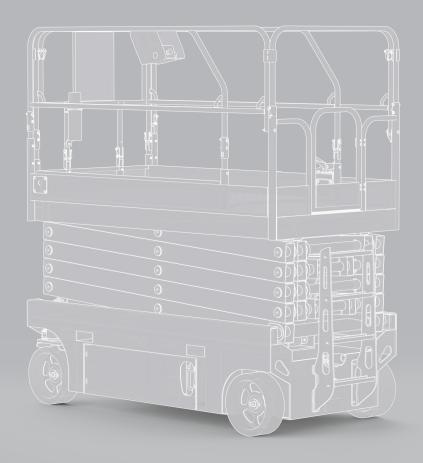




USER MANUAL SELF-PROPELLED SCISSORS BOOM LIFT









ABOUT US

Hisarlar was established in 1974 as a family company. In total 148.000 m² three factory area of 600+ people, operating with its corporate structure, internationally recognized "product-management-production" certified according to the requirements of the standard, is a large organization that adds value to Turkey.

Hisarlar, Turkey's first tractor cab manufacturer, the first soil tillage agricultural machinery, the first 4x4 vehicle manufacturer, has become a brand as an important OEM manufacturer that carries out precision productions such as chassis, body and other welded jointing parts for important construction machinery brands, equipment manufacturers, defense industry and railway equipment manufacturers that have made a name for themselves in the global market by concentrating their increasing experience and capabilities on heavy metal processing.

Hisarlar also has Turkey's first agricultural machinery R&D Center, which has developed with its own design and production capabilities in the Agricultural Machinery sector since 1985, and contunies to design and implement innovative and value-added products in the field of agricultural mechanization to address all stages of agriculture.

OUR VISION & MISSION

Our Vision:

Positioning ourselves at the optimum point on the value chain with our superior products.

Our Mission:

To meet the needs of our customers and stakeholders with our high-tech production and strong organizational competence, ensuring sustainability in stakeholder satisfaction through our pursuit of operational excellence.

EC DECLARATION OF CONFORMITY





Manufacturer's;

Name : Hisarlar Makina Sanayi Ve Ticaret Anonim Şirketi
Adress : Hisar Mah. 1047 Cd. No:2 Tepebaşı / Eskişehir, Türkiye

Phone : +90 222 411 24 30
Fax : +90 222 411 22 47
web : www.hisarlar.com.tr

Name and Address of the Person authorised to compile the technical file;

Name : Ali Osman Akbaş

Adress : Hisar Mah. 1047 Cd. No:2 Tepebaşı / Eskişehir, Türkiye

The undersigned declares that the described products meet the essential requirements of the below mentioned standards as based on *Machinery Directive 2006/42/EC, Electromagnetic Compatibility Directive 2014/30/EU.*

The item of equipments which identified below has been subject to internal manufacturing checks with monitoring of the final assesment by *HiSARLAR MAKINA SANAYI VE TICARET ANONIM ŞIRKETI*.

MACHINE DESCRIPTION

SELF-DRIVE SCISSORS BOOM LIFT

MODELS

Name

Position

Place/Date

SCL0810, SCL1012, SCL1214

Signed on be half of the manufacturer;

APPLICABLE REGULATIONS

2006/42/EC MACHINE DIRECTIVE

: Serdar Karel

: Quality And R&D Director : Eskisehir - Türkiye 16.07.2024

2014/30/EU ELECTROMAGNETIC COMPATIBILITY DIRECTIVE

APPLICABLE STANDARDS

EN ISO 12100:2010; EN 60204-1:2018; EN 61000-6-2:2019 and EN 61000-6-4:2019, EN 280-1:2022

Signature

INFORMATION TO BE FILLED IN WHILE THE MACHINE IS D	DELIVERED;	
MODEL NAME :	MODEL CODE :	
Self-drive Scissors Boom Lift - 8m	SCL0810	0
Self-drive Scissors Boom Lift - 10m	SCL1012	0
Self-drive Scissors Boom Lift - 12m	SCL1214	0
SERIAL NUMBER	PRODUCTION YEAR	

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About the Manual

These operating instructions have been prepared to help you use your machine safely and efficiently. The manual must be read carefully before using the machine fort he first time.

This manual is intended for the efficiency of the machine, first intervention in case of possible malfunctions and relevant information. For this reason, it must be kept in an easily accessible place during use of the machine.

If the machine is sold, the operating instrucitons must be handed over to the new owner so that this information can be used.

The information, warnings and rules given in the manual prepared considering.

The user has the sufficient level of professional experience and education. In addition to the information contained in the content, local and it is essential to comply with the regulations of national professional associations on general occupational health and safety issues.

This user manual is intended for use with all models of Mote Lift brand Hydrostatic Articulating Platform machines. Therefore, there may be differences between the information given in the content and your machine.

In addition to the topics in the content, you can contact HİSARLAR Customer Services or HİSARLAR authorized services for detailed information.

HİSARLAR CUSTOMER SERVICE



Hisar, 1047 Cd. No:2 26550 Tepebaşı/Eskişehir, Türkiye



Tel: +90 222 411 24 30 Faks: +90 222 411 22 47

Technical Changes

All information and technical values in this manual; printing Valid on the date. Working with the principle of continuous development and improvement, HİSARLAR reserves the right to change product specifications at any time without notice.

After the delivery of the machine,

In case of any changes to the technical documentation; HİSARLAR will send you the documents containing the added information in line with customer demand.

Changed sections of the document must be added to the manual for correct and safe use of the machine.



Product Identity

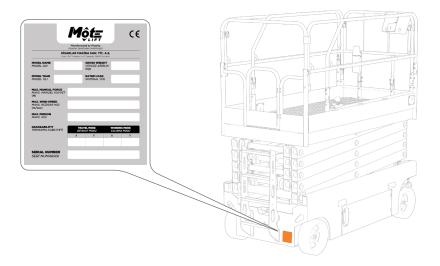
The machine identification label is located on the left side of the machine riveted to the body.

Always use your machine serial number in all your transactions so that you can make your spare parts, technical support and other after-sales transactions correctly and easily.

Never deform the label with the serial number and do not remove it.

On the machine identification label;

- · Model name,
- · Model year,
- · Unloaded weight,
- · Nominal load,
- Manual force.
- · Maximum wind speed,
- · Maximum number of people,
- · Climbing ability
- Serial number information is available.



Intended Use

This machine is designed to lift tools and materials with personnel to access work areas at height.

Contacting the Manufacturer

When you contact Mote Lift, you must provide the model number and serial number on your machine, along with your name and contact information.

Example situations where a connection with Mote Lift is required:

- · Incident Notice,
- Product application and safety questions,

- Information on compliance with standards and regulations
- Updates such as transfer of ownership of the machine or changes to your contact details

In case of change of ownership of the machine, see the next section.



Transfer of Machinery Ownership

Updating the ownership information guarantees that you receive important safety, maintenance and operating information about your machine on time.

Please register your machine by visiting our website at www.motelift. com or by calling us at 444 77 57.

Operation of the Machine

Danger

injury.

Failure to follow the

instructions and safety

rules in this manual could

result in death or serious

Do not operate the machine unless the following conditions are met.

- » To learn and apply the principles of safe machine operation in the manual.
 - 1. Avoid dangerous situations.
 - 2. Learn and thoroughly understand the safety rules before moving on to the next section.
 - 3. Always carry out an inspection before starting.
 - 4. Always perform function tests before use.
 - 5. Check the work area.
 - 6. Use this machine only for the purpose for which it was designed.

- » You must read, the manufacturer's instructions and safety rules, understand and comply with the safety manual, the operator's manual and the machine labels.
- » You must read, understand and comply with the employer's safety rules and workplace regulations.
- You must read, understand and comply with all applicable legal regulations.
- » You must have received the relevant training to operate this machine safely.

Maintenance of Safety Labels

You can replace missing or damaged safety labels by contacting the manufacturer. Always prioritize operator safety. Use mild soap and water to clean safety labels.

Do not use solvent-based cleaning agents as they may damage the material used to make the safety labels.

Classification of Hazards

The labels on this machine display various symbols,

Color codes and cautionary statements to identify the following:

Safety Warning Symbol

Warns you of possible personal injury hazards. Observe all safety messages following this symbol to avoid possible injury or death.



Red	Potential mortality risk
Orange	Risk of serious injuries
Yellow	Risk of material damage / minor injuries
Green	Maintenance and operation info
Other	Additinal technical info





General Safety

Tip-over Hazard

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

Maximum capacity - SCL1012	
Maximum occupants (Indoor use)	3 person
Maximum occupants (Outdoor use)	1 person
Platform allowable maximum load (Indoor use)	320kg
Platform allowable maximum load (Outdoor use)	120kg
Extension deck allowable maximum load	120kg

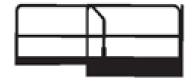
Maximum capacity - SCL0810	
Maximum occupants (Indoor use)	3 person
Maximum occupants (Outdoor use)	1 person
Platform allowable maximum load (Indoor use)	460kg
Platform allowable maximum load (Outdoor use)	120kg
Extension deck allowable maximum load	120kg

Maximum capacity - SCL1214	
Maximum occupants (Indoor use)	3 person
Maximum occupants (Outdoor use)	1 person
Platform allowable maximum load (Indoor use)	kg
Platform allowable maximum load (Outdoor use)	kg
Extension deck allowable maximum load	120kg

Platform retracted



Platform extended



Extension only Platform only

Personal Safety

Personal Protection Against Falling

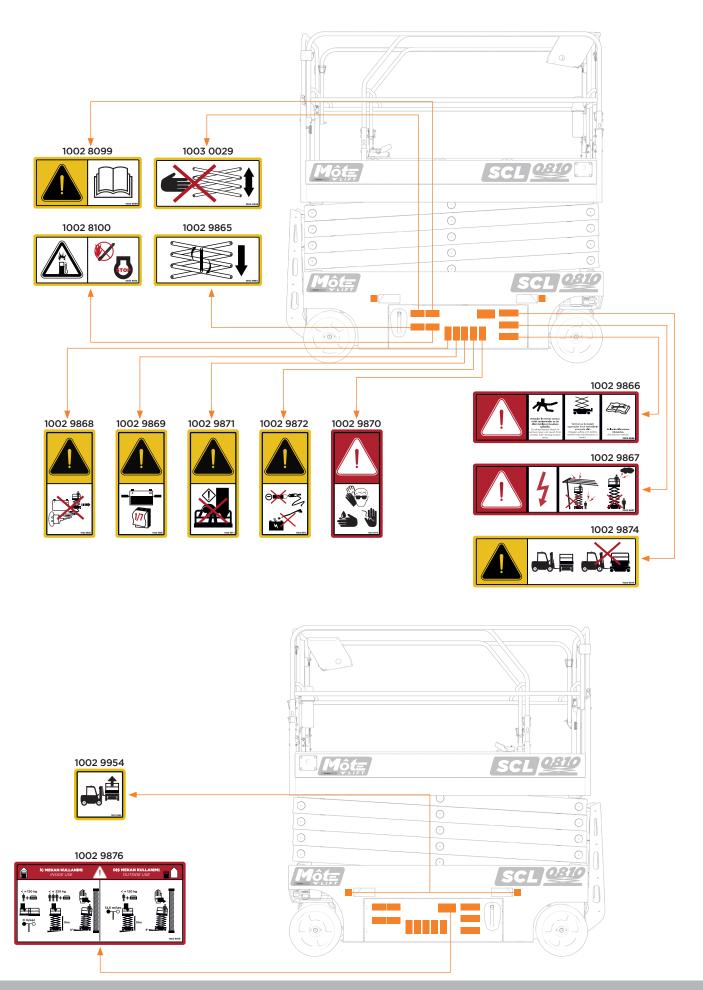
Personal fall protection equipment (PPE) must be worn when operating this machine.

Persons in the vehicle must use a safety belt or safety harness in accordance with legal regulations. Attach the rope to the fastener on the platform. Operators must comply with employer and workplace rules and legal regulations on the use of personal protective equipment.

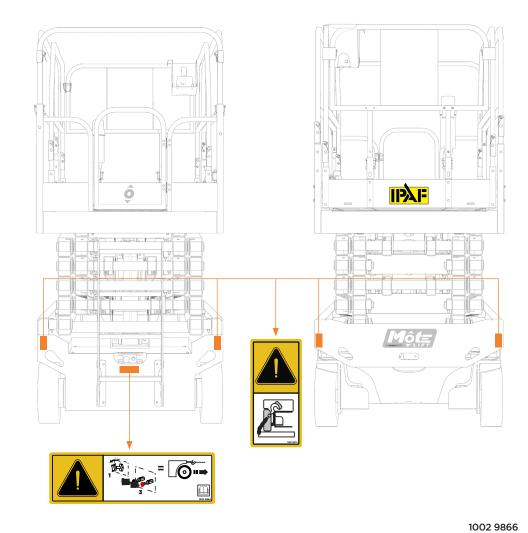
It is imperative that all PPE complies with applicable legal regulations and is inspected and used in accordance with the PPE manufacturer's instructions.



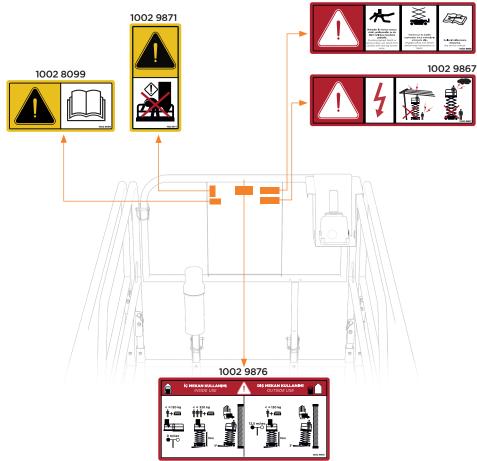
Label Location







Label No	Quantity
10028098	1
10028099	4
10028100	4
10029332	2
10029333	2
10029864	2
10029865	4
10029866	4
10029867	4
10029868	4
10029869	4
10029870	4
10029871	4
10029872	4
10029873	4
10029874	4
10029875	2
10029876	2
10029911	4
10029912	4
10029918	5
10029954	4
10030029	4
10029946	1
10029921	1





Working Area Safety



Electrical Shock 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.

Line Voltage	Mandatory Distance
0-50KV	3,05m
50-200KV	4,60m
200-350KV	6,10m
350-500KV	7,62m
500-750KV	10,67m
750-1000KV	13,72m

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.

Toppling Hazards

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.

For outdoor use machine, 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 push off or pull toward any object outside of the platform.



Maximum allowable manual force

Application	Manual Force	Maximum Occupants
Outdoor	200N	1
Indoor	400N	3
Outdoor	200N	1
Indoor	400N	3
Outdoor	200N	1
Indoor	400N	3
	Outdoor Indoor Outdoor Indoor	Application Force Outdoor 200N Indoor 400N Outdoor 200N Indoor 400N Outdoor 200N

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.

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 weight 28 kg. The batteries must weigh a minimum of 112 kg.; Each battery must weight 30 kg. The batteries must weigh a minimum of 120 kg); Each battery must weight 37 kg. The 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, toe boards or guard rail system can increase the weight in the platform and the surface area of the platform or the load.

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



Crushing Hazard

Keep hands and limbs out of scissors. Keep hands clear when folding rails.

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

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.

Hazards of Working on Slopes

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

Slope rating applies to machines only in the stowed position.



Maximum slope rating stowed



Maximum side slope rating stowed

Maximum slope rating stowed SCL 0810 25% (14°) SCL 1012 25% (14°) SCL 1214 25% (14°) Maximum side slope rating stowed SCL 0810 25% (14°) SCL 1012 25% (14°) SCL 1214 25% (14°)

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

Falling Hazards

The guard rail system provides fall protection. During operation, occupants in the platform must wear a full body harness with a lanyard attached to an authorized lanyard anchorage point. Attach only one (1) lanyard per lanyard anchorage point.



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.







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.





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 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.





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

Hazards of Physical Injury

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.

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.



Hazards Caused by Damaged Machinery

Do not use a damaged or malfunctioning machine.

Be sure all maintenance has been performed as specified in this manual.

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 decals are in place and legible.

Be sure the operator's manual is complete, legible and in the storage container located in the platform.

Component Damage Hazards

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

Do not use the machine as a ground for welding.

Battery Safety

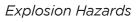
Burn Hazards



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





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

Electrocution/ Burn Hazard

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

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



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. The batteries must weigh a minimum of 112 kg.; Each battery must weigh 30 kg. The batteries must weigh a minimum

of 120 kg; Each battery must weigh 37 kg. The batteries must weigh a minimum of 148 kg.

Lifting Hazard

Use the appropriate number of people and proper lifting techniques when

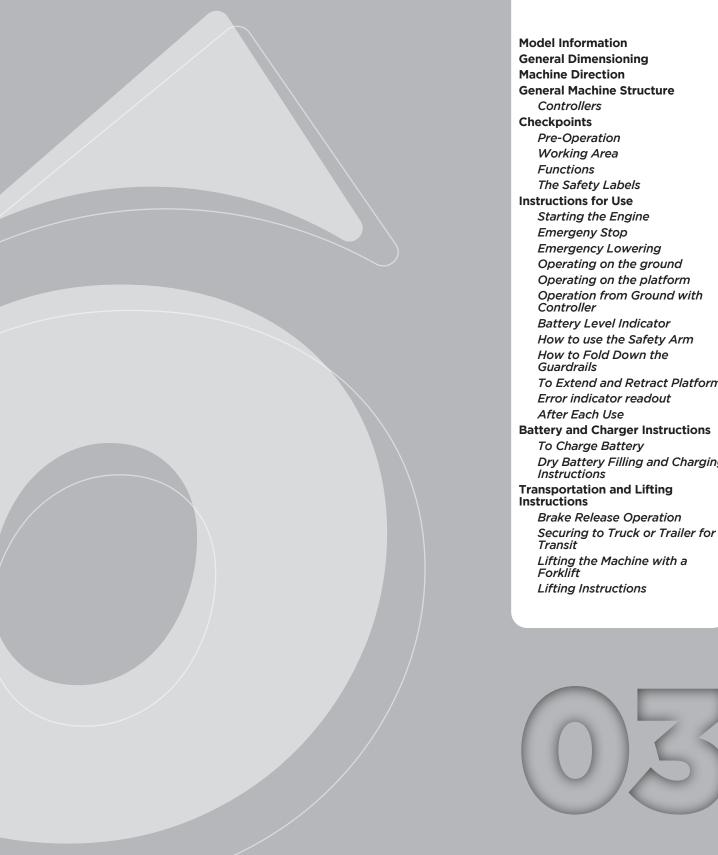
lifting batteries

After Use

- 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. Push in the red Emergency Stop buttons to "off" position.
- 5. Push in the main power switch to "off" position
- 6. Chock the wheels.
- 7. Charge the batteries.





Model Information General Dimensioning Machine Direction General Machine Structure

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TECHNICAL INFORMATION

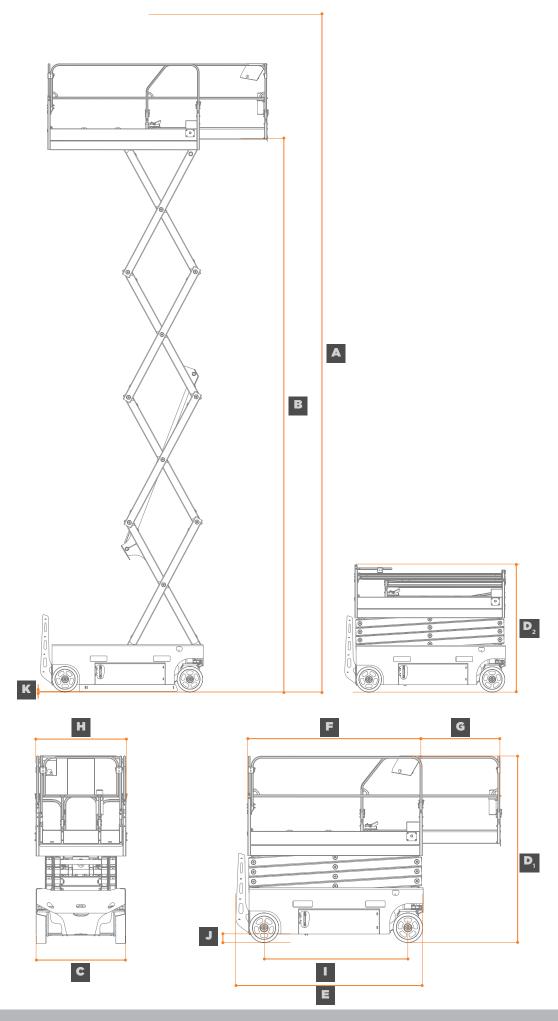
Model Information

This user manual covers all of the models listed below. However, upon customer request and different power some parts, accessories used for capacity values and features may not be available on your machine.

TECHNICAL DATA / MODEL	SCL0810	SCL1012	SCL1214
A Maximum Operating Height*	10,18 m	12,03 m	13,8 m
B Maximum Platform Height	8,18 m	10,03 m	11,8 m
E Length (stowed)	2,41 m	2,41 m	2,41 m
C Width	1,15 m	1,15 m	1,15 m
Height (platform handrails open)	2,4 m	2,5 m	2,64 m
D ₂ Height (basket handrails stowed)	1,92 m	2,04 m	2,16 m
Platform Length	2,24 m	2,24 m	2,24 m
G Additional platform extension	1 m	1 m	1 m
H Platform width	1 m	1 m	1 m
I Wheelbase	1,85 m	1,85 m	1,85 m
J Height Above Ground	0,095 m	0,095 m	0,095 m
K Height Above Ground (pit guard open)	0,02 m	0,02 m	0,02 m
Lifting capacity	460 kg	460 kg	460 kg
Lifting capacity (additional platform)	120 kg	120 kg	120 kg
Drive speed (stowed)	3,5 km/h	3,5 km/h	3,5 km/h
Raised retracted	0,8 km/h	0,8 km/h	0,8 km/h
Gradeability (stowed***)	%25	%25	%25
Weight	2620 kg	2900 kg	
Controls	Proportional		
Drive	2 Front-wheels		
Brake System	2 Rear-wheels		
Tyres - anti-marking	15 x 5 in		
Drive Engine	4,5 kw		
Battery	24V DC (four 6 V 225 Ah Battery)		
Charger	90-240V 25Amp		
Hydraulic System Capacity	20 L		



General Dimensioning



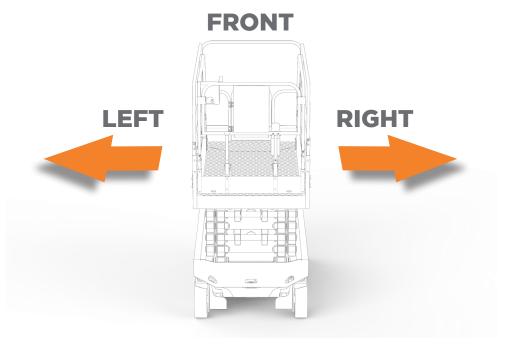


Machine Direction

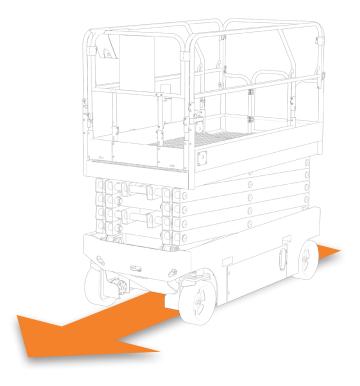
It is possible to consider the concept of direction in Mobile Platform machines when the machine is in travel mode.

The terms FRONT, RIGHT and LEFT are used when the camera is in travel mode. These terms are shown below and are always used in the same way.





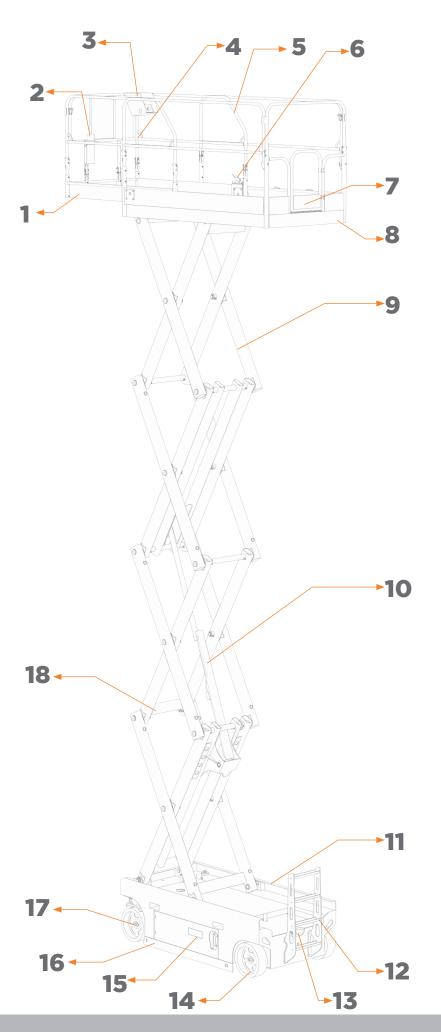
In the travel position, the steer tire must be positioned in front of the operator inside the platform.





General Structure of the Machine

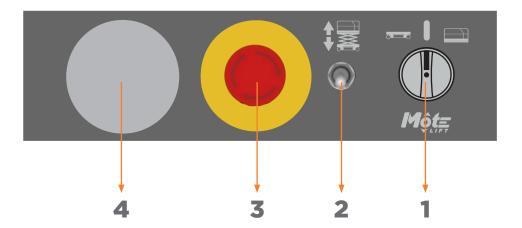
- 1. Platform extension
- 2. Manual storage container
- 3. Platform control
- 4. Lanyard anchorage point
- 5. Platform guard rails
- 6. Platform extension release pedal
- 7. Platform entry gate
- 8. Main platform
- 9. Scissor arms
- 10. Lift cylinder
- 11. Ground controls (on opposite side of machine)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





Controllers

Ground Controller



1. Key switch

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.

2. Platform up / down switch

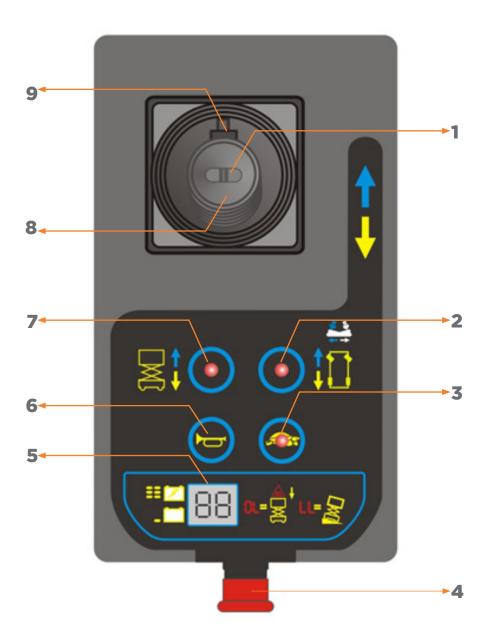
Move the switch up and the platform will raise. Move the switch down and the platform will lower.

3. Red Emergency Stop button

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

4.





- 1. Thumb rocker switch
- 2. Drive function select button
- 3. Drive speed button
- 4. Red Emergency Stop button
- 5. LED readout screen
- 6. Horn button
- 7. Lift function select button
- 8. Proportional control handle
- 9. Function enable switch

1. Thumb rocker switch

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

2. Drive function select button

Press this button to activate the drive function.

3. Drive speed button

Press this button to activate the slow or fast drive function.

4. 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.

5. LED readout screen

Diagnostic readout and battery charge indicator.

6. Horn Button

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

7. Lift function select button

Press this button to activate the lift function.

8. Proportional control handle

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.

9. Function enable switch

Press and hold the function enable switch to enable the drive/lift function.



Checkpoints

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 preoperation inspection.

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

- 3. Inspect the workplace.
- 4. Always perform function tests prior to use.
- 5. Only use the machine as it was intended.

Pre-Operation



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 this manual.

Pre-operation Checkpoints

- Platform overload components
- Platform entry gate
- Beacon (if equipped)
- Safety arm
- Platform extension(s)
- Scissor pins and retaining fasteners
- Platform control joystick
- Brake release components
- Pothole guard
- · 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.

- Be sure that the operator's manual 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 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 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



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 preoperation inspection.
- 3. Inspect the workplace.

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

- 4. Always perform function tests prior to use.
- Only use the machine as it was intended.

Working Area



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.

Working Area Checkpoints

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

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 preoperation inspection.
- 3. Inspect the workplace.
- 4. Always perform function tests prior to use.

Know and understand the function tests before going on to the next section.

5. Only use the machine as it was intended.

Functions



The function tests are designed to discover any malfunctions before the machine is put into service.

The operator must follow the step-bystep 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 preoperation inspection and function tests again before putting the machine into service.

- Select a test area that is firm, level and free of obstruction.
- 2. Be sure the battery pack is connected.
- Pull out the main power switch to "on" position.

At the Ground Controls

- Turn the ground red Emergency Stop button clockwise to the on position. Pull out the platform red Emergency Stop button to the on position.
- 5. Turn the key switch to ground control.
- 6. Observe the LED readout screen on the platform controls.

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



 Observe the LED readout screen on the ECU window. Result: The LED should look like the picture at right.



Test Emergency Stop

Push in the ground red
 Emergency Stop button to the off position.

Result: No functions should operate.

Turn the red Emergency Stop button clockwise to the on position.

Test Up/Down Functions

A buzzer with different sound



frequency is controlled in central system. The descent alarm sounds at 60 beeps per minute. The descent delay alarm sounds at 120 beeps per minute. The alarm that goes off when the pothole guards have not deployed sounds at 180 beeps per minute. The alarm that goes off when the machine is not level sounds at 180 beeps per minute. An optional automotive-style horn is also available.

- 10. Turn the key switch to off or platform position.
- Move up and hold the platform up / down switch.

Result: No function should operate.

- 12. Turn the key switch to ground control position.
- 13. Move up and hold the platform up / down switch.

Result: The platform should raise.

14. Move down and hold the platform up / down switch.

Result: The platform should lower. The descent alarm should sound while the

platform is lowering. The platform stop at the height is approximately 2m from the ground. The descent delay alarm will sound.

Note: Be sure the area below the platform is clear of personnel and obstructions before continuing.

15. Move down and hold the platform up / down switch.

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

Test the Emergency Lowering

- Activate the up function and raise the platform approximately 60 cm.
- 17. Pull the emergency lowering knob located on the ground controls side of the machine.

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

18. Turn the key switch to platform control.

At the Platform Controls

Test Emergency Stop

Push in the platform red
 Emergency Stop button to the off position.

Result: No functions should operate.

20. Pull out the red Emergency Stop button to the on position.

Result: The LED indicator light should come on.

Test the Horn

21. Push the horn button.

Result: The horn should sound.

Test Function Enable and Up/Down Functions

- 22. Do not hold the function enable switch on the control handle.
- 23. Slowly move the control handle in the direction indicated by the blue up arrow, then in the direction indicated by the yellow down

Result: No functions should operate.

- 24. Press the lift function select button.
- 25. Press and hold the function enable switch on the control handle.

26. Slowly move the control handle in the direction indicated by the blue up arrow.

Result: The platform should raise. The pothole guards should deploy.

- 27. Release the control handle. *Result: The platform should stop raising.*
- 28. Press and hold the function enable switch. Slowly move the control handle in the direction indicated by the yellow down 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.

- 29. Press the drive function select button. The indicator light should turn on.
- 30. Press and hold the function enable switch on the control handle.



31. Depress the thumb rocker switch on top of the control handle in the direction identified by the blue left arrow on the control panel.

Result: The steer wheels should turn in the direction that the blue left arrow points on the control panel.

 Depress the thumb rocker switch in the direction identified by the white right arrow on the control panel.

Result: The steer wheels should turn in the direction that the white right arrow points on the control panel.

Test Drive and Braking

- 33. Press the drive function select button. The indicator light should turn on
- 34. Press and hold the function enable switch on the control handle.
- 35. 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.

- 36. Press and hold the function enable switch on the control handle.
- 37. Slowly move the control handle in the direction indicated by the yellow 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 yellow 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

 Press and hold the function enable switch. Raise the platform approximately 2m from the ground.

Result: The pothole guards should deploy.

39. Press and hold the function enable switch on the control

handle.

40. Slowly move the control handle to the full drive position.

Result: The maximum achievable drive speed with the platform raised should not exceed 22 cm/s.Result: If the drive speed with the platform raised exceeds 22 cm/s, immediately tag and remove the machine from service.

Test the Tilt Sensor Operation

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

- 41. Fully lower the platform.
- 42. Place a 3.5-20cm or similar piece of wood under both wheels on one side and drive the machine up onto them.
- 43. Raise the platform approximately 2m from the ground.

Result: The platform should stop and the tilt alarm will sound at 180 beeps per minute. The platform controls LED readout should display LL.

- 44. Press the drive function select button.
- 45. Press and hold the function enable switch on the control handle.
- 46. Move the control handle in the direction indicated by the blue up arrow, then move the control handle in the direction indicated by the yellow down arrow.

Result: The drive function should not work in either direction.

47. 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 and lift.

48. Raise the platform.

Result: When the platform is raised approximately 2m from the ground, the pothole guards should deploy.

49. Press on the pothole guards on one side, and then the other.

Result: The pothole guards should not move.



50. Lower the platform.

Result: The pothole guards should return to the stowed position.

51. Place a 3.5-20cm or similar piece of wood under a pothole guard. Raise the platform.

Result: When the platform is raised approximately 2m from the ground, the pothole alarm will sound at 180 beeps per minute, and the platform controls LED screen readout should display 18.

- 52. Press the drive function select button.
- 53. Press and hold the function enable switch on the control handle
- 54. Move the control handle in the direction indicated by the blue up

arrow, and then move the control handle in the direction indicated by the yellow down arrow.

Result: The drive function should not work in either direction.

- 55. Press and hold the function enable switch on the control handle.
- 56. Depress the thumb rocker switch on top of the control handle in the direction identified by the blue and white arrow on the control panel.

Result: The steer function should not work in either direction.

57. Lower the platform and remove the 3.5-20cm wood block.

The Safety Labels

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

Below is a numbered list with quantity and description information.

Label No	Label Desciption	QTY
10028098	MOTE LIFT METAL MAKINA TANITIM ETIKETI	1
10028099	KULLANIM KILAVUZUNU OKUYUN ETİKETİ	4
10028100	PATLAMA TEHLİKESİ ETİKETİ	4
10029864	MAKİNE ÇEKME TALİMATI ETİKETİ	2
10029865	MAKAS YÖN ETİKETİ	4
10029866	YARALANMA UYARI ETIKETI NO1	4
10029867	YARALANMA UYARI ETIKETI NO2	4
10029868	MAKİNE ŞARJ OLURKEN KULLANMAYIN ETİKET	4
10029869	BATARYA ÖMÜR KONTROL ETİKETİ	4
10029870	YARALANMA UYARI ETIKETI NO3	4
10029871	SEPETTEN SARKMA UYARI ETİKETİ	4
10029872	BATARYA KULLANIMI UYARI ETİKETİ	4
10029873	MAKİNE TAŞIMA NOKTASI ETİKETİ	4
10029874	FORKLIFT İLE TAŞIMA TALİMATI ETİKETİ	4
10029875	MAKİNE KULLANIM ŞARTLARI ETİKETİ (0810)	2
10029876	MAKİNE KULLANIM ŞARTLARI ETİKETİ (1012)	2
10029954	FORKLIFT KALDIRMA NOKTASI ETIKETI	4
10030029	MAKASLARA EL SOKMAYINIZ ETİKETİ	4



Instructions for Use

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 preoperation inspection.
- 3. Inspect the workplace.
- 4. Always perform function tests prior to use.
- Only use the machine as it was intended.

This machine is a self-propelled hydraulic lift equipped with a work platform on the scissor mechanism. Vibrations emitted by these machines are not hazardous to an operator in the work platform. The machine can be used to position personnel with their tools and supplies at position above ground level and can be used to reach work areas located above and over machinery or equipment.

A full and detailed implementation of EN ISO 13849-1/2 is correctly applied on our MEWP design. SISTEMA, a software tool for PL Calculation Tool, is also used to perform some relatively straightforward calculations on subsystem to determine the overall PL of the system. Reliability data, diagnostic coverage [DC], the system architecture [Category], common cause failure and, where relevant, requirements for software are used to assess the PL to comply with PLr of SRP/CS in Clause 5.11 of EN 280.

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 manual.

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 manual. That means every new operator should perform a preoperation inspection, function tests, and a workplace inspection before using the machie.

Starting the Engine

- Pull the main switch on the underframe. (on)
- Make sure that the Emergency Stop buttons on both the tower and platform control panel are in the on position.
- 3. Insert the ignition switch from the tower control panel and turn it to position 1.
- 4. Wait until an image appears on the led screen.
- 5. Turn the ignition switch to the starter position (position 2).
- Release the key when you hear the diesel engine start. Do not do this for more than 8-10 seconds.

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

Pull the emergency lowering knob.

Operating on the ground

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

the on position.

To Position Platform

 Move the platform up/down switch according to the markings on the control panel.

Drive and steer functions are not available from the ground controls

Operating on the platform

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

To Position Platform

- 1. Press the lift function select button
- 2. Press and hold the 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
- 3. Increase speed: Slowly move the control handle off center.
- 4. Decrease speed: Slowly move the control handle toward

center.

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

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

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. SCL0810, SCL1012, SCL1214 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 m / 3.6 m = 0.083 x 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.

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 readout screen to determine the battery level.



How to use the Safety Arm

- Raise the platform until the distance of the two sets of scissor at least 0.5m.
- Lift the safety arm, move it to the center of the scissor arm and rotate up to a vertical position.
- 3. Lift the upper safety arm, move it to the center of the scissor

arm and rotate down to a vertical position.

4. Lower the platform until the safety arm rests securely on the link. Keep clear of the safety arm when lowering the platform.

\(\) 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 three sections 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.



- Fold down the extension platform left rail assembly. Keep hands clear of pinch points.
- Fold down the extension platform right 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 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 assembly. Keep hands free of pinch points.

How to Fold Down the Guardrails

Follow the fold down instructions

but in reverse order.

To Extend and Retract Platform

- Press the platform lock pin pedal on the extension deck by foot.
- 2. Push the platform extension guardrail to extend the platform

to the desired position.

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



Error indicator readout

The LED readout screen displays fault codes that provide information about the machine operating status and about malfunctions. The fault codes listed in the following charts

describe malfunctions and can aid in troubleshooting the machine by pinpointing the area or component affected.

List of Fau		
Display	Description	Lift Reaction
01	System initialization Fault	Disables All Motion
02	System communication Fault	Disables All Motion
03	Invalid option setting Fault	Disables All Motion
12	Chassis Up/Down Switch ON at Power-up Fault	Disable Chassis Control
18	Pothole Guard Fault	Disable Lifting and Driving
31	Pressure Sensor Fault	Disables All Motion
32	Angle Sensor Fault	Disables All Motion
36	Low Battery Alert	Warning Only
42	Platform Left Turn Switch ON at power-up Message	Warning Only
43	Platform Right Turn Switch ON at power-up Message	Warning Only
46	Platform Joystick Enable Switch ON at power-up Fault	Disable Platform Control
47	Platform Joystick not in neutral at power-up Message	Warning Only
52	Drive Forward Coil Fault	Disable Lifting and Driving
53	Drive Reverse Coil Fault	Disable Lifting and Driving
54	Lift Up Coil Fault	Disable Lifting and Driving
55	Lift Down Coil Fault	Disable Lifting and Driving
56	Right Turn Coil Fault	Disable Lifting and Driving
57	Left Turn Coil Fault	Disable Lifting and Driving
58	General Brake Coil Fault	Disable Lifting and Driving
59	Parallel Coil Fault	Disable Lifting and Driving
61	Motor Controller Current Sensor Fault	Controller Dependent
62	Motor Controller Hardware Failsafe Fault	Controller Dependent
63	Motor Controller Motor Output Fault	Controller Dependent
64	Motor Controller SRO Fault	Controller Dependent
65	Motor Controller Throttle Fault	Controller Dependent
66	Motor Controller Emergency Reverse Fault	Controller Dependent
67	Motor Controller HPD Fault	Controller Dependent
68	Low Voltage Fault	Disable All Motion
69	High Neutral Current Fault (ZAPI Only)	Disable All Motion
70	Steering Input Out of Range (ZAPI Only)	Disable All Motion
71	Motor Controller Main Contactor Fault	Disable Lifting and Driving
72	Motor Controller Over Voltage Fault	Controller Dependent



TECHNICAL INFORMATION

Switches down. If OK, consider replacing the Joystick or PCU. Platform Right Turn Switch ON at power-up Message: Ensure that nothing is holding the Joystick Toggl Switches down. If OK, consider replacing the Joystick or PCU.			
Motor Controller Pump Motor Fault Controller Dependent Motor Controller Left Drive Motor Fault Controller Dependent Motor Controller Left Drive Motor Fault Controller Dependent Motor Controller Right Drive Motor Fault Deable Lifting and Driving Pump Motor Short Fault Deable Lifting and Driving Deable Lifting and Driving Right Drive Motor Short Fault Right Drive Motor Short Fault Disable Lifting and Driving Right Drive Motor Short Fault Disable Lifting and Driving Right Drive Motor Short Fault Disable Lifting and Driving Right Drive Motor Short Fault Disable Lifting and Driving Right Drive Motor Short Fault Disable Lifting and Driving Right Drive Motor Short Fault Disable Lifting and Driving Right Drive Motor Short Disable Lifting and Driving Right Drive Motor Short Disable Lifting and Driving Right Motor Post Shorten Disable Lifting and Driving Right Release Switch Dn Warning Only Right Right Drive Motor Showed Warning Only Right Right Drive Motor Field Open Disable Lifting and Driving Disable Lifting and Driving Disable Lifting and Driving Right Motor Field Short Disable Lifting and Driving Disable Lifti	73	Motor Controller Thermal Cutback Fault	Controller Dependent
Motor Controller Left. Drive Motor Pault Controller Dependent Motor Controller Right Drive Motor Pault Controller Dependent Pump Motor Short Fault Disable Lifting and Driving Left Drive Motor Short Fault Disable Lifting and Driving Disable Lifting and Driving Warning Only Right Drive Motor Short Fault Disable Lifting and Driving Left Drave Coll Fault Disable Lifting and Driving Left Drave Coll Fault Disable Lifting and Driving Right Brake Coll Fault Disable Lifting and Driving Motor Post Shorted Disable Lifting and Driving Left Drave Coll Fault Disable Lifting and Driving Motor Post Shorted Disable Lifting and Driving Lift Drave Coll Fault Disable Lifting and Driving Motor Post Shorted Driving Marring Only Lift Motor Post Shorted Warning Only Marring Only Lift Motor Field Short Warning Only Left Motor Field Short Disable Lifting and Driving Motor Field Short Disable Lifting and Driving Lift Motor Field Short Disable Lifting and Driving Lift Motor Field Short Disable Lifting and Driving Marring Only Left Motor Field Short Disable Lifting and Driving Lift Motor Field Short Disable Lifting and Driving Marring Only Left Motor Field Short Disable Lifting and Driving Marring Only Lift Motor Field Short Disable Lifting and Driving Marring Only Disable All Motor Lift Marring Only Disable Lifting and Driving Marring Only Disable All Motor Troubleshooting Guide Display Description Lift Marring Motor System Initialization Fault: ECU may be malfunctioning, replace it. Lift Disable Lifting and Driving Troubleshooting Guide Display Description Lift Motor Field Payond Sire Limits Fault Disable Lifting and Driving Troubleshooting Guide Display Description Lift Motor Field Payond Sire Limits Fault Disable Lifting and Driving Troubleshooting Guide Display Description Lift Motor Field Payond Sire Limits Fault Disable Lifting and Driving Troubleshooting Guide Display Description Lift Motor Field Short Disable Lifting and Driving Troubleshooting Guide Display Description Lift	74	Motor Controller Motor Fault	Controller Dependent
Motor Controller Right Drive Motor Fault Pump Motor Short Fault Disable Litting and Driving Left Drive Motor Short Fault Disable Litting and Driving Left Drive Motor Short Fault Disable Litting and Driving Werning Only Bill Right Drive Motor Short Fault Disable Litting and Driving Left Brake Coll Fault Disable Litting and Driving Motor Post Shorted Disable Litting and Driving Bill Right Rivine Coll Fault Disable Litting and Driving Bill Right Rivine Coll Fault Disable Litting and Driving Bill Right Rivine Coll Fault Disable Litting and Driving Bill Rivine Coll Fault Disable Litting and Driving Bill Rivine Release Switch On Werning Only Bill Rivine Release Not Showed Werning Only Werning Only Disable Litting and Driving Werning Only Disable Litting and Driving Troubleshooting Guide Display Description Troubleshooting Guide Display Description Disable Litting and Driving Disable Litting and Driving Troubleshooting Guide Display Description Disable Litting and Driving Disable Litting and Driving Disable Litting and Driving Disable Litting and Driving Disable Litting and Driving Disable Litting and Driving Disable Litting and Driving Disable Litting and Driving Disable Litting and Driving Disable Litting and Driving Disable Litting and Driving Disable Litting and Driving Disable Litting and Driving Disable Litting and Driving Disable Litting and Driving Disable Litting and Driving Disable L	75	Motor Controller Pump Motor Fault	Controller Dependent
Pump Motor Short Fault Disable Litting and Driving Desable Litting and Driving Cver 80% Load Warning Warning Only Right Drive Motor Short Fault Disable Litting and Driving Right Drive Motor Short Fault Disable Litting and Driving Left Ender Coll Fault Disable Litting and Driving Left Ender Coll Fault Disable Litting and Driving Right Brake Coll Fault Disable Litting and Driving Motor Post Shorted Disable Litting and Driving Motor Post Shorted Disable Litting and Driving Brake Release Switch On Warning Only Brake Release Switch On Warning Only Brake Release Switch On Warning Only Brake Release Mot Showed Warning Only Brake Release Mot Showed Warning Only Cver 90% Load Warning Motor Field Open Disable Litting and Driving Cver 90% Load Warning Warning Only Left Motor Field Short Disable Litting and Driving Right Motor Field Short Disable Litting and Driving Cver 90% Load Warning Warning Warning Varning Only Cver 90% Load Warning Warning Warning Only Cver 90% Load Warning Warning Warning Only Disable Litting and Driving Warning Only Disable Litting and Driving Troubleshooting Guide Disable Litting and Driving Troubleshooting Guide Disable Litting and Driving Troubleshooting Guide Disable Description System Initialization Fault: ECU may be malfunctioning, replace it. 2 System Communication Fault: ECU may be malfunctioning, replace it. Chassis Toggle Switch ON at power-up Fault: Check the wires to the Toggle Switch or look for a stuck Toggle Switch Chassis Toggle Switch ON at power-up fault: Check the wires to the Toggle Switch or look for a stuck Toggle Switch Pethole Guard Fault: Check the wiring to the sensor and then the sensor itself. Also check to make sure that the correct option is properly selected (or not) for load sensing. Low Voltage Alert: Check that the pothole guards are extended, check the pothole limit switches. Check wires to the switches, check the down limit switch and connections. Angle Sensor Fault: Check the wiring to the sensor and then the sensor itse	76	Motor Controller Left Drive Motor Fault	Controller Dependent
Left Drive Motor Short Fault Over 80% Load Warning Over 80% Load Warning Naming Only Right Drive Motor Short Fault Disable Lifting and Driving Left Bruke Coil Fault Disable Lifting and Driving Left Bruke Coil Fault Disable Lifting and Driving Right Brake Coil Fault Disable Lifting and Driving Motor Post Shorted Disable Lifting and Driving Brake Release Switch On Warning Only Brake Release Switch On Brake Release Switch On Brake Release Switch On Brake Release Switch On Brake Release Switch On Brake Release Switch On Brake Release Switch On Brake Release Note Showed Warning Only Brake Release Note Showed Warning Only Brake Release Note Showed Warning Only Brake Release Note Showed Warning Only Brake Release Note Showed Warning Only Brake Release Note Showed Warning Only Brake Release Warning Warning Only Brake Release Note Field Short Disable Lifting and Driving Warning Only Disable Lifting and Driving Warning Only Warning Only Warning Only Disable Lifting and Driving Warning Only Over 99% Load Warning Warning Only Disable Lifting and Driving Troubleshooting Guide Disable All Motor Field Short Disable All Motor Disable All Motor Disable All Motor Disable All Motor System Initialization Fault: ECU may be malfunctioning, replace it. System Initialization Fault: Check communications cable connections and other wiring, if that does not resolve the problem, try replacing the PCU or ECU. Invalid Option setting Fault: Set appropriate option for this lift. Chassis Toggle Switch ON at power-up Fault: Check the wires to the Toggle Switch or look for a stuck Toggle Switch Check wires to the switches, check the down limit switch and connections. The Chassis Toggle Switch ON at power-up Message: Ensure that nothing is holding the Joystick Toggle Switch Cornect option is properly selected (or not) for load sensing. Low Voltage Alert: Check battery voltage and charge batteries if necessary. Platform Joystick Toggle Switch ON at power-up Fassage: Ensure that nothing	77	Motor Controller Right Drive Motor Fault	Controller Dependent
Over 80% Load Warning Worning Only Right Drive Motor Short Fault Disable Lifting and Driving Right Brake Coil Fault Disable Lifting and Driving Right Brake Coil Fault Disable Lifting and Driving Right Brake Coil Fault Disable Lifting and Driving Right Brake Coil Fault Disable Lifting and Driving Right Brake Release Switch On Warning Only Brake Release Switch On Warning Only Right Release Not Showed Warning Only Right Rode Release Not Showed Warning Only Right Motor Field Copen Disable Lifting and Driving Over 90% Load Warning Over 90% Load Warning Only Left Motor Field Short Disable Lifting and Driving Right Motor Field Short Disable Lifting and Driving Right Motor Field Short Disable Lifting and Driving Right Motor Field Short Disable Lifting and Driving Over 99% Load Warning Warning Only Overloaded Platform Fault Disable Lifting and Driving Troubleshooting Guide Disable Lifting and Driving Troubleshooting Guide Disable Disable Disable Lifting and Driving Troubleshooting Guide Disable Disable Disable Lifting and Driving Troubleshooting Guide Disable Disable Disable Lifting and Driving Troubleshooting Guide Disable Disable Disable Lifting and Driving Troubleshooting Guide Disable Disable Disable Lifting and Driving Troubleshooting Guide Disable Disable Disable Lifting and Driving Troubleshooting Guide Disable Disable Disable Lifting and Driving Troubleshooting Guide Disable Lifting and Driving Troubleshooting Guide Disable Lifting and Driving Troubleshooting Guide Disable Lifting and Driving Troubleshooting Guide Disable Lifting and Driving Troubleshooting Guide Disable Lifting and Driving Troubleshooting Guide Disable Lifting and Driving Troubleshooting Guide Disable Lifting and Driving Troubleshooting Guide Disable Lifting and Driving Troubleshooting Guide Disable Lifting and Driving Troubleshooting Guide Disable Lifting and Driving Troubleshooting Guide Disable Lifting and Driving Disable Lifting and Driving Disable Lifting and Driving Disable Lifti	78	Pump Motor Short Fault	Disable Lifting and Driving
Bill Right Drive Motor Short Fault Disable Lifting and Driving Bill Left Brake Coil Fault Disable Lifting and Driving Bill Right Brake Coil Fault Disable Lifting and Driving Bill Right Brake Coil Fault Disable Lifting and Driving Bill Motor Post Shorted Disable Lifting and Driving Bill Motor Post Shorted Disable Lifting and Driving Bill Right Release Switch On Warning Only Birake Release Switch On Warning Only Birake Release Warning Only Birake Release Warning Only Birake Release Warning Only Birake Release Warning Only Birake Release Warning Only Birake Release Warning Only Birake Release Warning Only Birake Release Warning Only Birake Release Warning Driving Birake Release Warning Warning Only Birake Release Warning Warning Only Birake Release Warning Warning Driving Birake Release Warning Warning Driving Disable Lifting and Driving Birake Release Warning Warning Warning Only Disable Lifting and Driving Disable	79	Left Drive Motor Short Fault	Disable Lifting and Driving
Right Brake Coil Fault Brake Coil Fault Brake Coil Fault Brake Release Switch On Brake Release Switch On Brake Release Switch On Brake Release Switch On Brake Release Switch On Brake Release Switch On Brake Release Switch On Brake Release Not Showed Worning Only Brake Release Worning Only Brake Release Worning Only Brake Release Worning Only Brake Release Worning Only Brake Release Worning Only Brake Release Worning Only Brake Release Worning Only Brake Release Worning Only Brake Release Worning Only Brake Release Worning Only Brake Release Worning Only Brake Release Worning Only Brake Release Worning Only Brake Release Worning Only Brake Release Worning Only Worning Only Brake Release Worning Only Worning Only Brake Release Worning Only Brake Release Worning Only Worning Only Brake Release Worning Only Worning Only Brake Release Worning Only Worning Only Brake Release Worning Only Worning Only Worning Only Brake Release Worning Only Worning Only Brake Release Worning Only Worning Only Worning Only Worning Only Worning Only Brake Release Worning Only Worning Only Worning Only Worning Only Worning Only Brake Release Worning Only Worning Only Worning Only Worning Only Worning Only Brake Release Worning Only Worning Only Worning Only Worning Only Brake Release Worning Only Worning Only Worning Only Brake Release Worning Only Worning Only Brake Release Worning Only Worning Only Brake Release Worning Only Worning Only Brake Release Worning Only Worning Only Brake Release Worning Only Brake Release Worning Only Worning Only Brake Release Worning Only Worning Only Brake Release Worning Only Worning Only Brake Release Worning Only Worning Only Brake Release Worning Only Worning Only Brake Release Worning Only Worning Only Brake Release Worning Only Worning Only Brake Release Worning Only Brake Release Worning Only Worning Only Worning Only Brake Release Worning Only Worning Only Brake R	80	Over 80% Load Warning	Warning Only
Right Brake Coil Fault Disable Lifting and Driving Motor Post Shorted Disable Lifting and Driving Riake Release Switch On Warning Only Brake Release Switch On Warning Only Brake Release Not Showed Warning Only Brake Release Warning Only Brake Release Warning Only Brake Release Warning Only Brake Release Warning Only Brake Release Warning Only Brake Release Warning Only Brake Release Warning Only Brake Release Warning Only Brake Release Warning Only Brake Release Warning Only Brake Release Warning Only Brake Release Warning Warning Only Cver 90% Load Warning Disable Lifting and Driving Brake Release Warning Disable Lifting and Driving Brake Release Warning Warning Only Cver 90% Load Warning Warning Only Cver 90% Load Warning Disable Lifting and Driving Brake Releas	81	Right Drive Motor Short Fault	Disable Lifting and Driving
Motor Post Shorted Brake Release Switch On Brake Release Switch On Brake Release Switch On Brake Release Not Showed Warning Only Brake Release Warning Only Brake Release Warning Only Motor Field Open Disable Lifting and Driving Warning Only Left Motor Field Short Disable Lifting and Driving Right Motor Field Short Disable Lifting and Driving Right Motor Field Short Disable Lifting and Driving Warning Only Cuerloaded Platform Fault Disable Lifting and Driving Warning Only Cuerloaded Platform Fault Disable Lifting and Driving Warning Only Cuerloaded Platform Fault Disable Lifting and Driving Warning Only Cuerloaded Platform Fault Disable Lifting and Driving Troubleshooting Guide Display Description System Initialization Fault: ECU may be malfunctioning, replace it. System Communication Fault: Check communications cable connections and other wiring. If that does not resolve the problem, try replacing the PCU or ECU. Invalid Option setting Fault: Set appropriate option for this lift. Chassis Toggle Switch ON at power-up Fault: Check the wires to the Toggle Switch or look for a stuck Toggle Switch. Pothole Guard Fault: Check that the pothole guards are extended, check the pothole limit switches. Check wire to the switches, check the down limit switch and connections. Pressure Sensor Fault: Check the wiring to the sensor and then the sensor itself. Also check to make sure that the correct option is properly selected (or not) for load sensing. Angle Sensor Fault: Check the wiring to the sensor and then the sensor itself. Also check to make sure that the correct option is properly selected (or not) for load sensing. Angle Sensor Fault: Check the wiring to the sensor and then the sensor itself. Also check to make sure that the correct option is properly selected (or not) for load sensing. Angle Sensor Fault: Check the wiring to the sensor and then the sensor itself. Also check to make sure that the correct option is properly selected (or not) for load sensing. Angle Sensor Faul	82	Left Brake Coil Fault	Disable Lifting and Driving
Brake Release Switch On Warning Only Brake Release Not Showed Warning Only Brake Release Not Showed Warning Only Brake Release Warning Only Brake Release Warning Only Brake Release Warning Disable Lifting and Driving Over 90% Load Warning Warning Warning Only Black Hotor Field Short Disable Lifting and Driving Disable Lifting and Driving Warning Only Brake Release Warning Warning Only Disable Lifting and Driving Warning Only Over 99% Load Warning Warning Only Over 99% Load Warning Warning Only Disable Lifting and Driving Warning Only Disable Lifting and Driving Troubleshooting Guide Display Description Disable Initialization Fault: ECU may be malfunctioning, replace it. Disable Lifting and Driving Troubleshooting Guide Display Description Disserting Fault: ECU may be malfunctioning, replace it. Disable Communication Fault: Check communications cable connections and other wiring. If that does not resolve the problem, try replacing the PCU or ECU. Disable Communication Fault: Check communications cable connections and other wiring. If that does not resolve the problem, try replacing the PCU or ECU. Disable Communication Fault: Check that the pothole guards are extended, check the pothole limit switches. Check wires to the switches, check the down limit switch and connections. Description Pressure Sensor Fault: Check the wiring to the sensor and then the sensor itself. Also check to make sure that the correct option is properly selected (or not) for load sensing. Angle Sensor Fault: Check the wiring to the sensor and then the sensor itself. Also check to make sure that the correct option is properly selected (or not) for load sensing. Description Left Turn Switch On at power-up Message: Ensure that nothing is holding the Joystick Toggle Switches down. If OK, consider replacing the Joystick or PCU. Platform Joystick Enable Switch On at power-up Message: Ensure that nothing is holding the Enable switch closed. Also check the neutral zone parameters. If OK, consider replacing the Joystick or PCU.	83	Right Brake Coil Fault	Disable Lifting and Driving
Brake Release Not Showed Brake Release Brake Release Warning Only Brake Release Warning Only Brake Release Warning Only Brake Release Warning Only Brake Release Warning Only Brake Release Warning Only Brable Lifting and Driving Desable Lifting and Driving Brable Lifting and Driving Brable Lifting and Driving Brable Lifting and Driving Desable Lifting and Driving Warning Only Warning Only Dever 99% Load Warning Our over 99% Load Warning Desable All Motion Disable All Motion Disable Lifting and Driving Troubleshooting Guide Display Description System Initialization Fault: ECU may be malfunctioning, replace it. System Communication Fault: Check communications cable connections and other wiring. If that does not resolve the problem, try replacing the PCU or ECU. Invalid Option setting Fault: Set appropriate option for this lift. Chassis Toggle Switch ON at power-up Fault: Check the wires to the Toggle Switch or look for a stuck Toggle Switch. Brothole Guard Fault: Check that the pothole guards are extended, check the pothole limit switches. Check wires to the switches, check the down limit switch and connections. Pressure Sensor Fault: Check the wiring to the sensor and then the sensor itself. Also check to make sure that the correct option is properly selected (or not) for load sensing. Angle Sensor Fault: Check the wiring to the sensor and then the sensor itself. Also check to make sure that the correct option is properly selected (or not) for load sensing. Angle Sensor Fault: Check the there yoltage and charge batteries if necessary. Platform Left Turn Switch ON at power-up Message: Ensure that nothing is holding the Joystick Toggle Switches down. If OK, consider replacing the Joystick or PCU. Platform Joystick Enable Switch ON at power-up Fault: Ensure that nothing is holding the Enable switches down. If OK, consider replacing the Joystick or PCU.	84	Motor Post Shorted	Disable Lifting and Driving
Brake Release Motor Field Open Disable Lifting and Driving Over 90% Load Warning Left Motor Field Short Disable Lifting and Driving Right Motor Field Short Disable Lifting and Driving Varning Only Over 99% Load Warning Over 99% Load Warning Over 99% Load Warning Over 99% Load Warning Over 99% Load Warning Disable Lifting and Driving Disable Lifting and Driving Disable All Motion LL Machine Tilted Beyond Safe Limits Fault Disable Lifting and Driving Troubleshooting Guide Display Description System Initialization Fault: ECU may be malfunctioning, replace it. System Communication Fault: Check communications cable connections and other wiring. If that does not resolve the problem, try replacing the PCU or ECU. Invalid Option setting Fault: Set appropriate option for this lift. Chassis Toggle Switch ON at power-up Fault: Check the wires to the Toggle Switch or look for a stuck Toggle Switch. Pothole Guard Fault: Check that the pothole guards are extended, check the pothole limit switches. Check wires to the switches, check the down limit switch and connections. Angle Sensor Fault: Check the wiring to the sensor and then the sensor itself. Also check to make sure that the correct option is properly selected (or not) for load sensing. Angle Sensor Fault: Check the wiring to the sensor and then the sensor itself. Also check to make sure that the correct option is properly selected (or not) for load sensing. Angle Sensor Fault: Check the wiring to the sensor and then the sensor itself. Also check to make sure that the correct option is properly selected (or not) for load sensing. Angle Sensor Fault: Check the wiring to the sensor and then the sensor itself. Also check to make sure that the Correct option is properly selected (or not) for load sensing. Angle Sensor Fault: Check the wiring to the sensor and then the sensor itself. Also check to make sure that the Correct option is properly selected (or not) for load sensing. Angle Sensor Fault: Check the wiring to the sensor and then the s	85	Brake Release Switch On	Warning Only
Motor Field Open Disable Lifting and Driving Over 90% Load Warning Disable Lifting and Driving Place Lifting and Driving Right Motor Field Short Disable Lifting and Driving Right Motor Field Short Disable Lifting and Driving Over 99% Load Warni	 86	Brake Release Not Showed	Warning Only
90 Over 90% Load Warning 91 Left Motor Field Short 92 Right Motor Field Short 93 Over 99% Load Warning 94 Over 99% Load Warning 95 Over 99% Load Warning 96 Over 99% Load Warning 97 Over 99% Load Warning 98 Over 99% Load Warning 99 Over 99% Load Warning 99 Over 99% Load Warning 99 Over 99% Load Warning 90 Overloaded Platform Fault 10 Disable All Motion 11 Disable All Motion 12 Disable Lifting and Driving 15 Disable Lifting and Driving 16 Display 17 Disable Lifting and Driving 18 Description 19 System Initialization Fault: ECU may be malfunctioning, replace it. 10 System Initialization Fault: Check communications cable connections and other wiring. If that does not resolve the problem, try replacing the PCU or ECU. 10 Invalid Option setting Fault: Set appropriate option for this lift. 11 Chassis Toggle Switch ON at power-up Fault: Check the wires to the Toggle Switch or look for a stuck Toggle Switch. 18 Pothole Guard Fault: Check that the pothole guards are extended, check the pothole limit switches. 18 Check wires to the switches, check the down limit switch and connections. 19 Pressure Sensor Fault: Check the wiring to the sensor and then the sensor itself. Also check to make sure that the correct option is properly selected (or not) for load sensing. 19 Angle Sensor Fault: Check the wiring to the sensor and then the sensor itself. Also check to make sure that the correct option is properly selected (or not) for load sensing. 20 Angle Sensor Fault: Check the wiring to the sensor and then the sensor itself. Also check to make sure that the correct option is properly selected (or not) for load sensing. 21 Angle Sensor Fault: Check the wiring to the sensor and then the sensor itself. Also check to make sure that the correct option is properly selected (or not) for load sensing. 22 Angle Sensor Fault: Check the wiring to the sensor and then the sensor itself. Also check to make sure that the Correct option is properly selected (or not) for load sensing. 23 Angle Sensor Fault: Check the wiring to the sensor and the	 87	Brake Release	Warning Only
Place Motor Field Short Disable Lifting and Driving Right Motor Field Short Disable Lifting and Driving Over 99% Load Warning Overloaded Platform Fault Disable Lifting and Driving Disable All Motion Disable Lifting and Driving Overloaded Platform Fault Machine Tilted Beyond Safe Limits Fault Disable Lifting and Driving Troubleshooting Guide Display Description System Initialization Fault: ECU may be malfunctioning, replace it. System Communication Fault: Check communications cable connections and other wiring. If that does not resolve the problem, try replacing the PCU or ECU. Invalid Option setting Fault: Set appropriate option for this lift. Chassis Toggle Switch ON at power-up Fault: Check the wires to the Toggle Switch or look for a stuck Toggle Switch. Pothole Guard Fault: Check that the pothole guards are extended, check the pothole limit switches. Check wires to the switches, check the down limit switch and connections. Pressure Sensor Fault: Check the wiring to the sensor and then the sensor itself. Also check to make sure that the correct option is properly selected (or not) for load sensing. Angle Sensor Fault: Check the wiring to the sensor and then the sensor itself. Also check to make sure that the correct option is properly selected (or not) for load sensing. Angle Sensor Fault: Check the wiring to the sensor and then the sensor itself. Also check to make sure that the correct option is properly selected (or not) for load sensing. Angle Sensor Fault: Check the wiring to the sensor and then the sensor itself. Also check to make sure that the correct option is properly selected (or not) for load sensing. Angle Sensor Fault: Check the wiring to the sensor and then the sensor itself. Also check to make sure that the correct option is properly selected (or not) for load sensing. Angle Sensor Fault: Check the wiring to the sensor and then the sensor itself. Also check to make sure that the Correct option is properly selected (or not) for load sensing. Angle Sensor Fault: Check	 89	Motor Field Open	Disable Lifting and Driving
Page 1922 Right Motor Field Short Disable Lifting and Driving 99 Over 99% Load Warning OL Overloaded Platform Fault Disable Alf Motion LL Machine Tilted Beyond Safe Limits Fault Disable Lifting and Driving Troubleshooting Guide Display Description O1 System Initialization Fault: ECU may be malfunctioning, replace it. O2 System Communication Fault: Check communications cable connections and other wiring. If that does not resolve the problem, try replacing the PCU or ECU. O3 Invalid Option setting Fault: Set appropriate option for this lift. 12 Chassis Toggle Switch ON at power-up Fault: Check the wires to the Toggle Switch or look for a stuck Toggle Switch. 18 Pothole Guard Fault: Check that the pothole guards are extended, check the pothole limit switches. Check wires to the switches, check the down limit switch and connections. 31 Pressure Sensor Fault: Check the wiring to the sensor and then the sensor itself. Also check to make sure that the correct option is properly selected (or not) for load sensing. 32 Angle Sensor Fault: Check the wiring to the sensor and then the sensor itself. Also check to make sure that the correct option is properly selected (or not) for load sensing. 33 Angle Sensor Fault: Check the wiring to the sensor and then the sensor itself. Also check to make sure that the correct option is properly selected (or not) for load sensing. 34 Angle Sensor Fault: Check the wiring to the sensor and then the sensor itself. Also check to make sure that the correct option is properly selected (or not) for load sensing. 35 Low Voltage Alert: Check battery voltage and charge batteries if necessary. 46 Platform Left Turn Switch ON at power-up Message: Ensure that nothing is holding the Joystick Toggle Switches down. If OK, consider replacing the Joystick or PCU. 47 Platform Joystick Enable Switch ON at power-up Message: Ensure that nothing is holding the Enable switc closed. Also check the neutral zone parameters. If OK, consider replacing the Joystick is in the neutral (upr ght) positi	90	Over 90% Load Warning	Warning Only
Overloaded Platform Fault Overloaded Platform Fault Disable All Motion Disable All Motion Disable Lifting and Driving Troubleshooting Guide Display Description System Initialization Fault: ECU may be malfunctioning, replace it. System Communication Fault: Check communications cable connections and other wiring. If that does not resolve the problem, try replacing the PCU or ECU. Invalid Option setting Fault: Set appropriate option for this lift. Chassis Toggle Switch ON at power-up Fault: Check the wires to the Toggle Switch or look for a stuck Toggle Switch. Pothole Guard Fault: Check that the pothole guards are extended, check the pothole limit switches. Check wires to the switches, check the down limit switch and connections. Pressure Sensor Fault: Check the wiring to the sensor and then the sensor itself. Also check to make sure that the correct option is properly selected (or not) for load sensing. Angle Sensor Fault: Check the wiring to the sensor and then the sensor itself. Also check to make sure that the correct option is properly selected (or not) for load sensing. Low Voltage Alert: Check battery voltage and charge batteries if necessary. Platform Left Turn Switch ON at power-up Message: Ensure that nothing is holding the Joystick Toggle Switches down. If OK, consider replacing the Joystick or PCU. Platform Joystick Enable Switch ON at power-up Message: Ensure that nothing is holding the Enable switc closed. Also check the neutral zone parameters. If OK, consider replacing the Joystick is in the neutral (upr ght) position. Check the neutral zone parameters setting in Dingli Scissor Programmer. If it's OK, consider replacing in Dingli Scissor Programmer. If it's OK, consider replacing in Dingli Scissor Programmer. If it's OK, consider replacing in Dingli Scissor Programmer.	91	Left Motor Field Short	Disable Lifting and Driving
OL Overloaded Platform Fault Machine Tilted Beyond Safe Limits Fault Disable Lifting and Driving Troubleshooting Guide Display Description System Initialization Fault: ECU may be malfunctioning, replace it. System Communication Fault: Check communications cable connections and other wiring. If that does not resolve the problem, try replacing the PCU or ECU. Invalid Option setting Fault: Set appropriate option for this lift. Chassis Toggle Switch ON at power-up Fault: Check the wires to the Toggle Switch or look for a stuck Toggle Switch. Pothole Guard Fault: Check that the pothole guards are extended, check the pothole limit switches. Check wires to the switches, check the down limit switch and connections. Pressure Sensor Fault: Check the wiring to the sensor and then the sensor itself. Also check to make sure that the correct option is properly selected (or not) for load sensing. Angle Sensor Fault: Check the wiring to the sensor and then the sensor itself. Also check to make sure that the correct option is properly selected (or not) for load sensing. Angle Sensor Fault: Check the wiring to the sensor and then the sensor itself. Also check to make sure that the correct option is properly selected (or not) for load sensing. Angle Sensor Fault: Check the wiring to the sensor and then the sensor itself. Also check to make sure that the correct option is properly selected (or not) for load sensing. Angle Sensor Fault: Check battery voltage and charge batteries if necessary. Platform Left Turn Switch ON at power-up Message: Ensure that nothing is holding the Joystick Toggle Switches down. If OK, consider replacing the Joystick or PCU. Platform Joystick Enable Switch ON at power-up Fault: Ensure that nothing is holding the Enable switch closed. Also check the neutral zone parameters. If OK, consider replacing the Joystick is in the neutral (upr ght) position. Check the neutral zone parameters setting in Dingli Scissor Programmer. If it's OK, consider ght position.	92	Right Motor Field Short	Disable Lifting and Driving
Troubleshooting Guide Display Description O1 System Initialization Fault: ECU may be malfunctioning, replace it. O2 System Communication Fault: Check communications cable connections and other wiring. If that does not resolve the problem, try replacing the PCU or ECU. O3 Invalid Option setting Fault: Set appropriate option for this lift. O2 Chassis Toggle Switch ON at power-up Fault: Check the wires to the Toggle Switch or look for a stuck Toggle Switch. O3 Pothole Guard Fault: Check that the pothole guards are extended, check the pothole limit switches. Check wires to the switches, check the down limit switch and connections. O3 Pressure Sensor Fault: Check the wiring to the sensor and then the sensor itself. Also check to make sure that the correct option is properly selected (or not) for load sensing. O4 Angle Sensor Fault: Check the wiring to the sensor and then the sensor itself. Also check to make sure that the correct option is properly selected (or not) for load sensing. O4 Angle Sensor Fault: Check battery voltage and charge batteries if necessary. O5 Platform Left Turn Switch ON at power-up Message: Ensure that nothing is holding the Joystick Toggle Switches down. If OK, consider replacing the Joystick or PCU. O6 Platform Right Turn Switch ON at power-up Message: Ensure that nothing is holding the Enable switch of Platform Joystick not in neutral at power-up Message: Make sure that the Joystick is in the neutral (upr ght) position. Check the neutral zone parameters. If OK, consider replacing the Joystick is in the neutral (upr ght) position. Check the neutral zone parameters setting in Dingli Scissor Programmer. If it's OK, consider parameters.	99	Over 99% Load Warning	Warning Only
Troubleshooting Guide Display Description O1 System Initialization Fault: ECU may be malfunctioning, replace it. O2 System Communication Fault: Check communications cable connections and other wiring. If that does not resolve the problem, try replacing the PCU or ECU. O3 Invalid Option setting Fault: Set appropriate option for this lift. 12 Chassis Toggle Switch ON at power-up Fault: Check the wires to the Toggle Switch or look for a stuck Toggle Switch. 18 Pothole Guard Fault: Check that the pothole guards are extended, check the pothole limit switches. Check wires to the switches, check the down limit switch and connections. O3 Pressure Sensor Fault: Check the wiring to the sensor and then the sensor itself. Also check to make sure that the correct option is properly selected (or not) for load sensing. O4 Angle Sensor Fault: Check the wiring to the sensor and then the sensor itself. Also check to make sure that the correct option is properly selected (or not) for load sensing. C4 Platform Left Turn Switch ON at power-up Message: Ensure that nothing is holding the Joystick Toggle Switches down. If OK, consider replacing the Joystick or PCU. Platform Right Turn Switch ON at power-up Message: Ensure that nothing is holding the Joystick Toggle Switches down. If OK, consider replacing the Joystick or PCU. Platform Joystick Enable Switch ON at power-up Fault: Ensure that nothing is holding the Enable switc closed. Also check the neutral zone parameters. If OK, consider replacing the Joystick is in the neutral (upr ght) position. Check the neutral zone parameters setting in Dingli Scissor Programmer. If it's OK, consider parameters setting in Dingli Scissor Programmer. If it's OK, consider parameters setting in Dingli Scissor Programmer. If it's OK, consider parameters setting in Dingli Scissor Programmer. If it's OK, consider parameters setting in Dingli Scissor Programmer. If it's OK, consider parameters setting in Dingli Scissor Programmer. If it's OK, consider parameters.	OL	Overloaded Platform Fault	Disable All Motion
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	47	ght) position. Check the neutral zone parameter setting	-



52	Drive Forward Coil Fault: Check the connections to the Coil's terminals and make sure they are tight. If so, check the coil itself to see if it is open or shorted.
53	Drive Reverse Coil Fault: Check the connections to the Coil's terminals and make sure they are tight. If so, check the coil itself to see if it is open or shorted.
54	Lift Up Coil Fault: Check the connections to the Coil's terminals and make sure they are tight. If so, check the coil itself to see if it is open or shorted.
55	Lift Down Coil Fault: Check the connections to the Coil's terminals and make sure they are tight. If so, check the coil itself to see if it is open or shorted.
56	Right Turn Coil Fault: Check the connections to the Coil's terminals and make sure they are tight. If so, check the coil itself to see if it is open or shorted.
57	Left Turn Coil Fault: Check the connections to the Coil's terminals and make sure they are tight. If so, check the coil itself to see if it is open or shorted.
58	General Brake Coil Fault: Check the connections to the Coil's terminals and make sure they are tight. If so, check the coil itself to see if it is open or shorted.
59	Parallel Coil Fault: Check the connections to the Coil's terminals and make sure they are tight. If so, che ck the coil itself to see if it is open or shorted.
61	Motor Controller Current Sensor Fault: Drive or Lift Motor may be overheating. Let the lift cool down. If that does not help, cycle power to reset the Motor controller. If the problem persists, check the wiring and if OK, try replacing the Motor Controller.
62	Motor Controller Hardware Failsafe Fault: Cycle power. If that does not resolve the issue check for noise sour ces. If still needed, try replacing the Motor Controller.
63	Motor Controller Motor Output fault: Check wiring first then cycle power. If needed replace controller.
64	Motor Controller SRO Fault: Look at motor enable delay with the Dingli Scissor Programmer, it may be too short. Make sure other Motor Controller parameters are properly selected.
65	Motor Controller Throttle Fault: Check wiring. Make sure the correct throttle type is selected in the Motor Controller.
66	Motor Controller Emergency Reverse Fault: Ensure that the Emergency Reverse Check Parameter is off in the Motor Controller.
67	Motor Controller HPD Fault: Look at motor enable delay with the Dingli Scissor Programmer, it may be too short. Make sure other Motor Controller parameters are properly selected.
68	Low Voltage Fault: Check battery voltage and charge batteries if necessary. Check the battery connections and tighten or clean. Check the voltage to the ECU and PCU.
69	High Neutral Current: The MC is sensing current in the motors when there should not be. This could occur anytime the MC thinks the brakes are on and the motors are still turning. This message sometimes comes just before other faults but should be ignored in those cases.
70	Steering Input Out of Range: There is an inappropriate voltage at the steering input of the ZAPI motor cont roller. The ZAPI may need to be "trained" for the three steering voltages (on Differential Steered machines). Or the steering voltage from the ECU was at some point outside of the range that was recorded during the "training" session. Retrain the controller and/or check for fluctuating voltages due to lose wires, etc.
71	Motor Controller Main Contactor Fault: Check the connections to the main contactor. Replace the contactor if necessary. Replace the Motor Controller if necessary.
72	Motor Controller Over Voltage Fault: Check battery voltage and make sure the battery charger is not on. The cycle power to the lift. If that does not resolve the issue, try replacing the Motor Controller.
73	Motor Controller Thermal Cutback Fault: Drive or Lift Motor may be overheating. Let the lift cool down. If that does not help cycle power to reset the Motor controller. If that doesn't resolve the issue, replace the Motor Controller.
74	Motor Controller Motor Fault: Check connections to the motors. Cycle power to the lift and if that does not resolve the issue, replace the Motor Controller.
75	Motor Controller Pump Motor Fault: Check connections to the Pump Motor. Cycle power to the lift and if the does not resolve the issue, replace the Motor Controller.
76	Motor Controller Left Drive Motor Fault: Check connections to the motors. Cycle power to the lift and if that does not resolve the issue, replace the Motor Controller.
77	Motor Controller Right Drive Motor Fault: Check connections to the motors. Cycle power to the lift and if the does not resolve the issue, replace the Motor Controller.
78	Pump Motor Short Fault: Check connections to the pump motor. Cycle power to the lift and if that does no resolve the issue, replace the Motor Controller.
79	Left Drive Motor Short Fault: Check the Motor connections and make sure they are tight. Check the Motor for a short.



80	Over 80% Load Warning: Platform is getting close to its limit of weight. Consider not adding more load.
81	Right Drive Motor Short Fault: Check the Motor connections and make sure they are tight. Check the Motor for a short.
82	Left Brake Coil Fault: Check the connections to the Coil's terminals and make sure they are tight. If so, check the coil itself to see if it is open or shorted.
83	Right Brake Coil Fault: Check the connections to the Coil's terminals and make sure they are tight. If so, check the coil itself to see if it is open or shorted.
84	Motor Post shorted: Check the connections of the controller and motor. Make sure the wiring is not shorted.
85	Brake Release Switch On: Check the wires to brake release switch or look for a stuck switch.
86	Brake Release Not Stowed: Check if the platform is below down limit height. Check the down limit switch and connections.
87	Brake Release Need Switch On: Check the wires to brake release switch or look for a Stuck switch. Check the wires to the Toggle Switch or look for a stuck Toggle Switch.
89	Motor Field Open: The field voltage is different from 1/2 battery voltage. Check connections of the field wires or leakage to the vehicle frame.
90	Over 90% Load Warning: Platform is getting close to its limit of weight. Consider not adding more load.
91	Left Motor Field Short: Check connections of the field wires or leakage to the vehicle frame.
92	Right Motor Field Short: Check connections of the field wires or leakage to the vehicle frame.
99	Over 99% Load Warning: Platform has reached its limit of weight. Do not add more load.
OL	Overloaded Platform Fault: Remove the excess load immediately.
LL	Machine Tilted Beyond Safe Limits Fault: If the machine is tilted, find a way to make it level. If the machine is level, check the wiring to the tilt sensor and then the sensor itself.

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 Mote authorized battery and charger.



To Charge Battery

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

Maintenance - free battery

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

Standard Battery

5. 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.
- 6. Replace the battery vent caps.
- 7. Connect the battery charger to a grounded AC circuit.
- 8. The charger will indicate when the battery is fully charged.
- 9. 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

- 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.

Transportation and Lifting Instructions

Brake Release Operation

For the Hydraulic Motor Drive Model

- 1. Chock the wheels to prevent the machine from rolling.
- Be sure the winch line is properly secured to the drive chassis tie points and the path is clear of all obstructions.
- 3. Push in the black brake release knob to open the brake valve.
- 4. Pump the red brake release pump knob.
- 5. If you want to close the brake release, just pull out the black brake release knob.

For the DC Motor Drive Model

- 1. Chock the wheels to prevent the machine from rolling.
- 2. Turn the ground red Emergency Stop button clockwise to the on

- position. Pull out the platform red Emergency Stop button to the on position.
- Move down and hold the platform up / down switch in ground control, meanwhile turn on the key switch to the "Ground" position. The brake will be released after Alarm alerts.
- 4. If you want to close the brake release, just turn off the key switch in "ground" position.
- 5. Towing the Hydraulic Drive Model is not recommended. If the machine must be towed, do not exceed 3.5 km/h.
- 6. Towing the DC Motor Drive Model is not recommended. If the machine must be towed, do not exceed 4.0 km/h.

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.

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.

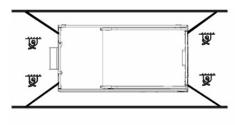
Inspect the entire machine for loose or unsecured items.

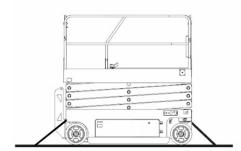
Use the tie-down points on the chassis for anchoring down to the transport surface.

Use a minimum of four chains or straps. Use chains or straps of ample load capacity.

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

before transporting.







Lifting the Machine with a Forklift

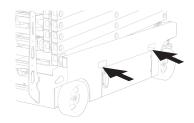
Observe and Obey

- 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.



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 15 cm and then tilt the forks back slightly to keep the machine secure.

Be sure the machine is level when lowering the forks.

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

Lifting Instructions

Fully lower the platform. Be sure the extension decks, controls and covers are secure.

Remove all loose items on the machine.

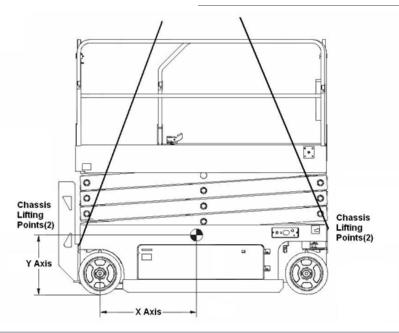
Determine the center of gravity of your machine using the table and the picture on this page.

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	
SCL0810			
SCL1012			
SCI 1214			







Regular Maintenance

Pre-delivery Preparation Report

The pre-delivery preparation report contains checklists for each type of scheduled inspection.

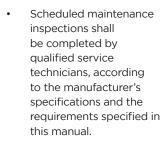
Make copies of the Pre-delivery

Preparation report to use for each inspection. Store completed forms as required.

Maintenance Schedule

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

Observe and Obey





There are five types of maintenance inspections that must be performed according to a schedule— daily, quarterly, semi-annually, annually, and two year. The Scheduled Maintenance Procedures Section and the Maintenance Inspection Report have been divided into five subsections—A, B, C, D, and

E. Use the following chart to determine which group(s) of procedures are required to perform a scheduled inspection.

Inspection	Checklist
Daily or every 8 hours	Α
Quarterly or every 250 hours	A+B
Semi-annually or every 500 hours	A+B+C
Annually or every 1000 hours	A+B+C+D
Two year or every 2000 hours	A+B+C+D

Maintenance Inspection Report

The maintenance inspection report contains checklists for each type of scheduled inspection.

Make copies of the Maintenance Inspection Report to use for each inspection. Maintain completed forms for a minimum of 4 years or in compliance with your employer, jobsite and governmental regulations and requirementS.

Pre-delivery Preparation Report

It is the responsibility of the dealer to perform the Pre-delivery Preparation.

The Pre-delivery Preparation is performed prior to each delivery. The inspection is designed to discover if anything is apparently wrong with a machine before it is put into service.

A damaged or modified machine must never be used. If damage or any variation from factory delivered condition is discovered, the machine must be tagged and removed from service.

Repairs to the machine may only be made by a qualified service technician, according to the manufacturer's specifications.

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



Instructions

Use the operator's manual on your machine.

The Pre-delivery Preparation consists of completing the Pre-operation Inspection, the Maintenance items and the Function Tests.

Use this form to record the results. Place a check in the appropriate box after each part is completed. Follow the instructions in the operator's manual.

If any inspection receives an N, remove the machine from service, repair and re-inspect it. After repair, place a check in the R box.

Legend

Y = yes, completed

N = no, unable to complete

R = repaired

Comments

Pre-Delivery Preparation	Υ	N	R
Pre-operation inspection			
completed			
Maintenance items			
completed			
Function tests completed			

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

Scheduled Maintenance

Quarterly, annual and bi-annual maintenance must be carried out by a qualified person who has been adequately trained and qualified to carry out maintenance on this machine in accordance with the procedures contained in the service manual for this machine.

Machines that have been out of service for more than three months must undergo a three-month check before being put back into service.





05

ADDITIONAL INFORMATION

Specifications

SCL0810

3010010	
Height, maximum operation	12,4 m
Height, maximum platform	10,4 m
Height, gathered	2,3 m
Length, gathered	5,8 m
Horizontal access, maximum	6,7 m
Maximum load capacity	230 kg
Max. wind speed	12,5 m/sn
Wheelbase	2 m
Radius of rotation (externally)	
Radius of rotation (internally)	
Döner tabla rotasyonu	
Turntable tail swing	
Speed, gathered	
Speed, booms elevated	
Floor distance, center	
Floor distance, axle	
Controllers	
Weight	4600 kg
Platform sizes	
Platform stabilization	
Platform rotation	

The total vibration level to which the hand/arm system is exposed does not exceed 2.5 m/sn²

The highest root mean square of the weighted acceleration to which the whole body is subjected does not exceed $0.5~\text{m/s}^2$.

Airborne sound emissions

Sound pressure level at the floor workstation
Sound pressure level at the platform workstation
Guaranteed sound volume level
AC socket on the platform
Hydraulic pressure, maximum (boom functions)
System Voltage

Tire length, 4WD RT ve 2WD RT

Tire size, Non-Sinking Feature

Maximum incline rate, gathered, 2WD

Platform inclination in down position	%25
Platform inclination in up position	%25
Side incline	%25

Maximum incline rate, gathered, 4WD

Platform inclination in down position	%45
Platform inclination in up position	%45
Side incline	%25

Note: The degree of slope depends on ground conditions and sufficient traction

Fuel tank capacity 50 L

Surface loading info

Surface loading info	
Tire contact pressure	

Pressure on the covered surface

Note: Ground loading information is approximate and does not cover different option configurations. It should only be used with appropriate safety factors

It is Mote Lift policy to continually improve our products. Product specifications are subject to change without notice or liability.

ABL14

ADL14	
Height, maximum operation	m
Height, maximum platform	m
Height, gathered	2,3 m
Length, gathered	m
Horizontal access, maximum	m
Maximum load capacity	230 kg
Max. wind speed	12,5 m/sn
Wheelbase	2 m
Radius of rotation (externally)	
Radius of rotation (internally)	
Döner tabla rotasyonu	
Turntable tail swing	
Speed, gathered	
Speed, booms elevated	
Floor distance, center	
Floor distance, axle	
Controllers	
Weight	6200 kg
Platform sizes	
Platform stabilization	
Platform rotation	

The total vibration level to which the hand/arm system is exposed does not exceed 2.5 m/sn²

The highest root mean square of the weighted acceleration to which the whole body is subjected does not exceed 0.5 m/ sn².



Airborne sound emissions

Sound pressure level at the floor workstation
Sound pressure level at the platform workstation
Guaranteed sound volume level
AC socket on the platform
Hydraulic pressure, maximum (boom functions)
System Voltage
Tire length, 4WD RT ve 2WD RT

Maximum incline rate, gathered, 2WD

Tire size, Non-Sinking Feature

Platform inclination in down position	%25
Platform inclination in up position	%25
Side incline	%25

Maximum incline rate, gathered, 4WD

Platform inclination in down position	%45
Platform inclination in up position	%45
Side incline	%25

Note: The degree of slope depends on ground conditions and sufficient traction

Fuel tank capacity 50 L

Surface loading info

Surface loading info

Tire contact pressure

Pressure on the covered surface

Note: Ground loading information is approximate and does not cover different option configurations. It should only be used with appropriate safety factors.

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ABL16

712210	
Height, maximum operation	16 m
Height, maximum platform	14 m
Height, gathered	2,3 m
Length, gathered	7 m
Horizontal access, maximum	8,7 m
Maximum load capacity	230 kg
Max. wind speed	12,5 m/sn
Wheelbase	2 m
Radius of rotation (externally)	
Radius of rotation (internally)	
Döner tabla rotasyonu	
Turntable tail swing	
Speed, gathered	
Speed, booms elevated	
Floor distance, center	
Floor distance, axle	
Controllers	
Weight	6200 kg
Platform sizes	
Platform stabilization	
Platform rotation	

The total vibration level to which the hand/arm system is exposed does not exceed 2.5 m/sn²

The highest root mean square of the weighted acceleration to which the whole body is subjected does not exceed 0.5 m/sn².

Airborne sound emissions

Sound pressure level at the floor workstation	
Sound pressure level at the platform workstation	
Guaranteed sound volume level	
AC socket on the platform	
Hydraulic pressure, maximum (boom functions)	
System Voltage	
Tire length, 4WD RT ve 2WD RT	
	_

Tire size, Non-Sinking Feature

Maximum incline rate, gathered, 2WD	
Platform inclination in down position	%25
Platform inclination in up position	%25
Side incline	%25

Maximum incline rate, gathered, 4WD

Platform inclination in down position	%45
Platform inclination in up position	%45
Side incline	%25

Note: The degree of slope depends on ground conditions and sufficient traction

Fuel tank capacity 50 L

Surface loading info

Surface loading info
Tire contact pressure

Pressure on the covered surface

Note: Ground loading information is approximate and does not cover different option configurations. It should only be used with appropriate safety factors.

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