

**Genie Industries**

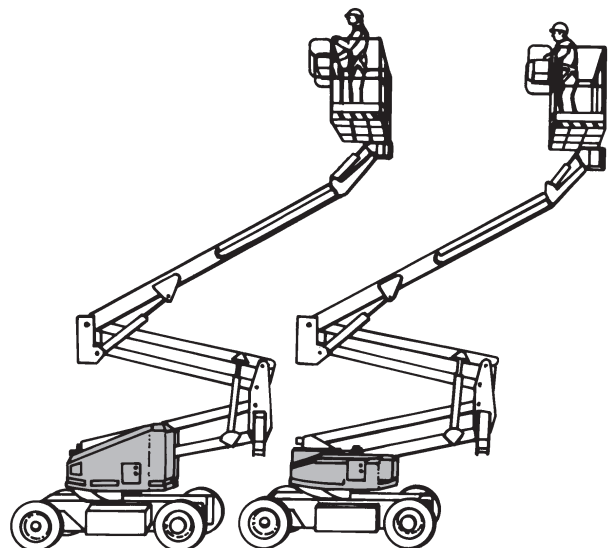


# Genie® Z-45/22

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## Operator's Manual

DC POWER  
BI-FUEL  
TRI-FUEL  
DIESEL  
GAS/LPG



First Edition, Second Printing  
Part No. 31063

# Genie® Z-45/22

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## 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. If you have any questions, call Genie Industries.

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## Verify Correct Manual

This operator's manual covers the Genie Z-45/22 models with the following power options introduced in 1993:

DC POWER  
BI-FUEL (Diesel/DC)  
TRI-FUEL (Gasoline/LPG/DC)  
DIESEL  
GAS/LPG

Look for the power option listed on the turntable cover or the serial number plate.

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## Genie Industries

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# Safety Rules

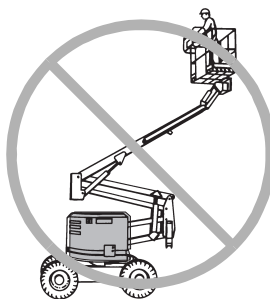


## Danger

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

## Do Not Operate Unless:

- ☒ You are trained to safely operate the machine.
- ☒ 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 inspect the entire machine for possible damage and test all machine functions for proper operation.



Do not use this operator's manual with the Genie Z-45/22 4WD and 2WD models introduced in 1991.

Compare turntable cover size and shape.

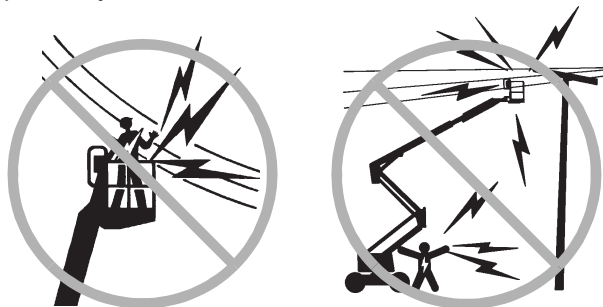
Do not read any further until you have verified that this is the correct operator's manual for this machine. See facing page. Contact Genie Industries if you have any questions.



## 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	Minimum Safe Approach Distance	
	Feet	Meters
Phase to Phase		
0 to 300V	Avoid Contact	
300V to 50KV	10	3.05
50KV to 200KV	15	4.60
200KV to 350KV	20	6.10
350KV to 500KV	25	7.62
500KV to 750KV	35	10.67
750KV to 1000KV	45	13.72

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

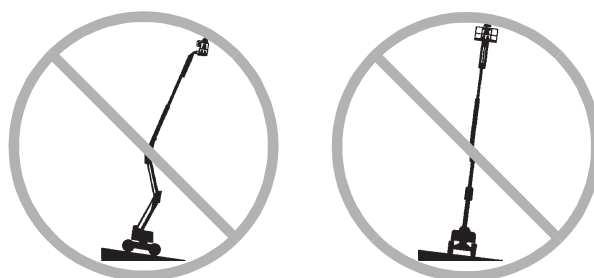
Keep away from the machine if it contacts energized power lines. Personnel on the ground or in the platform must not touch or operate the machine until energized power lines are shut off.

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 raise the boom in strong or gusty winds.

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

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

Be sure all tires are in good condition and air-filled tires are properly inflated.

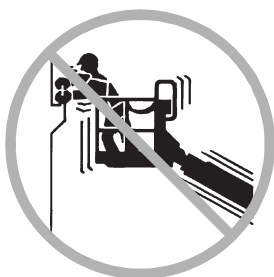
DC Power Models only: Batteries are used as counterweight and are critical to machine stability. Each battery must weigh 65 pounds (29.4 kg). Each battery box including batteries must weigh a minimum of 460 pounds (209 kg).

## SAFETY RULES

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

**Maximum allowable  
side force**

150 lbs  
667 N



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 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 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.

## Fall Hazards



Occupants must wear a safety belt or harness in accordance with governmental regulations. Attach lanyard to anchor provided in 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. If a power failure should occur, ground personnel should use the manual controls to lower platform.

Keep the platform floor clear of debris.

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

## Explosion and Fire Hazards

Do not operate machine 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 batteries only in an open, well-ventilated area away from sparks, flames and lighted tobacco.

Do not operate engine unless in a well-ventilated area to avoid carbon monoxide poisoning.

## SAFETY RULES

## Collision Hazards



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

Be aware of primary and secondary boom and platform 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 ground surface condition, congestion, slope, location of personnel, and any other factors which may cause collision.

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

## Component Damage Hazard

Do not use machine as a ground for welding.

## 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 legible and in the storage box 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 personal injury or damage to the machine.

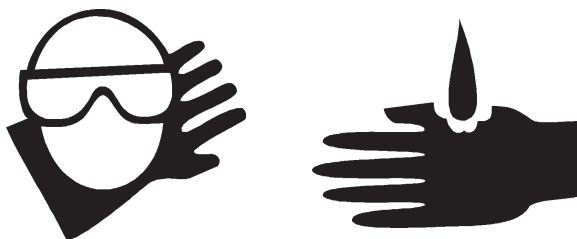
**NOTICE** Green—used to indicate operation or maintenance information.

## SAFETY RULES

## 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.

Battery pack must remain in upright position.

Do not expose battery or charger to water and/or rain.

### Explosion Hazards



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

The battery pack cover must remain off during charging.

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

### Component Damage Hazards

Do not use any battery charger greater than 36V to charge batteries.

Both battery packs must be charged together.

Disconnect battery pack plug before removing battery pack.

### Electrocution Hazards



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

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

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

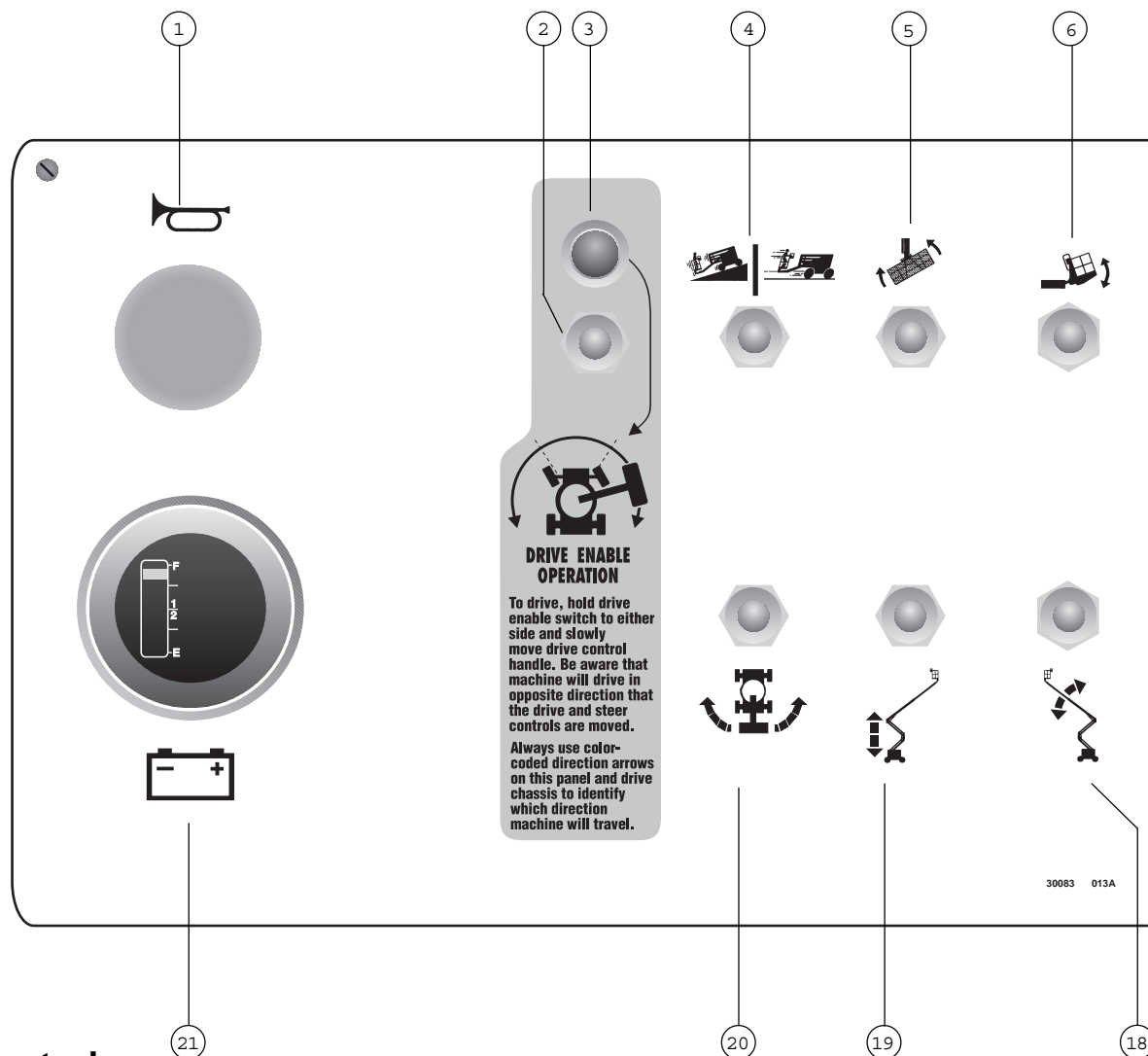
### Tip-over Hazard

DC Power Models only: Batteries are used as counterweight and are critical to machine stability. Each battery must weigh 65 pounds (29.4 kg). Each battery box including batteries must weigh a minimum of 460 pounds (209 kg).

### Lifting Hazard

Use a forklift to install or remove battery pack(s).

# Controls

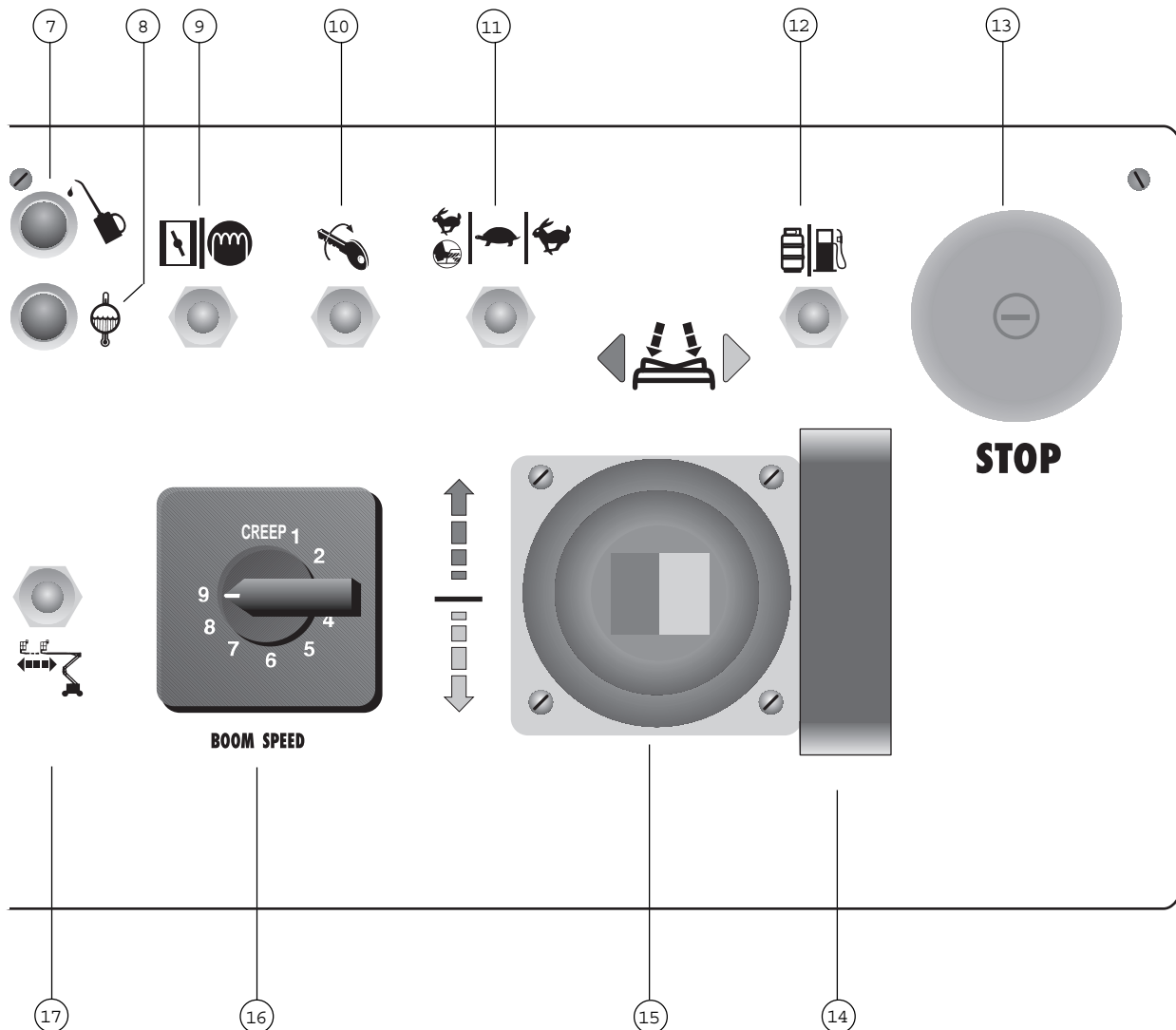


## Platform Controls

- |   |  |
|---|--|
| 1 Service horn button   | 7 Low engine oil pressure indicator light                                      |
| 2 Drive enable switch   | 8 Engine overheat indicator light  |
| 3 Drive enable indicator light  | 9 Choke switch - gasoline models only<br>Glow plug switch - diesel models only |
| 4 Drive select switch:  | 10 Engine start switch   |
| - Machine on incline symbol: Low range operation for inclines                   | 11 Engine idle (rpm) select switch   |
| - Machine on level surface symbol: High range operation for maximum drive speed | - Rabbit and foot switch symbol: foot switch activated high idle               |
| 5 Platform rotate switch  | - Turtle symbol: low idle  |
| 6 Platform level switch   | - Rabbit symbol: high idle   |



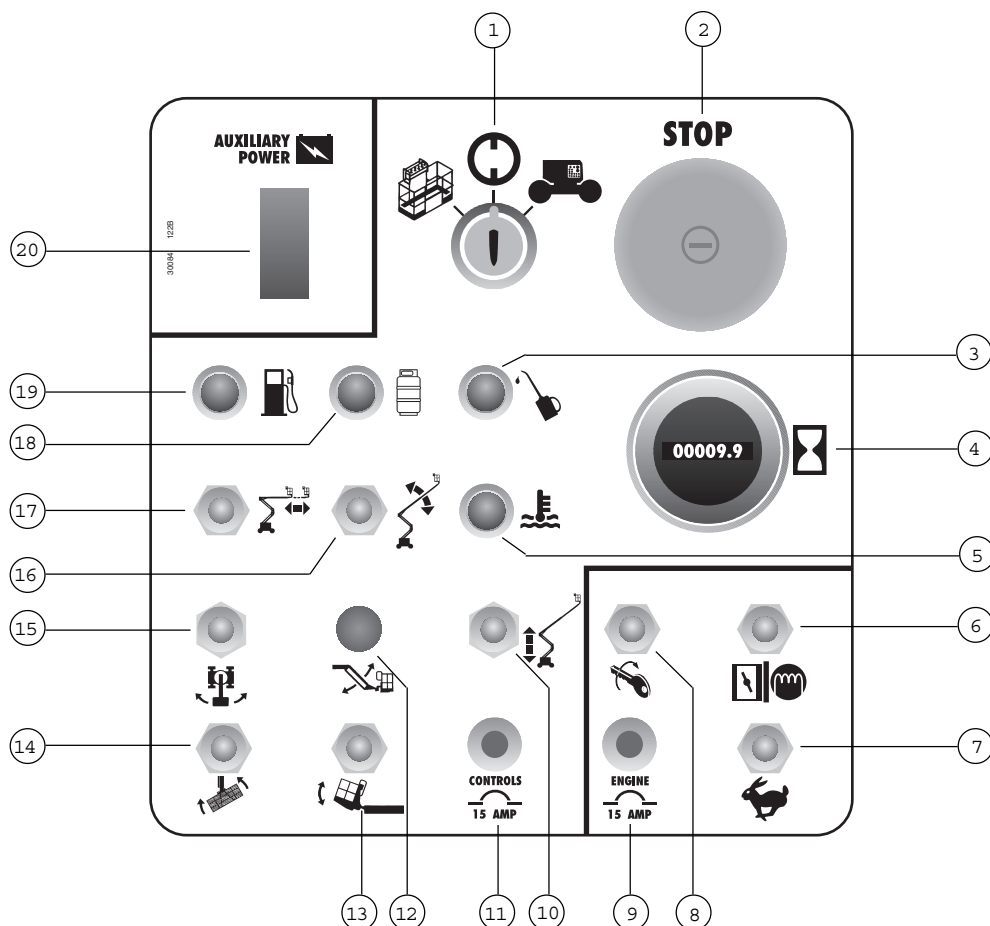
## CONTROLS



- 12 Fuel select switch: LPG/Gasoline
- 13 Emergency Stop button
- 14 Wrist rest for drive control handle
- 15 Drive proportional control handle with steering thumb rocker switch
- 16 Boom function speed controller
- 17 Primary boom extend/retract switch

- 18 Primary boom up/down switch
- 19 Secondary boom up/down switch
- 20 Turntable rotate left/right switch
- 21 Battery level gauge  
- models with DC power only

## CONTROLS

**Ground Controls**

- |  |  |
|--|--|
| 1 Controls select key switch   | 11 15A breaker for control electrical circuits                       |
| 2 Emergency Stop button  | 12 not used  |
| 3 Low engine oil pressure indicator light                                      | 13 Platform level switch   |
| 4 Hour meter (engine running only)   | 14 Platform rotate switch  |
| 5 Engine coolant overheat indicator light                                      | 15 Turntable rotate left/right switch                                |
| 6 Choke switch - gasoline models only<br>Glow plug switch - diesel models only | 16 Primary boom up/down switch                                       |
| 7 Engine high idle (rpm) switch  | 17 Primary boom extend/retract switch                                |
| 8 Engine start switch  | 18 Fuel selection indicator light, LPG<br>- gasoline/LPG models      |
| 9 15A breaker for engine electrical circuits                                   | 19 Fuel selection indicator light, gasoline<br>- gasoline/LPG models |
| 10 Secondary boom up/down switch   | 20 not used  |

# Pre-operation Inspection & Function Tests



## Observe and Obey:

- ☑ Conduct a thorough pre-operation inspection and function test before each work shift.
- ☑ Immediately tag and remove from service a damaged or malfunctioning machine.
- ☑ Repair any machine damage or malfunctions before operating machine.

## Pre-operation Inspection

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Be sure that all decals are legible and in place.

Be sure that operator's and safety manuals are legible and in the storage box located on the platform.

Check the engine oil, hydraulic oil, coolant and fuel levels.

Check for damage and improperly installed or missing parts:

- Electrical components, wiring and electrical cables
- Hydraulic power units, hoses, fittings, cylinders and manifolds
- Fuel and hydraulic tanks
- Drive and turntable motors and torque hubs
- Boom wear pads
- Dents or damage to machine
- Tires and wheels
- Engine and related components (if equipped)
- Limit switches
- Alarms, horn and beacon
- Nuts, bolts and other fasteners
- Platform entry mid-rail or gate
- Cracks in welds or structural components
- Compartment covers are in place and secured
- DC models: Both battery packs are in place and properly connected.

Perform quarterly (or every 150 hours) and annual machine inspections. Keep records for three years. See the *Genie Z-45/22 Service Manual* for details.

## PRE-OPERATION INSPECTION &amp; FUNCTION TESTS

## 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 (if equipped). See *Starting The Engine*, page 13.

### Test Emergency Stop

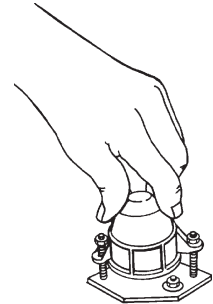
- 5 Push in the red Emergency Stop button to the OFF position.
- ⦿ Result: Engine should turn off and all ground and platform control functions should not operate.
- 6 Pull out the red Emergency Stop button to the ON position and restart the engine.

### Test the Machine Functions

- 7 Turn boom function speed controller to "9".
- 8 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 primary or secondary boom is being lowered.

### 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 turntable cover on the engine side. Locate the tilt sensor next to the ground control box.
- 11 Press down one side of the tilt sensor.
- ⦿ Result: The alarm, located in the platform, should sound.



## At the Platform Controls

### Test Emergency Stop

- 12 Restart the engine.
- 13 Push in the platform red Emergency Stop button to the OFF position.
- ⦿ Result: The engine should turn off and all ground and platform control functions should not operate.

### Test the Service Horn

- 14 Pull out the red Emergency Stop button to the ON position but do not start the engine.
- 15 Push the service horn button.
- ⦿ Result: The service horn should sound.

### Test the Foot Switch

- 16 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.
- 17 Do not press down the foot switch and restart engine.
- 18 Do not press down the foot switch. Activate each machine function.
- ⦿ Result: The machine functions should **not** operate.

## PRE-OPERATION INSPECTION &amp; FUNCTION TESTS

**Test Machine Functions**

19 Press down the foot switch.

20 Activate each boom function toggle switch.

- ⦿ Result: All boom/platform functions should operate through a full cycle.

Note: Control the speed of boom functions by adjusting the boom function speed controller. Platform, drive and steer functions are not affected by the boom function speed controller.

**Test the Steering**

21 Press down the foot switch.

22 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.

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

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

**Test Drive and Braking**

24 Press down the foot switch.

25 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 control 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 a complete stop.

26 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 control 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 a complete 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**

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

28 Rotate the turntable until the primary boom moves past one of the steering wheels (figure 1).

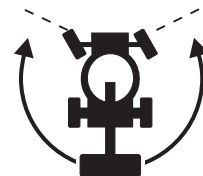


Figure 1

- ⦿ Result: The drive enable indicator light should come on and remain on while the primary boom is anywhere in the range shown in figure 2.

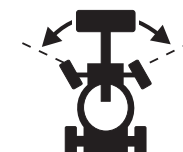


Figure 2

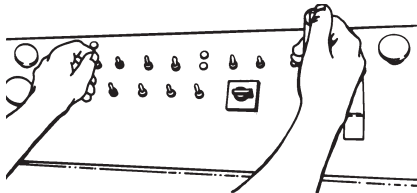
29 Move the drive control

handle off center.

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

## PRE-OPERATION INSPECTION &amp; FUNCTION TESTS

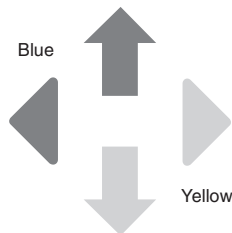
- 30 Move and hold the drive enable toggle switch to either side and slowly move the drive control handle off center.



- ⦿ Result: The drive function should operate.

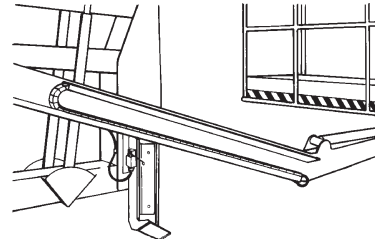
Note: When the drive enable system is in use, the machine will drive in the opposite direction that the drive and steer control handle is moved.

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

**Test Limited Drive Speed**

- 31 Press down the foot switch.

- 32 Raise the primary boom to just above the drive limit switch.



- 33 Move the drive select switch to high range and then slowly move the drive control handle to the full drive position.

- ⦿ Result: The maximum achievable drive speed with the primary or secondary boom raised should not exceed 40 feet per 150 seconds (12.2 meters per 150 seconds). If the drive speed with the boom raised exceeds 40 feet per 150 seconds (12.2 meters per 150 seconds), immediately tag and remove the machine from service.

Any person working on or around a machine must be aware of all known safety hazards. Personal safety and the continued safe operation of the machine should be your number one priority.

# Operating Instructions



## Before Each Use:

- ☑ Read, understand and obey all safety rules (see *Safety Rules*, page 1).
- ☑ Conduct a thorough pre-operation inspection of the machine (see *Pre-operation Inspection*, page 9).
- ☑ Test all machine functions for proper operation (see *Function Tests*, page 10).
- ☑ Repair any machine damage or malfunctions before operating the machine.

## Starting the Engine (if equipped)

- 1 At ground controls, turn key switch to desired position.
- 2 Be sure both ground and platform red Emergency Stop buttons are pulled out to the ON position.
- 3 Gasoline/LPG equipped models: Choose fuel by moving fuel select switch at platform controls to desired position.
- 4 Move engine start toggle switch to either side. If engine fails to start or dies, the restart delay will disable start switch for 3 seconds.



Cold engine - Gasoline equipped models: Use choke switch during start and until engine is warm.

Cold engine - Diesel equipped models: move glow plug switch to pre-heat for 15 seconds before starting.

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

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

## Emergency Stop

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

Repair any function that operates from ground or platform controls when Emergency Stop button is pushed in.

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

Operating manual controls will override ground and platform Emergency Stop buttons.

---

## OPERATING INSTRUCTIONS

### Operation from Ground

- 1 Turn key switch to ground control.
- 2 Pull out red Emergency Stop button to the ON position.
- 3 Start the engine (if equipped).

#### To Position Platform

- 1 Move appropriate toggle switch according to markings on control panel.

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

### Operation from Platform

- 1 Turn key switch to platform control.
- 2 Pull out both ground and platform red Emergency Stop buttons to the ON position.
- 3 Start the engine (if equipped). Do not press down the foot switch when starting engine.

#### To Position Platform

- 1 Set boom function speed controller to desired speed.

Note: Platform, drive and steer functions are not affected by the boom function speed controller.

- 2 Press down the foot switch.
- 3 Move appropriate toggle switch according to markings on control panel.

#### To Steer

- 1 Press down foot switch.
- 2 Turn steering wheels with thumb rocker switch located on top of drive control handle.

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

#### To Drive

- 1 Press down foot switch.
- 2 Increase speed: Slowly move drive control handle off center.

Decrease speed: Slowly move drive control handle toward center.

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

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

Machine travel speed is restricted when boom is raised.

#### Drive Enable

Light ON indicates that primary boom has moved just past either steering wheel and drive function has been interrupted.

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

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

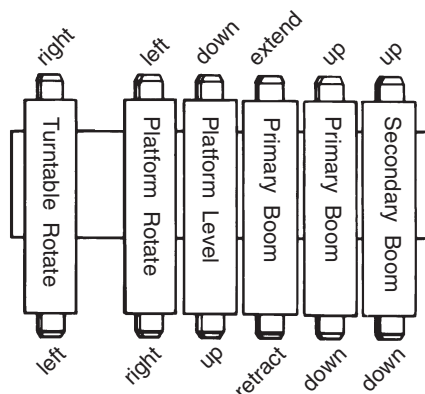
Always use color-coded direction arrows on platform controls and drive chassis to identify direction machine will travel.



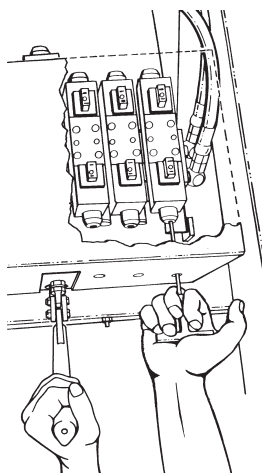
## OPERATING INSTRUCTIONS

## Manual Controls

All boom functions can be operated with the hand pump located on the turntable in front of the hydraulic manifold.

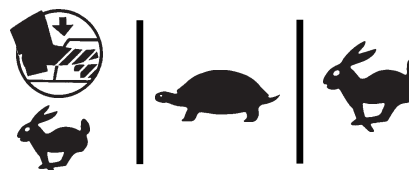


- 1 Select a function and it's corresponding valve.
- 2 Manually open the valve by pushing in on the end of the valve spool with a T-handle.
- 3 Hold the valve in the open position and operate the hand pump with a push/pull motion.
- 4 Remove the T-handle from the valve spool to close the valve.



## Engine Idle Select (rpm)

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



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

## Stopping the Engine

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

## After Each Use

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

## Drive Range Select



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

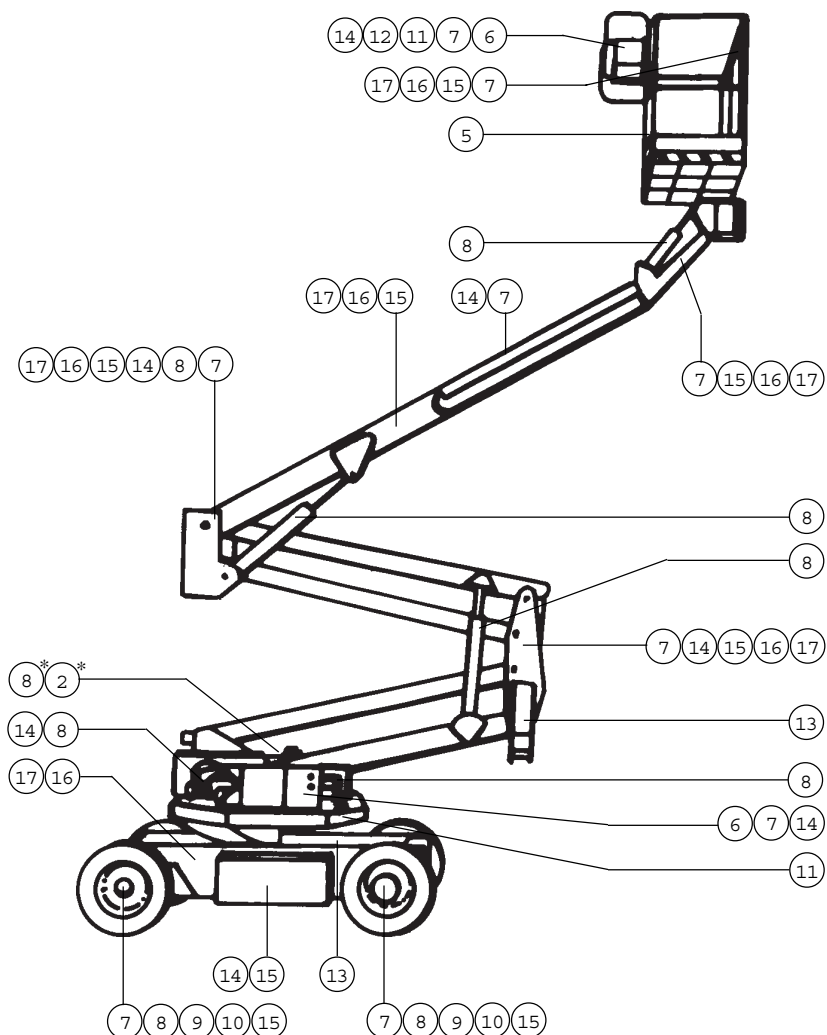
# Maintenance Inspection



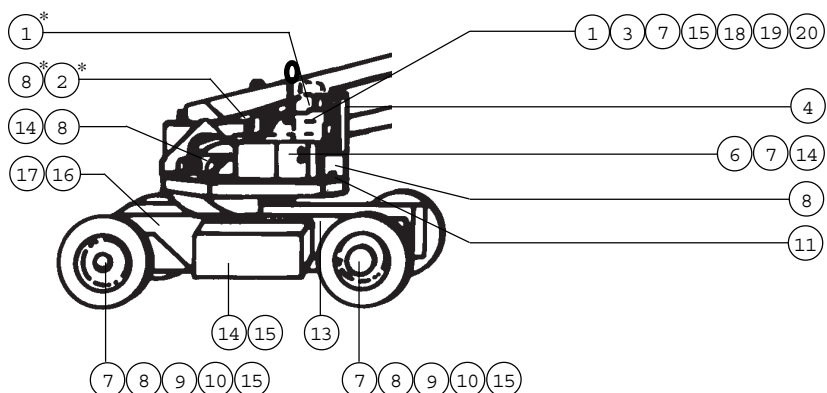
- ☑ The Maintenance Inspection shall be completed daily by a person trained and qualified on the maintenance of this machine.
- ☑ Immediately tag and remove from service a damaged or malfunctioning machine.
- ☑ Repair any machine damage or malfunctions before operating machine.

\* Items located on opposite side of machine shown.

DC Power model used for illustrative purposes.



Engine model used for illustrative purposes. Some component locations may vary.



## MAINTENANCE INSPECTION

## Daily Checklist

Make copies of this checklist to use for each inspection.

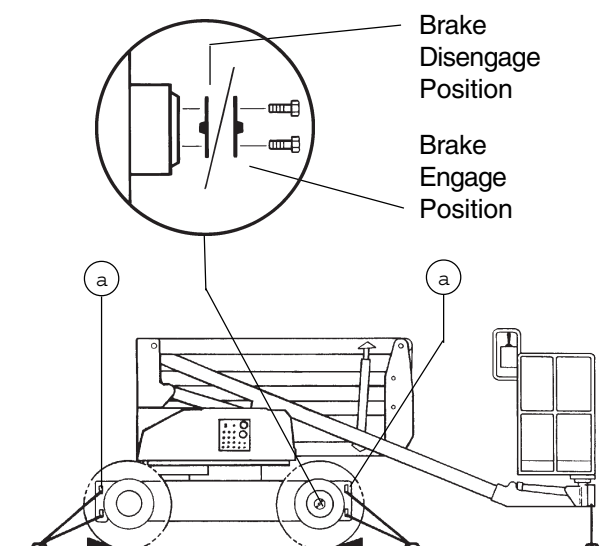
Index No.		Index No.
<input type="checkbox"/>	— Inspect decals and placards for damage and legibility (see <i>Decals</i> section).	<input type="checkbox"/> 15 Check that all structural and other critical components are present and all associated fasteners and pins are in place and properly tightened.
<input type="checkbox"/>	1 Check fuel level(s) and inspect for fuel leaks.	<input type="checkbox"/> 16 Check for dents or damage to machine.
<input type="checkbox"/>	2 Check hydraulic oil level.	<input type="checkbox"/> 17 Inspect all welds and structural surfaces for visible cracks.
<input type="checkbox"/>	3 Check engine oil level and inspect for leaks.	<input type="checkbox"/> — Check descent alarm, travel alarm and flashing beacon (if equipped) on turntable cover, from ground and platform controls.
<input type="checkbox"/>	4 Check engine coolant level and inspect for leaks.	
<input type="checkbox"/>	5 Inspect operator's and safety manuals for damage and legibility.	<b>Every 100 Hours</b>
<input type="checkbox"/>	6 Check platform and ground control operation.	<input type="checkbox"/> 18 Drain fuel filter/water separator (Kubota Diesel models).
<input type="checkbox"/>	7 Inspect for damage and loose or missing parts.	<input type="checkbox"/> 19 Replace engine oil and oil filter (Engine models).
<input type="checkbox"/>	8 Inspect hydraulic components for leaks and damage.	<input type="checkbox"/> 20 Replace engine air filter (Engine models).
<input type="checkbox"/>	9 Check air-filled tire pressure: Industrial - 100 psi (6.89 bar)	
<input type="checkbox"/>	10 Check wheel lug nuts, torque to 125 ft-lbs (169.5 Nm).	Notes: Perform quarterly (or every 150 hours) and annual machine inspections. Keep records for three years. See the <i>Genie Z-45/22 Service Manual</i> for details.
<input type="checkbox"/>	11 Check tilt sensor and alarm operation.	
<input type="checkbox"/>	12 Check drive brake operation.	
<input type="checkbox"/>	13 Check limit switch operation.	
<input type="checkbox"/>	14 Check electrical cables and wiring for frays, abrasions or other physical damage.	
		Inspected By _____
		Date _____
		Serial No. _____
		Model _____

# Transport Instructions



## Observe and Obey:

- ☑ Common sense and planning must be applied to control the movement of the machine when lifting it with a crane or forklift.
- ☑ Transport vehicle must be parked on a level surface.
- ☑ Transport vehicle must be secured to prevent rolling while machine is being loaded.
- ☑ Vehicle capacity, loading equipment and surfaces must be capable of supporting machine weight (see *Specifications*, page 28).
- ☑ Always transport the machine with the boom in the stowed position.
- ☑ The machine must be secured to the transport vehicle with chains or straps of ample load capacity.



a crane lifting points

## Securing to Transport Vehicle for Transit

Always chock machine wheels in preparation for transport.

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

Use lower platform mount between primary boom end and platform to secure boom from side-to-side movement. Do not use excessive downward force when securing the primary boom.

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.

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

Release non-steer wheel brakes by turning over torque hub disconnect caps.

Reverse procedure described to re-engage brakes.

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

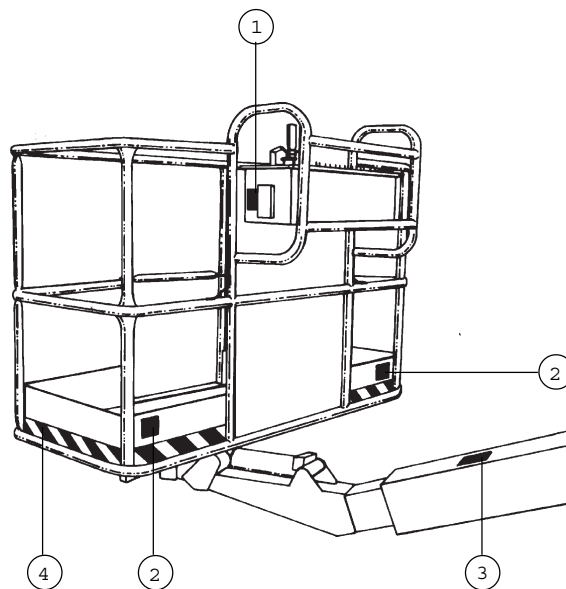
# Decals - DC Power Models

Index	Part No. Decal Description	Quantity	Index	Part No. Decal Description	Quantity
1	28174 Power to Platform, 220V AC or 28235 Power to Platform, 115V AC	2	17	29798 Notice - Platform Operating Instructions	1
2	28177 Warning - Crushing Hazard	2	18	28163 Notice - Maximum Allowable Side Force	1
3	28181 Warning - Fall Hazard	1	19	31053 Notice - Foot Switch	1
4	1699 Safety Tape	—	20	30080 Notice - Maximum Load	1
5	31508 Notice - Power to Battery Charger	1	21	28161 Warning - Crushing Hazard	4
6	27206 Triangle, Blue	2	22	30084 Ground Control Panel	1
7	27204 Arrow, Blue	1	23	31062 Notice - Manual Controls	1
8	27207 Triangle, Yellow	2	24	28179 Danger - Tip-over Hazard	2
9	28175 Caution - Improper contact with	4	25	29792 Notice - Battery Charger Operating Instructions	2
10	27205 Arrow, Yellow	1	26	29793 Notice - Battery Connection Diagram	2
11	31066 Caution - Component Damage Hazard	1	27	28372 Caution - Component Damage Hazard	2
12	28176 Notice - Missing Manuals	1	28	29794 Danger - Tip-over Hazard	2
13	28236 Warning - Improper Use Hazard	1	29	31052 Danger - Failure to obey	2
14	29800 Danger - Safety Rules	2	30	29796 Notice - Ground Operating Instructions	1
15	29799 Platform Control Panel	1	31	31784 Notice - Tire Pressure	1
16	29801 Notice - Pre-operation Inspection	2	32	25980 Danger - Electrocution Hazard	3

## DECALS - DC POWER MODELS

Index	Part No. Decal Description	Quantity
33	28157 Notice - Dexron II ATF equivalent	2
34	29797 Serial Plate	1
35	29803 Notice - Hazardous Materials	1
36	28173 Danger - Crushing Hazard	1
37	31746 Danger - Tip-over Hazard (platform mount)	2

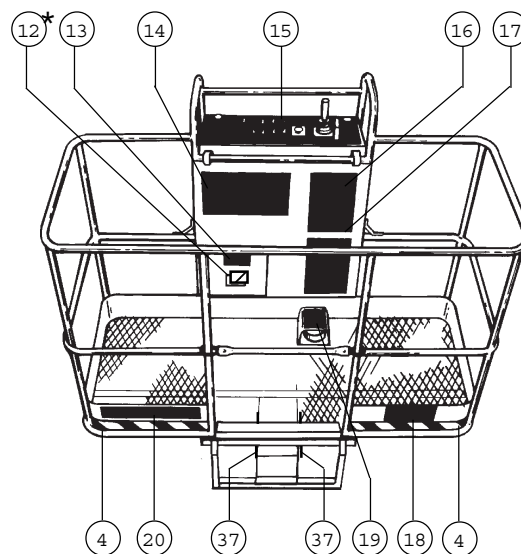
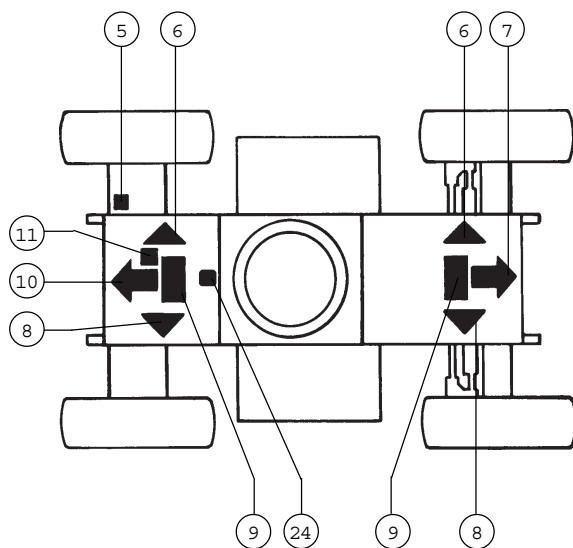
## Platform



\* Decal concealed from view

## Drive Chassis - Top

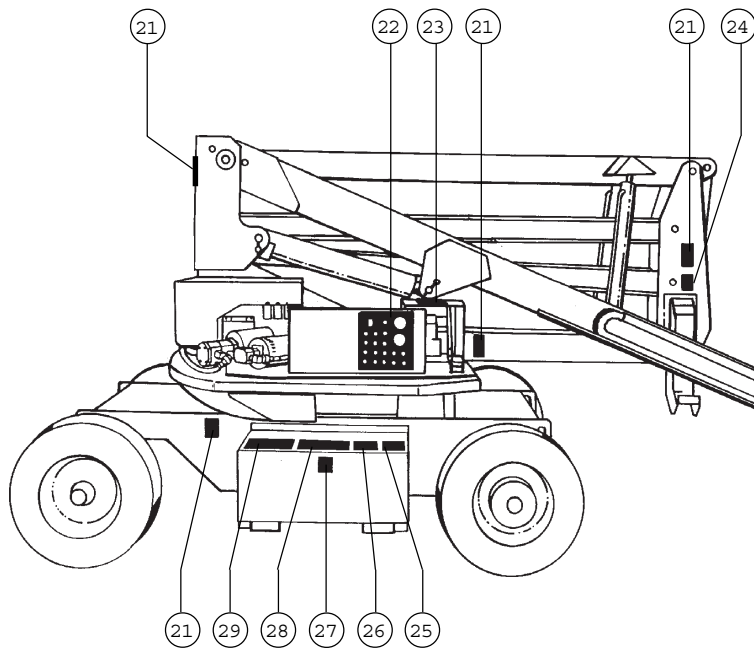
## Platform



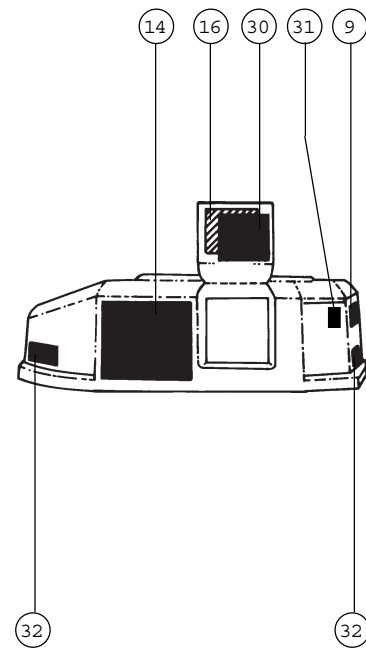
On the 4 foot platform, index numbers 18 and 20 will appear on each side of the platform.

## DECALS - DC POWER MODELS

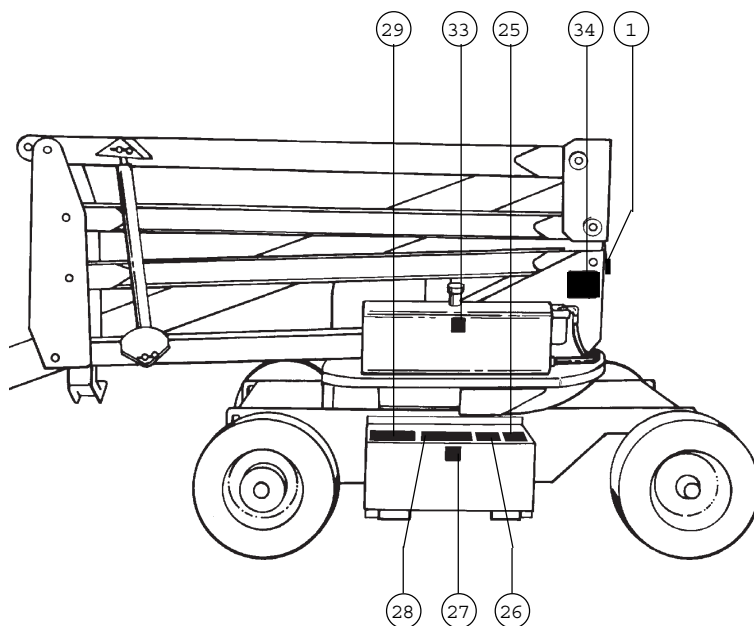
## Engine Side



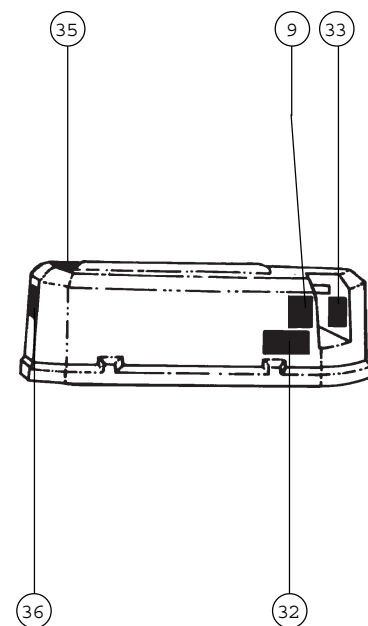
## Turntable Cover



## Tank Side



## Turntable Cover



# Decals - Tri-fuel and Gasoline/LPG Models

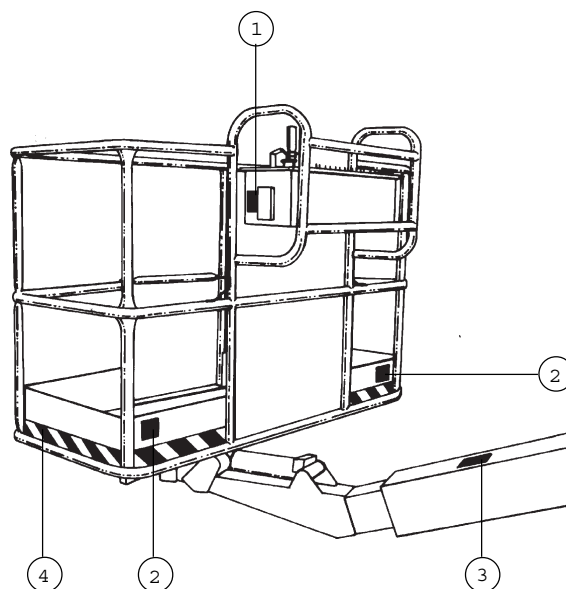
Index	Part No. Decal Description	Quantity			
1	28174 Power to Platform, 220V AC or 28235 Power to Platform, 115V AC	2  2	18	28163 Notice - Maximum Allowable Side Force	1
2	28177 Warning - Crushing Hazard	2	19	28165 Notice - Foot Switch	1
3	28181 Warning - Fall Hazard	1	20	30080 Notice - Maximum Load	1
4	1699 Safety Tape	—	21	28161 Warning - Crushing Hazard	4
5	31508 - Tri-fuel models only Notice - Power to Battery Charger	1	22	28162 Warning - Moving Engine Parts	1
6	27206 Triangle, Blue	2	23	31055 Notice - Kubota Gas/LPG Engine Specifications	1
7	27204 Arrow, Blue	1	24	30084 Ground Control Panel	1
8	27207 Triangle, Yellow	2	25	28170 - Gasoline/LPG models only Warning - Battery Safety	1
9	28175 Caution - Improper contact with	4	26	31062 Notice - Manual Controls	1
10	27205 Arrow, Yellow	1	27	28179 Danger - Tip-over Hazard	2
11	31066 Caution - Component Damage Hazard	1	28	29793 - Tri-fuel models only Notice - Battery Connection Diagram	2
12	28176 Notice - Missing Manuals	1	29	29794 - Tri-fuel models only Danger - Tip-over Hazard	2
13	28236 Warning - Improper Use Hazard	1	30	28372 - Tri-fuel models only Caution - Component Damage Hazard	2
14	29800 Danger - Safety Rules	2	31	29792 - Tri-fuel models only Notice - Battery Charger Operating Instructions	2
15	29799 Platform Control Panel	1	32	31052 - Tri-fuel models only Danger - Failure to obey	2
16	29801 Notice - Pre-operation Inspection	2	33	28239 Warning - Burn Hazard	1
17	29798 Notice - Platform Operating Instructions	1	34	29796 Notice - Ground Operating Instructions	1
			35	25980 Danger - Electrocution Hazard	2
			36	31784 Notice - Tire Pressure	1



## DECALS - TRI-FUEL AND GASOLINE/LPG MODELS

Index	Part No. Decal Description	Quantity
37	28171 Danger - No Smoking	2
38	28158 Notice - Unleaded Gasoline	2
39	28157 Notice - Dexron II ATF equivalent	2
40	29797 Serial Plate	1
41	28173 Danger - Crushing Hazard	1
42	28160 Notice - LPG	1
43	28164 Notice - Hazardous Materials	1
44	31746 Danger - Tip-over Hazard (platform mount)	2

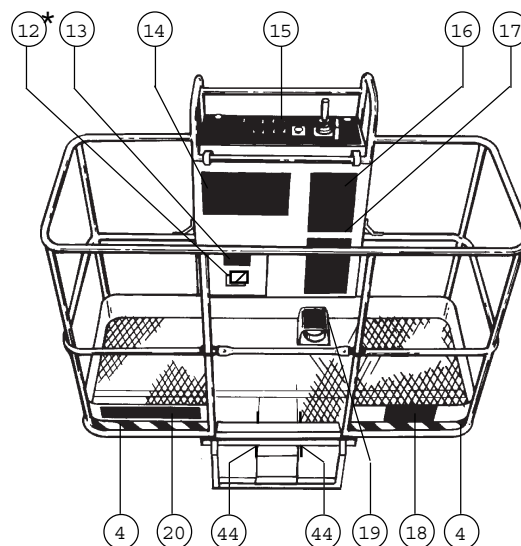
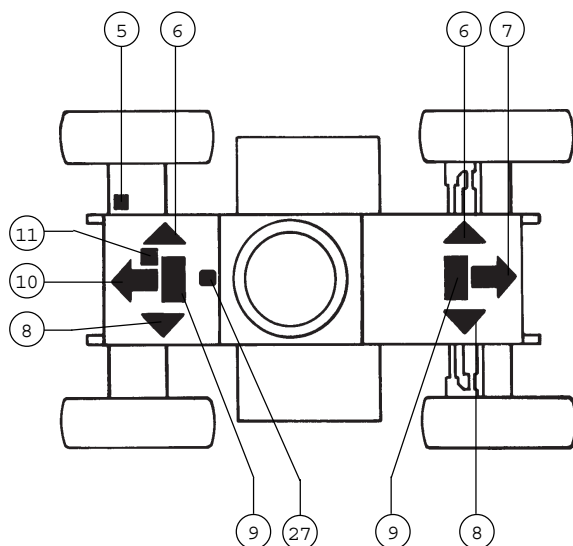
## Platform



\* Decal concealed from view

## Drive Chassis - Top

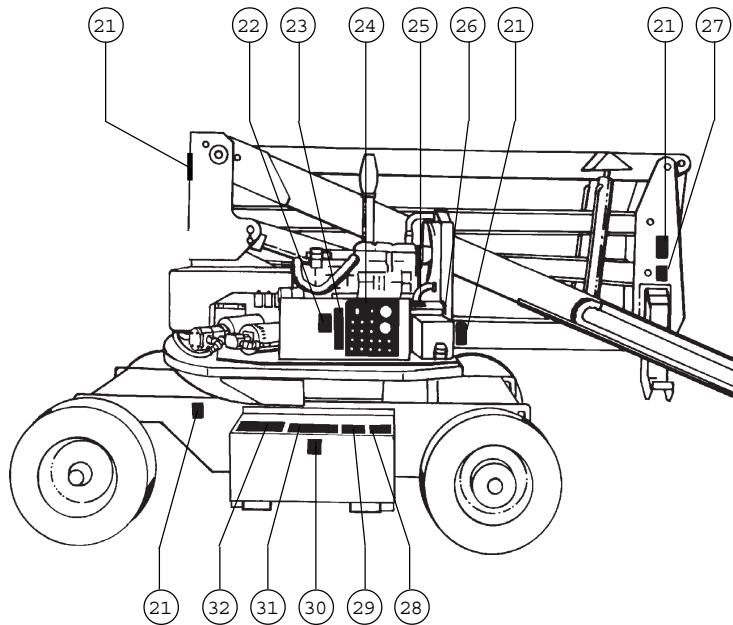
## Platform



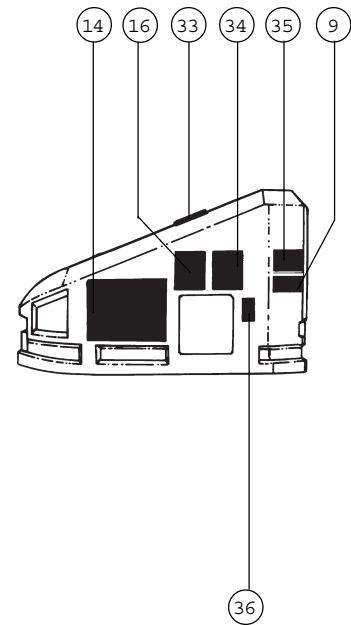
On the 4 foot platform, index numbers 18 and 20 will appear on each side of the platform.

## DECALS - TRI-FUEL AND GASOLINE/LPG MODELS

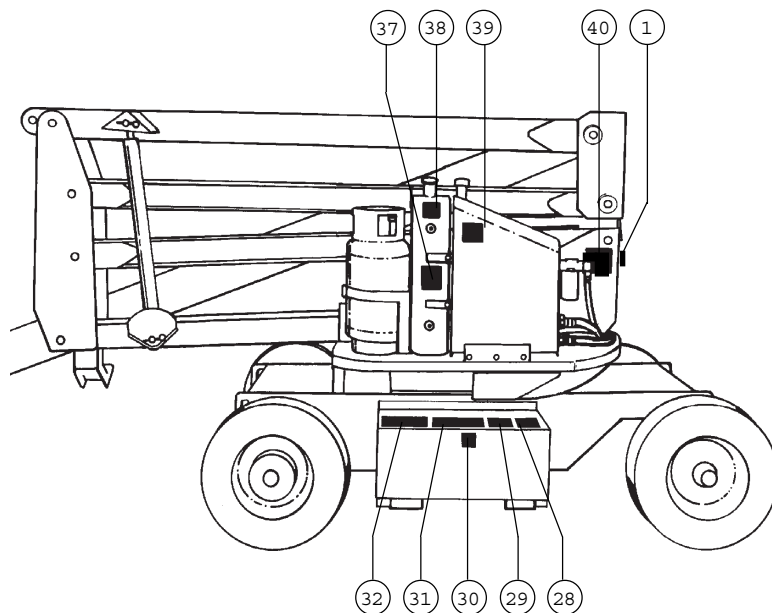
## Engine Side



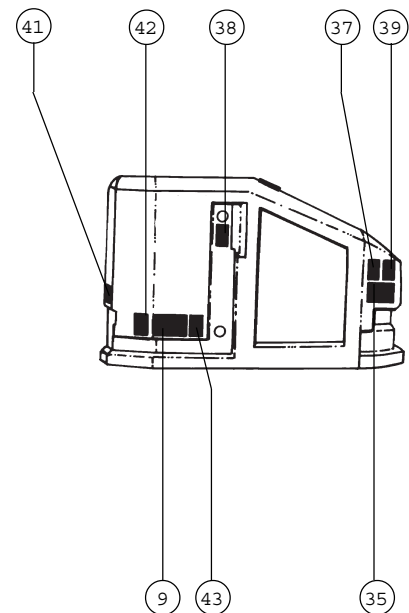
## Turntable Cover



## Tank Side



## Turntable Cover



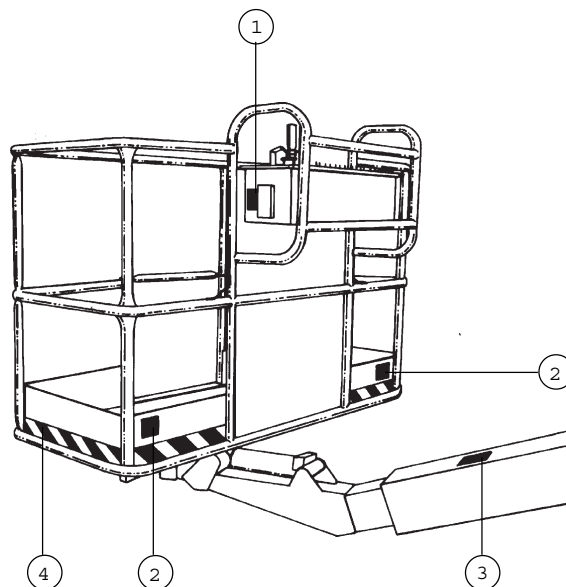
# Decals - Bi-fuel and Diesel Models

Index	Part No. Decal Description	Quantity			
1	28174 Power to Platform, 220V AC or 28235 Power to Platform, 115V AC	2	18	28163 Notice - Maximum Allowable Side Force	1
2	28177 Warning - Crushing Hazard	2	19	28165 Notice - Foot Switch	1
3	28181 Warning - Fall Hazard	1	20	30080 Notice - Maximum Load	1
4	1699 Safety Tape	—	21	28161 Warning - Crushing Hazard	4
5	31508 - Bi-fuel models only Notice - Power to Battery Charger	1	22	28162 Warning - Moving Engine Parts	1
6	27206 Triangle, Blue	2	23	31054 Notice - Kubota Diesel Engine Specifications	1
7	27204 Arrow, Blue	1	24	30084 Ground Control Panel	1
8	27207 Triangle, Yellow	2	25	28170 - Diesel models only Warning - Battery Safety	1
9	28175 Caution - Improper contact with	4	26	31062 Notice - Manual Controls	1
10	27205 Arrow, Yellow	1	27	28179 Danger - Tip-over Hazard	2
11	31066 Caution - Component Damage Hazard	1	28	29793 - Bi-fuel models only Notice - Battery Connection Diagram	2
12	28176 Notice - Missing Manuals	1	29	29794 - Bi-fuel models only Danger - Tip-over Hazard	2
13	28236 Warning - Improper Use Hazard	1	30	28372 - Bi-fuel models only Caution - Component Damage Hazard	2
14	29800 Danger - Safety Rules	2	31	29792 - Bi-fuel models only Notice - Battery Charger Operating Instructions	2
15	29799 Platform Control Panel	1	32	31052 - Bi-fuel models only Danger - Failure to obey	2
16	29801 Notice - Pre-operation Inspection	2	33	28239 Warning - Burn Hazard	1
17	29798 Notice - Platform Operating Instructions	1	34	29796 Notice - Ground Operating Instructions	1
			35	25980 Danger - Electrocution Hazard	2
			36	31784 Notice - Tire Pressure	1

## DECALS - BI-FUEL AND DIESEL MODELS

Index	Part No. Decal Description	Quantity
37	28171 Danger - No Smoking	2
38	28159 Notice - Diesel Fuel	2
39	28157 Notice - Dexron II ATF equivalent	2
40	29797 Serial Plate	1
41	28173 Danger - Crushing Hazard	1
42	28164 Notice - Hazardous Materials	1
43	31746 Danger - Tip-over Hazard (platform mount)	2

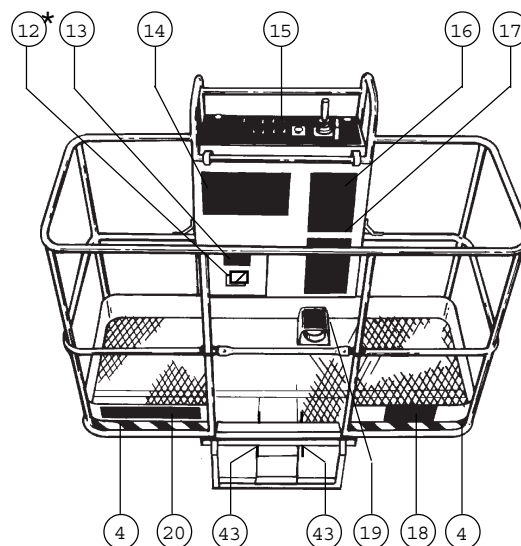
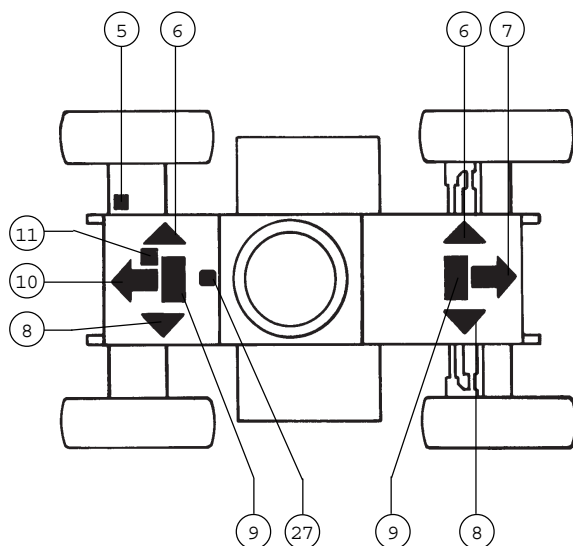
## Platform



\* Decal concealed from view

## Drive Chassis - Top

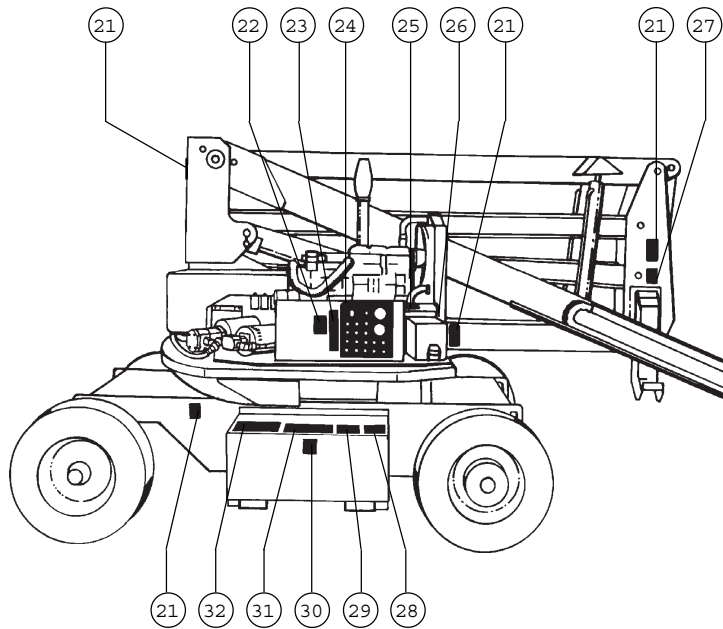
## Platform



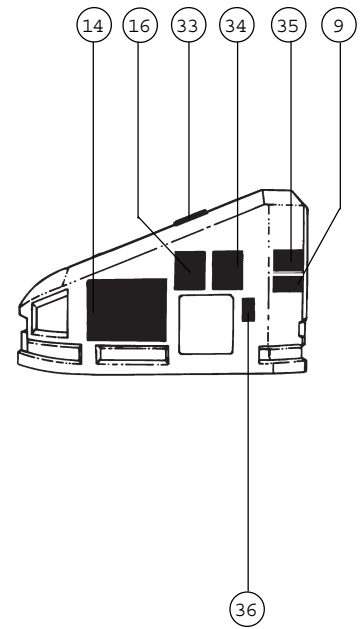
On the 4 foot platform, index numbers 18 and 20 will appear on each side of the platform.

## DECALS - BI-FUEL AND DIESEL MODELS

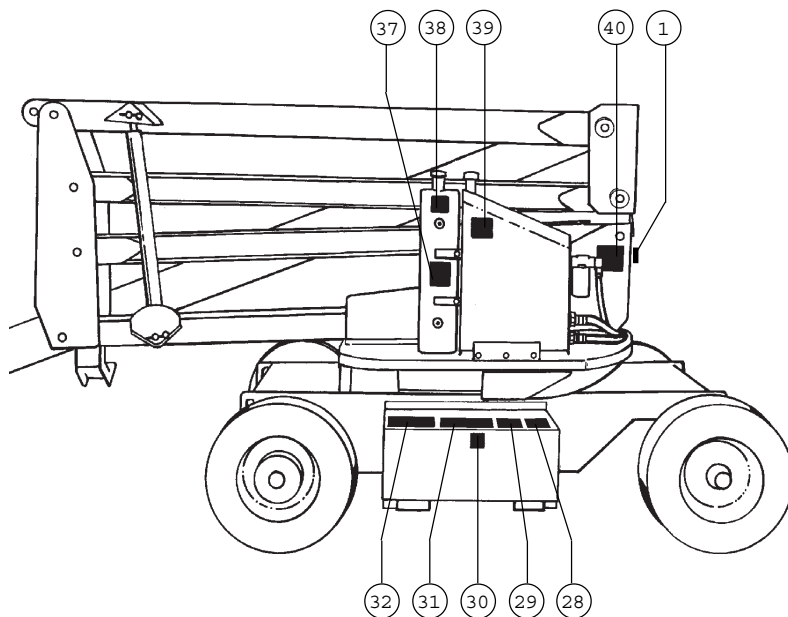
## Engine Side



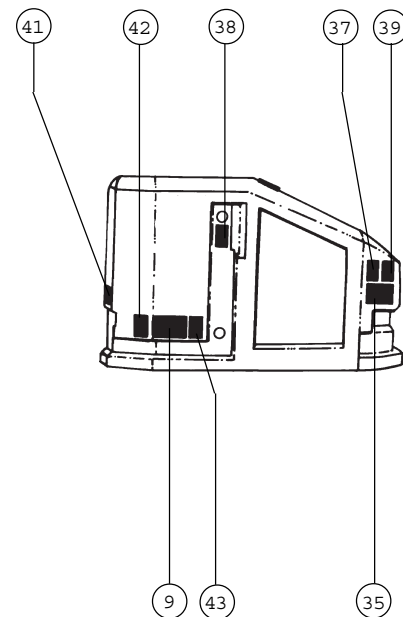
## Turntable Cover



## Tank Side



## Turntable Cover

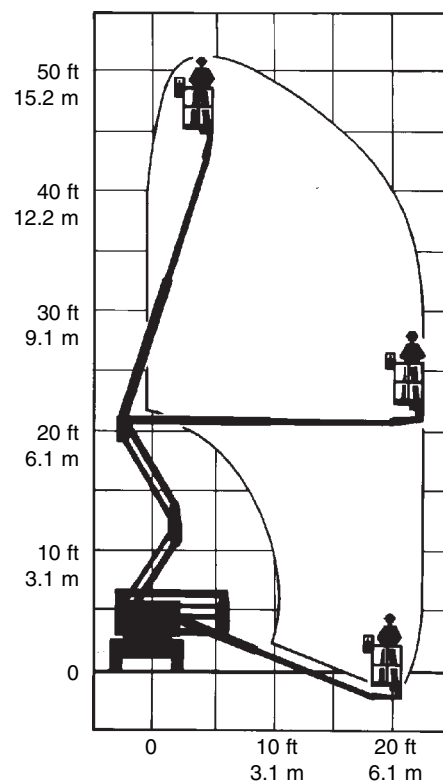


# Specifications

## All models

Height, working maximum	51 ft	15.54 m
Height, platform maximum	45 ft	13.72 m
Height, stowed maximum	6 ft 6 in	2.0 m
Horizontal reach maximum	23 ft	7 m
Width	5 ft 11 in	1.8 m
Length, stowed	17 ft 8 in	5.4 m
Lift capacity	500 lbs	227 kg
Wheelbase	6 ft 3 in	1.9 m
Turning radius (outside)	14 ft 4 in	4.36 m
Turning radius (inside)	7 ft	2.1 m
Turntable rotation (degrees)	359	
Turntable tailswing	0	
Controls	12V DC proportional	
Platform dimensions		
6 foot	30 x 72 in	76 x 183 cm
5 foot	30 x 60 in	76 x 152 cm
4 foot	30 x 48 in	76 x 121 cm
Platform leveling	self-leveling	
Platform rotation	180°	
AC outlet in platform	standard	
Hydraulic pressure, maximum drive functions	3500 psi 241 bar	
Hydraulic pressure, maximum boom functions	2200 psi 152 bar	
Industrial tires	9-14.5 LT	
Gradeability, stowed	30%	
Ground clearance	8 in	20 cm

## Range of Motion



## SPECIFICATIONS

**DC Power models**

Power source	12 Group-GC2B, 6V 245AH Batteries	
Travel speed, stowed	0 - 2.5 mph 0 - 4.02 km/h	
Travel speed, raised maximum	40 ft per 150 seconds 12.2 m per 150 seconds	
Hydraulic tank capacity	17.7 gallons	67 liters
Weight	13910 lbs	6309 kg

**Bi-fuel models**

Power source	Kubota D-905 26 Hp Diesel Engine and 12 Group-GC2B, 6V 245AH Batteries	
Travel speed, stowed	0 - 3.5 mph 0 - 5.6 km/h	
Travel speed, raised maximum	40 ft per 150 seconds 12.2 m per 150 seconds	
Hydraulic tank capacity	22.5 gallons	85 liters
Fuel tank capacity	18.2 gallons	68.9 liters
Weight	14770 lbs	6699 kg

**Tri-fuel models**

Power source	Kubota WG-750 24.5 Hp Gasoline/LPG Engine and 12 Group-GC2B, 6V 245AH Batteries	
Travel speed, stowed	0 - 3.5 mph 0 - 5.6 km/h	
Travel speed, raised maximum	40 ft per 150 seconds 12.2 m per 150 seconds	
Hydraulic tank capacity	22.5 gallons	85 liters
Fuel tank capacity	8 gallons	30.2 liters
LPG tank capacity	33.5 lbs	15.2 kg
Weight	14650 lbs	6645 kg

**Diesel models**

Power source	Kubota D-905 26 Hp Diesel Engine	
Travel speed, stowed	0 - 3.5 mph 0 - 5.6 km/h	
Travel speed, raised maximum	40 ft per 150 seconds 12.2 m per 150 seconds	
Hydraulic tank capacity	22.5 gallons	85 liters
Fuel tank capacity	18.2 gallons	68.9 liters
Weight	13651 lbs	6192 kg

**Gasoline/LPG models**

Power source	Kubota WG-750 24.5 Hp Gasoline/LPG Engine	
Travel speed, stowed	0 - 3.5 mph 0 - 5.6 km/h	
Travel speed, raised maximum	40 ft per 150 seconds 12.2 m per 150 seconds	
Hydraulic tank capacity	22.5 gallons	85 liters
Fuel tank capacity	8 gallons	30.2 liters
LPG tank capacity	33.5 lbs	15.2 kg
Weight	13531 lbs	6137 kg

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