Operation & Safety Manual

Original Instructions -
Keep this manual with the machine at all times.

E18MML, E18MCL, E18MSP

PVC 2402

3122326700

December 2, 2024 - Rev B

ANSI CE UK CA
AS/NZS MOL70

English (en-US)

⚠ WARNING

Operating, servicing and maintaining this vehicle or equipment can expose you to chemicals including engine exhaust, carbon monoxide, phthalates, and lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. To minimize exposure, avoid breathing exhaust, do not idle the engine except as necessary, service your vehicle or equipment in a well-ventilated area and wear gloves or wash your hands frequently when servicing. For more information go to www.P65Warnings.ca.gov.

FOREWORD

The Mobile Elevating Work Platform (MEWP) models covered in this manual are designed and tested to meet or exceed various compliance standards. Please refer to the manufacturer's nameplate affixed to the subject MEWP for specific standard compliance information.

This manual is a very important tool! Keep it with the machine at all times.

The purpose of this manual is to provide owners, users, operators, lessors, and lessees with the precautions and operating procedures essential for the safe and proper machine operation for its intended purpose.

Due to continuous product improvements, JLG Industries, Inc. reserves the right to make specification changes without prior notification. Contact JLG Industries, Inc. for updated information.

Refer to www. JLG. com for Warranty, Product Registration, and other machine-related documentation.

This manual is originally written in English.

SAFETY ALERT SYMBOLS AND SAFETY SIGNAL WORDS

This is the Safety Alert Symbol. It is used to alert you to the potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

⚠ DANGER

Indicates an imminently hazardous situation. If not avoided, will result in serious injury or death. This decal will have a red background.

⚠ WARNING

Indicates a potentially hazardous situation. If not avoided, could result in serious injury or death. This decal will have an orange background.

⚠ CAUTION

Indicates a potentially hazardous situation. If not avoided, may result in minor or moderate injury. It may also alert against unsafe practices. This decal will have a yellow background.

NOTICE

Indicates information or a company policy that relates directly or indirectly to the safety of personnel or protection of property.

⚠ WARNING

This product must comply with all safety related bulletins. Contact JLG Industries, Inc. or the local authorized JLG representative for information regarding safety related bulletins which may have been issued for this product.

NOTICE

JLG Industries, Inc. sends safety related bulletins to the owner of record of this machine. Contact JLG Industries, Inc. to ensure that the current owner records are updated and accurate.

NOTICE

JLG Industries, Inc. must be notified immediately in all instances where JLG products have been involved in an accident involving bodily injury or death or when substantial damage has occurred to personal property or the JLG product.

For:

- Accident Reporting
- Product Safety Publications
- Current Owner Updates
- Questions Regarding Product Safety
- Standards and Regulations Compliance Information
- Questions Regarding Special Product Applications
- Questions Regarding Product Modifications

Contact:

Product Safety and Reliability Department
JLG Industries, Inc.
13224 Fountainhead Plaza
Hagerstown, MD 21742
USA
or Visit www.jlg.com to find your local JLG office.

In USA:

Toll Free: 877-JLG-SAFE (877-554-7233)

Outside USA:

Phone: 240-420-2661
Fax: 301-745-3713
E-mail: ProductSafety@JLG.com

REVISION LOG

Date	Revision	Description
September 2, 2024	A	Original Issue
December 2, 2024	B	Revision

Other Publications Available

Publication	Publication Number
Service & Maintenance Manual	3122326800
Illustrated Parts Manual	3122326900

This Page is intentionally left blank

SECTION CONTENTS

Section	Subject	Page

FOREWORD **3**

REVISION LOG **7**

SECTION 1
SAFETY PRECAUTIONS **13**

1.1 General 13
1.2 Pre-Operation 13
1.3 Operation 15
1.4 Towing, Lifting, and Hauling 21
1.5 Maintenance 22
1.6 Long-Term Storage 24

SECTION 2
USER RESPONSIBILITIES, MACHINE PREPARATION, AND INSPECTION **25**

2.1 Personnel Training 25
2.2 Preparation, Inspection, and Maintenance 26
2.3 Pre-Start Inspection 28
2.4 Walk-Around Inspection 31
2.5 Function Check 33

SECTION 3
MACHINE CONTROLS, INDICATORS, AND OPERATION **35**

3.1 General 35
3.2 Machine Description 35
3.3 Machine Operation 36
3.4 Operating Characteristics and Limitations 36
3.5 Battery Charging 36
3.6 Ground Control Station 43
3.7 Platform Control Console 47
3.8 Parking Machine 53
3.9 Platform Configurations 54

3.10 Fall Protection — Lanyard Attachment 61
3.11 Quick-Change Platform Mounting 62
3.12 Transporting, Lifting and Tie Down Procedures 64
3.13 Beacons 67
3.14 ClearSky Smart Fleet™ 68
3.15 Access Control - ClearSky Smart Fleet™ (If Equipped) 68
3.16 Decal Installation 69

SECTION 4
EMERGENCY PROCEDURES 79

4.1 General Information 79
4.2 Emergency Operation 79
4.3 Incident Notification 81
4.4 Platform Manual Descent 82
4.5 Lithium-Ion Battery (If Equipped) 82
4.6 ClearSky Smart Fleet™ - Locked Out State 83

SECTION 5
ACCESSORIES 85

5.1 Available Accessories 85
5.2 Anti-Vandalism Package 86
5.3 Frame Bumpers 87
5.4 Tool Tray 88
5.5 Gate Latch 89
5.6 Gate Alarm 90
5.7 Crane Hook 91
5.8 Dual Beacon 92
5.9 Entry Step 93
5.10 Floor Mat 94

SECTION 6
GENERAL SPECIFICATIONS AND OPERATOR MAINTENANCE 95

6.1 Introduction 95
6.2 General Specifications 95
6.3 Operator Maintenance 99
6.4 Battery Maintenance and Charging (Lead Acid/AGM) 103
6.5 Battery Maintenance and Charging (Lithium-Ion) 105
6.6 Radio Frequency (RF) Information 106

6.7 Supplemental Information Only Applicable to CE/UKCA Machines (EN280-1:2022) 108
6.8 EC Declaration of Conformity 109
6.9 UKCA Declaration of Conformity..... 110
6.10 Supplemental Information Only Applicable to CE/UKCA Machines (EN280:2013+A1:2015) 111
6.11 EC Declaration of Conformity 112
6.12 UKCA Declaration of Conformity..... 113

This Page is intentionally left blank

SECTION 1
Safety Precautions

1.1 GENERAL

This section outlines the necessary precautions for proper and safe machine usage and maintenance. For proper machine use, it is mandatory that a daily routine is established based on the content of this manual. A maintenance program, using the information provided in this manual and the Service and Maintenance Manual, must also be established by a qualified person and must be followed to ensure that the machine is safe to operate.

The owner/user/operator/lessor/lessee of the machine should not accept operating responsibility until this manual has been read, training is accomplished, and operation of the machine has been completed under the supervision of an experienced and qualified operator.

If there are any questions with regard to safety, training, inspection, maintenance, application, and operation, please contact JLG Industries, Inc. (“JLG”).

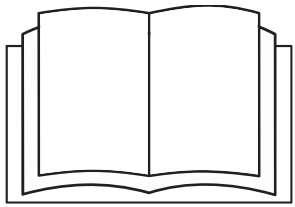
⚠ WARNING

Failure to comply with the safety precautions listed in this manual could result in machine damage, property damage, personal injury or death.

1.2 PRE-OPERATION

1.2.1 Operator Training And Knowledge

- Read, understand, and study the Operation and Safety Manual in its entirety before operating the machine. For clarification, questions, or additional information regarding any portions of this manual, contact JLG Industries, Inc.



- Only personnel who have received proper training regarding the inspection, application and operation of MEWPs (including recognition and avoiding hazards associated with their operation) shall be authorized to operate a MEWP.
- Only properly trained personnel who have received unit specific familiarization shall operate a MEWP. The user shall determine if personnel are qualified to operate the MEWP prior to operation.

- Read, understand, and obey all DANGERS, WARNINGS, CAUTIONS, and operating instructions on the machine and in this manual.
- Ensure that the machine is to be used in a manner which is within the scope of its intended application as determined by JLG.
- All operating personnel must have a thorough understanding of the intended purpose and function of the MEWP controls, including platform, ground and emergency descent controls.
- Read, understand, and obey all applicable employer, local, and governmental regulations as they pertain to operation of the machine.

1.2.2 Workplace Inspection

- Precautions to avoid all hazards in the work area must be taken by the user before and during operation of the machine.
- Do not operate or raise the platform from a position on trucks, trailers, railway cars, floating vessels, scaffolds or other equipment unless the application is approved in writing by JLG.
- Before operation, check work area for overhead hazards such as electric lines, bridge cranes, and other potential overhead obstructions.
- Check operating surfaces for holes, bumps, drop-offs, obstructions, debris, concealed holes, and other potential hazards.
- Check the work area for hazardous locations. Do not operate the machine in hazardous environments unless approved for that purpose by JLG.
- Ensure that the ground conditions are adequate to support the maximum tire load indicated on the tire load decals located on the chassis adjacent to each wheel. Do not travel on unsupported surfaces.
- This machine can be operated in temperatures of 0°F to 104°F (-20°C to 40°C). Consult JLG for operation outside this range.
- When operating an internal combustion engine at high altitudes, a decrease in machine performance may occur due to a decrease in air density depending on engine aspiration type, temperature, and humidity, therefore JLG recommends not operating the machine higher than 6000 m above sea level without consultation with the engine suppliers. For electric machines, performance may diminish higher than 6000 m above sea level.

1.2.3 Machine Inspection

- Do not operate this machine until the inspections and functional checks as specified in Section 2 of this manual have been performed.
- Do not operate this machine until it has been serviced and maintained according to requirements specified in the Service and Maintenance Manual.
- Ensure all safety devices are operating properly. Modification of these devices is a safety violation.

⚠ WARNING

Modification or major alteration of a MEWP shall be made only with the prior written permission from the manufacturer. Modification is defined as change(s) to a MEWP that affect the operation, stability, safety factors, rated load, or safety of the MEWP in any way.

- Do not operate any machine on which the safety or instruction placards or decals are missing or illegible.
- Check the machine for modifications to original components. Ensure that any modifications have been approved by JLG.
- Avoid any build up of debris on platform floor. Keep mud, oil, grease, and other slippery substances from footwear and platform floor.

1.3 OPERATION

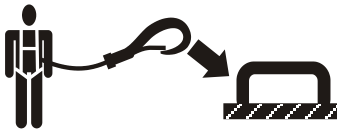
1.3.1 General

- Machine operation requires your full attention. Bring the machine to a full stop before using any device, i.e. cell phones, two-way radios, etc. that will distract your attention from safely operating the machine.
- Do not use the machine for any purpose other than positioning personnel, their tools and equipment, or for hand stock picking.
- Never operate a malfunctioning machine. If a malfunction occurs, shut down the machine. Remove the unit from service and notify the proper authorities.
- Never slam a control switch or lever through neutral to an opposite direction. Always return switch to neutral and stop before moving the switch to the next function. Operate controls with slow and even pressure.
- Do not allow personnel to tamper with or operate the machine from the ground with personnel in the platform, except in an emergency.
- Do not carry materials directly on platform railing unless approved by JLG.
- Always ensure that power tools are properly stowed and never left hanging by their cord from the platform work area.
- Do not assist a stuck or disabled machine by pushing or pulling except by pulling at the chassis tie-down lugs.
- Fully lower mast assembly and shut off all power before leaving machine.
- No riders are permitted on machine. Operator only in machine during operation.
- Remove all rings, watches, and jewelry when operating machine. Do not wear loose fitting clothing or long hair unrestrained which may become caught or entangled in equipment.

- Do not remove, modify, or disable any safety devices.
- Persons under the influence of drugs or alcohol or who are subject to seizures, dizziness, or loss of physical control must not operate this machine.
- Hydraulic cylinders are subject to thermal expansion and contraction. This may result in changes to the platform position while the machine is stationary. Factors affecting thermal movement can include the length of time the machine will remain stationary, hydraulic oil temperature, ambient air temperature and platform position.

1.3.2 Trip and Fall Hazard

- JLG Industries, Inc. recommends that the operator in the platform wear approved fall protection attached to an authorized lanyard anchorage point. For further information regarding fall protection requirements on JLG products, contact JLG Industries, Inc.
- Identify the designated lanyard anchorage point(s) at the platform and securely attach the lanyard. Attach only one (1) lanyard per lanyard anchorage point.



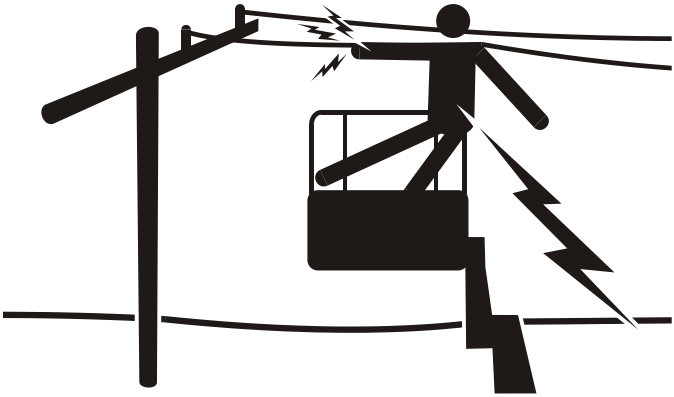
- Before operating the machine, make sure all railing and gates are fastened in their proper position.

- Keep both feet firmly positioned on the platform floor at all times. Never use ladders, boxes, steps, planks, or similar items on platform to provide additional reach.
- Never use the mast assembly to enter or leave the platform.

- Use extreme caution when entering or leaving platform. Ensure that the mast assembly is fully lowered. Face the platform when entering or leaving the platform. Always maintain “three point contact” with the machine, using two hands and one foot or two feet and one hand at all times during entry and exit.
- Keep oil, mud, and slippery substances cleaned from footwear and the platform floor.

1.3.3 Electrocution Hazards

- This machine is not insulated and does not provide protection from contact or proximity to electrical current.



- It is not recommended to use the machine during lightning. To prevent injury or machine damage if lightning occurs during operation, lower the platform and shut down the machine in a safe and secure location.
- Maintain distance from electrical lines, apparatus, or any energized (exposed or insulated) parts according to the *Minimum Approach Distances (M.A.D.) table, page 17*.
- Allow for machine movement and electrical line swaying.

Table 1. Minimum Approach Distances (M.A.D.)

Voltage Range (Phase to Phase)	MINIMUM APPROACH DISTANCE in Feet (Meters)
0 to 50 KV	10 (3)
Over 50KV to 200 KV	15 (5)
Over 200 KV to 350 KV	20 (6)
Over 350 KV to 500 KV	25 (8)
Over 500 KV to 750 KV	35 (11)

Table 1. Minimum Approach Distances (M.A.D.) (continued)

Over 750 KV to 1000 KV	45 (14)

Note: This requirement shall apply except where employer, local or governmental regulations are more stringent.

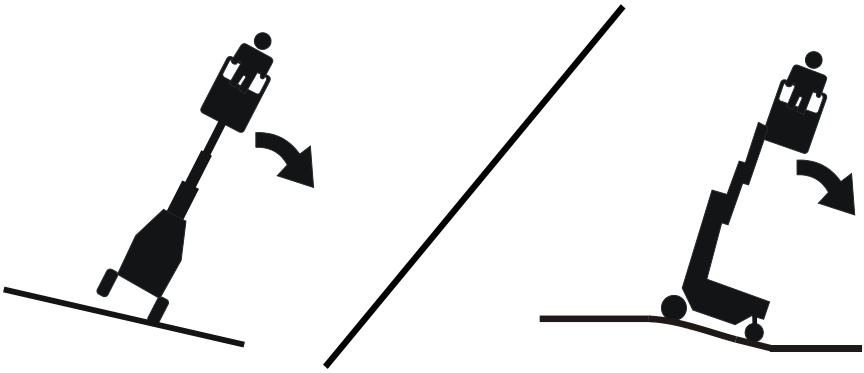
- Maintain a clearance of at least 10 ft (3 m) between any part of the machine and its occupants, their tools, and their equipment from any electrical line or apparatus carrying up to 50,000 volts. One foot additional clearance is required for every additional 30,000 volts or less.
- The minimum approach distance may be reduced if insulating barriers are installed to prevent contact, and the barriers are rated for the voltage of the line being guarded. These barriers shall not be part of (or attached to) the machine. The minimum approach distance shall be reduced to a distance within the designed working dimensions of the insulating barrier. This determination shall be made by a qualified person with respect to electrical transmission and distribution in accordance with the employer, local, or governmental requirements for work practices near energized equipment.

⚠ DANGER

Do not maneuver machine or personnel inside prohibited zone (MAD). Assume all electrical parts and wiring are energized unless known otherwise.

1.3.4 Tipping Hazard

- Ensure that the ground conditions are adequate to support the maximum tire load indicated on the tire load decals located on the chassis adjacent to each wheel. Do not travel on unsupported surfaces.
- The user must be familiar with the operating surface before driving. Do not exceed the allowable sideslope and grade while driving.
- Do not elevate platform or drive with platform elevated while on or near a sloping, uneven, or soft surface. Ensure machine is positioned on a smooth, firm surface within the limits of the maximum operating slope before elevating platform or driving with the platform in the elevated position.



- Before driving on floors, bridges, trucks, and other surfaces, check allowable capacity of the surfaces.
- Never exceed the maximum platform capacity as specified on the platform. Distribute loads evenly on platform floor and material tray.
- Keep the chassis of the machine a minimum of 2 ft. (0.6 m) from holes, bumps, drop-offs, obstructions, debris, concealed holes, and other potential hazards at the ground level.
- Never attempt to use the machine as a crane. Do not tie-off machine to any adjacent structure. Never attach wire, cable, or any similar items to platform.
- Do not push or pull any object with the machine.
- Wind speed can be significantly greater at height than at ground level.
- Wind speed can change rapidly. Always consider approaching weather events, the time required to lower the platform, and methods to monitor current and potential wind conditions. Refer to *Table — Beaufort Scale (For Reference Only), page 20*.
- Do not increase the platform size with unauthorized deck extensions or attachments, increasing the area exposed to wind will decrease stability.
- If mast assembly or platform is caught so that one or more wheels are off the ground, the operator must be removed before attempting to free the machine. Use cranes, forklift trucks, or other appropriate equipment to stabilize machine and remove personnel.

Table 2. Beaufort Scale (For Reference Only)

Beaufort Number	Wind Speed		Description	Land Conditions
	mph	m/s		
0	0	0-0.2	Calm	Calm. Smoke rises vertically.
1	1-3	0.3-1.5	Light air	Wind motion visible in smoke.
2	4-7	1.6-3.3	Light breeze	Wind felt on exposed skin. Leaves rustle.
3	8-12	3.4-5.4	Gentle breeze	Leaves and smaller twigs in constant motion.
4	13-18	5.5-7.9	Moderate breeze	Dust and loose paper raised. Small branches begin to move.
5	19-24	8.0-10.7	Fresh breeze	Smaller trees sway.
6	25-31	10.8-13.8	Strong breeze	Large branches in motion. Flags waving near horizontal. Umbrella use becomes difficult.
7	32-38	13.9-17.1	Near Gale/ Moderate Gale	Whole trees in motion. Effort needed to walk against the wind.
8	39-46	17.2-20.7	Fresh Gale	Twigs broken from trees. Cars veer on road.
9	47-54	20.8-24.4	Strong Gale	Light structure damage.

1.3.5 Crushing And Collision Hazard

- Personal protection equipment must be worn by all operating and ground personnel.
- Watch for obstructions around machine and overhead when driving. Check clearances above, on sides, and bottom of platform when lifting or lowering platform.

- During operation, keep all body parts inside platform railing.
- Always post a lookout when driving in areas where vision is obstructed.

- Keep non-operating personnel at least 6 ft (1.8 m) away from machine during all driving operations.
- Under all travel conditions, the operator must limit travel speed according to conditions of ground surface, congestion, visibility, slope, location of personnel, and other factors which may cause collision or injury to personnel.
- Be aware of stopping distances in all drive speeds. When driving in high speed, reduce drive speed before stopping. Travel grades in low speed only.
- Do not drive at high speeds in restricted or close quarters or when driving in reverse.
- Exercise extreme caution at all times to prevent obstacles from striking or interfering with operating controls and persons in the platform.
- Ensure that operators of other overhead and floor level machines are aware of the MEWP's presence. Disconnect power to overhead cranes. Barricade floor area if necessary.
- Do not operate over ground personnel. Warn personnel not to work, stand, or walk under a raised platform. Position barricades on floor as necessary.

⚠ WARNING

If driving machine with the platform control station from ground, do not hang the control box on any part of the machine while driving. Hold the control box and keep at least 3 ft. (1 m) distance from machine.

1.4 TOWING, LIFTING, AND HAULING

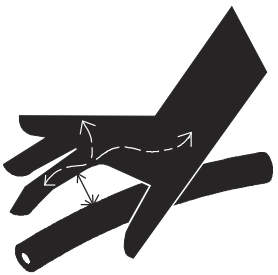
- Never allow personnel in platform while towing, lifting, or hauling.
- This machine should not be towed, except in the event of emergency, malfunction, power failure, or loading/unloading. Refer to the Emergency Procedures Section of this manual for emergency towing procedures.
- Ensure platform is fully retracted and completely empty of tools prior to towing, lifting or hauling.
- Do not assist a stuck or disabled machine by pushing or pulling except by pulling at the chassis tie-down bars.
- When lifting machine with a forklift, position forks only at designated areas of the machine. Lift with a forklift of adequate capacity.
- Refer to the Machine Operation section of this manual for lifting information.

1.5 MAINTENANCE

This sub-section contains general safety precautions which must be observed during maintenance of this machine. Additional precautions to be observed during machine maintenance are inserted at the appropriate points in this manual and in the Service and Maintenance Manual. It is of utmost importance that maintenance personnel pay strict attention to these precautions to avoid possible injury to personnel or damage to the machine or property. A maintenance program must be established by a qualified person and must be followed to ensure that the machine is safe.

1.5.1 Maintenance Hazards

- Shut off power to all controls and remove the key to ensure that all moving parts are secured from inadvertent motion prior to performing any adjustments or repairs.
- Never work under an elevated platform until it has been fully lowered to the full down position, if possible, or otherwise supported and restrained from movement with appropriate safety props, blocking, or overhead supports.
- Always relieve hydraulic pressure from all hydraulic circuits before loosening or removing hydraulic components.
- DO NOT attempt to repair or tighten any hydraulic hoses or fittings while the machine is powered on or when the hydraulic system is under pressure.
- DO NOT use your hand to check for leaks. Use a piece of cardboard or paper to search for leaks. Wear gloves to help protect hands from spraying fluid.



- Use only replacement parts or components that are approved by JLG. To be considered approved, replacement parts or components must be identical or equivalent to original parts or components.
- Never attempt to move heavy parts without the aid of a mechanical device. Do not allow heavy objects to rest in an unstable position. Ensure adequate support is provided when raising components of the machine.
- Use only approved non-flammable cleaning solvents.
- Do not replace items critical to stability, such as batteries or solid tires, with items of different weight or specification. Do not modify the MEWP in any way to affect stability.

- Refer to the Service and Maintenance Manual for the weights of critical stability items.

⚠ WARNING

Modification or major alteration of a MEWP shall be made only with the prior written permission from the manufacturer. Modification is defined as change(s) to a MEWP that affect the operation, stability, safety factors, rated load, or safety of the MEWP in any way.

1.5.2 Battery Hazards (Lead Acid/AGM)

- Always disconnect batteries when servicing electrical components or when performing welding on the machine.
- Do not allow smoking, open flame, or sparks near battery during charging or servicing.
- Do not contact tools or other metal objects across the battery terminals.
- Always wear hand, eye, and face protection when servicing batteries. Ensure that battery acid does not come in contact with skin or clothing.

⚠ CAUTION

Battery fluid is highly corrosive. Avoid contact with skin and clothing at all times. Immediately rinse any contacted area with clean water and seek medical attention.

- Charge batteries only in a well ventilated area.
- Avoid overfilling the battery fluid level. Add distilled water to batteries only after the batteries are fully charged.

1.5.3 Battery Hazards (Lithium-Ion)

- Do not tamper with, open, or attempt to service the battery. It contains no serviceable parts.
- Always disconnect batteries when servicing electrical components or when performing welding on the machine.
- Do not allow smoking, open flame, or sparks near battery during charging.
- Do not contact tools or other metal objects across the battery terminals.
- Charge batteries only in a well-ventilated area.
- Do not jumpstart the battery.
- Do not use any additional external heating sources.
- Only use the JLG-installed charger to charge the batteries. Do not substitute this charger for a different charger.

1.6 LONG-TERM STORAGE

- Prior to long-term storage of machines (placed into storage for periods greater than 3 months) with an internal combustion engine, refer to the engine manufacturer's guidance regarding fuel degradation.
- For long-term storage of battery-electric machines, store machines in a cool, dry place away from direct sunlight and heat sources. Avoid storing batteries in a fully discharged or fully charged state.

SECTION 2
User Responsibilities, Machine Preparation, and Inspection

2.1 PERSONNEL TRAINING

The Mobile Elevating Work Platform (MEWP) is a personnel handling device; so it is necessary that it be operated and maintained only by trained personnel.

Persons under the influence of drugs or alcohol or who are subject to seizures, dizziness or loss of physical control must not operate this machine.

2.1.1 Operator Training

Operator training must cover:

1. Reading and understanding the Operation and Safety Manual.
2. Thorough understanding of the intended purpose and function of the MEWP controls, including platform, ground, and emergency descent controls.
3. Control labels, instructions, and warnings on the machine.
4. Applicable regulations, standards, and safety rules.
5. Use of approved fall protection equipment.
6. Enough knowledge of the mechanical operation of the machine to recognize a malfunction or potential malfunction.
7. The safest means to operate the machine where overhead obstructions, other moving equipment, and obstacles, depressions, holes, and drop-offs exist.
8. Means to avoid the hazards of unprotected electrical conductors.
9. Selection of the appropriate MEWP and available options for the work to be performed considering specific job requirements, with involvement from the MEWP owner, user, and/or supervisor.
10. The responsibility of the operator to ensure all platform occupants have a basic level of knowledge to work safely on the MEWP, and to inform them of applicable regulations, standards, and safety rules.
11. The requirement for familiarization in addition to training.

2.1.2 Training Supervision

Training must be delivered by a qualified person in an open area, free of hazards until the trainee has demonstrated the ability to safely control and operate the machine.

2.1.3 Operator Responsibility

Operators must be instructed that they have the responsibility and authority to shut down the machine in case of a malfunction or other unsafe condition of either the machine or the job site.

2.1.4 Machine Familiarization

Note: Responsibilities for familiarization may vary by region.

Only properly trained personnel who have received unit-specific familiarization shall operate a MEWP. The user shall determine if personnel are qualified to operate the MEWP prior to operation. The user shall ensure that after familiarization, the operator operates the MEWP for a sufficient period of time to achieve proficiency. When authorized by the user, self-familiarization can be achieved, if authorized, by a properly trained operator reading, understanding and following the manufacturer's operator's manual.

Prior to users authorization of an operator to use a specific model of MEWP, the user shall ensure the operator is familiarized on the following:

1. Location of the manual storage compartment and the requirement to ensure the required manual(s) are present on the MEWP;
2. Purpose and function of the machine controls and indicators at the platform and ground control stations;
3. Purpose, location, and function of the emergency controls;
4. Operating characteristics and limitations;
5. Features and devices;
6. Accessories and optional equipment.

2.2 PREPARATION, INSPECTION, AND MAINTENANCE

The following table covers the machine inspections and maintenance recommended by JLG Industries, Inc. Consult local regulations for further requirements for MEWPs. Frequency of inspections and maintenance must be increased as necessary when machine is used in a harsh or hostile environment, if machine is used with increased frequency, or if machine is used in a severe manner.

Table 3. Inspection and Maintenance Table

TYPE	FREQUENCY	PRIMARY RESPONSIBILITY	SERVICE QUALIFICATION	REFERENCE
Pre-Start Inspection	Before using each day; or whenever there's an Operator change.	User or Operator	User or Operator	Operation and Safety Manual
Pre-Delivery Inspection (See ***Note*** Below)	Before each sale, lease, or rental delivery.	Owner, Dealer, or User	Qualified JLG Mechanic	Service and Maintenance Manual and applicable JLG inspection form
Frequent Inspection (See ***Note*** Below)	In service for 3 months or 150 hours, whichever comes first; or Out of service for a period of more than 3 months; or Purchased used.	Owner, Dealer, or User	Qualified JLG Mechanic	Service and Maintenance Manual and applicable JLG inspection form
Annual Machine Inspection (See ***Note*** Below)	Annually, no later than 13 months from the date of prior inspection.	Owner, Dealer, or User	Factory-Trained Service Technician (Recommended)	Service and Maintenance Manual and applicable JLG inspection form
Preventative Maintenance	At intervals as specified in the Service and Maintenance Manual.	Owner, Dealer, or User	Qualified JLG Mechanic	Service and Maintenance Manual

Note: Inspection forms are available from JLG. Use the Service and Maintenance Manual to perform inspections.

NOTICE

JLG Industries, Inc. recognizes a factory trained service technician as a person who has successfully completed the JLG service training school for the specific JLG product model.

2.3 PRE-START INSPECTION

The Pre-Start Inspection should include each of the following:

1. **Cleanliness** – Check all surfaces for leakage (hydraulic oil or battery fluid) or foreign objects. Report any leakage to the proper maintenance personnel.

2. **Structure** – Inspect the machine structure for dents, damage, weld or parent metal cracks or other discrepancies.
   Report this to the proper maintenance personnel.

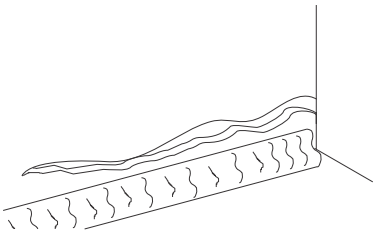


Figure 1. Parent Metal Crack

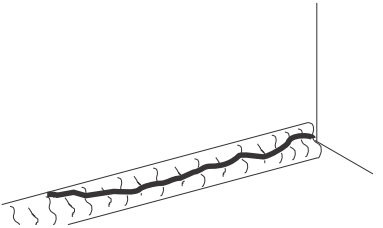


Figure 2. Weld Crack

3. **Decals and Placards** – Check all for cleanliness and legibility. Make sure no decals or placards are missing. Make sure all illegible decals and placards are cleaned or replaced. Refer to *Decal Installation*.

4. **Operation and Safety Manuals** – Ensure a copy of the Operation and Safety Manual, AEM Safety Manual (ANSI market only), and ANSI Manual of Responsibilities (ANSI/CSA Spec market only) is enclosed in the weather-resistant storage container.

5. **Walk-Around Inspection** – Perform as instructed in *Daily Walk-Around Inspection*.

6. **Battery** – Charge as required.

7. **Hydraulic Oil** – Check the hydraulic oil level in the pump reservoir; add as required.

8. **Function Check** – Once the Walk-Around Inspection is complete, perform a functional check of all systems in an area free of overhead and ground level obstructions. Refer to *Function Check* for more specific instructions on the operation of each function.

9. **Platform Gate** – Keep gate and surrounding area clean and unobstructed. Verify the gate closes properly and is not bent or damaged. Keep gate closed at all times except when entering/exiting the platform and loading/unloading materials.

10. **Accessories/Options** – Refer to the Accessories section in this manual or to the accessory installed on the machine for specific inspection, operation, and maintenance instructions.

11. If optional equipment is installed on this machine refer to *Section 3* for specific Pre-Start Inspection and Operation instructions.

12. **Lanyard Attach Points** – JLG Industries, Inc. recommends personnel in the platform wear a full body harness with a lanyard attached to an authorized lanyard anchorage point.

⚠ WARNING

If the machine does not operate properly, turn off the machine immediately! Report the problem to the proper maintenance personnel. Do not operate the machine until it is declared safe for operation.

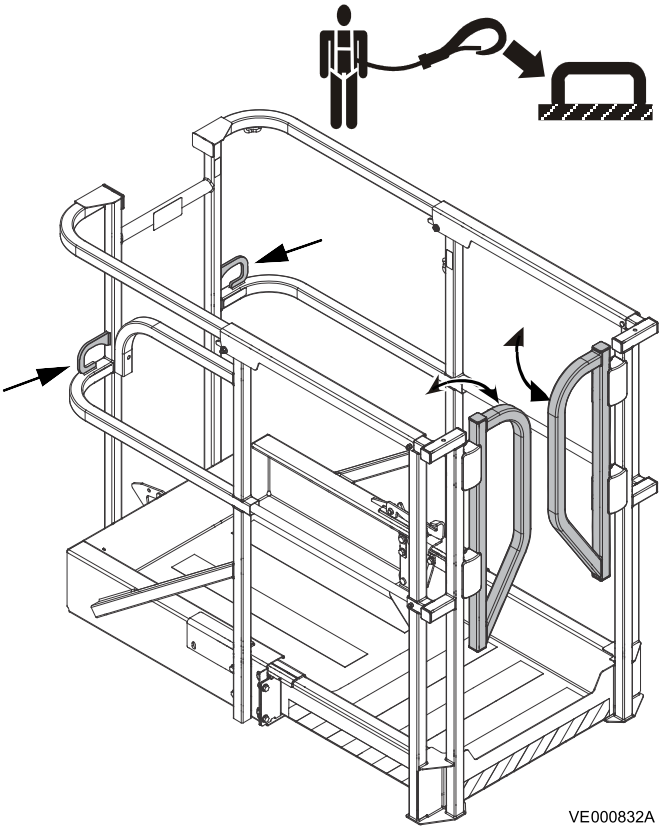
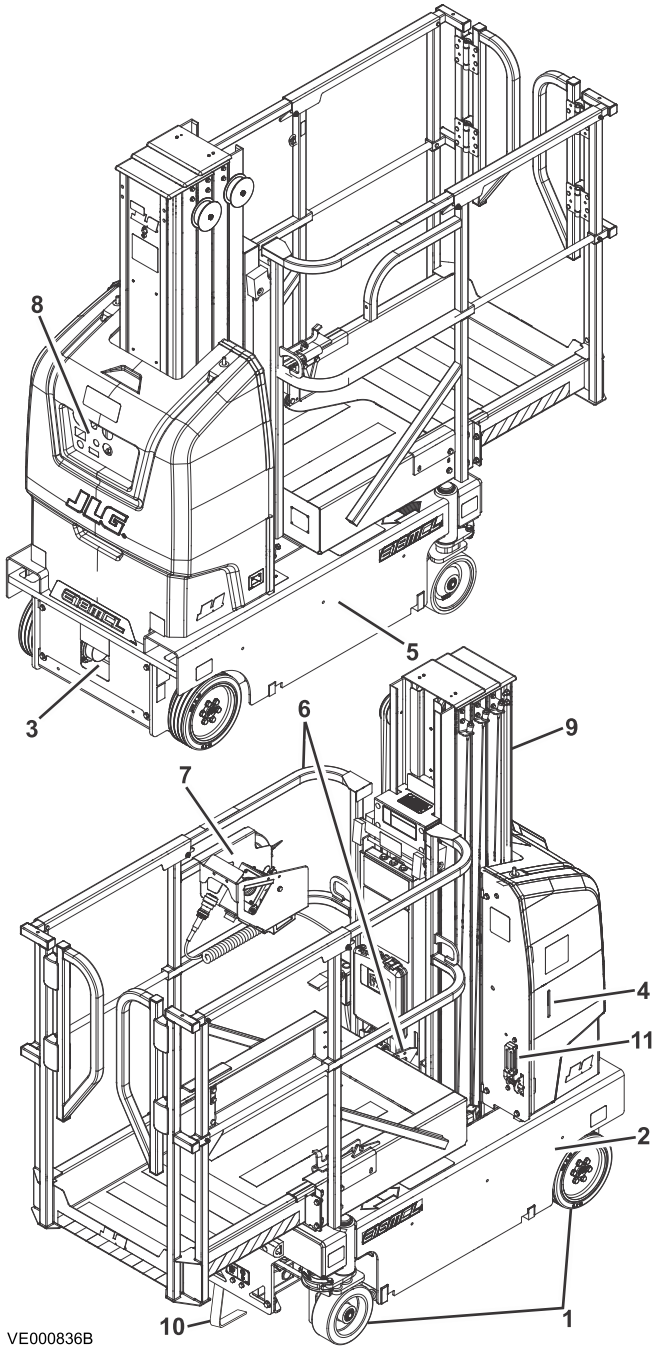


Figure 3. Self-Closing Gate and Lanyard Attach Points

2.4 WALK-AROUND INSPECTION



Begin the Walk-Around Inspection at item one (1) as noted on the diagram. Continue around machine check each item in sequence for the conditions listed in the following check list.

⚠ WARNING

To avoid possible injury, be sure machine power is off. Do not operate machine until all malfunctions have been corrected.

NOTICE

Do not overlook visual inspection of the chassis underside. Checking this area may result in discovery of conditions which could cause extensive machine damage.

Note: On all components, make sure there are no loose or missing parts, that they are securely fastened, and that no visible damage, leaks or excessive wear exists in addition to any other criteria mentioned.

1. **Wheels, Tires and Drive Motors** - Check for any debris stuck to or around wheels.
2. **Frame/Chassis** - Check pot-hole-protection system components; check for loose wires or cables dangling below the base.
3. **Manual Descent Control Valve** - See inspection note.
4. **Motor/Pump/Reservoir Unit** - No evidence of hydraulic leaks.
5. **Batteries (in machine frame)** - Not leaking; battery cables secure to posts; no corrosion.
6. **Platform Assembly and Gate** - Quick-Change platform mounting and mounting pins; platform railings; entry bar or gate in proper working order. Make sure latch is in place and secure.
7. **Platform Control Console** - Platform control; placards secure and legible, control lever and switches return to neutral position when activated and released; emergency stop switch reset for operation; control markings legible.
8. **Ground Control Station** - Main Power Switch (Key) operable; placards secure and legible; control switches return to neutral position when activated and released; emergency stop switch operates properly.
9. **Mast Assembly** - Mast sections; slide pads; mast chains; sequencing cables; platform control and power cables (on side of mast); power cables properly tensioned and seated in sheaves; cable sheaves rotating freely.
10. **Static Strap** - Make sure there are no loose or missing parts, that they are securely fastened, and that no visible damage.
11. **Beacon(s) (If Equipped)** - See inspection note.

2.5 FUNCTION CHECK

Once the “Walk-Around” Inspection is complete, perform a function check of all systems in an area free of overhead and ground level obstructions. Refer to Section 3 for more specific operating instructions.

Perform a Function Check as follows:

1. From the **Ground Control Panel** with no load in the platform:
   a. Ensure that the key selector switch and the platform lift switch operates properly.
   b. Ensure Pot-Hole-Protection device is fully engaged (bars down on sides) when the platform is elevated.
   c. Ensure that all machine functions are disabled when the Emergency Stop Button is activated.
   d. Ensure Manual Descent is operating properly.

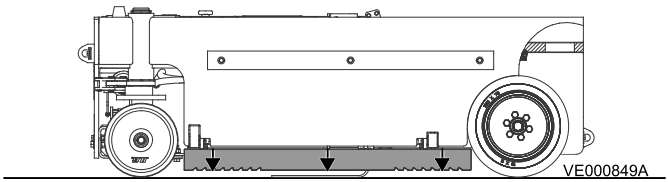


Figure 4. Pot-Hole-Protection Bars Lowered

2. From the **Platform Control Console:**
   a. Ensure the control console is firmly secure in the proper location.
   b. Ensure all machine functions are disabled when Emergency Stop Button is activated (pressed in).
   c. Operate all functions. Check all limit, cut-out, and enable switches are functioning properly:
      - **Machine Brakes** - With the platform completely lowered, drive the machine on a grade do not exceed the rated gradeability and stop to ensure the brakes hold.
      - **Tilt Warning Limit** - With the platform completely lowered, drive the machine onto a surface with a tilt of more than 3.0° in any direction (do not exceed rated gradeability). The machine will indicate a tilt. condition if any attempt is made to elevate the platform.
      - **Drive Speed Reduction Limit** - When platform is elevated more than 22 in (56 cm) above the ground, drive speed is cut to approximately 1/5 of platform lowered drive speed.
      - **Platform Joystick Enable** - The machine will not operate (drive or lift) unless switches are pressed and held during drive or lift operation. A timeout will occur after five seconds if enable is engaged and no function is selected.
   d. Raise and lower platform 2 ft to 3 ft (0.61 m to 0.92 m) several times. Check for smooth lifting and lowering of platform.
   e. When the platform is elevated, visually inspect the mast sections, slide pads, mast chains, sequencing cables, platform control and power cables (on side of mast). Ensure power cables are properly tensioned and seated in sheaves and rotating freely.

SECTION 3
Machine Controls, Indicators, and Operation

3.1 GENERAL

NOTICE

The manufacturer has no direct control over machine application and operation. The user and operator are responsible for conforming with good safety practices.

This section provides the necessary information needed to understand control function and operation.

⚠ WARNING

Do not raise platform unless the machine is on a smooth, firm surface, within the limits of the maximum operating slope, free of obstructions and holes.

To avoid serious injury, do not operate machine if any control levers or toggle switches controlling platform movement do not return to the off or neutral position when released.

If the platform does not stop when a control switch or lever is released, use the emergency stop switch to stop the machine.

3.2 MACHINE DESCRIPTION

This machine is a Mobile Elevating Work Platform (MEWP) mounted to an elevating aluminum mast mechanism. The personnel lift's intended purpose is to provide personnel access to areas above ground level. The MSP model lift is intended for stock picking purposes in retail stores or warehouses to allow placing and removing of stock from storage or display areas.

The primary control station is located in the platform. From the Platform Control Console the operator can drive the machine and raise or lower the platform.

The Ground Control Station is to be used during machine power-up, machine maintenance or in case of emergency should the operator in the platform be unable to lower the platform.

Vibrations emitted by these machines are not hazardous to an operator working in the platform.

The continuous A-Weighted sound pressure level at the work platform is less than 70db (A).

3.3 MACHINE OPERATION

3.3.1 Getting Started

The following control conditions must be met before the machine can be operated from either the Ground or Platform Controls.

- The batteries contain enough voltage to operate the machine.
- The Main Power Selector Switch on the Ground Control Station must be set for either Ground Control Mode or Platform Control Mode.
- Both Emergency Stop Switches, one on the Ground Control Station the other on the Platform Control Console must be in the ON position.
- The On/Off Key Switch on the Ground Control Station must be set to the ON position.

3.4 OPERATING CHARACTERISTICS AND LIMITATIONS

3.4.1 Placards

Important points to remember during operation are provided at the control stations by DANGER, WARNING, CAUTION, NOTICE, IMPORTANT and INSTRUCTION placards. This information is placed at various locations for the express purpose of alerting personnel of potential hazards constituted by the operating characteristics and limitations of the machine. See foreword for definitions of placard safety signal words.

3.4.2 Capacities

Raising platform above stowed position with or without any load in platform is based on the following criteria:

1. Machine is positioned on a smooth, firm surface within the limits of the maximum operating slope.
2. Load is within manufacturer’s rated capacity.
3. All machine systems are functioning properly.

3.4.3 Stability

This machine, as originally manufactured by JLG and operated within its rated capacity on a smooth, firm surface, within the limits of the maximum operating slope, provides a stable aerial platform for all platform positions.

3.5 BATTERY CHARGING

This machine is equipped with an AC voltage input/DC voltage output battery charger. The charger automatically terminates charging when the batteries reach full capacity.

Note: The platform drive function is disabled when the battery charger is plugged into an AC receptacle.

⚠ WARNING

Lead acid batteries may generate explosive hydrogen gas during normal operation. Keep sparks, flames, and smoking materials away from batteries. Provide adequate ventilation during charging. Never charge a frozen battery. Study all battery manufacturers' specific precautions such as recommended rates of charge and removing or not removing cell caps while charging.

⚠ WARNING

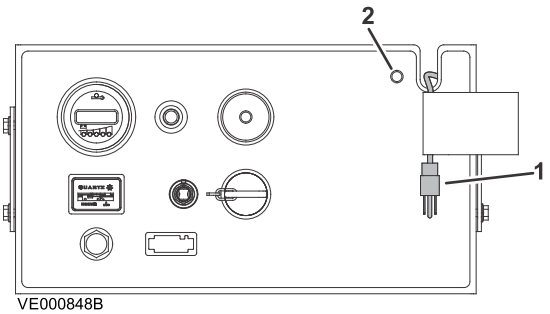
If the machine is equipped with lithium-ion batteries:

Do not use an additional battery heater or heater blanket in cold weather conditions.

Only use the JLG-installed 24 V charger, which has been rated specifically for this machine and battery type, to charge the batteries. Do not substitute this charger for a different charger. Doing so will void the machine warranty.

If any damage to the batteries is discovered during machine inspection, discontinue use immediately. Do not use the machine until the issue has been inspected and corrected by a qualified mechanic.

3.5.1 To Charge Batteries



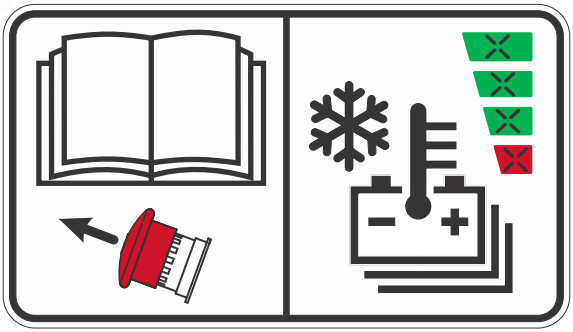
1. Charger Plug
2. Battery Charge LED Indicator

1. Park machine in a well ventilated area near an AC voltage electrical outlet.
2. Always use a grounded AC outlet. Connect charger to an outlet that has been properly installed and grounded in accordance with all local codes and ordinances. A grounded outlet is required to reduce risk of electric shock – do not use ground adapters or modify plug. When using an extension cord, avoid excessive voltage drops by using a grounded 3-wire 12 AWG cord.

3. Verify normal operation of the battery charge LED indicator (**2**) on the ground control panel:
   - Solid green LED = charging complete/100% charge
   - Flashing green LED = charging in process
   - Solid red LED = battery heater running
   - Flashing red LED = battery not charging/possible charger fault

Note: When emergency stop is on and machine is charging, the MDI lights will indicate charge level. See Section 3.6– Ground Control Station for MDI Indicator and battery charge information.

3.5.2 Lithium-Ion Batteries (If Equipped)



SC000210A

Machine operation may be limited if the lithium-ion battery is too cold.

Temperature	Functions	Behavior
Normal Battery Temperature (32°F/0°C)	Full machine operation	—
Chilled Battery Temperature (-10°F/-23°C)	Machine lift and drive functions operate at creep speed	Battery heater will activate. The system fault indicator will flash and an active DTC will appear for the battery heater. Once battery reaches normal temperature, full machine operation is restored.
Very Cold Battery Temperature (-22°F/-30°C)	Machine will not lift or drive	Battery heater will activate. The system fault indicator will flash, an active DTC will appear for the battery heater, and the battery charge indicators on the platform control box will flash simultaneously. Once the battery achieves an internal temperature permitting machine operation at creep speed, the platform and ground alarms will sound three times, and the battery charge indicators will show the current state of charge.

Note: For machines equipped with lithium-ion batteries, if the machine is being used, stored, or sitting overnight in a cold environment, plug in the machine to keep the batteries full and warm. If it is not plugged in, the batteries may be cold and will need to warm up before the machine can fully function. The battery heater is operational when the machine is powered on (both emergency stop switches pulled out and the keyswitch positioned to either ground or platform) or when the machine is charging.

If the machine is equipped with lithium-ion batteries, battery charging is a function of the battery cell temperature. Refer to the table below for details.

Table 4. Battery Heater Ranges (Lithium-Ion Only)

Cell Temperature Range			
Temperature Range Limits		Lithium-Ion with Heater	
Temp °C	Temp °F	Charge	Discharge
> 0	> 32	Yes	Yes
> -18	> 0	Yes *	Yes *
> -35	> -31	Yes *	No

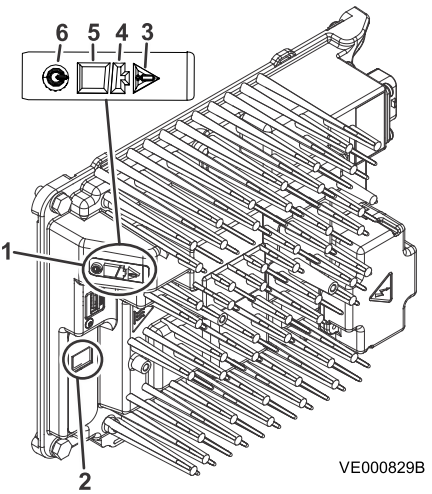
* The battery heater turns on while charging at a cell temperature below 41°F (5°C) and shuts off at 59°F (15°C).

Note: The battery heater will raise the temperature of the battery at a rate of approximately 2°F (1°C) per minute.

Note: In order for the battery heater to operate, the battery state-of-charge must be 5% or greater if the machine is not actively charging. If the machine is actively charging, the battery heater is able to operate at any time.

3.5.3 Charger Indicator LEDs

Note: The battery charger is located underneath the hood on the front of the mast.

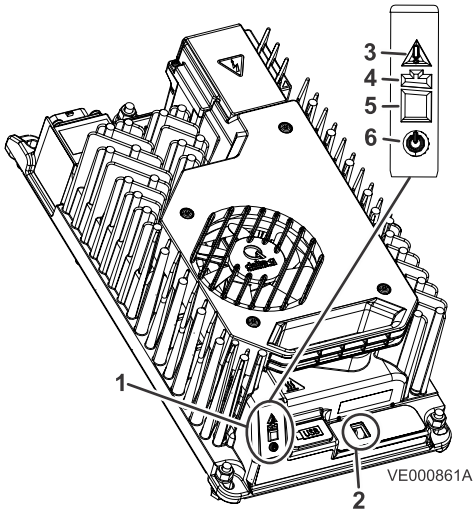


1. Charge Indicator LED Panel
2. Seven Segment Display
3. Fault Indicator LED (Red or Amber)
4. Battery Charging LED 1 (Green)
5. Battery Charging LED 2 (Green)
6. AC Power LED (Blue)

Figure 5. Delta-Q (650 W) Charger Indicator LEDs

- **AC Power On:** blue LED (**6**) solid
- **Low State of Charge:** green LED 2 (**5**) flashing, green LED 1 (**4**) off
- **High State of Charge:** green LED 2 (**5**) solid, green LED 1 (**4**) flashing
- **Charge Complete:** green LED 2 (**5**) and green LED 1 (**4**) solid
- **Fault Indicator:** red LED (**3**) solid, (**2**) displays a “F”
- **External Error Condition Caution:** amber LED (**3**) flashing, (**2**) displays an “E”
- **Battery Heater Active:** red LED (**3**) solid, (**2**) displays an “H”

Note: If the seven segment display shows an “F” or “E,” consult the service manual for more information.

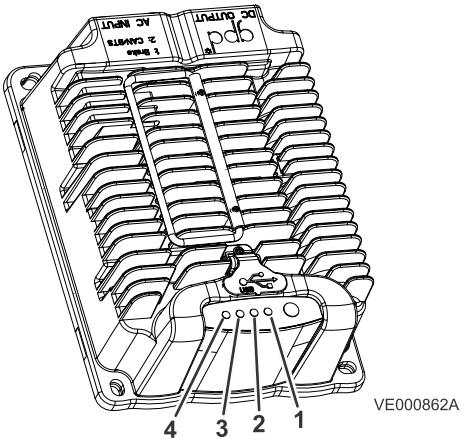


1. Charge Indicator LED Panel
2. Seven Segment Display
3. Fault Indicator LED (Red or Amber)
4. Battery Charging LED 1 (Green)
5. Battery Charging LED 2 (Green)
6. AC Power LED (Blue)

Figure 6. Delta-Q (1200 W) Charger Indicator LEDs

- **AC Power On:** blue LED (**6**) solid
- **Low State of Charge:** green LED 2 (**5**) flashing, green LED 1 (**4**) off
- **High State of Charge:** green LED 2 (**5**) solid, green LED 1 (**4**) flashing
- **Charge Complete:** green LED 2 (**5**) and green LED 1 (**4**) solid
- **Fault Indicator:** red LED (**3**) solid, (**2**) displays a “F”
- **External Error Condition Caution:** amber LED (**3**) flashing, (**2**) displays an “E”
- **Battery Heater Active:** red LED (**3**) solid, (**2**) displays an “H”

Note: If the seven segment display shows an “F” or “E,” consult the service manual for more information.

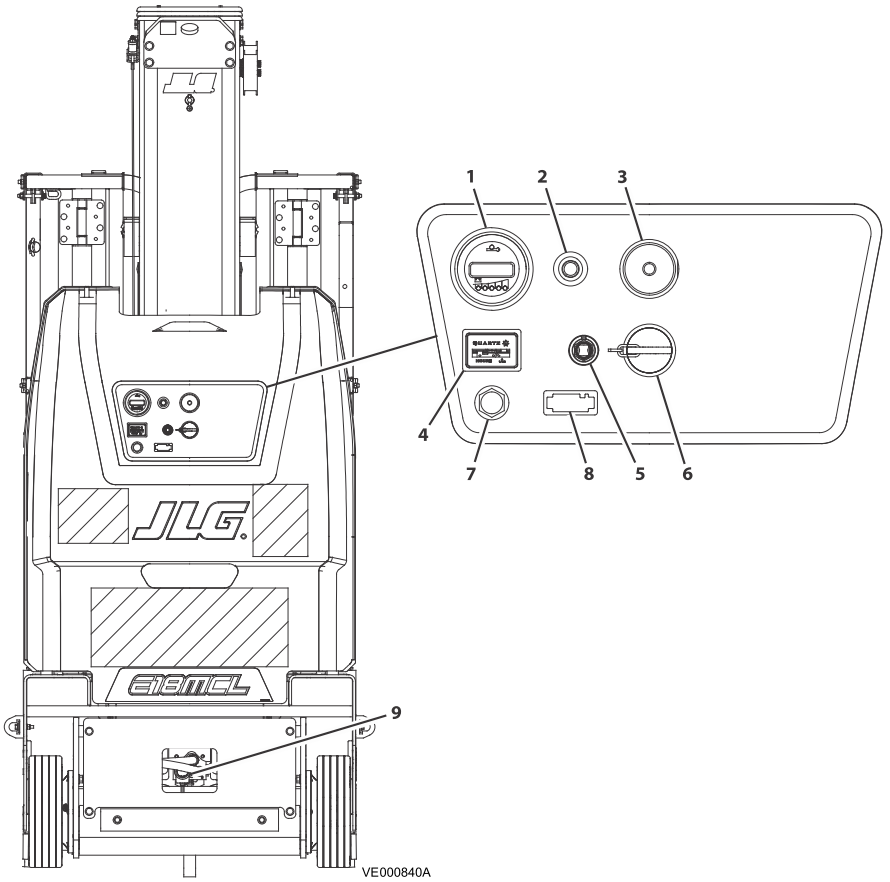


1. USB Status LED
2. LED 2
3. LED 3
4. LED 4

Figure 7. Green Power Charger

- **0% — 49% Charge:** LED 4 (**4**) flashing
- **50% — 74% Charge:** LED 3 (**3**) flashing, LED 4 (**4**) solid
- **75% — 99% Charge:** LED 2 (**2**) flashing, LED 3 (**3**) and LED 4 (**4**) solid
- **100% Charge:** LED 2 (**2**), LED 3 (**3**), LED 4 (**4**) solid
- **Fault Indicator:** LED 2 (**2**), LED 3 (**3**), LED 4 (**4**) flashing simultaneously

3.6 GROUND CONTROL STATION



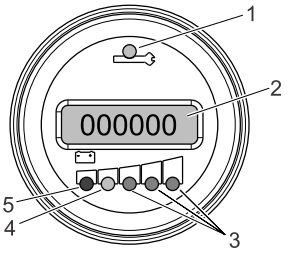
1. MDI Indicator	**4.** Hour Meter Gauge	**7.** Brake Release Button
2. Overload Indicator (LSS)	**5.** Platform Up/Platform Down Toggle Switch	**8.** Analyzer Port
3. Emergency Stop/Shut Down Button	**6.** Main Power Selector Switch	**9.** Manual Descent Control Valve

3.6.1 Ground Control Station Functions

MDI Indicator
The Multifunction Digital Indicator (MDI) displays a Battery Discharge Indicator (BDI), a system distress LED, and Diagnostic Trouble Codes (DTC) when a functional problem occurs with the machine.
When a problem occurs and a DTC Code displays:

- An LED wrench icon (1) LED illuminates.
- A three to five digit DTC code will display on the DTC LCD display (2) below the wrench icon.

Note: When more than one DTC exists, each DTC will be displayed on the LCD for three seconds before changing to the next DTC. Once the last active DTC is displayed, the display will recycle indefinitely until the DTCs are corrected. For DTCs and descriptions, refer to Diagnostic Trouble Codes.



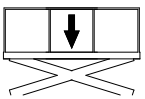
1. System Fault LED Indicator (RED LED)
2. DTC Code Display
3. 100% Battery Charge Indicator (GREEN AREA)
4. Battery Charge LOW Indicator (YELLOW AREA)
5. Battery Re-Charge Indicator (RED AREA)

Also located on the MDI are Battery Discharge Indicators (BDI) (3, 4, 5). The BDIs (3, 4, 5) will blink while charging and the machine in powered On.
The level of charge (voltage) remaining in the batteries is determined by the LEDs.

- All LEDs On = 76%-100%
- Red, Yellow, and 2 Green LEDs On = 51%-75%
- Red, Yellow, and 1 Green LED On = 26%-50%
- Red and Yellow LEDs On = 11%-25%
- Red LED On = 0%-10%

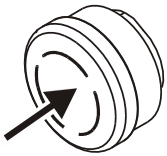
BDIs display under normal operating conditions. When a DTC exists other than 00x DTCs, the BDI LEDs are not be displayed. Additionally, when the platform is elevated and the machine is driving in creep mode, the turtle icon is displayed.

Overload Indicator (LSS)
The Overload Indicator indicates when the platform has been overloaded. An audible alarm will also signal when the platform is overloaded.

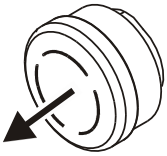


Note: If the Overload Indicator is illuminated, further elevation will be prevented. Reduce the weight in the platform to not exceed the rated workload indicated on the capacity decal, then the controls will work again.

Emergency Stop/Shut Down Button
POWER OFF
PUSH IN - To Engage Emergency Stop



POWER ON
PULL OUT - To Reset Emergency Stop

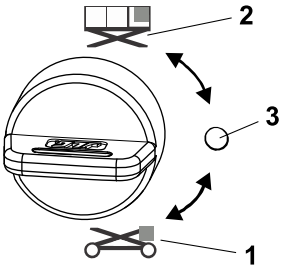


Hour Meter Gauge
The machine is equipped with an hour meter to indicate the number of hours the machine has been operated.

Platform Up/Platform Down Toggle Switch
PLATFORM UP
PUSH UPWARD - TO ELEVATE Platform
RELEASE - TO STOP Elevating

PLATFORM DOWN
PUSH DOWNWARD - TO LOWER Platform
RELEASE - TO STOP Platform Descent

Main Power Selector Switch
Set the Main Power Selector Switch to Ground Control Mode for Ground Control Operation or Platform Control Mode for Platform Operation.



Brake Release Button

⚠ CAUTION

Do not manually disengage the brakes unless machine is setting on a level surface or machine is fully restrained.

The Brake Release only works while in Ground Control Mode and machine is in transport position. PUSH and HOLD for 1 second - TO DISENGAGE Brakes

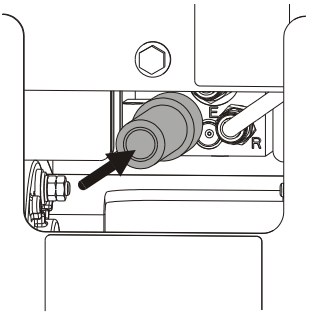
Note: The alarms will sound and a Brake Release DTC will activate.

PUSH and RELEASE - TO ENGAGE Brakes

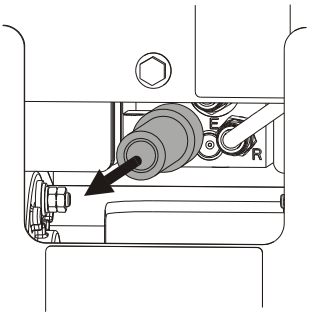
Note: The brakes only DISENGAGE (electrically) when the joystick control is moved off center during driving or are manually DISENGAGED (electrically) using the Brake Release Button.

Note: If the machine's batteries are completely depleted of electrical charge the brakes cannot be released manually.

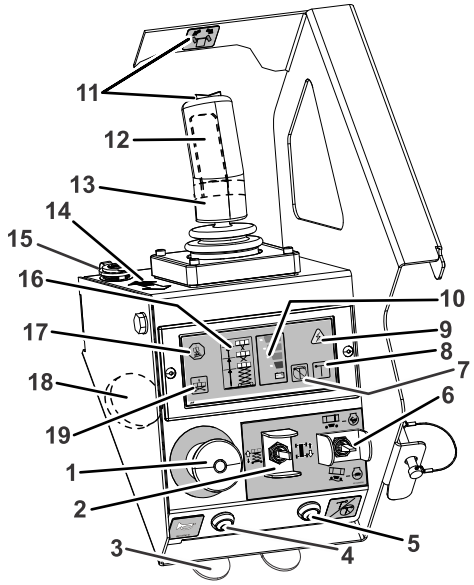
Manual Descent Control Valve
PUSH IN - TO LOWER Platform



RELEASE - TO STOP Platform Descent



3.7 PLATFORM CONTROL CONSOLE



SC000937A

1. Emergency Stop Switch

2. Lift/Drive Select Switch

3. Mobile Phone Cradle (If Equipped)

4. Horn Button

5. Indoor/Outdoor Operation Mode Switch

6. Drive Speed Select Switch

7. Indoor Mode Capacity Indicator

8. Outdoor Mode Capacity Indicator

9. System Fault Indicator

10. Battery Discharge Indicator

11. Steer Control Switch and Decal (E18MCL Only)

12. Trigger Enable Switch

13. Joystick Controller

14. Black/White Directional Arrow

15. USB Port (If Equipped)

16. Variable Tilt - Platform Restricted Height Indicator

17. Tilt Indicator

18. Alarm

19. Overload Indicator (LSS)

3.7.1 General

The following conditions must be met before the machine can be operated from the platform control console:

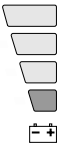
- Ground Control Station - Main Power Selector Switch must be set to PLATFORM CONTROL MODE. Refer to *Ground Control Station*.
- Ground Control Station - Emergency Stop/Shut Down Button must be set to the ON position (POWER ON). Refer to *Ground Control Station*.
- Platform Control Console - Emergency Stop/Shut Down Button must be set to the ON position (POWER ON).

Note: **SLEEP MODE** - During operation if no control functions have been activated for 10 minutes, the ground control module will power the machine down to conserve battery power. After 45 minutes, the platform control will power the machine down. Cycle power back on using either the main power selector switch (key) or the emergency stop/power down button on either the platform controller or the ground control station.

3.7.2 Platform Control Console Functions

Alarm
This alarm mounted on the front of the platform control console will sound for various machine conditions or warnings such as, system ready chirp or if the machine tilt warning is activated.

Battery Charge Indicator
The battery charge indicator displays the current charge status of the onboard batteries.



- RED LED flashing = 10% charge/ depleted
- RED LED ON solid = 25% charge
- GREEN LEDs ON = 50%, 75%, and 100% charge

Drive/Lift/Steer Joystick Control

Trigger (Enable) Switch - This trigger switch is located on the front of the joystick controller. It acts as an enable and must be depressed before operating the drive, steer, and lift functions. When released, the function in operation will stop.

The speed on all selected functions is proportionally controlled by the distance from the neutral (center) position of the joystick controller.

Note: Once the trigger switch is pressed, the operator has (5) seconds to begin operating a function. After 5 seconds, the trigger switch must be released and pressed again to operate a joystick function.

Steer Switch (E18MCL Only) - The steer switch is a thumb-operated switch located at the top of the joystick controller handle. Press the switch to the right to drive to the right. Press the switch to the left to drive to the left.

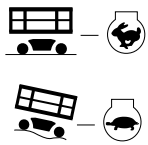
Joystick Controller - This controls drive and lift.

This controls steer (E18MML/E18MSP) — Position the platform lift/drive select switch to drive/steer position. Squeeze the trigger switch on front of the joystick and move the joystick to the right to drive to the right, or to the left to drive to the left.

The drive system is proportional: for additional drive speed, push the joystick further from the neutral position in the direction of travel. Releasing the trigger switch or returning the joystick to center will stop machine movement.

Drive Speed Select Switch

The two-position speed switch controls high or low range drive speed. Use high speed in unobstructed open, flat, and level work areas. Use low speed in close work areas with obstacles, other machinery or personnel to avoid.



Note: Drive speed automatically reduces to low drive when the platform is raised above the stowed position but the speed switch position can still be selected.

Emergency Stop Switch

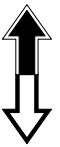
Note: Both the ground and platform emergency stop buttons must be set to ON in order to operate the machine.

When power is directed to the platform from the ground control station, the platform emergency stop switch is turned on by pulling the switch out (on), and is turned off by pushing the switch in (off). The two-position, red, mushroom-shaped emergency stop switch functions to provide power to the platform control console and also to turn off power to machine functions in the event of an emergency.

NOTICE

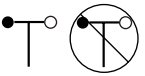
Always position emergency stop switch to off position (pushed in) when machine is not in use.

Forward/Reverse/Lift/Lower Direction Arrow
This decal indicates the proper direction to mount the platform control console, with the black arrow pointing to the front of the machine. The black/white arrow also indicates the direction to move the joystick control per the lift/drive selector switch decal for the lift and the drive select functions.



Horn
This push-button switch, when pressed, permits the operator to warn job site personnel when the machine is operating in the area.

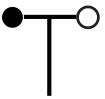
Indoor/Outdoor Operation Indicator
The Indoor (GREEN) indicator and the Outdoor (YELLOW) indicator displays which mode the machine is currently set to operate in.



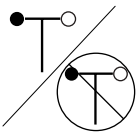
Note: E18MML and E18MSP are rated for INDOOR USE only.

The Indoor Operation Indicator displays when Indoor Operation mode is selected. Indoor Mode is to be used in areas defined for INDOOR USE.

The Outdoor Operation Indicator displays when Outdoor Operation mode is selected. Outdoor Mode is to be used in areas defined for OUTDOOR USE.



Indoor/Outdoor Operation Mode Switch
This button will toggle between the indoor/outdoor operation modes.



Note: E18MML and E18MSP are rated for INDOOR USE only.

Note: INDOOR USE is use of a MEWP in areas shielded from wind so that there is no wind. OUTDOOR USE is use of a MEWP in an environment that can be exposed to wind.

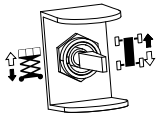
Prior to selecting Indoor Mode, ensure the machine will be used in an area that is shielded from wind so that there is no wind.

CE/UKCA machines only: To switch from one mode to another, the platform must be in the stowed position. If the mode switch is pressed while the machine is elevated, the indicator will flash but the machine state will not change.

⚠ WARNING

Do not operate the machine in INDOOR MODE while in OUTDOOR USE. Follow all information on the platform capacity decal for the selected operating mode. Failure to comply could result in machine tip over, personal injury, or death.

Lift/Drive Select Switch

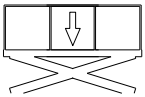


Note: When selecting between the lift and drive functions the joystick control must be returned to the neutral position for approximately 1/2 second before the function change is operable.

This toggle switch is used to select operation of either the drive or lift function. After selecting a function, the joystick controller must be used in order to activate that function. Only change the function selected, with the joystick in the neutral position. Otherwise, the function selected will not change until the joystick is returned to the neutral position.

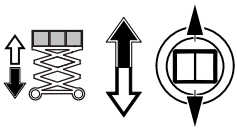
Mobile Phone Cradle (If Equipped)
Provides an enclosed area for mobile phones in the platform.

Overload Indicator (LSS)
The Overload Indicator indicates when the platform has been overloaded. An audible alarm will also signal when the platform is overloaded.



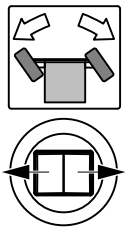
Note: If the Overload Indicator is illuminated, further elevation will be prevented. Reduce the weight in the platform to not exceed the rated workload indicated on the capacity decal, then the controls will work again.

Raising And Lowering Platform



1. If the machine was shut down, place the key selector switch to the platform position.
2. Position both emergency stop switches, to the ON position.
3. Position the lift/drive select switch to lift.
4. Squeeze and hold the trigger switch, and move the joystick back (platform up - white arrow direction) or move the joystick forward (platform down - black arrow direction) and hold until desired elevation is reached. Releasing the trigger switch or moving the joystick back to its center position will stop the function being operated.

Steering (E18MCL Only)
On the platform control console, position the lift/drive select switch to the drive position.
To steer the machine, engage trigger switch and the thumb operated steer rocker-switch on the joystick handle. Press to the right for steering right, or to the left for steering left. When released, the switch will return to the center-off position and the wheels will remain in the previously selected position.
To return the wheels to the center position, the switch must be activated in the opposite direction until the wheels are centered.



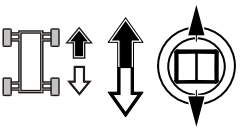
System Fault Indicator
When this indicator light is flashing, a system fault has occurred, possibly stopping machine operation.
Check the MDI Indicator on the Ground Control Station to see if a DTC is displayed.
If the code cannot be cleared by the operator, the machine will require service by a qualified JLG mechanic.

Tilt Indicator Warning Light and Alarm
A red warning light on the control panel illuminates and an audible alarm sounds when the chassis is at or beyond the tilt cutout settings.

⚠ WARNING

If the tilt indicator warning light/alarm is activated when platform is raised, lower platform and drive to a smooth, firm surface, within the limits of the maximum operating slope.

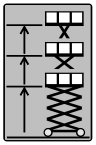
Traveling Forward And Reverse
Position the platform lift/drive select switch to drive/steer position.
Squeeze the trigger switch on front of the joystick and move the joystick forward to drive forward, or backward to drive in reverse.
The drive system is proportional: for additional drive speed, push the joystick further from the neutral position in the direction of travel.
Releasing the trigger switch or returning the joystick to center will stop machine movement.



Note: To ensure proper operation of the desired platform function, move the joystick in the direction of the black or white arrow that matches the color of the arrow on the chassis for the intended direction of travel.

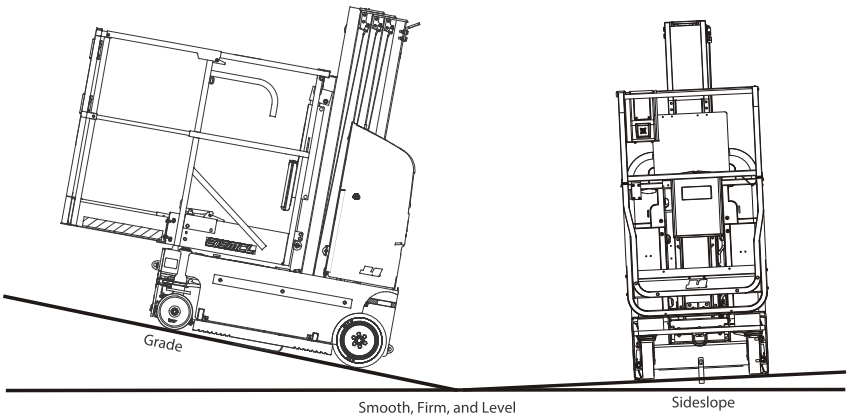
USB Port (If Equipped)
Provides a USB port in the platform.

Tilt - Platform Restricted Height Indicator
This indicator shows the maximum allowable platform elevation when the machine is within the limits of the tilt envelope. When activated, allowable platform height will be shown in one of three height ranges, depending on the amount of tilt detected by the machine's tilt sensor.



- Top green LED ON = Lifting to maximum height and not tilted.
- Middle green LED ON = Lifting to partial height and not tilted.
- Bottom green LED ON = Used at power-up for the operator to check if LEDs are functioning properly.

3.7.3 Grade and Side Slope



DO NOT DRIVE MACHINE ON A GRADE OR SIDESLOPE EXCEEDING THOSE SPECIFIED IN MACHINE SPECIFICATIONS

VE000824A

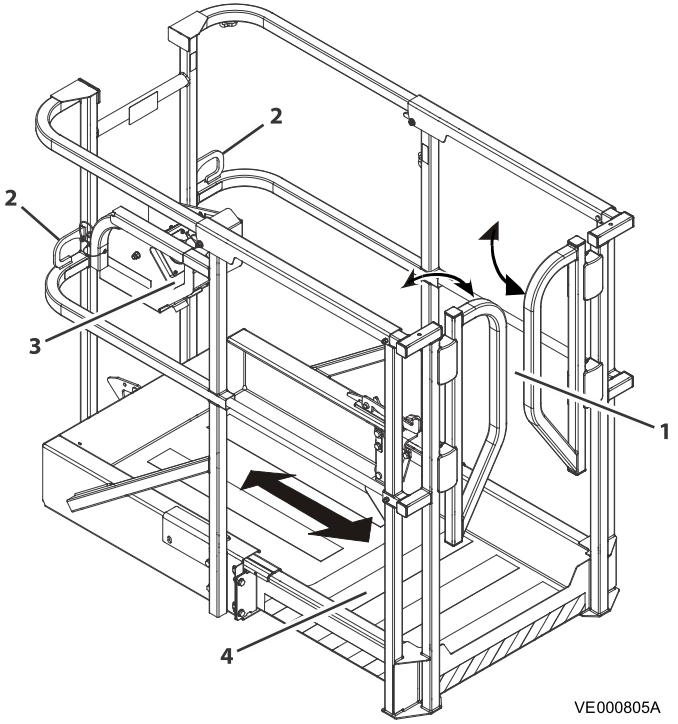
3.8 PARKING MACHINE

1. Drive machine to a well-protected and well-ventilated area.
2. Ensure the platform is fully lowered. Turn the main power selector switch at the ground control station to the OFF position.
3. If necessary, remove key from the ground control station ON/OFF power switch to disable machine from unauthorized use.

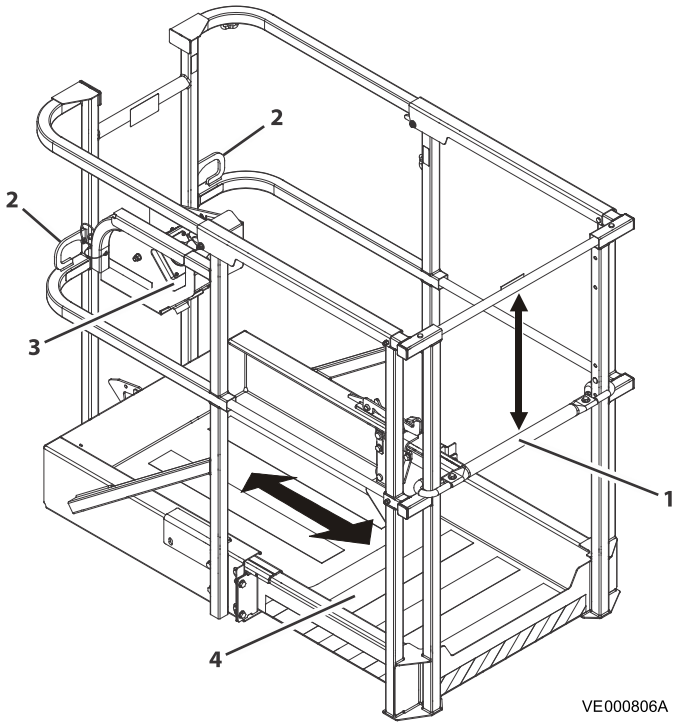
Note: If required, charge batteries in preparation for next work day.

3.9 PLATFORM CONFIGURATIONS

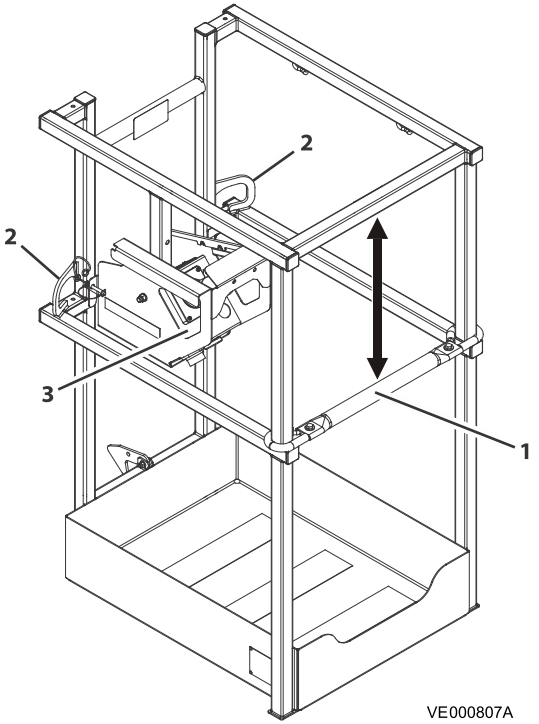
The platforms in the following illustrations show the entry points as well as the direction of the platform gates for opening and closing when entering the platform. The maximum loading capacities per model are shown in the tables below each platform as well as the various components of the platform.



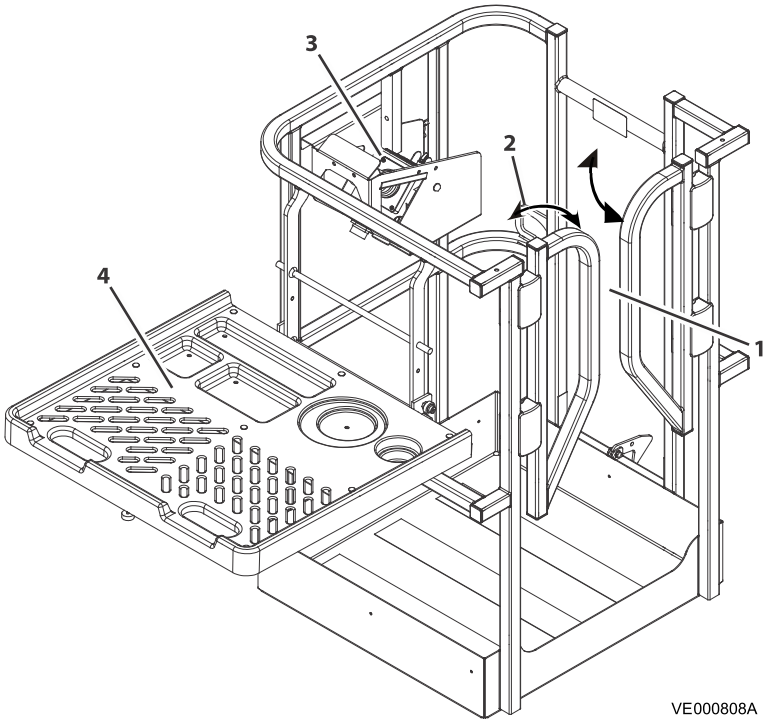
EXTENSION SALOON ENTRY PLATFORM	
Model	Max. Capacity
ES18MML, ES18MCL, E18MSP	400 lb (181 kg)
1. Swing Front Entry Gates **2.** Lanyard Attach Points	**3.** Platform Control Console **4.** Sliding Extendible Section



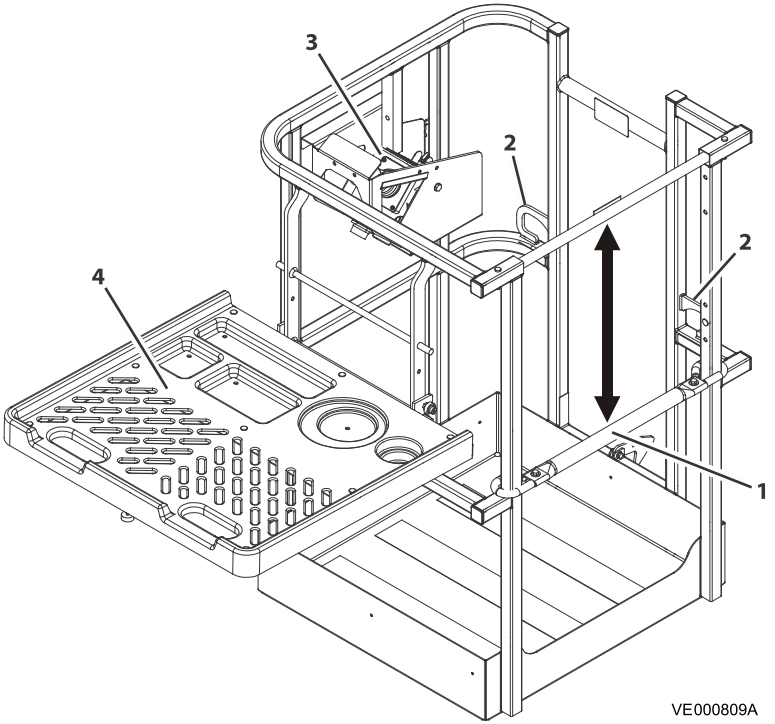
EXTENSION DROP BAR PLATFORM	
Model	Max. Capacity
ES18MML, ES18MCL, E18MSP	400 lb (181 kg)
1. Sliding Bar Entry Gate **2.** Lanyard Attach Points	**3.** Platform Control Console **4.** Sliding Extendible Section



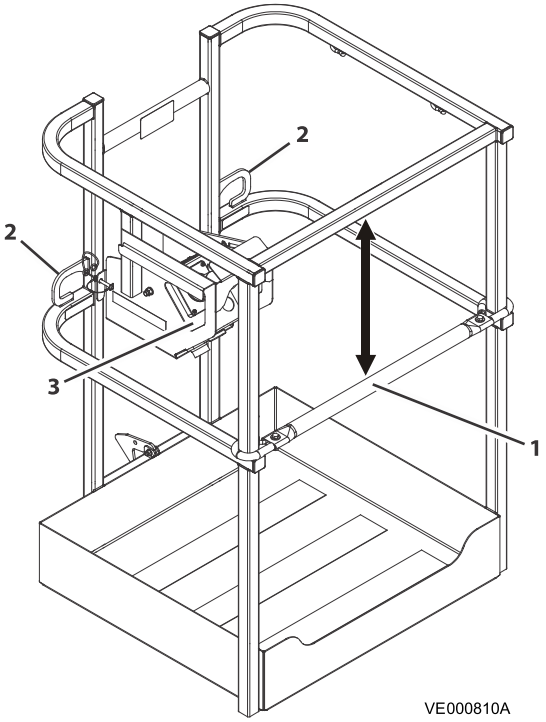
CEILING TILE PLATFORM	
Model	Max. Capacity
ES18MML, ES18MCL, E18MSP	450 lb (204 kg)
1. Sliding Bar Entry Gate **2.** Lanyard Attach Points	**3.** Platform Control Console



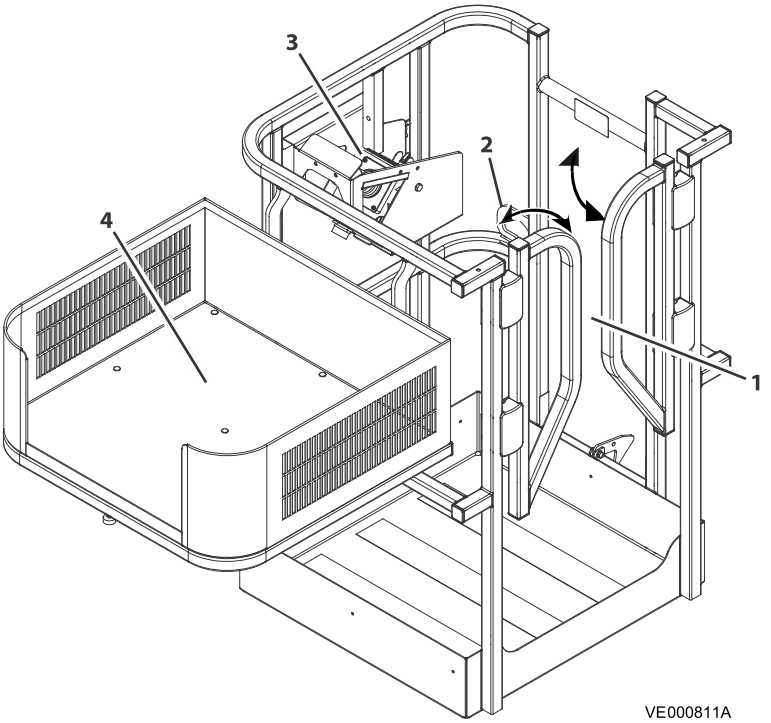
SALOON SIDE ENTRY PLATFORM — FOLDING MATERIAL TRAY	
Model	Max. Capacity
ES18MML, ES18MCL ES18MSP	400 lb (181 kg)
1. Swing Side Entry Gates **2.** Lanyard Attach Points	**3.** Platform Control Console **4.** Material Tray



DROP BAR SIDE ENTRY PLATFORM — FOLDING MATERIAL TRAY	
Model	Max. Capacity
ES18MML, ES18MCL ES18MSP	400 lb (181 kg)
1. Sliding Bar Entry Gate **2.** Lanyard Attach Points	**3.** Platform Control Console **4.** Material Tray



STANDARD DROP BAR PLATFORM	
Model	Max. Capacity
ES18MML, ES18MCL, ES18MSP	450 lb (204 kg)
1. Sliding Bar Entry Gate **2.** Lanyard Attach Points	**3.** Platform Control Console

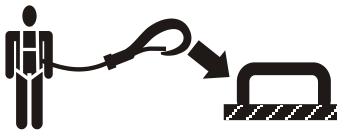


SALOON SIDE ENTRY PLATFORM — ALUMINUM TRAY	
Model	Max. Capacity
ES18MML, ES18MCL ES18MSP	400 lb (181 kg)
1. Sliding Bar Entry Gate **2.** Lanyard Attach Points	**3.** Platform Control Console **4.** Material Tray

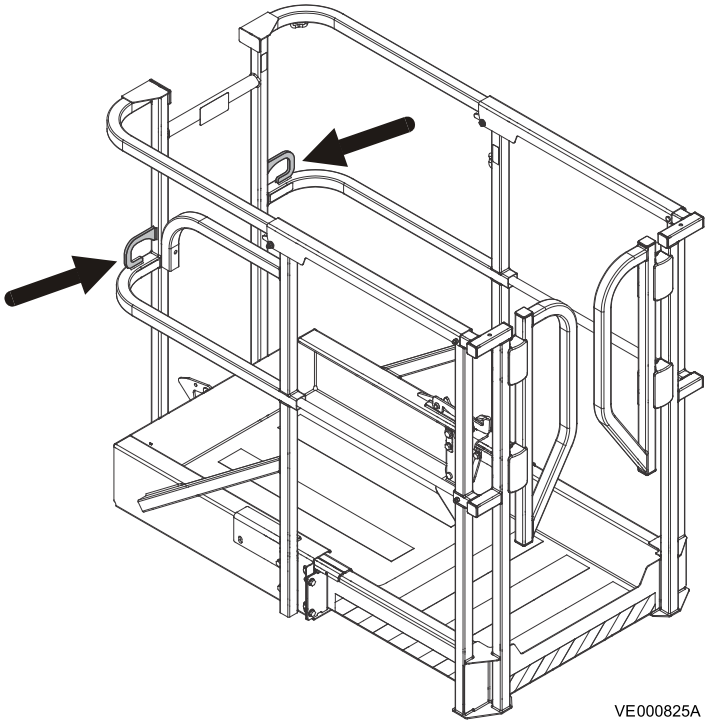
3.10 FALL PROTECTION — LANYARD ATTACHMENT

⚠ CAUTION

JLG Industries, Inc. recommends the operator in the platform wear a full body harness with a lanyard attached to an authorized lanyard anchorage point.



The lanyard attach points are located on each side of the platform.



3.11 QUICK-CHANGE PLATFORM MOUNTING

All MML, MCL, and MSP Model Lifts are equipped with quick-change platform mounts which allow quick removal and installation of currently available quick-change platforms.

Note: This removal and installation procedure recommends that two people lift the platform or use an overhead crane.

Platform Removal

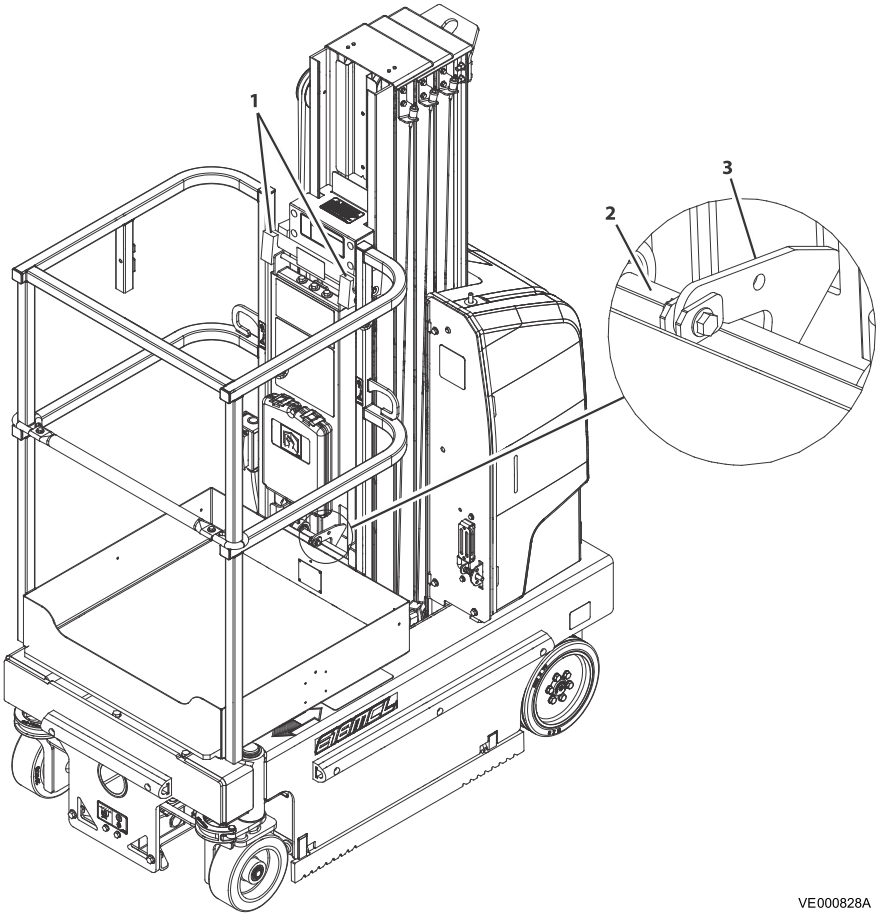
1. Disconnect and remove the platform control console from the platform and lay aside.
2. Raise the latch on the bottom of the platform, tilt the platform forward and lift out of the cradles.

Platform Installation

1. Tilt the platform forward and set in the cradles.
2. Let the platform rotate about the cradles and engage the lower latch.
3. Connect and attach platform control console to platform rail.

⚠ WARNING

Ensure platform support tube is fully engaged into cradle and latch has closed.



Quick-Change Platform Mounting

1. Cradles

2. Platform Support Tube

3. Latch

3.12 TRANSPORTING, LIFTING AND TIE DOWN PROCEDURES

3.12.1 General

All MML, MCL, and MSP Model Personnel Lifts may be transported to a work site using the following methods:

- Driving the machine around on its base wheels if travel surface area permits.
- Loaded, IN AN UPRIGHT POSITION ONLY onto a heavy-duty vehicle with the payload capacity capable of supporting the full weight of the machine (Check machine gross weights in the Operating Spec Chart at the beginning of this Section).
- Moved with a fork-lift truck using the fork-lift pockets in the base frame.

3.12.2 Truck Transport

⚠ CAUTION

Do not transport the machine in a horizontal position due to leakage of battery acid from the batteries or hydraulic fluid from the hydraulic reservoir.

The machine may be winched onto a tilted roll-back truck bed (see important note following) which has been rolled back to ground level. Disengage the brakes and always winch (pull) from the mast (rear) end of the machine, using the rear tie-down loop attached to the base frame.

NOTICE

The MML, MCL, and MSP machines power module could sustain serious damage when the unit is pushed or towed at speeds greater than 2 mph.

When towing or winching, the machine's brakes must be disengaged.

Re-engage the brakes once machine is in place with truck bed level and ready for tie down.

Tie down loops are provided on both ends of the base frame to secure machine to bed of transport vehicle.

3.12.3 Machine Tie-Down

With machine in position to be tied down and brakes engaged, use the following guidelines for restraining the machine during transport.

NOTICE

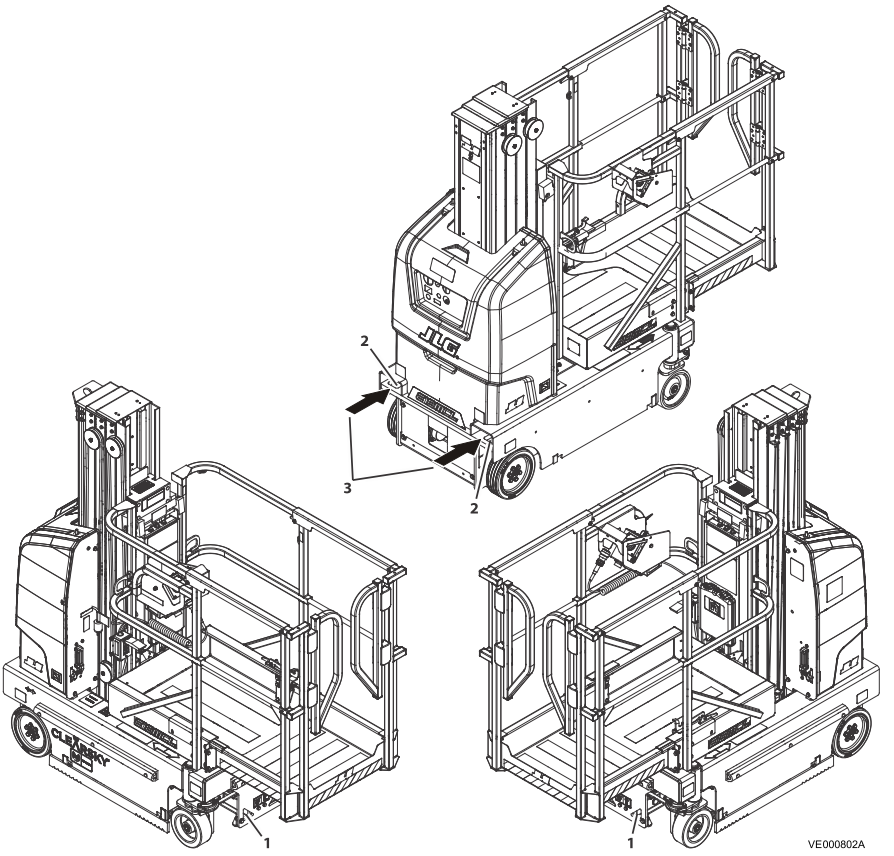
Use of excessive force when securing machine (drive wheel load) can cause damage to the machine's drive wheel components.

1. Secure machine with adequate straps or chain attached through the tie down loops located at the front and rear of machine.
2. The chain should be securely tightened with a force of approximately 100 lb. applied two feet from the pivot handle.

3.12.4 ForkLift Truck Transport

All MML, MCL, and MSP Model Lifts are equipped with wide forklift pockets running the length of the base frame. This allows the machine to be either transported around a work area or lifted onto a higher level using a standard forklift truck.

Note: Forklift trucks must be capable of handling the gross weight of the machine, see Section 5, GENERAL SPECIFICATIONS AND OPERATOR MAINTENANCE of this manual for machine specifications.



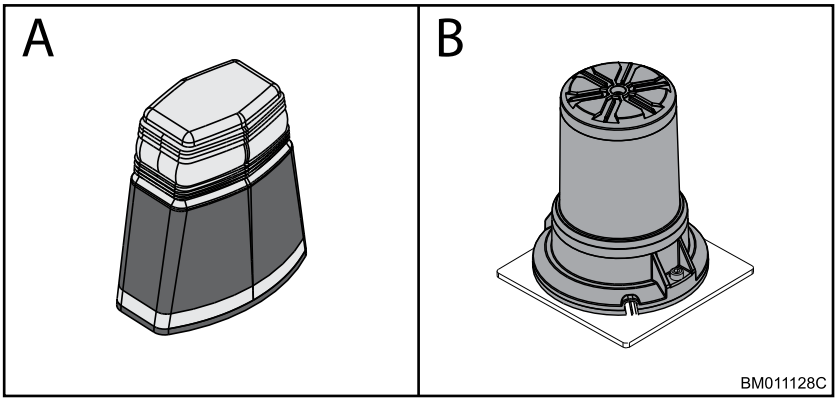
Forklift Truck Lifting Pockets and Machine Tie Down Loop Locations

1. Front Tie-Down Loops

2. Rear Tie-Down Loops

3. Rear Fork Lift Pockets

3.13 BEACONS



A. LED Motion / Amber Beacon (CS550) B. Beacon

Note: Image for reference only. Beacon design may vary based on beacon type, machine model and installation location.

3.13.1 ClearSky® LED Motion / Amber Beacon (CS550)

The ClearSky® CS550 is installed on ClearSky Smart Fleet™ equipped machines.

The CS550 can function as a machine beacon using multiple colors and flash patterns for communication and identification purposes. In addition to amber, colors include: red, blue, green, cyan, and white. The ClearSky Smart Fleet mobile app can command visual alerts or audible alarms to assist in machine identification.

The CS550 also functions as a visible connectivity point for ClearSky Smart Fleet. Refer to the ClearSky Smart Fleet section for more information.

3.13.2 Amber Beacon

This amber-colored beacon flashes in a consistent pattern to alert those nearby that the machine power is on. The device may also use different flash patterns to identify specific machine alerts.

3.14 CLEARSKY SMART FLEET™

ClearSky Smart Fleet™ integrates on-machine hardware with web-based software and a mobile app to provide fleet management data and analytics. Personnel with the appropriate permissions can access telematics and machine identification data using a dashboard visible in the ClearSky Smart Fleet web portal or the ClearSky Smart Fleet mobile app. (Navigation and visual configuration may vary between the web portal or mobile app.)

Features include machine monitoring such as fuel level and battery charge, remote analyzer tasks including diagnostic trouble codes or system alerts, and access control (if available) restrictions.

Refer to the Access Control and Beacons sections of this manual for more information. Visit the ClearSky section of the JLG website for more resources and information about accessing web portal or mobile app data.

3.15 ACCESS CONTROL - CLEARSKY SMART FLEET™ (IF EQUIPPED)

NOTICE

Operator access to the machine may be placed into a restricted state remotely.

If a modification to a restricted state is required, contact the ClearSky Smart Fleet™ account owner. Only authorized personnel can make changes from within the web portal or mobile app.

This machine may be equipped with ClearSky Smart Fleet Access Control. Using the ClearSky Smart Fleet mobile app or web portal (remotely or locally), the machine can be placed into restricted states that limit machine functionality for all operators.

By using this machine, the operator acknowledges Access Control functionality, including restricted states, and accounts for it in their safe use plan.

Restricted states may include:

1. Speed Restricted — Machine drive speed is restricted to low speed and lift speed is reduced.
2. Speed and Function Restricted — Machine drive speed is restricted to low speed and the platform is restricted to a fully-lowered position. In this state, once the platform is fully lowered, it is not permitted to leave that defined position.
3. Locked Out — Machine has been locked out and will not operate (including engine start, if applicable).

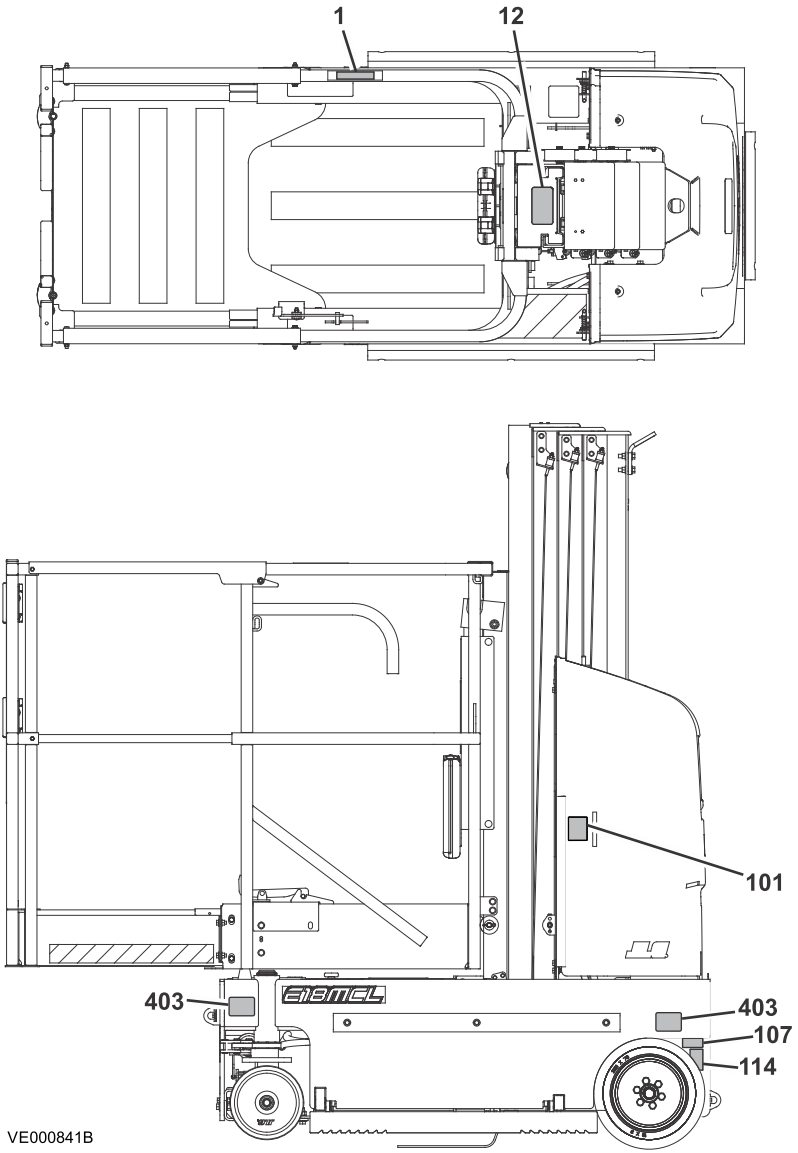
Note: Restricted functionality may occur if the CS550 (ClearSky® LED Motion / Amber Beacon) is damaged or removed. A protective cage is available through JLG.

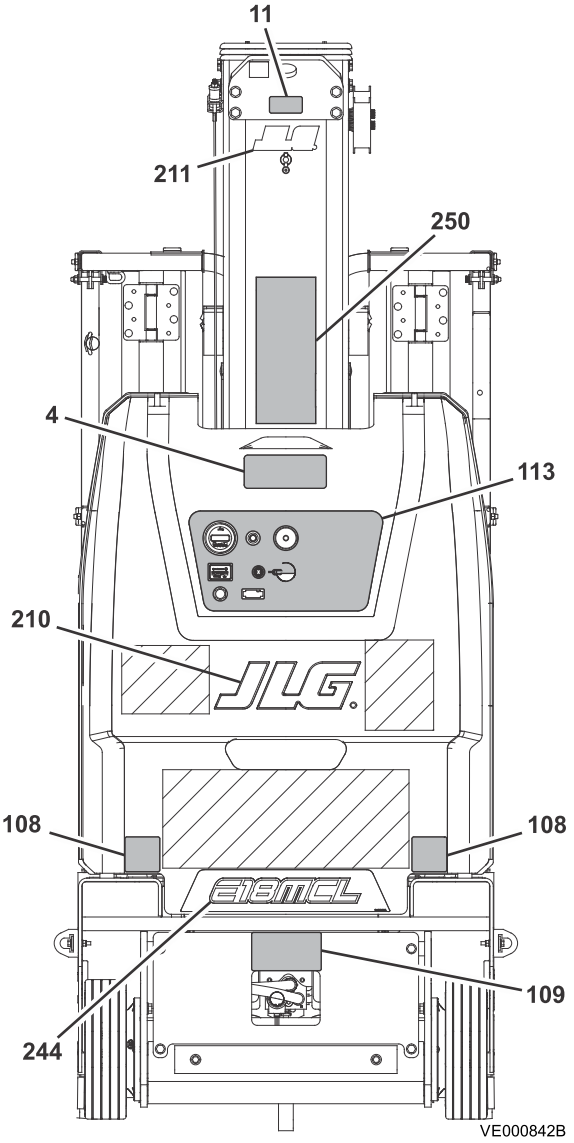
Machines equipped with ClearSky Smart Fleet Access Control are also equipped with the CS550. Refer to the ClearSky Smart Fleet and Beacons sections of this manual for more information.

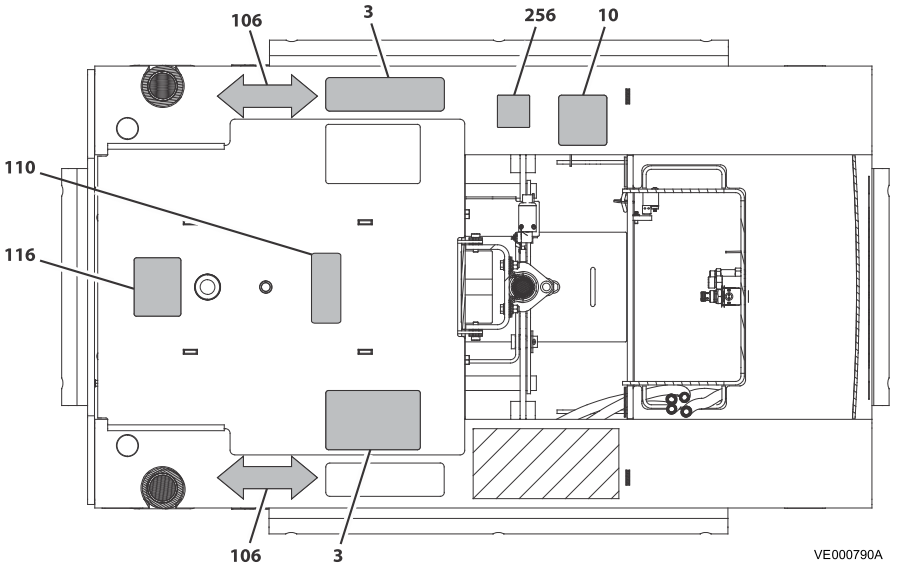
At time of publication, Access Control is not available for CE/UKCA markets.

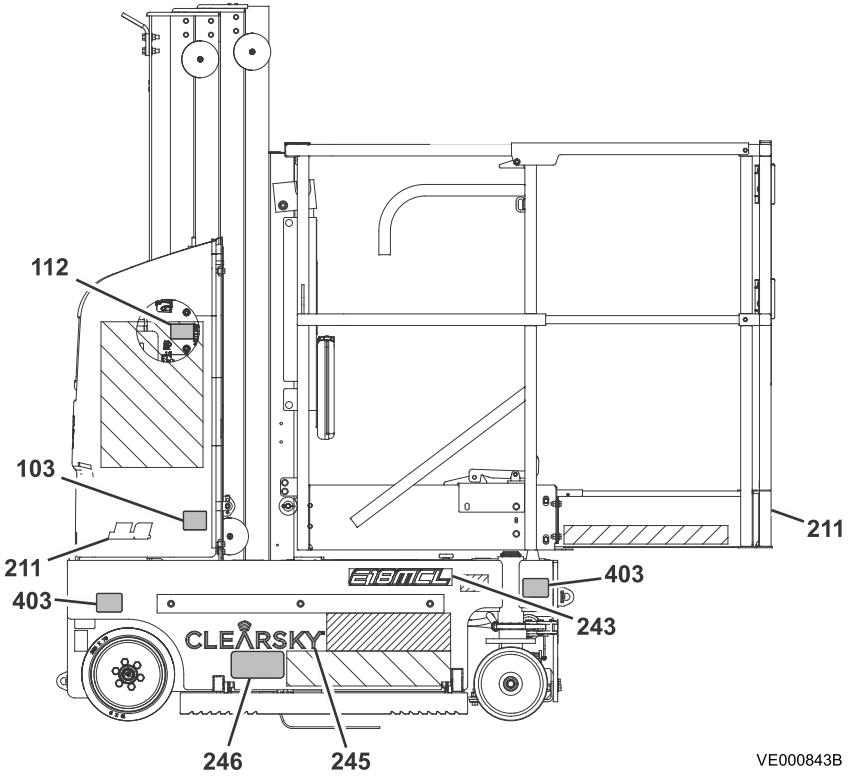
3.16 DECAL INSTALLATION

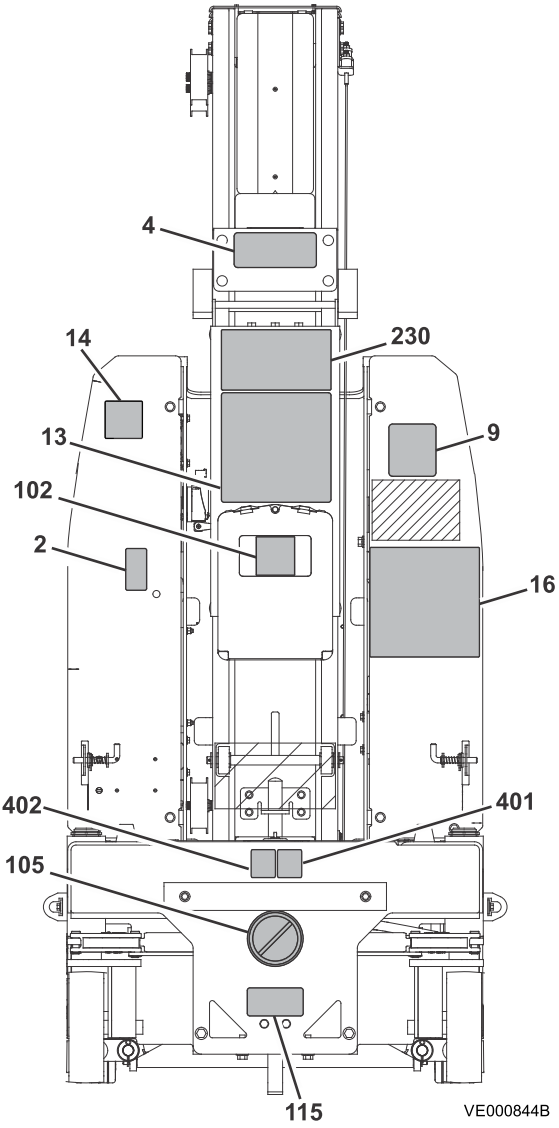
Note: Some components may be removed for illustrative clarity.


1
12
101
403
403
107
114
E18MCL
VE000841B


11
211
250
4
113
210
JLG
108
108
E18MCL
109
244
VE000842B


106
3
256
10
110
116
106
3
VE000790A


112
103
211
403
211
403
243
246
245
VE000843B


4
14
230
13
9
102
2
16
402
401
105
115
VE000844B

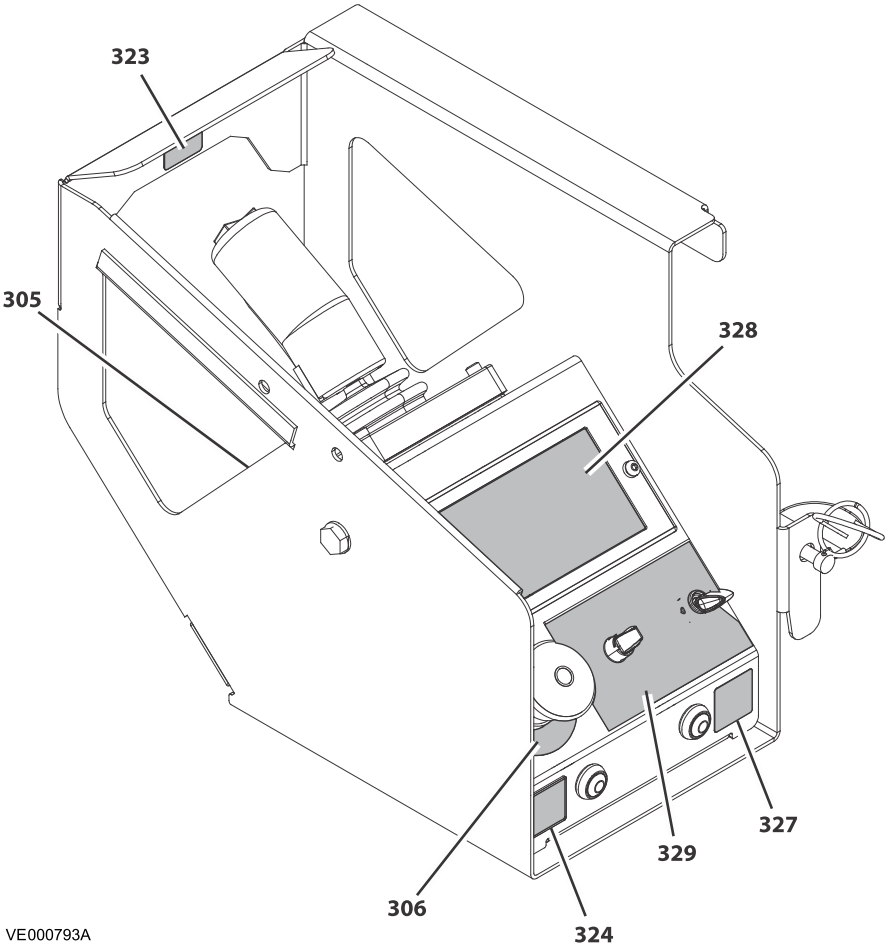

323
305
328
327
329
306
324
VE000793A

Table 5. Decal Legend

Item	ANSI/CSA English	CE/UKCA/AUS	ANSI Spanish	ANSI Portuguese/ Spanish	ANSI Chinese	CSA French/English
1	1703684	1705959	1703685	1703686	1703751	1705959
2	1703785	1705803	1704031	1704023	1704079	1001162897
3	1703786	1705099	1704032	1704024	1704081	1001162896
4	1706832	1705802	1001282020	1001282021	1001282022	1001282019
9	1001131273	–	–	–	–	1001131273
10	1001223055	–	1001224049	1001224052	1001224051	1001223971
11	1001228370	–	–	–	–	1001228370
12	1001231801	–	–	–	–	–
13	1001272920	–	1001279428	1001279430	1001279431	1001272920
14	1702631	1702631	1702631	1702631	1702631	1702631
16	–	–	–	–	–	1001279429
101	1701504	1701504	1701504	1701504	1701504	1701504
102	1701640	1701640	1701640	1701640	1701640	1701640
103	1702155	1702155	1702155	1702155	1702155	1702155
105	1703072	1703072	1703072	1703072	1703072	1703072
106	1703687	1703687	1703687	1703687	1703687	1703687
107	1703814	1703814	1703814	1703814	1703814	1703814
108	1703817	1703817	1703817	1703817	1703817	1703817

Table 5. Decal Legend (continued)

Item	ANSI/CSA English	CE/UKCA/AUS	ANSI Spanish	ANSI Portuguese/ Spanish	ANSI Chinese	CSA French/English
109	1705016	1705016	1705016	1705016	1705016	1705016
110	1001261105	1001261105	1001261105	1001261105	1001261105	1001261105
112	1001269897	1001269897	1001269897	1001269897	1001269897	1001269897
113	1001273100	1001273100	1001273100	1001273100	1001273100	1001273100
114	1703455	1703455	1703455	1703455	1703455	1703455
115	1001162864	1001162864	1001162864	1001162864	1001162864	1001162864
116	1001280548	1001280548	1001280548	1001280548	1001280548	1001280548
210	1001280217	1001280217	1001280217	1001280217	1001280217	1001280217
211	1703681	1703681	1703681	1703681	1703681	1703681
230	1001279424 (ALL MCL EXCEPT AUS) 1001279423 (ALL MML AND MSP) (ALL AUS)	1001279424 (ALL MCL EXCEPT AUS) 1001279423 (ALL MML AND MSP) (ALL AUS)	1001279424 (ALL MCL EXCEPT AUS) 1001279423 (ALL MML AND MSP) (ALL AUS)	1001279424 (ALL MCL EXCEPT AUS) 1001279423 (ALL MML AND MSP) (ALL AUS)	1001279424 (ALL MCL EXCEPT AUS) 1001279423 (ALL MML AND MSP) (ALL AUS)	1001279424 (ALL MCL EXCEPT AUS) 1001279423 (ALL MML AND MSP) (ALL AUS)
243	1001277917 (MCL) 1001277918 (MML) 1001277919 (MSP)	1001277917 (MCL) 1001277918 (MML) 1001277919 (MSP)	1001277917 (MCL) 1001277918 (MML) 1001277919 (MSP)	1001277917 (MCL) 1001277918 (MML) 1001277919 (MSP)	1001277917 (MCL) 1001277918 (MML) 1001277919 (MSP)	1001277917 (MCL) 1001277918 (MML) 1001277919 (MSP)
244	1001279425 (MCL) 1001279426 (MML) 1001279427 (MSP)	1001279425 (MCL) 1001279426 (MML) 1001279427 (MSP)	1001279425 (MCL) 1001279426 (MML) 1001279427 (MSP)	1001279425 (MCL) 1001279426 (MML) 1001279427 (MSP)	1001279425 (MCL) 1001279426 (MML) 1001279427 (MSP)	1001279425 (MCL) 1001279426 (MML) 1001279427 (MSP)
245	1001116208	1001116208	1001116208	1001116208	–	1001116208

Table 5. Decal Legend (continued)

Item	ANSI/CSA English	CE/UKCA/AUS	ANSI Spanish	ANSI Portuguese/ Spanish	ANSI Chinese	CSA French/English
246	1001120989	1001120989	1001120989	1001120989	–	1001120989
250	1001280664	1001280665	1001280664	1001280664	1001280664	1001280664
256	–	1001173703	–	–	–	–
305	1703819	1703819	1703819	1703819	1703819	1703819
306	1704260	1704260	1704260	1704260	1704260	1704260
323	1001132358	1001132358	1001132358	1001132358	1001132358	1001132358
324	1001132361	1001132361	1001132361	1001132361	1001132361	1001132361
327	1001213886	1001213886	1001213886	1001213886	1001213886	1001213886
328	1001218285	1001218285	1001218285	1001218285	1001218285	1001218285
329	1001220893	1001220893	1001220893	1001220893	1001220893	1001220893
401	1701499	1701499	1701499	1701499	1701499	1701499
402	1704461	1704461	1704461	1704461	1704461	1704461
403	1001258494	1001258494	1001258494	1001258494	1001258494	1001258494

This Page is intentionally left blank

SECTION 4
Emergency Procedures

4.1 GENERAL INFORMATION

This section explains the steps to be taken in case of an emergency situation during operation.

4.2 EMERGENCY OPERATION

4.2.1 Use of Ground Controls

NOTICE

Know how to use the ground controls in an emergency situation.

Ground personnel must be thoroughly familiar with the machine operating characteristics and the ground control functions. Training should include operation of the machine, review and understanding of this section and hands-on operation of the controls in simulated emergencies.

4.2.2 Operator Unable to Control Machine

IF THE PLATFORM OPERATOR IS PINNED, TRAPPED OR UNABLE TO OPERATE OR CONTROL THE MACHINE:

1. Other personnel should operate the machine from ground controls only as required.
2. Only qualified personnel in the platform may use the platform controls. DO NOT CONTINUE OPERATION IF CONTROLS DO NOT FUNCTION PROPERLY.
3. Rescue equipment can be used to remove the platform occupant. Cranes and forklifts can be used to stabilize motion of the machine.

4.2.3 Platform Caught Overhead

If the platform becomes jammed or snagged in overhead structures or equipment, do the following:

1. Shut off the machine.
2. Rescue all people in the platform before freeing the machine. Personnel must be out of the platform before operating any controls on the machine
3. Use cranes, forklifts or other equipment to stabilize motion of the machine to prevent a tip over as required.
4. From the ground controls, carefully free the platform from the object.
5. Once clear, restart the machine and return the platform to a safe position.
6. Inspect the machine for damage. If the machine is damaged or does not operate properly, turn off the machine immediately. Report the problem to the proper maintenance personnel. Do not operate the machine until it is declared safe for operation.

4.2.4 Righting of Tipped Machine

A fork truck of suitable capacity or equivalent equipment should be placed under the elevated side of the chassis, with a crane or other suitable lifting equipment used to lift the platform while the chassis is lowered by the forklift or other equipment.

4.3 INCIDENT NOTIFICATION

JLG Industries, Inc. must be notified immediately of any incident involving a JLG product. Even if no injury or property damage is evident, JLG must be contacted by telephone and provided with all necessary details.

- USA: 877-JLG-SAFE (554-7233)
- EUROPE: (32) 0 89 84 82 20
- AUSTRALIA: (61) 2 65 811111
- E-mail: productsafety@jlg.com

Failure to notify the manufacturer of an incident involving a JLG Industries product within 48 hours of such an occurrence may void any warranty consideration on that particular machine.

NOTICE

Following any incident, thoroughly inspect the machine. Do not elevate the platform until it is certain that all damage has been repaired and that all controls are operating correctly. Test all functions first from the ground control station then from the platform control console.

4.4 PLATFORM MANUAL DESCENT

The platform manual descent valve is used in the event of total power failure to retract and lower the platform using gravity. The manual descent valve is located on the rear of the machine inside an access hole just below the hood. Look for the instruction decal located just above the access hole.

The procedure is as follows:

1. Locate the manual descent valve(**1**) on the rear of the machine just below the hood.

⚠ WARNING

Keep hands and arms out of the path of the mast and platform while lowering.

2. Press and hold the RED button on the manual descent valve, release the button when the platform is lowered to desired level.

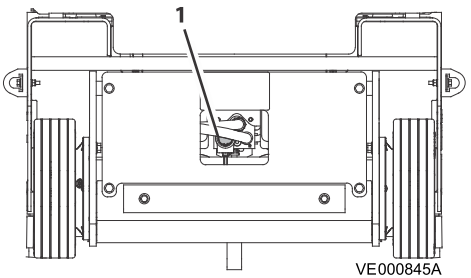


Figure 8. Location of Manual Descent Valve (Rear of Machine)

4.5 LITHIUM-ION BATTERY (IF EQUIPPED)

Immediate actions to take if the lithium-ion battery is emitting visible gasses, fumes, smoke, or fire:

1. Do not operate the machine. Evacuate the immediate area surrounding the machine.

⚠ WARNING

Do not breathe in or contact fumes, smoke, or fire coming from a lithium-ion battery. They are extremely hot and toxic.

2. Use only a Class D fire extinguisher to extinguish a lithium-ion battery fire. Do not use water. Class A, B, or C fire extinguishers may be used on other components.

3. If required, contact local emergency response authorities to assist in mitigation.

Actions to take after the lithium-ion battery is involved in an incident or has concluded emitting visible gasses, fumes, smoke, or fire:

1. Once the battery surface temperature has dropped to ambient temperature, do not operate the machine.
2. Use only qualified personnel trained to handle damaged lithium-ion batteries utilizing the correct personal protective equipment (PPE) in accordance with employer, federal, state, and local regulations.

⚠ CAUTION

Do not contact residues from a lithium-ion battery fire without proper PPE. Residues may be toxic.

3. Move any damaged batteries or machine to an isolated area in accordance with employer, federal, state, and local regulations.

4.6 CLEARSKY SMART FLEET™ - LOCKED OUT STATE

The machine may be placed into a Locked Out state remotely through ClearSky Smart Fleet.

If the CS550 (ClearSky® LED Motion / Amber Beacon) is removed from a machine or disconnected from the control system through damage, the machine may also be placed into a Locked Out state.

NOTICE

Contact the ClearSky Smart Fleet™ account owner if the machine is in a Locked Out state.

This Page is intentionally left blank

SECTION 5
Accessories

5.1 AVAILABLE ACCESSORIES

Table 6. Available Accessories

ACCESSORY	Market						
	ANSI	ANSI Export	CSA	CE/ UKCA	AUS	MOL70	China (GB)
Anti-Vandalism Package	✓	✓	✓	✓	✓	✓	✓
Frame Bumpers	✓	✓	✓	✓	✓	✓	✓
Tool Tray	✓	✓	✓	✓	✓	✓	✓
Gate Latch	✓	✓	✓	✓	✓	✓	✓
Gate Alarm	✓	✓	✓	✓	✓	✓	✓
Crane Hook	✓	✓	✓	✓	✓	✓	✓
Dual Beacon	✓	✓	✓	✓	✓	✓	✓
Entry Step	✓	✓	✓	✓	✓	✓	✓
Floor Mat	✓	✓	✓	✓	✓	✓	✓

5.2 ANTI-VANDALISM PACKAGE

The Anti-Vandalism Package consists of one lockable cover for the Platform Station that prevents unauthorized use of the machine. Locks are not provided with this kit.

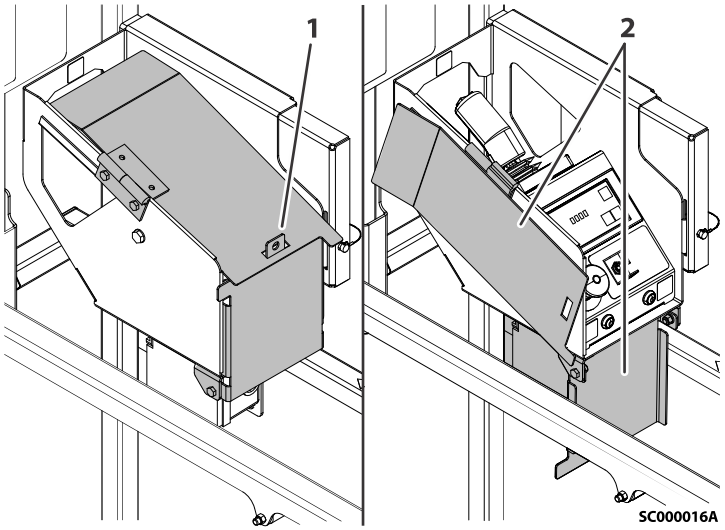
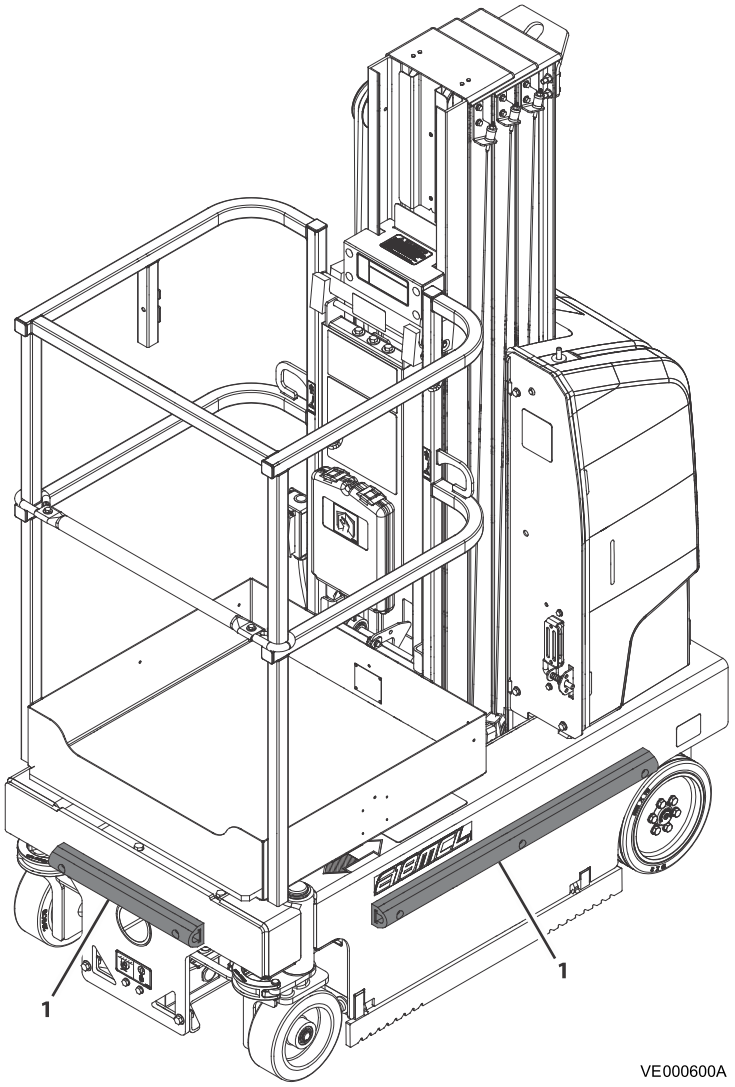


Figure 9. Platform Control Console

1. Lock Position (Covers Closed)
2. Covers Open

Note: Anti-Vandalism Package not available for use with USB/phone cradle option.

5.3 FRAME BUMPERS

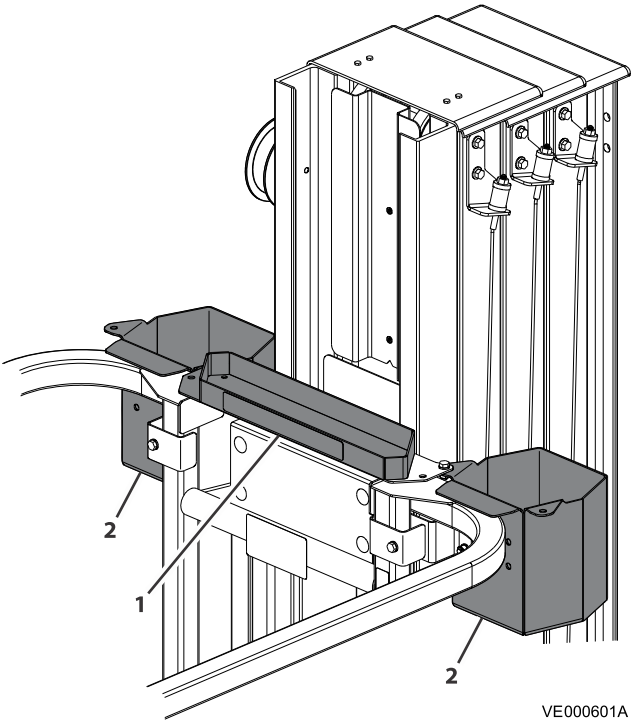


The Frame Bumpers (**1**) provide padding to the frame/chassis in order to prevent damage to the machine as well as objects it may come into contact with during operation.

5.4 TOOL TRAY

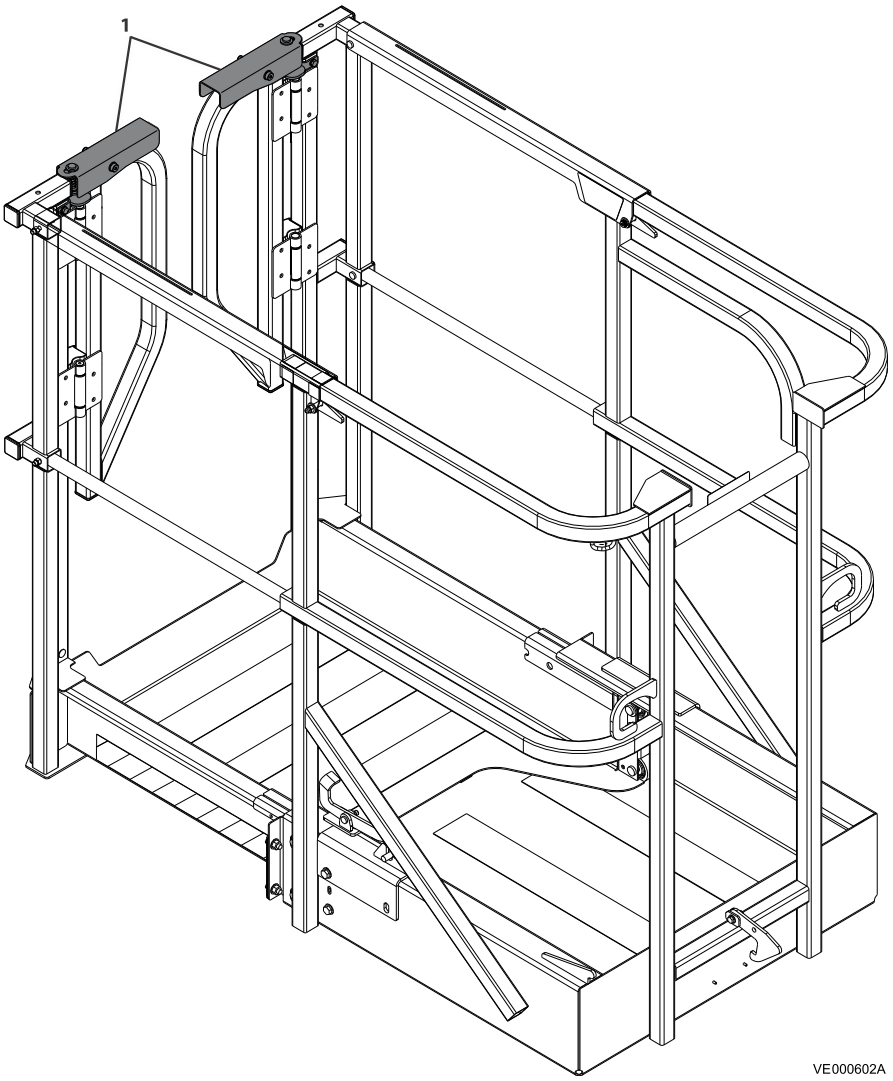
The Tool Tray provides additional space for placement of tools and objects.

Note: The tool tray (**1**) has a maximum capacity of 5 lb (2 kg). The tool bucket trays (**2**) have a maximum capacity of 15 lb (6 kg) each.



5.5 GATE LATCH

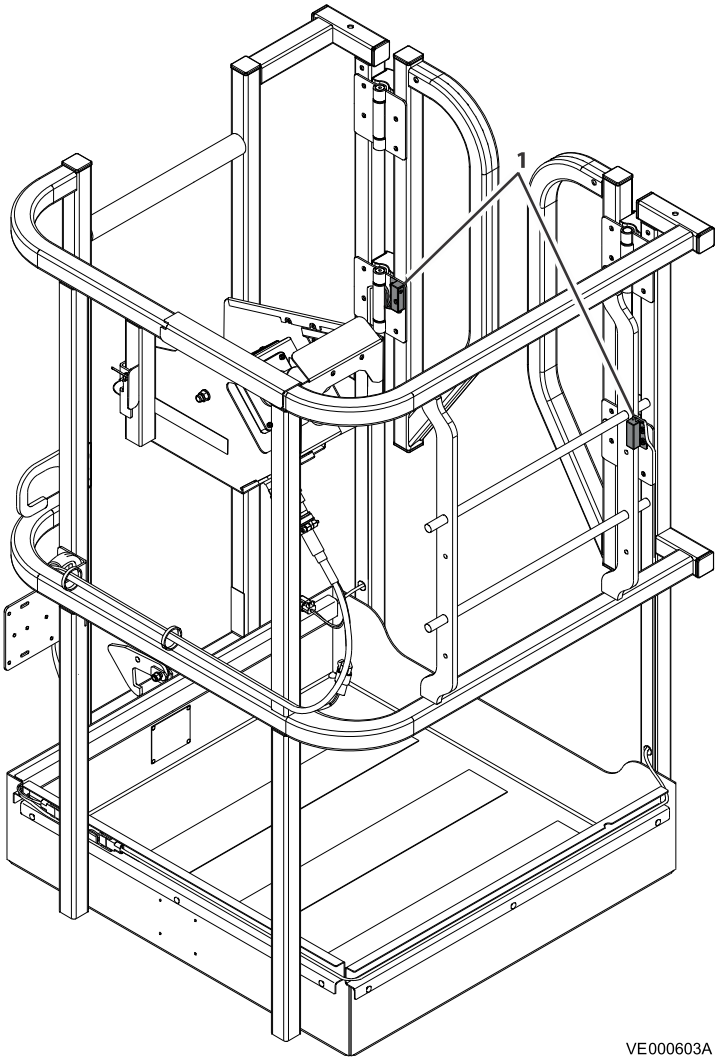
The Gate Latch (**1**) ensures the platform gate latches securely when closed.



Note: Gate Latch only available for saloon entry platforms.

5.6 GATE ALARM

The Gate Alarm (**1**) is available for machines equipped with the side entry/material tray platform with swinging gates. The gate alarm sounds if either or both gates are opened once the platform is raised approximately 2 inches from the fully lowered position.

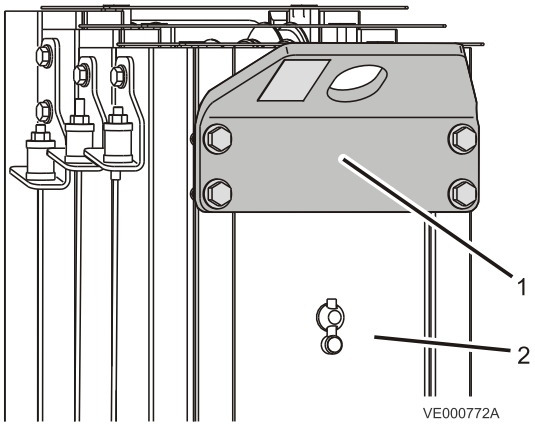


5.7 CRANE HOOK

The Crane Hook provides an attachment point for a lifting device to lift the machine. The lifting device must be capable of handling the gross weight of the machine, see the machine specifications Section 6 of this manual.

NOTICE

Do not attempt to use the crane hook accessory as an attach point to lift items with the mast assembly. This will result in damage to the mast and possible machine tipping.

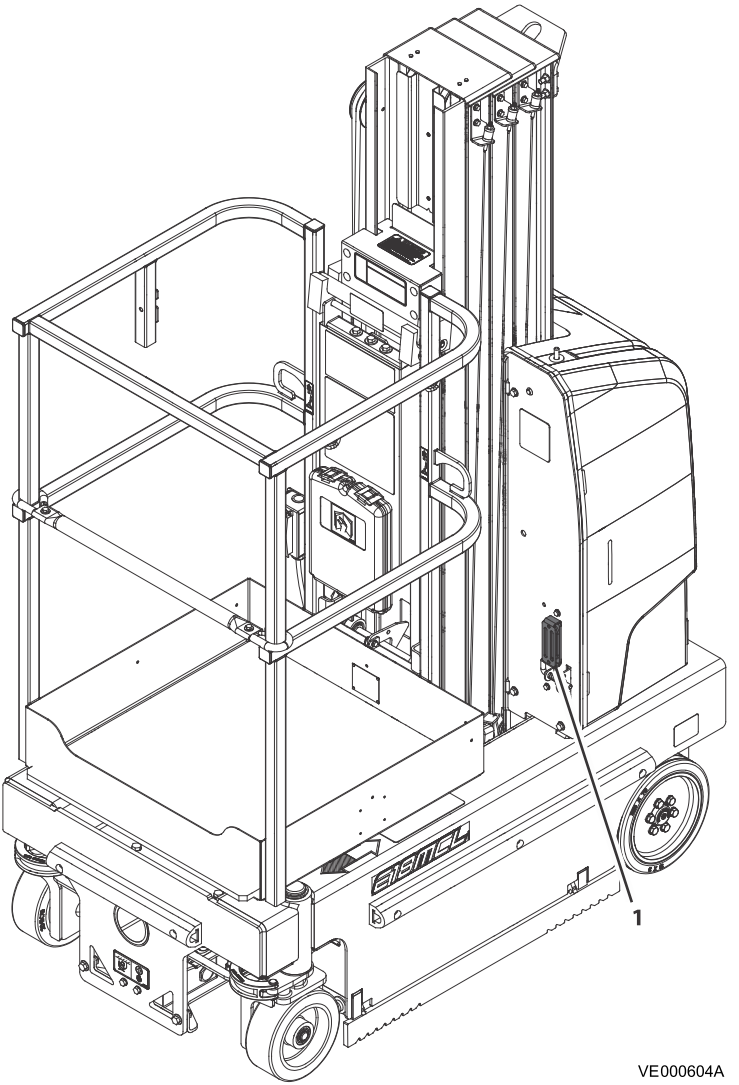


Crane Hook Accessory

1. Crane Hook Attachment

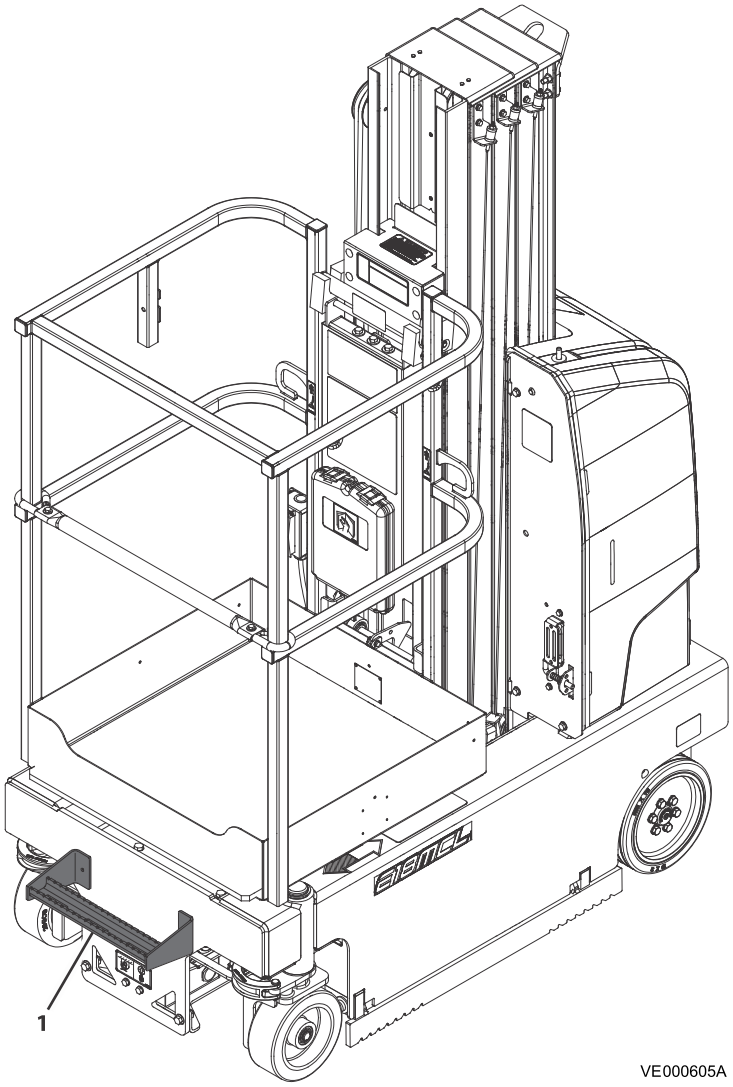
2. Back of Mast

5.8 DUAL BEACON



The flashing amber Dual Beacon (**1**) lights are activated when the machine power is turned on and provides a visual warning to the machine's operation.

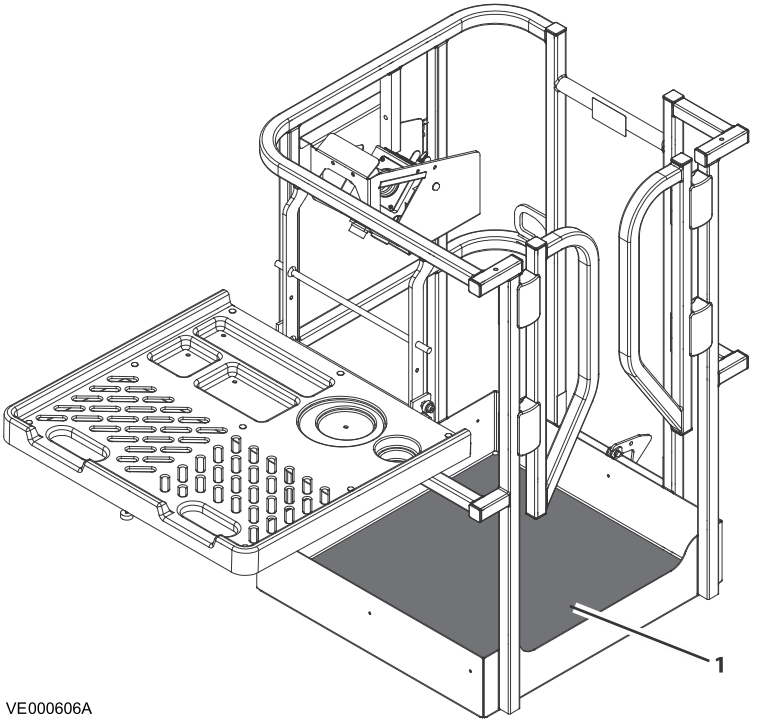
5.9 ENTRY STEP



The Entry Step (**1**) provides ease of access when entering/exiting the platform.

Note: Entry Step not available for platforms with trays or with frame bumpers accessory.

5.10 FLOOR MAT



VE000606A

The Floor Mat (**1**) helps reduce operator fatigue by providing padded flooring on top of the metal platform floor.

Note: Floor Mat not available for extension saloon, extension drop bar, or ceiling tile platforms.

SECTION 6
General Specifications and Operator Maintenance

6.1 INTRODUCTION

This section of the manual provides additional necessary information to the operator for proper operation and maintenance of this machine.

The maintenance portion of this section is intended as information to assist the machine operator to perform daily maintenance tasks only, and does not replace the more thorough Preventive Maintenance and Inspection Schedule included in the Service and Maintenance Manual.

6.2 GENERAL SPECIFICATIONS

6.2.1 Machine Specifications

SPECIFICATION	E18MML	E18MCL	E18MSP
Gross Machine Weight (Platform Empty)	1,870 lb (848 kg)	1,900 lb (862 kg)	1,870 lb (848 kg)
Machine Height (Platform Stowed)	78 in (198 cm)		
Tilt Indicator Setting	1.5°		
Maximum Travel Grade (Gradeability) (Platform STOWED ONLY)	30%		
Maximum Travel Grade (Side Slope) (Platform STOWED ONLY)	5°		
Max. Allowable Operating Slope (Elevated) Front to Back Side to Side	3.0° 1.5°		
Maximum Drive Speeds (Operator Variable)	0.25 - 2.5 mph (0.4 - 4.0 kph)		
Machine Base - Overall (Width x Length)	30 in.- W x 53 in.- L (76 cm- W x 134 cm- L)		
Maximum Wind Speed	0 mph (0 m/s)	28 mph (12.5 m/s)	0 mph (0 m/s)
Maximum Horizontal Manual Side Force (Platform fully extended with Maximum load)	45 pound-force (200 Newton)		

SPECIFICATION	E18MML	E18MCL	E18MSP
Maximum Hydraulic System Pressure (Recommended initial setting)	3000 PSI (211 Bars)		
Hydraulic System Capacity	2.4 gal (9.1 L)		
Hydraulic Reservoir Capacity	1 gal (3.8 L)		
Maximum Tire Load	855 lb (388 kg)		
Ambient (Operating) Temperature	Refer to Hydraulic Oil Operating Temperature Chart		

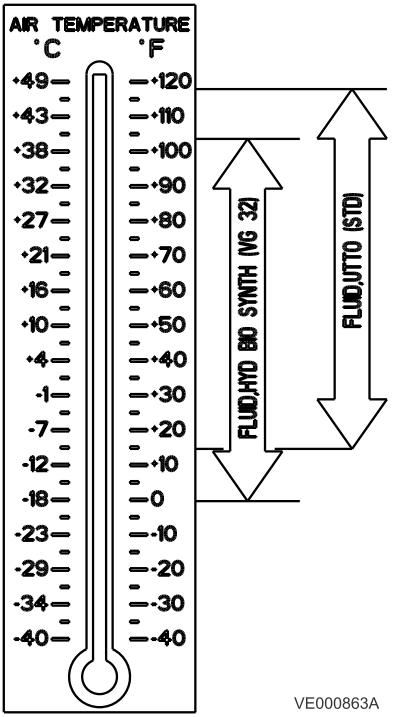


Figure 10. Hydraulic Oil Operating Temperature Chart

6.2.2 Batteries (Lead Acid, AGM)

SPECIFICATION		E18MML, E18MCL, E18MSP
System Voltage		24 Volts DC
Battery Specifications	Battery Type:	FLA (Non-Sealed) AGM (VRLA) (Sealed)
	Voltage (DC):	6 Volts DC - 4 Battery System
	Amp Hour (AH) Rating:	220 Amp Hr. @ 20 Hr. Rate - 6V - 4 Battery System

6.2.3 Batteries (Lithium-Ion)

Description	Value
Voltage	24 V
Amp Hour Rating	90 Ah
Energy	2.30 kWh
Weight	45 lb (20.4 kg)
Charge Operating Temperature	-31°F to 131°F (-35°C to +55°C)
Discharge Operating Temperature	-31°F to 131°F (-35°C to +55°C)

6.2.4 Battery Charger

DESCRIPTION	ALL MACHINES		
Electrical System Voltage (DC)	24 V		
Battery Charger	Delta-Q (650 W)	Delta-Q (1200 W)	Green Power
Input			
AC Input Voltage	85 - 270 VAC	85 - 270 VAC	100 - 240 VAC
Nominal AC Input Voltage	100 - 240 VAC	100 - 240 VAC	—
Input Frequency	50 - 60 Hz	50 - 60 Hz	45 - 65 Hz
Max. AC Input Current	7.5 A	14.5 A	8.5 A
Ingress Protection	IP66	IP66	IP66
Operating Temperature	-40°F to 149°F (-40°C to +65°C)	-40°F to 149°F (-40°C to +65°C)	-4°F to 122°F (-20°C to +50°C)
Output			
Nominal DC Output Voltage	24 V	24 V	24 V
Max. DC Output Voltage	36 V	36 V	34 V
Max DC Output Current	27.1 A	50.0 A	30 A
Max. Interlock Current	1 A @ 24 V	10 A @ 24 V	1 A @ 24 V
Protection			
Output Reverse Polarity	Electronic Protection-Auto Reset	Electronic Protection-Auto Reset	Electronic Protection-Auto Reset

DESCRIPTION	ALL MACHINES		
Output Short Circuit	Current Limited	Current Limited	Electronic Protection-Auto Reset
AC Overload	Current Limited	Current Limited	Current Limited
DC Overload	Current Limited	Current Limited	Current Limited

6.2.5 Platform Data

SPECIFICATION		E18MML	E18MCL	E18MSP
Occupants: (Persons allowed in Platform)		1	1	1
Maximum Work Load (Capacity)	Saloon or Drop Bar Entry:	450 lb (204 kg)	450 lb (204 kg)	450 lb (204 kg)
	Extendible:	400 lb (180 kg)	400 lb (180 kg)	400 lb (180 kg)
	Platform w/Folding Material Tray:	400 lb (180 kg)	400 lb (180 kg)	400 lb (180 kg)
Platform Height - Mast Fully Extended (Ground to Platform Floor)		17 ft 8 in (5.43 m)	17 ft 8 in (5.43 m)	17 ft 8 in (5.43 m)
Platform Cycle Performance	Lift Up:	21 - 25 seconds	21 - 25 seconds	21 - 25 seconds
(in seconds) (w/ max. rated load)	Lift Down:	21 - 25 seconds	21 - 25 seconds	21 - 25 seconds

6.2.6 Machine Component Weights

SPECIFICATION	E18MML, E18MCL, E18MSP
Platform Weight (Quick-Change Platforms)	
Extension, Saloon Front Entry Platform:	162.3 lb (73.6 kg)
Extension, Drop Bar Front Entry Platform:	149.5 lb (67.8 kg)
Ceiling Tile Platform:	60.4 lb (27.4 kg)
Maintenance with Tray, Saloon Side Entry Platform:	117.1 lb (53.1 kg)
Maintenance with Tray, Drop Bar Side Entry Platform:	104.3 lb (47.3 kg)
Standard, Drop Bar Front Entry Platform:	68.3 lb (31.0 kg)
Aluminum Tray, Saloon Side Entry Platform:	126.5 lb (57.4 kg)

SPECIFICATION	E18MML, E18MCL, E18MSP
Battery (Lead Acid, AGM): (per battery)	63 lb (29 kg) - 6 Volt - 4 Battery System
Battery (Lithium-ion): (per battery)	45 lb (20.4 kg)

6.2.7 Serial Number Locations

For machine identification, a serial number plate is affixed to the machine. The plate is located on the back of the mast, just above the mast support bracket.

6.3 OPERATOR MAINTENANCE

6.3.1 Tires and Wheels

Tire Wear and Damage

Inspect tires periodically for wear or damage. Tires with worn edges or distorted profiles require replacement. Tires with significant damage in the tread area or side wall, require immediate evaluation before replacing the machine into service.

Wheel and Tire Replacement

Replacement wheels must have the same diameter and profile as the original. Replacement tires must be the same size and rating as the tire being replaced.

Wheel Installation

It is extremely important to apply and maintain proper wheel mounting torque.

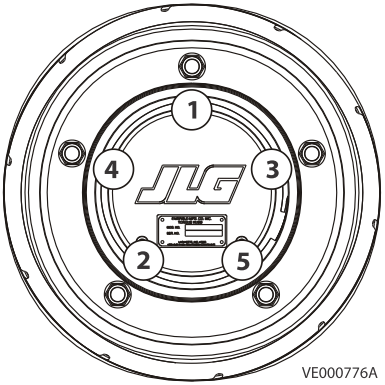
⚠ WARNING

Wheel lug nuts must be installed and maintained at the proper torque to prevent loose wheels, broken lug nuts, and possible separation of wheel from the axle. Be sure to use only the lug nuts matched to the cone angle of the wheel.

Tighten the lug nuts to the proper torque to prevent wheels from coming loose. Use a torque wrench to tighten the fasteners. If you do not have a torque wrench, tighten the fasteners with a lug wrench, then immediately have a service garage or dealer tighten the lug nuts to the proper torque. Over-tightening will result in breaking the lug nuts or permanently deforming the mounting holes in the wheels. The proper procedure for attaching wheels is as follows:

1. Start all lug nuts by hand to prevent cross threading. DO NOT use a lubricant on threads or nuts.

2. Tighten lug nuts in the following sequence.



3. Following the recommended sequence, tighten each lug nut per the wheel torque of 43 ft lb (58 Nm).

4. Wheel lug nuts should be torqued after the first 50 hours of operation and after each wheel removal. Check torque every 3 months or 150 hours of operation.

6.3.2 Lubrication

Table 7. Hydraulic Oil Temperature Range

HYDRAULIC SYSTEM OPERATING TEMPERATURE RANGE	SAE VISCOSITY GRADE
+0° F to +180° F (-18° C to -83° C	10W
+0° F to +210° F (-18° C to +99° C)	10W-20, 10W-30
+50° F to +210° F (+10° C to +99° C)	20W-20

Note: Hydraulic oils must have anti-wear qualities at least to API Service Classification GL-3, and sufficient chemical stability for mobile hydraulic system service. JLG Industries, recommends standard UTTO hydraulic oil, which has an SAE viscosity of 10W-30 and a viscosity index of 152.

Note: When temperatures remain consistently below 20°F (–7°C), JLG Industries recommends the use of a premium "cold weather" hydraulic fluid (Viscosity Grade 32.)

Note: Aside from JLG recommendations, it is not advisable to mix oils of different brands or types, as they may not contain the same required additives or be of comparable viscosities. If use of hydraulic oil other than standard UTTO is desired, contact JLG Industries for proper recommendations.

Table 8. Lubrication Specifications

KEY	SPECIFICATIONS
MPG	Multipurpose Grease having a minimum dripping point of 350° F. Excellent water resistance and adhesive qualities, and being of extreme pressure type. (Timken OK 40 pounds minimum).
EPGL	Extreme Pressure Gear Lube (oil) meeting API service classification GL-5 or MIL-Spec MIL-L-2105.
HO	Hydraulic Oil. ISO-Vg grade 32, 46. Standard UTTO.
CL	Chain Lube. Use Mobil 375 NC.
PTFE	Polytetrafluoroethylene dry lube.

Note: Refer to ***Lubrication Chart, page 102*** for specific lubrication locations on machine.

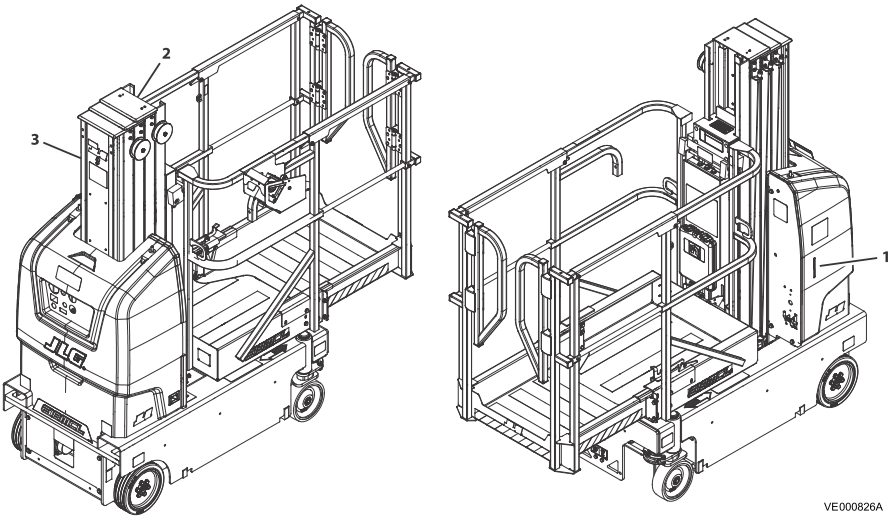


Table 9. Lubrication Chart

ITEM	COMPONENT	NO/ TYPE (a) LUBE POINTS	LUBE/ METHOD	INTERVAL (b)				COMMENTS
				3 MONTHS	6 MONTHS	1 YEAR	2 YEARS	
1	Hydraulic Oil	Fill To Line on Reservoir 5 Qt. Reservoir	HO - Check Hyd. Oil Level HO - Change Hyd. Oil				X	Check fluid level every day. (c) Change hydraulic oil every 2 years.
2	Mast Chains	2 - Per Mast Section	CL - Brush or Spray		X			Inspect and lubricate.
3	Mast Channels	2 - Per Mast Section	PTFE - Spray		X			Inspect, lubricate if dry.
Key to Lubricants:		**MPG** - Multipurpose Grease **HO** - Hydraulic Oil - ISO-Vg grade 32, 46 **CL** - Chain Lube. Use Mobil 375 NC **PTFE** - Polytetrafluoroethylene dry lube						

Note: **(a)** Be certain to lubricate like items on each side of the machine.
(b) Recommended lubricating intervals are based on normal use. If machine is subjected to severe operating conditions, such as a high number of cycles, location, corrosive/dirty environment, etc., user must adjust lubricating requirements quarterly.
(c) Prior to checking hydraulic oil level, operate machine through one complete cycle of lift function (full up and down). Failure to do so will result in incorrect oil level reading on the hydraulic reservoir.

6.3.3 Mast Prop

⚠ WARNING

Never work under an elevated platform until it has been restrained from movement with the mast prop, blocking or overhead sling.

⚠ CAUTION

The mast prop must be used whenever maintenance performed on the machine requires the mast to be raised and only with no load in the platform.

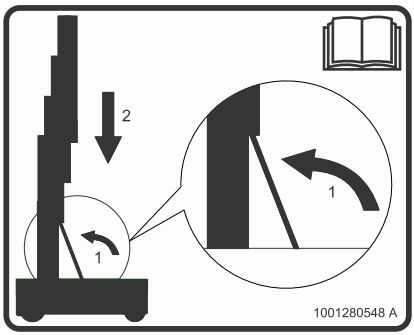
The mast prop is the battery cover located below the platform.

To engage the mast prop:

1. From the Ground Control Station, raise the platform far enough to unlatch and lift battery cover and position it below the lowest mast channel to allow the mast prop to be engaged.
2. Lower the platform until the battery cover rests against bottom of the mast channel, stopping all downward movement of the platform.
3. Turn off machine power by pressing the emergency stop switch at the Ground Control Station.

To disengage the mast prop:

1. Pull out the emergency stop switch at the ground and raise the platform enough to lower and latch the battery cover back onto the frame.



6.4 BATTERY MAINTENANCE AND CHARGING (LEAD ACID/AGM)

⚠ WARNING

To avoid injury from an explosion, do not smoke or allow sparks or a flame near battery during servicing. Always wear eye and hand protection when servicing batteries.

6.4.1 Battery Charging (Daily)

⚠ WARNING

When battery charger is to be used, charging harness must be plugged into a grounded receptacle. If receptacle is not grounded and a malfunction should occur, the machine could cause serious electrical shock.

For increased battery life:

- Batteries should be kept at highest state of charge permitted by availability at job site and machine use. Charge batteries before they reach 20% state of charge. Avoid completely discharging the batteries.
- Fully charge the batteries each day the machine is used.
- Charge the batteries at available times between use. Flooded lead acid/AGM batteries do not develop a charging memory.
- If applicable, be sure the battery fluid covers the battery plates before charging. To avoid overflow, do not top off the fluid level until after charging.

⚠ CAUTION

When adding distilled water to the batteries, non-metallic containers and/or funnels must be used. Add water until electrolyte covers plates. Do not charge batteries unless electrolyte covers the plates.

Note: To avoid electrolyte overflow, add distilled water to batteries after charging. When adding water to the battery, fill only to level indicated or 3/8" above separators.

6.4.2 Battery Maintenance (Quarterly)

⚠ CAUTION

When adding distilled water to the batteries, non-metallic containers and/or funnels must be used. Add water until electrolyte covers plates. Do not charge batteries unless electrolyte covers the plates.

Note: To avoid electrolyte overflow, add distilled water to batteries after charging. When adding water to the battery, fill only to level indicated or 3/8" above separators.

1. Open battery compartment cover to allow access to battery terminals and vent caps.

2. Remove all vent caps and inspect electrolyte level of each cell. Electrolyte level should be to the ring approximately one inch from top of battery. Fill batteries with distilled water only. Replace and secure all vent caps.
3. Remove battery cables from each battery post one at a time, negative first. Clean cables with acid neutralizing solution (e. g., baking soda and water or ammonia) and wire brush. Replace cables and/or cable clamp bolts as required.
4. Clean battery post with wire brush then reconnect cable to post. Coat non-contact surfaces with mineral grease or petroleum jelly.
5. When all cables and terminal posts have been cleaned, ensure all cables are properly positioned and do not get pinched. Close battery compartment cover.
6. Power up machine and verify it functions properly.

6.5 BATTERY MAINTENANCE AND CHARGING (LITHIUM-ION)

NOTICE

Do not tamper with, open, or attempt to service the battery. It contains no serviceable parts.

6.5.1 Battery Charging

- Only use the JLG-installed 24 V charger, which has been rated specifically for this machine and battery type, to charge the batteries. Do not substitute this charger for a different charger.
- Charge batteries in a well-ventilated area. Avoid charging in extreme temperatures.
- Charge the batteries to 100% whenever possible.
- Avoid deep discharges (below 10%).
- Charge batteries regularly, even if the machine is not in use, to maintain optimal performance.

Note: If the machine is being used, stored, or sitting overnight in a cold environment, plug in the machine to keep the batteries full and warm. If it is not plugged in, the batteries may be cold and will need to warm up before the machine can fully function.

6.5.2 General Maintenance

⚠ WARNING

If any damage to the batteries is discovered during machine inspection, discontinue use immediately. Do not use the machine until the issue has been investigated and corrected by a qualified mechanic.

- Do not tamper with, open, or attempt to service the battery. It contains no serviceable parts.
- Periodically inspect batteries for signs of swelling, discoloration, smoke, dents, damage, or smells. If any abnormalities are detected, discontinue use immediately and notify a qualified mechanic.
- Keep battery contacts clean and free of dust and debris to ensure a good connection and efficient charging.
- For long-term storage, store machines in a cool, dry place away from direct sunlight and heat sources. Avoid storing batteries in fully discharged or fully charged states for extended periods. Store batteries at 30-50% state of charge.
- Avoid exposing batteries to extreme temperatures
- Routinely use and charge the battery. Idle batteries can lose capacity over time. Perform a full charge and discharge cycle every 6 to 12 months to maintain proper state of charge calibration and cell balancing.
- Do not exchange lithium-ion batteries for a different type of battery. Using incompatible devices can cause damage to the machine.
- Monitor battery performance regularly. Unusual drops in performance or capacity can indicate the need for maintenance or replacement.

6.6 RADIO FREQUENCY (RF) INFORMATION

Note: The ClearSky Smart Fleet™ CS550 connectivity module antenna is internal to the assembly. The CS550 connectivity module complies with the wireless certification regulations in the regions of sale. Machines equipped with ClearSky Smart Fleet telematics must be received by countries that are certified to have ClearSky Smart Fleet. For a full listing of ClearSky Smart Fleet certified countries, please refer to the ClearSky webpage on the JLG website.

6.6.1 Federal Communications Commission (FCC)

FCC Interference Statement

ClearSky CS550 has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

> (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Notice Regarding Radio Frequency Radiation Exposure

ClearSky CS550 complies with the FCC radio frequency exposure limits prescribed for mobile use (i.e,. antennas are greater than 20 cm from a person's body) in an uncontrolled environment. Consequently, a person within 20 cm (8 in) of a CS550 that is connected to machine battery power could expose that person to RF energy in excess of what has been established by the FCC RF exposure guidelines.

6.6.2 Innovation, Science and Economic Development (ISED)

Radio Frequency Interference Requirements

The ClearSky CS550 Class B digital apparatus complies with Canadian ICES-003. [Canada Compliance Label: CAN ICES-3 (B)/NMB-3(B)]

This device complies with Industry Canada license-exempt RSS standard (s). Operation is subject to the following two conditions:

> (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Notice Regarding Radio Frequency Radiation Exposure

ClearSky CS550 complies with the ISED radio frequency exposure limits prescribed for mobile use (i.e,. antennas are greater than 20 cm from a person's body) in an uncontrolled environment. Consequently, a person within 20 cm (8 inches) of a CS550 that is connected to machine battery power could expose that person to RF energy in excess of what has been established by the ISED RF exposure guidelines.

6.6.3 European Union Conformity (CE)

CE Interference Statement

JLG Industries, Inc. declares that the radio equipment ClearSky Smart Fleet CS550 Connectivity Module complies with Directive 2014/53/EU. Full details can be found on the declaration of conformity. The CS550 is intended to be mounted on JLG machines and has integrated beacon functionality. Additionally, it provides telematics data via WiFi or Cell, and provides local diagnostic data exchange with a mobile device connected via WiFi and BLE. Mobile device software is obtained through Google Play Store or Apple App Store.

Frequencies of Operation [and maximum power output]:

- LTE Cat M1: 700/750/800/850/900/1700/1800/1900/2100 MHz [23 dBm±2 dB]
- 2G GPRS: 900MHz [Class 4, 33 dBm ±3 dB], 1800MHz [Class 1, 30 dBm ±3 dB]
- 2G EGPRS: 900MHz [Class E2, 27 dBm ±3 dB], 1800MHz [Class E2, 26 dBm ±3 dB]
- WiFi (IEEE 802.11b/g/n): 2400-2483.5 MHz [18 dBm e.i.r.p]
- Bluetooth (BLE, Mesh 1.0 and proprietary GATT): 2400-2483.5 MHz [12.1 dBm e.i.r.p]
- GNSS (receive only: GPS, GLONASS, BeiDou, Galileo): 1575.42MHz, 1561.098MHz, 1602MHz

Ensure at least 20 cm separation distance is maintained between user's body and CS550 module to meet Maximum Permissible Exposure (MPE) restrictions for RF exposure.

Contact: JLG EMEA B.V., Polaris Avenue 63, 2132 JH Hoofddorp, Netherlands

6.7 SUPPLEMENTAL INFORMATION ONLY APPLICABLE TO CE/UKCA MACHINES (EN280-1:2022)

The following information is provided in accordance with the requirements of the European Machinery Directive 2006/42/EC or Supply of Machinery (Safety) Regulations 2008 No. 1597.

The A-Weighted emission sound pressure level at the specified workstation based on test methods per EN280-1:2022 Annex M.1 does not exceed 70 dB (A).

The vibration highest root mean square value of weighted acceleration to which the whole body is subjected during driving or lifting does not exceed 0.5 m/s².

JLG declares that machines included in this manual, before placing on the market, have been subjected to the required tests in accordance with EN280-1:2022, clause 5.3.

Note: EC/UKCA Declarations of Conformity may vary. Refer to the original serial number-specific declaration for your machine to determine which is applicable.

6.8 EC DECLARATION OF CONFORMITY

Manufacturer
JLG Industries, Inc.

Address
1 JLG Drive
McConnellsburg, PA 17233 USA

Technical File
JLG EMEA B.V.
Polaris avenue 63,
2132 JH Hoofddorp
The Netherlands

Contact/Position
Senior Manager — Product Strategy EMEAI

Date/Place
Hoofddorp, Netherlands

Machine Type
Mobile Elevating Work Platform

Model Type
E18MML, E18MCL, E18MSP

EC-Number
2842

Certificate Number
DK-MAC000118

Notified Body
TÜV SÜD Danmark

Address
NB 2443
Strandvejen 125, 2900 Hellerup, Denmark

Reference Standards

- EN 55011:2016+A11:2020
- EN 61000-6-2:2005
- EN 60204-1:2018
- EN 280-1:2022
- EN ISO 12100:2010

JLG Industries, Inc. hereby declares that the above mentioned machine conforms with the requirements of:

- 2006/42/EC — Machinery Directive
- 2014/30/EU — EMC Directive
- 2014/53/EU — RED Directive (If fitted with optional equipment)

Note: This declaration conforms with the requirements of annex II-A of the council directive 2006/42/EC. Any modification of the above described machine violates the validity of this declaration.

6.9 UKCA DECLARATION OF CONFORMITY

Manufacturer
JLG Industries, Inc.

Address
1 JLG Drive
McConnellsburg, PA 17233 USA

Technical File
JLG Industries UK Ltd
Braunstone Frith Industrial Estate
Unit 3 Sunningdale Road
Leicester, LE3 1UX
United Kingdom

Contact/Position
Director of Engineering — Europe

Date/Place
Leicester, United Kingdom

Machine Type
Mobile Elevating Work Platform

Model Type
E18MML, E18MCL, E18MSP

AB-Number
0463

Certificate Number
UK-MAC000117

Approved Body
TÜV SÜD BABT

Address
0168
Octagon House, Concorde Way Segensworth North
Fareham, Hampshire, PO15 5RL England

Reference Standards

- EN 55011:2016+A11:2020
- EN 61000-6-2:2005
- EN 60204-1:2018
- EN 280-1:2022
- EN ISO 12100:2010

JLG Industries, Inc. hereby declares that the above mentioned machine conforms with the requirements of:

- 2008 No. 1597 - Supply of Machinery (Safety) Regulations 2008
- 2016 No. 1091 - Electromagnetic Compatibility Regulations 20165
- 2017 No. 1206 - Radio Equipment Regulations 2017 (if fitted with optional equipment)

Note: This declaration conforms with the requirements of annex II-A of the Regulations 2008 No. 1597. Any modification of the above described machine violates the validity of this declaration.

6.10 SUPPLEMENTAL INFORMATION ONLY APPLICABLE TO CE/UKCA MACHINES (EN280:2013+A1:2015)

The following information is provided in accordance with the requirements of the European Machinery Directive 2006/42/EC or Supply of Machinery (Safety) Regulations 2008 No. 1597.

The A-Weighted emission sound pressure level at the work platform is less than 70 dB(A).

The vibration total value to which the hand-arm system is subjected does not exceed 2,5 m/s². The highest root mean square value of weighted acceleration to which the whole body is subjected does not exceed 0.5 m/s².

Note: EC/UKCA Declarations of Conformity may vary. Refer to the original serial number-specific declaration for your machine to determine which is applicable.

6.11 EC DECLARATION OF CONFORMITY

Manufacturer
JLG Industries, Inc.

Address
1 JLG Drive
McConnellsburg, PA 17233 USA

Technical File
JLG EMEA B.V.
Polaris avenue 63,
2132 JH Hoofddorp
The Netherlands

Contact/Position
Senior Manager — Product Strategy EMEAI

Date/Place
Hoofddorp, Netherlands

Machine Type
Mobile Elevating Work Platform

Model Type
E18MML

EC-Number
2842

Certificate Number
DK-MAC000118

Notified Body
TÜV SÜD Danmark

Address
NB 2443
Strandvejen 125, 2900 Hellerup, Denmark

Reference Standards

- EN 55011:2016+A11:2020
- EN 61000-6-2:2005
- EN 60204-1:2018
- EN 280:2013+ A1:2015
- EN ISO 12100:2010

JLG Industries, Inc. hereby declares that the above mentioned machine conforms with the requirements of:

- 2006/42/EC — Machinery Directive
- 2014/30/EU — EMC Directive
- 2014/53/EU — RED Directive (If fitted with optional equipment)

Note: This declaration conforms with the requirements of annex II-A of the council directive 2006/42/EC. Any modification of the above described machine violates the validity of this declaration.

6.12 UKCA DECLARATION OF CONFORMITY

Manufacturer
JLG Industries, Inc.

Address
1 JLG Drive
McConnellsburg, PA 17233 USA

Technical File
JLG Industries UK Ltd
Braunstone Frith Industrial Estate
Unit 3 Sunningdale Road
Leicester, LE3 1UX
United Kingdom

Contact/Position
Director of Engineering — Europe

Date/Place
Leicester, United Kingdom

Machine Type
Mobile Elevating Work Platform

Model Type
E18MML

AB-Number
0463

Certificate Number
UK-MAC000117

Approved Body
TÜV SÜD BABT

Address
0168
Octagon House, Concorde Way Segensworth North
Fareham, Hampshire, PO15 5RL England

Reference Standards

- EN 55011:2016+A11:2020
- EN 61000-6-2:2005
- EN 60204-1:2018
- EN 280:2013+ A1:2015
- EN ISO 12100:2010

JLG Industries, Inc. hereby declares that the above mentioned machine conforms with the requirements of:

- 2008 No. 1597 - Supply of Machinery (Safety) Regulations 2008
- 2016 No. 1091 - Electromagnetic Compatibility Regulations 20165
- 2017 No. 1206 - Radio Equipment Regulations 2017 (if fitted with optional equipment)

Note: This declaration conforms with the requirements of annex II-A of the Regulations 2008 No. 1597. Any modification of the above described machine violates the validity of this declaration.

This Page is intentionally left blank

Serial Number _____

Any additional required certificates can be attached to the rear cover of this manual or stored in the manual box.

Date	Comments

Inspection, Maintenance and Repair Log

Corporate Office
JLG Industries, Inc.
1 JLG Drive
McConnellsburg, PA 17233-9533 USA
(717) 485-5161 (Corporate)
(877) 554-5438 (Customer Support)
(717) 485-6417

Visit our website for JLG Worldwide Locations.
www.jlg.com

OSHKOSH™