
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 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:

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

employer's safety rules and worksite regulations

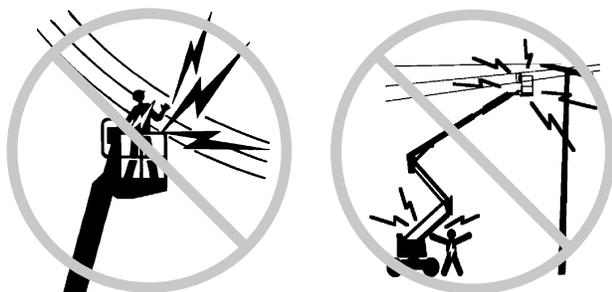
applicable governmental regulations

- 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	Minimum Safe Approach Distance	
	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.

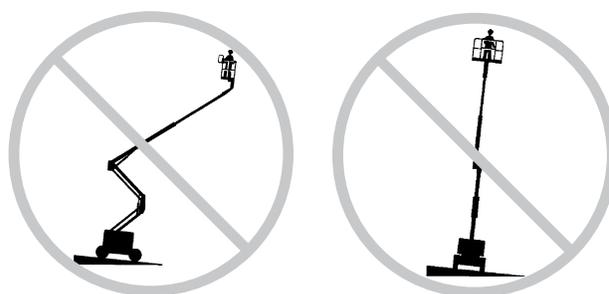
Keep away from the machine if it contacts energized power lines. Personnel on the ground or in the platform must not touch or operate the machine until energized power lines are shut off.

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 the tilt alarm as a level indicator. The tilt alarm sounds in the platform only when the machine is on a severe slope.

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

Do not alter or disable the limit switch(es).

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
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Maximum allowable side force - CE	90 lbs 400 N
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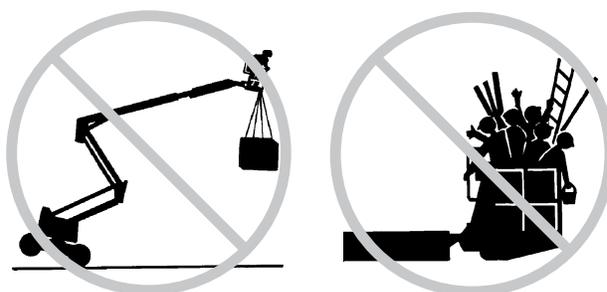


Do not alter or disable machine components that in any way affect safety and stability.

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.

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



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

Z-45/25 & Z-45/25J Narrow Base Models: Do not use air-filled tires. These machines are equipped with foam-filled tires. Wheel weight and proper counterweight configuration are critical to stability.

SAFETY RULES

- Do not use the machine as a crane.
- Do not push the machine or other objects with the boom.
- Do not contact adjacent structures with the boom.
- Do not tie the boom or platform to adjacent structures.
- Do not place loads outside the platform perimeter.

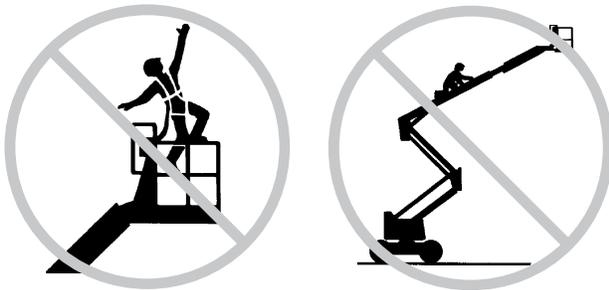
Fall Hazards



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

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.

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

Collision Hazards



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

Be aware of boom position when rotating the turntable.

Check the 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.

SAFETY RULES

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.

Explosion and Fire Hazards

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

Do not refuel the machine with the engine running.

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

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

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-45/25 & Genie Z-45/25J Service Manual*.

Be sure all decals are in place and legible.

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

Battery Safety

Burn Hazards

Batteries contain 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 batteries. Batteries emit explosive gas.

Electrocution Hazard

Avoid contact with electrical terminals.

Component Damage Hazards

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

Do not use the machine as a ground for welding.

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

SAFETY RULES

Decal Legend

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



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

▲ DANGER

Red—used to indicate the presence of an imminently hazardous situation which, if not avoided, will result in death or serious injury.

▲ WARNING

Orange—used to indicate the presence of a potentially hazardous situation which, if not avoided, could result in death or serious injury.

▲ CAUTION

Yellow with safety alert symbol—used to indicate the presence of a potentially hazardous situation which, if not avoided, may cause minor or moderate injury.

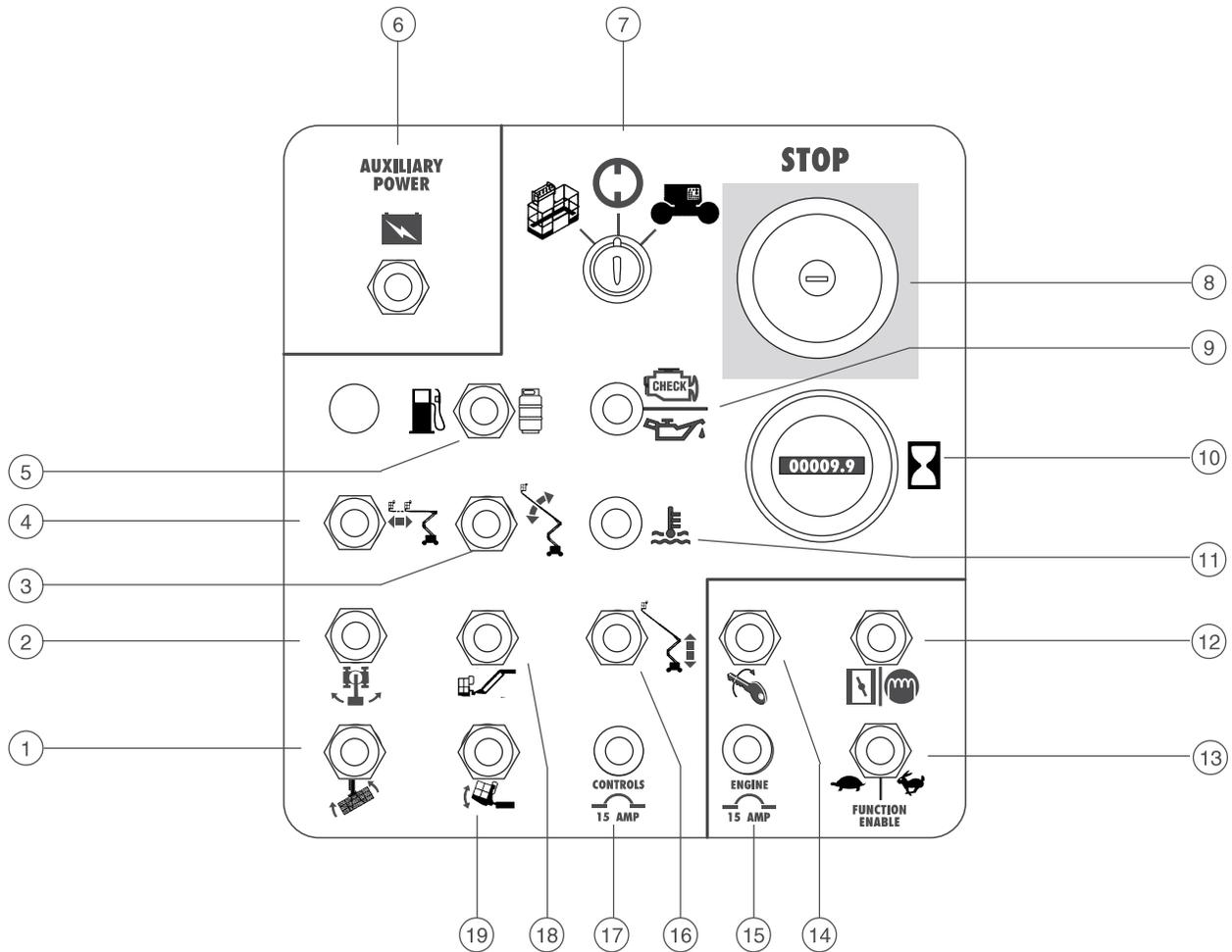
CAUTION

Yellow without safety alert symbol—used to indicate the presence of a potentially hazardous situation which, if not avoided, may result in property damage.

NOTICE

Green—used to indicate operation or maintenance information.

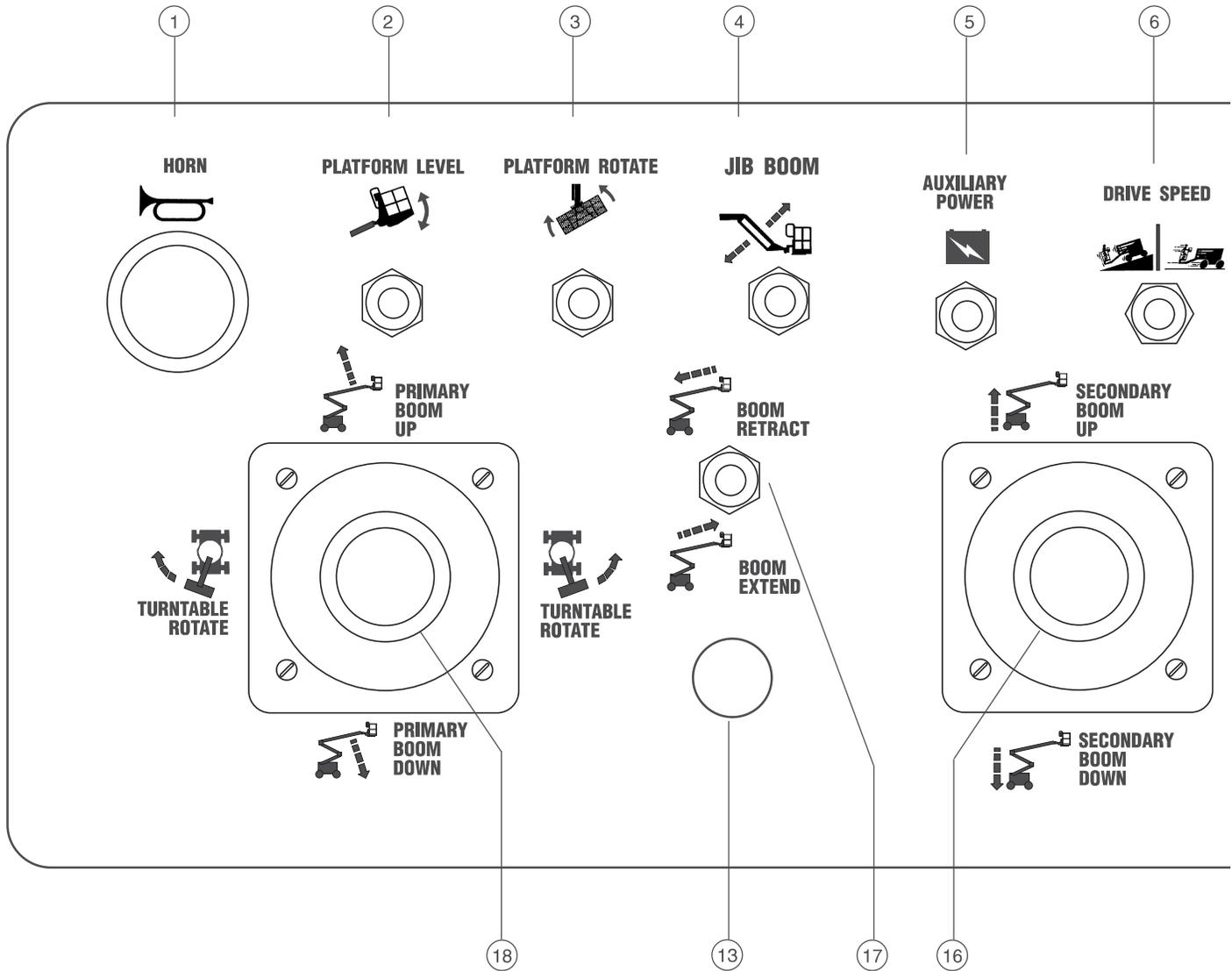
Controls



Ground Control Panel

- | | |
|--|--|
| <ul style="list-style-type: none"> 1 Platform rotate switch 2 Turntable rotate switch 3 Primary boom up/down switch 4 Primary boom extend/retract switch 5 Gasoline/LPG models: Fuel select switch 6 Auxiliary power switch 7 Key switch for platform/off/ground selection 8 Red Emergency Stop button 9 Gasoline/LPG models: Check engine light
Diesel models: Oil pressure light 10 Hour meter | <ul style="list-style-type: none"> 11 Diesel models: Water temperature light 12 Gasoline/LPG models: Choke switch
Diesel models: Glow plug switch (option) 13 Function enable switch 14 Engine start switch 15 15A breaker for engine electrical circuits 16 Secondary boom up/down switch 17 15A breaker for control electrical circuits 18 Z-45/25J models only: Jib boom up/down switch 19 Platform level switch |
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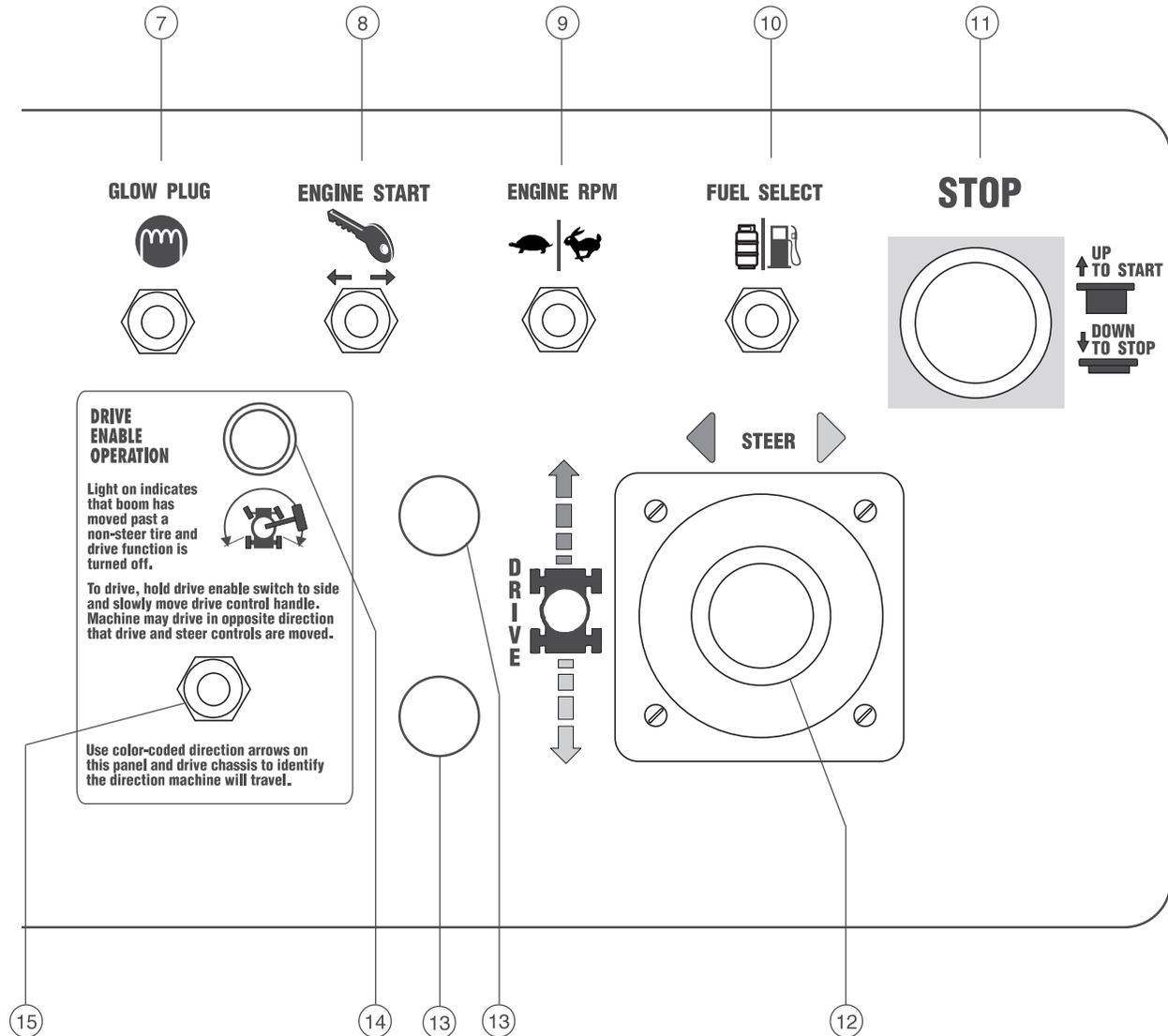
CONTROLS



Platform Control Panel

- | | |
|---|---|
| <ul style="list-style-type: none"> 1 Horn button 2 Platform level switch 3 Platform rotate switch 4 Z-45/25J models only: Jib boom up/down switch 5 Auxiliary power switch | <ul style="list-style-type: none"> 6 Drive speed select switch 7 Glow plug switch 8 Engine start switch 9 Engine idle (rpm) select switch 10 Gasoline/LPG models: Gasoline/LPG select switch |
|---|---|

CONTROLS



11 Red Emergency Stop button

12 Dual axis proportional control handle for drive and steer functions
OR Proportional control handle for drive function and thumb rocker for steer function

13 used for optional equipment

14 Drive enable indicator light

15 Drive enable switch

16 Proportional control handle for secondary boom up/down function

17 Primary boom extend/retract switch

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

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.

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 workplace inspection before using the machine.

OPERATING INSTRUCTIONS

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 the engine fails to start or dies, the restart delay will disable the start switch for 3 seconds.



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

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

Gasoline/LPG models: In extreme cold conditions, 20°F / -6°C and below, the 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 the engine off.

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

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

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 the 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 the fuel select switch to the desired position.
- 4 Start the engine.

OPERATING INSTRUCTIONS

To Position Platform

- 1 Hold the function enable switch to either side.
- 2 Move the appropriate toggle switch according to the 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 the fuel select switch to the desired position.
- 4 Start the engine. Do not press down the foot switch when starting the 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 Slowly move the control handle in the direction indicated by blue or yellow triangles
OR press 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 the wheels will turn.

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 the machine will travel.

Machine travel speed is restricted when the booms are raised.

OPERATING INSTRUCTIONS

Drive Enable

Light on indicates that the boom has moved just past either non-steer wheel and the 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 the machine will travel.

Generator

To operate the 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 a power tool into the power to platform GFCI outlet.

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

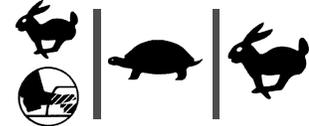
Drive Speed Select

- 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)

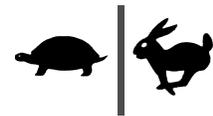
Select the engine idle speed (rpm) using the symbols on the control panel.

If your control panel looks like this:



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

If your control panel looks like this:



When the foot switch is not pressed, the engine will idle at the lowest rpm.

- Turtle symbol: Foot switch activated low idle
- Rabbit symbol: Foot switch activated high idle

OPERATING INSTRUCTIONS

**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-steer wheels.
- 4 Turn the key switch to the off position and remove the key to secure from unauthorized use.
- 5 Chock the wheels.