

OPERATOR'S MANUAL

SELF-PROPELLED SCISSOR LIFTS

S06-E



WARNING

THE MANUFACTURER SHALL NOT BE HELD LIABLE IN CASE OF FAULTS OR ACCIDENTS DUE TO NEGLIGENCE, INCAPACITY, INSTALLATION BY UNQUALIFIED TECHNICIANS AND IMPROPER USE OF THE MACHINE

DO NOT OPERATE THIS MACHINE UNTIL YOU READ AND UNDERSTAND ALL THE DANGERS, WARNINGS AND CAUTIONS IN THIS MANUAL

Important

Read, understand and obey these safety rules and operating instructions before operating this machine.

Only trained and authorized personnel shall be permitted to operate this machine. This manual should be considered a permanent part of your machine and should remain with the machine at all times. If you have any questions, please call DINGLI Machinery.

Contents

	Page
Safety Rules	1
Control panel	9
Pre-operation Inspection	11
Maintenance	14
Function Tests	17
Workplace Inspection	22
Operating Instructions	24
Transport and Lifting Instructions	29
Decals	32
Specifications	35
Schematic	37

Owners, Users and operators:

We appreciate your choice of our machine for your application. Our number one priority is user safety, which is best achieved by our joint efforts. We feel that you make a major contribution to safety if you, as the equipment users and operators:

1. Comply with employer, job site and governmental rules.
2. Read, understand and follow the instructions in this and other manuals supplied with this machine.
3. Use good safe work practices in a commonsense way.
4. Only have trained / certified operators, directed by informed and knowledgeable supervision, running the machine.

If there is anything in this manual that is not clear or which you believe should be added, please contact us.

Contact us:

Zhejiang Dingli machinery Co., Ltd.

1255 Baiyun South Road. Leidian Town.

Deqing Zhejiang

China

Tel: +86-572-8681688

Fax: +86-572-8681690

Web: www.chinadinli.com



Danger

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

Do Not Operate Unless:

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

1 Avoid hazardous situations.

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

2 Always perform a pre-operation inspection.

3 Always perform function tests prior to use.

4 Inspect the workplace.

5 Only use the machine as it was intended.

You read, understand and obey the manufacturer's instructions and safety rules—safety and operator's manuals and machine decals.

You read, understand and obey employer's safety rules and worksite regulations.

You read, understand and obey all applicable governmental regulations.

You are properly trained to safely operate the machine.

Decal Legend

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



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

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

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

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

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

Safety Rules

Intended Use

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

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.

Personal Safety

Fall Protection

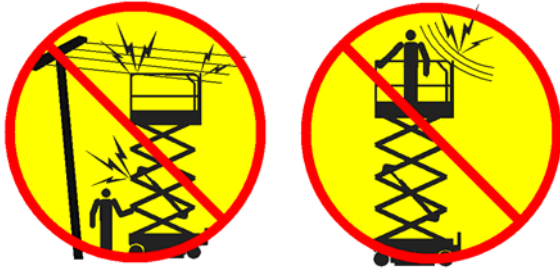
Personal fall protection equipment (PFPE) is not required when operating this machine. If PFPE is required by job site or employer rules, the following shall apply:

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

Safety Rules

⚠ Electrocuting Hazards

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



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

Voltage Phase to Phase	Minimum Safe Approach Distance Meters
0 to 300V	Avoid Contact
300V to 50KV	3.05
50KV to 200KV	4.60
200KV to 350KV	6.10
350KV to 500KV	7.62
500KV to 750KV	10.67
750KV to 1000KV	13.72

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

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

Do not operate the machine during lightning or storms.

Do not use the machine as a ground for welding.

⚠ Tip-over Hazards

Occupants, equipment and materials must not exceed the maximum platform capacity or the maximum capacity of the platform extension.

Maximum capacity

Maximum occupants (Indoor use)	2
Maximum occupants (Outdoor use)	1
Platform retracted	230 kg
Only platform	117 kg
Only extension deck	113 kg

Platform retracted



Platform extended



Extension only

Platform only

Safety Rules**Work Area Safety**

Do not raise the platform unless the machine is on a firm, level surface.

Do not drive over 0.8 km/h with the platform raised.



Do not depend on the tilt alarm as a level indicator. The tilt alarm sounds on the chassis and in the platform when the machine is on a slope.

If the tilt alarm sounds:

Lower the platform. Move the machine to a firm, level surface. If the tilt alarm sounds when the platform is raised, use extreme caution to lower the platform.

Do not drive over 0.8 km/h with the platform raised.

Do not raise the platform when wind speeds may exceed 12.5 m/s. If wind speeds exceed 12.5 m/s when the platform is raised, lower the platform and do not continue to operate the machine.

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



Do not use the platform controls to free a platform that is caught, snagged or otherwise prevented from normal motion by an adjacent structure. All personnel must be removed from the platform before attempting to free the platform using the ground controls.

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

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

Do not use the machine as a crane.

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

Do not push the machine or other objects with the platform.

Do not operate the machine with the chassis trays open.

Do not contact adjacent structures with the platform

Do not alter or disable the limit switches.

Safety Rules

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



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

Do not transport tools and materials unless they are evenly distributed and can be safely handled by person(s) in the platform.

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

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

Indoor Use

Maximum allowable manual force	400 N
--------------------------------	-------

Outdoor Use

Maximum allowable manual force	200 N
--------------------------------	-------

Do not tie the platform to adjacent structures.

Do not place loads outside the platform perimeter.

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 use batteries that weigh less than the original equipment. Batteries are used as counterweight and are critical to machine stability. Each battery must weigh 28 kg. Battery box including batteries must weigh a minimum of 148 kg.

Do not modify or alter an aerial work platform without prior written permission from the manufacturer. Mounting attachments for holding tools or other materials onto the platform, toeboards or guard rail system can increase the weight in the platform and the surface area of the platform or the load.

Safety Rules**Work Area Safety****▲ Crushing Hazards**

Keep hands and limbs out of scissors.

Keep hands clear when folding rails.

Use common sense and planning when operating the machine with the controller from the ground. Maintain safe distances between the operator, the machine and fixed objects.

Maintain a firm grasp on the platform rail when removing the rail pins. Do not allow the platform guard rails to fall.

▲ Operation on Slopes Hazards

Do not drive the machine on a slope that exceeds the slope and side slope rating of the machine.

Slope rating applies to machines in the stowed position.

Maximum slope rating stowed position	25% (14°)
---	-----------

Maximum side slope rating stowed position	25% (14°)
--	-----------

Note: Slope rating is subject to ground conditions and adequate traction.

▲ Fall Hazards

The guard rail system provides fall protection. If occupant(s) of the platform are required to wear personal fall protection equipment (PFPE) due to job site or employer rules, PFPE equipment and its use shall be in accordance with the PFPE manufacturer's instructions and applicable governmental requirements.

Do not sit, stand or climb on the platform guard rails. Maintain a firm footing on the platform floor at all times.



Do not climb down from the platform when raised.

Keep the platform floor clear of debris.

Close the entry gate before operating.

Do not operate the machine unless the guard rails are properly installed and the entry is secured for operation.

Do not enter or exit the platform unless the machine is in the stowed position.

Safety Rules**▲ Collision Hazards**

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

Be aware of extended platform position(s) when moving the machine.

Check the work area for overhead obstructions or other possible hazards.



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



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

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

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

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

No stunt driving or horseplay while operating a machine.

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

⚠ Component Damage Hazards

Do not use any battery or charger greater than 24V to charge the batteries.

Do not use the machine as a ground for welding.

⚠ Explosion and Fire Hazards

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

⚠ Damaged Machine Hazards

Do not use a damaged or malfunctioning machine.

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

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

Be sure all decals are in place and legible.

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

⚠ Bodily Injury Hazard

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

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

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

Safety Rules**▲ 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 Hazard

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



The battery tray should remain open during the entire charging cycle.

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

Component Damage Hazard

Do not use any battery charger greater than 24V to charge the batteries.

Electrocution/ Burn Hazard

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

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

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

Tip-over Hazard

Do not use batteries that weigh less than the original equipment. Batteries are used as counterweight and are critical to machine stability. Each battery must weigh 28 kg. Battery tray including batteries must weigh a minimum of 148 kg.

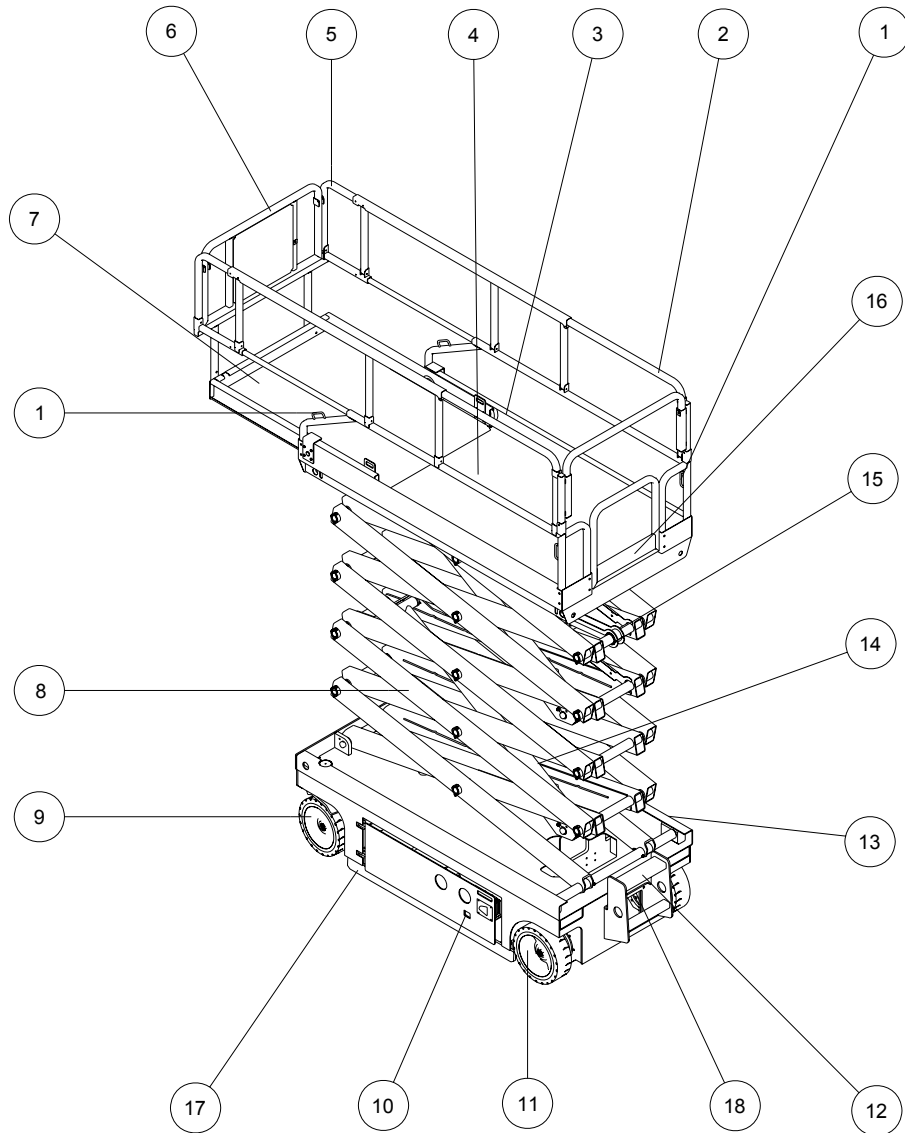
Lifting Hazard

Use the appropriate number of people and proper lifting techniques when lifting batteries.

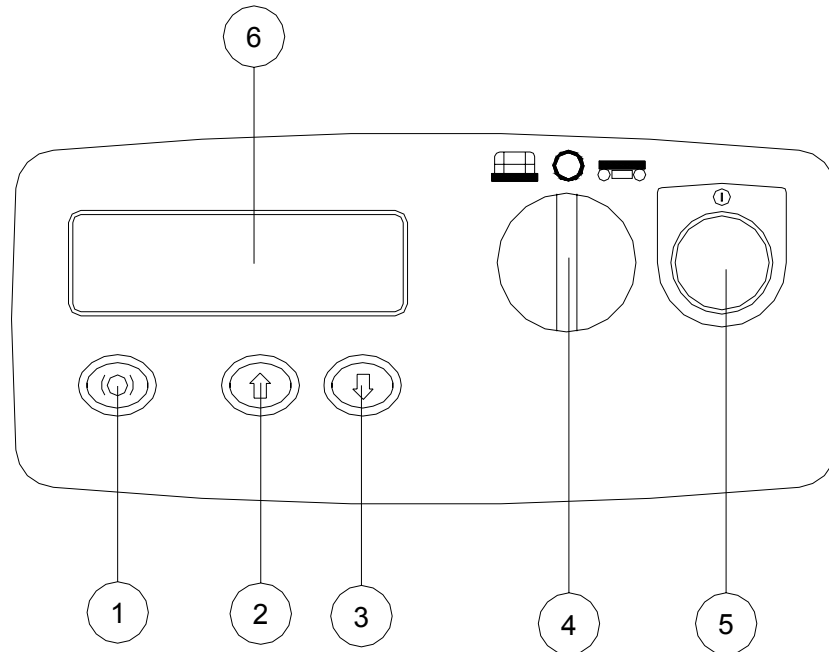
Lockout After Each Use

1. Select a safe parking location - firm level surface, clear of obstruction and traffic.
2. Lower the platform.
3. Turn the key switch to the off position and remove the key to secure from unauthorized use.
4. Chock the wheels.
5. Charge the batteries.

Legend



- | | |
|-------------------------------------|---|
| 1. Lanyard anchorage point | 10. Battery charger |
| 2. Platform guard rails | 11. Non-steer tire |
| 3. Platform extension release pedal | 12. Entry ladder |
| 4. Main Platform | 13. Ground controls (on opposite side of machine) |
| 5. Platform controls | 14. Lift Cylinder |
| 6. Manual storage container | 15. Safety arm |
| 7. Platform extension | 16. Platform entry gate |
| 8. Scissor Arms | 17. Pothole guard |
| 9. Steer tire | 18. Brake release pump |

Control Panel**Ground Control Panel**

1 Break release button

2 Platform up button

Press the button and the platform will raise.

3 Platform down button

Press the button and the platform will lower.

4 Key switch for platform / off / ground control selection

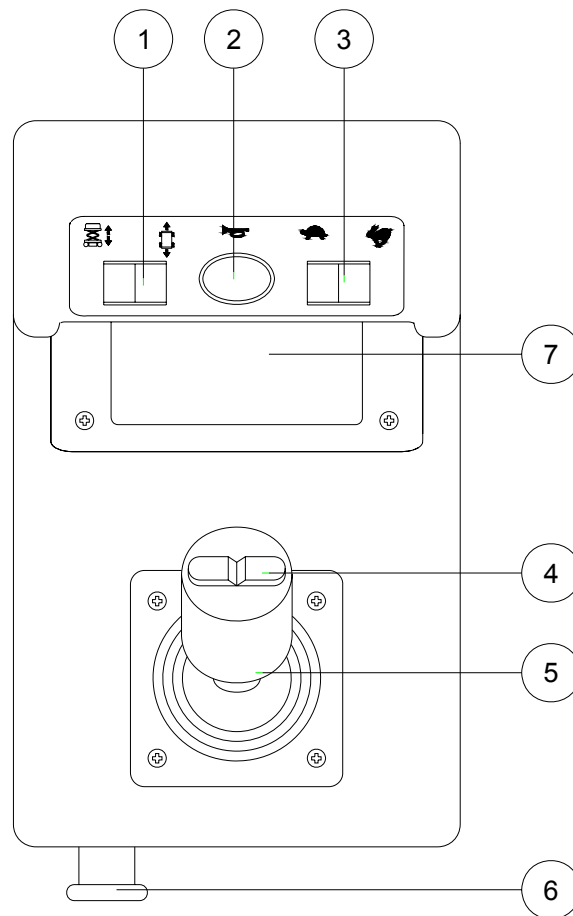
Turn the key switch to the platform position and the platform controls will operate. Turn the key switch to the off position and the machine will be off. Turn the key switch to the base position and the ground controls will operate.

5 Red Emergency Stop button

Push in the red Emergency Stop button to the off position to stop all functions. Pull out the red Emergency Stop button to the on position to operate the machine.

6 LED

Control Panel

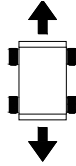


Platform Control Panel

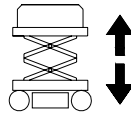
- | | |
|---|---|
| 1 Drive / Lift function select button | 5 Proportional control handle and function enable switch for lift and drive functions |
| 2 Horn button | 6 Red Emergency Stop button |
| 3 Drive speed select button | 7 LED |
| 4 Thumb rocker switch for steer functions | |

Control Panel**Platform Control Panel****1 Drive / Lift function select button**

Press this button the left end to activate the left function.



Press this button the right end to activate the drive function.

**2 Horn Button**

Push the horn button and the horn will sound. Release the horn button and the horn will stop.

3 Drive speed select button

Press this button the left end to activate the slow speed drive function.

Press this button the right end to activate the fast speed drive function.

1 Thumb rocker switch for steer functions

Press the thumb rocker switch in either direction to activate steer function.

2 Proportional control handle and function enable switch for lift and drive functions

Lift function: Press and hold the function enable switch to enable the lift function on the platform control handle. Move the control handle in the direction indicated by the blue arrow and the platform will raise. Move the control handle in the direction indicated by the yellow arrow and the platform will lower. The descent alarm should sound while the platform is lowering.

Drive function: Press and hold the

function enable switch to enable the drive function on the platform control handle.

Move the control handle in the direction indicated by the blue arrow on the control panel and the machine will move in the direction that the blue arrow points. Move the control handle in the direction indicated by the yellow arrow on the control panel and the machine will move in the direction that the yellow arrow points.

3 Red Emergency Stop button

Push in the red Emergency Stop button to the off position to stop all functions. Pull out the red Emergency Stop button to the on position to operate the machine.

4 LED

Diagnostic read out and battery charge indicator.

Pre-operation Inspection



Do Not Operate Unless:

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

1 Avoid hazardous situations.

2 Always perform a pre-operation inspection.

Know and understand the 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.

Fundamentals

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

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

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

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

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

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

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

Pre-operation Inspection

Pre-operation Inspection

- Be sure that the operator's, safety and responsibilities manuals are complete, legible and in the storage container located in the platform.
- Be sure that all decals are legible and in place. See Decals section.
- Check for engine oil leaks and proper oil level. Add oil if needed. See Maintenance section.
- Check for hydraulic oil leaks and proper oil level. Add oil if needed. See Maintenance section.
- Check for engine coolant leaks and proper level of coolant. Add coolant if needed. See Maintenance section.
- Check for battery fluid leaks and proper fluid level. Add distilled water 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
 - Battery pack and connections
 - Drive motors
 - Wear pads
 - Tires and wheels
 - Ground strap
 - Limit switches, alarms and horn
 - Nuts, bolts and other fasteners
 - Platform overload components

- Platform entry gate
- Beacon and alarms (if equipped)
- Safety arm
- Platform extension(s)
- Scissor pins and retaining fasteners
- Platform control joystick
- Brake release components

Check entire machine for

- Cracks in welds or structural components
- Dents or damage to machine
- Be sure that all structural and other critical components are present and all associated fasteners and pins are in place and properly tightened
- Be sure side rails are installed and rail pins and bolts are fastened.
- Be sure that the chassis trays are closed and latched and the batteries are properly connected.

Note: If the platform must be raised to inspect the machine, make sure the safety arm is in place. See Operating Instructions section.



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

NOTICE

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



Indicates that tools will be required to perform this procedure.



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

Check the Batteries



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

⚠WARNING

Electrocution hazard

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

⚠WARNING

Bodily injury hazard

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

- 1 Put on protective clothing and eye wear.
- 2 Be sure that the battery cable connections are tight and free of corrosion.
- 3 Be sure that the battery hold-down bars are secure.
- 4 Remove the battery vent caps.
- 5 Check the battery acid level. If needed, replenish with distilled water to the bottom of the battery fill tube. Do not overfill.
- 6 Install the vent caps.

**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.

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.

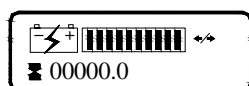
Function Tests

- 1 Select a test area that is firm, level and free of obstruction.
- 2 Be sure the battery pack is connected.

At the Ground Controls

- 3 Pull out the platform and ground red Emergency Stop buttons to the on position.
- 4 Turn the key switch to ground control.
- 5 Observe the diagnostic LED readout on the ground controls.

- ⦿ Result: The LED should look like the picture at right.



Test Emergency Stop

- 6 Push in the ground red Emergency Stop button to the off position.
- ⦿ Result: No functions should operate.
- 7 Pull out the red Emergency Stop button to the on position.

Test Up / Down Functions

The audible warnings on this machine and the standard horn all come from the same central alarm. The horn is a constant tone. The descent alarm sounds at 60 beeps per minute. The alarm that goes off when the pothole guards have not deployed sounds at 300 beeps per minute. The alarm that goes off when the machine is not level sounds at 600 beeps per minute. An optional automotive-style horn is also available.

- 8 Turn the key switch to platform control or off position.
 - 9 .Press and hold the UP button on the ground control.
- ⦿ Result: The platform should not raise.
- 10 Turn the key switch to ground control

- 11 .Press and hold the UP button on the ground control.

- ⦿ Result: The platform should raise.

- 12 Press and hold the DOWN button on the ground control.

- ⦿ Result: The platform should lower then stop at the height is 2.1 m. The descent alarm should sound while the platform is lowering.

- 13 Press and hold the DOWN button on the ground control.

- ⦿ Result: The platform should lower to end. The descent alarm should sound while the platform is lowering.

Test the Emergency Lowering

- 14 Activate the up function and raise the platform approximately 60 cm.

- 15 Pull the emergency lowering knob located the ground control side .

- ⦿ Result: The platform should lower. The descent alarm will not sound.

- 16 Turn the key switch to platform control.

Function Tests

At the Platform Controls

Test Emergency Stop

- 17 Push in the platform red Emergency Stop button to the off position.
- ⦿ Result: No functions should operate.
- 18 Pull the red Emergency Stop button out to the on position.
- ⦿ Result: The LED indicator light should come on.

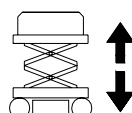
Test the Horn

- 19 Push the horn button.
- ⦿ Result: The horn should sound.

Test Function Enable and Up / Down Functions

- 20 Do not hold the function enable switch on the control handle.
- 21 Slowly move the control handle in the direction indicated by the blue arrow, then in the direction indicated by the yellow arrow.
- ⦿ Result: No functions should operate.

- 22 Press the lift function select button.



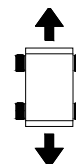
- 23 Press and hold the function enable switch on the control handle.
- 24 Slowly move the control handle in the direction indicated by the blue arrow.
- ⦿ Result: The platform should raise. The pothole guards should deploy.
- 25 Release the control handle.
- ⦿ Result: The platform should stop raising.
- 26 Press and hold the function enable switch. Slowly move the control handle in the direction indicated by the yellow arrow.
- ⦿ Result: The platform should lower. The

descent alarm should sound while the platform is lowering.

Test the Steering

Note: When performing the steer and drive function tests, stand in the platform facing the steer end of the machine.

- 27 Press the drive function select switch.
- 28 Press and hold the function enable switch on the control handle.



- 29 Depress the thumb rocker switch on top of the control handle in the direction identified by the blue left triangle on the control panel.
- ⦿ Result: The steer wheels should turn in the direction that the blue left triangle points on the control panel.
- 30 Depress the thumb rocker switch in the direction identified by the white right triangle on the control panel.
- ⦿ Result: The steer wheels should turn in the direction that the white right triangle points on the control panel.

Function Tests

Test Drive and Braking

- 31 Press and hold the function enable switch on the control handle.
- 32 Slowly move the control handle in the direction indicated by the blue up arrow on the control panel until the machine begins to move, then return the handle to the center position.
 - ⊙ Result: The machine should move in the direction that the blue up arrow points on the control panel, then come to an abrupt stop.
- 33 Press and hold the function enable switch on the control handle.
- 34 Slowly move the control handle in the direction indicated by the white down arrow on the control panel until the machine begins to move, then return the handle to the center position.
 - ⊙ Result: The machine should move in the direction that the white down arrow points on the control panel, then come to an abrupt stop.

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

Test Limited Drive Speed

- 35 Press and hold the lift function enable switch. Raise the platform approximately 1.2 m) from the ground.
 - ⊙ Result: The pothole guards should deploy,
- 36 Press and hold the function enable switch on the control handle.
- 37 Slowly move the control handle to the full drive position.
 - ⊙ Result: The maximum achievable drive speed with the platform raised should not exceed 20 cm/s.

If the drive speed with the platform raised exceeds 20 cm/s, immediately tag and remove the machine from service.

Function Tests

Test the Tilt Sensor Operation

Note: Perform this test from the ground with the platform controller. Do not stand in the platform.

- 38 Fully lower the platform.
- 39 Place a 2x4 or similar piece of wood under both wheels on one side and drive the machine up onto them.
- 40 Raise the platform at least 2.1 m.
 - ⊙ Result: The platform should stop and the tilt alarm will sound at 600 beeps per minute..
- 41 Move the drive control handle in the direction indicated by the blue up arrow, then move the drive control handle in the direction indicated by the white down arrow.
 - ⊙ Result: The drive function should not work in either direction.
- 42 Lower the platform and drive the machine off the block.

Test the Pothole Guards

Note : The pothole guards should automatically deploy when the platform is raised . The pothole guards activate another limit switch which allows the machine to continue to function . If the pothole guards do not deploy , an alarm sounds and the machine will not drive.

- 43 Raise the platform .
 - ⊙ Result : When the platform is raised 1.2 m from the ground , the pothole guards should deploy .
- 44 Press on the pothole guards on one side , and then the other .
 - ⊙ Result : The pothole guards should not move .
- 45 Lower the platform .
 - ⊙ Result : The pothole guards should return to the stowed position .
- 46 Place a 2x4 or similar piece of wood under a pothole guard . Raise the platform .
 - ⊙ Result : Before the platform is raised 2.1 m from the ground , an alarm should sound and the drive function Should not Work .
- 47 Lower the platform and remove the 2x4 .

Workplace Inspection



Do Not Operate Unless:

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

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

Know and understand the workplace inspection before going on to the next section.

- 5 Only use the machine as it was intended.

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

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

Operating Instructions



Do Not Operate Unless:

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

- 1 1 Avoid hazardous situations.
- 2 Always perform a pre-operation inspection.
- 3 Always perform function tests prior to use.
- 4 Inspect the workplace.
- 5 **Only use the machine as it was intended.**

Fundamentals

The Operating Instructions section provides instructions for each aspect of machine operation.

It is the operator's responsibility to follow all the safety rules and instructions in the operator's, safety and responsibilities manuals.

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

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

Operating Instructions

Emergency Stop

Push in the red Emergency Stop button to the off position at the ground controls or the platform controls to stop all machine functions.

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

Emergency Lowering

- 1 Pull the emergency lowering knob.

Operation from Ground

- 1 Turn the key switch to ground control.
- 2 Pull out both ground and platform red Emergency Stop buttons to the on position.
- 3 Be sure the battery pack is connected before operating the machine.

To Position Platform

- 1 Press and hold the UP button on the ground control to raise the platform.
- 2 Press and hold the DOWN button on the ground control to lower the platform.

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

Operation from Platform

- 1 Turn the key switch to platform control.
- 2 Pull out the ground and platform red Emergency Stop buttons to the on position.
- 3 Be sure the battery pack is connected before operating the machine.

To Position Platform

- 1 Press the lift function select button.
- 2 Press and hold the lift function enable switch on the control handle.
- 3 Move the control handle according to the markings on the control panel.

To Steer

- 1 Press the drive function select button.
- 2 Press and hold the function enable switch on the control handle.
- 3 Turn the steer wheels with the thumb rocker switch located on the top of the control handle.

To Drive

- 1 Press the drive function select button.
- 2 Press and hold the function enable switch on the control handle.
- 3 Increase speed: Slowly move the control handle off center.

Decrease speed: Slowly move the control handle toward center.

Stop: Return the control handle to center or release the function enable switch.

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

Operating Instructions

Machine travel speed is restricted when the platform is raised.

Battery condition will affect machine performance. Machine drive speed and function speed will drop when the battery level indicator is flashing.

To reduce drive speed

The drive controls can operate in two different drive speed modes. When the drive speed button light is on, slow drive speed mode is active. When the button light is off, fast drive speed mode is active.

Press the drive speed button to select the desired drive speed.

Driving on a slope

Determine the slope and side slope ratings for the machine and determine the slope grade.

Maximum slope rating, stowed position 25% ,
Maximum side slope rating, stowed position 25%

Note: Slope rating is subject to ground conditions and adequate traction.

Press the drive speed button to the fast drive speed mode.

To determine the slope grade

Measure the slope with a digital inclinometer OR use the following procedure.

You will need:

Carpenter's level

straight piece of wood, at least 1 m long

tape measure



Lay the piece of wood on the slope.

At the downhill end, lay the level on the top edge of the piece of wood and lift the end until the piece of wood is level.

While holding the piece of wood level, measure the distance from the bottom of the piece of wood to the ground.

Divide the tape measure distance (rise) by the length of the piece of wood (run) and multiply by 100.

Example:

Run = 3.6 m

Rise = 0.3 m

$0.3 \text{ m} \div 3.6 \text{ m} = 0.083 \times 100 = 8.3\%$

If the slope exceeds the maximum slope or side slope rating, the machine must be winched or transported up or down the slope. See Transport and Lifting section.

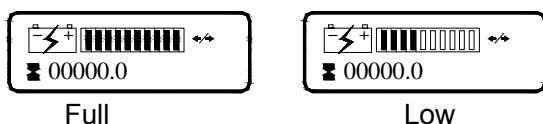
Operating Instructions

Operation from Ground with Controller

Maintain safe distances between operator, machine and fixed objects.

Be aware of the direction the machine will travel when using the controller.

Battery Level Indicator



Use the LED diagnostic readout to determine the battery level.

How to use the Safety Arm

- 7 Raise the platform approximately 3 m from the ground.
- 8 Rotate the safety arm away from the machine and let it hang down.
- 9 Lower the platform until the safety arm rests securely on the link. Keep clear of the safety arm when lowering the platform.

⚠ DANGER Don't engage the safety arm unless unload the platform.

How to Fold Down the Guardrails

The platform railing system consists of three fold down rail section for the extension deck and two section for the main deck. All sections are held in place by four wire lock pins.

1. Fully lower the platform and retract the platform extension.
2. Remove the platform controls.
3. From inside the platform, remove the two front extension deck wire lock pins.
4. Fold down the front rail assembly. Keep hands clear of pinch points.

5. Replace the two removed pins back into each side rail bracket.
6. Fold down the right extension platform rail assembly. Keep hands clear of pinch points.
7. Fold down the left extension platform rail assembly. Keep hands clear of pinch points.
8. Carefully open the gate and move to the rear step or the ground.
9. From the rear step or from the ground, remove the left rear main deck wire lock pins.
10. Fold down the left and rail assembly. Keep hands clear of pinch points.
11. Replace the removed pin back into rear rail bracket.
12. Remove the right rear main deck wire lock pins.
13. Fold down the right rail assembly. Keep hands clear of pinch points.
14. Replace the removed pin back into rear rail bracket.
15. Fold down the rear rail assemble. Keep hands free of pinch points.

How to Raise the Guardrails

Follow the fold down instructions but in reverse order.

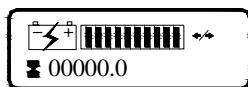
To Extend and Retract Platform

- 1 Press the lock pedal by foot.
- 2 Push the extension platform guardrail to extend the platform to the desired position.

Do not stand on the platform extension while trying to extend it.

Operating Instructions

Error indicator readout



If the LED diagnostic readout displays an error code, such as LL, push in and pull out the red Emergency Stop button to reset the system.

Code	Description
02	Left PHP bar up
03	Right PHP bar up
04	Tilt Condition
13	Traction Module Over Temperature
17	Ground Control Module Over Temperature
32	Pump Motor Over Current
33	Both PHP Bars UP
34	Aux. #1 – Platform Gate Open or No Pressure on the Platform Enable switch
35	Aux. #1 – Platform Enable switch depressed during Machine Power – up
--	Brakes Released
--	Charger AC Plugged In
--	Obstruction Sensor System
--	Programmable Security Lock Password

For more information, please consult the appropriate Dingli Service Manual.

Operating Instructions



Battery and Charger Instructions

Observe and Obey:

- Do not use an external charger or booster battery.
- Charge the battery in a well-ventilated area.
- Use proper AC input voltage for charging as indicated on the charger.
- Use only a Dingli authorized battery and charger.

To Charge Battery

1. Be sure the batteries are connected before charging the batteries.
2. Open the battery compartment. The compartment should remain open for the entire charging cycle.

Maintenance - free batteries

3. Connect the battery charger to a grounded AC circuit.
4. The charger will indicate when the battery is fully charged.

Standard Batteries

3. Remove the battery vent caps and check the battery acid level. If necessary, add only enough distilled water to cover the plates. Do not overfill prior to the charge cycle.
4. Replace the battery vent caps.
5. Connect the battery charger to a grounded AC circuit.
6. The charger will indicate when the battery is fully charged.
7. Check the battery acid level when the charging cycle is complete. Replenish with distilled water to the bottom of the fill tube. Do not overfill.

Dry Battery Filling and Charging Instructions

1. Remove the battery vent caps and permanently remove the plastic seal from the battery vent openings.
2. Fill each cell with battery acid (electrolyte) until the level is sufficient to cover the plates.

Do not fill to maximum level until the battery charge cycle is complete. Overfilling can cause the battery acid to overflow during charging. Neutralize battery acid spills with baking soda and water.

3. Install the battery vent caps.
4. Charge the battery.
5. Check the battery acid level when the charging cycle is complete. Replenish with distilled water to the bottom of the fill tube. Do not overfill.

Transport and Lifting Instructions



Observe and Obey:

- Common sense and planning must be applied to control the movement of the machine when lifting it with a crane or forklift.
- Only qualified aerial lift 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.
- Be sure the vehicle capacity, loading surfaces and chains or straps are sufficient to withstand the machine weight. See the serial label for the machine weight.
- The machine must be on a level surface or secured before releasing the brakes.
- Do not allow the rails to fall when the snap pins are removed. Maintain a firm grasp on the rails when the rails are lowered.
- Do not drive the machine on a slope that exceeds the slope or side slope rating. See *Driving on a Slope* in the Operating Instructions section.
- If the slope of the transport vehicle bed exceeds the maximum slope rating, the machine must be loaded and unloaded using a winch as described.

Brake Release Operation

1. Chock the wheels to prevent the machine from rolling.
2. Be sure the winch line is properly secured to the drive chassis tie points and the path is clear of all obstructions.
3. Press the break release button on the ground control panel.

After the machine is loaded:

1. Chock the wheels to prevent the machine from rolling.
2. Pull out the red Emergency Stop button on both the ground and platform controls to the on position.
3. Press the break release button.
4. Push the red Emergency stop button on both the ground and platform controls to the off position.

Towing the DC Motor Drive Model JCPT0807 is not recommended. If the machine must be towed, do not exceed **5 km/h**.

Transport and Lifting Instructions

Securing to Truck or Trailer for

Transit

Always chock the machine wheels in preparation for transport.

Retract and secure the extension deck(s).

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

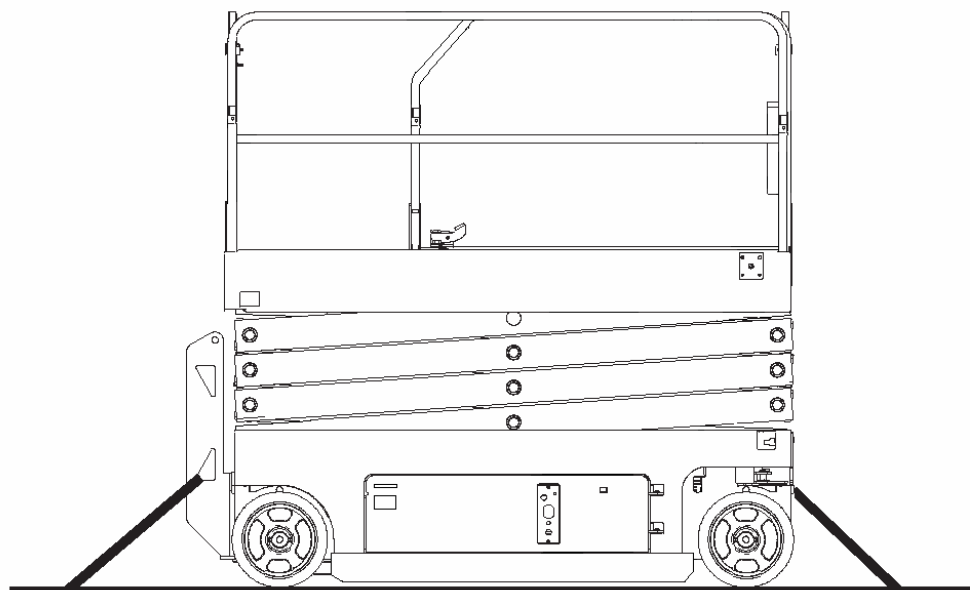
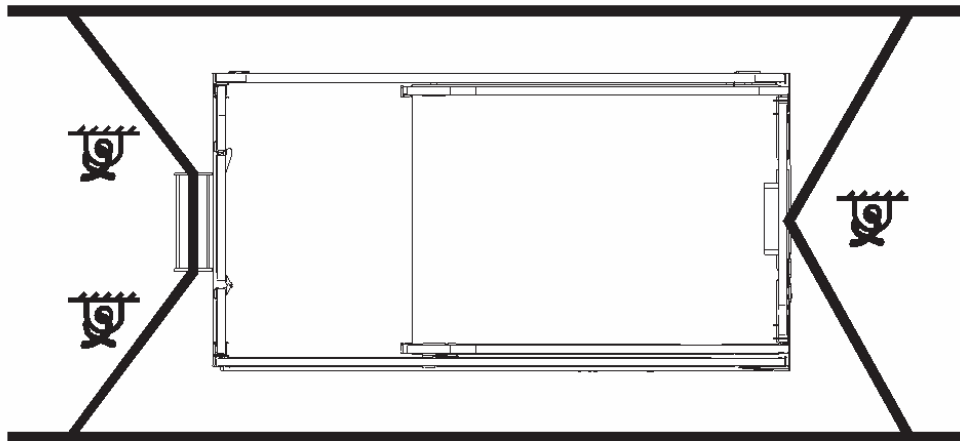
Inspect the entire machine for loose or unsecured items.

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

Use a minimum of 2 chains or straps.

Use chains or straps of ample load capacity.

If the railings have been folded down, secure them with straps before transporting.



Transport and Lifting Instructions



Observe and Obey:

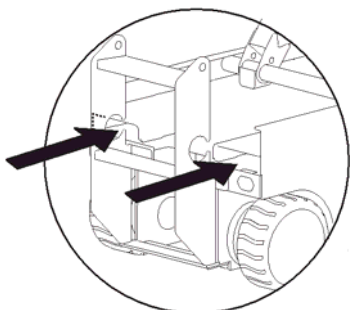
- Only qualified riggers should rig and lift the machine.
- Only qualified forklift operators should lift the machine with a forklift.
- Be sure the crane capacity, loading surfaces and straps or lines are sufficient to withstand the machine weight. See the serial plate for the machine weight.

Lifting the Machine with a Forklift

Be sure the extension deck, controls and component trays are secure. Remove all loose items on the machine.

Fully lower the platform. The platform must remain lowered during all loading and transport procedures.

Use the forklift pockets located on both sides of the ladder.



Position the forklift forks in position with the forklift pockets.

Drive forward to the full extent of the forks.

Raise the machine 6 in / 15 cm and then tilt the forks back slightly to keep the machine secure.

Be sure the machine is level when lowering the forks.

NOTICE

Lifting the machine from the side can result in component damage.

Transport and Lifting Instructions

Lifting Instructions

Fully lower the platform. Be sure the extension decks, controls and covers are secure. Remove all loose items on the machine.

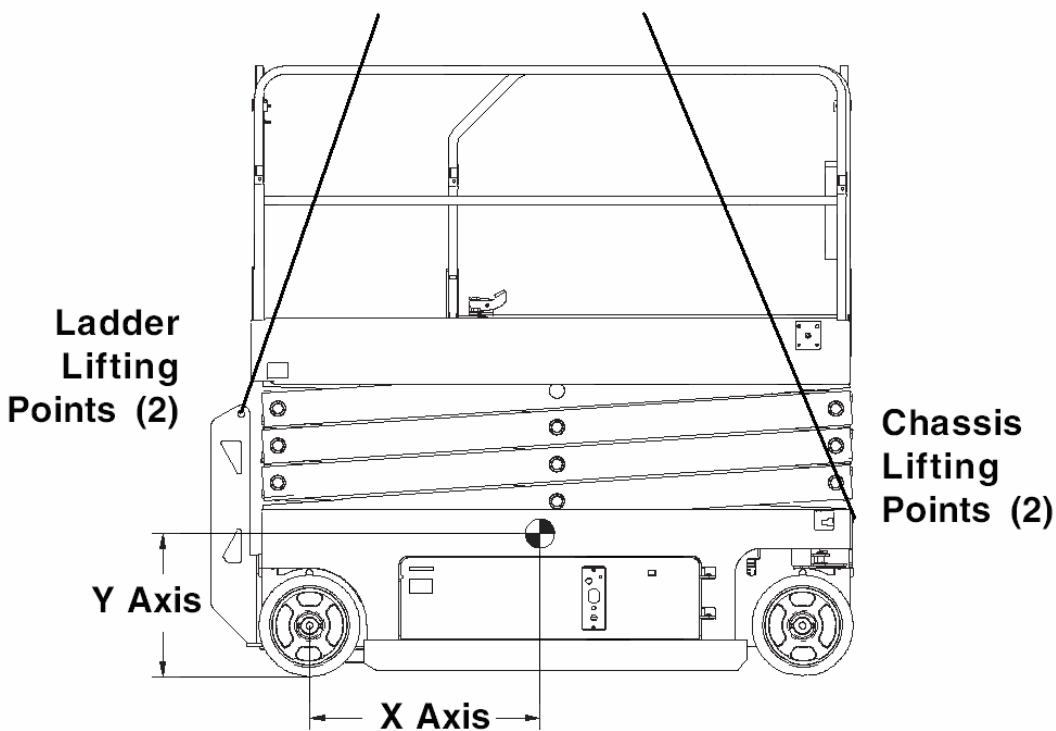
Determine the center of gravity of your machine using the table and the picture on this page.

Attach the rigging only to the designated lifting points on the machine. There are two lifting points on each end of the machine.

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

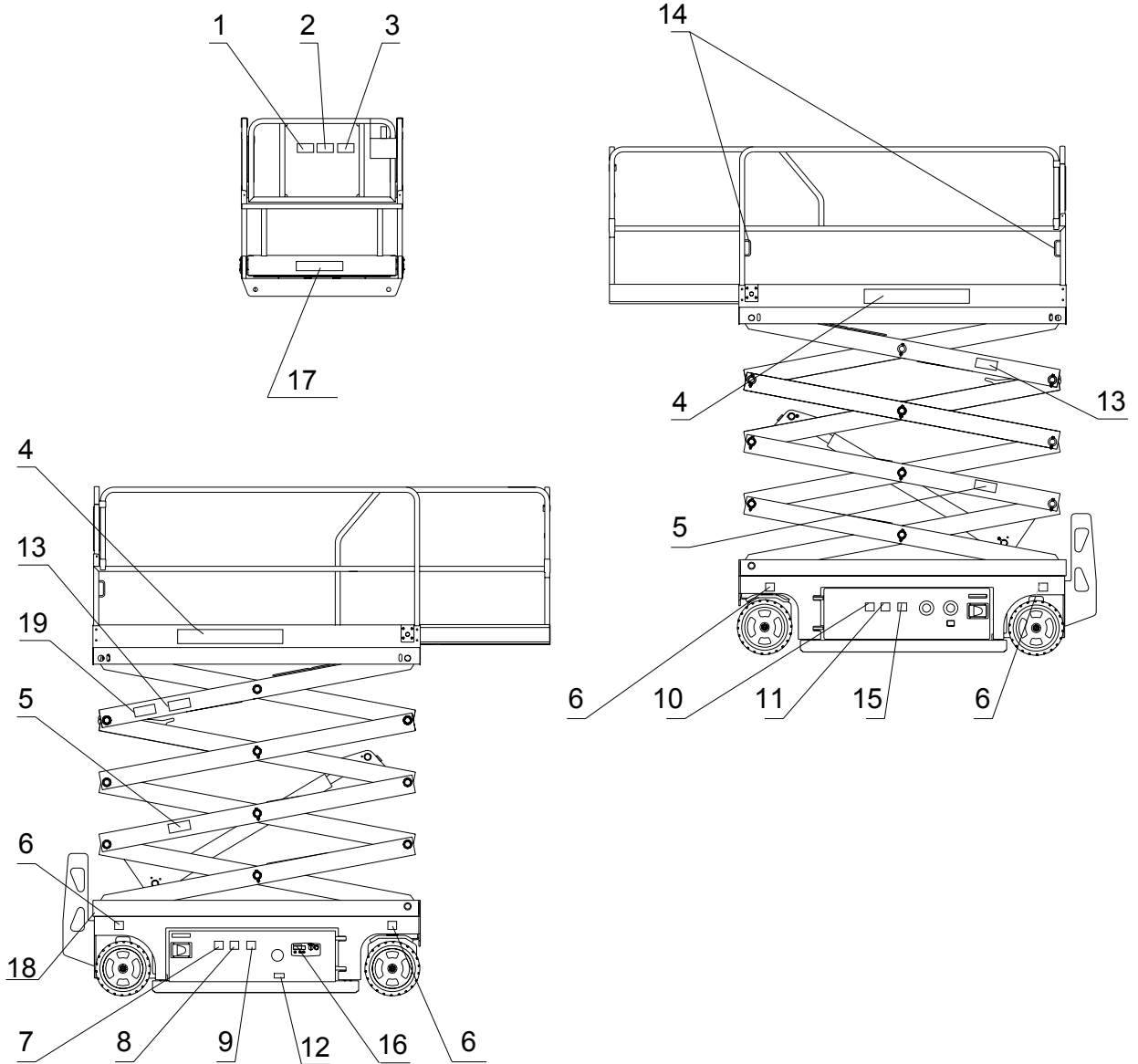
Center of gravity

Model	X Axis	Y Axis
JCPT0807	64.8 cm	59.1 cm



Decals

Green - used to indicate operation or maintenance information.



Decal Inspection

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.

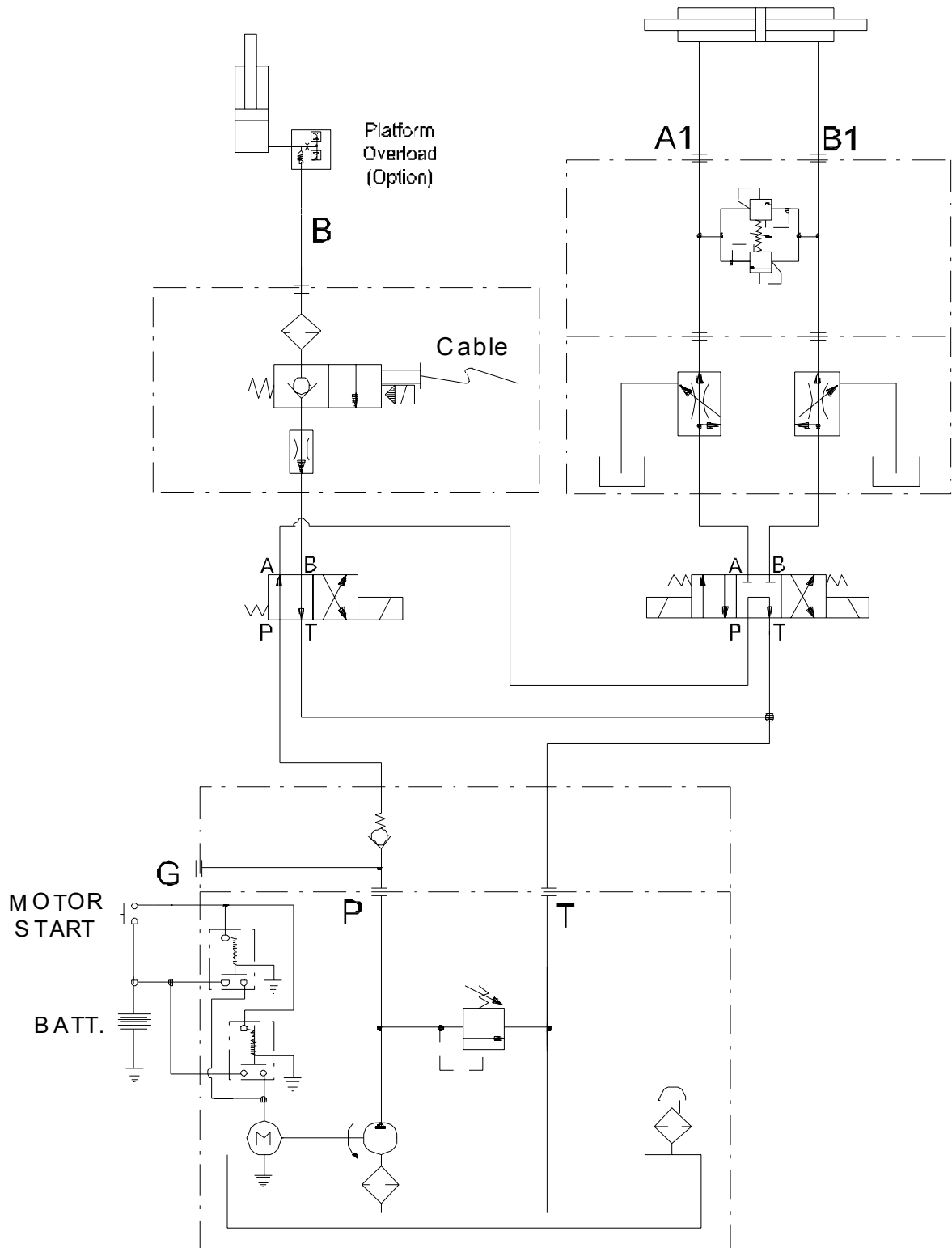
No.	Part No.	Description	Qty.
1	9413001	Danger - Safety Rules	1
2	9413003	Danger -Tip Alam	1
3	9213001	Notice - Maximum Side Force 90lbs / 400N	1
4		Cosmetic - JCPT0807	2
5	9411003	Danger - Crushing Hazard	2
6		Label -Wheel Maximum Load 1000kg	2
7	9411005	Danger -Tip-over Hazard	2
8	9422019	Warning -Inspected and Operation Properly	4
9	9411001	Danger – Explosion / Burn Hazard	1
10	9441019	Warning -Timely Charging	1
11	9443019	Notice - Timely Recharging	1
12	9443021	Notice - Saving the Electricity	1
13	9412001	Danger- Safety Arm	2
14	9211011	Labe I-Lanyard Anchorage	4
15	9441017	Notice—Charging usage	1
16	9341011	Emergency down	1
17	9213033	Capacity 230kg	1
18	9441023	Forklift pockets	4
19	9421003	Danger -Safety Arm	2

Specifications

Model: JCPT0807

Height, working maximum	7.8 m	Maximum hydraulic pressure (functions)	241.3 bar
Height, platform maximum	5.8 m	System voltage	24V
Height, stowed maximum Rails up	2.2 m	Tire size	ϕ 305 × 100
Height, stowed maximum Rails lowered	1.97 m	Airborne noise emissions	<70 dB
Width	0.76 m	Maximum sound level at normal operating workstations (A-weighted)	
Length, platform retracted	1.93 / 1.68 m	Vibration value does not exceed 2 .5m / s ²	
Length, platform extended	2.93 / 2.58 m	Maximum slope rating , Stowed position	25%
Platform dimensions Platform length x width	1.67 x 0.74 m	Maximum side slope rating Stowed position	25%
Platform extension length	0.9 m	Note : Slope rating is subject to ground conditions and adequate traction .	
Maximum load capacity	230 kg	Maximum working slope	3°
Maximum wind speed	12.5 m/s	Drive speeds	
Wheelbase	1.32 m	Stowed, maximum	5 km/h
Turning radius (outside)	1.64 m	Platform raised, maximum	0.8 km/h
Turning radius (inside)	0	Floor loading information	
Ground clearance	9 cm	Tire load, maximum	600 kg
Ground clearance Pothole guards deployed	1.9 cm	Tire contact pressure	10.18 kg/cm ² 998 kPa
Weight	1379kg	Occupied floor pressure	11.5 kg/m ² 1172 kPa
(Machine weights vary with option configurations)			
Power source	4 Batteries , 6V 210AH	Note: Floor loading information is approximate and does not incorporate different option configurations.	
Controls	Proportional	It should be used only with adequate safety factors.	
AC outlet in platform	Standard	Continuous improvement of our products is a DINGLI policy. Product specifications are subject to change without notice or obligation.	

Hydraulic Schematic



Electrical Schematic

