next section.

3 Always perform function tests prior to use.

4 Inspect the work place.

5 Only use the machine as it was intended.

Fundamentals

It is the responsibility of the operator to perform a Pre-operation Inspection.

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 tests it.

Refer to the list on page 10 and check each of the items and locations for modifications, damage or loose or missing parts.

A damaged or modified machine must never be used. If damage or any 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 manuals.

PRE-OPERATION INSPECTION

Pre-operation Inspection

- ❑ Be sure that the operator's, the safety and the responsibilities manuals are legible and in the storage container located on the platform.
- ❑ Be sure that all decals are legible and in place (see Decals, page 21).
- ❑ Check the engine oil, hydraulic oil, coolant and fuel levels. Check for leaks.

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

- ❑ Electrical components, wiring and electrical cables
- ❑ Hydraulic hoses, fittings, cylinders and manifolds
- ❑ Fuel and hydraulic tanks
- ❑ Drive and turntable motors and torque hubs
- ❑ Boom wear pads
- ❑ Tires and wheels
- ❑ Engine and related components
- ❑ Limit switches, alarms, horn and beacon
- ❑ Nuts, bolts and other fasteners
- ❑ Platform entry mid-rail/gate

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.
- ❑ After you complete your inspection, be sure that all compartment covers are in place and secured.

Function Tests



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 above principles before going on to the next section.

4 Inspect the work place.

5 Only use the machine as it was intended.

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.

Symbol Legend

- ⊙ Indicates that a specific result is expected after performing a series of steps.

FUNCTION TESTS

- 1 Select a test area that is firm, level and free of obstruction.

At the Ground Controls

- 2 Turn the key switch to ground control.
- 3 Pull out the red Emergency Stop button to the ON position.
- ⦿ Result: Beacon (if equipped) should flash.
- 4 Start the engine (see *Starting The Engine*, page 17).

Test Emergency Stop

- 5 Push in the red Emergency Stop button to the OFF position.
- ⦿ Result: Engine should turn off and all functions should not operate.
Deutz Diesel models: The engine will shut off after 2 to 3 seconds.
- 6 Pull out the red Emergency Stop button to the ON position and restart the engine.

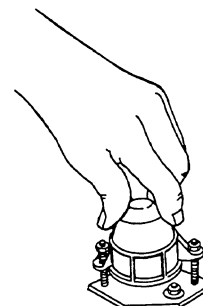
Test the Machine Functions

- 7 Do not hold the function enable switch to either side. Attempt to activate each boom and platform function toggle switch.
- ⦿ Result: All boom and platform functions should **not** operate.
- 8 Hold the function enable switch to either side and activate each boom and platform function toggle switch.
- ⦿ Result: All boom and platform functions should operate through a full cycle. Descent alarm (if equipped) should sound while boom is lowering.

Machines equipped with Platform Level Control Disable Function: The platform level toggle switch will not operate when the primary boom is raised past the drive speed limit switch.

Test the Tilt Sensor

- 9 Pull out the platform red Emergency Stop button to the ON position. Turn the key switch to platform control.
- 10 Open the engine side turntable cover and locate the tilt sensor next to the control box.

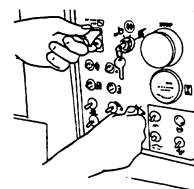


- 11 Press down one side of the tilt sensor.

- ⦿ Result: The alarm, located in the platform, should sound.

Test Auxiliary Controls

- 12 Turn the key switch to ground control and shut the engine off.
- 13 Pull out the red Emergency Stop button to the ON position.
- 14 Lift the red auxiliary power switch cover.
- 15 Simultaneously hold the auxiliary power switch on and activate each boom function toggle switch.



Note: To conserve battery power, test each function through a partial cycle.

- ⦿ Result: All boom functions should operate.

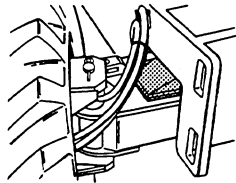
Note: Oscillating axle equipped machine only. From the stowed position, auxiliary power can not raise the primary boom above the drive limit switch. Auxiliary power can raise the primary boom if already raised above the drive limit switch.

FUNCTION TESTS

Test Oscillate Lock-out (if equipped)

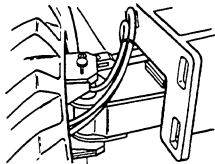
- 16 Start the engine and raise the primary boom approximately 2 feet (61 cm).

- ⊙ Result: The oscillation lock-out wedges should fully extend.



- 17 Lower the primary boom to the stowed position.

- ⊙ Result: The oscillation lock-out wedges should fully retract.

**At the Platform Controls****Test Emergency Stop**

- 18 Turn the key switch to platform control and restart the engine.
- 19 Push in the platform red Emergency Stop button to the OFF position.
- ⊙ Result: The engine should turn off and all functions should not operate.
Deutz Diesel models: The engine will shut off after 2 or 3 seconds.
- 20 Pull out the red Emergency Stop button and restart the engine.

Test the Service Horn

- 21 Push the horn button.
- ⊙ Result: The service horn should sound.

Test the Foot Switch

- 22 Push in the platform Emergency Stop button to the OFF position.
- 23 Pull out the Emergency Stop button to the ON position but do not start the engine.

- 24 Press down the foot switch and attempt to start engine by moving the start toggle switch to either side.

- ⊙ Result: The engine should **not** start.
- 25 Do not press down the foot switch and restart engine.
- ⊙ Result: The engine should start.
- 26 Move the lift/drive select switch to the lift position (if equipped).
- 27 Do not press down the foot switch. Then test each machine function.

- ⊙ Result: The machine functions should **not** operate.

Test Machine Functions

- 28 Move the lift/drive select switch to the lift position (if equipped).
- 29 Press down the foot switch.
- 30 Activate each machine function control handle or toggle switch.
- ⊙ Result: All boom/platform functions should operate through a full cycle.

Machines equipped with Platform Level Control Disable Function: The platform level toggle switch will not operate when the primary boom is raised past the drive speed limit switch.

Test the Steering

- 31 Move the lift/drive select switch to the drive position (if equipped).
- 32 Press down the foot switch.
- 33 Depress the thumb rocker switch on top of the drive control handle in the direction identified by the blue triangle on the control panel.
- ⊙ Result: The steer wheels should turn in the direction that the blue triangles point on the drive chassis.

FUNCTION TESTS

34 Depress the thumb rocker switch in the direction identified by the yellow triangle on the control panel.

- ⦿ Result: Steer wheels should turn in the direction that the yellow triangles point on the drive chassis.

Test Drive and Braking

35 Move the lift/drive select switch to the drive position (if equipped).

36 Press down the foot switch.

37 Slowly move the drive control handle in the direction indicated by the blue arrow on the control panel 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 on the drive chassis, then come to an abrupt stop.

38 Slowly move the drive control handle in the direction indicated by the yellow arrow on the control panel 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 on the drive chassis, then come to an abrupt stop.

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

Test the Drive Enable System

39 Move the lift/drive select switch to the lift position (if equipped).

40 Press down the foot switch. Then lower the boom to the stowed position.

41 Rotate the turntable until the primary boom moves past one of the non-steering wheels.



- ⦿ Result: The drive enable indicator light should come on and remain on while the boom is anywhere in the range shown.

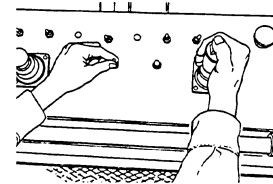


42 Move the lift/drive select switch to the drive position (if equipped).

43 Move the drive control handle off center.

- ⦿ Result: The drive function should **not** operate.

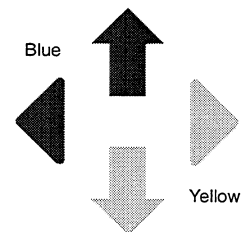
44 Move and hold the drive enable toggle switch to either side and slowly move the drive control handle off center.



- ⦿ Result: The drive function should operate.

Note: When the drive enable system is in use, the machine may drive in the opposite direction that the drive and steer control handle is moved.

Use the color-coded direction arrows on the platform controls and the drive chassis to identify the direction of travel.



FUNCTION TESTS

Test Limited Drive Speed

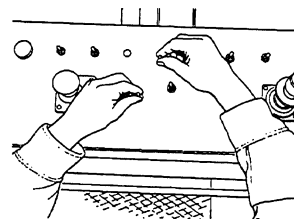
- 45 Move the lift/drive select switch to the lift position (if equipped).
- 46 Press down the foot switch.
- 47 Raise the primary boom approximately 2 feet (61 cm).
- 48 Move the lift/drive select switch to the drive position (if equipped).
- 49 Slowly move the drive control handle to the full drive position.
- ⊙ Result: The maximum achievable drive speed with the primary boom raised should not exceed 1 foot per second (0.3 meters per second).
- 50 Move the lift/drive select switch to the lift position (if equipped).
- 51 Lower the primary boom to the stowed position.
- 52 Raise the secondary boom approximately 2 feet (61 cm).
- 53 Move the lift/drive select switch to the drive position (if equipped).
- 54 Slowly move the drive control handle to the full drive position.
- ⊙ Result: The maximum achievable drive speed with the secondary boom raised should not exceed 1 foot per second (0.3 meters per second).

If the drive speed with the primary boom raised or the secondary boom raised exceeds 1 foot per second (0.3 meters per second), immediately tag and remove the machine from service.

- 55 Move the lift/drive select switch to the lift position (if equipped).
- 56 Lower the secondary boom to the stowed position.

Test Auxiliary Controls

- 57 Shut the engine off.
- 58 Pull out the red Emergency Stop button to the ON position.
- 59 Move the lift/drive select switch to the lift position (if equipped).
- 60 Press down the foot switch.
- 61 Lift the red auxiliary power switch cover.
- 62 Simultaneously hold auxiliary power switch on and activate each function control handle or toggle switch.



Note: To conserve battery power, test each function through a partial cycle.

- ⊙ Result: All boom and steer functions should operate. Drive functions should not operate with auxiliary power.

Test the Lift/Drive Select Switch (if equipped)

- 63 Move the lift/drive select switch to the lift position.
- 64 Press down the foot switch.
- 65 Move the drive control handle off center.
- ⊙ Result: No drive functions should operate.
- 66 Activate each boom function toggle switch.
- ⊙ Result: All boom functions should operate.
- 67 Move the lift/drive select switch to the drive position.
- 68 Press down the foot switch.
- 69 Activate each boom function toggle switch.
- ⊙ Result: No boom functions should operate.
- 70 Move the drive control handle off center.
- ⊙ Result: The drive functions should operate.
- 71 Repair any malfunctions before operating the machine.

Work Place Inspection



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 work place.

Know and understand the above principles before going on to the next section.

- 5 Only use the machine as it was intended.

Work Place Inspection

Be aware of and avoid the following hazardous situations:

- drop-offs or holes
- bumps, floor obstructions or debris
- 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

Fundamentals

The Work Place Inspection helps the operator determine if the work place is suitable for safe machine operation. It should be performed by the operator prior to moving the machine to the work place.

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

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 work place.
- 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.

Using the machine for anything other than lifting personnel and tools to an aerial work site is unsafe and dangerous.

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 work place inspection before using the machine.

Starting the Engine

- 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 Gasoline/LPG models: Choose fuel by moving the fuel select switch to the desired position.
- 4 Move the engine start toggle switch to either side. If engine fails to start or dies, the restart delay will disable the start switch for 3 seconds.



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

All models: In extreme cold conditions, 20°F (-6°C) and below, warm engine for 5 minutes to prevent hydraulic system damage.

Gasoline/LPG models: In extreme cold conditions, 20°F (-6°C) and below, machine should be started on gasoline, then switched to LPG.

Emergency Stop

Push in either ground or platform red Emergency Stop button to the OFF position to stop all functions and turn engine off.

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

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

OPERATING INSTRUCTIONS

Auxiliary Controls

Use auxiliary power if the primary power source (engine) fails.

- 1 Turn the key switch to ground or platform control.
- 2 Pull out the red Emergency Stop button to the ON position.
- 3 Move the lift/drive select switch to the lift position when operating the auxiliary controls from the platform.
- 4 Press down the foot switch when operating the auxiliary controls from the platform.
- 5 Simultaneously hold auxiliary power switch ON and activate desired function.

The drive and steer functions will not operate with auxiliary power.

Operation from Ground

- 1 Turn the key switch to ground control.
- 2 Pull out the red Emergency Stop button to the ON position.
- 3 Gasoline/LPG models: Choose fuel by moving fuel select switch to desired position.
- 4 Start the engine.

To Position Platform

- 1 Hold the function enable switch to either side.
- 2 Move the appropriate toggle switch according to markings on the control panel.

Drive and steer functions are not available from the ground controls.

Machines equipped with Platform Level Control Disable Function: The platform level toggle switch will not operate when the primary boom is raised past the drive speed limit switch.

Operation from Platform

- 1 Turn the key switch to platform control.
- 2 Pull out both ground and platform red Emergency Stop buttons to the ON position.
- 3 Gasoline/LPG models: Choose fuel by moving fuel select switch to desired position.
- 4 Start engine. Do not press down the foot switch when starting engine.

To Position Platform

- 1 Move the lift/drive select switch to the lift position (if equipped).
- 2 Press down the foot switch.
- 3 Slowly move the appropriate function control handle or toggle switch according to the markings on the control panel.

Machines equipped with Platform Level Control Disable Function: The platform level toggle switch will not operate when the primary boom is raised past the drive speed limit switch.

To Steer

- 1 Move the lift/drive select switch to the drive position (if equipped).
- 2 Press down the foot switch.
- 3 Turn the steering wheels with the thumb rocker switch located on top of the drive control handle.

Use the color-coded direction arrows on the platform controls and the drive chassis to identify the direction wheels will turn.

OPERATING INSTRUCTIONS

To Drive

- 1 Move the lift/drive select switch to the drive position (if equipped).
- 2 Press down the foot switch.
- 3 Increase speed: Slowly move the drive control handle off center.

Decrease speed: Slowly move the drive control handle toward center.

Stop: Return the drive control handle to center or release the foot switch.

Use the color-coded direction arrows on the platform controls and the drive chassis to identify the direction machine will travel.

Machine travel speed is restricted when the booms are raised.

Drive Enable

Light on indicates that the boom has moved just past either non-steering wheel and drive function has been interrupted.

To drive, hold the drive enable switch to either side and slowly move the drive control handle off center.

Be aware that the machine may move in the opposite direction that the drive and steer controls are moved.

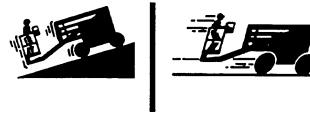
Always use the color-coded direction arrows on the platform controls and the drive chassis to identify the direction machine will travel.

Generator

To operate generator, move the generator toggle switch to the generator position. The engine will continue to run but no drive or platform functions will operate.

Plug power tool into the power to platform GFCI outlet.

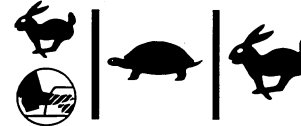
To resume machine functions, move generator toggle switch to machine functions position. All functions will operate.

Drive Speed Select

- Machine on incline symbol: Low range operation for inclines
- Machine on level surface symbol: High range operation for maximum drive speed

Engine Idle Select (rpm)

Select engine idle (rpm) using the symbols on the control panel.



- Rabbit and foot switch symbol: foot switch activated high idle
- Turtle symbol: low idle
- Rabbit symbol: high idle

Check Engine Light (if equipped)

Light on and engine stopped: Tag the machine and remove from service.

Light on and engine still running: Contact service personnel within 24 hours.

Stopping the Engine

Push in the red Emergency Stop button and turn the key switch to the OFF position.

After Each Use

- 1 Select a safe parking location—firm level surface, clear of obstruction and traffic.
- 2 Retract and lower the boom to the stowed position.
- 3 Rotate the turntable so that the boom is between the non-steering wheels.
- 4 Turn the key switch to the OFF position and remove the key to secure from unauthorized use.
- 5 Chock the wheels.

OPERATING INSTRUCTIONS



Transport Instructions Observe and Obey:

- ☒ Transport vehicle must be parked on a level surface.
- ☒ Transport vehicle must be secured to prevent rolling while machine is being loaded.
- ☒ Be sure vehicle capacity, loading surfaces and chains or straps are sufficient to withstand machine weight (see *Specifications*, page 23).

Securing to Truck or Trailer for Transit

Always chock machine wheels in preparation for transport.

Use tie points on drive chassis for anchoring down to transport surface.

Use rotator guard under platform to secure boom from side-to-side movement. Do not use excessive downward force when securing boom section.

Use chains or straps of ample load capacity.

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

Inspect entire machine for loose or unsecured items.

Free-wheel Configuration for Winching

Chock wheels to prevent machine from rolling.

Release non-steer wheel brakes by turning over torque hub disconnect caps (see below).

4WD models: Open pump free-wheel valve by turning counterclockwise two turns (see below).

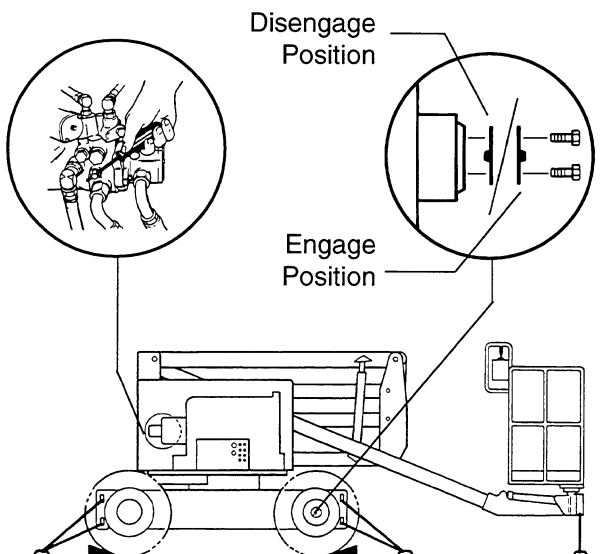
Be sure winch line is properly secured to drive chassis tie points and path is clear of all obstructions.

Reverse procedures described to re-engage brakes.

4WD models: Close pump free-wheel valve by turning clockwise two turns.

2WD models: The pump free-wheel valve should always remain closed.

Note: Towing the Genie Z-45/22 is not recommended. If the machine must be towed, do not exceed 2 mph (3.2 km/h).



Decals

Decal Inspection

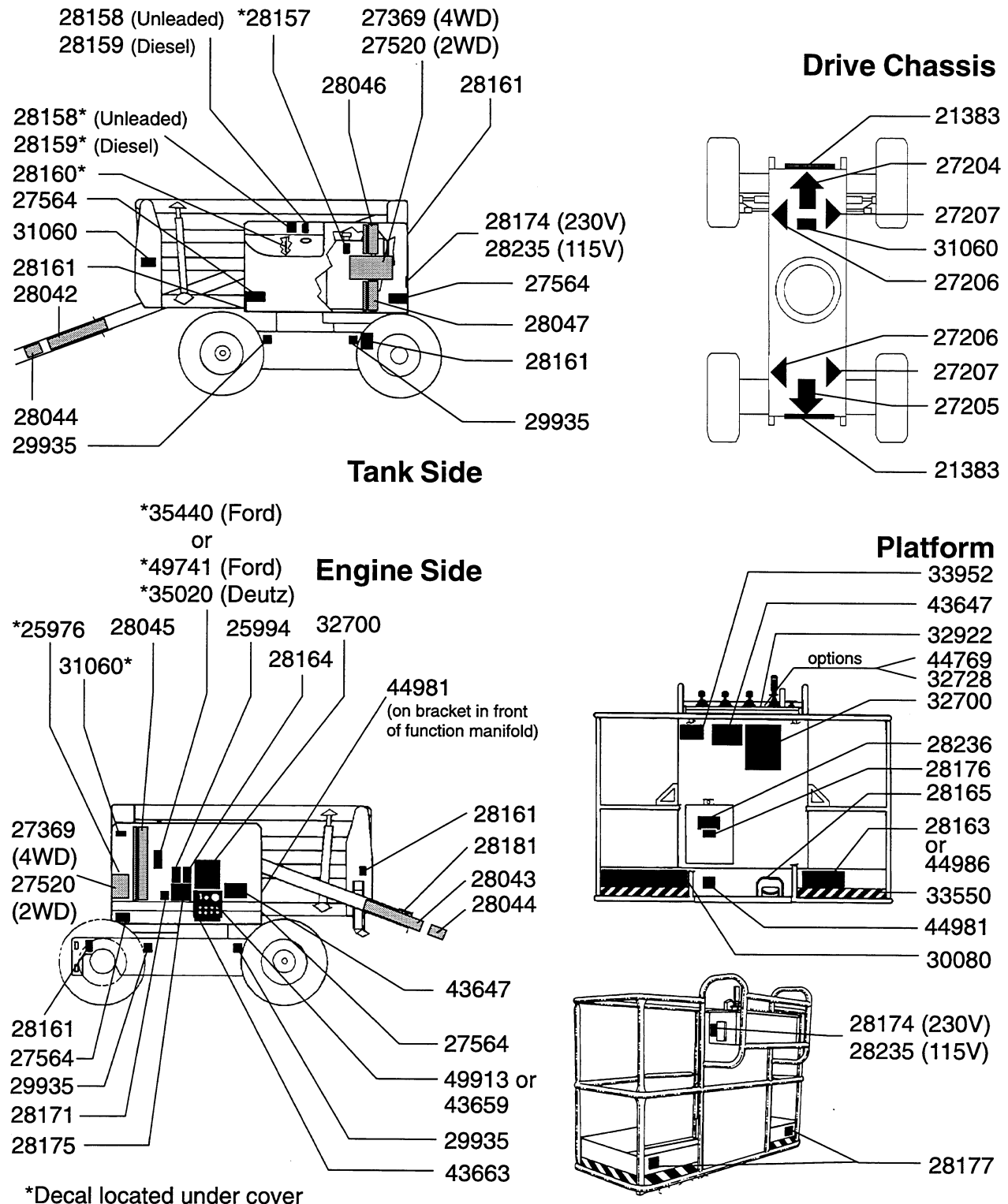
Use the pictures on this and the next page to verify that all decals are legible and in place.

Below is a numerical list with quantities and descriptions.

Part No.	Decal Description	Quantity
25976	Serial Number Plate	1
25994	Caution - Component Damage Hazard	1
27204	Arrow - Blue	1
27205	Arrow - Yellow	1
27206	Triangle- Blue	2
27207	Triangle - Yellow	2
27564	Danger - Electrocution Hazard	4
28157	Label - Dexron	1
28158	Label - Unleaded	2
28159	Label - Diesel	2
28160	Label - Liquid Petroleum Gas	1
28161	Danger - Crushing Hazard	5
28163	Notice - Max Side Force - 150 lbs	1
28164	Notice - Hazardous Materials	1
28165	Notice - Foot Switch	1
28171	Label - No Smoking	1
28174	Power to Platform, 230V	2
28175	Caution - Compartment Access	1
28176	Notice - Missing Manuals	1
28177	Warning - Platform Rotate	2
28181	Warning - No Step or Ride	1
28235	Power to Platform, 115V	2
28236	Warning - Failure To Read . . .	1
29935	Label - Tire Pressure	4
30080	Notice - Maximum Load	1

Part No.	Decal Description	Quantity
31060	Danger - Tip-over Hazard, Interlock	3
31060	Danger - Tip-over (CTE option)	+1
32700	Danger - Safety Rules	2
32728	Generator (option)	1
35020	Notice - Deutz Diesel Specifications	1
35440	Notice - Ford Engine Spec LRG 423	1
32922	Platform Control Panel	1
33550	Safety Tape	—
33952	Danger - Tilt-Alarm	1
43647	Notice - Operating Instructions	2
43659	Ground Control Panel	1
43663	Notice - Function Enable	1
44769	Lift/Drive Select (option)	1
44981	Airline to Platform	2
44986	Notice - Max Manual Force - 90 lbs	1
49741	Notice - Ford Engine Spec LRG-425 EFI	1
49913	Ground Control Panel	1

DECALS

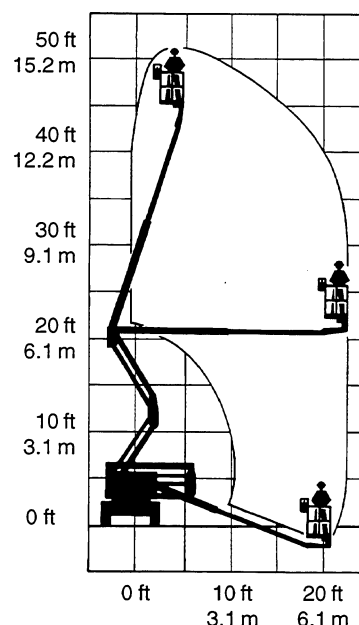


Specifications

Model	2WD	4WD
Height, working maximum	51 ft 15.5 m	51 ft 15.5 m
Height, platform maximum	45 ft 13.7 m	45 ft 13.7 m
Height, stowed maximum	6 ft 6 in 2.0 m	7 ft 4 in 2.2 m
Horizontal reach maximum	23 ft 7 m	23 ft 7 m
Width	5 ft 11 in 1.8 m	7 ft 2.1 m
Length, stowed	17 ft 8½ in 5.4 m	17 ft 11 in 5.5 m
Maximum load capacity 6 foot platform	500 lb 227 kg	500 lb 227 kg
Wheelbase	6 ft 3 in 1.9 m	6 ft 3 in 1.9 m
Turning radius (outside)	14 ft 4 in 4.4 m	14 ft 9 in 4.5 m
Turning radius (inside)	7 ft 2.1 m	6 ft 9 in 2.1 m
Turntable rotation (degrees)	359°	
Turntable tailswing	1 in 2.5 cm	0 in 0 cm
Power source (choice)	Ford 63 Hp Gasoline/LPG LRG-423 or LRG 425 EFI Deutz 36 Hp Diesel F3L 1011	
Drive speed, stowed Gasoline/LPG models	5.0 mph 8.0 km/h 40 ft/5.5 sec 12.2 m/5.5 sec	4.8 mph 7.7 km/h 40 ft/5.7 sec 12.2 m/5.7 sec
Drive speed, stowed Deutz Diesel models	4.4 mph 7.1 km/h 40 ft/6.2 sec 12.2 m/6.2 sec	4.2 mph 6.8 km/h 40 ft/6.5 sec 12.2 m/6.5 sec
Drive speed, booms raised - all models	0.68 mph 1.1 km/h 40 ft/40 sec 12.2 m/40 sec	0.68 mph 1.1 km/h 40 ft/40 sec 12.2 m/40 sec
Airborne noise emissions	80 dB	
Maximum sound level at normal operating workstations (A-weighted)		

Model	2WD	4WD
Controls	12V DC proportional	
Platform dimensions, 6 foot (length x width)	72 in x 30 in 1.8 m x 76 cm	72 in x 30 in 1.8 m x 76 cm
Platform leveling	self-leveling	self-leveling
Platform rotation	180°	180°
AC outlet in platform	standard	standard
Hydraulic pressure (maximum) (boom functions)	2200 psi 151 bar	2000 psi 138 bar
Hydraulic pressure (maximum) (drive functions)	3500 psi 241 bar	3500 psi 241 bar
Tire size, 2WD	9-14.5 12 ply	
Tire size, 4WD	14-17.5 8 ply	
Gradeability, stowed	30%	40 %
Ground clearance	8 in 20 cm	12 in 30.5 cm
Hydraulic tank capacity	25 gallons	94.6 liters
Fuel tank capacity	15 gallons	56.8 liters
Weight	13,860 lbs 6,287 kg	14,410 lb 6,536 kg

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



California Proposition 65

WARNING

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



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