



Operation & Safety Manual

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

1250AJP

PVC 2607

3122581700

July 13, 2026 - Rev A

ANSI **CE** **UK** **CA**  **ERC**
AS/NZS

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.

Foreword

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.

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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

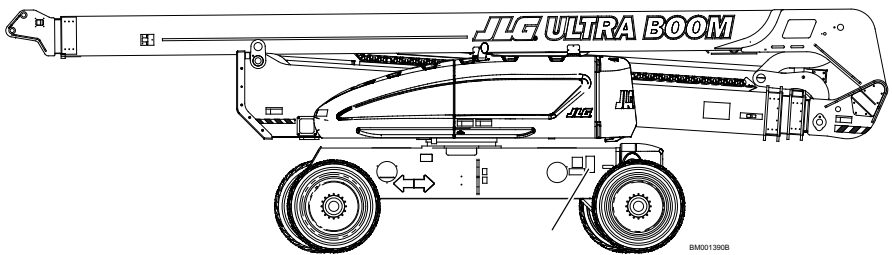
DATE	REVISION	DESCRIPTION
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Other Publications Available

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Service & Maintenance Manual	3122581800
Illustrated Parts Manual	3122581900

Serial Number Location

A serial number plate is affixed to the right side of the frame. If the serial number plate is damaged or missing, the machine serial number is stamped on the left side of the frame.



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SECTION 1

Safety Precautions

1.1 GENERAL

This section outlines the necessary precautions for proper and safe machine usage and maintenance. It is mandatory that a daily routine is established based on the content of this manual to promote proper machine usage. A maintenance program, using the information provided in this manual and the Service & 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 must 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.

This section contains the responsibilities of the owner, user, operator, lessor, and lessee concerning safety, training, inspection, maintenance, application, and operation. If there are any questions with regard to safety, training, inspection, maintenance, application, and operation, please contact JLG Industries, Inc. ("JLG").

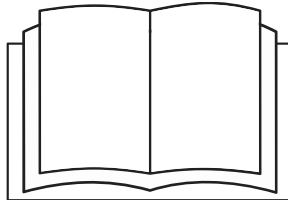
WARNING

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 recognizing and avoiding hazards associated with their operation) shall be authorized to operate a MEWP.

Safety Precautions

- 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 your utilization and application 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.
- 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 the User Responsibilities, Machine Preparation, and Inspection Section of this manual have been performed.
- Do not operate this machine until it has been serviced and maintained according to the maintenance and inspection requirements as specified in the machine's Service 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 accumulation 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

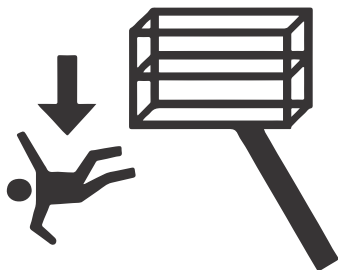
- Machine operation requires your full attention. Bring the machine to a full stop before using any device, i.e. cell phones, two-way radios, etc. that will distract your attention from safely operating the machine.
- Do not use the machine for any purpose other than positioning personnel, their tools, and equipment.
- Before operation, the user must be familiar with the machine capabilities and operating characteristics of all functions.
- Never operate a malfunctioning machine. If a malfunction occurs, shut down the machine. Remove the unit from service and notify the proper authorities.
- Do not remove, modify, or disable any safety devices.
- 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.
- When two or more persons are in the platform, the operator shall be responsible for all machine operations.
- Always ensure that power tools are properly stowed and never left hanging by their cord from the platform work area.

Safety Precautions

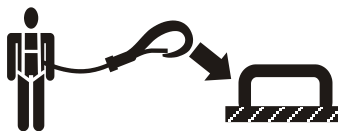
- When driving, always position boom over rear axle in line with the direction of travel. Remember, if boom is over the front axle, steer and drive functions will be reversed.
- Do not assist a stuck or disabled machine by pushing or pulling except by pulling at the chassis tie-down lugs.
- Fully lower platform and shut off all power before leaving machine.
- 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.
- 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 Hazards

- Before operating the machine, ensure all gates are closed and fastened in their proper position.



- During operation, occupants in the platform must wear a full body harness with a lanyard attached to an authorized lanyard anchorage point. Attach only one (1) lanyard per lanyard anchorage point.



Note: For machines covered under CE/UKCA certifications, the utilization of fall protection systems is limited to fall restraint devices.

- Enter and exit only through gate area. Use extreme caution when entering or leaving platform. Ensure that the platform 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 both feet firmly positioned on the platform floor at all times. Never position ladders, boxes, steps, planks, or similar items on unit to provide additional reach for any purpose.
- 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 with 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 boom 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 Distance (MAD) as shown in [Table — Minimum Approach Distances \(MAD\), page 17](#).
- Allow for machine movement and electrical line swaying.

Table 1. Minimum Approach Distances (MAD)

Voltage Range (Phase to Phase)	Minimum Approach Distance in Feet (Meters)
0 to 50 KV	10 (3)
Over 50K V 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)
Over 750 KV to 1000 KV	45 (14)
Note: This requirement shall apply except where employer, local or governmental regulations are more stringent.	

Safety Precautions

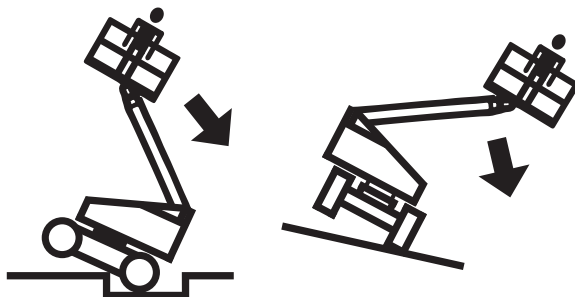
- Maintain a clearance of at least 10 ft (3m) between any part of the machine and its occupants, their tools, and their equipment from any electrical line or apparatus carrying up to 50,000 volts. One foot additional clearance is required for every additional 30,000 volts or less.
- The MAD may be reduced 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 MAD 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 Hazards

- 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 side slope 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. Keep all loads within the confines of the platform, unless authorized by JLG.

- Keep the chassis of the machine a minimum of 2 ft (0.6m) from holes, bumps, drop-offs, obstructions, debris, concealed holes, and other potential hazards at the ground level.
- Do not push or pull any object with the boom.
- 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.
- If boom assembly or platform is in a position that one or more wheels are off the ground, all persons must be removed before attempting to stabilize the machine. Use cranes, forklift trucks, or other appropriate equipment to stabilize machine.
- Do not operate the machine when wind conditions, including gusts, exceed 28 mph (12.5 m/s). Refer to [Table — Beaufort Scale \(For Reference Only\)](#), [page 19](#). Factors affecting wind speed are; platform elevation, surrounding structures, local weather events, and approaching storms.
- 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.
- Do not cover or increase surface area of the platform or the load. Do not carry large surface area items in the platform when operating outdoors. The addition of such items increases the exposed wind area of the machine. Increased areas exposed to wind will decrease stability.
- Do not increase the platform size with unauthorized modifications or attachments.

WARNING

Do not operate the machine when wind conditions exceed specifications shown in the General Specifications section of this manual or as shown on the capacity placard on the platform billboard.

Table 2. Beaufort Scale (For Reference Only)

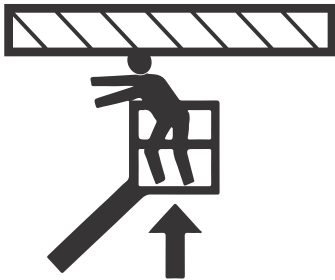
Beau- fort Number	Wind Speed		Description	Land Conditions
	mph	m/s		
0	0	0-0.2	Calm	Calm. Smoke rises vertically
1	1-3	0.3-1.5	Light air	Wind motion visible in smoke
2	4-7	1.6-3.3	Light breeze	Wind felt on exposed skin. Leaves rustle
3	8-12	3.4-5.4	Gentle breeze	Leaves and smaller twigs in constant motion
4	13-18	5.5-7.9	Moderate breeze	Dust and loose paper raised. Small branches begin to move.

Table 2. Beaufort Scale (For Reference Only) (continued)

Beau- fort Number	Wind Speed		Description	Land Conditions
	mph	m/s		
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 Hazards

- Approved head gear 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 during all operations.



- During operation, keep all body parts inside platform railing.
- Use the boom functions, not the drive function, to position the platform close to obstacles.
- 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 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.
- 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 use high speed drive 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 boom or platform. Position barricades on floor if necessary.

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 boom is in the stowed position and, if equipped, the turntable locked prior to towing, lifting or hauling. The platform must be completely empty of tools.
- When lifting machine, lift only at designated areas of the machine. Lift the unit with equipment 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.
- 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.

Safety Precautions

- Always relieve hydraulic pressure from all hydraulic circuits before loosening or removing hydraulic components.
- 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.
- Do not use machine as a ground for welding.
- When performing welding or metal cutting operations, precautions must be taken to protect the chassis from direct exposure to weld and metal cutting spatter.
- Do not refuel combustion engine-powered machines with the engine running.
- 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 & 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

- 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.

1.6 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.

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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.

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

The operator 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 user's 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 machine inspections and maintenance required by JLG Industries, Inc. Consult local regulations for further requirements for MEWPs. The frequency of inspections and maintenance must be increased as necessary when the machine is used in a harsh or hostile environment, if the machine is used with increased frequency, or if the 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 is an Operator change	User or Operator	User or Operator	Operation & Safety Manual
Pre-Delivery Inspection (See Note)	Before each sale, lease, or rental delivery	Owner, Dealer, or User	Qualified JLG Mechanic	Service & Maintenance Manual and applicable JLG inspection form

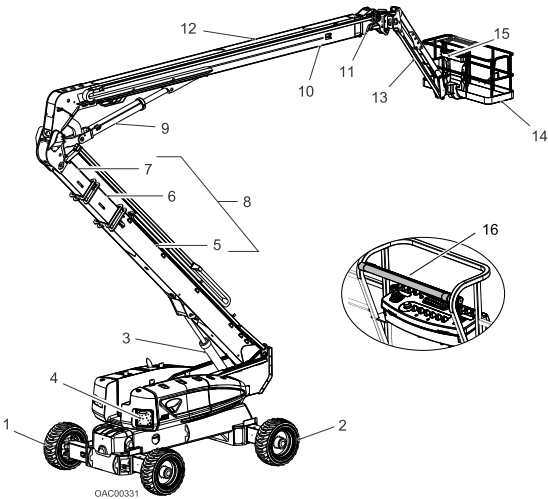
Table 3. Inspection and Maintenance Table (continued)

Type	Frequency	Primary Responsibility	Service Qualification	Reference
Frequent Inspection (See Note)	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 & Maintenance Manual and applicable JLG inspection form
Annual Machine Inspection (See Note)	Annually, no later than 13 months from the date of prior inspection	Owner, Dealer, or User	Factory-Trained Service Technician (Recommended)	Service & Maintenance Manual and applicable JLG inspection form
Preventive Maintenance	At intervals as specified in the Service & Maintenance Manual	Owner, Dealer, or User	Qualified JLG Mechanic	Service & Maintenance Manual
Note: Inspection forms are available from JLG. Use the Service & 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 specified JLG product model.

2.3 1250AJ MACHINE COMPONENTS



- | | |
|-----------------------------|----------------------------|
| 1. Front Drive\Steer Wheels | 10. Main Base Boom Section |
| 2. Rear Drive\Steer Wheels | 11. Main Boom Fly Section |
| 3. Tower Lift Cylinder | 12. Main Boom Assembly |
| 4. Ground Console | 13. Jib |
| 5. Tower Base Boom Section | 14. Platform |
| 6. Tower Mid Boom Section | 15. Platform Console |
| 7. Tower Fly Boom Section | 16. SkyGuard |
| 8. Tower Boom Assembly | |
| 9. Main Lift Cylinder | |

2.4 PRE-START INSPECTION

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

1. **Cleanliness** — Check all surfaces for leakage (oil, fuel, 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.

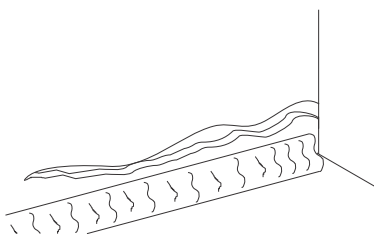


Figure 1. Parent Metal Crack

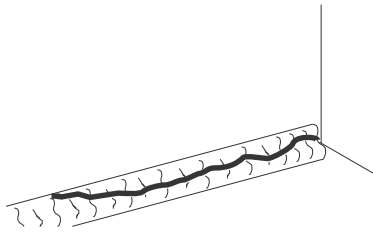


Figure 2. Weld Crack

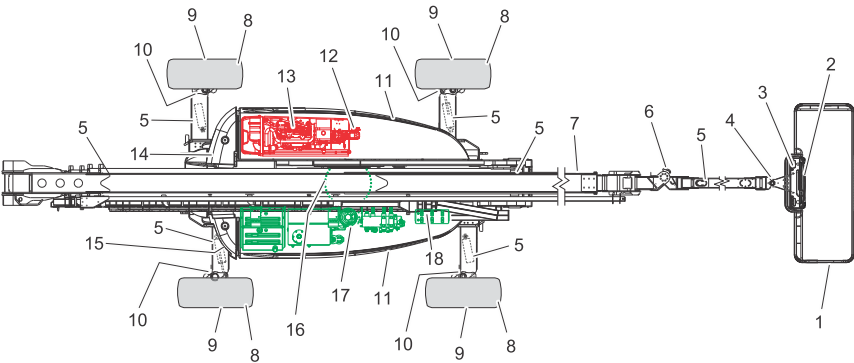
3. **Decals and Placards** — Check all for cleanliness and legibility. Make sure none of the decals and placards are missing. Make sure all illegible decals and placards are cleaned or replaced.
4. **Operation and Safety Manuals** — Make sure a copy of the Operation and Safety Manual, AEM Safety Manual (ANSI markets only), and ANSI Manual of Responsibilities (ANSI markets only) is enclosed in the weather resistant storage container.
5. **Walk-Around Inspection** — Perform as instructed.
6. **Battery** — Charge as required.
7. **Fuel (Combustion Engine Powered Machines)** — Add the proper fuel as necessary.
8. **Engine Oil Supply** — Ensure the engine oil level is at the Full mark on the dipstick and the filler cap is secure.
9. **Hydraulic Oil** — Check the hydraulic oil level. Ensure hydraulic oil is added as required.
10. **Accessories/Attachments** — Refer to the Accessories section in this manual or the accessory installed upon the machine for specific inspection, operation, and maintenance instructions.
11. **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 Section 4 for more specific operating instructions.

- 12. **Boom Control System Check** — Perform a check of the boom control system as specified in this section.
- 13. **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.
- 14. **Lanyard Attach Points** — During operation, occupants in the platform must wear a full body harness with a lanyard attached to an authorized lanyard anchorage point. Attach only one (1) lanyard per lanyard anchorage point.

! 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.

2.5 1250AJP WALK-AROUND INSPECTION



OAC00341

2.5.1 General

Begin the Walk-Around Inspection at Item 1, as noted on the diagram. Continue checking each item in sequence for the conditions listed in the following checklist.

! 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 chassis underside. Checking this area may result in discovery of conditions which could cause extensive machine damage.

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

1. **Platform Assembly and Gate** — Footswitch works properly, not modified, disabled or blocked. Latch and hinges in working condition.
2. **SkyGuard** — See Inspection Note.
3. **Platform Control Console** — Switches and levers return to neutral when activated and released, decals/placards secure and legible, control markings legible.
4. **Platform Rotator** — See Inspection Note.
5. **All Hydraulic Cylinders** — No visible damage; pivot pins and hydraulic hoses undamaged, not leaking.
6. **Jib Rotator** — See Inspection Note.
7. **Boom Sections/Uprights/Turntable** — See Inspection Note.
8. **Wheel/Tire Assemblies** — Properly secured, no missing lug nuts. Inspect for worn tread, cuts, tears or other discrepancies. Inspect wheels for damage and corrosion.
9. **Drive Motor, Brake, and Hub** — No evidence of leakage.
10. **Steering Spindles and Sensors** — See Inspection Note.
11. **Hood Assemblies** — See Inspection Note.
12. **Main Hydraulic Pump** — See Inspection Note.
13. **Air Shutoff Valve (ASOV) (If Equipped)** — See Inspection Note.
14. **Counterweight** — See Inspection Note.
15. **Ground Control Console** — Switches and levers return to neutral when activated and released, decals/placards secure and legible, control markings legible.
16. **Turntable Bearing** — Evidence of proper lubrication. No evidence of loose bolts or looseness between bearing and machine.
17. **Swing Drive** — No evidence of damage.
18. **Auxiliary Hydraulic Pump** — See Inspection Note.

2.6 FUNCTION CHECK

Perform the Function Check as follows:

1. From the ground control panel with no load in the platform:
 - a. Ensure that all machine functions are disabled when the Emergency Stop Button is pushed in.
 - b. Ensure all functions stop when the function switch is released.
 - c. Operate all functions and check all limiting and cut-out switches to ensure proper operation.
 - d. Check auxiliary power and ensure proper operation.
 - e. Raise main boom approximately horizontal, then extend and retract boom sections. All boom sections should extend/retract together at the same rate of speed. Any difference would indicate delayed movement and loose wire ropes.

WARNING

If delayed movement is detected in wire rope operation, lower platform to stowed position, shut down machine, and have wire ropes inspected/ serviced by a qualified JLG mechanic. Loose or mis-adjusted wire ropes could result in serious injury or death.

2. Check the Boom Control System. Refer to Boom Control System Check Procedure below.
3. From the platform control console:
 - a. Ensure that the control console is firmly secured in the proper location.
 - b. Check that all guards protecting the switches or locks are in place.
 - c. Ensure that all machine functions are disabled when the Emergency Stop Button is pushed in.
 - d. Ensure that all machine functions stop when the footswitch is released.
 - e. Operate all functions and check all limit and cut-out switches to ensure proper operation.
4. With the platform in the stowed position:
 - a. Drive the machine on a grade, not to exceed the rated gradeability, and stop to ensure the brakes hold.
 - b. Check that the tilt indicator is illuminated to ensure proper operation.
5. Swing the boom over either rear corner of the machine and ensure that the Drive Orientation indicator illuminates and that the Drive Orientation Override switch must be used for the drive function to operate.

6. Ensure machine is positioned on a smooth, firm surface with axles fully extended and drive machine with boom elevated beyond 6° horizontal. Ensure drive speed is reduced while operating.

2.7 BOOM CONTROL SYSTEM CHECK PROCEDURE

Perform the following check with no load (personnel or material) in the platform from the ground control station.

1. Extend all axles fully.
2. With the boom fully retracted, raise the boom off the boom rest to horizontal.
3. Position the jib horizontal, jib straight, and platform level.
4. Extend the boom until it stops.
5. Boom must stop on colored stripe matching the capacity indicator. If the boom does not stop on the correct stripe, the system must be repaired by JLG authorized Service Personnel before the machine can be used.
6. Push and hold the gray Boom Control System Test Button on the ground control panel. The lighting of the green Boom Control System Calibrated indicator indicates the system is functioning properly. No indicator light or the lighting of the red Boom Control System Warning indicator, indicates the system must be repaired by JLG authorized Service Personnel before the machine can be used.

2.8 SKYGUARD® FUNCTION CHECK

From the Platform Control Station in an area free from obstructions:

1. Operate the telescope-out function.
2. Activate the **SkyGuard SkyLine®** sensor by pressing rod to break connection between the rod and the right bracket.
3. Once the sensor has been activated, verify the following conditions:
 - a. Telescope-out function stops and telescope-in function operates for a short duration.
 - b. The horn sounds.
 - c. If equipped with a configured ClearSky CS550 or SkyGuard beacon, the beacon illuminates.

Note: If SkyGuard is enabled with the Soft Touch system, functions will cut out instead of reversing.

4. Release controls, reattach the rod to the right bracket and recycle the foot switch. Make sure normal operation is available.

If SkyGuard remains activated after function reversal or cutout, press and hold the SkyGuard Override Switch to allow normal use of machine functions until the sensor is deactivated.

Refer to the SkyGuard Activation/Deactivation section for additional information.

2.9 OSCILLATING AXLE LOCKOUT TEST (IF EQUIPPED)

The front axles will oscillate when the boom is in the transport position.

NOTICE

Lockout system test must be performed quarterly, any time a system component is replaced, or when improper system operation is suspected.

Note: Ensure the axles are extended (if equipped) and the boom is fully retracted, lowered, and centered between the rear wheels prior to beginning lockout cylinder test.

1. Place a 6 inch (15.2 cm) high block with ascension ramp in front of left front wheel.
2. From platform control station, start engine.
3. Place the Drive control lever to the forward position and carefully drive machine up ascension ramp until left front wheel is on top of block.
4. Carefully extend the boom just enough to get it out of the transport position.
5. With boom in this position, place Drive control lever to Reverse and carefully drive machine off of block and ramp.
6. Have an assistant check to see that left front or right rear wheel remains elevated in position off of the ground.
7. Carefully return the boom to the transport position. When boom reaches the transport position, carefully activate Drive to release cylinders. The lockout cylinders should release and allow the wheel to rest on ground.
8. Repeat the procedure for the right oscillation cylinder checking to see that the right front or left rear wheel remains elevated in position off of the ground.
9. If lockout cylinders do not function properly, have qualified personnel correct the malfunction prior to any further operation.

SECTION 3

Machine Controls and Indicators

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 functions.

3.2 CONTROLS AND INDICATORS

Note: The indicator panels use different shaped symbols to alert the operator to different types of operational situations that could arise. The meaning of those symbols are explained below.



Indicates a potentially hazardous situation, which if not corrected, could result in serious injury or death. This indicator will be red.

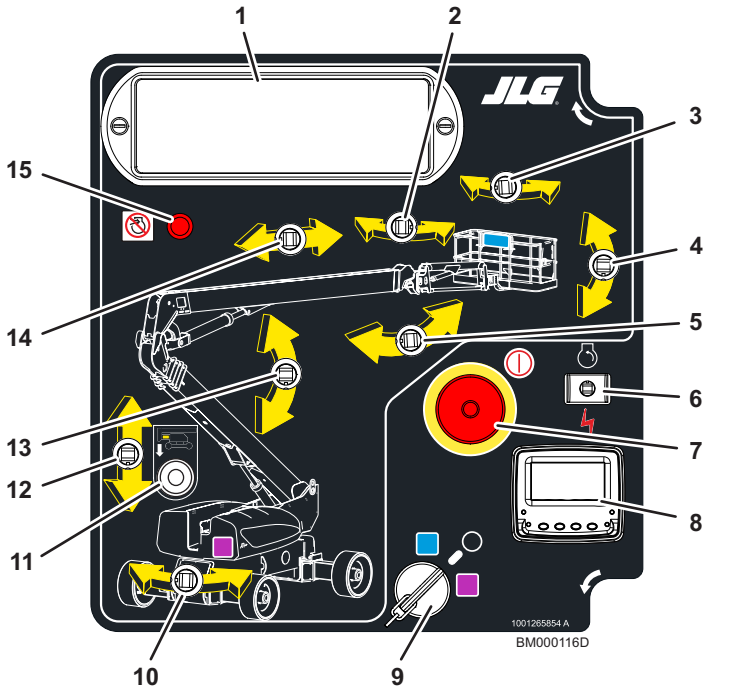


Indicates an abnormal operating condition, which if not corrected, may result in machine interruption or damage. This indicator will be yellow.



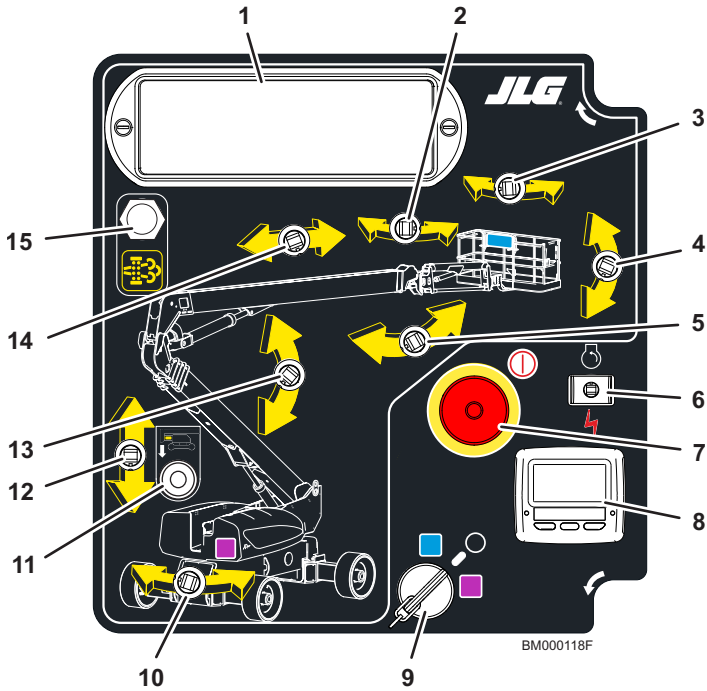
Indicates important information regarding the operating condition, i.e. procedures essential for safe operation. This indicator will be green with the exception of the capacity indicator which will be yellow.

3.3 GROUND CONTROL STATION



- | | |
|--|---|
| 1. Indicator Panel | 9. Platform / Ground Select Switch |
| 2. Jib Swing | 10. Swing |
| 3. Platform Rotate | 11. Tower Boom Stow Indicator (If Equipped) |
| 4. Platform Leveling Override Switch | 12. Tower Boom Lift |
| 5. Jib Lift | 13. Main Boom Lift |
| 6. Engine Start / Auxiliary Power Switch | 14. Main Boom Telescope |
| 7. Power / Emergency Stop Switch | 15. Air Shutoff Valve (ASOV) (If Equipped) |
| 8. Multifunction Display | |

Figure 3. 1250AJP Ground Control Station



- | | |
|-----------------------------------|---|
| 1. Indicator Panel | 9. Platform / Ground Select Switch |
| 2. Jib Swing | 10. Swing |
| 3. Platform Rotate | 11. Tower Boom Stow Indicator (If Equipped) |
| 4. Platform Leveling Override | 12. Tower Boom Lift |
| 5. Jib Lift | 13. Main Boom Lift |
| 6. Engine Start / Auxiliary Power | 14. Main Boom Telescope |
| 7. Power / Emergency Stop | 15. Diesel Particulate Filter (DPF) |
| 8. Multifunction Display | |

Figure 4. 1250AJP Ground Control Station with DPF

3.3.1 Ground Control Station Functions

! WARNING

When operating the boom ensure there are no personnel around or under platform.

! WARNING

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.

Note: When machine is shut down the Platform/ Ground Select switch and Emergency Stop must be positioned to Off.
To operate machine from the platform, the Platform/Ground Select switch must be turned to the blue square.
To operate the machine from the ground, the Platform/Ground Select switch must be turned to the purple square.



Air Shutoff Valve (ASOV) (If Equipped)

The red LED ASOV light indicates when the valve has been actuated.



Diesel Particulate Filter (DPF) (If Equipped)

This button initiates the standstill exhaust system cleaning.



Engine Start / Auxiliary Power Switch

To start the engine, the switch must be held up until the engine starts.

Note: When the glow plug indicator is illuminated on machines equipped with diesel engines, wait until the light goes out before cranking the engine.



To use auxiliary power, the switch must be held down for the duration of auxiliary pump use.



! CAUTION

When operating on auxiliary power, do not operate more than one function at a time. Simultaneous operation can overload the auxiliary pump motor.

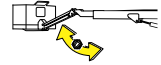
Indicator Panel

The Indicator Panel contains indicator lights which signal problem conditions or functions operating during machine operation.



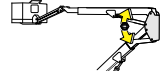
Jib

Provides raising and lowering of the jib.



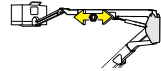
Main Boom Lift

Provides raising and lowering of the main boom.



Main Boom Telescope

Provides extension and retraction of the main boom.



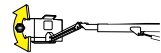
Multifunction Display

Registers engine hours, fuel level (if applicable), and Diagnostic Trouble Codes (DTCs) from the JLG Control System and the engine control system.



Platform Leveling Override Switch

A three position switch allows the operator to adjust the automatic self leveling system. This switch is used to adjust platform level in situations such as ascending/descending a grade.

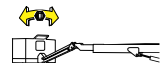


WARNING

Only use the platform leveling override function for slight leveling of the platform. Incorrect use could cause the load/occupant to shift or fall. Failure to do so could result in death or serious injury.

Platform Rotate

Provides rotation of the platform.



Platform / Ground Select Switch

The three position, key operated switch supplies power to the platform control console when positioned to Platform. With the switch key turned to the Ground position only ground controls are operable.

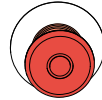


Note: When the Platform/Ground Select Switch is in the center position, power is shut off to the controls at both operating stations. Remove the key to prevent the controls from being actuated.



Power / Emergency Stop Switch

A two-position red mushroom shaped switch supplies power to Platform/Ground Select switch when pulled out (On position). When pushed in (Off position), power is shut off to the Platform/Ground Select switch.



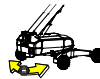
Note: When Power/Emergency Stop switch is in the On position and engine is not running, an alarm will sound, indicating the ignition is On.

NOTICE

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

Swing

Provides 360 degrees continuous turntable rotation.



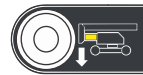
Tower Boom Lift

This switch provides raising and lowering of the tower boom. This function works only when the tower boom is fully retracted.



Tower Boom Stow Indicator (If Equipped)

A green LED illuminates when the tower boom is in the stowed position.



Tower Boom Telescope

This switch provides extending and retracting of the tower boom. This function works only when the tower boom is fully elevated.

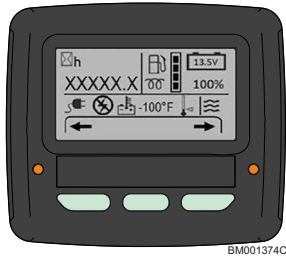


! WARNING

To avoid serious injury, do not operate machine if tower lift and tower telescope functions do not operate in the above sequence.

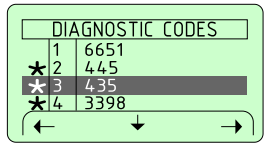
3.4 MULTIFUNCTION DISPLAY

The multifunction display shows engine hours, fuel level (if applicable), and Diagnostic Trouble Codes (DTCs) from both the JLG Control System and the engine control system. During machine start up, with no active DTCs in the control system, the splash screen will show for 3 seconds and then switch to main screen. If there is an active DTC while powering up the machine, the splash screen will show for 3 seconds, and then launch the Diagnostics Screen. The indicator lamps will light when there is an active DTC in the Fault Log.

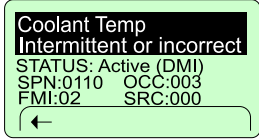


3.4.1 Multifunction Display Diagnostic Screen

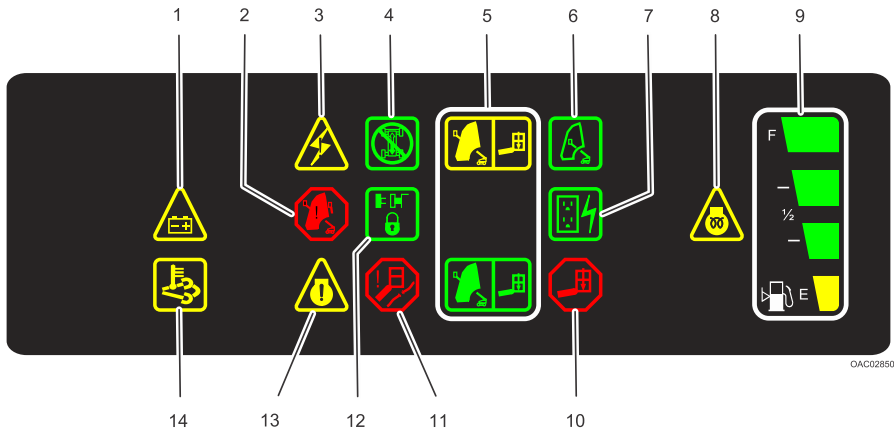
The Diagnostic Screen will show active and inactive faults from the JLG Control System on the screen. An asterisk (*) will be displayed to show active faults.



The Engine Diagnostics Screen will show SPN (Suspect Parameter Number), FMI (Failure Mode Identifier), and Occurrence count information. Engine SPN text is not scrollable. If there is more than one engine trouble code, the operator must exit from the Engine DTC Screen to see other SPN and FMI information.



3.5 GROUND CONTROL INDICATOR PANEL



- | | |
|-----------------------------------|---------------------------|
| 1. Battery Charge | 8. Glow Plug |
| 2. Boom Control System Warning | 9. Fuel Gauge |
| 3. System Distress | 10. Platform Overload |
| 4. Drive and Steer Disable | 11. Wire Rope Service |
| 5. Capacity Zone Indicator | 12. Axles Set |
| 6. Boom Control System Calibrated | 13. Engine Error |
| 7. AC Generator | 14. Emissions Temperature |

3.5.1 Ground Control Indicator Panel Functions

AC Generator
Indicates the generator is in operation.



Axles Set
Indicates the axles are fully extended. The indicator will flash as the axles are extending or retracting and be solid when fully extended. The indicator icon will go out when the axles are fully retracted.



Battery Charge
Indicates a problem in the battery or charging circuit, and service is required.



Boom Control System Calibrated
When illuminated, the light indicates the Boom Control System is properly calibrated.



Boom Control System Warning

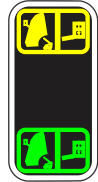
Indicates the platform is outside the operating area and operation of certain boom functions may be disabled (i.e. lift, telescope). Attempts to use the disabled functions cause the indicator to flash and an alarm to sound. Immediately return the platform to the ground. If the indicator remains lit a boom control system fault or failure has been detected. If a failure is discovered, the system must be repaired by a JLG factory trained technician before the machine can be used.



Capacity Zone Indicator

Indicates the platform capacity zone for the current position of the platform. Restricted capacities are permitted at restricted platform positions (shorter boom lengths and higher boom angles).

Note: Refer to the capacity decals on the machine for restricted and unrestricted platform capacities.



Drive and Steer Disable

Indicates the Drive and Steer Disable function has been activated.



Emissions Temperature

Indicator illuminates when exhaust temperature reaches 1022° F (550° C).



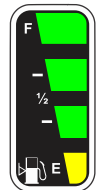
Engine Error

Indicates a fault with the engine and service is required or is requesting a cleaning sequence.



Fuel Gauge

Indicates the level of the fuel in the fuel tank.



Glow Plug

Indicates the glow plugs are on. The glow plugs are automatically turned on with the ignition circuit and remain on for approximately seven seconds. Start the engine only after the light goes out.



Platform Overload

Indicates the platform has been overloaded.



System Distress

The light indicates that the JLG Control System has detected an abnormal condition and a Diagnostic Trouble Code has been set in the system memory. Refer to the Service Manual for instructions concerning the trouble codes and trouble code retrieval.

The system distress indicator light will illuminate for 2-3 seconds when the key is positioned to the ON position to act as a self test.

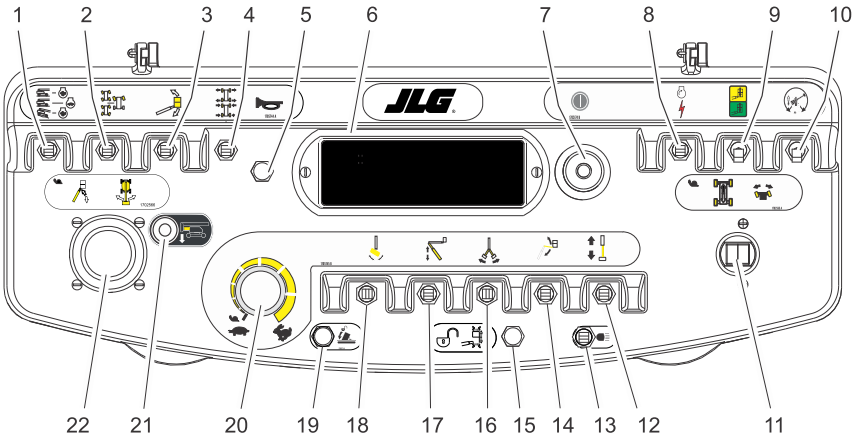


Wire Rope Service

When illuminated, the light indicates the wire ropes are loose or broken and must be repaired or adjusted prior to use.



3.6 PLATFORM CONTROL STATION



BM000209E

- | | |
|-----------------------------------|---|
| 1. Drive Speed / Torque Select | 12. Main Boom Telescope |
| 2. Steer Select | 13. Lights / SkySense Mute |
| 3. Platform Level Override | 14. Jib Lift |
| 4. Axle Extend / Retract | 15. Soft Touch / SkyGuard / SkySense Override |
| 5. Horn | 16. Jib Swing |
| 6. Indicator Panel | 17. Tower Boom Lift |
| 7. Power / Emergency Stop | 18. Platform Rotate |
| 8. Engine Start / Auxiliary Power | 19. Jib Stow Override |
| 9. Capacity Select | 20. Function Speed Control |
| 10. Drive Orientation Override | 21. Tower Boom Stow Indicator (If Equipped) |
| 11. Drive / Steer | 22. Main Lift / Swing Controller |

3.6.1 Platform Control Station Functions

! WARNING

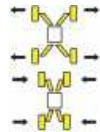
To avoid serious injury, do not operate machine if any control levers or toggle switches controlling platform movement do not return to the off or neutral position when released.

! WARNING

Only use the platform leveling override function for slight leveling of the platform. Incorrect use could cause the load/occupants to shift or fall. Failure to do so could result in death or serious injury.

Axle Extend / Retract

Allows the operator to extend or retract the axles. The axles can only be extended or retracted while the machine is being driven forward or reverse.



Capacity Select

This switch allows the operator to select between an operating envelope with a 500 lb (227 kg for ANSI markets and 230 kg for CE, UKCA, and Australia markets) capacity restriction or a 1000 lb (454 kg for ANSI markets and 450 kg for CE, UKCA, and Australia markets) capacity restriction.



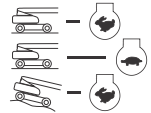
Drive Orientation Override

When the boom is swung over the rear tires or further in either direction, the Drive Orientation indicator will illuminate when the drive function is selected. Push and release the switch, and within 3 seconds move the Drive/Steer control to activate drive or steer. Before driving, locate the black/white orientation arrows on both the chassis and the platform controls. Move the drive controls in a direction matching the directional arrows for the intended direction of travel.



Drive Speed / Torque Select

The machine has a two position switch - The forward position gives maximum drive speed. The back position gives maximum torque for rough terrain and climbing grades.

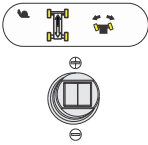


! CAUTION

Do not operate machine if drive speed /torque select switch operates when boom is above horizontal.

Drive / Steer

Push forward to drive forward, pull back to drive in reverse. Steering is accomplished via a thumb-activated rocker switch on the end of the steer handle.



Note: To operate the Drive joystick, pull up on the locking ring below the handle.

Note: The Drive joystick is spring loaded and will automatically return to neutral (off) position when released.



Engine Start / Auxiliary Power

When pushed forward, the switch energizes the starter motor to start the engine.



The Auxiliary Power control switch energizes the electrically operated hydraulic pump. (Switch must be held on for duration of auxiliary pump use.)

The auxiliary pump functions to provide sufficient oil flow to operate the basic machine functions should the main pump or engine fail. The auxiliary pump will operate tower boom lift, tower telescope, main boom lift, main telescope and swing.



Function Speed Control

This control affects the speed of the Main Boom Telescope, Tower Boom Lift, Jib Lift, Jib Swing, and Platform Rotate functions.

Note: During platform rotation, a speed difference may not be noticeable to the operator.

Turning the knob all the way counterclockwise until it clicks puts the machine into Creep Mode. Creep Mode puts the functions listed above, as well as the Drive/Steer and Main Lift/Swing functions into the slowest speed setting.



! CAUTION

Do not operate machine if function speed switch operates when boom is above horizontal.

Horn

A push-type Horn switch supplies electrical power to an audible warning device when pressed.



Jib Lift

Provides raising and lowering of the upright and lower booms.



Jib Stow Override

Allows the operator to swing the jib to the right past the electronic stop to stow the jib beside the boom for transport.



Jib Swing

Allows the operator to swing the jib to the left or right.



Note: The Jib Swing function is not operable when the Capacity Select control is in the 1000 lb (454 kg for ANSI markets and 450 kg for CE, UK-CA, and Australia markets) position.

Lights / SkySense Mute (If Equipped)

This switch operates the accessory lights package if the machine is so equipped.



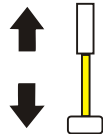
Note: The ignition switch does not have to be on to operate the lights, so care must be taken to avoid draining the battery if left unattended. The master switch and/or the ignition switch at the ground control will turn off power to all lights.

If machine is equipped with SkySense, the switch will mute the SkySense speakers.



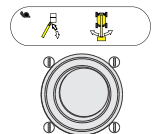
Main Boom Telescope

Provides extension and retraction of the main boom.



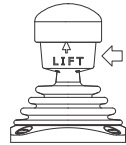
Main Lift / Swing Controller

Provides main lift and swing. Push forward to lift up, pull backward to boom down. Move right to swing right, move left to swing left.



Note: To operate the Main Boom Lift/Swing joystick, pull up on the locking ring below the handle.

Note: The Main Boom Lift/Swing joystick is spring loaded and will automatically return to neutral (Off) position when released.



Platform Level Override

A three position switch allows the operator to adjust the automatic self leveling system. This switch is used to adjust platform level in situations such as ascending/descending a grade.



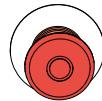
Platform Rotate

Provides rotation of the platform.



Power / Emergency Stop

A two-position red mushroom shaped switch furnishes power to Platform Controls when pulled out (On). When pushed in (Off), power is shut off to the platform functions.



Soft Touch / SkyGuard / SkySense Override

For machines equipped with SkyGuard:

The SkyGuard override switch enables functions cut out by the SkyGuard system to be operated again, allowing the operator to resume use of machine functions.



For machines equipped with both SkyGuard and Soft Touch:

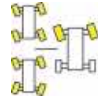
The switch operates like the SkyGuard override switch as described above. The switch also enables the functions cut out by the Soft Touch system to operate again at creep speed, allowing the operator to move the platform away from the obstacle that caused the shutdown situation.

For machines equipped with both SkyGuard and SkySense:

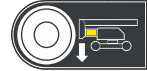
The switch operates like the SkyGuard override switch as described above. The switch also enables the functions cut out by the SkySense system to operate again at creep speed, allowing the operator to move the platform closer to the obstacle that caused the shutdown situation if desired.

Steer Select

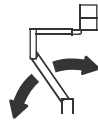
The action of the steering system is operator selectable. The center switch position gives conventional front wheel steering with the rear wheels unaffected. This is for normal driving at maximum speeds. The forward position is for "crab" steering. When in this mode both front and rear axles steer in the same direction, which allows the chassis to move sideways as it goes forward. This can be used for positioning the machine in aisle ways or close to buildings. The back switch position is for "coordinated" steering. In this mode the front and rear axles steer in the opposite directions to produce the tightest turning circle for maneuvering in confined areas.

**Tower Boom Stow Indicator (If Equipped)**

A green LED illuminates when the tower boom is in the stowed position.

**Tower Lift**

This switch provides for raising and lowering of the Tower Boom when positioned to the up or down positions. Tower Lift must be fully elevated (in the up position) before operating Tower Telescope.



Note: Tower Lift should not function when Tower Telescope is extended.

Tower Telescope

This switch provides for extending and retracting of the tower boom when positioned to in or out. Tower Telescope must be fully retracted before operating Tower Lift.

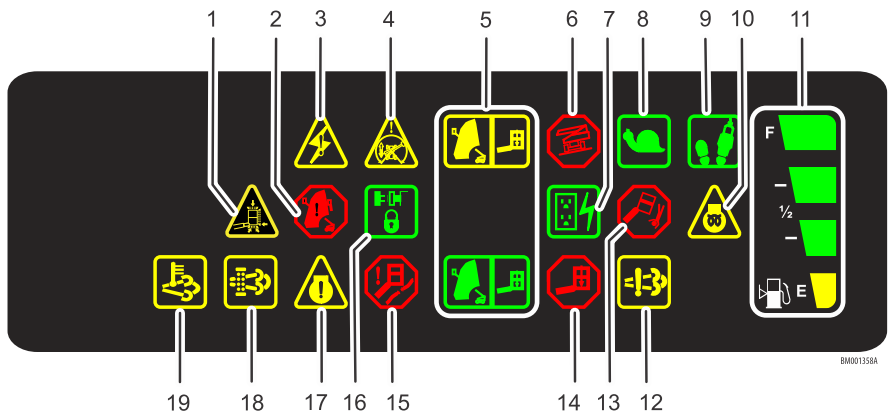


Note: Tower Telescope should not function when Tower Lift is not fully elevated (in the up position).

WARNING

To avoid serious injury, do not operate machine if tower lift and telescope do not operate in the order described above.

3.7 PLATFORM CONTROL INDICATOR PANEL



- | | |
|---|-------------------------------|
| 1. Soft Touch / SkyGuard / SkySense Indicator | 11. Fuel Gauge |
| 2. Boom Control System Warning | 12. Emissions Failure |
| 3. System Distress | 13. Level System |
| 4. Drive Orientation | 14. Platform Overload |
| 5. Capacity Zone Indicator | 15. Wire Rope Service |
| 6. Tilt Alarm / Warning | 16. Axles Set |
| 7. AC Generator | 17. Engine Error |
| 8. Creep Speed | 18. Diesel Particulate Filter |
| 9. Footswitch Enable | 19. Emissions Temperature |
| 10. Glow Plug | |

3.7.1 Platform Control Indicator Panel Functions

AC Generator

Indicates the generator is in operation.



Axles Set

Indicates the axles are fully extended. The indicator will flash as the axles are extending or retracting and be solid when fully extended. The indicator icon will go out when the axles are fully retracted.



Boom Control System Warning

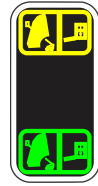
Indicates the platform is outside the operating area and operation of certain boom functions may be disabled (i.e. lift, telescope). Attempts to use the disabled functions cause the indicator to flash and an alarm to sound. Immediately return the platform to the ground. If the indicator remains lit a boom control system fault or failure has been detected. If a failure is discovered, the system must be repaired by a JLG factory trained technician before the machine can be used.



Capacity Zone Indicator

Indicates the platform capacity zone for the current position of the platform. Restricted capacities are permitted at restricted platform positions (shorter boom lengths and higher boom angles).

Note: Refer to the capacity decals on the machine for restricted and unrestricted platform capacities.

**Creep Speed**

When the Function Speed Control is turned to the creep position, the indicator acts as a reminder that all functions are set to the slowest speed.

**Diesel Particulate Filter**

Icon will illuminate when standstill exhaust system cleaning is required.

**Drive Orientation**

When the boom is swung beyond the rear drive tires or further in either direction, the Drive Orientation indicator will illuminate when the drive function is selected. This is a signal for the operator to verify that the drive control is being operated in the proper direction (i.e. controls reversed situations).

**Emissions Temperature**

Icon illuminates when the engine emissions control sensor reaches a high temperature.

**Engine Emissions System Failure**

Icon illuminates when there is a fault with the Emissions After Treatment system.

**Engine Error**

Indicates a fault with the engine and service is required.

**Footswitch Enable**

To operate any function, the footswitch must be pressed down and the function selected within seven seconds. The enable indicator shows that the controls are enabled. If a function is not selected within seven seconds, or if a seven second lapse between ending one function and beginning the next function, the enable light will go out and the footswitch must be released and pressed again to enable the controls.

Releasing the footswitch removes power from all controls and applies the drive brakes.

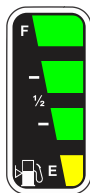


⚠ WARNING

To avoid serious injury, do not remove, modify or disable the footswitch by blocking or any other means.

Fuel Gauge

Indicates the level of the fuel in the fuel tank.



Glow Plug

Indicates the glow plugs are operating. After turning on ignition power, wait until light goes out before cranking engine.



Level System

Indicates a fault in the electronic leveling system. The fault indicator will flash and an alarm will sound. All functions will default to creep if the boom is extended past transport mode or elevated more than 8 degrees above horizontal.



Platform Overload

Indicates the platform has been overloaded.



Soft Touch / SkyGuard / SkySense Indicator

Indicates the Soft Touch bumper is against an object or the SkyGuard sensor has been activated. All controls are cut out until the override button is pushed. For Soft Touch, controls are then active in the Creep Mode or for SkyGuard, controls will work normally.



System Distress

The light indicates that the JLG Control System has detected an abnormal condition and a Diagnostic Trouble Code has been set in the system memory. Refer to the Service Manual for instructions concerning the trouble codes and trouble code retrieval.



Tilt Warning Light and Alarm

This red illuminator indicates that the chassis is on a slope. If the boom is above horizontal and the machine is on a slope, the tilt alarm warning light will illuminate, an alarm will sound, available functions are placed in Creep speed, and drive is cut out in direction of travel. Drive in the opposite direction may be allowed under certain conditions.



Note: When the tilt sensor alarm is activated, the Drive function will be disabled if the boom is elevated above horizontal.

⚠ WARNING

If Tilt Warning Light Is Illuminated When Boom Is Raised Or Extended, Retract And Lower To Below Horizontal Then Reposition Machine So That It Is Within The Limits Of The Maximum Operating Slope Before Extending Boom Or Raising Boom Above Horizontal.

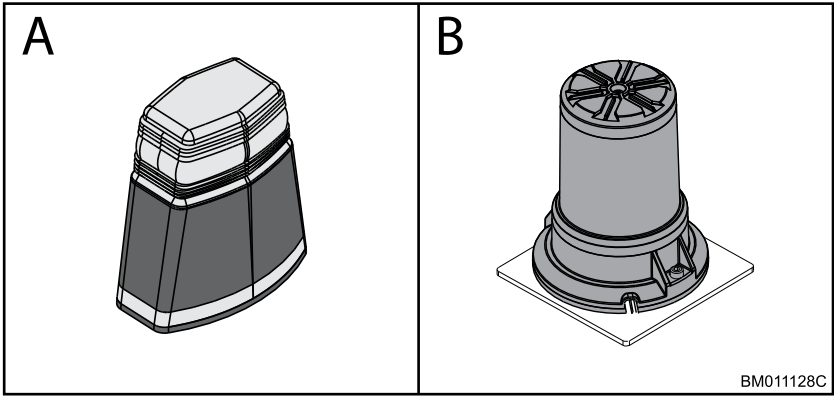
Tilt Angle	Market
5°	All Markets

Wire Rope Service

When illuminated, the light indicates the wire ropes are loose or broken and must be repaired or adjusted prior to use.



3.8 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.

3.8.1 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. Where applicable, the CS550 can also be configured to function as a SkyGuard Beacon (see below).

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

3.8.2 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.

3.8.3 Blue or Red SkyGuard® Beacon

The SkyGuard beacon is available in blue or red lamp options. The beacon will flash in conjunction with an audible alarm when the SkyGuard sensor is activated.

Refer to the SkyGuard Operation section for more information.

SECTION 4

Machine Operation

4.1 GENERAL

This machine is a Mobile Elevating Work Platform (MEWP) used to position personnel, along with their necessary tools and materials at work locations.

The primary operator control station is in the platform. From this control station, the operator can drive and steer the machine in both forward and reverse directions. The operator can raise or lower the main or tower boom or swing the boom to the left or right. The machine can be driven on a smooth, firm surface within the limits of the maximum operating slope from an elevated platform position.

Refer to the subsection Steering and Traveling of this manual for specific requirements. The machine has a Ground Control Station that can override the Platform Control Station. Ground controls operate all functions except Drive and Steer. Except for performing inspections and the Function Check, the ground controls are to be used in an emergency to lower the platform to the ground should the operator in the platform be unable to do so.

4.2 HYDRAULIC SYSTEM WARM UP

The control system monitors the hydraulic system in extremely cold temperatures and provides optimal performance by automatically limiting the function speeds of the high demand functions. The warm up mode automatically shuts off when system oil reaches allowable temperatures.

While the system is cold and in the warm up mode, the tower lift, main lift, and main telescope functions are limited to creep speeds and is indicated to the operator by flashing the creep light on the platform control panel.

Functions being operated when the warm up mode turns off will remain in the creep speed until the function is re-initiated.

4.3 OPERATING CHARACTERISTICS AND LIMITATIONS

4.3.1 Capacities

The boom can be raised above horizontal with or without any load in platform, if:

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.
4. Machine is as originally equipped from JLG.

4.3.2 Envelope Control System

The Envelope Control System is the primary means of controlling the working positions of the tower and main boom within the stability and structural requirements of the machine.

The main boom must be controlled in maximum angle and minimum angle to avoid entering a position that could compromise backward stability and avoid main boom to tower boom interference. The tower boom must be controlled by permitting only specific combinations of tower length and tower angle to avoid entering a position that could compromise forward and backward stability (see Tower Path Control System).

Recognized failures within this system will result in control by the Electrical Retrieval System (refer to the Service Manual), reduced function speeds, and BCS warning light illumination. After retrieval the boom will be restricted from leaving the transport position until the failure is resolved.

Boom position violations outside of the allowable envelope will result in reduced function speeds, BCS warning light illumination, and restriction of functions. Attempts to operate restricted functions will cause the BCS warning light to flash and the platform alarm to sound.

Violations of the tower path (with a healthy control system) will cause the automatic combined operation of tower lift and tower telescope to be suspended. A forward tower path violation can be resolved by operating the tower lift up switch (tower telescope out without auto tower lift up) or the tower lift down switch (tower lift down without auto tower telescope in). A backward tower path violation can be resolved by operating the tower lift up switch (tower lift up without auto tower telescope out) or the tower lift down switch (tower telescope in without auto tower lift down).

The restricted functions due to backward tower envelope violations are disallowing automatic tower lift down, automatic tower telescope out, main lift up and down, main telescope in, jib, swing, drive and steer.

The restricted functions due to forward tower envelope violations are disallowing automatic tower lift up, automatic tower telescope in, main lift up and down, main telescope out, jib, swing, drive and steer.

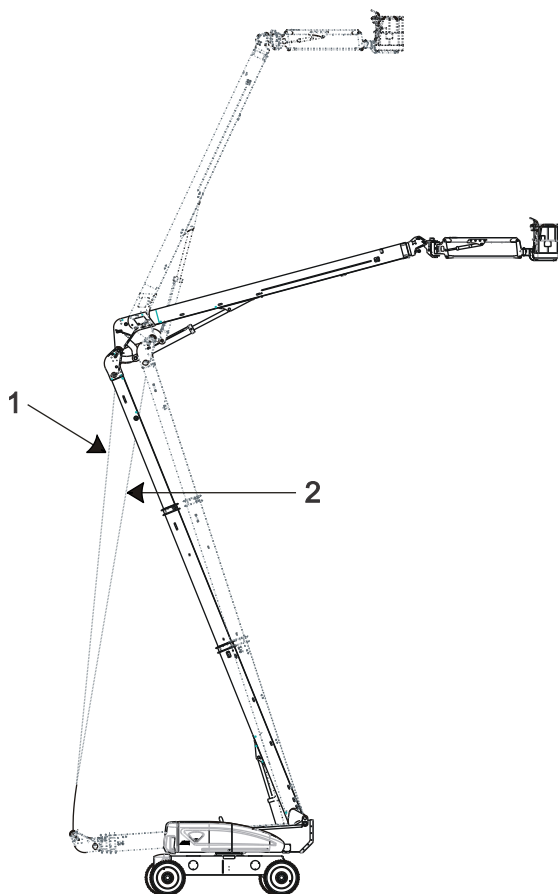
The restricted functions due to maximum main boom envelope violations are disallowing tower lift up and down, main lift up, main telescope in, jib, swing and drive.

The restricted functions due to minimum main boom envelope violations are disallowing main lift down, swing and drive.

4.3.3 Tower Path Control System

The Tower Path Control System uses the envelope control sensors to enhance the control of the tower boom for increased user efficiency and is used as an integral part of the envelope control system.

Both the ground and platform control panels use one function switch to control the tower. User commands for tower lift up or tower lift down causes the control system to automatically introduce the correct combination of tower telescope and tower lift for the tower boom to follow a pre-described path or trajectory of the tower nose.



1. Tower path for main boom angles below 15° 2. Tower path for main boom angles above 55°

4.3.4 Automatic Boom Control System

During combined tower lift and main lift functions, the control system will maintain the tower lift speed and automatically vary the maximum main lift command as needed to compensate for the movement of the tower.

The interaction of the main boom and the tower boom is slightly different when the main boom is above or below 60° relative to gravity.

Tower Lift Up/Down - Main Boom Below 60°

During tower lift up or down with the main boom below 60°, the control system will maintain the angle of the main boom read at the start of the tower lift command or as read at the conclusion of main lift during combined tower and main lift commands.

Tower Lift Down — Main Boom Above 60°

During tower lift down with the main boom initially above 60°, the control system will lower the main boom to approximately 60° before starting tower movement. The control system will then control the main boom to 60° for the remainder of the tower lift down command.

Tower Lift Up — Main Boom Above 60°

During tower lift up with the main boom already above 60°, the control system will delay automatic compensation of the main boom angle during tower lift until the main boom reaches approximately 60°. The control system will then control the main boom to 60° until the tower boom has reached its maximum height. Continuing to operate the tower lift up when the tower reaches its maximum height will cause the control system to automatically raise the main boom to its original angle.

4.3.5 Slow Down System

The control system uses the envelope control sensors to automatically slow down the tower lift up and tower lift down at the top of the tower path and to automatically slow down main lift up and main lift down as the minimum and maximum angles of the working envelope are approached. The control system indicates to the operator this slow down by flashing the creep light on the platform display. This applies to both platform and ground controls, however, no indication is made on the ground control panel.

4.3.6 Controlled Angle

The Controlled Boom Angle System minimizes the interaction of swing and drive functions with the envelope edges. This interaction is due to two factors. First, the envelope is controlled relative to gravity regardless of ground slope and second, the turntable/ boom mounting is effected by swing and drive functions when the ground slope varies. This can cause the boom position to vary within the envelope or even violate the envelope edges when swinging or driving without intentionally moving the boom. The controlled boom angle system automatically activates either the tower or main boom lift up or down during swing and drive commands to maintain a constant boom angle relative to gravity.

Controlled boom angle is disabled with any envelope violation or failure.

4.3.7 Swing Speed Proportioning

The boom control system sensors sense the distance the platform is extended from the centerline of rotation, allowing higher swing speeds with the platform nearest to the centerline of rotation and gradually slower swing speeds the further the platform gets from the center line of rotation.

4.3.8 Platform Load Sensing System (LSS)

The Platform Load Sensing System provides the platform load to the control system.

If the LSS system senses an overload condition, boom functions will be disabled, the overload indicator is illuminated at both control stations, and the overload alarm will sound. Reduce the weight in the platform to not exceed the rated workload indicated on the capacity decal, then the controls will work again.

4.4 STABILITY

Machine stability is based on two (2) conditions which are called FORWARD and BACKWARD stability. The machine's position of least FORWARD stability is shown in (See [Figure — Position of Least Forward Stability](#)) and its position of least BACKWARD stability is shown in (See [Figure — Position of Least Backward Stability](#))

WARNING

To avoid forward or backward tipping, do not overload machine or operate the machine beyond the limit of the maximum operating slope.

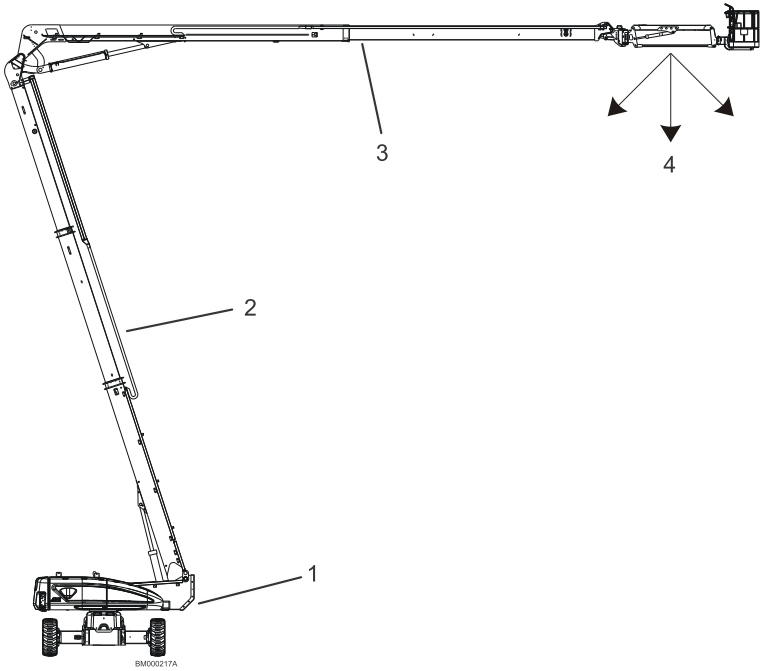


Figure 5. Position of Least Forward Stability

1. Turntable rotated 90° from the stowed position.
2. Tower boom fully lowered to fully raised.
3. Main boom fully extended.
4. Machine will tip over in the direction if overloaded or operated beyond the limits of the maximum operating slope.

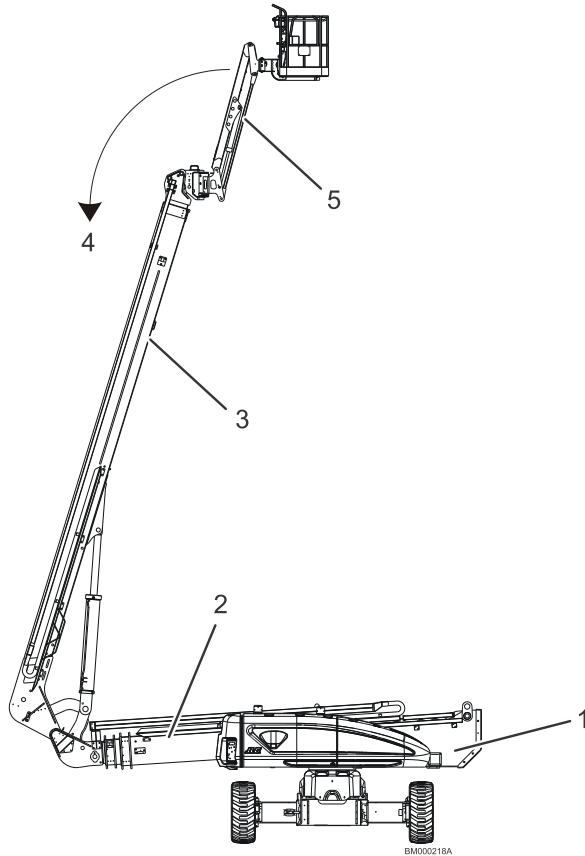


Figure 6. Position of Least Backward Stability

1. Turntable rotated 90° from the stowed position.
2. Tower boom fully lowered to fully raised.
3. Main boom fully elevated.
4. Machine will tip over in the direction if overloaded or operated beyond the limits of the maximum operating slope.
5. Jib elevated.

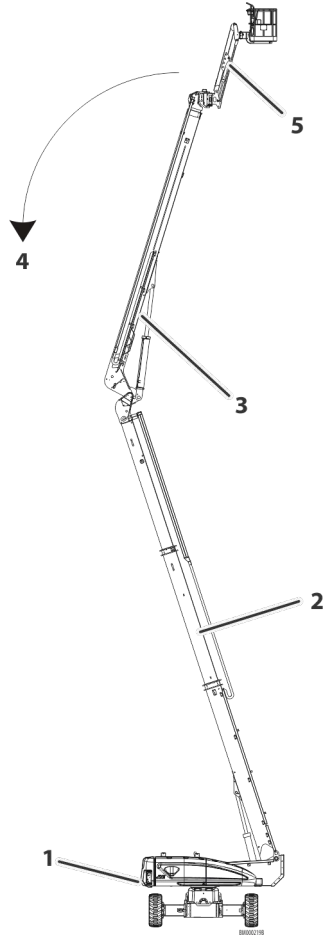


Figure 7. Position of Least Backward Stability

1. Turntable rotated 90° from the stowed position.
2. Tower boom fully lowered to fully raised.
3. Main boom fully elevated.
4. Machine will tip over in the direction if overloaded or operated beyond the limits of the maximum operating slope.
5. Jib Elevated.

4.5 CAPACITY ZONES (DUAL CAPACITY WITH A CAPACITY SELECT SWITCH)

This machine is equipped with a Dual Capacity System which allows the operator to select operation in unrestricted and restricted capacity zones by positioning the Capacity Select switch on the platform console. The applicable capacity zone indicator will light in both the platform control and the ground control stations based on the position of the Capacity Select switch.



When platform load is equal to or less than 500 lb (227 kg for ANSI markets and 230 kg for CE, UKCA, and Australia markets), the platform is unrestricted within the full machine envelope boundary. When the platform load is between 500 lb (227 kg for ANSI markets and 230 kg for CE, UKCA, and Australia markets) and 1000 lb (454 kg for ANSI markets and 450 kg for CE, UKCA, and Australia markets), the platform position is restricted within a smaller working envelope boundary.

The machine will stop at the boundary from the restricted to the unrestricted zone unless the Capacity Select switch is in the unrestricted position. Both capacity lights will flash and an alarm will sound if the platform is out of the selected capacity range.

Note: Operation in the 1000 lb (454 kg for ANSI markets and 450 kg for CE, UKCA, and Australia markets) envelope requires the jib to be straight with the boom.

4.6 ENGINE OPERATION

Note: When operating a machine at high altitudes, a decrease in machine performance may occur due to a decrease in air density.

Note: When operating a machine at high ambient temperatures, a decrease in machine performance and an increase in engine coolant temperature may occur.

Note: Avoid repeated, low intensity, or periodic machine operation and extended engine idle times in cold weather environments.

CAUTION

For every 8 hours of low intensity machine operation or extended engine idle time, drive the machine continuously for 15 minutes.

Note: Contact JLG Customer Service for operation under abnormal conditions.

4.6.1 Starting Procedure

Note: Initial starting should always be performed from the Ground Control station. Make sure to perform a ground control function check prior to platform operation.

! CAUTION

If engine fails to start promptly, do not crank for an extended time. Should engine fail to start again, allow starter to cool off for 2-3 minutes. If engine fails after several attempts, refer to engine maintenance manual.

Note: Diesel engines only: After turning on ignition power, operator must wait until glow plug indicator light goes out before cranking engine.



1. Turn key of Platform/Ground Select switch to Ground.



2. Pull the Power/Emergency Stop switch to On.



3. Push the Engine Start switch until engine starts.



! CAUTION

Allow engine to warm-up for a few minutes at low speed before applying any load.

4. After engine has had sufficient time to warm up, push in the Power/Emergency Stop switch and shut engine off.



5. Turn Platform/Ground Select switch to Platform.



6. From Ground Control Console, pull Power/ Emergency Stop switch out.



7. From Platform, pull Power/Emergency Stop switch out.



8. Push the Engine Start switch until engine starts.



Note: Footswitch must be released in the up position before starter will operate. If starter operates with footswitch in the down position, do not operate the machine.

⚠ CAUTION

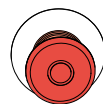
Do not idle or operate the engine under light load or no-load conditions for extended periods of time. Doing so may cause wet stacking, which may result in premature wear of engine or engine failure.

4.6.2 Shutdown Procedure

⚠ CAUTION

If an engine malfunction causes an unscheduled shutdown, determine the cause and correct it before restarting the engine.

1. Remove all load and allow engine to operate at low speed for 3-5 minutes; this allows further reduction of internal engine temperature.
2. Push Power/Emergency Stop switch in.



3. Turn Platform/Ground Select switch to Off.



Note: Refer to Engine Manufacturer's manual for detailed information.

4.7 AIR SHUTOFF VALVE (ASOV) (IF EQUIPPED)

Air Shutoff Valve (ASOV) is an overspeed protection device mounted to the engine's air intake system. When the valve is actuated, it obstructs airflow intake and stops the engine. Weekly tests are recommended to ensure the valve remains in good working condition.

Machine Operation

1. Start the engine, running at idle.
2. Open the red switch guard on ASOV test switch, then activate toggle to test mode.

Note: Test switch is located under hood to the left of the ground control panel (look for test decal).



3. At the ground control panel, select any function and activate until valve actuates at test RPM of 1500. Once valve actuates, engine will stop.
4. Turn ignition power OFF.
5. Visually inspect valve to ensure it appears in good condition.
6. Reset valve by rotating valve handle to the Open position.

Note: The handle cannot be turned unless the machine is off. Ensure the ignition power is OFF.

WARNING

Do not use ASOV as an alternative to shutting down machine properly.

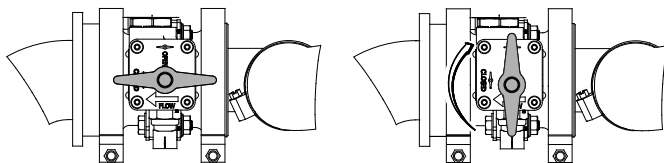


Figure 8. ASOV Reset (Closed to Open Position)

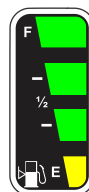
4.8 FUEL SHUTOFF SYSTEM (RESERVE)

Note: Reference the Service and Maintenance Manual along with a qualified JLG Mechanic to verify your machine setup.

The Fuel Shutoff System monitors the fuel in the tank and senses when the fuel level is getting low. The JLG Control System automatically shuts the engine down before the fuel tank is emptied unless the machine is set up for Engine Restart.

When the fuel level reaches $\frac{1}{8}$ tank, the $\frac{1}{4}$ tank indicator will flash once a second.

If fuel level reaches the Low Fuel range the $\frac{1}{4}$ tank indicator will flash 10 times a second and there will be approximately 5 minutes of engine run time left. If the system is in this condition and automatically shuts down the engine, or the engine is manually shut down before the 5-minute run time is complete, the engine will react according to machine setup.



Machine setup options:

- **Engine Restart** - When the engine shuts down, the operator will be permitted to cycle power and restart the engine for approximately 2 minutes of run time. After the 2 minutes of run time is complete, the operator may cycle power and restart the engine for an additional 2 minutes of run time. The operator can repeat this process until there is no more fuel available.

NOTICE

Contact a qualified JLG mechanic if the machine needs restarted after no more fuel is available.

- **Engine One Restart** - When the engine shuts down, the operator will be permitted to cycle power and restart the engine once with approximately 2 minutes of run time. After the 2 minute run time is complete or if the engine is shut down by the operator prior to the completion of the 2 minute run time, it cannot be restarted until fuel is added to the tank.
- **Engine Stop** - The engine will shut down. No restarts will be permitted until fuel is added to the tank.

4.9 DIESEL PARTICULATE FILTER – STANDSTILL CLEANING (IF EQUIPPED)

Diesel Particulate Filter (DPF) is an emissions control system used in diesel engines and requires operator interaction to ensure proper operation of the system.

For peak operation, the DPF system must be cleaned using one of two methods, Standstill Cleaning and Maintenance Standstill Cleaning. Standstill Cleaning is any cleaning requested by the engine outside of the regular maintenance window (for example, if the system detects excessive soot in the DPF canister). Maintenance Standstill Cleaning is cleaning requested by the engine on the regular maintenance interval.

Note: The system will reset the maintenance interval back to zero hours after Standstill or Maintenance Standstill Cleaning events are performed.

4.9.1 Standstill Cleaning/ Maintenance Standstill Cleaning

The following conditions must be met to perform Standstill Cleaning and Maintenance Standstill Cleaning.

- Machine must be stationary.
- Boom in the stowed position.
- No personnel in platform.
- Engine must be idling
- Coolant temperature must be above 104° F (40° C).
- Machine in Ground Station mode.

Note: Maintenance Standstill Cleaning can be started by one of two methods, by using the Analyzer or the DPF button on the Ground Control Console.

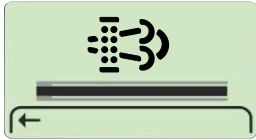
1. The Diesel Particulate Filter (DPF) Indicator on the Platform Control Panel will flash when standstill cleaning is required.



2. Move the machine to a suitable area free of flammables and personnel that could be exposed to hot exhaust.
3. Launch the cleaning process by pressing the DPF button on the Ground Console for 3 seconds. The multifunction display will show the following screen.



4. The Main Cleaning process will begin and last for approximately 30 to 60 minutes. The following screen will show that the process has begun and includes a status bar that indicates the progress of the cleaning process.



5. After the cleaning process is complete, the engine will run for approximately 5 minutes to allow the engine and Exhaust After Treatment (EAT) to cool down. The multifunction display will show the "Regen Complete" screen as shown and the Emissions Temperature indicator will no longer be illuminated.



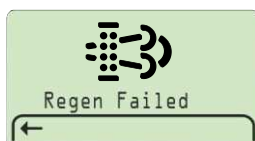
4.10 DPF – CANCELING AND UNSUCCESSFUL STANDING CLEANING (IF EQUIPPED)

4.10.1 Canceling Maintenance Standstill/Standstill Cleaning

Maintenance Standstill Cleaning will be stopped immediately if:

- The Platform/Ground Select switch is switched from Ground to Platform mode.
- Any function switch is enabled to perform a boom function.
- The Engine is powered down.

If Maintenance Standstill Cleaning is interrupted, it must be re-initiated and the multifunction display will show the "Regen Failed" screen.



4.10.2 Unsuccessful Cleaning Event

If there is an unsuccessful cleaning event, the DPF icon will show on the multifunction display. Possible causes of an unsuccessful cleaning event are:

- Engine cold
- Out of Neutral
- Permanent System Lockout
- System Fault Active
- System Timeout
- Temporary System Lockout
- Machine Enabled
- Not in Ground Mode
- Not in Transport Position

- DEF tank (if equipped) frozen

The multifunction display will show the "Regen Failed" screen. If the cleaning event has failed, the process must be repeated.



4.11 DPF FILTER REPLACEMENT DUE TO ASH LOAD

The DPF collects non-burnable particulates which cannot be removed by the Standstill Cleaning process. Build up of the ash load requires filter maintenance and/or exchange. DPF filter maintenance or exchange requirement is indicated by the DPF Exchange icon shown on the multifunction display.

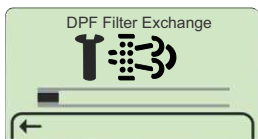


Table 4. Ash Load DPF Filter Replacement

	Ash Load	DPF Filter Exchange Indicator	Engine Error Indicator	Derate
Normal Operation	<100%	--	--	None
Filter Exchange Required	≥100%		--	None
Warning Level	≥105%	<p>Blinking</p> 	--	None
Warning Level	≥110%	<p>Blinking</p> 	Continuous 	Machine placed in Creep and DTC active. Contact Deutz Dealer

Table 5. DPF Cleaning Strategy and Warning Indicators (Maintenance Standstill Cleaning)

Maintenance Standstill Cleaning Levels		Machine Hours Since Last Cleaning		Engine Error Indicator	DPF Indicator	Emissions Temperature Indicator ¹	Derate	Comments
0	Normal Operation	0-500	500-650	--	--		None	Between 500 and 650 hours, cleaning cycle can be initiated 500-650 with JLG analyzer.
		500-650		--	--		None	Engine coolant temperature must be >40° C and machine must be in ground station 2 mode.
1	Standstill Required	650-750		--			Machine placed in Creep and DTC active	
2	Warning Level	750-775		Continuous 			Idle Lock. Boom Functions Locked Out and trapped in Transport.	Contact Deutz Dealer
3	Shut Off Level	>775		Blinking 			Idle Lock. Boom Functions Locked Out and trapped in Transport.	
4	Filter Exchange	DPF Regeneration NOT POSSIBLE DPF Filter exchange required		Blinking 				

1. Emissions Temperature Indicator continuously On during Standstill Cleaning. Emissions Temperature Indicator is possible during normal operation but will not appear if the exhaust temperature is below 550°C.

Table 6. Soot Load DPF Cleaning Strategy and Warning Indicators (Standstill Cleaning)

Soot Levels	Soot Load	Time in Heat Mode (Hr)	DPF Cleaning Initiation Methods	Engine Error Indicator	DPF Indicator	Emissions Temperature Indicator ²	Derate	Comments
Normal Operation	<70%							
Heat Mode 1	71% to 85%	50		--	--		None	If Soot Load reaches 56% in 50 hours of Heat Mode 1, system will return to Normal Operation setting.
Heat Mode 2	86% to 100%	250						If Soot Load reaches 56% in 250 hours of Heat Mode 2, system will return to Normal Operation setting.
Standstill Required	101% to 115%	100	Switch in JLG Machine or JLG Analyzer	--			None	Will remain in Standstill mode for 100 hours or until the soot load reaches 115%
Warning Level	116% to 130%	25	Switch in JLG Machine or JLG Analyzer	Continuous 			Machine placed in Creep and DTC active	Will remain in Warning level (Derate) for 25 hours or until the soot load reaches 130%

2. Emissions Temperature indicator continuously ON during Standstill Cleaning. Emissions Temperature Indicator is possible during normal operation but will not appear if the exhaust temperature is below 550°C.

Table 6. Soot Load DPF Cleaning Strategy and Warning Indicators (Standstill Cleaning) (continued)

Soot Levels	Soot Load	Time in Heat Mode (Hr)	DPF Cleaning Initiation Methods	Engine Error Indicator	DPF Indicator	Emissions Temperature Indicator ³	Derate	Comments
Shut Off Level	131% to 145%		Switch in JLG Machine or JLG Analyzer + Level 3 Diagnostic Access	Blinking 			Idle Lock. Boom Functions Locked Out and Trapped in Transport	Contact Deutz Dealer
Filter Exchange	>145%		DPF Cleaning Not Possible	Blinking 			Idle Lock. Boom Functions Locked Out and Trapped in Transport	

3. Emissions Temperature indicator continuously ON during Standstill Cleaning. Emissions Temperature Indicator is possible during normal operation but will not appear if the exhaust temperature is below 550°C.

4.12 AUXILIARY POWER OPERATION

The Auxiliary Power System provides a means of moving the platform in the event of an engine malfunction. This system uses an electric motor/pump unit capable of operating all boom functions needed to allow the platform to be lowered to ground level.

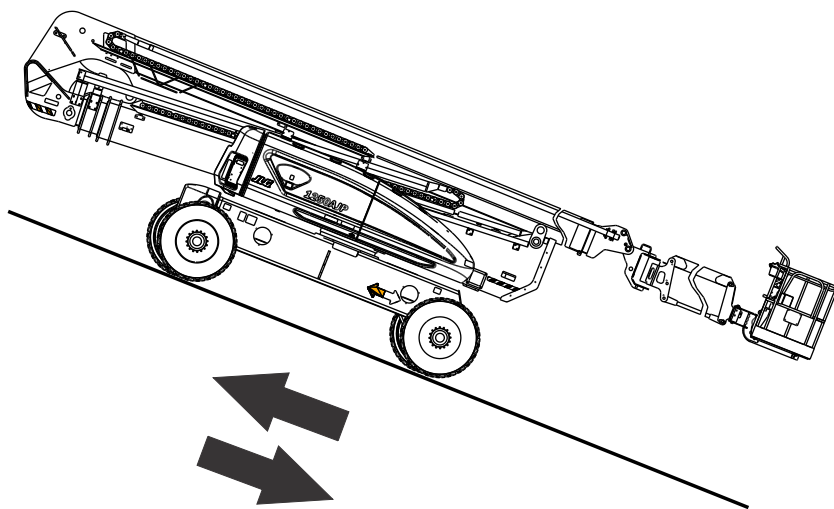
With auxiliary power activated, the control system will attempt to use the force of gravity to operate main lift down, tower lift down, and tower telescope in. If appropriate movement is not detected by the boom sensors, the auxiliary power system will supply hydraulic flow to power boom movement. Allow sufficient operating time for system to respond.

Note: To ensure sufficient battery life, where possible, use the Main Lift and Main Telescope functions to lower the platform to ground level before using Tower Lift. Movements of the boom using auxiliary power will be Slow and the movements will momentarily stop and alternate between other functions as needed. When operating Tower Lift, the movements will alternate between tower lift, tower telescope, and main lift. When operating Main Lift, the movements will alternate between main lift, tower lift, and platform level.

4.13 TRAVELING (GRADE/SIDE SLOPE)

4.13.1 Traveling on a Grade

When traveling a grade, maximum braking and traction are obtained with the boom stowed, in position over the rear (drive) axle, and in line with the direction of travel. Drive the machine forward when climbing a grade and in reverse when descending a grade. Do not exceed the machine's maximum rated gradeability.



BM000221

Figure 9. Traveling on a Grade

NOTICE

If the boom is over the front (steer) axle, direction of steer and drive movement will be opposite from the movement of the controls.

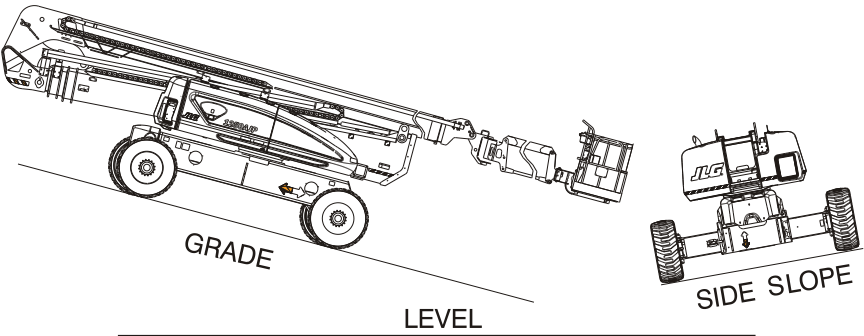


Figure 10. Grade and Side Slope

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4.14 TRAVELING (DRIVING)

Note: When the main boom is raised approximately 5 degrees above horizontal, the high drive function will automatically be in low drive.

! WARNING

Do not drive with boom above horizontal except on a smooth, firm surface within the limits of the maximum operating slope.

Be sure the turntable lock (if equipped) is engaged before any extended traveling.

! WARNING

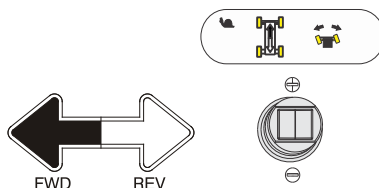
Do not drive on side slopes which exceed 5 degrees.

To avoid loss of travel control or tip over, do not drive machine on grades exceeding those specified in the operating specifications section of this manual.

⚠ WARNING

Use extreme caution when driving in reverse and at all times when the platform is elevated.

Before driving, locate the black/white orientation arrows on both the chassis and the platform controls. Move the drive controls in a direction matching the directional arrows for the intended direction of travel.

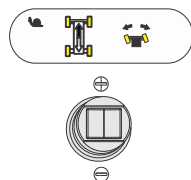


4.14.1 Traveling Forward and Reverse

1. At Platform Controls, pull out Emergency Stop switch, start engine, and activate footswitch.

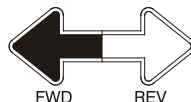


2. Position Drive controller to Forward or Reverse as desired.



This machine is equipped with a Drive Orientation Indicator. The yellow light on the platform control console indicates that the boom is swung beyond the rear drive tires and the machine may Drive/Steer in the opposite direction from the movement of the controls. If the indicator is illuminated, operate the Drive function in the following manner:

1. Match the black and white direction arrows on both platform control panel and the chassis to determine the direction the machine will travel.
2. Push and release the Drive Orientation Override switch. Within 3 seconds, slowly move the Drive control toward the arrow matching the intended direction of machine travel. The indicator light will flash during the 3 second interval until the drive function is selected.



4.15 STEERING



Press footswitch. Position thumb switch on Drive/Steer controller to Right for steering right, or to Left for steering left.

4.16 EXTENDING THE AXLES

Note: The operator must be driving the machine (forward or reverse) in order to extend the axles.

Position the Axle Extend switch to extend or retract the axles.

4.17 PLATFORM

JLG offers multiple platform sizes to accommodate a variety of applications. Refer to the Illustrated Parts Manual for available platforms.

Not all platform options may be of adequate size to allow for the maximum number of rated occupants shown on the machine's capacity decal. The number of platform occupants may never exceed the number of available lanyard anchorage points. Attach only one (1) lanyard per lanyard anchorage point.

4.17.1 Platform Level Adjustment

⚠ WARNING

Only use the platform leveling override function for slight leveling of the platform. Incorrect use could cause the load/occupants to shift or fall. Failure to do so could result in death or serious injury.

Note: When the Boom Control Select Switch is in the manual mode, platform leveling only functions during main lift operation. When the Boom Control Select Switch is in the automatic mode, platform leveling is active during all functions except during telescope operation. Also, when in the manual mode, the controlled arc and controlled angle systems are not active.

During normal operation of the machine, the platform will automatically maintain its position. To manually level up or down, position the platform/level control switch up or down and hold until the platform is level.



Note: Platform Leveling is active during all functions except during main boom telescope operations.

4.17.2 Platform Rotation

To rotate the platform to the left or right, use the platform rotate control switch to select the direction and hold until the desired position is reached.



4.18 BOOM

! WARNING

A red tilt warning light is located on the control console which lights when the chassis is on an excessive slope. Do not swing or raise boom above horizontal when indicator is lit.

Do not depend on the tilt warning light as a level indicator for the chassis. The tilt warning light indicates chassis is on an excessive slope. Chassis must be level before swinging or raising boom above horizontal or driving with the boom elevated.

! WARNING

To avoid tip over, if red tilt warning light illuminates when the boom is raised above horizontal, lower platform to ground level. Then reposition machine so that chassis is level before raising boom.

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

! WARNING

Traveling with the boom below horizontal is permitted on grades and side slopes specified in the Operating Specifications section of this manual.

! WARNING

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

⚠ CAUTION

To avoid a collision and injury if platform does not stop when a control switch or lever is released, remove foot from footswitch or use emergency stop switch to stop the machine.

4.18.1 Swinging the Boom

To swing boom, use Swing control switch to select Right or Left direction.



NOTICE

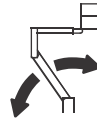
When swinging the boom make sure there is ample room for the boom to clear surrounding walls, partitions and equipment.

4.18.2 Raising and Lowering the Tower Boom

This machine has two controls for the tower boom (two toggle switches), one controls tower lift, the other tower telescope. The switching system will sequence its Lift and Telescope functions as follows:

1. Sequence while raising the Tower Boom from the fully lowered position.

- a. The Tower Boom must be fully elevated before the Tower Boom can be extended from the fully retracted position.



- b. The Tower Telescope out or in will only be operable when the Tower Boom is fully elevated up.

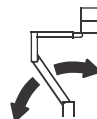


2. Sequence while lowering the Tower Boom from the fully elevated position.

- a. Operate Tower Telescope in until Tower Boom is fully retracted. (Tower must not lift down until tower boom is full retracted).



- b. The Tower lift down will only operate when the Tower Boom is fully retracted.



⚠ WARNING

To avoid tipping machine if tower boom switching malfunction:

- Lower platform to ground using main boom lift and telescope functions.
- Have condition corrected by a qualified JLG service technician before continuing use of machine.

4.18.3 Raising and Lowering the Main Boom

To raise or lower the Main Boom, position the Main Boom Lift switch to Up or Down until the desired height is reached.

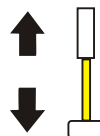
Note: The main lift function is not operable with the boom out of the transport mode if the axles are not fully extended.



4.18.4 Telescoping the Main Boom

To extend or retract the main boom, use the Main Telescope Control Switch to select In or Out movement.

Note: The telescope function is not operable beyond the transport position if the axles are not fully extended.



4.18.5 Swinging the Jib

To swing the jib, use the Jib Swing control switch to select Right or Left direction.



Note: For 1000 lb (454 kg for ANSI markets and 450 kg for CE, UKCA, and Australian markets) mode operation, the jib must be centered and the Jib swing function is not operable. If the jib is out of the centered position when in this mode the jib swing function will allow the operator to center the jib again.

4.19 FUNCTION SPEED CONTROL

This control affects the speed of Main Boom Telescope, Tower Boom Lift, Jib Lift, Jib Swing, and Platform Rotate functions.

Note: During platform rotation and jib swing, a speed difference may not be noticeable to the operator.



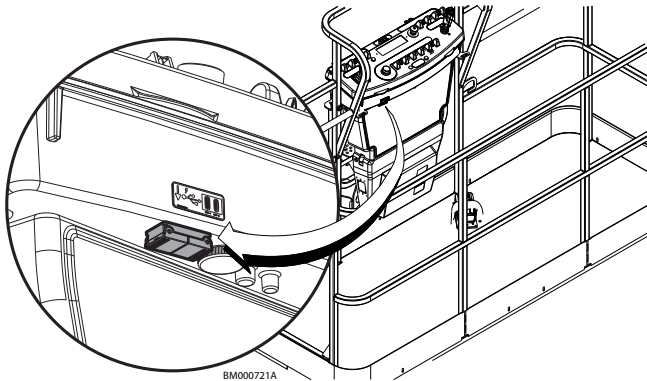
Turning the knob all the way counterclockwise until it clicks puts drive, main lift, tower lift, and swing into creep mode.

Creep Mode puts the functions listed above, as well as the Drive/Steer and Main Lift/Swing functions into the slowest speed setting.

4.20 USB DC POWER PORTS

Machines equipped with the Rapid Replaceable Platform have two USB ports for DC charging. One port accepts a USB-A connector and one port accepts a USB-C connector.

Access to the ports is under the left side of the platform control station.



4.21 AC POWER RECEPTACLE (IF EQUIPPED)

The machine platform may be equipped with an AC receptacle for operations requiring alternating current.

Access to the receptacle is under the platform control station.

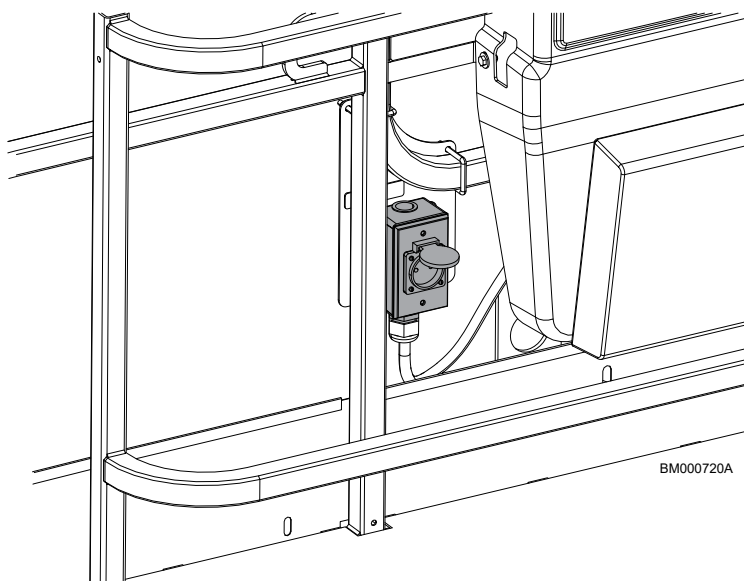


Figure 11. Platform Power — AC Power Receptacle

4.22 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.

4.23 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 is in Creep mode. See Operation section for more information on machine mode.
2. Speed and Function Restricted — Machine is in Creep mode and boom movement is restricted to transport position. In this state, once the boom reaches the transport position, it is not permitted to leave that defined position.
3. Locked Out — Machine has been locked out and will not operate (including engine start and auxiliary power, if applicable).

CAUTION

The Locked Out state will override the machine capability to use auxiliary power.

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.

4.24 SKYGUARD ACTIVATION/DEACTIVATION

SkyGuard provides enhanced protection at the Platform Control Station. When the SkyGuard sensor is activated, functions in use at the time of actuation will reverse or cutout. See SkyGuard Function Table.

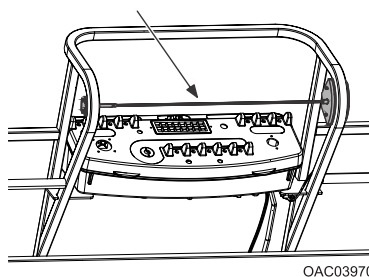


Figure 12. SkyGuard - SkyLine

To activate SkyGuard, the rod is pressed breaking the connection between the rod and right bracket.

During activation, the horn will sound and (if equipped and configured) a beacon will illuminate until sensor is reattached and footswitch is disengaged.

If SkyGuard activates inadvertently, release controls, reattach the rod to the right bracket and recycle the foot switch. Normal operation should resume.

If SkyGuard remains activated after rod reattachment, press and hold the SkyGuard Override Switch to allow functions to return the operator to the ground. Do not operate machine until the machine is inspected and any malfunctions are corrected.

Table 7. SkyGuard Function Table

Function	Reversal / Cutout
Drive Forward	R * / C **
Drive Reverse	R
Steer	C
Swing	R
Tower Lift Up / Tower Telescope Out	C
Tower Lift Down / Tower Telescope In	C
Boom Lift Up	R
Boom Lift Down	R
Boom Telescope Out	R
Boom Telescope In	C
Jib Lift (If equipped)	C
Platform Level	C

Table 7. SkyGuard Function Table (continued)

Function	Reversal / Cutout
Platform Rotate	C
<p>R = Indicates Reversal is Activated; C = Indicates Cutout is Activated * DOS (Drive Orientation System) Enabled ** DOS Not Enabled, machine is driving straight without steering, and any other hydraulic function is active Note: If SkyGuard is enabled with the Soft Touch system, functions will cut out instead of reversing.</p>	

4.25 EMERGENCY TOWING

 WARNING

Runaway vehicle/machine hazard. Machine has no towing brakes. Towing vehicle must be able to control machine at all times. On-highway towing not permitted. Failure to follow instructions could cause serious injury or death.

 WARNING

Maximum towing speed 5 mph (8 km/h)

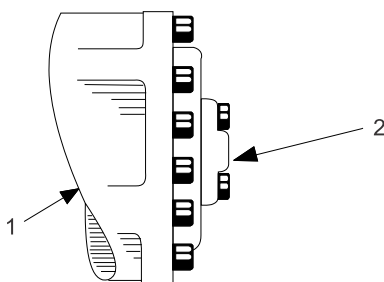
 WARNING

Maximum towing grade 25%.

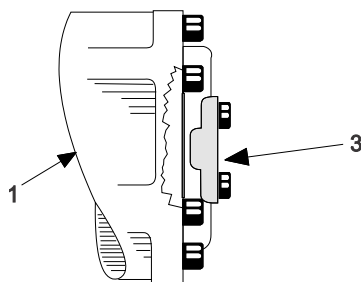
 CAUTION

Do not tow machine with engine operating or drive hubs engaged.

1. Retract, lower and position boom in travel position; lock turntable.
2. Disconnect drive hubs (1) by inverting disconnect cap (2). The disconnect cap will be in the inverted position (3).



BM000028

Figure 13. Drive Hub Engaged

BM000028

Figure 14. Drive Hub Disengaged

3. Reconnect the drive hubs by inverting the disconnect cap when towing is complete.

4.26 SHUT DOWN AND PARK

The preferred procedures to shut down and park the machine are as follows:

1. Drive machine to a reasonably well protected area.
2. Ensure boom is fully retracted and lowered over rear axle.
3. Shut down Emergency Stop at Platform Controls.
4. Shut down Emergency Stop at Ground Controls. Position Platform/Ground Select switch to center OFF (center position).
5. If necessary, cover Platform Controls to protect instruction placards, warning decals, and operating controls from hostile environment.

NOTICE

If parking a MEWP with the boom elevated in an effort to conserve space, booms may be elevated, but shall not be extended. It is the operator's responsibility to ensure all safety precautions in Section 1 of this manual are followed for each unique situation.

4.27 LIFTING AND TIE DOWN

4.27.1 Lifting

1. Refer to the Machine Serial Number Plate, call JLG Industries, or weigh the individual unit to find out the Gross Vehicle Weight.

2. Place the boom in the stowed position.
3. Remove all loose items from the machine.
4. Properly adjust the rigging to prevent damage to the machine and so the machine remains level.

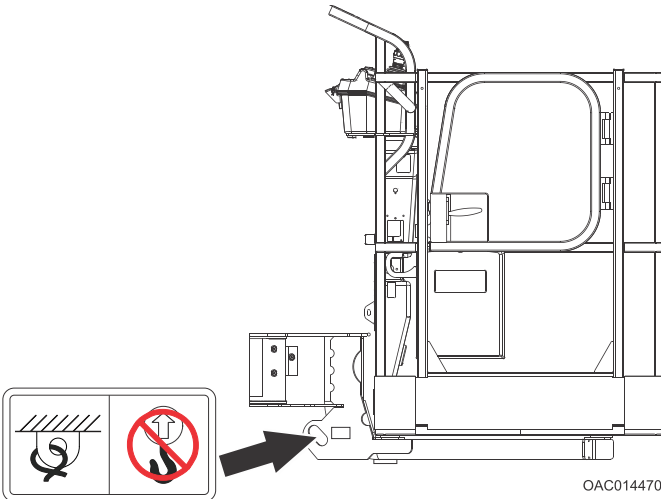
4.27.2 Tie Down

NOTICE

When transporting the machine, the boom must be fully lowered into the boom rest.

1. Place the boom in the stowed position.
2. Remove all loose items from the machine.
3. Secure the chassis using straps or chains of adequate strength.
4. Ensure the platform is lowered so the wear pad on the bottom rests on the surface of the transportation vehicle.

Note: Secure through the tie downs on the boom using straps or chains of adequate strength.



NOTICE

Secure turntable with turntable lock (if equipped) before traveling long distances or hauling machine on truck/trailer.

4.28 STOWING THE JIB FOR TRANSPORT

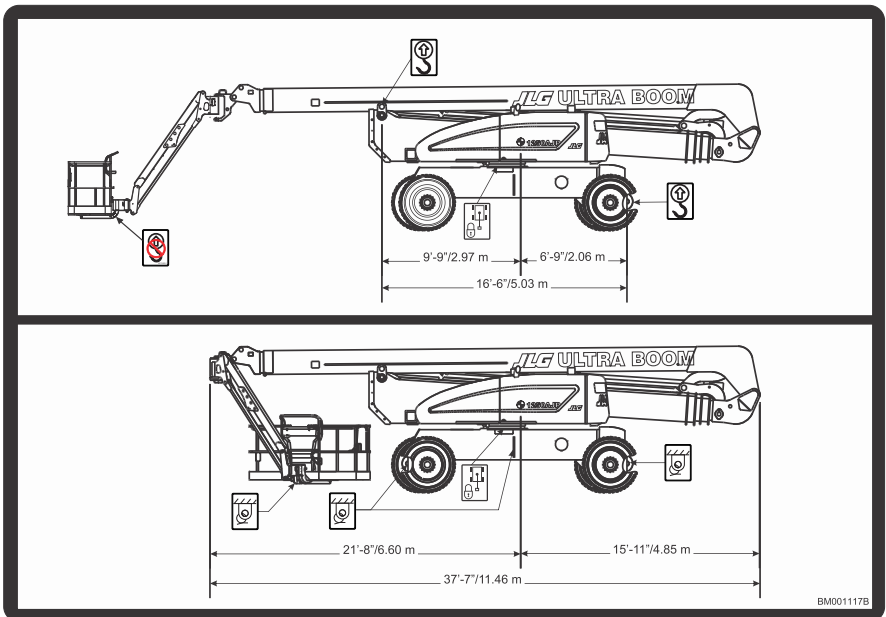
1. Place the boom in the stowed position with the axles retracted.
2. Hold the Jib Swing control switch to the right until the platform will no longer swing.

Note: The Jib Swing function is not operable when the Capacity Select control is in the 1000 lb (454 kg for ANSI markets and 450 kg for CE and Australia markets) position.

Note: Automatic platform leveling is disabled when stowing the jib.

3. Push and hold the Jib Stow Override control switch until the jib and platform are in the stowed position under the boom.

4.29 LIFTING CHART



4.30 SAFETY DECALS

4.30.1 Safety Decal Locations and Legend

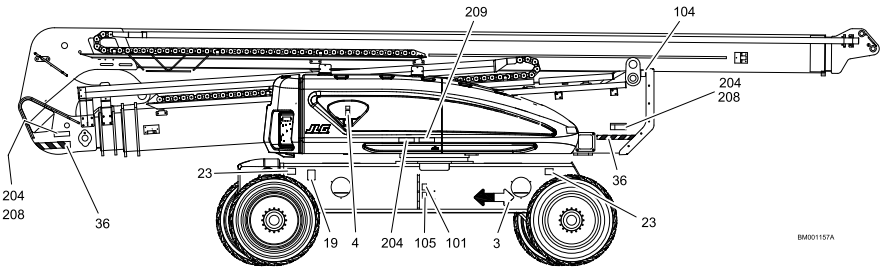


Figure 15. Safety Decal Locations 1 of 5

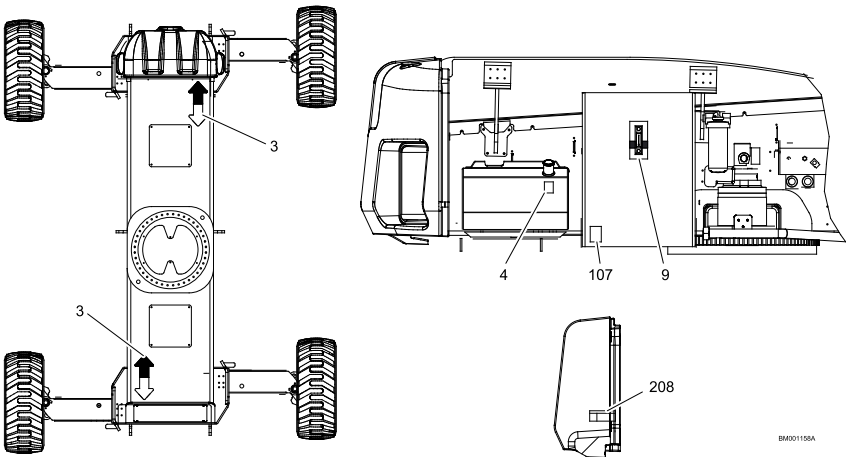


Figure 16. Safety Decal Locations 2 of 5

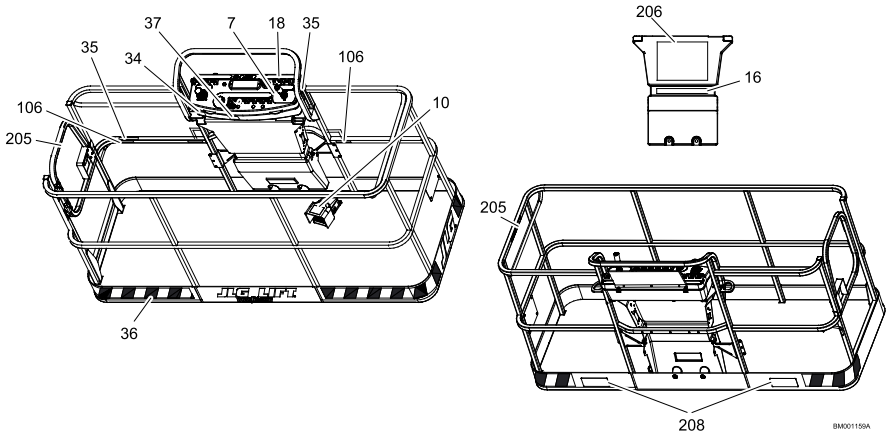


Figure 17. Safety Decal Locations 3 of 5

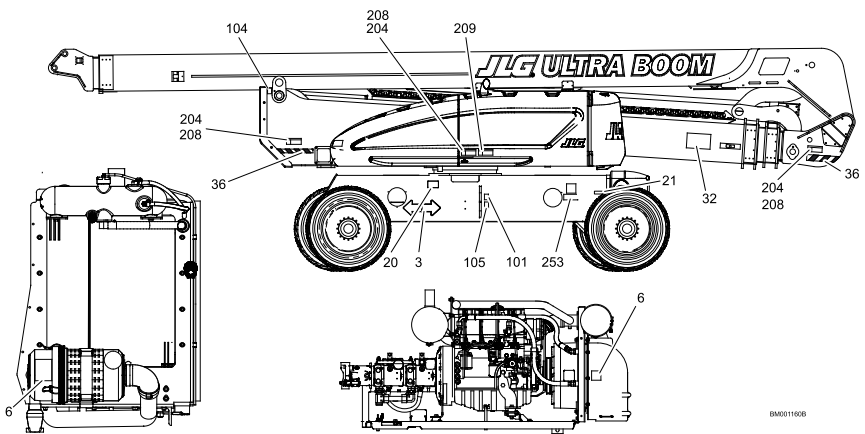


Figure 18. Safety Decal Locations 4 of 5

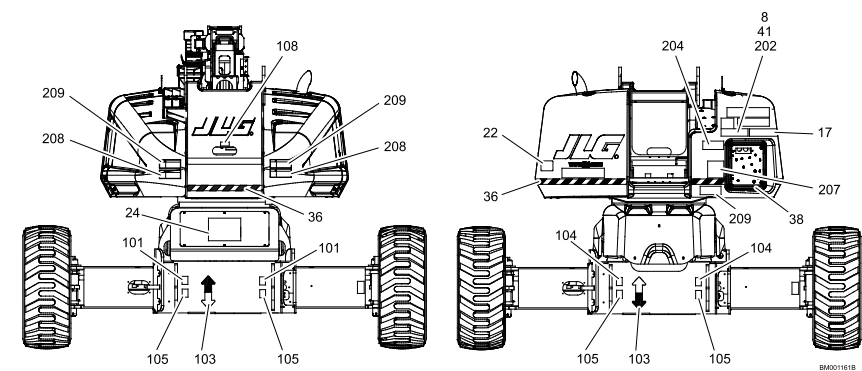


Figure 19. Safety Decal Locations 5 of 5

Table 8. Safety Decal Legend

Item #	ANSI	Korean	Chinese	Portuguese	Spanish	French	Australian	Japanese
3	1701501	1701501	1701501	1701501	1701501	1701501	1701501	1701501
4	1701505	1701505	1701505	1701505	1701505	1701505	1701505	1701505
6	1704972	1706061	1706060	1706059	1706063	1706064	1706098	1706062
7	1705351	1705427	1705430	1705905	1705910	1705429	--	1705426
8	1705492	--	--	--	--	--	--	--
9	1705511	1705511	1705511	1705511	1705511	1705511	1705511	1705511
10	3252347	--	--	--	--	--	1705828	--
16	1001253048	1001253052	1001253054	1001253057	1001253059	1001253050	1706770	1001253061
17	1001253049	1001253053	1001253056	1001253058	1001253060	1001253051	1705468	1001253062
18	1001122611	1001122611	1001122611	1001122611	1001122611	1705174	1705174	1001122611
19	1001131269	--	--	--	--	1001131269	--	--
20	1001223055	1001224048	1001224050	1001224052	1001224049	1001223971	--	1001224053
21	1001223453	--	--	--	--	1001223453	--	--
22	3251813	--	--	3251813	3251813	3251813	1705084	--
23	1703483	1703483	1703483	1703483	1703483	1703483	1703483	1703483
24	1001284690	1001284690	1001284690	1001284690	1001284690	1001284690	1001284690	1001284690
32	1703959	1703959	1703959	1703959	1703959	1703959	1703959	1703959
34	1001231801	--	--	--	--	--	--	--

Table 8. Safety Decal Legend (continued)

Item #	ANSI	Korean	Chinese	Portuguese	Spanish	French	Australian	Japanese
35	1703175	--	--	--	--	1703175	--	--
36	4420051	4420051	4420051	4420051	4420051	4420051	4420051	4420051
37	1001094055	1001094055	1001094055	1001094055	1001094055	1001094055	1001094055	1001094055
41	--	--	--	--	--	--	1001112551	--
101	1701499	1701499	1701499	1701499	1701499	1701499	1701499	1701499
102	1701509	1701509	1701509	1701509	1701509	1701509	1701509	1701509
103	1701529	1701529	1701529	1701529	1701529	1701529	1701529	1701529
104	1703811	1703811	1703811	1703811	1703811	1703811	1703811	1703811
105	1703814	1703814	1703814	1703814	1703814	1703814	1703814	1703814
106	1704277	1704277	1704277	1704277	1704277	1704277	1704277	1704277
107	1704412	1704412	1704412	1704412	1704412	1704412	1704412	1704412
108	3251243	3251243	3251243	3251243	3251243	3251243	--	3251243
202	--	1705503	1001117035	1705906	1705915	1705505	--	1705493
204	1703953	1703945	1703943	1705903	1703941	1703942	--	1703944
205	1702868	1705969	1001116846	1705967	1704001	1704000	1001218850	--
206	1001231315	1001231317	1001231321	1001231319	1001231318	1001231316	1705921	1001231320
207	1705336	1705345	1001116849	1705896	1705917	1705347	1705822	1705344
208	1703804	1703951	1703949	1705898	1703947	1703948	1701518	1703950

Table 8. Safety Decal Legend (continued)

Item #	ANSI	Korean	Chinese	Portuguese	Spanish	French	Australian	Japanese
209	1703805	1703939	1001116851	1705897	1703935	1703936	1705961	1703938
210	--	1703981	1703982	1705902	1703983	1703984	--	1703980

4.30.2 CE/UKCA Only Safety Decal Locations and Legend

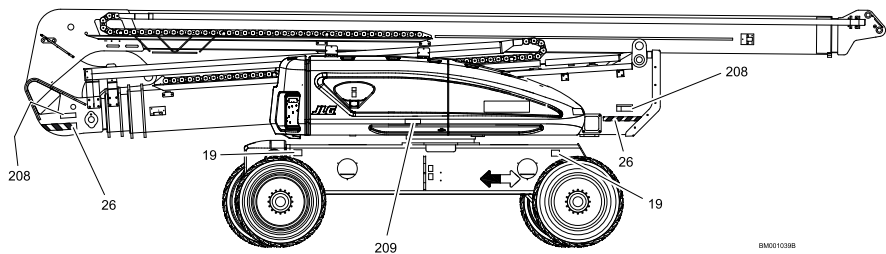


Figure 20. CE/UKCA Only Safety Decal Locations 1 of 4

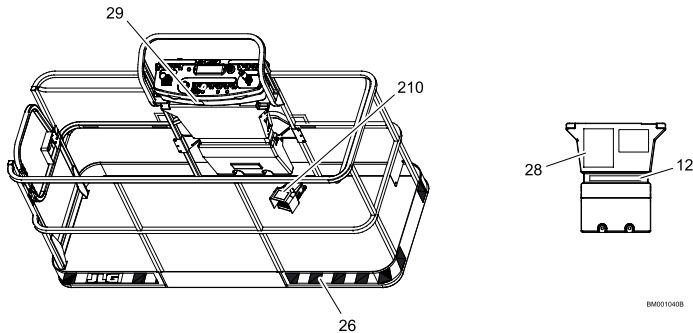


Figure 21. CE/UKCA Only Safety Decal Locations 2 of 4

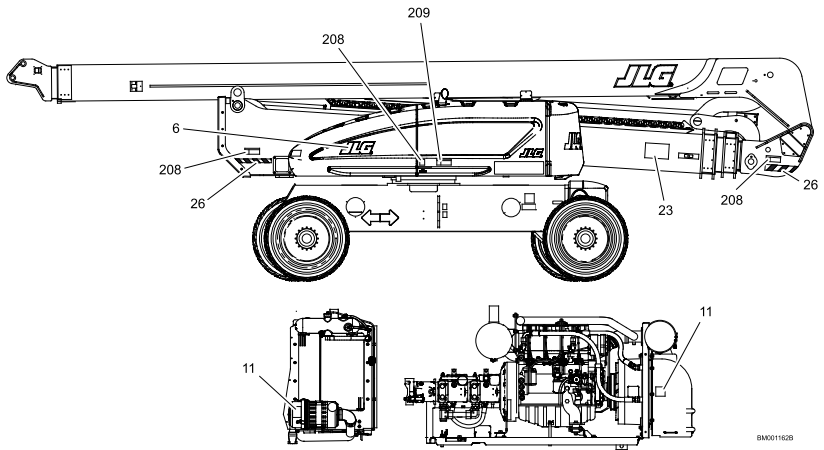


Figure 22. CE/UKCA Only Safety Decal Locations 3 of 4

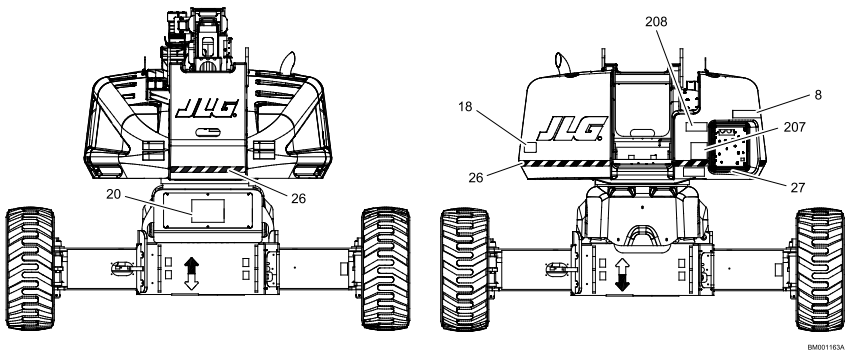


Figure 23. CE/UKCA Only Safety Decal Locations 4 of 4

Table 9. CE/UKCA Only Safety Decals Legend

Item #	CE/UKCA
6	1702773
8	1705468
11	1706098
12	1706770
18	1001191525
19	1703483

Table 9. CE/UKCA Only Safety Decals Legend (continued)

Item #	CE/UKCA
20	1001284690
23	1703959
27	1001197408
28	1001180696
29	1001094055
38	1001319656
102	1701509
205	1001218850
206	1705921
207	1705822
208	1701518
209	1705961
210	1705828

4.31 RAPID REPLACEABLE PLATFORM SAFETY DECALS

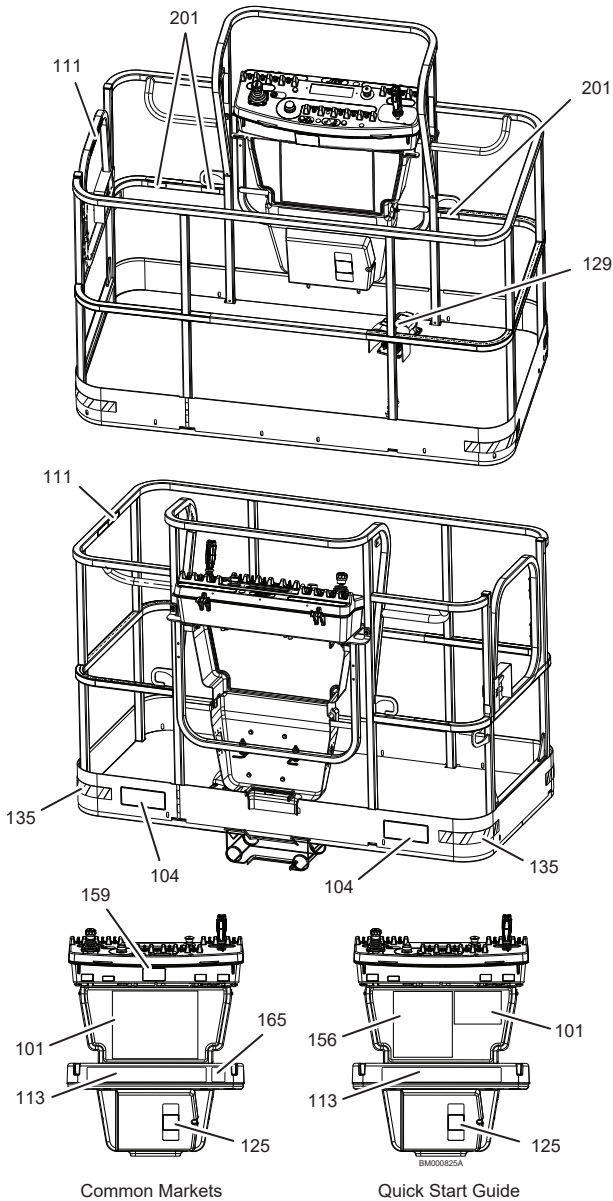


Figure 24. Rapid Replaceable Platform Decal Installation

Table 10. Decal Legend - 1250AJP

Item #	ANSI	CE/UKCA	Japanese	Korean	Spanish	French (CSA)	Chinese	Portuguese	Australian
101	1001311942	1705921	1001311947	1001311944	1001311945	1001311943	1001311948	1001311946	1705921
104	1703804	1701518	1703950	1703951	1703947	1703948	1703949	1705898	1701518
111	1702868	--	--	1705969	1704001	1704000	1001116846	1705967	--
113	1001253048	1706770	1001253061	1001253052	1001253059	1001253050	1001253054	1001253057	1706770
125	1701640	1701640	1701640	1701640	1701640	1701640	1701640	1701640	1701640
129	3252347	1705828	1703980	1703981	1703983	1703984	1703982	1705902	1705828
135	4420051	4420051	4420051	4420051	4420051	4420051	4420051	4420051	4420051
156	--	1001180696 (English)	--	--	--	--	--	--	--
159	1001231801 1001094055	1001094055	1001094055	1001094055	1001094055	1001094055	1001094055	1001094055	1001094055
165	Not Used								
201	1704277	1704277	1704277	1704277	1704277	1704277	1704277	1704277	1704277

SECTION 5

Emergency Procedures

5.1 GENERAL

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

5.2 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, the factory should 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 and test all functions first from the ground controls, then from the platform controls. Do not lift above 3 m (10 ft.) until you are sure that all damage has been repaired, if required, and that all controls are operating correctly.

5.3 EMERGENCY OPERATION

5.3.1 Operator Unable to Control Machine

If the platform operator is pinned, trapped or unable to operate or control machine, do the following:

1. Other personnel should operate the machine from ground controls only as required.
2. Other qualified personnel on the platform may use the platform controls.

WARNING

Do not continue operation if controls do not function properly.

3. Cranes, forklift trucks or other equipment can be used to remove platform occupants and stabilize motion of the machine.

5.3.2 Platform or Boom Caught Overhead or Boom Movement Prevented by Boom Control System

Lowering the boom onto an object or structure may cause the boom control system to prevent movement of the machine. This can include movement necessary to lift the boom off the object. Additionally, if the platform or boom becomes jammed or snagged in overhead structures, movement of the boom can be regained by doing 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, use the Auxiliary Power System to carefully free the platform or boom 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.

5.4 EMERGENCY TOWING PROCEDURES

Towing this machine is prohibited, unless properly equipped. However, provisions for moving the machine have been incorporated. For specific procedures, refer to the Machine Operation section.

5.5 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.

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SECTION 6

Accessories

6.1 AVAILABLE ACCESSORIES AND RELATIONSHIP TABLE

Table 11. Available Accessories Table

Accessory	Market						
	ANSI (USA Only)	ANSI	AUS	CE/ UKCA	CSA	GB (China)	MOL 70 (Japan)
Bolt-On External Fall Arrest (36" x 72") (36" x 96")	✓	✓	✓		✓	✓	✓
Cable Ladder Carrier			✓				
Fabric Mesh to Mid Rail (36" x 72") (36" x 96")	✓	✓	✓				
Fabric Mesh to Top Rail (36" x 72") (36" x 96")	✓	✓			✓		
Fall Arrest Platform (36" x 72")	✓	✓					
Fall Arrest Platform (36" x 96")	✓				✓		
Nite Bright®	✓	✓	✓	✓	✓	✓	✓
Pipe Racks	✓		✓	✓			
Platform Mesh to Mid Rail (36" x 72") (36" x 96")	✓	✓	✓				
Platform Mesh to Top Rail (36" x 72") (36" x 96")	✓	✓			✓		

Table 11. Available Accessories Table (continued)

Accessory	Market						
	ANSI (USA Only)	ANSI	AUS	CE/ UKCA	CSA	GB (China)	MOL 70 (Japan)
Platform Mid-Rail Deck (36" x 96")	✓						
Platform Top Rail Extension (36" x 72") (36" x 96")	✓	✓	✓	✓	✓	✓	✓
Platform Work Lights	✓	✓	✓	✓	✓	✓	✓
Platform Work Surface	✓	✓	✓	✓	✓	✓	✓
SkyGlazier®	✓	✓	✓	✓	✓	✓	
SkyPower® — 7.5 kW	✓	✓	✓		✓		✓
Generator — 4 kW	✓	✓	✓	✓	✓	✓	✓
SkySense®	✓	✓	✓	✓	✓	✓	✓
SkySense® Platform Bumper Padding	✓	✓	✓	✓	✓	✓	✓
SkyWelder®	✓	✓	✓		✓	✓	✓
Soft Touch	✓	✓	✓	✓	✓	✓	✓
Soft Touch - Overhead		✓					
Storage Tray	✓	✓	✓	✓	✓	✓	✓

Table 12. Accessories/Options Relationship Table

Accessory	Required Item	Compatible With (Note 1)	Incompatible With	Interchangeable With (Note 2)
Bolt-On Fall Arrest			Platform MMR*, Platform MTR**, SkyGlazier, SkySense, SkySense Platform Bumper Padding, Soft Touch, Storage Tray, Top Rail Extension	
Cable Ladder Carrier			Platform/Fabric MMR*, Platform/Fabric MTR**, Platform Work Lights, SkySense Platform Bumper Padding, Top Rail Extension	
Nite Bright			Platform/Fabric MMR*, Platform/Fabric MTR**, Platform Work Lights, SkySense Platform Bumper Padding, Soft Touch, Top Rail Extension	
Pipe Racks		SkyPower	Platform MMR*, Platform MTR**, SkySense, Soft Touch	SkyCutter, SkyGlazier, SkyWelder
Platform Mid-Rail Deck		Platform MTR** (Fabric), Pipe Racks, Nite Bright, SkyCutter, SkyGlazier, SkyWelder, Top Rail Extension	Bolt-On Fall Arrest, Platform MMR* (Steel), Platform MTR** (Steel), Platform Work Lights, SkySense	
Platform Work Surface			Platform MMR*, Platform MTR**, SkySense, SkySense Platform Bumper Padding, Soft Touch	
SkyAir	SkyPower	SkyCutter, SkyGlazier, SkyWelder		
SkyCutter	SkyPower	SkyWelder	Pipe Racks, Platform/Fabric MMR*, Platform/Fabric MTR**, SkySense, SkySense Platform Bumper Padding, Soft Touch, Storage Tray	SkyGlazier
SkyGlazier		SkyPower	Bolt-On Fall Arrest, Fall Arrest Platform, Pipe Racks, Platform/Fabric MMR*, Platform/Fabric MTR**, SkySense, SkySense Platform Bumper Padding, Soft Touch, Top Rail Extension, Tri-Entry Platform	SkyCutter, SkyWelder

Table 12. Accessories/Options Relationship Table (continued)

Accessory	Required Item	Compatible With (Note 1)	Incompatible With	Interchangeable With (Note 2)
SkyPower		Nite Bright, SkyCutter, SkyGlazier, SkyWelder		
SkySense			Bolt-On Fall Arrest, Pipe Racks, Fabric MMR*, Fabric MTR**, Platform Work Surface, SkyGlazier, SkyWelder, Soft Touch, Top Rail Extension	
SkySense Platform Bumper Padding		SkySense	Cable Ladder Carrier, Nite Bright, SkyWelder, Platform/Fabric MTR, Platform/Fabric MMR, Soft Touch, Storage Tray, Top Rail Extension, Sky Glazier, Sky Cutter, Platform Work Surface	
SkyWelder	SkyPower	Nite Bright, SkyCutter	Pipe Racks, Platform/Fabric MMR*, Platform/Fabric MTR**, SkySense Platform Bumper Padding, Soft Touch, Storage Tray	SkyGlazier
Soft Touch		SkyPower	Bolt-On Fall Arrest, Fall Arrest Platform, Pipe Racks, Nite Bright, Platform/Fabric MMR*, Platform/Fabric MTR**, Platform Work Surface, SkyCutter, SkyGlazier, SkySense, SkySense Platform Bumper Padding, SkyWelder, Storage Tray, Top Rail Extension, Tri-Entry Platform	
Storage Tray			Bolt-On Fall Arrest, Platform MMR*, Platform MTR**, SkyCutter, SkySense Platform Bumper Padding, Soft Touch, Top Rail Extension	

Note: 1. Any non - "Sky" accessory not listed under "Incompatible With" is assumed to be compatible.

Note: 2. Can be used on the same unit but not simultaneously.

* MMR = Mesh to Mid Rail, ** MTR = Mesh to Top Rail

6.2 BOLT-ON EXTERNAL FALL ARREST

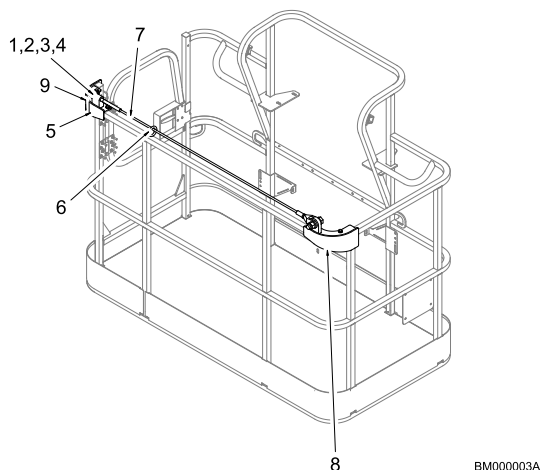


Figure 25. Bolt-On External Fall Arrest System

1. Belleville Washer
2. Washer
3. Hex Nut

4. Jam Nut
5. LH Bracket
6. Attachment Ring

7. Cable
8. RH Bracket
9. Decal

The bolt-on external fall arrest system is designed to provide a lanyard attach point while allowing the operator to access areas outside the platform. Exit/Enter the platform through the gate area only. The system is designed for use by one person.

Personnel must use fall protection at all times. A full-body harness is required with a shock absorbing lanyard or self-retracting lanyard not to exceed 6 ft (1.8 m) in length.

External Fall Arrest System capacity is 310 lb (140 kg) - one (1) person maximum.

Do not move platform during use of the external fall arrest system.

! WARNING

Do not operate any machine functions while outside of platform. Be careful when entering/exiting the platform at elevation.

! WARNING

If the external fall arrest system is used to arrest a fall or is otherwise damaged, the entire system must be replaced and the platform fully inspected before returning to service. Refer to the service manual for removal and installation procedures.

NOTICE

The external fall arrest system requires an annual inspection and certification. The annual inspection and certification must be performed by a qualified person other than the user.

6.2.1 Inspection Before Use

The external fall arrest system must be inspected before each use of the machine. Replace components if there are any signs of wear or damage.

Before each use, perform a visual inspection of the following components:

- Cable: Inspect cable for proper tension, broken strands, kinks, or any signs of corrosion.

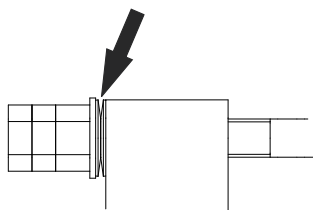


Figure 26. Incorrect Gap

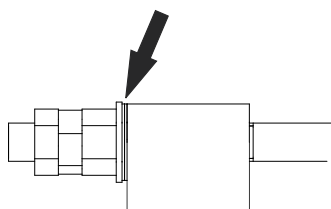
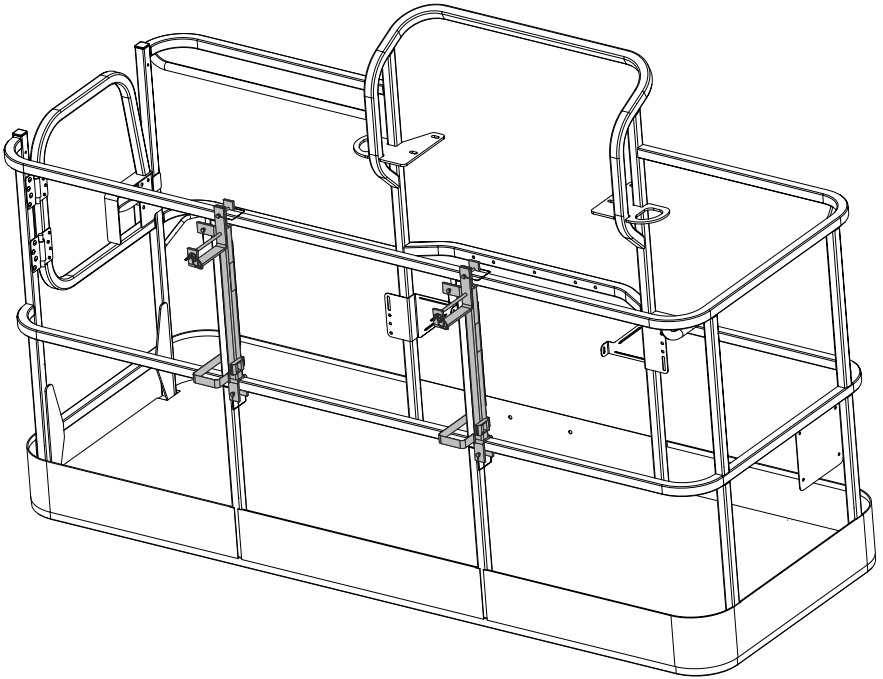


Figure 27. Correct Gap

Note: There should be no visible gap between the two Belleville washers when setting proper cable tension. If any gap is shown between the two Belleville washers, the cable tension is incorrect.

- Fittings & Brackets: Ensure all fittings are tight and there are no signs of fractures. Inspect brackets for any damage.
- Attachment Ring: No cracks or signs of wear are acceptable. Any signs of corrosion requires replacement.
- Attaching Hardware: Inspect all attaching hardware to ensure there are no missing components and hardware is properly tightened.
- Platform Rails: No visible damage is acceptable.

6.3 CABLE LADDER CARRIER



BM000362

Figure 28. Cable Ladder Carrier

The Cable Ladder Carrier accessory consists of two vertical brackets mounted to the outside of the platform used to carry a "ladder" style cable tray.

6.4 FABRIC MESH TO MID OR TOP RAIL

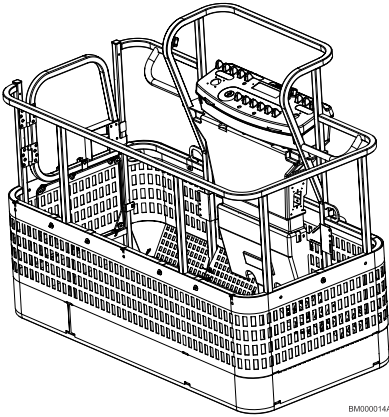


Figure 29. Fabric Mesh to Mid Rail

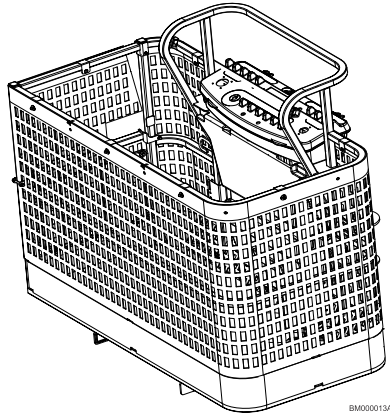


Figure 30. Fabric Mesh to Top Rail

The Fabric Mesh accessory consists of a flame retardant, lightweight mesh which is attached to the mid platform rail **or** the top platform rail.

6.5 FALL ARREST PLATFORM

Note: See the JLG External Fall Arrest System manual (PN 3128935) for more detailed information.

The external fall arrest system is designed to provide a lanyard attach point while allowing the operator to access areas outside the platform. Exit/enter the platform through the gate area only. The system is designed for use by one person.

Personnel must use fall protection at all times. A full body harness is required with lanyard not to exceed 6 ft (1.8 m) in length, that limits the maximum arrest force to 900 lb (408 kg) for the transfastener type and 1350 lb (612 kg) for the shuttle type fall arrest system.

6.5.1 Safety Precautions

⚠ WARNING

Do not operate any machine functions while outside the platform. Use caution when entering/exiting the platform at elevation.

6.6 NITE BRIGHT®

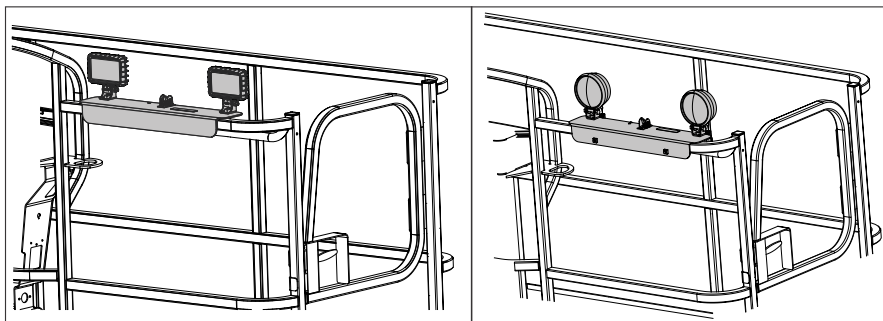


Figure 31. Nite Bright

The Nite Bright light package* consists of two 40W lights mounted to the platform railing.

* Appearance of Nite Bright lights may vary.

6.7 PIPE RACKS

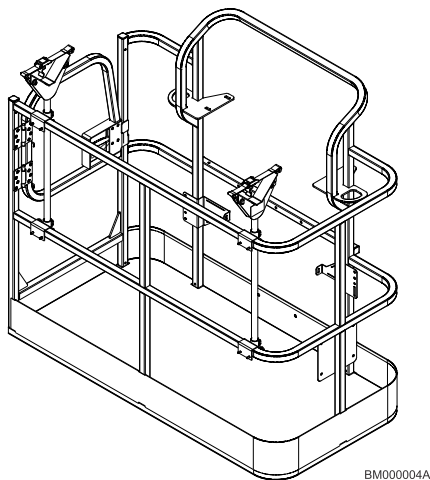


Figure 32. Pipe Racks

Pipe Racks provide a way to store pipe or conduit inside the platform in order to prevent rail damage and optimize platform utility. This accessory consists of two racks with adjustable straps to secure the load in place.

6.7.1 Capacity Specifications

Max. Capacity in Racks	Max. Platform Capacity (With Max. Weight in Racks)
80 kg	184 kg
Max. Length of Material in Racks: 6.1 m Min. Length of Material in Racks: 2.4 m	

6.7.2 Safety Precautions

 WARNING

Reduce platform capacity by 100 lb (45.5 kg) when installed.

 WARNING

Weight in racks plus weight in platform must not exceed rated capacity.

NOTICE

The maximum load in the racks is 180 lb (80 kg) evenly distributed between the two racks.

NOTICE

The maximum length of material in racks is 20 ft (6.1 m).

- Ensure no personnel are beneath the platform.
- Do not exit platform over rails or stand on rails.
- Do not drive machine without material secured.
- Return racks to the stowed position when not in use.
- Use this option only on approved models.

6.7.3 Preparation and Inspection

- Ensure racks are secured to the platform rails.
- Replace torn or frayed tie-down straps.

6.7.4 Operation

1. To prepare racks for loading, remove locking pins, rotate each rack 90 degrees from stowed to working position, then secure with locking pins.
2. Loosen and remove tie-down straps. Place material on racks with weight evenly distributed between both racks.
3. Route the tie-down straps at each end across loaded material and tighten.
4. To remove material, loosen and remove tie-down straps, then carefully remove material from racks.

Note: Reinstall tie-down straps across any remaining material before continuing machine operations.

6.8 PLATFORM MESH TO MID OR TOP RAIL

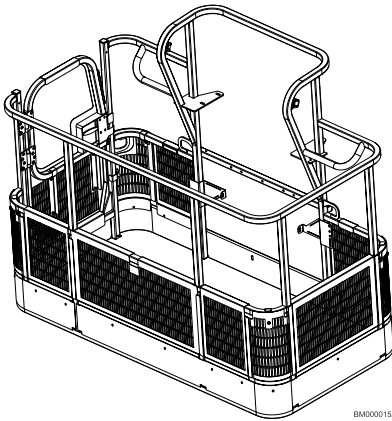


Figure 33. Platform Mesh to Mid Rail

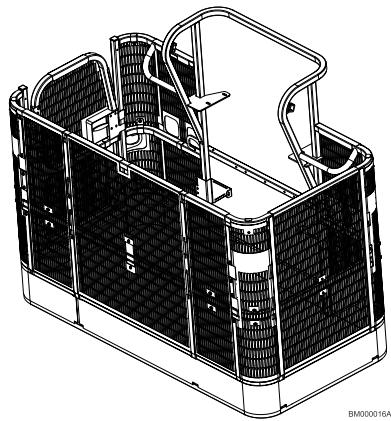


Figure 34. Platform Mesh to Top Rail

The Platform Mesh to Mid Rail accessory consists of stainless steel mesh attached to the platform mid rail.

The Platform Mesh to Top Rail accessory consists of lightweight, aluminum mesh attached to the platform top rail.

6.9 PLATFORM MID-RAIL DECK

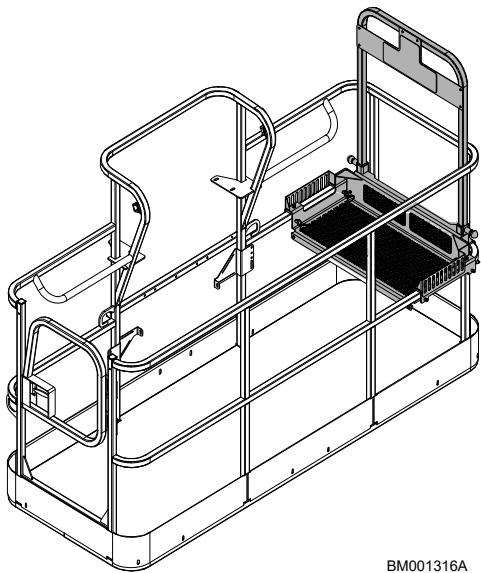
The platform mid-rail deck accessory consists of a deck base and a handrail installed on the middle rail of the platform.

WARNING

Do not operate machine with personnel on this device.

WARNING

Personnel in the platform must wear a full body harness with a lanyard attached to an authorized lanyard anchorage point at all times while in the platform.



BM001316A

Figure 35. Boom Platform Deck

WARNING

Handrail required when using this accessory. Make sure the handrail is in the up position and both spring pins are fully inserted before use.

WARNING

De-rate the platform by 55 lb (25 kg) when the accessory is in the platform.

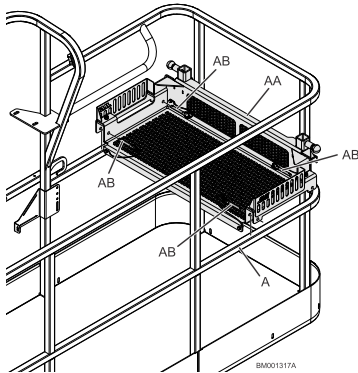
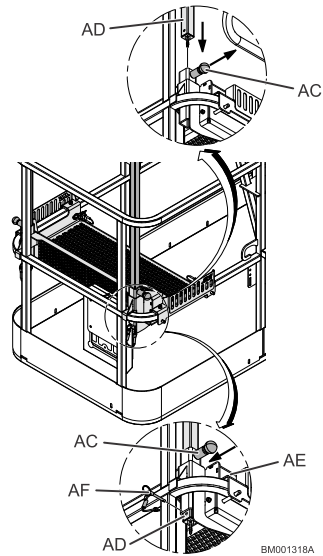
WARNING

Do not operate any machine functions from the platform deck. Use caution when getting on and off of the accessory.

6.9.1 Accessory Installation

Machine Preparation

1. Park the machine on a firm, level surface. Fully retract and lower boom onto the machine's boom rest stop.
2. Turn the key select switch to off (center) position and push in the power/emergency stop switch to off (down).
3. Disconnect the battery power from the machine.
4. Place a Do Not Operate tag on the key select switch.



Installation Procedures

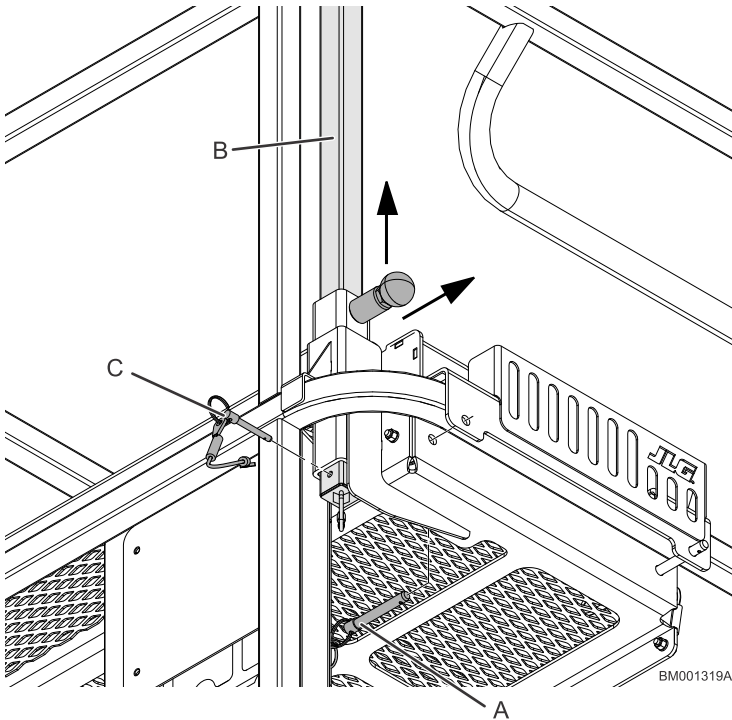
1. Install support deck base (**AA**) onto mid rail (**A**) of platform and secure with mid rail retention pins (**AB**).
2. Pull out round knob spring pins (**AC**) and rotate them a quarter turn. They will lock in the retracted position.
3. Install handrail tube assembly (**AD**) into the support deck base (**AE**).
4. Reset round knob spring pins (**AC**) by pulling out and rotating a quarter turn.
5. Slide the handrail up or down until the round knob spring pins (**AC**) slide into locating holes in the handrail. This will secure the handrail in the up position.
6. Insert the handrail overextension pins (**AF**) into the handrail tube. This will secure the mid rail deck.
7. Reconnect battery power to the machine.

8. Remove the Do Not Operate tag from the key select switch.
9. Verify proper operation of the machine functions.
10. Return the machine to service.

NOTICE

Use of the Boom Mid Rail Deck must not block platform entry/exit gate on single entry platforms.

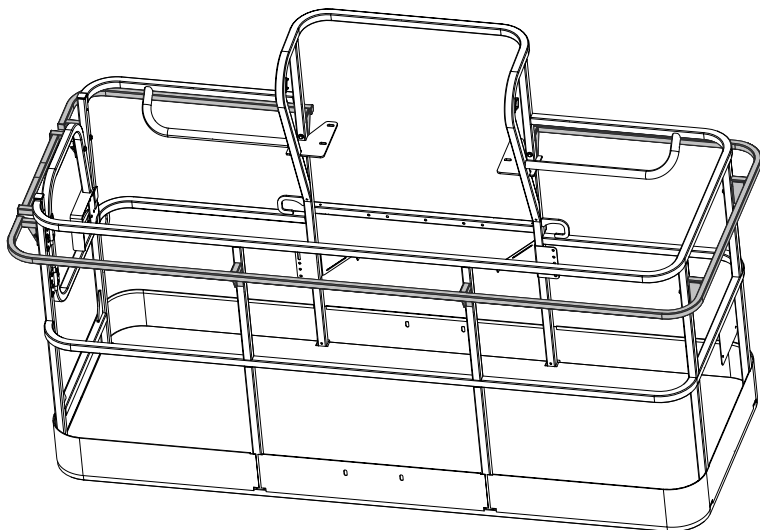
6.9.2 Access to Manual Box (Traditional Platform)



1. Remove and retain mid rail retention pins (A) closest to the handrail (B).
2. Lift the mid rail deck retention hooks up and over the platform mid rail while sliding the deck assembly away from the platform end.

Note: For machines with a platform hand rail located in front of the mid rail deck hand rail, remove and retain handrail overextension pin (C). Disengage spring pins and remove the handrail (B) from the mid rail deck base.

6.10 PLATFORM TOP RAIL EXTENSION

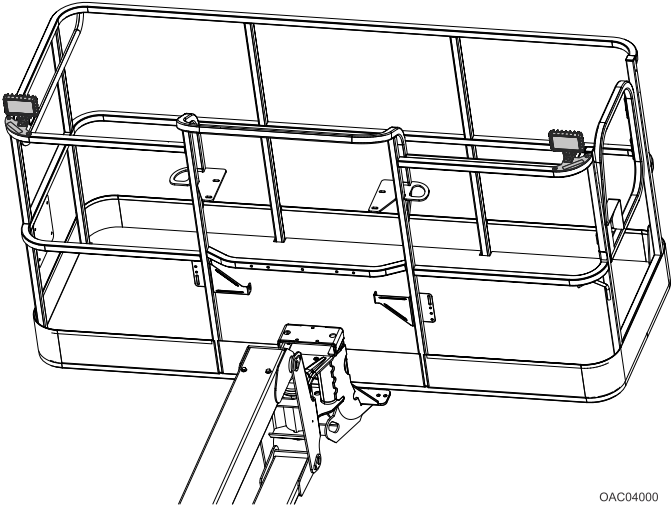


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Figure 36. Platform Top Rail Extension

The Platform Top Rail Extension accessory consists of an additional bar extending from all sides of the platform.

6.11 PLATFORM WORK LIGHTS

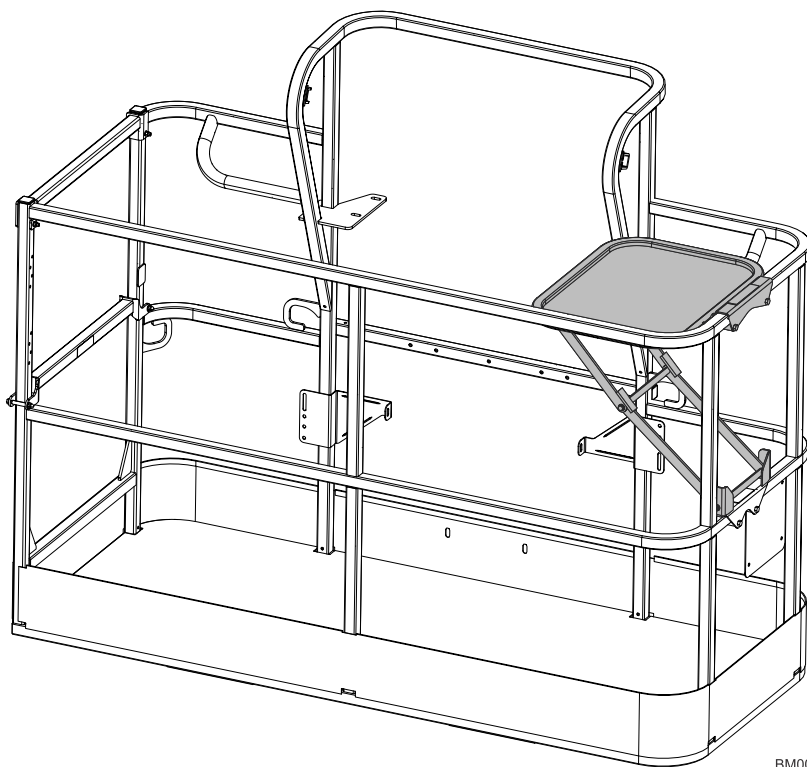


OAC04000

Figure 37. Platform Work Lights

The Platform Work Lights accessory consists of two 12V lights mounted to the platform railing.

6.12 PLATFORM WORK SURFACE



BM00027f

Figure 38. Platform Work Surface

The platform work surface option consists of a corner tray bolted onto the top and mid rails of the platform.

6.13 SKYGLAZIER®

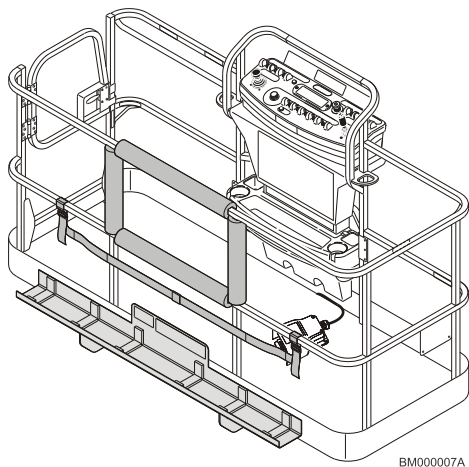


Figure 39. SkyGlazier System

SkyGlazier allows glaziers to position panels efficiently. The glazier package consists of a tray that attaches to the bottom of the platform. The panel rests on the tray and against top-rail of the platform, which is padded to prevent damage. SkyGlazier includes a strap to secure the panel to the platform rail.

6.13.1 Capacity Specifications

Capacity Zone *	Max. Tray Capacity	Max. Platform Capacity With Max. Weight in Tray
500 lb (227 kg/230 kg)	150 lb (68 kg)	250 lb (113 kg)
550 lb (249 kg/250 kg)	150 lb (68 kg)	250 lb (113 kg)
600 lb (270 kg/272 kg)	150 lb (68 kg)	250 lb (113 kg)
660 lb (299 kg/300 kg)	150 lb (68 kg)	350 lb (160 kg)
750 lb (340 kg)	150 lb (68 kg)	440 lb (200 kg)
1000 lb (450 kg/454 kg)	250 lb (113 kg)	500 lb (227 kg)
* Refer to the capacity decals installed on the machine for capacity zone information.		
Required Platform Type: Side-Entry		
Maximum Dimensions of Panel: 32 sq ft (3 sq m)		
Maximum Wind Speed: 20 mph (32 kph)		

6.13.2 Safety Precautions

⚠ WARNING

Ensure panel is secured with strap.

WARNING

Do not overload tray or platform. Total machine capacity is reduced when tray is installed.

WARNING

With SkyGlazier installed, the original platform capacity ratings are reduced as specified in the specifications table above. Do not exceed the new platform capacity rating. Refer to capacity decal located on tray.

WARNING

An increase of the area exposed to the wind will decrease stability. Limit panel area to 32 sq ft (3 sq m). Maximum allowable wind speed is 20 mph (32 kph).

- Ensure no personnel are beneath platform.
- Do not exit platform over rails or stand on rails.
- Remove tray when not in use.
- Use this option only on approved models.

6.13.3 Preparation and Inspection

- Check for cracked welds and damage to tray.
- Ensure tray is properly secured to platform.
- Ensure strap is not torn or frayed.

6.13.4 Operation

1. Load SkyGlazier tray with panel.
2. Position panel to its desired location on the tray.
3. Route the adjustable strap around the panel and tighten until secure.

6.14 SKYPOWER® 7.5 KW AND GENERATOR 4 KW

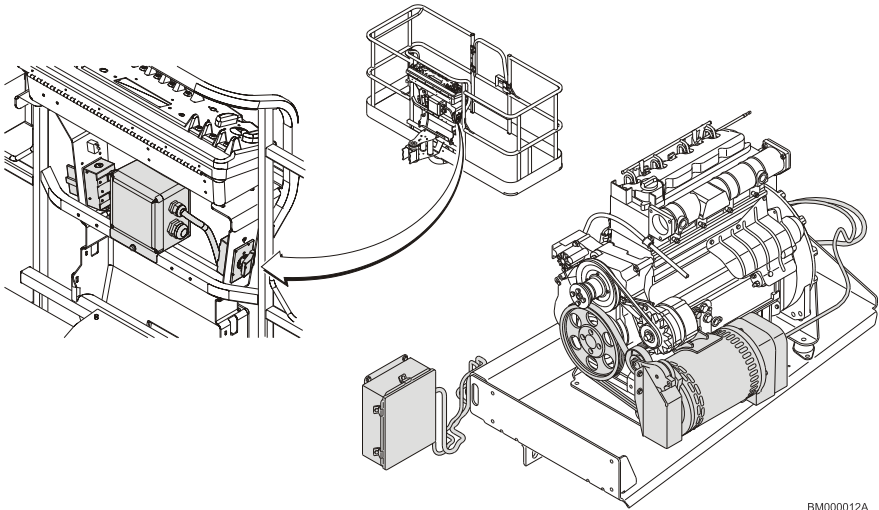


Figure 40. SkyPower and Generator Systems

The SkyPower and generator systems supply AC power to the platform through an AC receptacle to run tools, lights, cutting, and welding equipment.

All power regulation components are located in a watertight box connected by cable to the generator. The generator supplies power when running at the specified speed with the power switch on (switch is located on platform). A two-pole, 20 A (4 kW) or a three-pole, 30 A (7.5 kW) circuit breaker protects the generator from overload.

6.14.1 Output

SkyPower 7.5 kW Specifications:

- 3-phase: 240 V, 60 Hz, 7.5 kW (Peak: 8.5 kW)
- 1-phase: 240 V / 120 V, 60 Hz, 6 kW (Peak: 6 kW)

Generator 4 kW Specifications:

- 1-phase: 240 V / 120 V, 60 Hz, 4 kW
- 1-phase: 230 V / 115 V, 50 Hz, 4 kW

6.14.2 Safety Precautions

WARNING

Do not overload platform.

- Ensure no personnel are beneath platform.
- This factory-installed option is available only on specified models.
- Keep lanyard attached at all times.
- Do not use electrical tools in water.
- Use correct voltage for tool being used.
- Do not overload circuit.

6.14.3 Preparation and Inspection

- Ensure generator is secure.
- Check condition of belt and wiring.

6.14.4 Operation

Start the engine, then turn on the generator.

Refer to the Miller Generator Technical Manual (PN 3121677) for more information.

6.15 SKYSENSE®

WARNING

SkySense is not intended to replace or reduce the need for the operator to be aware of the environment around the machine. Hazards that will cause serious injury or death may not be prevented or reduced by SkySense. The operator must always look in the direction of travel, avoid power lines, avoid obstacles that could strike the machine or persons in the platform, and follow all instructions, decals, and other warnings provided with this machine.

The operator must not rely on SkySense as a substitute for following the instructions and warnings contained in the manuals and placards provided with this machine

SkySense is intended to assist the operator. SkySense may not detect certain objects depending on shape, type of material, or orientation of the object to the sensors. It is the operator's responsibility to be aware of their surroundings at all times.

WARNING

De-rate the platform by 10 lb (4.5 kg) per bar when installed on the platform (20 lb (9 kg) or 30 lb (14 kg) total).

Note: SkySense is not active when operating the machine from the ground controls.

6.15.1 Preparation and Inspection

Pre-Operation Inspection:

1. Inspect each of the SkySense tubes for dents, cracks, or other damage.
2. Inspect each SkySense sensor for any damage to the housing or sensor.

To test the SkySense system:

1. In an area free of obstructions, ensure the machine is on a smooth, firm surface within the limits of the maximum operating slope.
2. From the platform control console, elevate the boom until the bottom of the platform is at least 6 feet off the ground.
3. Continue to elevate the platform.
4. While elevating, hold your hand 6 inches to 12 inches above one of the upward facing sensors. The machine should stop, and the LED corresponding to that sensor (left LED for left sensor bar; right LED for right sensor bar; both LEDs for center sensor bar or overhead sensor) should be red.
5. Ensure the area below the platform is clear of obstructions and lower the platform. The machine should slow down, (SkySense Status LED will blink yellow with increasing frequency) and stop, (SkySense Status LED will be illuminated solid red) when the bottom of the platform is approximately 12 inches from the ground. The alarm should sound if it is not muted (refer to SkySense Alarm).
6. Recycle the footswitch and press the override button on the platform control console.
7. Continue to lower the platform. The machine should move in the elevated drive speed mode (SkySense Status LED will remain red).

Note: The SkySense system will not stop machine operation while in Creep.

6.15.2 Operation

SkySense slows a machine's function to creep speed when it is a certain distance away from an object, known as the "warning zone." If the machine continues to approach the object and moves into the "stop zone," SkySense stops all machine functions.

For proportional functions activated by the joystick, the size of the warning zone varies based on the amount of joystick activation. The stop zone always activates at the same distance from the object regardless of the joystick's position.

If the function has reached the warning zone, normal drive speed will resume when a function is activated in the opposite direction. If the machine has reached the SkySense stop zone, release the function and recycle the footswitch to activate a function in the opposite direction.

SkySense is active during the following functions:

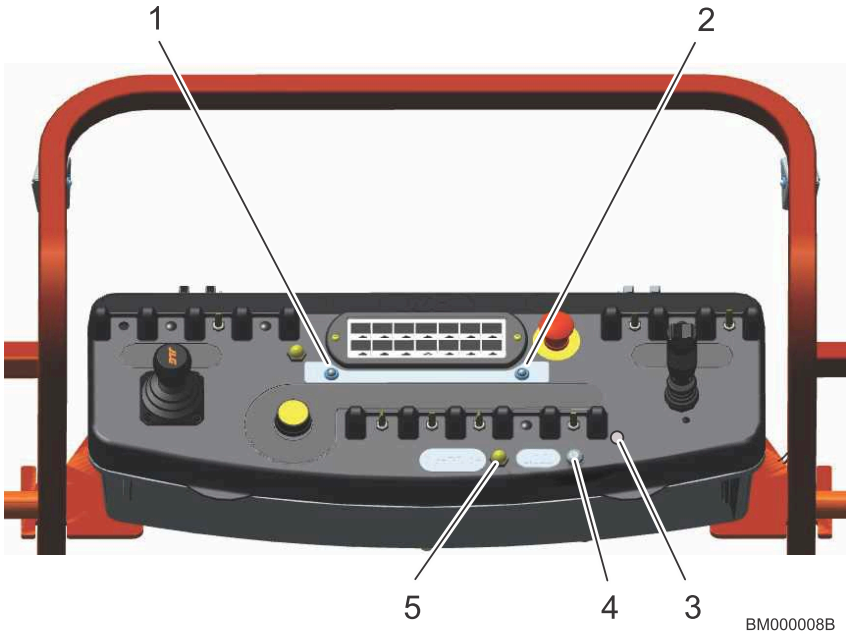
- Lift Up/Down (including jib functions)
- Platform Rotate (including jib rotate)
- Telescope Out
- Swing
- Reverse Drive

Note: During active DOS (Drive Orientation System), SkySense is active when driving in both forward and reverse directions.

There are two LED indicators on the platform control box that signal SkySense activity.

- **No LED:** Normal operation.
- **LED Flashing Yellow:** Machine is in SkySense warning zone and will reduce function speed to creep. Flash frequency correlates to proximity of object.
- **LED Red:** Machine is in SkySense stop zone and all machine functions will cease.
- **LED Flashing Red:** SkySense sensor is obstructed or damaged. Obstructions must be removed and proper function verified. Damaged sensors must be replaced.

6.15.3 SkySense Platform Panel Indicators



- 1. LED Indicator Light
- 2. LED Indicator Light
- 3. Alternate Mute Speaker Button Position

- 4. Mute Speaker Button
- 5. Override Button

6.15.4 SkySense Alarm

Activation of SkySense is signaled by an audible alarm and the LEDs on the platform console that indicate SkySense activity when reaching the warning or stop zones

In the warning zone, the audible alarm will pulse and increase in frequency as the machine moves closer to the object. In the stop zone, the alarm will sound a continuous tone.

Additionally, when the machine is in the stop zone, the platform control panel audible alarm will sound. The system may be reset by recycling the footswitch.

The audible SkySense alarms can be muted by a button on the platform control console, although LEDs will continue to light. The platform control panel alarm will sound when the machine enters the SkySense stop zone even when muted.

Note: If the machine is equipped with headlights/tail lights or chassis illumination lights options AND the SkySense option, the Mute button will be located in the alternate position (3). [See Figure — SkySense Platform Panel Indicators.](#)

6.15.5 Override Button

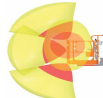
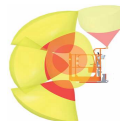
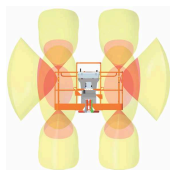
The yellow override button allows operators to bypass normal SkySense operation in order to move closer to an object in the stop zone.

When the operator overrides the SkySense via the override button to get closer to a work surface, the machine will maintain creep speed and flash the appropriate indicator color based on location in either the warning or stop zones.

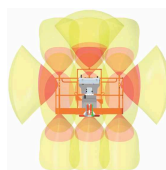
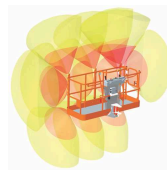
Note: Override is only required to be engaged if the operator desires to move the platform closer to an object that is in or entering the stop zone.

NOTICE

SkyGuard operation is affected when SkySense is installed on a machine. If SkySense activation occurs prior to SkyGuard activation, SkyGuard will only cut out functions if activated. If SkyGuard activation occurs prior to SkySense activation, SkyGuard will function normally.



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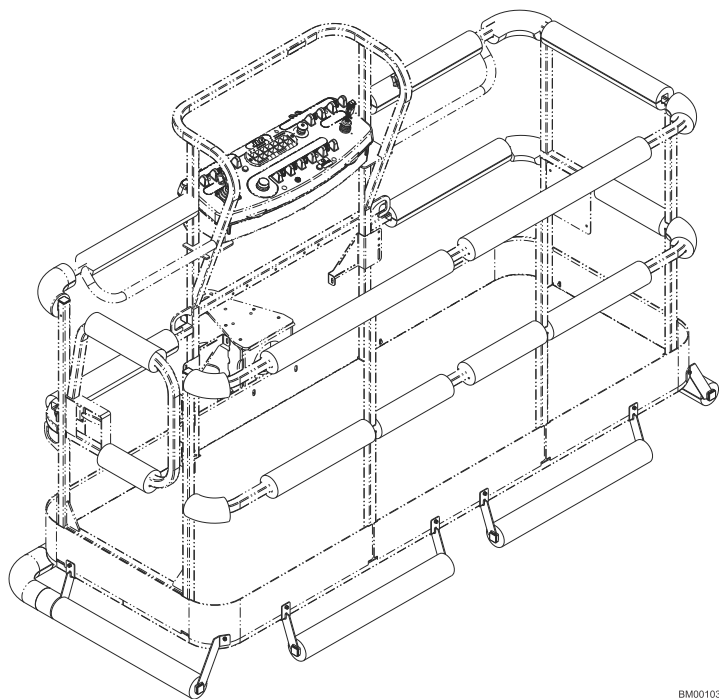
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Figure 41. SkySense Coverage Level 1 Areas (2— Bar)

Figure 42. SkySense Coverage Level 2 Areas (3 — Bar)

Note: Sensor Cones shown are approximations for reference only.

6.16 SKYSENSE® PLATFORM BUMPER PADDING



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Figure 43. Platform Bumper Padding

This accessory outfits machines equipped with the SkySense accessory additional padding for the platform.

6.17 SKYWELDER®

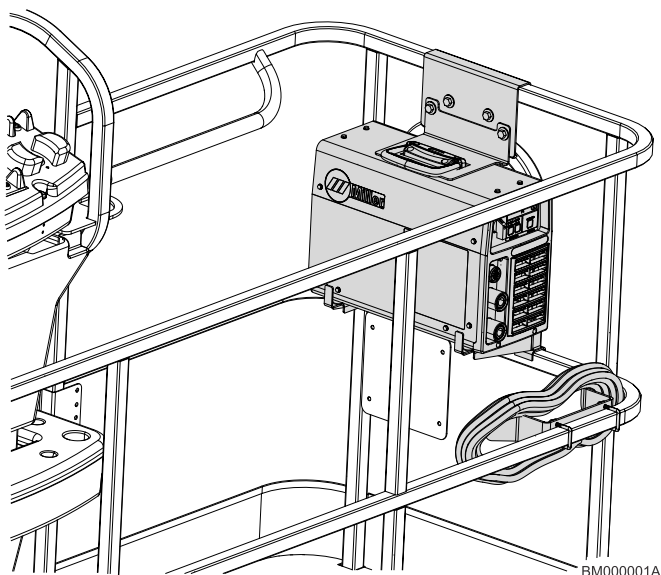


Figure 44. SkyWelder System

SkyWelder is capable of TIG and Stick welding, producing 200 A at 100% duty cycle or 250 A at 50% duty cycle. This accessory receives power from the SkyPower system.

6.17.1 Operation

Start the engine, turn on the generator, then turn on the welder.

See the Miller Welder Owner's Manual (PN 31215476) for more information.

6.17.2 Generator Output

Engine Speed of 1800 rpm +/- 10%.

ANSI Specifications:

- 3-phase: 240 V, 60 Hz, 7.5 kW
- 1-phase: 240 V/120 V, 60 Hz, 6 kW

Table 13. Accessory Ratings Table

Welding Mode	Input Power	Rated Output	Welding Amperage Range	Maximum Open Circuit Voltage	Ampere Input at Rated Load Output (50/60 Hz)					KVA	KW
					208 V	230 V	400 V	460 V	575 V		
Stick (SMAW)	3 — phase	280 A at 31.2 VDC, 35% Duty Cycle	30 — 280 A	103 VDC	29.63	26.65	15.71	13.92	12.08	12	10.2
		200 A at 28 VDC, 100% Duty Cycle			18.86	17.09	10.6	9.37	8.02	8	6.4
	1 — phase	200 A at 28 VDC, 50% Duty Cycle	33.7		30.65	17.61	16.18	14.51	8.3	6.6	
		150 A at 26 VDC, 100% Duty Cycle	23.07		20.59	12.97	11.8	11.15	6.4	4.5	
TIG (GTAW)	3 — phase	280 A at 21.2 VDC, 35% Duty Cycle	5 — 280 A	9.5 VDC	20.77	18.85	11.54	10.22	8.95	8.9	7.1
		200 A at 18 VDC, 100% Duty Cycle			12.89	11.74	7.42	6.55	5.49	5.4	4.3
	1 — phase	200 A at 18 VDC, 50% Duty Cycle	22.12		19.71	12.89	11.06	10.61	6.1	4.4	
		150 A at 16 VDC, 100% Duty Cycle	14.84		13.38	8.73	8.63	7.72	5.1	2.9	

6.17.3 Welding Accessories

- 12 ft welding leads with clamp and stinger (stored in the platform)
- Fire extinguisher

6.17.4 Safety Precautions

WARNING

Do not overload platform.

WARNING

De-rate the platform by 64 lb (29 kg) when welder is in the platform.

- Check for cracked welds and damage to welder supports.
- Check for proper and secure installation of welder and bracket.
- Ensure no personnel are beneath platform.
- Do not exit platform over rails or stand on rails.
- Use this option only on approved models.
- Keep lanyard attached at all times.
- Ensure correct polarity of leads.
- Wear proper welding apparel.
- Use correct rod size and current settings.
- Do not use electrical cords without ground.
- Do not use electrical tools in water.
- Do not weld to the platform.
- Do not ground through the platform.
- Do not use a high frequency arc starter with TIG welder.

6.17.5 Preparation and Inspection

- Connect ground clamp to metal being welded.
- Ensure there is a good ground connection and observe proper polarity.

6.18 SOFT TOUCH

A padding kit is mounted to the platform rails and to a frame suspended below the platform. Limit switches deactivate platform functions when the padded framework contacts an adjacent structure. A button on the platform console allows override of the system.

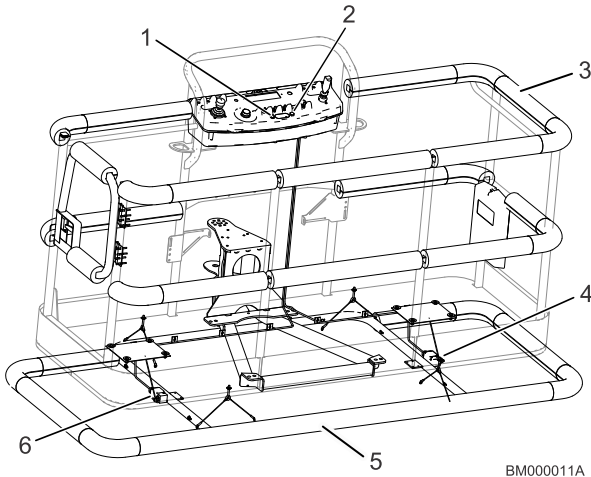
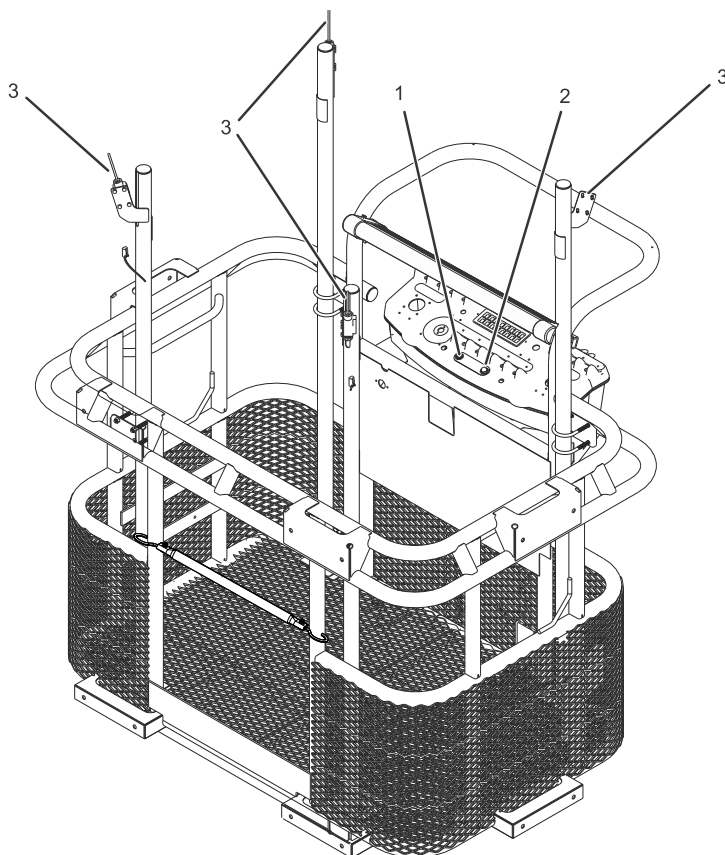


Figure 45. Soft Touch System

1. Override Indicator Light
2. Override Button
3. Rail Bumper
4. Limit Switch
5. Suspended Frame and Rail Bumper
6. Limit Switch

6.19 SOFT TOUCH — OVERHEAD

A collection of masts are mounted, extending near the operator's head height. Limit switches mounted to these masts deactivate all platform function when contacted by an adjacent structure. A button on the platform console allows override of the system.



BM000317r

1. Override Indicator Light
2. Override Button
3. Limit Switch

Note: Some parts hidden for clarity.

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SECTION 7

General Specifications and Operator Maintenance

7.1 GENERAL

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 & Maintenance Manual.

7.2 OPERATING SPECIFICATIONS

7.2.1 Operating Specifications

Maximum Work Load (Capacity) - ANSI, CSA, and Japan Unrestricted Restricted	500 lb (227 kg) 1000 lb (454 kg)
Maximum Work Load (Capacity) - CE, UKCA, and Australia Unrestricted Restricted	500 lb (230 kg) 1000 lb (450 kg)
Maximum Operating Slope	5°
Maximum Travel Grade (Boom Stowed) Gradeability Side Slope	45% 5°
Maximum Boom Swing	360° Continuous
Jib PLUS Length Horizontal Motion Vertical Motion	8 ft. (2.44 m) 125° working, 210° stowed 130° (+75/-55)
Max. Hydraulic System Pressure	4600 psi (317 Bar)
Maximum Wind Speed	28 mph (12.5 m/s)
Maximum Manual Force	400 N
Max Tire Load	23,700 lb (10750 kg)

General Specifications and Operator Maintenance

Maximum Platform Rotation	± 90°
Max Ground Bearing Pressure	100 psi (7.03 kg/cm ²)
Maximum Drive Speed	
Stowed	3.25 mph (5.2 km/h)
Elevated	0.75 mph (1.2 km/h)
Electrical System Voltage	12 Volts
Gross Machine Weight	
Platform Empty	44,000 lb (19,958 kg)
Platform Empty w/ SkyPower	44,215 lb (20,056 kg)
Ambient (Operating) Temperature: See Hydraulic Oil/Engine Oil Figures — Operating Temperature Specifications	

7.2.2 Dimensional Data

Machine Height (Stowed)	10 ft. (3.05 m)
Machine Length (Stowed)	
Transport Mode	37 ft. 7 in. (11.46 m)
Working Mode	47 ft. 6 in. (14.48 m)
Machine Width	
Axles Retracted	8 ft. 2 in. (2.49 m)
Axles Extended	12 ft. 6 in. (3.8 m)
Turning Radius (Outside)	
Axles Retracted	22 ft. 6 in. (6.8 m)
Axles Extended	19 ft. 4 in. (5.89 m)
Turning Radius (Inside)	
Axles Retracted	14 ft. 5 in. (4.4 m)
Axles Extended	8 ft. (2.4 m)
Wheelbase	12 ft. 6 in. (3.81 m)
Axle Oscillation	± 6 in. (0.15 m)
Ground Clearance	
Chassis	25.5 in. (64.7 cm)
Axle	12 in. (30.4 cm)
Maximum Vertical Platform Height	125 ft. (38.1 m)
Up and Over Height	60 ft. 7 in. (18.5 m)
Main Boom Range (At Maximum Up & Over)	+75° / -55°

Maximum Horizontal Platform Reach	
Unrestricted	63 ft. 2 in. (19.3 m)
Restricted	53 ft. 2 in. (16.2 m)
Tail Swing	
Tower Up	7 ft. (2.13 m)
Tower Down	11 ft. 3 in. (3.43 m)

7.2.3 Capacities

Hydraulic Tank	53.3 gallons (201.7 liters)
Fuel Tank	31 gallons (117 liters)
Hydraulic System	65.4 gallons (247.5 liters)
Drive Hub	0.5 quarts (0.5 liters) ± 10%

7.2.4 Tire Specifications

Table 14. Size — 445/50 D710

Load Range	J
Ply Rating	18
Foam Fill	Polyurethane HD (55 Durometer) Foam
Diameter	46.45 in. (117.9 cm)
Width	18 in. (45.7 cm)
Rim Size	15 x 28
Tire & Wheel Weight	867 lb (393 kg)
Max Tire Load	23,700 lb (10750 kg)

Table 15. Size — 445/65-24

Type	Solid
Diameter	45.3 in. (115.1 cm)
Width	17.3 in. (43.9 cm)
Rim Size	12.00-24
Tire & Wheel Weight	960 lb (435.4 kg)
Max Tire Load	23,700 lb (10750 kg)

7.2.5 Engine Data

Table 16. Deutz TD 2.9 L4 Specifications

Fuel	Diesel
Type	Liquid Cooled
Number of Cylinders	4
Total Displacement	178 cu. in. (2925 cm³)
Engine Oil Capacity	2.4 gal. (8.9 L)
Coolant Capacity	3.2 gal. (12.1 L) 0.79 gal. (3 L)
System Engine	
Min. Low Engine RPM	900
Mid Engine RPM	1800
Max. High Engine RPM	2500
Average Fuel Consumption	1.2 gph (4.1 lph)
Output	74.2 hp (55.4 kW)

7.2.6 Major Component Weights

Component	Weight
Tire & Wheel	867 lb. (393 kg)
Drive Hub & Motor	275.5 lb. (123 kg)
Engine Assembly	1275 lb. (579 kg)
Main Boom	5186 lb. (2357 kg)
Tower Boom	6990 lb. (3173 kg)
Tower Telescope Cylinder	915 lb. (415 kg)
Axle Oscillation Cylinder	74 lb. (34 kg)
Axle Extend Cylinder	92 lb. (42 kg)
Level Cylinder	89 lb. (40 kg)
Platform	195 lb. (89 kg) 245 lb. (111 kg)
36 x 72 36 x 96	

Component	Weight
Counterweight	3320 lb. (1506 kg)
<i>* For actual weight, see stamping on counterweight</i>	

7.3 HYDRAULIC OIL SPECIFICATIONS

Table 17. Hydraulic Oil SAE Viscosity Grade Operating Temperature Ranges

Hydraulic System Operating Temperature Range	SAE Viscosity Grade
+0° to + 180° F (-18° to +83° C)	10W
+0° to + 210° F (-18° to + 99° C)	10W-20, 10W-30
+50° to + 210° F (+10° to + 99° C)	20W-20

Note: Hydraulic oils require 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.

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.

Note: Machine operation using non-JLG approved hydraulic fluids or operation outside of the temperature boundaries outlined in the hydraulic fluid operation charts may result in premature wear or damage to components of the hydraulic system.

Note: Machines may be equipped with standard UTTO biodegradable and non-toxic hydraulic oil. This is a fully synthetic hydraulic oil that possesses the same anti-wear and rust protection characteristics as mineral oils, but will not adversely affect the ground water or the environment when spilled or leaked in small amounts.

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

Table 18. Hydraulic Oil Properties and Classifications

Fluid	Properties		Base				Classifications		
Description	Viscosity at 40° C *	Viscosity Index	Mineral Oils	Vegetable Oils	Synthetic	Synthetic Polyol Esters	Readily Biodegradable**	Virtually Non-toxic †	Fire Resistant ‡
Shell Spirax S4 TXM - Recommended	67	146	✓						
Mobilfluid 424 - Optional	60	134	✓						
Shell Tellus S2 VX32 - Recommended	32	142	✓						
Mobil DTE 10 Excel 32 - Optional	32	164	✓						
Shell Tellus S4 VX32 - Recommended	32	296	✓						
Univis HVI 26 - Optional	26	376	✓						
Shell Panolin S2 Hydraulic EAL 32	31	192		✓			✓	✓	
Shell Panolin S2 Hydraulic DU EAL 46	46	193			✓		✓	✓	
Quintolubric 888-46	48	190				✓	✓	✓	✓
Hydrolube HP-5046D	46	192				✓	✓	✓	✓

* cSt, Typical

** Readily biodegradable classification indicates one of the following:

CO2 Conversion > 60% per EPA 560/6-82-003

CO2 Conversion > 80% per CEC-L-33-A-93

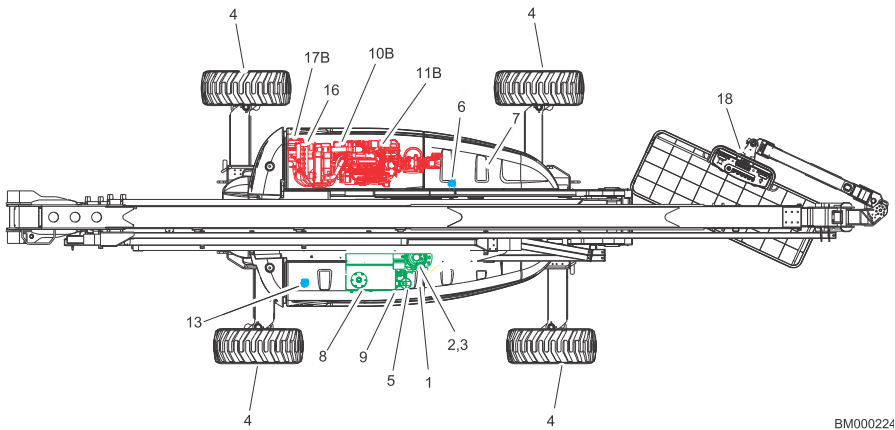
† Virtually Non-toxic classification indicates a LC50 > 5000 ppm per OECD 203

‡ Fire Resistant classification indicates Factory Mutual Research Corp. (FMRC) Approval



7.5 OPERATOR MAINTENANCE AND LUBRICATION DIAGRAM

7.5.1 Deutz 2.9 Engine



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7.6 OPERATOR MAINTENANCE

Table 19. Lubrication Specifications

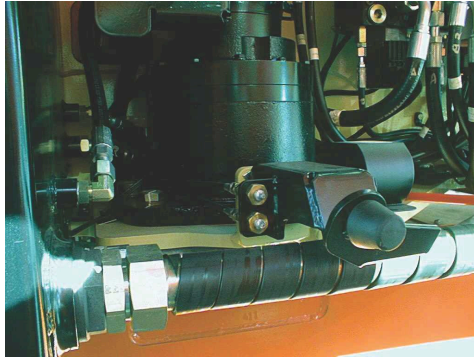
KEY	SPECIFICATIONS
MPG	Multipurpose Grease having a minimum dripping point of 350° F (177° C). Excellent water resistance and adhesive qualities, and being of extreme pressure type. (Timken OK 40 pounds minimum.)
EPGL	Extreme Pressure Gear Lube (oil) meeting API service classification GL-5 or MIL-Spec MIL-L-2105
HO	Hydraulic Oil. API service classification GL-3.
EO	Engine (crankcase) Oil. Gas - API SF, SH, SG class, MIL-L-2104. Diesel - API CC/CD class, MIL-L-2104B / MIL-L-2104C.

NOTICE

Lubrication intervals are based on machine operation under normal conditions. For machines used in multi-shift operations and/or exposed to hostile environments or conditions, lubrication frequencies must be increased accordingly.

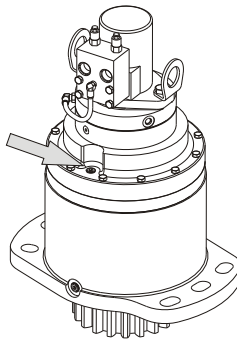
- Note:** It is recommended as a good practice to replace all filters at the same time.
- Note:** The following numbers correspond to those in the Operator Maintenance and Lubrication Diagram figure.

1. Swing Bearing - Remote Lube
Lube Point(s) - 2 Grease Fitting
Capacity - A/R
Lube - MPG
Interval - Every 3 months or 150 hours of operation



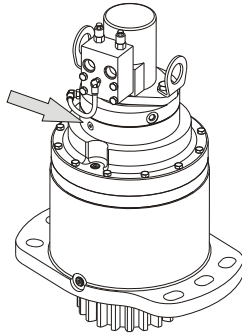
BM00028

2. Swing Gearbox
Lube Point(s) - Fill Plug
Capacity - 79 ounces (2.3 L)
Lube - GL-5
Interval - Check level every 150 hrs/Change every 1200 hours of operation. Fill to cover ring gear.



BM00022

3. Swing Brake
Lube Point(s) - Fill Plug
Capacity - 2.7 ounces (80 ml)
Lube - DTE24
Interval - Check level every 150 hrs/Change every 1200 hours of operation.



BM00022

4. Wheel Drive Hub
Lube Point(s) - Level/Fill Plug
Capacity - 0.5 quarts (0.5 liters) $\pm$ 10%
Lube - EPGL
Interval - Change after first 150 hours then every 1200 hours of operation
Comments - Place Fill port at 12 o'clock position and Check port at 3 o'clock position. Pour lubricant into fill port until it just starts to flow out of check port.



BM00022

5. Hydraulic Return Filter

Lube Point(s) - Replaceable Element

Interval - Change after first 50 hours and every 300 hours thereafter or as indicated by condition indicator.



BM00023C

- 6. Hydraulic Charge Filter
Lube Point(s) - Replaceable Element
Interval - Change after first 50 hours and every 300 hours thereafter or as indicated by condition indicator (if equipped)



BM000231



BM000232

7. Main Valve Filter

Lube Point(s) - Replaceable Element

Interval - Change after first 50 hours and every 300 hours thereafter



BM000233

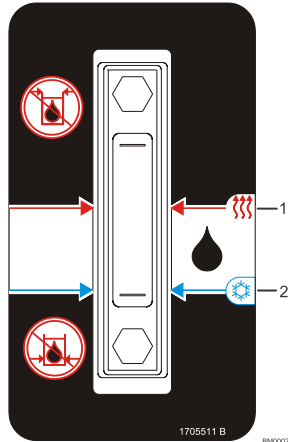
8. Hydraulic Oil

Lube Point(s) - Fill Cap

Capacity - 55 gallons (208 liters) Tank

Lube - HO

Interval - Check level daily. Change every 2 years or 1200 hours of operation.

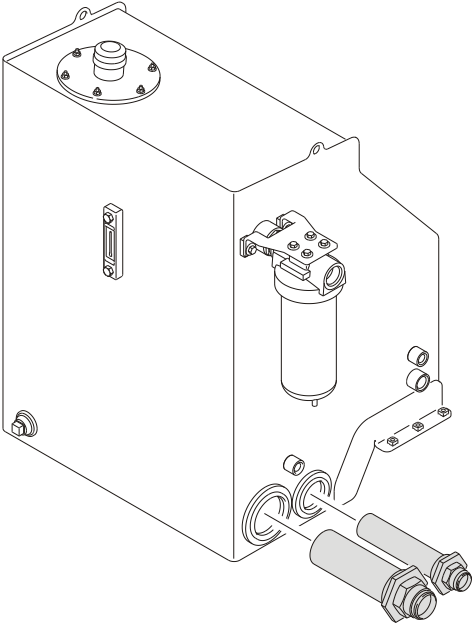


BM000233

1. Fuel Level (Hot Oil)

2. Fuel Level (Cold Oil)

9. Suction Strainers (In Tank)
Lube Point(s) - 2
Interval - Every 2 years or 1200 hours of operation. Remove and clean at time of hydraulic oil change.



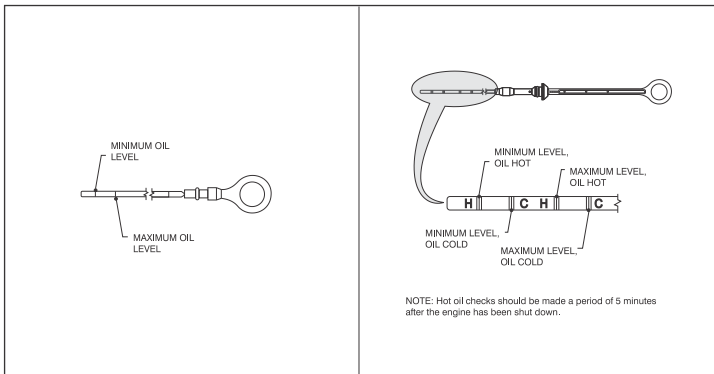
BM00023:

10. (B) Oil Change with Filter - Deutz 2.9
Lube Point(s) - Fill Cap/Spin-on Element
Capacity - 2.4 Gallon (8.9 L)
Lube - EO

Interval - Check level daily; change every 500 hours or six months, whichever comes first. Adjust final oil level by mark on dipstick.

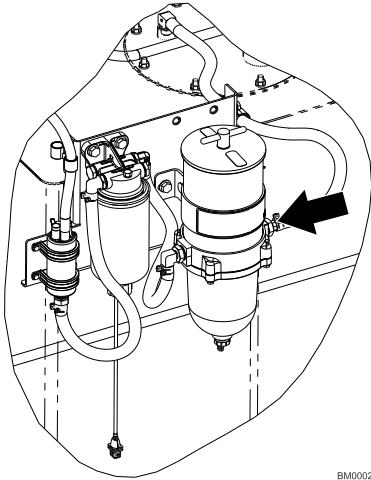


BM00023



BM00023

- 11. (B) Fuel Filter - Deutz 2.9
Lube Point(s) - Replaceable Element
Interval - Every year or 500 hours of operation



BM000267

- 12. N/A
- 13. Fuel Pre-Filter – Deutz 2.9
Lube Point(s) - Replaceable Element
Interval - Drain water daily; Change every year or 500 hours of operation



BM000242

- 14. N/A
- 15. N/A

16. Radiator Coolant – Deutz 2.9

Lube Point(s) - Fill Cap

Capacity - 3.2Gallon (12.1 L)

Lube - Anti-Freeze

Interval - Check level daily; change every 1000 hours or 2 years, whichever comes first.



BM00024

17. (B) Air Filter - Deutz 2.9
Lube Point(s) - Replaceable Element
Interval - Every 6 months or 300 hours of operation or as indicated by the condition indicator
Comments - Check Dust Valve daily



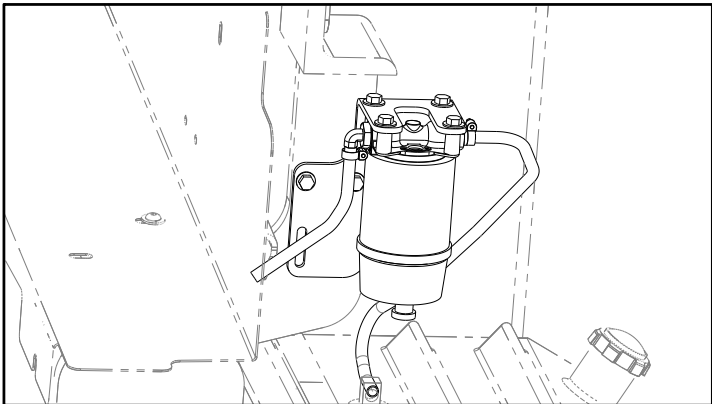
BM00024

18. Platform Filter
Lube Point(s) - Replaceable Element
Interval - Change after first 50 hours and then every year or 600 hours of operation thereafter



BM000241

19. Optional Fuel Filter/Water Separator
Lube Point(s) - Replaceable Element
Interval - Drain water daily; Change every year or 600 hours of operation



BM000249

7.7 TIRES AND WHEELS

7.7.1 Tire Damage

For polyurethane foam filled tires, JLG Industries, Inc. recommends that when any of the following are discovered, measures must be taken to remove the JLG product from service immediately and arrangements must be made for replacement of the tire or tire assembly.

- a smooth, even cut through the cord plies which exceeds 3 inches (7.5 cm) in total length
- any tears or rips (ragged edges) in the cord plies which exceeds 1 inch (2.5 cm) in any direction
- any punctures which exceed 1 inch in diameter
- any damage to the bead area cords of the tire

If a tire is damaged but is within the above noted criteria, the tire must be inspected on a daily basis to insure the damage has not propagated beyond the allowable criteria.

7.7.2 Tire Replacement

JLG recommends a replacement tire be the same size, ply and brand as originally installed on the machine. Please refer to the JLG Parts Manual for the part number of the approved tires for a particular machine model. If not using a JLG approved replacement tire, we recommend that replacement tires have the following characteristics:

- Equal or greater ply/load rating and size of original
- Tire tread contact width equal or greater than original
- Wheel diameter, width, and offset dimensions equal to the original
- Approved for the application by the tire manufacturer (including inflation pressure and maximum tire load)

Unless specifically approved by JLG Industries Inc. do not replace a foam filled or ballast filled tire assembly with a pneumatic tire. When selecting and installing a replacement tire, ensure that all tires are inflated to the pressure recommended by JLG. Due to size variations between tire brands, both tires on the same axle should be the same.

7.7.3 Wheel and Tire Replacement

The rims installed on each product model have been designed for stability requirements which consist of track width, tire pressure, and load capacity. Size changes such as rim width, center piece location, larger or smaller diameter, etc., without written factory recommendations, may result in an unsafe condition regarding stability.

7.7.4 Wheel Installation

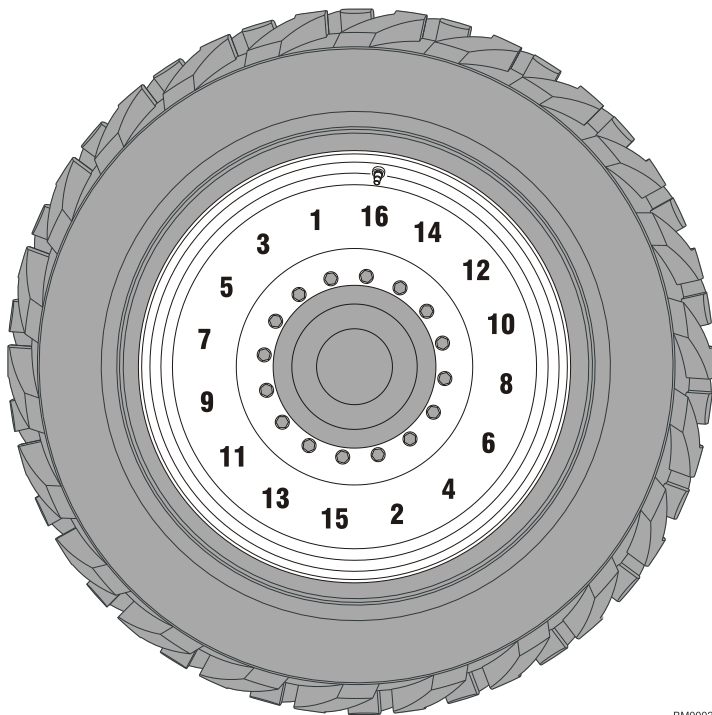
It is extremely important to apply and maintain proper wheel mounting torque.

⚠ WARNING

Wheel nuts must be installed and maintained at the proper torque to prevent loose wheels, broken studs, and possible dangerous separation of wheel from the axle. Be sure to use only the 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 studs or permanently deforming the mounting stud holes in the wheels. The proper procedure for attaching wheels is as follows:

1. Start all nuts by hand to prevent cross threading. DO NOT use a lubricant on threads or nuts.
2. Tighten nuts in the following sequence:



BM00025

3. The tightening of the nuts should be done in stages. Following the recommended sequence, tighten nuts per wheel torque chart.

Table 20. Wheel Torque Chart

TORQUE SEQUENCE		
1st Stage	2nd Stage	3rd Stage
45 ft. lbs. (60 Nm)	100 ft. lbs. (140 Nm)	180 ft. lbs. (252 Nm)

4. Wheel nuts should be torqued before first road use and after each wheel removal. Check and torque every 3 months or 150 hours of operation.

7.8 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.

7.8.1 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.

7.8.2 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.

7.8.3 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 $\pm$ 2 dB]
- 2G GPRS: 900MHz [Class 4, 33 dBm $\pm$ 3 dB], 1800MHz [Class 1, 30 dBm $\pm$ 3 dB]
- 2G EGPRS: 900MHz [Class E2, 27 dBm $\pm$ 3 dB], 1800MHz [Class E2, 26 dBm $\pm$ 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

7.9 SUPPLEMENTAL INFORMATION ONLY APPLICABLE TO CE/UKCA MACHINES

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 is 93 dB (A).

The guaranteed Sound Power Level (LWA) per European Directive 2000/14/EC (Noise Emission in the Environment by Equipment for Use Outdoors) or Noise Emission in the Environment by Equipment for use Outdoors Regulations 2001 No. 1701 based on test methods in accordance with Annex III, Part B, Method 1 and 0 of the directive, is 104 dB (A) for machines equipped with Stage IIIA engines and 108 dB (A) for machines equipped with Stage V engines.

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.

7.10 EC DECLARATION OF CONFORMITY

Manufacturer

JLG Industries, Inc.

Machine Type

Mobile Elevating Work Platform

Address1 JLG Drive
McConnellsburg, PA 17233 USA**Model Type**

1250AJP

Technical FileJLG EMEA B.V.
Polaris avenue 63,
2132 JH Hoofddorp
The Netherlands**EC-Number**

2842

Certificate Number

KCEC5408

Contact/Position

Senior Manager — Product Strategy EMEA

Notified Body

Kuiper Certificering b.v.

Date/Place

Hoofddorp, Netherlands

AddressVan Slingelandtstraat 75, 7331 NM
Apeldoorn, The Netherlands**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)
- 2000/14/EC — Outdoor Noise Directive

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.

7.11 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

1250AJP

AB-Number

0463

Certificate Number

AVUK5408

Notified Body

Amtri Veritas

Address

Pierce Street, Macclesfield, SK11 6ER, 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 2016
- 2017 No. 1206 - Radio Equipment Regulations 2017 (if fitted with optional equipment)
- 2001 No. 1701 - Noise Emission in the Environment by Equipment for use Outdoors Regulations 2001

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.

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www.jlg.com**



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