A TEREX BRAND

Operator's Manual

Serial number range

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Contents

Introduction 1
Symbol and Hazard Pictorials Definitions 5
General Safety 6
Work Area Safety 8
Safety Precautions 15
Legend 18
Controls 19
Inspections 25
Operating Instructions 34
Parking and Storage 55
Transport and Lifting Instructions 57
Maintenance 60
Attachments 68
Specifications 80
Load Charts 81

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Introduction

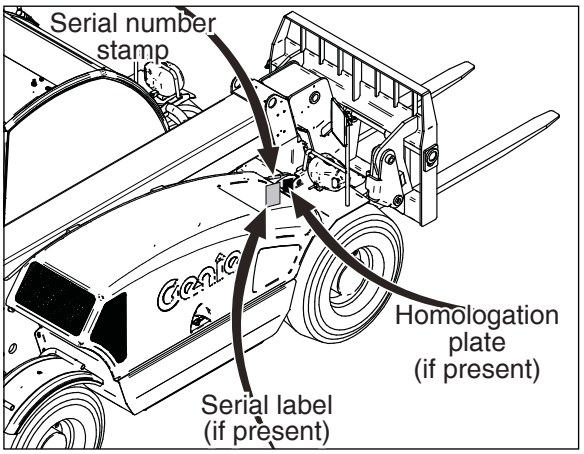
About This Manual

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

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

Product Identification

The machine serial number is located on the serial label.



Intended Use

This product is only intended to be used and operated by qualified, trained, competent and authorized personnel according to the instructions in this manual, the safety and instructional decals, and any applicable standards and regulations.

A variable reach rough terrain forklift truck is defined as a wheeled type truck with a pivoting boom, which may be equipped with various attachments for picking, transporting and placing loads using the established load range charts.

Use of this product in any other way is prohibited and contrary to its intended use.

Introduction

Bulletin Distribution and Compliance

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

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

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

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

Contacting the Manufacturer

At times it may be necessary to contact Genie.

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

- Accident reporting
- Questions regarding product applications and safety
- Standards and regulatory compliance information
- Current owner updates, such as changes in machine ownership or changes in your contact information. See Transfer of Ownership, below.

Transfer of Machine Ownership

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

Please register your machine by visiting us on the web at www.genieindustries.com.au

Introduction



Danger

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

Do Not Operate Unless:

☑ You learn and practice the principles of safe machine operation contained in this operator's manual.
1. Avoid hazardous situations.
Know and understand the safety rules before going on to the next section.
2. Always perform a pre-operation inspection.
3. Always perform function tests prior to use.
4. Inspect the workplace.
5. Only use the machine as it was intended.

☑ You read, understand and obey the manufacturer's instructions and the safety rules, the safety and operator's manuals, and the decals applied on the machine.
☑ You read, understand and obey the employer's safety rules and work-site regulations.
☑ You read, understand and obey all applicable governmental regulations.
☑ You are properly trained to safely operate the machine.

Introduction

Hazard Classification



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

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

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

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

NOTICE Indicates a property damage message.

Standards

The following standards and/or regulations apply to this machine:

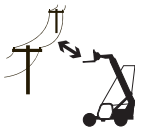
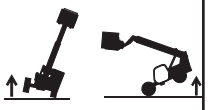
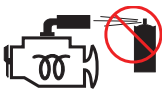
Directive

AS 1418.19-2007 Cranes, hoists and winches. Part 19: Telescopic handlers

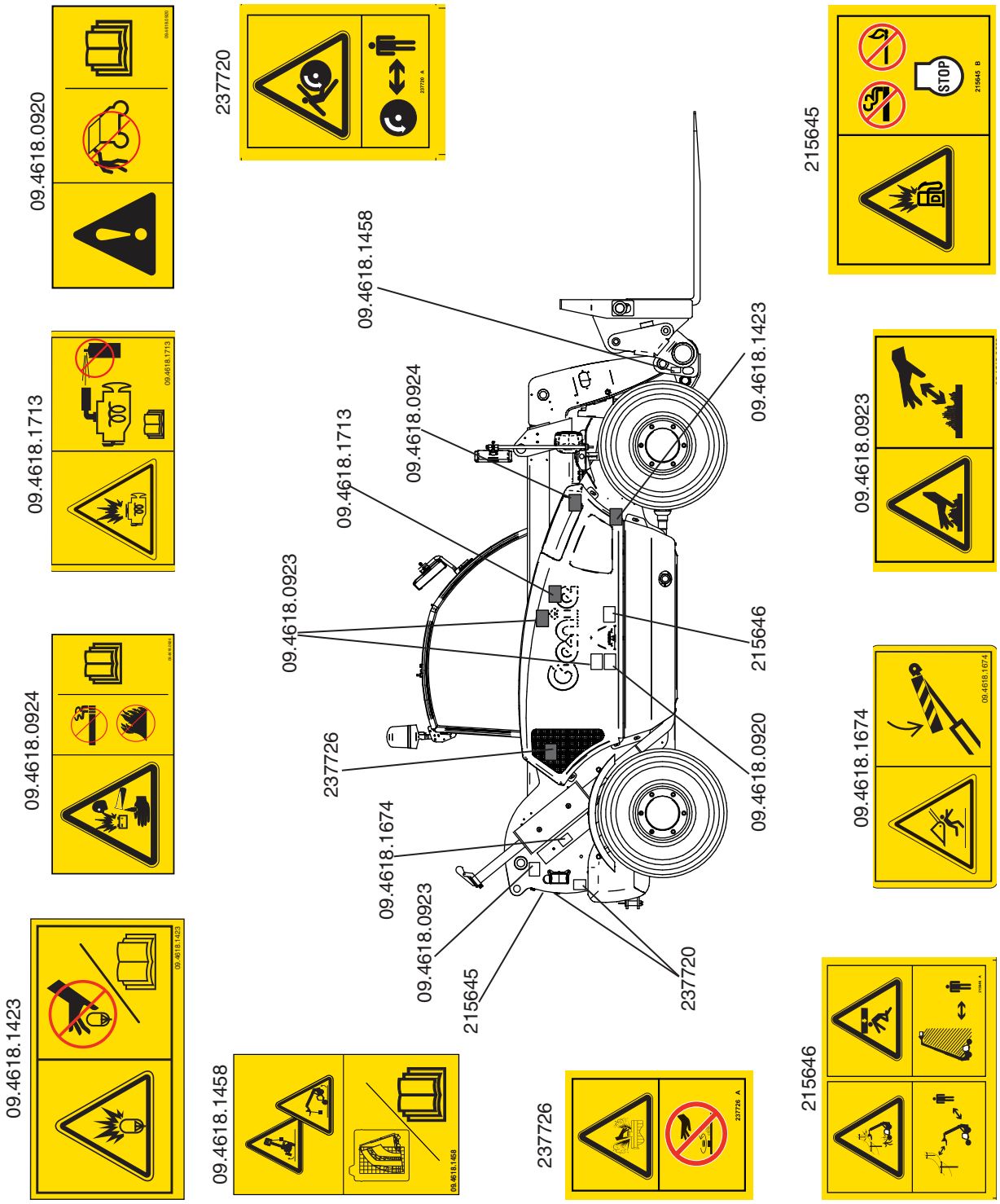
Safety Sign Maintenance

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

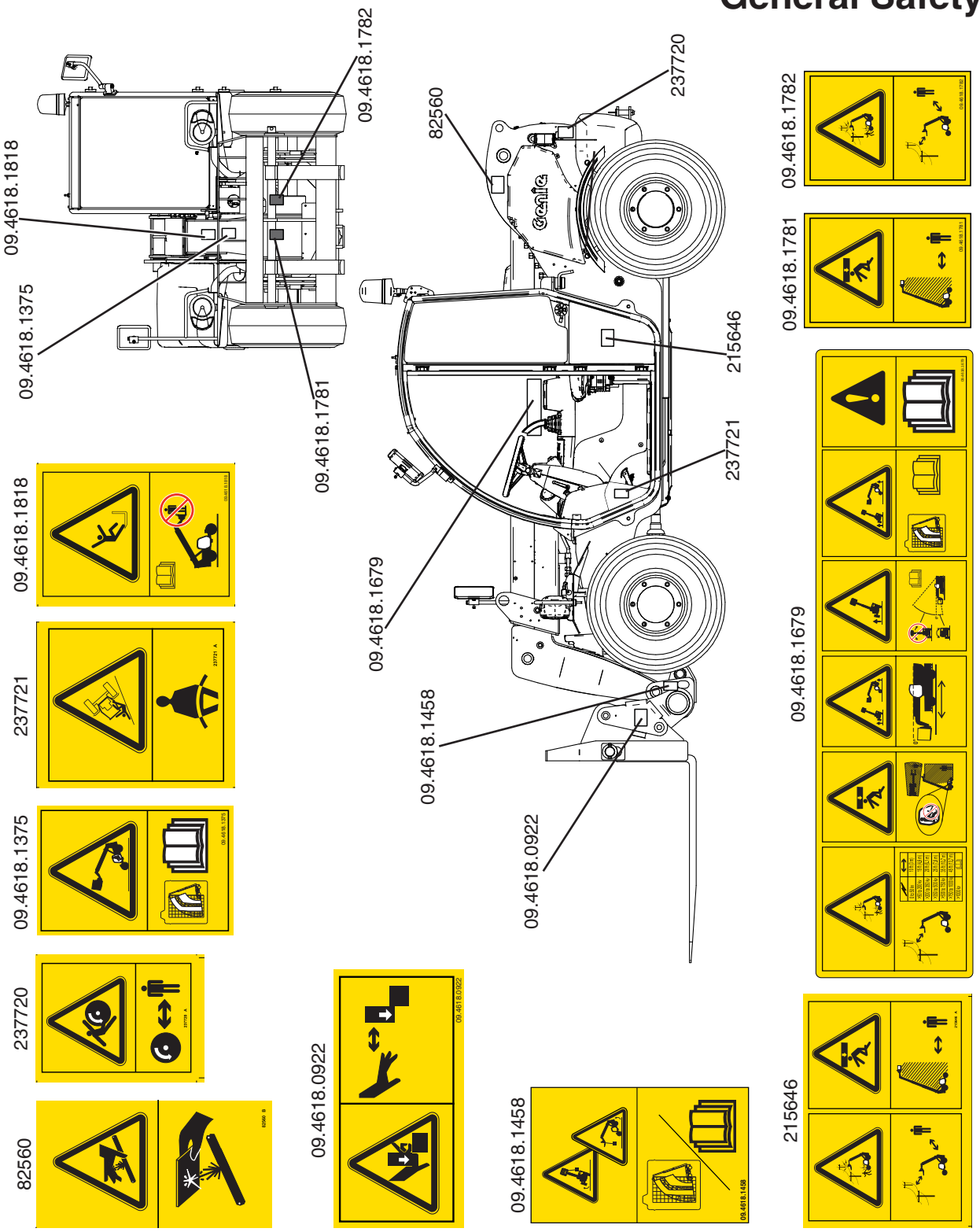
Symbol and Hazard Pictorials Definitions

 Electrocution hazard	 Maintain required clearance.	 Crush hazard.	 No people under load	 Read the operator's manual.	 Tip-over hazard
 Crush hazard.	 Apply maintenance collar	 Crush hazard.	 Always wear seat belt.	 Explosion hazard	 Do not use.
 Crush hazard.	 Keep away from moving parts.	 Crush Hazard	 Keep clear of moving parts.	 Burn hazard.	 Do not loosen cap until cool.
 Explosion/burn hazard	 No smoking. No open flame.	 Burn Hazard	 Allow surfaces to cool.	 Injection Hazard	 Use cardboard to search for leaks
 Tip-over hazard	 Explosion/burn hazard	 No smoking. No open flame.	 Fall hazard	 Do not ride on forks	 Refer to load charts and manual
 Only trained maintenance personnel should access compartments.	 Keep load low during travel	 Do not use starting aids	 Explosion hazard	 Tip-over hazard	

General Safety



General Safety



Work Area Safety

⚠ Overturning Hazards



Using the load chart, confirm that the load is within the rated capacity of the machine. Do not exceed the rated load.

The load center of the fork (if equipped) must be equal to or less than the load center indicated on the load chart.

All loads shown on the load chart are based on the machine being on firm ground, the frame being level, the forks being positioned evenly on the carriage, the load being centered on the forks, the tires being properly sized and properly inflated, and the telehandler being in good operating condition.

If using accessories, read, understand and obey the decals, instructions and manuals with the accessory.

Do not raise the load unless the ground can support all forces imposed by the machine.

Do not lower a load without retracting the boom first.

Do not use attachments which are not approved by Genie.

Do not operate the machine if the load chart is missing.

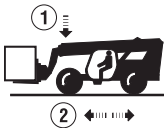
Do not exceed the rated capacity for each configuration.



Do not raise the boom unless the machine is level. The machine level indicator should be no more than +/- 0,5 degrees.

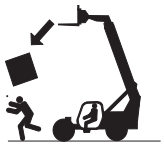
Do not work with the load limiting system cut out.

Do not raise a load and then drive to position it.



When driving, keep the boom at or below horizontal and keep the load close to the ground.

Operate the machine at speeds that will keep the load under control. Start and stop movements smoothly.



Do not raise a load unless the load is properly positioned or secured on the forks or approved attachment.

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

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

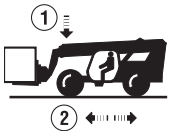
Do not alter or disable machine components that in any way affect safety and stability.

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

Do not replace factory-installed tires with tires of different specification or ply rating.

Work Area Safety

⚠ Traveling on Slopes Hazards



When driving, keep the boom at or below horizontal and keep the load close to the ground.

When the machine is unloaded, travel with the forks or attachment downhill.

On steep terrain, drive only up and down a hill, and always keep the machine in gear. Do not turn across the slope when the machine is traveling up or down a slope.

Limit travel path and speed according to the condition of the ground surface, traction, slope, location of personnel and any other factors which may create a hazard. Never drive the machine unless the mast and equipment are in their proper travel position. Whether a machine will tip over during dynamic machine operation involves many factors that need to be considered. Among these are pavement/ground conditions, stability and slope, as well as machine equipment, operator skill, load position, tire inflation, machine speed, etc.

Additionally, tip-over of a machine is dependent in large part upon operator inputs such as the speed and smoothness of the operation, as well as the position of the attachment and its load.

Construction sites and roads will frequently change slope from place to place, can be hard and soft, and change due to construction activities and weather.

Operators should be properly trained and use their best judgment and experience to take the necessary precautions to prevent a tip-over.

Operators must assess the job site variables and avoid exceeding the machine's (or operator's) capabilities for terrain and conditions.

⚠ Fall Hazards



Always wear a seat belt when operating the machine.

Always remain completely inside the cab when operating the machine.

When getting in and out of the cab, face the machine, use the steps and handrails provided and always maintain three-point contact.

Do not use the steering wheel or any other controls as handrails.



Do not allow riders on the machine or forks.



Do not transport or lift personnel with this machine.

Work Area Safety

⚠ Collision Hazards

Do not put the transmission into gear unless the parking brake is set.

Do not drive the machine if visibility is obstructed.

Do not raise the boom unless the parking brake is set.

Do not operate in conditions without fenders to protect debris from hitting the operator or accumulating on the cab windows.

Do not operate the machine with a faulty back-up/ reversing alarm. The back-up alarm should sound when the machine is in reverse.

Do not operate the machine in low light conditions.

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

Do not drive the machine directly up to anyone.

If a radio and/or mp3 player is equipped, keep the volume low enough to hear surrounding environment (i.e. traffic, alarms, people etc.).
Do not adjust the controls while driving or manoeuvring a load.

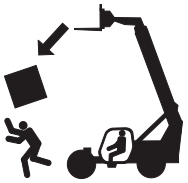
Scan the area prior to operating the machine. Look in the direction of travel. Use mirrors and the camera to assist in checking all around the machine.
Keep windows and mirrors clean, adjusted and in good repair.

Be aware of the machine/load swing area.

Do not rely on the camera system to determine if personnel/objects are behind the machine. The system has limitations due to maintenance practices, environmental and lighting conditions and operating range.

⚠ Falling Object Hazards

Operate the machine at speeds that will keep the load under control. Start and stop movements smoothly.



Keep people, equipment and material out of the work area.
Do not operate the machine while people are under or near an elevated boom, whether it is loaded or unloaded.

Be sure the load is secure before lifting it.

Work Area Safety

⚠ Bodily Injury Hazards



Always adjust the seat and fasten the seat belt before starting the engine.



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



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

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



Stay clear of belts and fans when the engine is running.

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

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

⚠ Damaged Machine Hazards

Do not use a damaged or malfunctioning machine.

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

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

Be sure all decals are in place and legible.

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

Do not attempt to start the machine by towing or pushing.

Do not attempt to use the forks or attachments for prying wedged or frozen loads free.

Do not push or pull objects or loads with the forks, attachment or boom.

Work Area Safety

⚠ 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.

Do not steer the front tires on dry pavement when the axle differential lock is activated.

⚠ Crush Hazards

Keep clear of moving parts during machine operation.

Set the parking brake, put the transmission in neutral and lower the carriage or the attachment to the ground before leaving the machine.

Keep clear of elevated components.

Support components before performing service. Keep clear of moving parts during machine operation.

⚠ Burn Hazards



Allow hot surfaces to cool before touching or servicing.

⚠ 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.

Do not spray ether into engines equipped with glow plugs or air intake grid heaters.

Do not use air or oxygen for charging the accumulators.

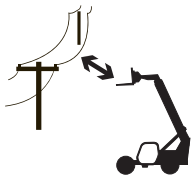
Work Area Safety

⚠ Electrocution Hazards

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



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



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

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

Do not use the machine as a ground for welding.

Always contact the electrical power line owner. The electrical power shall be disconnected or the power lines moved or insulated before machine operations begin.

Allow for boom movement, electrical line levelling 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 cab must not touch or operate the machine until energized power lines are shut off.

Do not operate the machine during lightning or storms.

Work Area Safety

⚠ Battery Safety

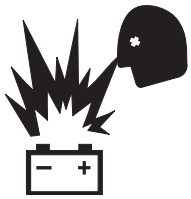
Burn Hazards



Batteries contain acid. Always wear protective clothing and eye wear when working with batteries.

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

Explosion Hazards



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



Electrocution Hazard

Avoid contact with electrical terminal.

Using the Charger (if equipped), be sure the device works at 12 Volt and doesn't exceed 15 Ampere.

During maintenance or repair works, and while welding, disconnect the battery by turning the cut-out switch (see Inspection for Decals section).

After turning off the cut-out switch, wait for 60 seconds before starting the engine.

⚠ Employer's Responsibilities

Employers are responsible for providing a safe work environment and for complying with local and national governmental regulations.

⚠ Personal Safety

Be sure that everyone working on or near this machine is familiar with the applicable safety precautions.

Safety Precautions

⚠ Requirements for Machine Operators

The operators who use the machine regularly or occasionally (i.e. for transport reasons) shall have the following prerequisites:
health:
before and during any operation, operators shall never take alcoholic beverages, medicines or other substances that may alter their psycho-physical conditions and, consequently, their working abilities.
physical:
good eyesight, acute hearing, good co-ordination and ability to carry out all required operations in a safe way, according to the instructions of this manual.
mental:
ability to understand and apply the enforced rules, regulations and safety precautions. They shall be careful and sensible for their own as well as for the others' safety and shall desire to carry out the work correctly and in a responsible way.
emotional:
they shall keep calm and always be able to evaluate their own physical and mental conditions.
training:
they shall read and be familiar with this handbook, its enclosed graphs and diagrams, the identification and hazard warning plates. They shall be skilled and trained about the machine use.

The operator shall have a licence (or a driving licence) when provided for by the laws enforced in the country where the machine is operated. Please, ask the competent bodies.

⚠ Requirements for service personnel

Personnel in charge of machine maintenance shall be qualified, specialised in the maintenance of telehandlers, and shall have the following prerequisites:
physical:
good eyesight, acute hearing, good co-ordination and ability to carry out all required maintenance operations in a safe way, according to this manual.
mental:
ability to understand and apply the enforced rules, regulations and safety precautions. They shall be careful and sensible for their own as well as for the others' safety and shall desire to carry out the work correctly and in a responsible way.
training:
they shall read and be familiar with this handbook, its enclosed graphs and diagrams, the identification and warning plates. They shall be skilled and trained about the machine functioning.

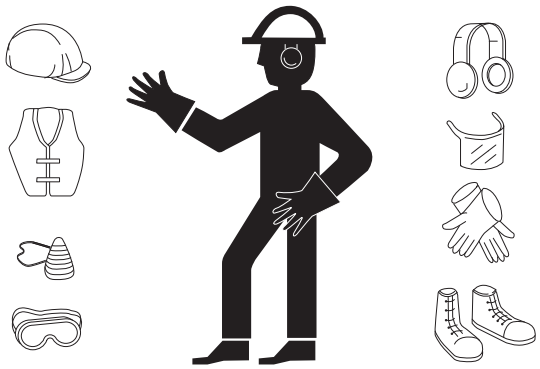
From a technical point of view, routine maintenance of the machine is not a complex procedure and can be carried out by the machine operator too, provided he has a basic knowledge of mechanics.

Safety Precautions

⚠ Working clothes

During work, but especially when maintaining or repairing the machine, operators must wear suitable protective clothing:

- Overalls or any other comfortable garments. Operators should not wear clothes with large sleeves or objects that can get stuck in moving parts of the machine.
- Protective helmet.
- Protective gloves.
- Working shoes.



Use only approved safety workwear in good condition.

⚠ Personal protective equipment

Under special working conditions, the following personal protective equipment should be used:

- Breathing set (or dust mask).
- Ear-protectors or equivalent equipment.
- Goggles or facial masks.

Safety Precautions

⚠ Control Indicators and Interlocks

Several control indicators and interlocks have been fitted to the machine. They must never be tampered with or removed.
Always perform a function test to check the proper operation of these devices.
Never operate a machine that is malfunctioning. If the machine starts to malfunction, immediately stop using it and have it repaired.

Load Management System (LMS)
The Load Management System has been developed to help the operator to maintain longitudinal stability of the machine. Audible and visual messages are provided when the limits of longitudinal stability are being approached.
However this device cannot replace the experience of the operator. It is up to the user to adopt the necessary safety measures to work within the rated limits of the machine.
The LMS is designed to function only:
- when the truck is static;
- when the truck is on consolidated, stable and level ground;
- when the truck is performing loading or placing functions;
- when the LMS is activated (not overridden).

The LMS will only warn the operator in the event of inadequate stability in the longitudinal plane in the forward direction.
The LMS is not intended for warning of the risk of overturning in the case of:
- a sudden overload;
- travelling with the load in the elevated position;
- travelling on rough terrain or on grounds with obstacles and holes;
- travelling across a slope or turning on a slope;
- driving in bends too fast or too sharp;

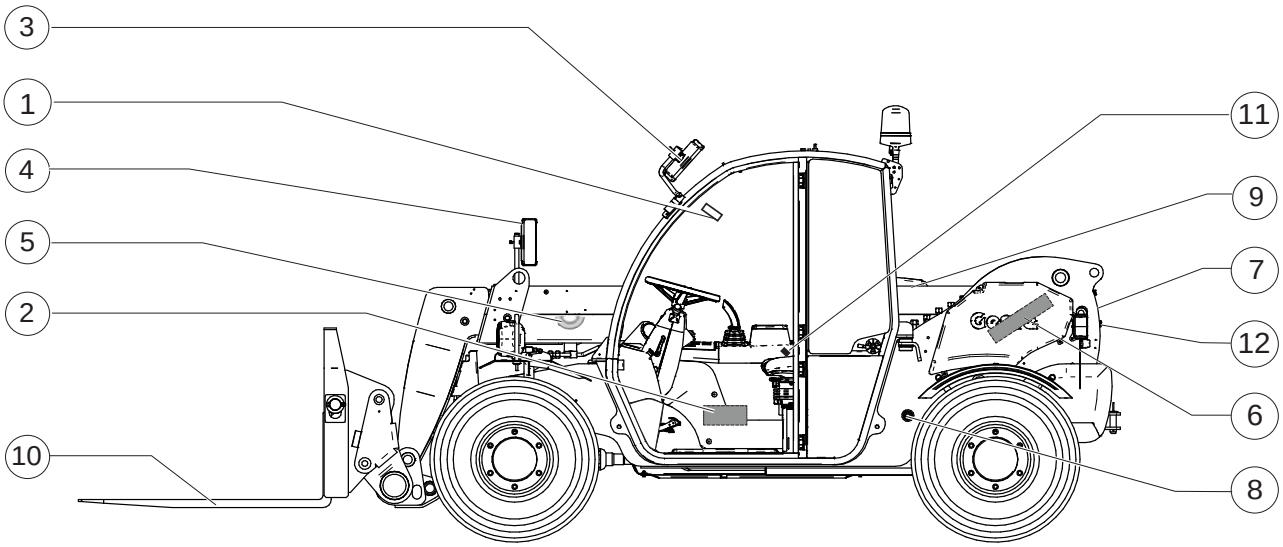
Adjustments affecting the setting of the Load Management System shall be performed only by authorised personnel.

Seat Interlock
This micro switch is located inside the seat cushion, and it prevents any machine transmission movements if the operator is not correctly seated in the driving seat.

Emergency Stop Push-button
This device may be used to stop the machine during an emergency situation.
By pressing this button, the engine shuts down while the Load Management System stays active.
Before restarting the machine, it is necessary to reset the push-button by rotating it clockwise.

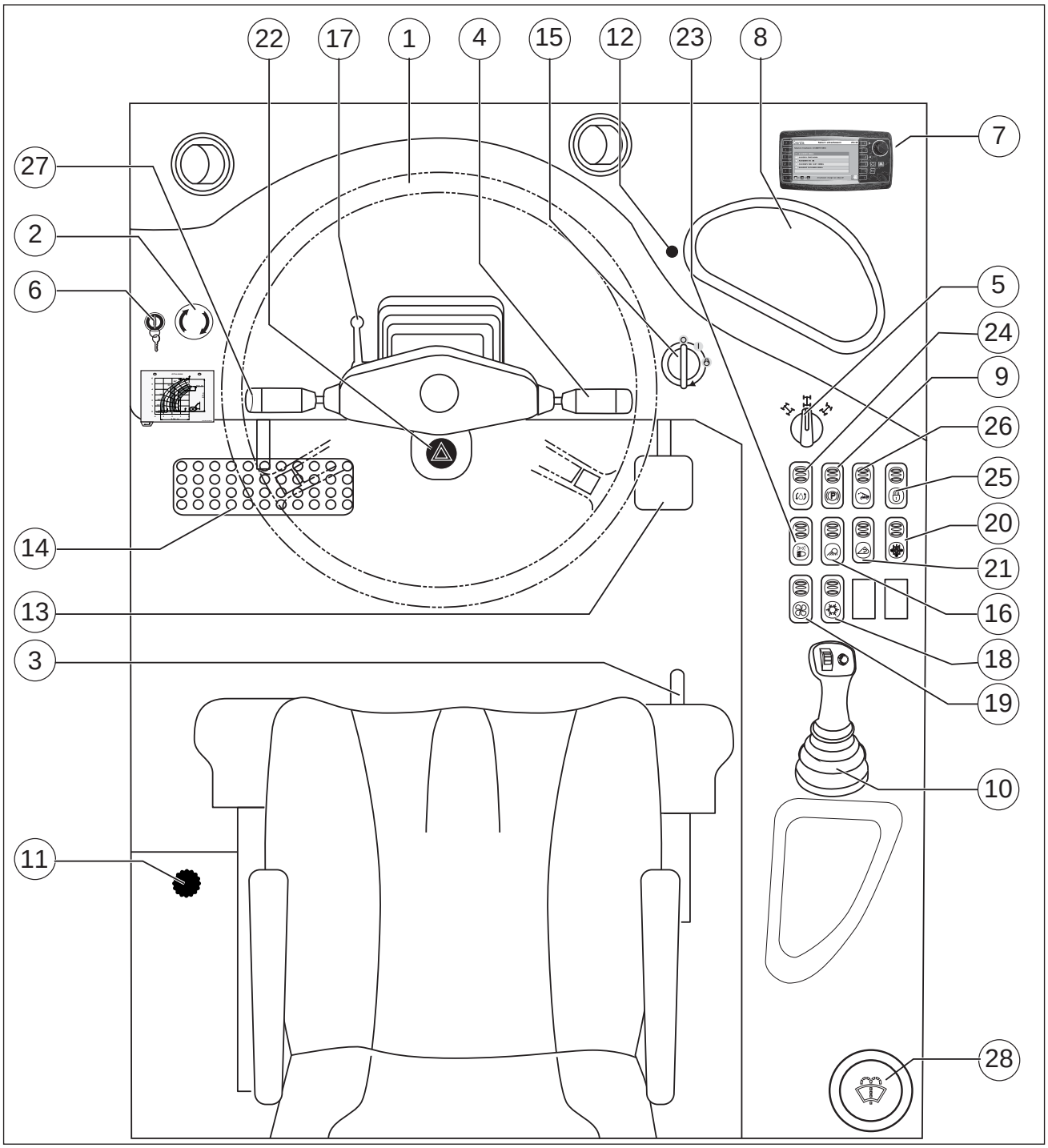
Enabling Function Switch on Joystick
The joystick is equipped with an enabling function switch. This red finger switch must be held pressed down until the joystick functions have been completed; if it is released, the manoeuvre stops.

Legend



1. Left/right level indicator
2. Operator's manual storage (door internal side)
3. Left rear view mirror
4. Right rear view mirrors
5. Boom angle indicator
6. Maintenance collar (on opposite side of machine)
7. Fuel filler
8. Hydraulic oil level gauge
9. Engine (on opposite side of machine)
10. Forks
11. Seat belt
12. Reversing Camera

Controls



Controls

Control Panel

1. Steering wheel
2. Emergency stop push-button
3. Seat controls
4. Turn signal - Windshield washer/wiper - High beams
5. Steering mode selector
6. Load Management System override key switch
7. Load Management System control panel
8. Instruments panel
9. Parking brake switch
10. Boom functions joystick
11. Heater and air conditioning controls
12. Instrument panel display toggle button
13. Accelerator pedal
14. Brake pedal
15. Ignition switch
16. Work lights switch (if equipped)
17. Steering column tilt adjustment lock
18. A/C switch (if equipped)
19. Cab heater fan switch
20. Auxiliary hydraulic circuit switch (if equipped)
21. Mixing bucket switch (if equipped)
22. Hazard warning lights switch
23. Road lights switch
24. Hydraulic mixing bucket oil direction switch (if equipped)
25. Hydraulic quick coupling enabling switch (if equipped)
26. Road/Job-site switch
27. Transmission control lever - Horn button
28. Windshield washer reservoir

Controls

1 Steering wheel

Turn the steering wheel to the right to turn the front wheels to the right. Turn the steering wheel to the left to turn the front wheels to the left.

2 Emergency stop push-button

See “Control Indicators and Interlocks” section.

3 Seat controls

See “Adjusting the Seat” section.

4 Turn signal - Windshield washer/wiper - High beams

Move the lever forward to activate the left turn signal. Move the lever backward to activate the right turn signal.

Press the top button at the end of the lever to direct a jet of water onto the cab windscreen.

Rotate the lever tip to operate the windscreen wiper.

Push the lever down to turn the high beams on (after pushing the ***Road lights switch 23***). Push the lever up to use high beams for intermittent signalling.

5 Steering mode selector

Rotate the steer selector to the right side to select four-wheel steer. Rotate the steer selector to the middle position to select two-wheel steer. Rotate the steer selector to the left to select crab steer.

6 Load Management System override key switch

See “Load Management System” section.

7 Load Management System control panel

See “Load Management System” section.

8 Instrument panel

9 Parking brake switch

Push the bottom of the rocker switch to turn the parking brake on. Push the top of the switch to turn the parking brake off.

10 Boom functions joystick

See “Jostick movements” section.

11 Heater and air conditioning controls

12 Instrument panel display toggle button

Push the button to scroll the LCD screen menu.

13 Accelerator pedal

14 Brake pedal

15 Ignition switch

Turn the key until the engine starts; when released, key springs back to pos. **I** automatically.

16. Work lights switch (if equipped)

Push the rocker switch to turn the work lights on: first position for front & boom working lights and second position for front, boom & rear working lights.

17 Steering column tilt adjustment lock

Unlock the lever on the right-bottom side and pull or push the steering wheel to the required position, then re-lock it.

18 A/C switch

Push the switch to turn the A/C on. Push the switch to turn the A/C off.

Controls

19 Cab heater fan switch

Push the bottom of the switch to turn the cab heater fan on: first position for low speed and second position for high speed. Push the top of the switch to turn the cab heater fan off.

20 Auxiliary hydraulic circuit switch (if equipped)

Push the button to switch the hydraulic directional flow between the two auxiliary lines.

21 Mixing bucket switch (if equipped)

Push the bottom of the rocker switch to enable the hydraulic mixing bucket functioning. Push the top of the switch to stop the hydraulic mixing bucket functioning.

22 Hazard warning lights switch (if equipped)

Push the bottom of the switch to turn the hazard warning lights on. Push the top of the switch to turn the hazard warning lights off.

23. Road lights switch

Push the rocker switch to turn the road lights on: first position for position lights and second position for low beams.

24. Hydraulic mixing bucket oil direction switch (if equipped)

Press the switch to regulate the oil flow direction towards right or left: push the top to direct the oil towards left; push the bottom to direct the oil towards right.

25. Hydraulic quick attach enabling switch (if equipped)

Push and hold the switch to enable the coupling or the release of the attachment, managed by the ***control handle***.

26 Road/Job-site switch

Push the bottom of the rocker switch to select job-site mode. Push the bottom of the rocker switch to select road transfer mode.

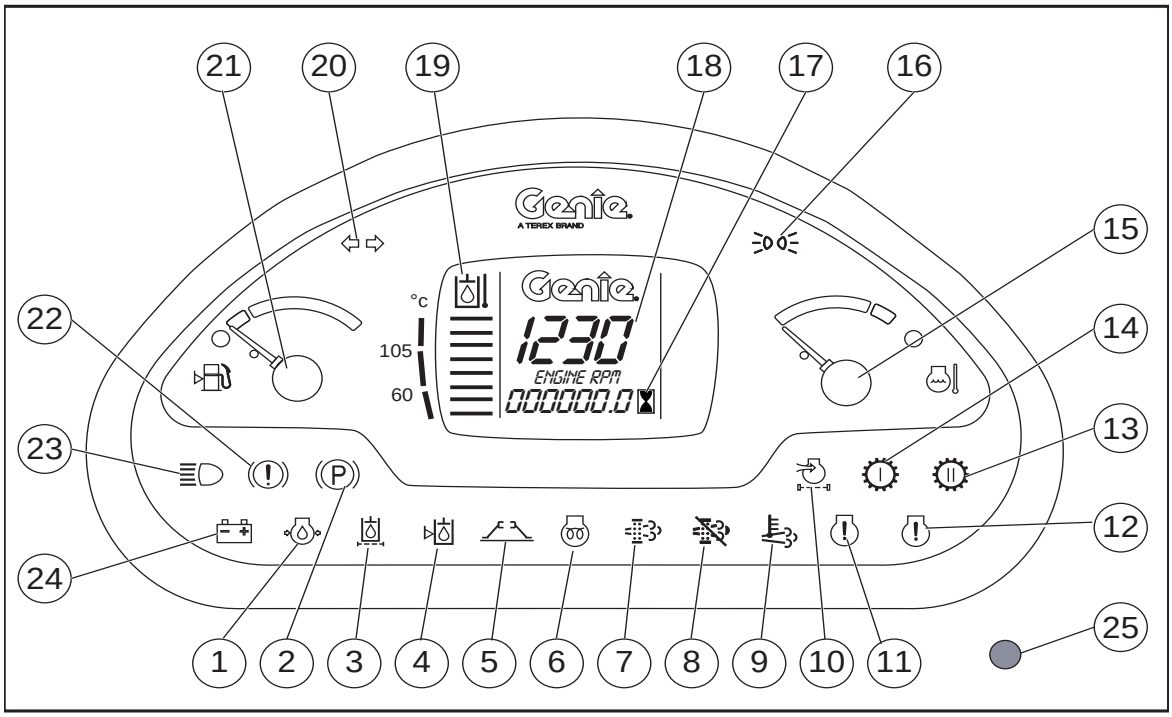
27 Transmission control lever - Horn button

Move the transmission control lever away from you for forward gear. Move the lever toward you for reverse gear. Move the lever to the center position for neutral.

Press the top end lever button and the horn will sound. Release the button and the horn will stop.

28 Windshield washer reservoir

Controls



Instrument Panel

1. Low engine oil pressure indicator light
2. Parking brake engaged indicator light
3. Hydraulic oil filter clogged indicator light
4. Low hydraulic oil level indicator light
5. Not active
6. Glow plugs preheating indicator light
7. Not active
8. Not active
9. Not active
10. Engine air filter restricted indicator light
11. Engine Alert indicator light
12. Engine Critical Fault indicator light
13. Not active
14. Not active
15. Engine coolant temperature gauge with high coolant temperature indicator light
16. Position light indicator light
17. Hour-meter
18. Tachometer
19. High hydraulic oil temperature indicator light
20. Turn signal indicator light
21. Fuel level gauge with low fuel indicator light
22. Brake pressure low indicator light
23. High beam indicator light
24. Battery voltage low indicator light
25. Load Management System general alarm indicator light

Controls

1 Low engine oil pressure indicator light

When illuminated this light indicates that the engine oil pressure is too low which can lead to machine damage. Discontinue use of the machine and service.

3 Hydraulic oil filter clogged indicator light

When illuminated this light indicates that the hydraulic oil filter is clogged which can lead to machine damage. Discontinue use of the machine and service.

4 Low hydraulic oil level indicator light

When illuminated this light indicates that the hydraulic oil level is too low which can lead to machine damage. Replenish and eliminate any oil leaks.

10 Engine air filter restricted indicator light

When this lamp comes on, the engine air filter is clogged proceed with cleaning or changing the air filter cartridge.

11 Engine Alert indicator light

This light flashes to warn of a problem with the engine. To identify the problem, see the two sections “Engine Lamp Logic”.

12 Engine Critical Fault indicator light

This light comes on to warn of a problem with the engine. To identify the problem, see the two sections “Engine Lamp Logic”.

15 Engine coolant temperature gauge with high coolant temperature indicator light

When gauge reaches red, the engine coolant is too hot which can lead to engine damage. Discontinue use and service the engine.

19 High hydraulic oil temperature indicator light

This indicates the temperature of the hydraulic oil in the tank which can lead to machine damage. Discontinue use of the machine and service.

22 Brake pressure low indicator light

It lights when the pressure of the braking circuit is too low for a correct functioning which can lead to machine damage. Discontinue use of the machine and service.

25. Load Management System general alarm indicator light

Inspections



Do Not Operate Unless:

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

1. Avoid hazardous situations.

2. Always perform a pre-operation inspection.

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

3. Always perform function tests prior to use.

4. Inspect the workplace.

5. Only use the machine as it was intended.

Pre-operation Inspection Fundamentals

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

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

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

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

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

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

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

Inspections

Pre-operation Inspection

- ❑ Be sure that the operator's and safety manuals are complete, legible and in the storage container located in the cab.
- ❑ Be sure that all decals are legible and in place. See Inspections section.
- ❑ Check for hydraulic oil leaks and proper oil level. Add oil if needed. See Maintenance section.
- ❑ Check for battery fluid leaks and proper fluid level. Add distilled water if needed. See Maintenance section.
- ❑ Check for engine oil leaks and proper oil level. Add oil if needed. See Maintenance section.
- ❑ Air-filled tires models: Check for proper tire pressure. Add air if needed. See Maintenance section.

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

- ❑ Electrical components, wiring and electrical cables
- ❑ Hydraulic hoses, fittings, cylinders and manifolds
- ❑ Fuel and hydraulic tanks
- ❑ Drive motors and drive hubs
- ❑ Boom wear pads
- ❑ Tires and wheels
- ❑ Mirrors /Camera system
- ❑ Engine and related components
- ❑ Limit switches
- ❑ Lights, alarms and beacons
- ❑ Pins, nuts, bolts and other fasteners
- ❑ - LMS front and rear cameras (if fitted) and their cables;

Check entire machine for:

- ❑ Cracks in welds or structural components
- ❑ Dents or damage to machine
- ❑ Excessive rust, corrosion or oxidation

- ❑ Be sure that all structural and other critical components are present and all associated fasteners and pins are in place and properly tightened.
- ❑ Be sure the windshield and windows and camera system are clean and free of obstructions that might limit visibility.
- ❑ Be sure the LMS cameras lens protector is clean (use tissue and water when required) and that the cameras mount is not loose.
- ❑ After you complete your inspection, be sure that all guards, screens and compartment covers are in place and secured.

Inspections



Do Not Operate Unless:

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

1. Avoid hazardous situations.
2. Always perform a pre-operation inspection.
3. **Always perform function tests prior to use.**

   Know and understand the function tests before going on to the next section.
4. Inspect the workplace.
5. Only use the machine as it was intended.

Function Test Fundamentals

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

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

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

Inspections

Function Tests

1 Select a test area that is firm, level and free of obstruction. Be sure there is no load on the forks or attachment.

2 Enter the cab and sit on the seat.

3 Adjust the seat and steering column, if needed.

4 Fasten and secure the seat belt around your waist.

5 Adjust the cab mounted mirror and the exterior right hand mirror, if required.

6 Be sure the parking brake is on and the transmission control lever is in the neutral position.

7 Start the engine. See Starting the Engine in the Operating Instructions section.

Test the Boom Functions Joystick

8 Using the control handle, momentarily raise the boom and extend the boom, tilt the forks up and down.

⊙ Result: All functions should operate smoothly.

9 Using the roller switch, momentarily extend and retract the boom.

⊙ Result: All functions should operate smoothly.

Test the Hydraulic Quick Coupling Lock/ Unlock (if equipped)

10 While pressing the dedicated switch, push and hold the white thumb switch and use the control handle, momentarily lock/unlock the hydraulic quick coupling.

⊙ Result: All functions should operate smoothly.

Test the Steering

11 Rotate the steer selector to the right side to select four-wheel steer.

12 Check the steering operation by turning the steering wheel approximately ¼ turn in each direction.

⊙ Result: The front wheels should turn in the same direction as the steering wheel. The rear wheels should turn in the opposite direction.

Inspections

13 Straighten the wheels.

14 Rotate the steer selector to the middle position to select two-wheel steer.

15 Check the steering operation by turning the steering wheel approximately ¼ turn in each direction.

⊙ Result: The front wheels should turn in the same direction as the steering wheel. The rear wheels should not turn.

16 Straighten the wheels.

17 Rotate the steer selector to the left to select crab steer.

18 Check the steering operation by turning the steering wheel approximately ¼ turn in each direction.

⊙ Result: The front wheels and the rear wheels should turn in the same direction as the steering wheel.

Test the Transmission and Brakes

19 Be sure the boom is fully lowered and retracted.

20 Step on the brake pedal. Push the top of the parking brake switch to turn it off.

21 Move the transmission control lever to the forward direction. Push down lightly on the accelerator pedal to increase the RPM's and slowly let up on the brake pedal. As soon as the machine starts to move, push the brake pedal.

⊙ Result: The machine should move forward, and then come to an abrupt stop.

22 Move the transmission control lever to the reverse direction. Push down lightly on the accelerator pedal to increase the RPM's and slowly let up on the brake pedal. As soon as the machine starts to move, push the brake pedal.

⊙ Result: The machine should move in reverse, and then come to an abrupt stop. The reversing alarm should sound when the transmission control lever is in reverse.

23 Move the transmission control lever to neutral.

24 Push the parking brake switch.

⊙ Result: The red parking brake indicator light should come on, indicating the parking brake is on.

25 Move the transmission control lever forward, and then in reverse while increasing the RPM's with the accelerator pedal.

⊙ Result: The machine should not move.

Test the Parking Brake

26 Push the bottom of the rocker switch to turn the parking brake on: the parking brake warning light should come on.

27 Push down lightly on the accelerator pedal.

⊙ Result: The machine should not move .

Inspections

Test the Road Transfer Mode

28 Set the steer select switch to road transfer mode.

29 Attempt to: operate the boom

⊙ Result: None of these functions should operate.

Test the Lights

30 Verify that all equipped working and road lights are functional.

Test the Load Management System

31 Load a known weight of approximately 1000 kg.

32 Raise the boom about 30 cm above the ground.

33 Extend the boom and check if the system enters the alarm mode once it has reached the distance as indicated in the load charts for the attachment fitted to the machine.

⊙ Result: The LMS alarm should sound and boom movement stop.

Test the Joystick Enabling Function Switch

34 Operate the joystick without pressing this button.

⊙ Result: the joystick shall not activate any movement.

Test the Emergency Stop Push button

35 Press the Emergency Stop Push button down during a movement.

⊙ Result: the movements shall stop and engine should shut down.

Test the Seat Switch

36 Sit on the driver seat.

37 Release parking and service brakes.

38 Place transmission into forward or reverse gear.

39 Lift body weight off the driver seat.

40 Push down lightly on the accelerator pedal.

⊙ Result: the machine should not move.

Inspections



Do Not Operate Unless:

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

1. Avoid hazardous situations.
2. Always perform a pre-operation inspection.
3. Always perform function tests prior to use.
4. **Inspect the workplace**.

   Know and understand the function tests before going on to the next section.
5. Only use the machine as it was intended.

Workplace Inspection Fundamentals

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

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

Workplace Inspection Checklist

Be aware of and avoid the following hazardous situations:

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

Inspections

Inspection for Decals

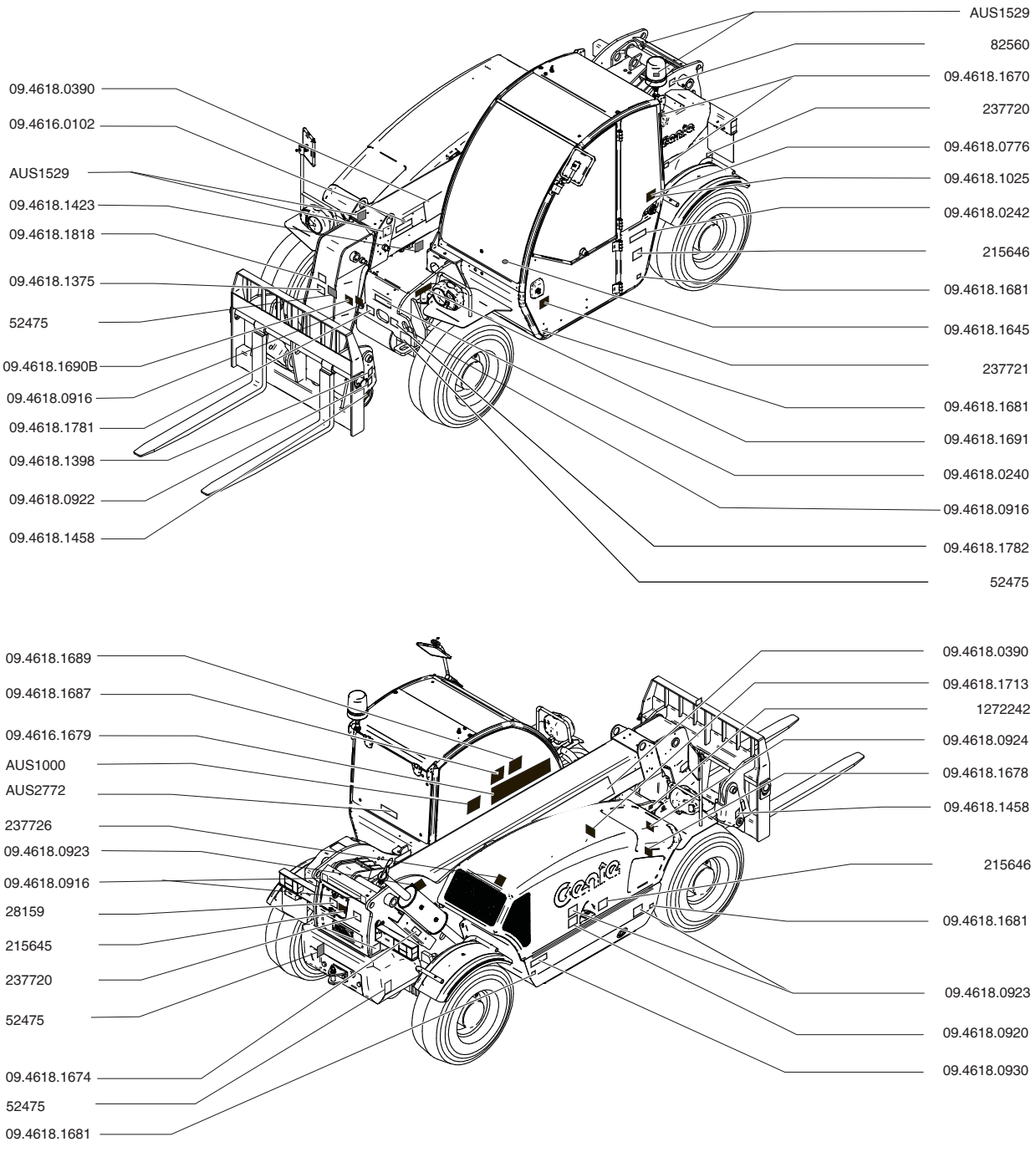
Use the pictures on the next page to verify that all decals are legible and in place.

Below is a numerical list with quantities and descriptions.

Part No.	Decal Description	Qty
215645	Danger – Explosion/Burn Hazard, Fueling	1
215646	Warning – Electrocution Hazard	2
09.4618.1818	Danger - No Riders on Forks	1
82560	Warning – Injection Hazard	1
237720	Warning – Crush Hazard, Moving Machine	3
237721	Warning – Wear seat Belt	1
237726	Warning – Burn Hazard	1
09.4616.0102	Label – 2500 kg	1
09.4618.0242	Cosmetic - Genie	1
09.4618.0240	Cosmetic - Genie	1
09.4618.0776	Label - Upper Door Internal Unlock	1
09.4618.0920	Warning – Engine Compartment	1
09.4618.0922	Warning – Crush Hazard	2
09.4618.0924	Danger – Explosion/Burn Hazard	1
09.4618.0923	Warning – Burn Hazard, Hot Parts	3
09.4618.1691	Label - Test Ports	1
09.4618.1375	Warning - Tip Over, Obey Capacity	1
09.4618.1398	Label - Attachment Locking Pin	1
09.4618.1025	Label - External Door Unlock	1
09.4618.1423	Danger – Explosion/Burn Hazard	1
09.4618.1687	Label - Control Lever	1
09.4618.1689	Label - Control Lever with Lock/Unlock (if equipped)	1
09.4618.1458	Warning - Tip Over, Obey Capacity	2
09.4618.0390	Cosmetic - Genie **GTH-2506**	2
09.4618.0930	Cosmetic - Genie **GTH-2506**	1

Part No.	Decal Description	Qty
09.4618.1645	Label - Load Management System Disabling	1
09.4618.1670	Label - Hydraulic Oil	2
28159	Label – Diesel	1
09.4618.1674	Warning - Crush Hazard, Boom Safety Strap	2
09.4618.1681	Label - Tyre Pressure 4.5 bar	4
09.4618.1690	Label - Anchoring & Lifting	1
09.4618.1678	Label - Cut-off Switch	1
09.4618.1679	Warning - 7 decals	1
09.4618.1713	Warning - Burn Hazard	1
09.4618.1781	Warning – Falling Object Hazard	1
09.4618.1782	Danger – Electrocution Hazard	1
52475	Label - Tie down point	4
1272242	Label - Machine Registration/Owner Transfer	1
AUS1529	Label - Do not lift	4
AUS1000	Label - Clearance requirements near electrical power lines	1
AUS2772	Label - Break glass	1
09.4618.0916	Label - Lift point 4	4
AUS 4098	Load Chart - Forks	1
AUS 4099	Load Chart - Fixed Hook	1
AUS 4100	Load Chart - 2m Jib	1
AUS 4101	Load Chart - Side Shift Forks	1
AUS 4102	Load Chart - Extended Forks	1
AUS 4103	Load Chart - Fork Rotator	1
AUS 4104	Load Chart - GP Bucket 500L	1
AUS 4105	Load Chart - Bucket 4 in 1 500L	1

Inspections



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

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.

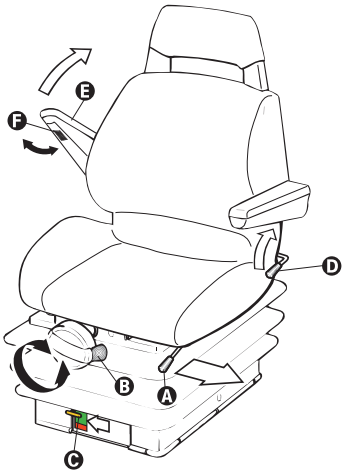
A variable reach rough terrain forklift truck is defined as a wheeled type truck designated primarily as a fork truck with a pivoted telescopic boom, which may be equipped with attachments for lifting material. Using it for any other purpose is unsafe and dangerous.

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.

Additionally, everyone working on or near the product also needs to be familiar with the applicable safety precautions.

Operating Instructions

Adjusting the Seat



To adjust the seat position, move lever A and slide the seat forward or backward. Release the lever and make sure the seat locks in position.

To adjust the seat height and spring, rotate knob B clockwise or counter-clockwise until reaching the desired spring setting. Once you are correctly seated check that the yellow indicator C is within the green zone.

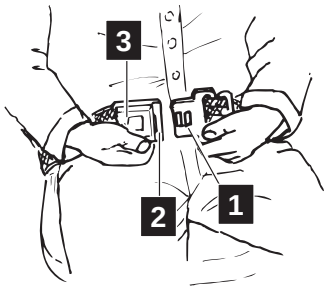
To adjust the armrest, raise arm rest E and turn wheel F to adjust the armrest at the height you want.

Raise armrest E and turn wheel F to put the armrest at the height you want.

⚠ The seat is for one person only.

Don't adjust the seat when the machine is moving.

Fastening the Seat Belts



Sit correctly in the driving seat; then:

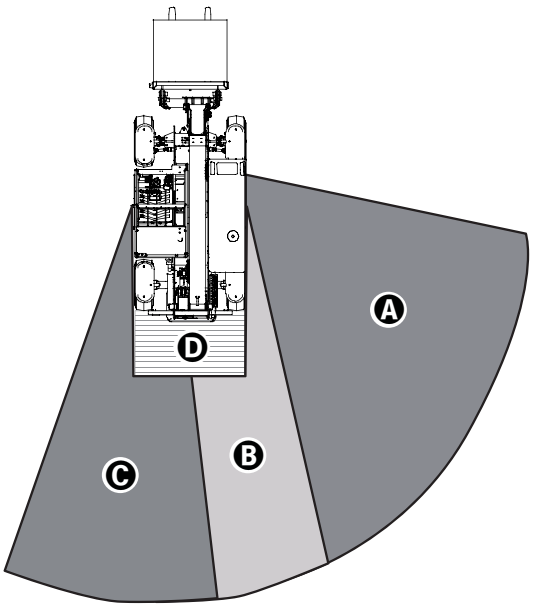
- The seat belt is equipped with a reel retractor.
- To fasten the belt, pull tab 1 and push it into buckle 2.
- To release the belt, push button 3 and remove the tab from the buckle.
- Make sure that the buckle is correctly located at the hip point and not on the stomach.

Operating Instructions

Adjusting the mirrors

The machine is fitted with five rear view mirrors. To adjust their positions, manually rotate them to the position(s) which provides optimal visibility.

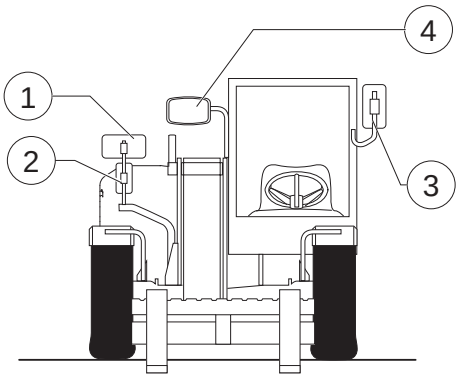
1. Allows checking the area Ⓐ behind the machine, on the right-hand side.
2. Allows checking the carriageway Ⓑ behind the machine.
3. Allows checking the area Ⓒ behind the machine, on the left- hand side.
4. Allows checking the area Ⓓ behind the machine as well as the rear part of the chassis.



Camera System

The system is designed to supplement other safety practices (i.e. signal persons) and systems (i.e. mirrors), and is not intended to be used as the sole method of collision avoidance. It should be used in conjunction with established safety programs and procedures to augment the safe operation of the telehandler. The operator is always the first line of defence when safely operating the telehandler and should always use direct line of sight and indirect visual methods (i.e. mirrors) to identify obstacles and collision hazards.

Always look in the direction of travel. When the object appears in the monitor, bring the machine to a controlled stop and verify the location of the obstacle. Only proceed when the obstacle is clear of the travel path.



Operating Instructions

Parking Brake

Use the parking brake switch to apply the parking brake before raising the boom or leaving the machine.

Always engage the parking brake before leaving the driver's seat.

Push the bottom of the rocker switch to turn the parking brake on.

Push the top of the switch to turn the parking brake off.

Brake Pedal

Use the brake pedal to control the machine speed and to stop the machine motion.

Push and hold the brake pedal to stop the machine.

Push and release the brake pedal to control the machine speed.

Starting the Engine

1. Be sure the parking brake is set and the transmission control lever is in the neutral position.
2. Insert the key in the ignition switch.
3. Turn the key until the engine starts.

If the engine fails to start after 30 seconds of cranking, determine the cause and repair any malfunction. Wait 20 seconds before trying to start again.

Starting in Cold Condition

In cold conditions, 20°F / -6°C and below, warm the engine for 5 minutes before operating to prevent hydraulic system damage. In extreme cold conditions, 0°F / -18°C and below, machines should be equipped with optional cold start kits. Attempting to start the engine when temperatures are below 0°F / -18°C may require the use of a booster battery.

Steer Select

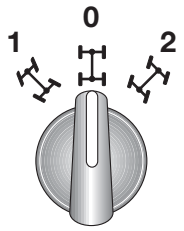
Always position all wheels in line with the machine before switching the steering mode.

Do not realign the wheels while driving.

To align the rear wheels:

1. Start the engine, and move the Job-Site/Road/Platform Select to the job-site position.
2. Rotate the steering wheel until the wheels are in line with the length of the chassis and the orange indicator light of the steer selector switches on with a solid light.

When swapping from four-wheel steer to crab steer (or vice versa), the machine will automatically aligned the rear wheels.



Operating Instructions

Emergency Exit

The rear window of the cabin can be used as an escape route in case of emergency.

In an emergency, break the rear window glass using the "Emergency break glass hammer" located behind the driver's seat.



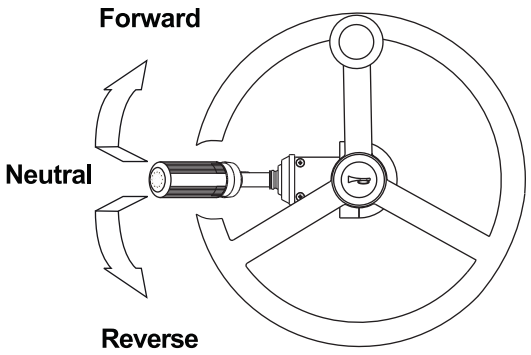
Transmission Control

Use the transmission control lever to control the direction of machine travel.

To drive forward, move the transmission control lever up and towards the front of the machine

To drive in reverse, move the transmission control lever up and towards the back of the machine. The reversing alarm sounds and the reversing lights turn on.

To return to neutral, move the transmission control lever to the center position.



Operating Instructions

Transporting a Load

Center the load on the forks. Position the load so that it is completely against the back of the fork frame.

The load should be kept as low to the ground as possible while traveling. Always move a loaded machine with the boom angle indicator at 0 degrees or less.

Tilt the forks back slightly to help keep the load secure.

Always bring the machine to a complete stop before applying the parking brake.

Raising and Placing a Load

The load chart in the cab shows the operating limits of a properly maintained and operated machine. To use the load chart, the operator must know the weight of the load, its load center and how far out and up it is to be placed.

This machine has more than one load chart. Be sure you are using the load chart that corresponds to the attachment on the machine.

If you determine that the weight of the load cannot be placed at the height and angle you want, these options can be used:

1. Move the machine closer to the loading or pick point so that the weight of the load will meet the load chart specifications.
2. Divide the load into smaller pieces so that each piece meets the load chart specifications.
3. Obtain a larger machine capable of handling the load within specifications.

Operating Instructions

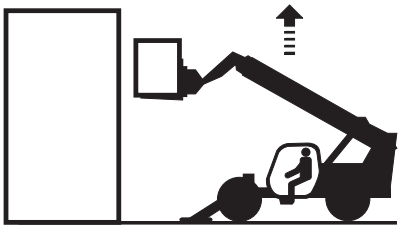
Placing the load

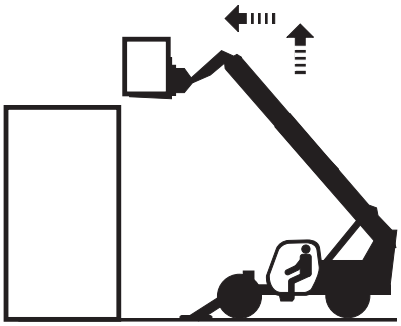
1 Travel to the desired work site and carefully stop the machine.

2 Put the transmission in neutral.

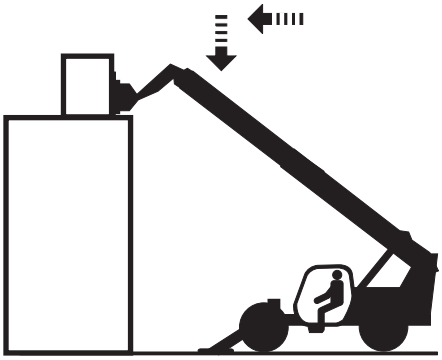
3 Apply the parking brake.

4 Gradually move the controller to raise and extend the boom to the required height.

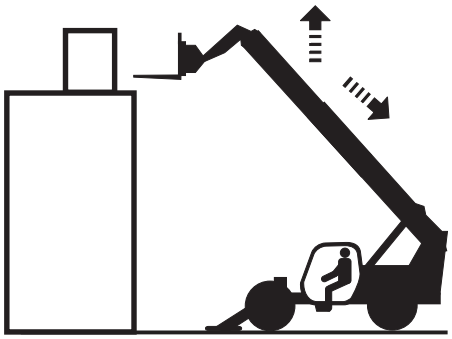




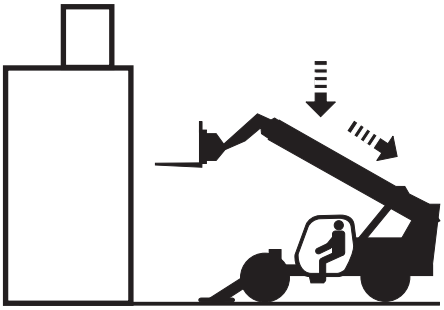
5 Gradually move the controller to lower and extend the boom into final position. Lower the load until the weight is completely off the forks. Do not apply a downward force with the forks.



6 Gradually move the controller to raise and retract the boom. This will bring the forks out of the load.

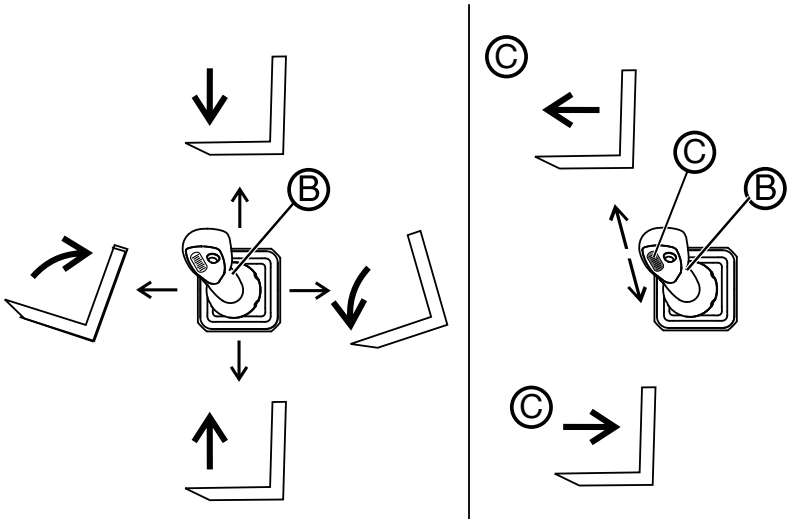


7 When the forks are clear of the load and the structure, the boom can be lowered and retracted.



Operating Instructions

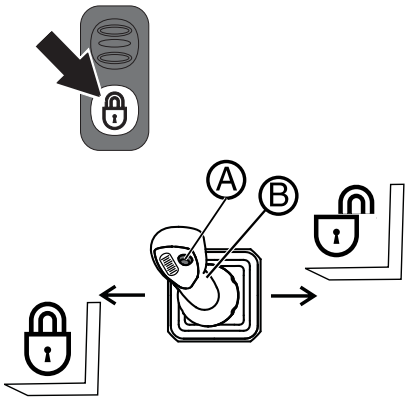
Controller movements - Single Joystick



Joystick with function enable switch (B)

Joystick with function enable switch (B) and yellow roller switch (C)

Hydraulic quick coupling (if equipped)



Lock or unlock hydraulic quick coupling by simultaneously pressing hydraulic quick coupling lock/unlock switch, function enable button (B) and button (A).

Operating Instructions

Load Management System

The Load Management System (LMS) is a safety system designed to monitor the telehandlers stability condition during the loading/unloading cycle when the machine has stopped travel (Figure 1). The LMS is integral with the machine electronics and boom movement commands. The LMS restricts further de-stabilizing movements when the rated capacity of the machine is reached. This system continuously monitors the actual load, load position, configuration and geometry of the telehandler. The graphical interface shows the actual load on the attachment, rated capacity based on boom position and a load chart showing the position of the load reference point of the load being handled. When the telehandler rated capacity is reached, the following movements are disbled: Boom raise/lower, boom extend and attachment tilt forward.

The LMS is designed to warn when the rated capacity is being reached and restrict de-stabilizing movements of the load only during the loading/unloading cycle, it does not address the risks associated with pick and carry operations.

The LMS is an electronic system including several sensing component failure. These electronic components are constantly monitored by the LMS, so the system is able to notify the operator when a fault occurs; alarms and warnings describing the type of fault are communicated to the operator via the display unit.

The risks associated with the following hazards are not controlled by the LMS:

- Overtuning due to set up outside the operating limits specified on the load chart.
- Incorrect attachment selection.
- Pick and carry operations

Functionality

The LMS is a system designed to assist the operator during the loading/unloading cycle. However, the LMS is not intended as a substitute for the guidelines esablished in this manual relating to the proper use of the machine. When the telehandler is first started, boom operations are disabled and can only be enabled by selecting an attachment from the LMS's display unit.

> The operator is responsible for the selection of the attachment from the display unit. The operator must ensure the attachment description shown on the LMS's display screen matches the attachment fitted on the telehandler.



Figure 1 Load Management System Display Unit

Operating Instructions

Although the LMS warns the operator when they are reaching the rated capacity, it does not replace the operator's experience in the safe use of the telehandler. It is the operator's responsability to operate the telehandler in a safe manner and to control risks associated with the operation of the telehandler. The operator must be able to recognise these events (e.g. by examining the alarms and warnings screen, checking the operation against the load chart) and take appropriate action to avoid the hazards (i.e. stop all load movements that would further de-stabilize the machine and bring the machine to a stable condition).

Before operating this telehandler, the operator must become familiar with the safe operation of the machine and LMS.

Display unit

The display screen is also known as a human machine interface (HMI). The LMS uses the HMI to receive inputs from the operator (i.e. attachment selection) and presents key information back to the operator. The display can also be used to troubleshoot machine faults associated with LMS (i.e. boom operation, joystick, outrigger and chassis tilting functionality).

There are two main screens used to display information about the condition of the machine during normal operation.

Function buttons (1, 2). Functionality of these buttons depends on the screen being displayed. In the home screen, function buttons on the left hand side (1) are used to zoom in and out of the load chart area; the bottom four buttons on the right hand side of the screen are used for audible alarm ON/OFF, front camera view (if equipped), rear camera view, and access to secondary home screen. On all other screens, the function buttons perform actions as indicated on the screen.

Encoder button (3). Press to access the main menu, and selections within sub-menus rotate clockwise or counter clockwise to scroll through menu options and to enter access code numbers in the login screen.

Main menu button (4). Press button to access the main menu, press again in menu screen to scroll through available menu items.

Home button (5). Press this button to return to the home screen from the main menu or a submenu.

Escape button (6). Press this button to return to the previous menu or to exit from a menu item.



Figure 2 Display unit input buttons

Operating Instructions

USB port (7) (if equipped with enhanced display). Used to load LMS software, machine configuration, load tables and operator access data (not avaible with standard display). For machines fitted with standard display, a USB port is located under the dashboard, behind the fuse-relay board.

Access Methods

There are three different ways to access the LMS depending on LMS configuration:

- No password
- 4- digit pin
- iButton

No password. In this access method, operators are not required to login to operate the telehandler. The attachment selection screen appears on the display immediately after the LMS boot up sequence is complete.

4-digit pin. When a login is required to operate the machine, user access levels and permissions can be set within the LMS. For example, available attachments can be enabled or disabled for different users depending on their training, experience and/or licensing status. In this case, a login screen appears after LMS boot up which prompts users to login before machine boom functions will be enabled.

Login via iButton. This access method operates in the same way as the 4-digit pin, except that an electronic tag in used to login into the LMS. An iButton is a round shaped electronic coded key which contains user information to quickly access a machine. The optional iButton reader is located on the right hand side of the dashboard (Figure 3). The LMS automatically logs user off when the iButton is removed from the iButton reader and boom functions are subsequently disabled.

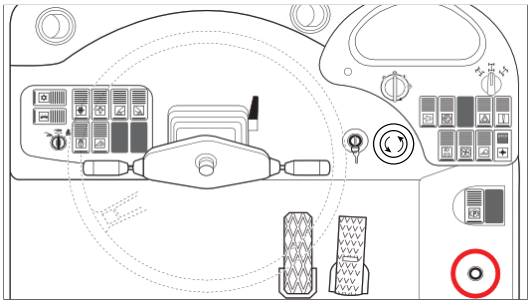


Figure 3 Location of iButton reader

Start Up

During telehandler start up, the LMS runs through a series of self-tests. The display panel shows information about the software version and operating system. By default, the LMS shows the attachment selection sreen after boot up (Figure4). However, if the LMS is configured to require login via a 4 digit code or iButton reader, a user login screen appears after system start up (Figure5).



Figure 4 Display attachment selection screen



Figure 5 Display login screen

Operating Instructions

Procedure:

- Start the engine;
- If login is required, use encoder wheel button to select user name and enter 4-digit code.
- If iButton feature is available, place iButton in iButton reader.

Use only attachments directly manufactured or recommended by Genie and whose load charts are provided.

- In the attachment selection screen, scroll through available attachments with the encoder wheel.
- Select the attachment by pressing the encoder button.
- Acknowledge attachment selection by pressing the button at the bottom right corner of the display.

After start up, the LMS defaults to the previously used attachment. The boom must be lowered before a different attachment can be selected from the attachment selection screen.

Before using the machine, make sure there are no warnings or alarms on the LMS display panel, and the name of the attachment on the display corresponds to the attachment being used.

- Begin operation as per instructions in this manual.

Shut Down

After the ignition is turned off, the system remains in stand-by mode for a period of 30 minutes. During this time, the display screen is turned off but the system turns on when the ignition is turned on accessories. After 30 minute stand-by time, the system shuts down and will require a boot up sequence when the machine is started.

Changing Attachments

- Follow appropriate instructions from within the manual to fit desired attachment.
- Ensure the attachment us lowerd to the ground.
- Press the encoder button (3) or rotate button (4) to go to main menu (Figure 6).



Figure 6 Display main menu

- From the main menu, select menu item "work" to display the work submenu (Figure7)



Figure 7 Display work submenu

- From the "Work" submenu, select menu item: "Attachment". The attachment selection screen will appear.
- Scroll through the list of available attachments using the encoder wheel.
- Press the encoder wheel to select the attachment.
- Acknowledge attachment selection by pressing the button at the bottom right corner of the display.

Operating Instructions

Overriding the LMS

Overriding the LMS may result in the machine overturning and cause death or serious injury to the operator and/or by-stander.

The LMS should only be overridden when a motion inhibited by the alarm condition is necessary to recover the machine from a hazardous situation.

If it is possible, unload the load at height and reposition the telehandler for more stability. Alternatively reduce the radius and retract the telescopic boom before lowering the load.

- Release the joystick and function enable button.
- Turn override key switch A (Figure8).

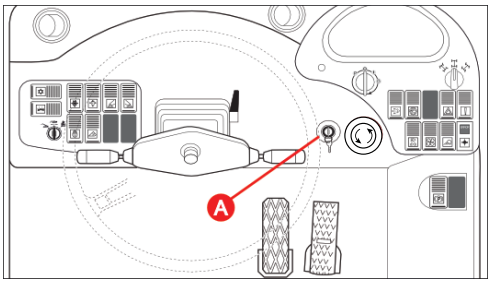


Figure 8 Override key switch A

- LMS override is enabled when the LMS override icon appears on the home screen (item 17 on Figure 9).

Primary Home Screen

This is the default screen displayed during operation of the machine. It displays the most relevant information to the operator during the loading cycle such as actual load, rated capacity, load chart, and selected attachment (Figure9).

Load chart area (8).
This area of the displays shows the load chart for attachment selected, the chart automatically switches between 'ON OUTRIGGERS' and 'OFF OUTRIGGERS'

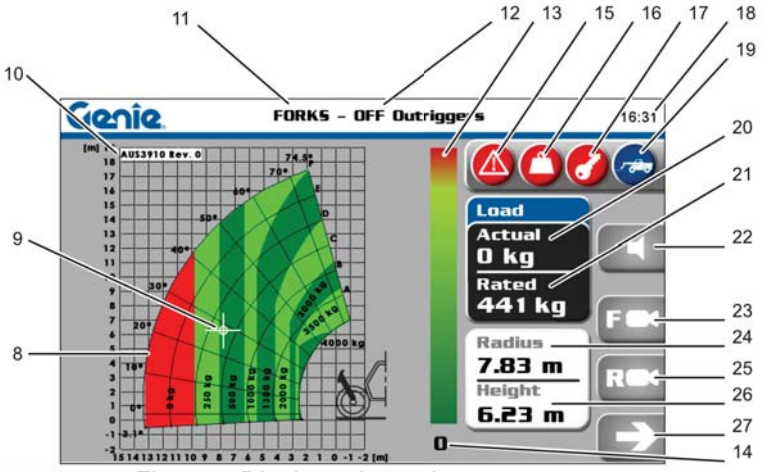


Figure 9 Display primary home screen

depending on outrigger position. The chart's load zones change colour from green to orange or red when the actual load reaches 90% and 100% of the rated capacity.

Load chart area zoom function. Turn the encoder wheel (3) clockwise to zoom into the load chart area, or counter clockwise to zoom out. Alternatively, press the pre-set zooming buttons on the right hand side of the screen (1).

Boom position indicator (9). Position of the load reference point is dynamically shown on the load chart by a cursor.

Load chart part number (10). Load chart number and revision is shown at the top left hand corner of the load chart area.

Select attachment (11). Short description of selected attachment.

Outrigger position (12). Outrigger position changes from 'ON outriggers' to 'OFF outriggers' dependingon outrigger configuration.

Load percentage graph (13). Actual load as displayed as gradient vertical bar graph. As you approach orange and red colours you are apporaching 90% and 100% rated capacity.

Load percentage value (14). Actual load as a percentage of rated capacity displayes as numerical value.

Alarm icon (15). This icon appears when an alarm or warning is active. The icon will disappear when the alarm condition has been cleared.

Overload icon (16). Overload icon appears when actual load has exceeded rated capacity.

Override icon (17). The override icon appears when LMS override function is in use.

Time/date (18). Current time/date. This value toggles between time and date every 10 seconds.

Machine status (19). This icon indicates the position of job-site/road/platform selector switch.

Actual load (20). Numerical value of load being lifted.

Rated capacity (21). Machine capacity based on attachment selected, boom position and outrigger configuration.

Audible alarm ON/OFF (22). Press button to the right of the icon to mute the overload alarm. Press again to unmute.

Front camera (if equipped) (23). Press button next to the icon to switch to front camera view.

Radius (24). This value represents the horizontal distance between the front vertical projection of the front tyres/outriggers to the vertical projection of the load reference point.

Rear camera (if equipped) (25). Press button next to the icon to switch to rear camera view.

Height (26). This value represents the vertical distance from the ground to the load reference point.

Secondary home screen (27). Press button next to the icon to switch to secondary home screen.

Secondary Home Screen

This information screen can only be accessed from the primary home screen. It displays machine geometrical information, user data, and description of current alarms and warnings (figure 11).

Operating Instructions

Primary home screen (28). Press button next to icon to return to the primary home screen.

Chassis pitch angle indicator (29). Graphical display of chassis pitch angle direction.

Chassis pitch angle readout (30). Numerical display of chassis pitch angle, in degrees. Negative values indicate the front of the chassis is lower than the rear, or it's pitched downwards, whereas a positive value indicates the front of the chassis is higher than the rear, or it's pitched upwards.

Boom angle (31). Numerical display of boom angle in relation to the horizon.

Boom length (32). Distance from the boom pivot point to attachment coupling pivot point measured along the boom's longitudinal axis.

Selected attachment (33). See 11.

Outrigger position (34). See 12.

Operator Name (35). Name of logged in operator.

Time/date (36). See 18.

Chassis tilt angle readout (37). Numerical display of chassis tilt angle, in degrees. A positive value indicates the machine is tilting to the right a negative value indicates the machine is tilting to the left.

Chassis tilt angle indicator (38). Graphical display of chassis tilt angle direction.

Alarms and warnings (39). Active alarms and warnings automatically scroll through this window. A blank window indicates there are no active alarms or warnings.

⚠ The LMS override key should be kept by the site manager or the person responsible for jobsite safety**.**

Alarms and Warnings

Alarms and warnings are automatically recorded into the system's memory. When either of these events is active, the warning icon is displayed in the home screen. Alarm events disable boom functions as if the telehandler is overloaded, warnings allow the operator to continue using the machine. Active alarms and warnings can be viewed in the alarms submenu.

Active alarms list is located in Main_Menu > Alarms > Active_Alm

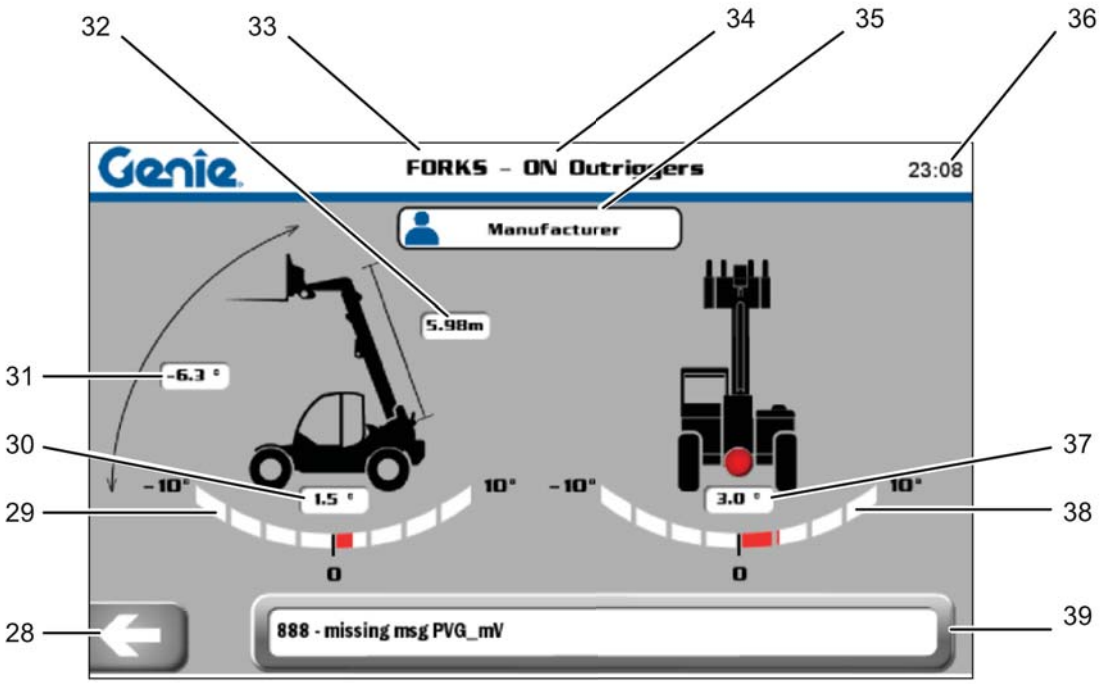
Active warnings list is located in Main_Menu > Alarms > Active_Warn

Each event recorded stores the following information:

- Date and time the event occurred
- Error code number
- Event description
- Duration of the event.

A malfunctioning machine must never be used. If malfunctions are discovered, the machine must be tagged and removed from service. Call Genie Technical Support for assistance.

Operating Instructions



Operating Instructions

Load Management System Override Key Switch

This switch allows the override of the LMS in order to recover the machine:

- when it is stuck after the load limiting system has triggered;
- in case of main machine failures requesting the unlock of all the machine movements;

In order to prevent any misuse of this device (ie working outside the load and stability limits of the machine), the LMS is provided with a timer (calibrated at 10 seconds) which, after this time is expired, restores automatically the lock-out functions.

When the LMS override key switch is on, the L8 functional led lights with a solid red light.

The LMS override key switch is active only in the Job-site mode.

Using The Load Charts

The load chart provided in the cabin (see section "load charts") specify operating limits for stationary and "pick and carry" operations, they indicate the maximum allowable load in relation to boom extension, boom elevation, outrigger position, and the type of attachment used. The operator is responsible for referring to and complying with the conditions described in these charts.
The extension level of the boom can be checked with the help of the letters (A, B, C, D, E) painted on the same boom, while the actual boom inclination degrees are shown by the angle indicator.

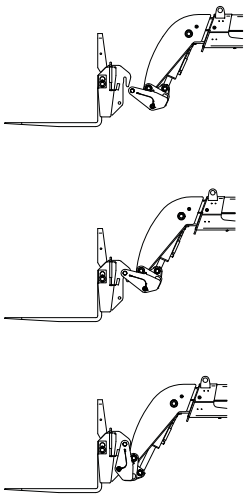
Load Management System Indicator (Christmas Tree) Lights (if equipped)

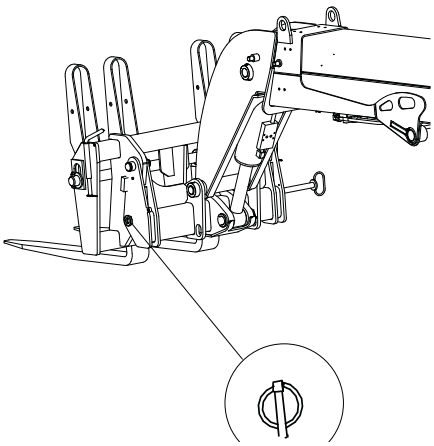
This device, fitted outside the cabin, is connected to the LMS and shows the same LED sequence which appears on the LMS display.

Operating Instructions

Quick Attach Instructions

1. Drive to the place where you will release the mounted attachment (when possible, a solid and sheltered site).
2. Disconnect the quick connectors of the attachment (if any).
3. Rest the attachment flat on the ground.
4. Remove the safety pin placed on attachment lock pin.
5. Press the Lock/Unlock Enabling Switch and keep it pressed up to the end of Step 6.
6. Retract the attachment lock cylinder to free the attachment by simultaneously pressing the white button on the joystick, the hydraulic quick coupling lock/unlock button, the function enable button on the joystick, and shifting the joystick to the right.
7. Tilt the attachment frame forward and lower the boom to release the attachment upper lock.
8. Move back with the machine and drive to the new attachment to be coupled.
9. Hold the frame tilted forward and hook the upper lock of the new attachment.
10. Retract and raise the attachment a small distance. It will center automatically on the quick coupling frame.
11. Extend the attachment lock cylinder and replace the safety pin previously removed.
12. Re-couple the connectors of the attachment (if any).
13. Select the correct attachment through the LMS control panel (see "Load Management System" section).





Operating Instructions

Jump Starting the Machine

Jump starting at the battery or battery replacement is required when the battery is discharged to the point where the battery will not crank the starter.

Never jump start the machine directly to the starter or the starter solenoid. Serious injury or death could result from the machine moving forward or backward.

To avoid personal injury when jump starting with another machine, be certain that the machines are not touching.

Never jump start a frozen battery as it will explode.

Keep sparks and flames away from the battery. Lead acid batteries generate explosive gases when charging. Wear safety glasses when working near batteries.

The booster battery must be 12V. The machine used for jump starting must have a negative ground electrical system.

To jump start the machine

1 Connect the positive (+) jumper cable to the positive (+) post of the discharged battery.

2 Connect the other end of the same jumper cable to the positive (+) post of the booster battery.

3 Connect one end of the second jumper cable to the negative (-) post of the booster battery.

4 Make the final cable connection to the engine block or the furthest ground point away from the battery.

5 Start the engine.

6 Disconnect the jumper leads in the reverse order.

Driving on a slope

When the machine is loaded, always travel with the load uphill. When the machine is unloaded, travel with the forks or attachment downhill.

On steep terrain, drive only up and down hill, and always keep the machine in gear. Do not turn across slope when machine is traveling up or down a slope.

Limit travel path and speed according to the condition of the ground surface, traction, slope, location of personnel and any other factors which may create a hazard. Never drive the machine unless the boom and equipment are in their proper travel position.

Whether a machine will tip over during dynamic machine operation involves many variables that need to be considered. Among these are pavement/ground conditions, stability and slope, as well as machine equipment, operator skill, load position, tire inflation, machine speed, etc.

Additionally, tip over of a machine is dependent in large part upon operator inputs such as the speed and smoothness of the operation as well as the position of the attachment and its load.

Construction sites and roads will frequently change slope from place to place, can be hard and soft, and change due to the construction activities and weather.

Operators should be properly trained and use their best judgment and experience to take the necessary precautions to prevent tip over. Operators must assess the job-site variables and avoid exceeding the machine's (or operator's) capabilities for terrain and conditions.

Operating Instructions

Engine Condition Indicator

If the Alert indicator light and/or the Engine Critical Fault indicator light switches on, contact service personnel.

After Each Use

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

2 Retract and lower the boom to the stowed position.

3 Move the transmission control lever to neutral.

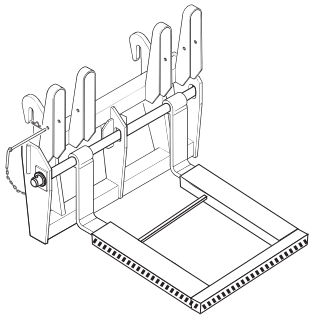
4 Set the parking brake.

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

Road or site transfer

When travelling on public roads, strictly obey the local or national road traffic regulations.
Before traveling on public roads, ensure the following precautions are taken:

- Start the engine.
- Align the rear wheels with the chassis.



- Retract and lower the boom.
- Set the ***Job-site/Road*** selector to ***"Road mode"***.
- Make sure that lights, horn and turn signals are in working order.
- The drive speed of the machine will depend on the engine rpm.

⚠ Driving on public loads is only allowed with an unloaded machine. Do not use the machine to tow trailers.

Operating Instructions

Moving a disabled machine

Tow the machine only when no alternative is possible, since this operation may result in serious damage to the transmission. When possible, repair the machine on site.
When the machine must be towed:

1. Disable the parking brake.
2. Set the transmission to neutral.
3. Select the two-wheel steer.
4. Connect a rigid draw bar to one of the two tie down points present on the front axle.
5. When possible, start the engine and use the hydraulic drive and the braking system.
6. Tow the machine for short distances and at low speed (less than 5 km/h).

Disabling the parking brake

⚠ Use the wheel chokes on all wheels to prevent the vehicle moving once the parking brake is disabled.

⚠ Lock with mechanical system all wheels to prevent the vehicle moving once the parking brake is disabled.

⚠ Clear the area of any personnel before remove the locking from each of the four tires and tow the vehicle to a suitable location.

To unlock the parking brake of a faulty machine follow the procedure below, using the 14mm and 19mm combination wrenches provided with the machine:

1. Locate the two screws and nuts (A and B) positioned on both sides of the front axle.
2. Working on the left side of the axle, unscrew the nuts (B) approximately 10 mm nearby the bolt head.
3. Screw in the brake release screws (A), 1/4 turn at a time, in sequence, until the torque drops off sharply (the wheels are free).
4. Working on the right side of the axle, unscrew the nuts (B) approximately 10 mm nearby the bolt head.
5. Screw in the brake release screws (A), 1/4 turn at a time, in sequence, until the torque drops off sharply (the wheels are free).

Enabling the parking brake

⚠ Use wheel chokes on all wheels to prevent the vehicle from moving before executing any operation.

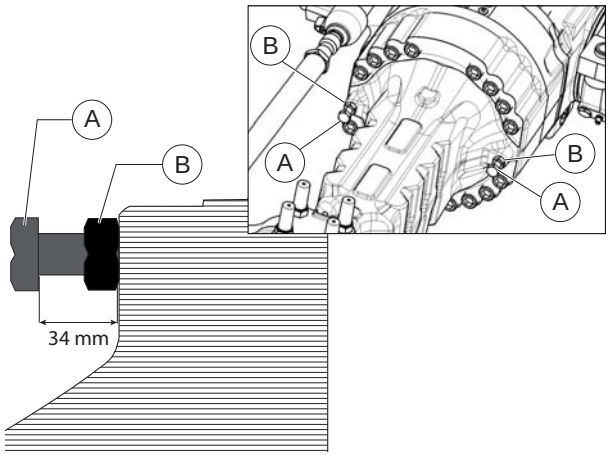
⚠ Lock with mechanical system all four wheels to prevent the vehicle from moving before execute any operation.

⚠ Clear the area of any personnel and verify that parking brake works properly.

To re-activate the parking brake:

1. Working on the left side of the front axle, unscrew the brake release screws (A).
2. Adjust the screws (A) to 34 mm.
3. Tighten the nuts (B) to 15-20 Nm.
4. Working on the right side of the front axle, unscrew the brake release screws (A).
5. Adjust the screws (A) to 34 mm.
6. Tighten the nuts (B) to 15-20 Nm.

The parking brakes are now re-activated and the wheels are locked.



Parking and Storage

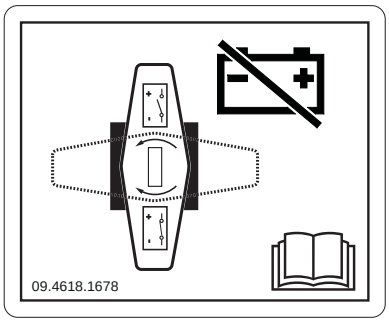
Short inactivity

Always park the machine in a safe way after a working day, a shift and at night.
Take all precautions to prevent injury to those persons who will approach the machine while stationary:

- Park the machine so that it does not hinder other operations.
- Retract and lower the boom to the ground.
- Disengage the transmission and set the parking brake.
- Remove the key from the ignition switch and lock the cab door.

⚠ Leaving a battery connected can result in shorts and, as a consequence, in a fire.

Disconnect the battery by turning the cut-out switch (placed inside the engine housing) to OFF position (see Inspection for Decals section).



⚠ Never leave the telehandler unattended with the boom elevated and extended, even if it is unloaded.

Machine storage

In case of extended inactivity of the machine, follow the above precautions. Additionally:

- Wash the machine thoroughly. For better cleaning, remove grills and protection casings.
- Carefully dry all machine parts by blowing with compressed air.
- Lubricate the machine thoroughly.
- Do a walk-around inspection and replace any worn or damaged part.
- Re-paint any worn or damaged part.
- Remove the battery, smear its terminals with vaseline and store it in a dry place. Battery can be used for other purposes. Otherwise, periodically check its charge level.
- Refuel the tank to prevent internal oxidation.
- Store the machine in a sheltered and well-ventilated place.
- Start the engine for about 10 minutes at least once a month.
- When weather is particularly cold, empty the radiator.

Always remember that routine maintenance must be carried out even during the machine inactivity. Pay particular attention to the fluid levels and to those parts subject to ageing. Before re-starting the machine, carry out pre-operation inspection maintenance and carefully check all mechanical, hydraulic and electrical components.

Parking and Storage

Cleaning and washing the machine

Clean the machine in accordance with the following instructions:

- Remove any oil or grease traces with a dry solvent or a volatile mineral alcohol.
- Before assembling a new part, remove any protection product (rust-preventer, grease, wax etc.).
- Remove any trace of rust from metal parts with some emery cloth before smearing the part with a protection product (rust-preventer, paint, oil etc.).

Do not use water at high pressure for washing the machine and especially the main valve, the solenoid valves and electrical parts.

External washing
Before washing the machine, check that the engine is shut down and the doors and windows are closed. Do not, at any time, use fuel to clean the machine. Use water or steam. In cold climates, dry the locks after washing or smear them with antifreeze.
Before using the machine again, check its condition.
Internal washing
Wash the machine interior with some water and a sponge. Do not use water at high pressure. After washing, dry with a clean cloth.
Washing the engine
Before washing the engine, protect the air intake filter to prevent water from entering the circuit.

⚠ If the machine is to be used in a marine or equivalent environment, protect it against salt deposits with an adequate treatment to prevent rust formation.

Machine disposal

⚠ At the end of the machine life, call in a specialized firm to dispose of it in compliance with the local or national regulations.

Battery disposal

⚠ Used lead-acid batteries cannot be disposed of as normal industrial solid wastes. Because of the presence of harmful substances, they must be collected, eliminated and/or recycled in accordance with the laws of the EU.
Used batteries must be kept in a dry and confined place. Make sure the battery is dry and the cell plugs are tight. Place a sign on the battery to warn of not using it. If before disposal the battery is left in the open air, it will be necessary to dry, smear the box and the elements with a coat of grease and tighten the plugs. Do not rest the battery on the ground; it is always advisable to rest it on a pallet and cover it. The disposal of batteries shall be as rapid as possible.

Transport and Lifting Instructions



Observe and Obey:

- ☑ Genie customers needing to containerize any lift or Genie product should source a qualified freight forwarder with expertise in preparing, loading and securing construction and lifting equipment for international shipment.
- ☑ Only qualified operators should move the machine on or off the truck.
- ☑ The transport vehicle must be parked on a level surface.
- ☑ The transport vehicle must be secured to prevent rolling while the machine is being loaded.
- ☑ Before loading for transport, make sure the deck, ramps and machine tires are free of mud, snow and ice. Failure to do so could cause the machine to slide.
- ☑ Be sure the vehicle capacity, loading surfaces and chains or straps are sufficient to withstand the machine weight. Genie telehandlers are very heavy relative to their size. See the serial label for the machine weight. See the Inspections section for the serial label location.

Transport and Lifting Instructions

Securing to Truck or Trailer for Transit

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

Inspect the entire machine for loose or unsecured items.

Be sure the door and the door windows are latched and secured.

Prior to loading, level the telehandler and retract the boom.

Use a spotter to load and unload the telehandler. Keep the boom as low as possible when loading and unloading.

Set the parking brake.

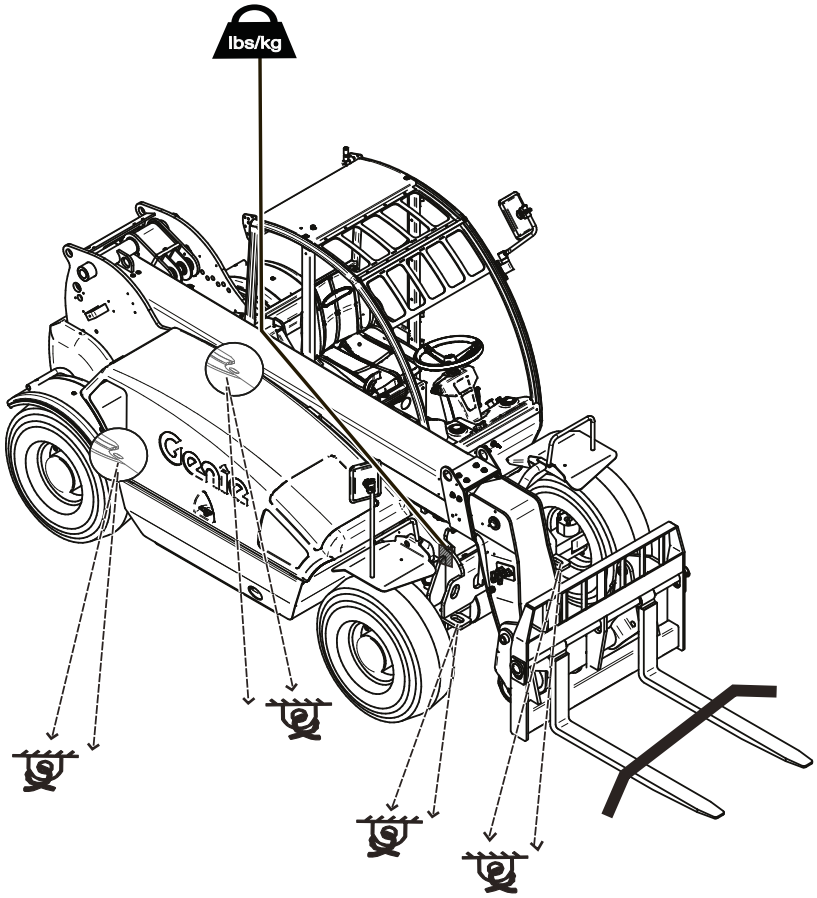
Securing the Chassis

Use chains of ample load capacity.

Use a minimum of 4 chains. There are 4 tie down points on the chassis, two in the front and two in the rear of the machine.

Fully lower the forks or attachment onto the truck bed. Secure the forks or attachment with a suitable strap or chain to prevent movement.

Adjust the rigging to prevent damage to the chains.



Transport and Lifting Instructions

Observe and Obey:

☑ Only qualified riggers should rig the machine.

☑ Only certified crane operators should lift the machine and only in accordance with the applicable crane regulations.

☑ Be sure the crane capacity, loading surfaces and straps or lines are sufficient to withstand the machine weight. See the serial label for the machine weight.

Lifting Instructions

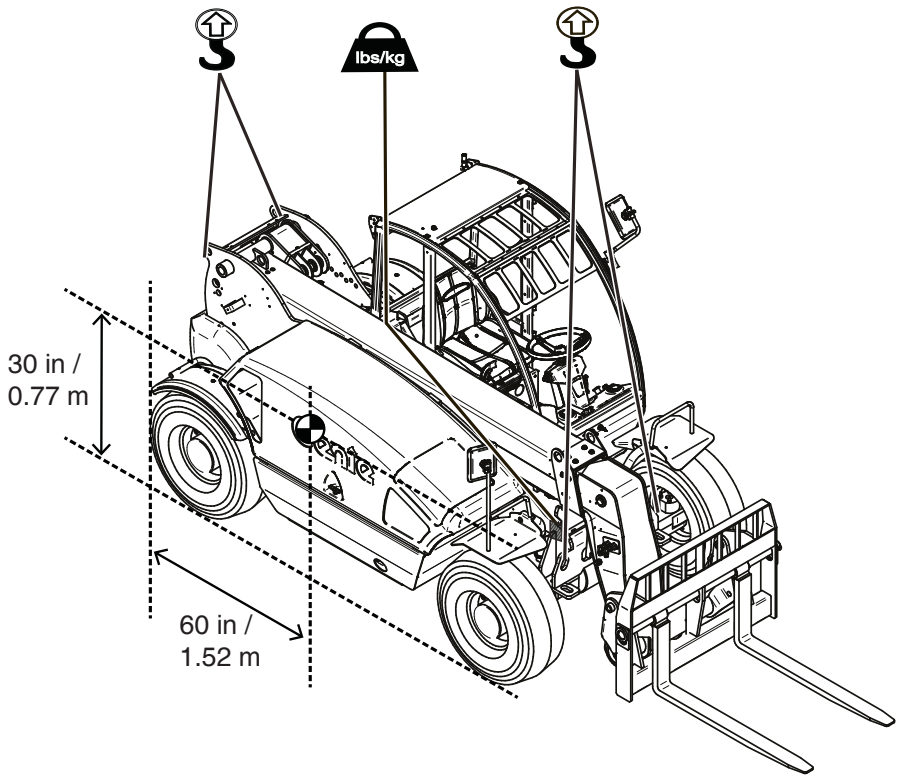
Fully lower and retract the boom.

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

Remove all loose items on the machine.

Attach the rigging only to the designated lifting points on the machine.

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



Maintenance



Observe and Obey:

☑ Only routine maintenance items specified in this manual shall be performed by the operator.

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

Maintenance Symbols Legend

The following symbols have been used in this manual to help communicate the intent of the instructions. When one or more of the symbols appear at the beginning of a maintenance procedure, it conveys the meaning below.



Indicates that tools will be required to perform this procedure.



Indicates that new parts will be required to perform this procedure.



Indicates that a cold engine will be required to perform this procedure.

Check the Tire Pressure



⚠ Tip-over hazard. An over-inflated tire can explode which may compromise machine stability and cause the machine to tip over.

⚠ Tip-over hazard. The use of temporary flat tire repair products may lead to tire failure which could compromise machine stability and cause the machine to tip over.

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

Note: This procedure does not need to be performed on machines equipped with foam-filled tires.

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

Wheel and Tire Specifications

Tire	12-16.5
Rim	9.75x16.5
Wheel	8 holes DIN 70361
Tire pressure	4.5 bar (65 psi)

Maintenance

Check the Engine Oil Level



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

Note: Check the oil level with the engine off and on a level surface.

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

Deutz TD 2.9 L4, STAGE III A	
Oil type	SHELL RIMULA R4 L 15W-40

Diesel Fuel Requirements

Satisfactory engine performance is dependent on the use of a good quality fuel. The use of a good quality fuel will give the following result: long engine life and acceptable exhaust emissions levels.

Tank	60 L	13 gal
Fuel Type		Diesel

Check the Hydraulic Oil Level



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

1 Be sure that the engine is off, the frame is level and the boom is in the stowed position.

2 Visually inspect the sight gauge located on the left side of the hydraulic oil tank.

⊙ Result: The hydraulic oil level should be halfway in the sight gauge.

3 Add oil as needed. Do not overfill.

Hydraulic oil specifications
Hydraulic Oil type
GAZPROMNEFT HYDRAULIC HDZ 46

Maintenance

Check the Engine Coolant Level



Maintaining the engine coolant at the proper level is essential to engine service life. Improper coolant level will affect the engine's cooling capability and damage engine components. Daily checks will allow the inspector to identify changes in coolant level that might indicate cooling system problems.

1 Visually inspect the sight gauge located on the top side of the radiator.

⊙ Result: The fluid level should be halfway in the sight gauge.

⚠ Bodily Injury Hazard. Fluids in the radiator are under pressure and extremely hot. Use caution when removing cap and adding fluids.

Check Mirrors and Camera System

Maintaining the indirect visual aids is essential to workplace visibility.

1. Visually inspect all mirrors to ensure they are working properly and clean and free from debris.

Check the Battery



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

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

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

1 Put on protective clothing and eye wear.

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

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

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

Maintenance

Scheduled Maintenance

Machines that have been out of service for more than three months must receive the quarterly inspection before they are put back into service.

Model
Serial number
Date
Hour meter
Machine owner
Inspected by (print)
Inspector signature
Inspector title
Inspector company
Instructions

- Make copies of this report to use for each inspection.
- Select the appropriate checklist(s) for the type of inspection to be performed.

☐ **Daily or 8 hours**
Inspection: A

- Place a check in the appropriate box after each inspection procedure is completed.
- Use the step-by-step procedures in this section to learn how to perform these inspections.
- If any inspection receives an “N”, tag and remove the machine from service, repair and re-inspect it. After repair, place a check in the “R” box.

Checklist A		**Y**	**N**	**R**
A-1	Manuals and decals			
A-2	Pre-operation inspect			
A-3	Function tests			
A-4	Lubricate the boom			
A-5	Engine maintenance			
Perform after first 10 hours:				
A-6	Axle maintenance			
Perform after first 100/250 hours:				
A-7	Axle maintenance			

Interlocks Spare Parts	
LMS Display & Board	56.0016.0132
Enabling Function Switch on Joystick	07.0741.0225
Emergency Stop Switch	56.0016.0091
Seat Switch	07.0703.0484

Maintenance

A-1
Inspect the Manuals and Decals

Genie specifications require that this procedure be performed every 8 hours or daily, whichever comes first.

Maintaining the operator's and safety manuals in good condition is essential to proper and safe machine operation. Manuals are included with each machine and should be stored in the container provided in the operator's compartment. An illegible or missing manual will not provide safety and operational information necessary for a proper and safe operating conditions.

In addition, maintaining all of the safety and instructional decals in good condition is mandatory for proper and safe machine operation. Decals alert operators and personnel to the many possible hazards associated with using this machine. They also provide users with operation and maintenance information. An illegible decal will fail to alert personnel of a procedure or hazard and could result in hazardous operating conditions.

1 Check to make sure that the operator's and safety manuals are present and complete in the storage container in the operator's compartment.

2 Examine the pages of each manual to be sure that they are legible and in good condition.

⊙ Result: The operator's manual is appropriate for the machine and all manuals are legible and in good condition.

⊗ Result: The operator's manual is not appropriate for the machine or all manuals are not in good condition or is illegible. Remove the machine from service until the manual is replaced.

3 Open the operator's manual to the decals inspection section. Carefully and thoroughly inspect all decals on the machine for legibility and damage.

⊙ Result: The machine is equipped with all required decals, and all decals are legible and in good condition.

⊗ Result: The machine is not equipped with all required decals, or one or more decals are illegible or in poor condition. Remove the machine from service until the decals are replaced.

4 Always return the manuals to the storage container after use.

Note: Contact your authorized Genie distributor or Genie Industries if replacement manuals or decals are needed.

Maintenance

A-2
Perform Pre-operation Inspection

Genie specifications require that this procedure be performed every 8 hours or daily, whichever comes first.

Completing a Pre-operation Inspection is essential to proper and safe machine operation. The Pre-operation Inspection is a visual inspection performed by the operator prior to each work shift. The inspection is designed to discover if anything is apparently wrong with a machine before the operator performs the function tests. The Pre-operation Inspection also serves to determine if routine maintenance procedures are required.

A-3
Perform Function Tests

Genie specifications require that this procedure be performed every 8 hours or daily, whichever comes first.

Completing the function tests is essential to safe machine operation. Function tests are designed to discover any malfunctions before the machine is put into service. A malfunctioning machine must never be used. If malfunctions are discovered, the machine must be tagged and removed from service.

Maintenance

A-4
Lubricate the Boom



Genie specifications require that this procedure be performed every 8 hours or daily, whichever comes first.

Greasing the specified locations is essential for good machine performance and service life.
Operating the machine with little or no grease may cause the machine to perform poorly and continued use may cause component damage.

Grease Specification	
MASCHERPA GR 529	
Genie part number	09.4693.0007

1. Fully extend and raise the boom, then retract the boom, checking to insure it operates smoothly. There should be a light film of lubricant on wear pad contact surfaces.

⊙ Result: Boom operates smoothly and a thin film of lubricant is visible. Proceed to step 4.

☒ Result: Boom does not extend or retract smoothly and no lubricant is visible on wear pad contact surfaces. Proceed to step 2.

2. Apply a thin layer of grease to the underside of the number 2 boom tube where it makes contact with the number 1 boom tube lower wear pads.
3. Lubricate the top and side boom tube wear pads.
4. Return the boom to the stowed position.

A-5
Perform Engine Maintenance - Perkins Models



Engine specifications require that this procedure be performed every 8 hours or daily, whichever comes first.

Deutz TD 2.9 L4
Lubricating oil level - check/add
Coolant level - check/add
Visual inspection
Suction air filter/dry air filter - check
Fuel pre-filter - check/empty water

Required maintenance procedures and additional engine information is available in the Deutz TD 2.9 L4 Operation and Maintenance Manual (Deutz part number 0312 3893).

Deutz TD 2.9 L4 Operation and Maintenance Manual	
Genie part number	57.4700.0006

Maintenance

A-6
Perform Axle Maintenance



Axle specifications require that this procedure be performed after the first 10 hours.

Differential lubricating oil - check/add
Planetary reduction lubricating oil - check/add

Required maintenance procedures and additional axle information is available in the ***Dana Axle ASM-194 Service Manual***

Dana Axle Service Manual	
Genie part number (Genie Instructions Library)	57.4700.0026

A-7
Perform Axle Maintenance



Axle specifications require that this one-time procedure be performed after the first 100/250 hours.

Differential lubricating oil - change
Planetary reduction lubricating oil - change
Magnetic plug - clean

Required maintenance procedures and additional axle information is available in the ***Dana Axle ASM-194 Service Manual***

Dana Axle Service Manual	
Genie part number (Genie Instructions Library)	57.4700.0026

Attachments

This machine can be equipped with several attachments.

Use only Genie approved attachments specified in this section.

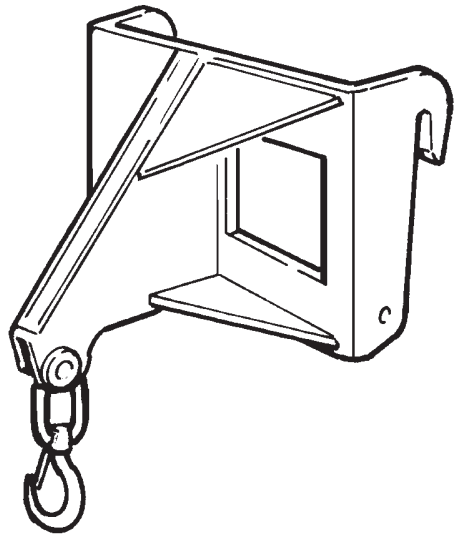
Information about how to fit and replace attachments on the machine can be found in section “Quick Attach Instructions”.

Genie Approved Attachments List:

- **Floating Fork**
  (part number AUS10099)
- **Fixed Hook**
  (part number AUS10011)
- **2 m Jib**
  (part number AUS10020)
- **Extended Forks**
  (part number AUS10075)
- **Side Shift Forks**
  (part number AUS10024)
- **500 L Bucket**
  (part number AUS10001)
- **800 L Bucket**
  (part number AUS10002)
- **500 L 4-in-1 Bucket**
  (part number AUS10003)
- **Fork Rotator**
  (part number AUS10018)

Attachments

Fixed Hook
(part number AUS10011)



TECHNICAL DATA	
Payload	4000 kg
Width	990 mm
Length	615 mm
Height	510 mm
Weight	150 kg

⚠ The fixed hook has been designed to support a load of 4000 kg. The max payload corresponds to the nominal capacity rating of the telehandler on which it is installed and may be reduced as indicated on the load charts supplied with the equipment.

Application
Quick-coupling fitted attachment for lifting loads by means of special slings.

Safety
Strictly obey the general safety precautions given in section “Safety”.
Do not oscillate the load.
Do not drag hooked loads.
Lift the load before extending the boom.

Operation
Fork the hook and hold it in position by means of the locking cylinder.
All loads must be bridled with special textile slings or chains in compliance with all pertinent regulations.
To handle the load, raise and rotate the telescopic boom of the handler.

Maintenance
Visually check the hook for damage before using it. Check the safety catch is in good working order.

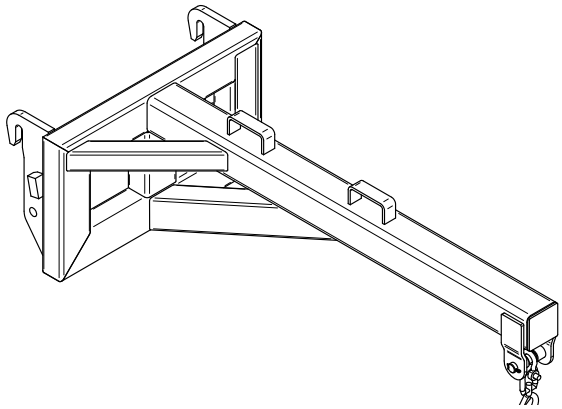
- Capacity is in accordance with the load chart supplied for this attachment
- Load must be kept low while travelling - use short slings
- Pick and carry position

-max boom angle 35°
-boom fully retracted
-maximum drive speed 0.4 m/s (walking speed)
-maximum downhill slope 5°
-maximum sidewards slope 5°

For use of this attachment, refer to “suspended load Hazard” section

Attachments

2 m Extension Jib
(part number AUS100020)



TECHNICAL DATA	
Payload	2000 kg
Width	1000 mm
Length	2225 mm
Height	675 mm
Weight	205 kg

⚠ The 2 m extension jib has been designed to support a load of 2000 kg. The max payload corresponds to the nominal capacity rating of the telehandler on which it is installed and may be reduced as indicated on the load charts supplied with the equipment.

Application
Quick-coupling fitted attachment for lifting loads by means of slings.

Safety
Strictly obey the general safety precaution given in “Safety” chapter.
Never lift incorrectly slung loads.
Avoid abrupt acceleration or deceleration.
Avoid load oscillations, and especially do not move the load from the vertical pull line.
Do not pull crosswise and do not tow.

Operation
Couple the jib and hold it in position by means of the locking cylinder. All loads must be lifted with slings or chains in compliance with all relevant regulations. To handle the load, raise and rotate the telescopic boom of the telehandler.

Maintenance
Visually Check the jib for damage before using it.
Check the safety catch is in good working order.

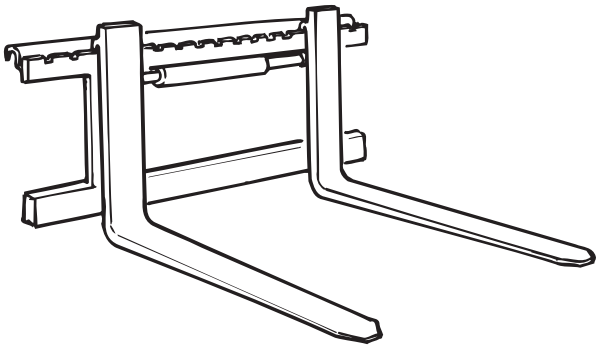
- Capacity is in accordance with the load chart supplied for this attachment
- Load must be kept low while travelling-use short slings.
- Pick and carry position

-max boom angle 35°
-boom fully retracted
-maximum drive speed 0.4 m/s (walking speed)
-maximum downhill slope 5°
-maximum sidewards slope 5°

For use of this attachment refer to “Suspended Load Hazard” section.

Attachments

Forks with Hydraulic Side-Shift
(part number AUS10024)



TECHNICAL DATA	
Payload	2500 kg
Width	1240 mm
Length	1600 mm
Height (with protection)	1000 mm
Weight	290 kg
Stroke	± 100
Fork Attachments	FEM 2

Application
Quick-coupling fitted attachment for handling palletised loads with possibility of shifting the load to the side by ± 100mm.

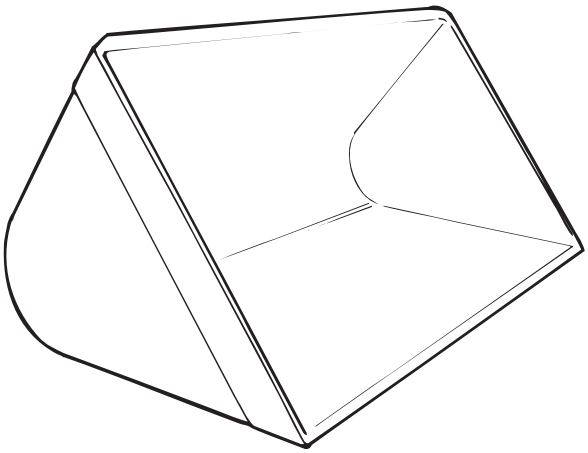
Safety
Strictly obey the general safety precaution given in section “Safety”.
- Do not load loose materials
- Do not move stacked pallets

Operation
To adjust the tilting, operate the rotation lever of the attachment coupling frame.
to side-shift, operate the attachment locking lever after connecting the hoses of the attachment to the quick couplings.

Maintenance
Visually check the attachment for damage before using it.
Check for hydraulic oil leaks.
Daily grease the joints using a greasing gun, and smear the sliding guides with graphitized grease.

Attachments

500 Litre Bucket
(part number AUS10001)



TECHNICAL DATA	
Capacity	500 litres
Width	1800 mm
Length	850 mm
Height	740 mm
Weight	233 kg

⚠ Attachment suitable for moving loose material.
Do not use for digging operations.

Application
Quick coupling attachment for moving soil, sand, debris, grains, etc.

Safety
Strictly obey the general safety precautions given in section “Safety”.

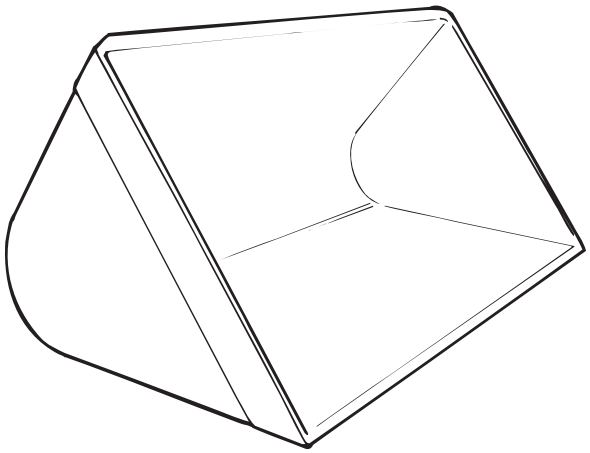
Operation
To load/unload the material, operate the rotation lever of the attachment holding plate.

When using a bucket, load the material only when the boom is completely retracted and puch against the heap with straight wheels.

Maintenance
Visually check the bucket for damage before using it.

Attachments

800 Litre Bucket
(part number AUS10002)



TECHNICAL DATA	
Capacity	800 litres
Width	1800 mm
Length	850 mm
Height	840 mm
Weight	315 kg

⚠ Attachment suitable for moving loose material.
Do not use for digging operations.

Application
Quick coupling attachment for moving soil, sand, debris, grains, etc.

Safety
Strictly obey the general safety precautions given in section “Safety”.

Operation
To load/unload the material, operate the rotation lever of the attachment holding plate.

When using a bucket, load the material only when the boom is completely retracted and puch against the heap with straight wheels.

Maintenance
Visually check the bucket for damage before using it.

Attachments

⚠ Suspended Load Hazards

Work Area Safety

General Safety

Do not lift a suspended load without first understanding the standards and government regulations related to the activity. Additional rules, standard and regulations may apply. Additional training may be required.

If a telehandler must be used to transport a load, the following precautions for the protection of the operator shall be taken.

Read, understand and obey all warnings and instructions provided with the attachment that is approved for suspending loads.

Only a properly designed, tested and approved attachment should be used to carry a suspended load.

The telehandler load charts are designed for loads where the load center is stationary. As a suspended load moves, the load center can change. As a result, extreme caution in transporting and lifting, or placing, the load must be observed to minimize the potential for the load to move.

Overturning Hazards

Do not lift a suspended load without the proper and legible load capacity chart for the attachment/ telehandler combination you are using.





Do not permit the load to swing freely. Always properly tether loads to restrict movement. Driving across grades, sudden starts, stops, and turns can cause the load to swing and create a hazard if not externally stabilized.

Keep the boom retracted as much as practical.

Do not lift suspended loads when wind speeds can cause an unsafe situation (e.g. machine instability).

All movements of the load must be accomplished gradually and at the slowest practical speed to prevent the load from swinging.

Keep the heavy part of the load closest to the attachment.

Never drag or pull a load sideways.

Only lift a load vertically; do not pull a load horizontally as it could cause excessive swinging of the load.

The weight of all rigging (slings, shackles etc.) must be included as part of the load.

Attachments

Identify the proper lifting points of the load, taking into consideration the center of gravity and load stability.

Do not attempt to use the telehandler frame-levelling to compensate for a swinging load or to adjust the load after it has been raised.

Do not try to move fixed or obstructed loads.

Do not leave the telehandler unattended with a suspended load.

Keep the boom and load as low as practical while maintaining visibility in the direction of travel. The load should be no more than 300 mm from the ground and the boom at an angle of no more than 35°

Do not exceed walking speed (0.4 m/s or 1.4 km/h)with a suspended load.

Start, travel, turn and stop slowly to prevent the load from becoming unstable or swinging.

Do not use any controls to re-position the load when traveling. Come to a gradual and complete stop before attempting to re-position the load.

Do not attempt to cross inclines as the load center will move towards the tipping line, thereby reducing stability.

Only climb or descend inclines with extreme care as the load center will move towards the tipping line, thereby reducing stability

Do not park on a slope.

When driving on a rise with loaded material, proceed in forward gear and travel with load in the lowest possible position.

When sloping downward with loaded material, proceed into reverse

When driving on a rise with empty shovel, proceed into reverse.

When sloping downward with empty shovel, proceed in forward gear.

Do not allow suspended loads to oscillate.

Do not drag loads when they are hooked up.

A suspended load has a dynamic, and therefore an unpredictable effect on machine stability, operate with caution.

The rated capacity of an attachment is indicated in its serial plate. The maximum payload corresponds to the nominal capacity rating of the handler on which it is installed and is indicated on the load charts supplied with the equipment.

Fall Hazards

Do not lift or suspend personnel.

Attachments

Collision Hazards

Be sure that the load is clear of any adjacent obstacles before lifting.

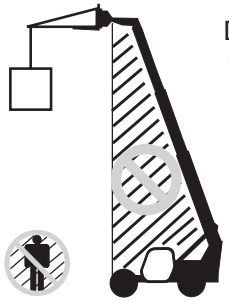
When visibility is or could be obstructed, near or at the load placement, the operator shall use alternative or additional means to safely lift the load, such as a qualified signal person/dogger.

Signal persons/dogger must remain in constant communication (verbal or hand) and be in visual contact with the operator at all times.

Crush Hazards

Never allow the signal person/dogger to come between the suspended load and another object (such as the telehandler itself).

Falling Object Hazards



Do not raise the load into the fall zone shown.

Do not operate the machine while people are under the load or in the fall zone.

Do not suspend loads using slings or chains from the forks or fork carriage.

Avoid lifting double tiered loads.

When loading round-shaped objects (as petrol drums, etc) bind them with straps or ropes and travel at reduced speed.

Attachments

Lifting a Suspended Load

Verify that landing point is level and can safely support the load.

Properly secure the attachment to the telehandler

Level the frame on the telehandler.

Tether the load to restrict movement.

Ask a signal person/dogger to assist with lifting the load if visibility will be obstructed at the point of operation.

Make sure that the signal person/dogger remains in constant communication and is in visual contact at all times.

With the boom retracted as far as practical, slowly and gradually raise the boom and load, making sure to keep the load and boom as low to the ground as practical (do not raise the load above 300 mm clear of the ground).

Be sure that all boom and attachment movements are performed as slow as practical to avoid swinging of the load.

Travelling

Be sure that the path of travel is level and capable of supporting the telehandler with its load. Ground side slope must not exceed the values listed on the load chart.

Keep the boom, and load, as low as practical while maintaining visibility in the direction of travel.

Ask a signal person/dogger to assist with your travel if visibility will be obstructed in the direction of travel.

Crush or Collision Hazard. Make sure that the signal person/dogger remains in constant communication and be in visual contact at all times.

Only make adjustments to the load after bringing the telehandler to a complete stop.

Start, stop, travel and turn slowly to prevent the load from becoming unstable or swinging.

Do not travel faster than walking speed (<0.4 m/s or 1.4 km/h).

Attachments

Placing the Load

Ask a signal person/dogger to assist with placing the load if visibility will be obstructed at the point of operation.

Make sure that the signal person/dogger remains in constant communication and be in visual contact at all times.

Come to a complete stop near the landing point.

Set the parking brake and place the transmission into neutral.

Slowly, and gradually, place the load over the landing point and lower the load until it is safely supported.

Once the load has been landed, continue to lower the boom until the rigging and tethers can be removed.

Signal Person

A signal person is recommended when:

The point of operation, meaning the load travel or the area near or at load placement, is not in full view of the operator.

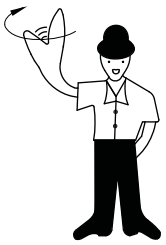
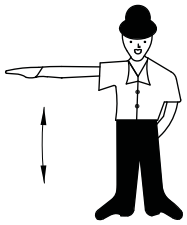
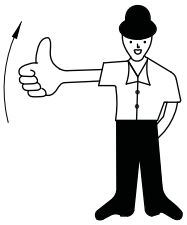
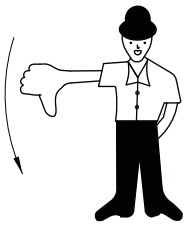
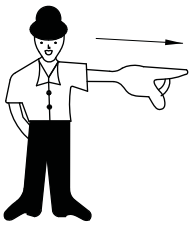
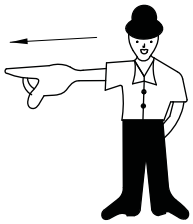
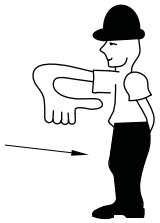
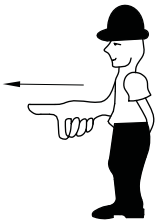
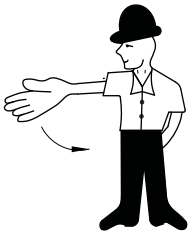
When the equipment is traveling, the view in the direction of travel is obstructed.

Due to site specific safety concerns, either the operator or the person handling the load determines that it is necessary.

Signal persons must remain in constant communication (verbal or hand) and be in visual contact with the operator at all times.

The hand signal chart below may be used as reference.

Attachments

MOTION	HAND SIGNAL	WHISTLE, BELL OR BUZZER SIGNAL		MOTION	HAND SIGNAL	WHISTLE, BELL OR BUZZER SIGNAL
Hoisting raise		2 short • •		Hoisting lower		1 long ———
Luffing boom up		3 short • • •		Luffing boom down		4 short • • • •
Slewing right		1 long, 2 short — • •		Slewing left		1 long, 1 short — •
Jib-trolley out: telescoping boom extend		1 long, 3 short — • • •		Jib-trolley in: telescoping boom retract		1 long, 4 short — • • • •
Travel and traverse		Not applicable		STOP		1 short •
CREEP SPEED: APPROPRIATE HAND SIGNAL FOR MOTION WITH HAND OPENING AND CLOSING						

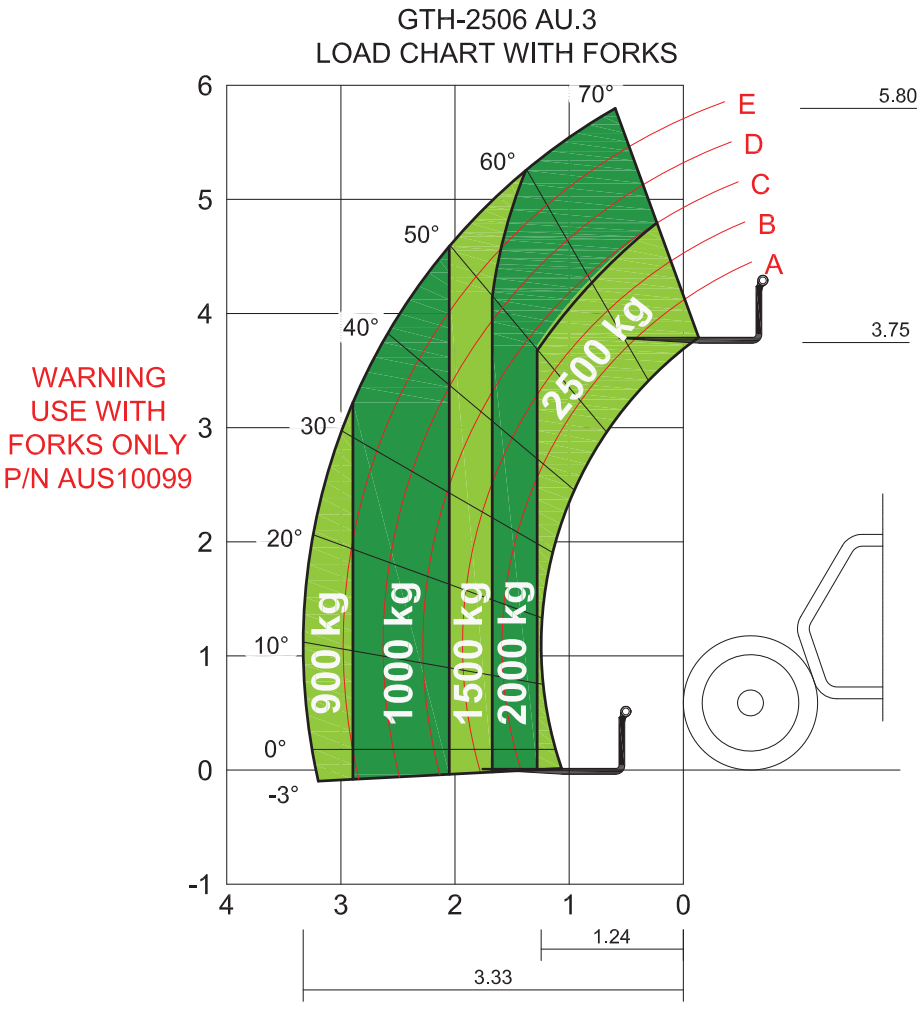
Specifications

GTH-2506	
Height, stowed	1.92 m
Length, stowed, to attachment frame	3.84 m
Width, standard tires	1.81 m
Wheelbase	2.36 m
Ground clearance, center	0.33 m
Weight	4,580 kg
Working fork height, maximum	5.79 m
Horizontal reach maximum	3.33 m
Reach at maximum height	0.60 m
Lift capacity, maximum height	2,000 kg
Lift capacity, maximum reach	900 kg
Maximum lift capacity	2,500 kg
Drive speed, maximum,	23 km/h
Turning radius, outside, 2 wheel steer	5.4 m
Turning radius, outside, 4 wheel steer	4 m
Fuel tank capacity	60 L
Maximum grade	50 %
Horn sound level, manufacturer's rating	112 dB
Backup alarm sound level, manufacturer's rating	95 dB
Mean assessed vibration level transmitted to body	0.44 m/s^2
Floor loading information	
Tire load, maximum	3,500 kg
Occupied floor pressure	7.5 kPa
Reversing camera pitch angle	23° below horizontal

Load Charts

Refer to load charts provided in cabin for comprehensive operating restrictions, e.g. pick and carry configuration, allowable slope for various operating modes and in-service wind speed rating.

GTH-2506 AU.3, Standard Forks

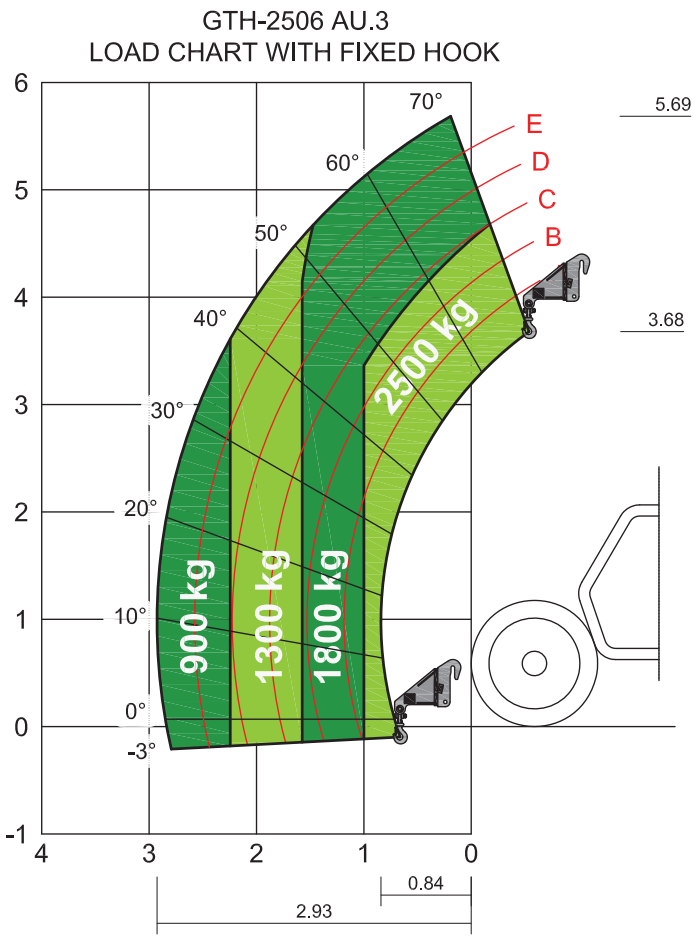


LOAD CENTRE = 600 mm
STABILITY TO AS 1418.19

Load Charts

GTH-2506 AU.3, Fixed Hook

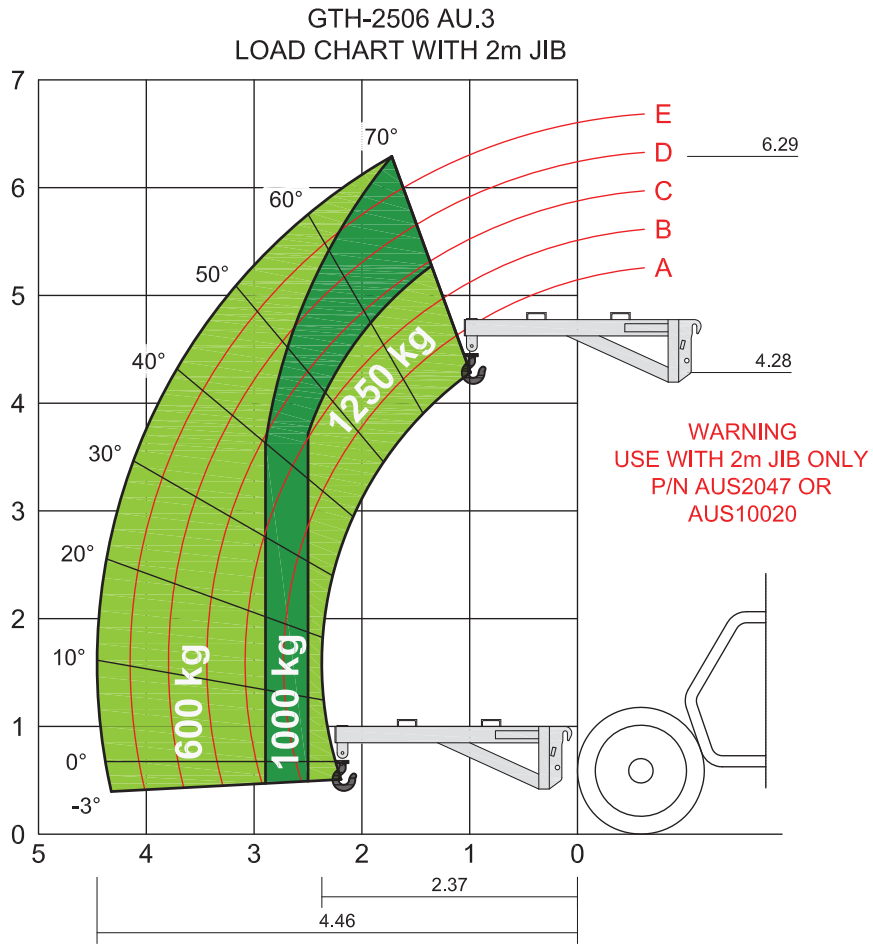
WARNING
ONLY USE WITH
FIXED HOOK P/N:
AUS10011



STABILITY TO AS 1418.19

Load Charts

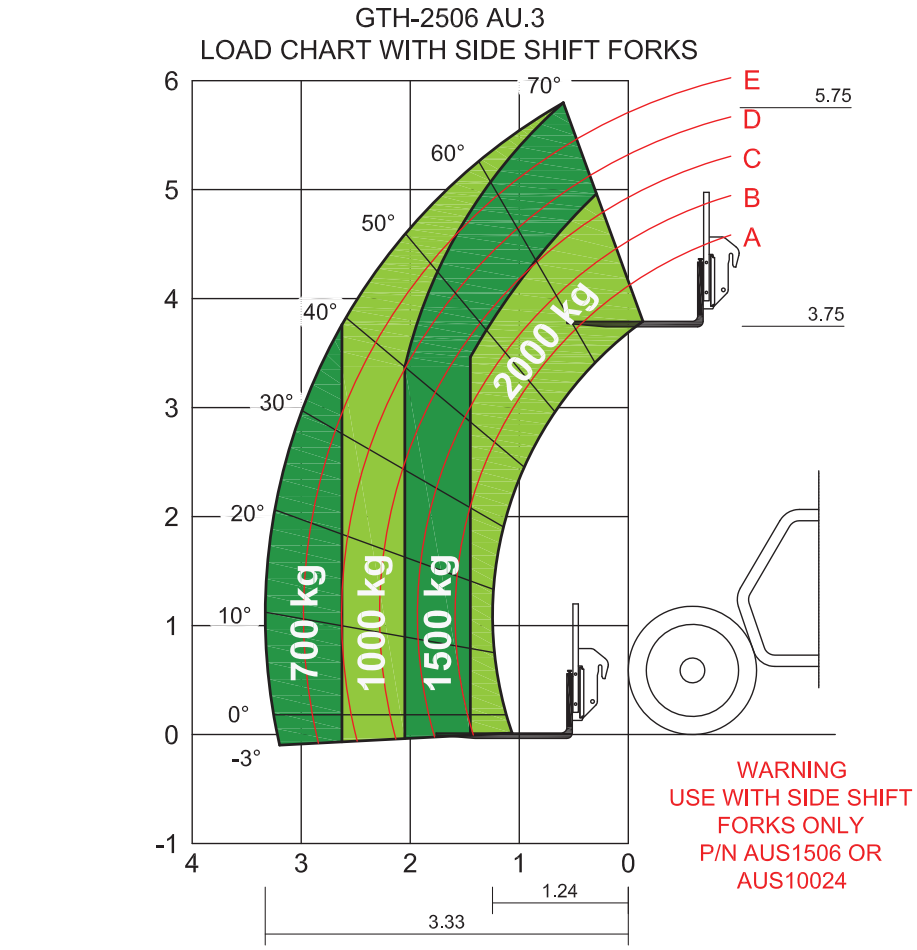
GTH-2506 AU.3, 2 m JIB



STABILITY TO AS 1418.19

Load Charts

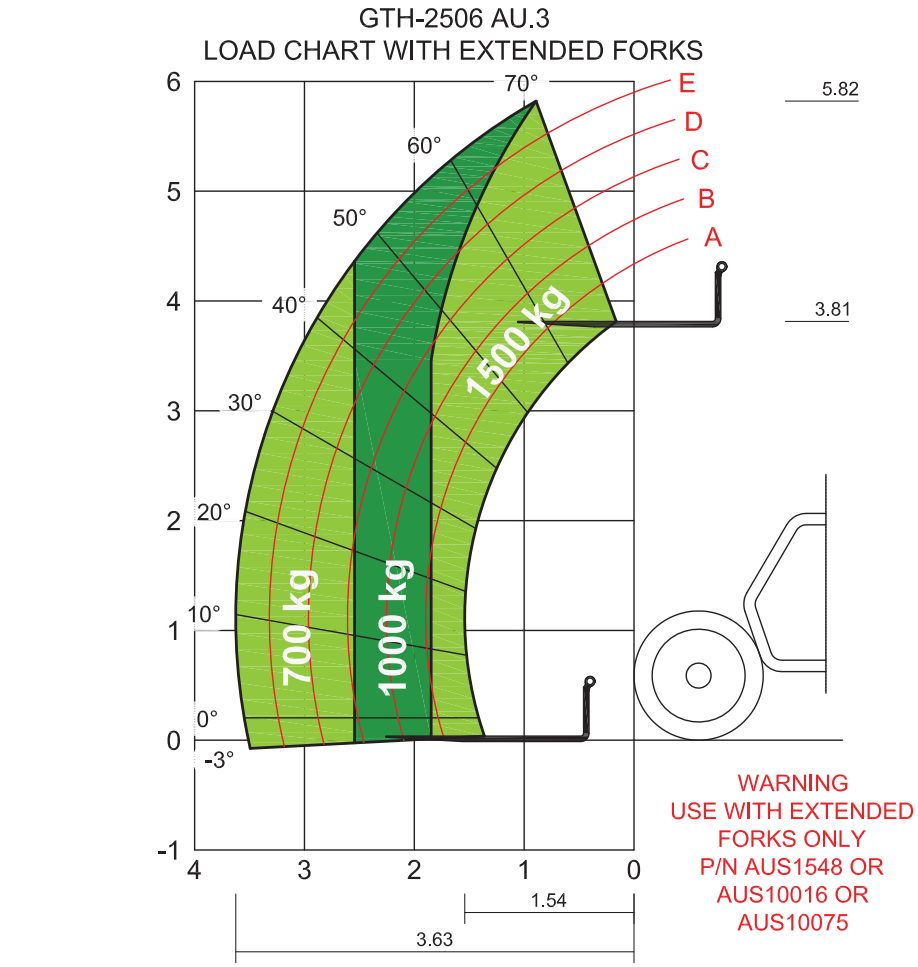
GTH-2506 AU.3, Side Shift Forks



LOAD CENTRE = 600 mm
STABILITY TO AS 1418.19

Load Charts

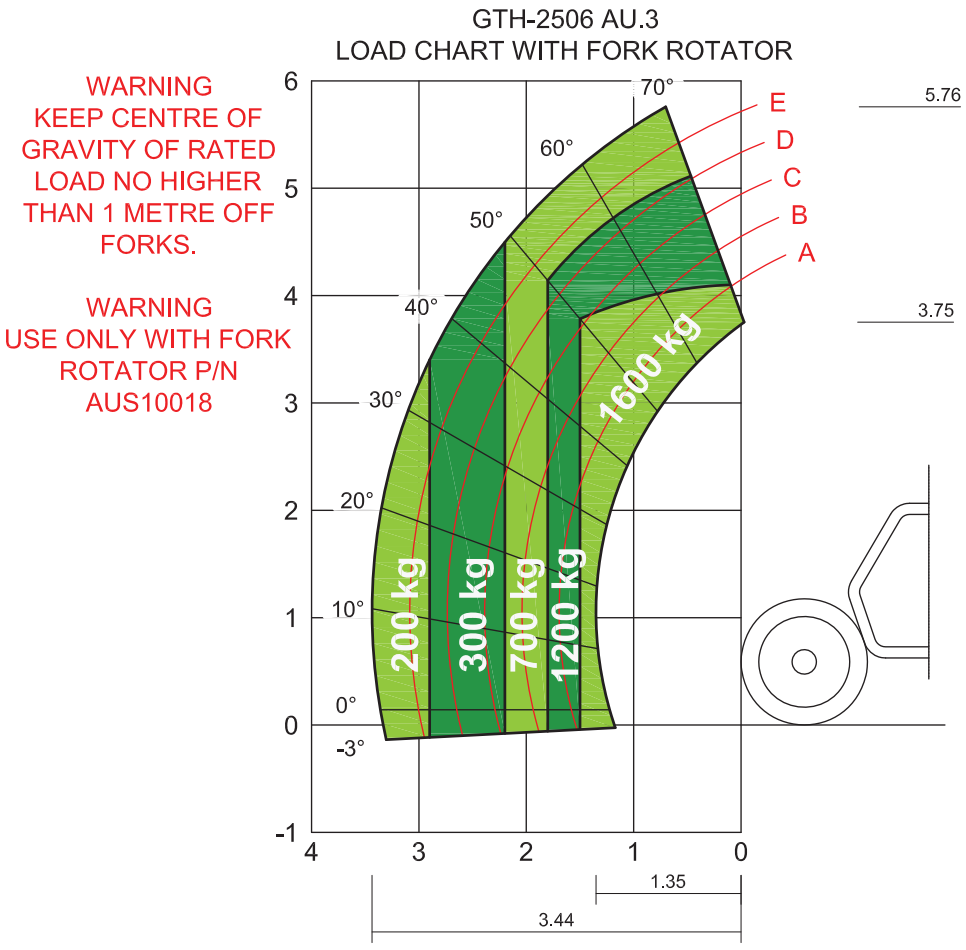
GTH-2506 AU.3, Extended Forks



LOAD CENTRE = 900 mm
STABILITY TO AS 1418.19

Load Charts

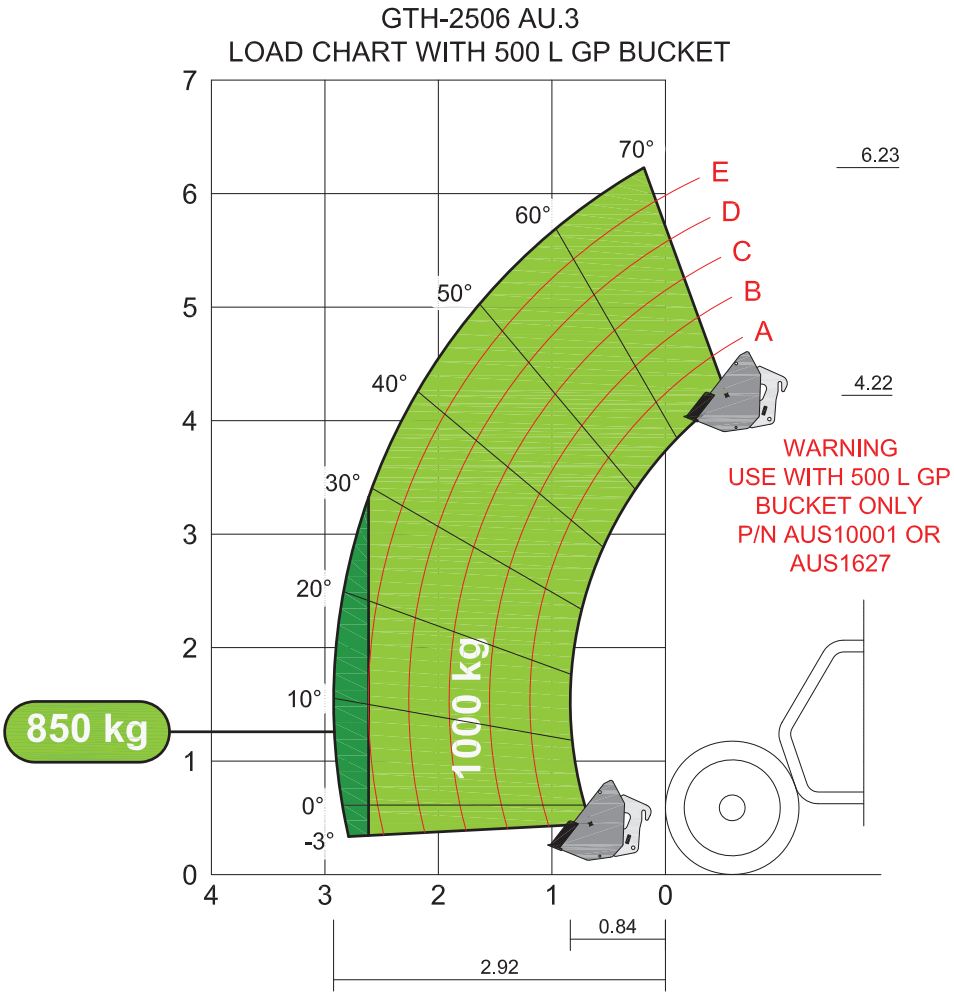
GTH-2506 AU.3, Fork Rotator



LOAD CENTRE = 600 mm
STABILITY TO AS 1418.19

Load Charts

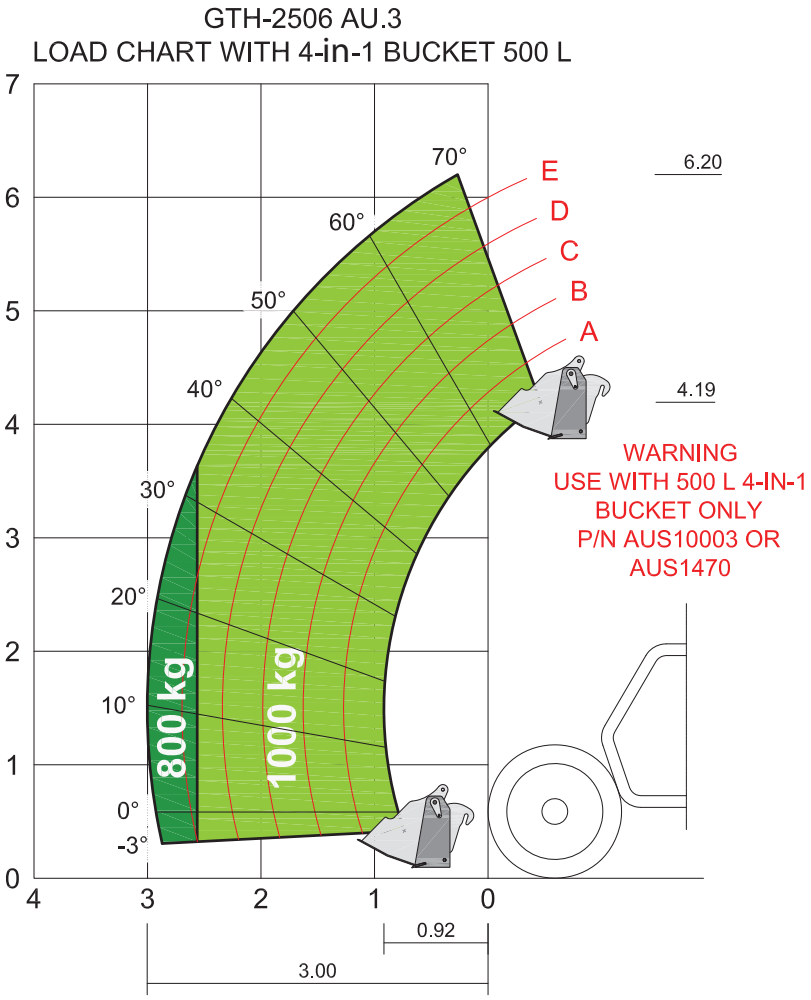
GTH-2506 AU.3, 500L GP Bucket



STABILITY TO AS 1418.19

Load Charts

GTH-2506 AU.3, 4-in-1 Bucket 500L



STABILITY TO AS 1418.19

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